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May 11th, 2022

Mr. Clifford Ng
United States Environmental Protection Agency, Region 2
290 Broadway
Mail Code: 22nd Floor
New York, NY 10007-1866

RE: Bridgeport Disposal, LLC; 2858 Route 322 Bridgeport, NJ 08014-0337
USEPA ID No. NJD 053 388 239
Transmittal of the *Bridgeport Facility Per- and Polyfluoroalkyl Substances Remedial Investigation Report.*

Dear Mr. Ng:

On behalf of Bridgeport Disposal, LLC, Leppert Associates is pleased to submit this copy of the *Bridgeport Facility Per- and Polyfluoroalkyl Substances Remedial Investigation Report* for the Bridgeport Disposal Facility located in Bridgeport New Jersey. The Remedial Investigation was a follow up to a Preliminary Assessment of PFASs conducted for the Bridgeport facility as submitted to the United States Environmental Protection Agency (USEPA) on December 4, 2019. This investigation of the nature and extent of PFAS contamination is an emerging contaminant activity supplemental to site ongoing Corrective Action activities and the Corrective Measures Report, Bridgeport Disposal, LLC Bridgeport, New Jersey submitted to the USEPA and New Jersey Department of Environmental Quality (NJDEP) November 12th, 2020.

If you have any questions, please feel free to contact me by either phone at (970) 946-8037 or email (aengers@leppertassociates.com) or Shawn Leppert at (303) 216-2428, sleppert@leppertassociates.com.

Sincerely,

Aaron Engers
Hydrologist
Leppert Associates

Attachments: *Bridgeport Facility Pre- and Polyfluoroalkyl Substances Remedial Investigation Report* (electronic, text only. Full report available for download via link provided above)

CC: Mr. Geoff Jones, Clean Harbors Environmental Services
Mr. Shawn Leppert, Leppert Associates

Bridgeport Facility Per- and Polyfluoroalkyl Remedial Investigation Report

Bridgeport Disposal, LLC
600 Crossroads Blvd.
Logan Township, NJ 08085
USEPA Identification Number NJD053288239

Prepared for:

Prepared by:

1422 Washington Avenue
Golden, CO 80401

May 9th, 2022

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List of Acronyms

µG/L	MICROGRAMS PER LITER
11 CL-PF3OUDS	11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACID
3:3 FTCA	3-PERFLUOROPROPYL PROPANOIC ACID
4:2 FTS	4:2 FLUOROTELOMERSULFONIC ACID
5:3 FTCA	UNDECAFLUOROOCTANOIC ACID
6:2 FTS	6:2 FLUOROTELOMERSULFONIC ACID
7:3 FTCA	3-PERFLUOROHEPTYL PROPANOIC ACID
8:2 FTS	8:2 FLUOROTELOMERSULFONIC ACID
9 CL-PF3ONS	9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID
ADONA	4,8-DIOXA-3H-PERFLUORONONANOIC ACID
AFFF	AQUEOUS FILM FORMING FOAM
BGS	BELOW GROUND SURFACE
CLPFPECAS	CHLOROPERFLUOROPOLYETHER CARBOXYLATES
CWA	CLEAN WATER ACT
ESTCP	ENVIRONMENTAL SECURITY TECHNOLOGY CERTIFICATION PROGRAM
HFPO-DA	HEXAFLUOROPROPYLENE OXIDE DIMER ACID
ISGWQC	INTERIM SPECIFIC GROUND WATER QUALITY CRITERION
ITRC	INTERSTATE TECHNOLOGY REGULATORY COUNCIL
LA	LEPPERT ASSOCIATES
MDL	METHOD DETECTION LIMIT
MG/KG	MILLIGRAMS PER KILOGRAM
N-ETFOSA	N-ETHYLPERFLUOROOCTANESULFONAMIDE
NETFOSAA	N-ETHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID
N-ETFOSE	N-ETHYLPERFLUOROOCTANESULFONAMIDOETHANOL
NFDHA	PERFLUORO-3,6-DIOXAHEPTANOIC ACID
NG/L	NANOGRAMS PER LITER
N.J.A.C.	NEW JERSEY ADMINISTRATIVE CODE
NJDEP	NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
NJPDES	NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM
N-MEFOSA	N-METHYLPERFLUOROOCTANESULFONAMIDE
NMEFOSAA	N-METHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID
N-MEFOSE	N-METHYLPERFLUOROOCTANESULFONAMIDOETHANOL
NORM	NATURAL OCCURRING RADIOACTIVE MATERIALS

OECD	Organization for Economic Co-operation and Development
PFASs	Per-and Poly- Fluoro Alkyl Substances
PFBA	Perfluorobutanoic acid
PFBS	Perfluorobutanesulfonic acid
PFCAs	Perfluorocarboxylic acids
PFDA	Perfluorodecanoic acid
PFDoA	Perfluorododecanoic acid
PFDoS	Perfluorododecanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
PFEESA	Perfluoro(2-ethoxyethane)sulfonic acid
PFHpA	Perfluoroheptanoic acid
PFHpS	Perfluoroheptanesulfonic acid
PFHxA	Perfluorohexanoic acid
PFHxS	Perfluorohexanesulfonic acid
PFMBA	Perfluoro-4-methoxybutanoic acid
PFMPA	Perfluoro-3-methoxypropanoic acid
PFNA	Perfluorononanoic acid
PFNS	1-Nonanesulfonic acid
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctanesulfonic acid
PFOSA	Perfluorooctanesulfonamide
PFPeA	Perfluoropentanoic acid
PFPeS	Perfluoropentanesulfonic acid
PFSA	Perfluorosulfonic acid
PFTeDA	Perfluorotetradecanoic acid
PFTrDA	Perfluorotridecanoic acid
PFUnA	Perfluoroundecanoic acid
QA/QC	Quality Assurance/Quality Control
RL	Reporting Limit
SAP	Sampling and Analysis Plan
SERDP	Strategic Environmental Research and Development Program
SOP	Standard Operating Procedure
USDoD	U.S. Department of Defense
USEPA	U.S. Environmental Protection Agency

1 INTRODUCTION

Leppert Associates (LA) prepared this Remedial Investigation Report to present the results of the October 2021 Per- and Polyfluoroalkyl Substances (PFASs) Remedial Investigation conducted at the Clean Harbors Bridgeport Disposal, LLC facility located at 600 Crossroads Blvd., Logan Township, NJ 08085 (USEPA Identification Number NJD053288239). The Remedial Investigation was a follow up to a Preliminary Assessment of PFASs conducted for the Bridgeport facility as submitted to the United States Environmental Protection Agency (USEPA) on December 4, 2019. This investigation of the nature and extent of PFAS contamination is an emerging contaminant activity supplemental to site ongoing Corrective Action activities and the *Corrective Measures Report, Bridgeport Disposal, LLC Bridgeport, New Jersey* submitted to the USEPA and New Jersey Department of Environmental Quality (NJDEP) November 12th, 2020 (Leppert Associates, 2020). The investigation also included sampling to satisfy an NJDEP request for PFAS Monitoring of New Jersey Pollutant Discharge Elimination System (NJPDES) discharges dated August 18, 2021 and associated follow-up email from NJDEP dated August 31, 2021. This report has been prepared for submission to the USEPA, but the report structure and content follows reporting requirements prescribed for a Remedial Investigation Workplan as prescribed in New Jersey Administrative Code (N.J.A.C.) 7:26E: *Technical Requirements for Site Remediation* (specifically, Subchapter 4: *Remedial Investigations*; Section 4.9: *Remedial Investigation Report*).

Note that PFAS molecular compound names are cumbersome; for the purposes of this work plan, the molecular compound acronym is used in the text; definitions of each acronym are defined in the List of Acronyms.

1.1 SITE REGULATORY SETTING

The Bridgeport facility is an industrial facility that formerly served as a hazardous waste treatment facility under a Resource Conservation and Recovery Act (RCRA) permit. The NJDEP, Division of Hazardous Waste Management issued the facility a USEPA Hazardous Waste and Solid Waste Amendments of 1984 Permit (HSWA; I.D. Number: NJD 053 288 239) effective March 31st, 1989. In 2001, the Facility ceased hazardous waste treatment operations and has since been utilized for consolidation of used oil and as a 10-day Transfer station.

Ongoing groundwater pumping and corrective measure monitoring activities are part of the overall facility RCRA corrective action Interim Measure in place since 1972 to mitigate potential threats to human health and the environment. The initial investigation of the facility was initiated by the USEPA, and surface

treatment basins and other historical operational were closed and removed to mitigate early operational sources of contamination. In 1977, an explosion and fire occurred at the facility which resulted in additional soil and groundwater contamination that is being addressed through the Corrective Action program. The current corrective measures include groundwater pumping from twenty-two (22) abatement wells, onsite water treatment using a shallow tray air stripper with final discharge to Raccoon Creek under NJPDES Permit #NJ0005240. Groundwater monitoring events are conducted semi-annually, and Groundwater and Corrective Measure Monitoring Reports are submitted semi-annually, with the report submission at the end of the year serving as an annual report.

A meeting was held on March 13th, 2018 between the USEPA, the NJDEP, Clean Harbors and Leppert Associates to discuss the preparation of the pending revisions to the Corrective Measures Study (CMS) previously submitted to the USEPA and NJDEP for the facility. During the meeting, a general request was made by the USEPA and NJDEP for the facility to perform screening level sampling and analysis for the potential occurrence of Per- and Poly-fluoroalkyl Substances (PFAS) in conjunction with the resubmission of the CMS. A Preliminary Assessment for the occurrence of PFASs in facility environmental media was conducted following N.J.A.C. 7:26E *Technical Requirements for Site Remediation*; Subchapter 3: *Preliminary Assessment and Site Investigation* (Leppert Associates, 2019b).

1.2 PFAS PRELIMINARY ASSESSMENT

In response to requests made by the USEPA and the NJDEP, and following New Jersey Administrative Code (N.J.A.C.) 7:26E *Technical Requirements for Site Remediation*, a Preliminary Assessment of PFAS occurrence in environmental media was conducted for the Bridgeport facility in July of 2019. Environmental media sampling and analysis for the event followed the USEPA and NJDEP approved Sampling and Analysis Plan (SAP) for the PFAS Screening Event (Leppert Associates, 2019a). The SAP was implemented using procedures consistent with the NJDEP Field Sampling Procedures Manual (August 2005), the USEPA Methods for Collection, Storage and Manipulation of Sediments for Chemical and Toxicological Analyses: Technical Manual (October 2001) and the USEPA Field Equipment Cleaning and Decontamination (December 2011).

During the PFAS Preliminary Assessment, eleven (11) water samples and five (5) soil samples were collected (Figure 1: *Preliminary Assessment Sample Locations*). Aqueous phase samples were collected from the following seven (7) locations: one (1) abatement well: Well 22D; four (4) groundwater monitoring wells: Well MW-4-a, Well 4-b, Well 17-a and Well 88-5-WT; and two (2) samples associated with the on-site waste water treatment plant (WWTP). One of the WWTP samples was collected from the inflow

sampling port on the manifold of the air stripper (influent sample), and the other was collected from a sampling port on the NJPDES discharge pipe coming from the WWTP discharge tanks (effluent sample). In addition, four (4) QA/QC samples were collected. The focus of the selected sampling locations was to analyze soil and groundwater media in the areas and wells previously determined to be contaminated with other contaminants detected across the facility.

The PFAS samples collected from groundwater and soil were analyzed using the USEPA drinking water Method 537.1 to investigate samples for PFAS. The method used for the analysis measured the concentrations of twenty-one (21) PFAS analyte compounds. PFAS compound concentrations detected in groundwater samples collected from the four (4) monitoring wells during the assessment ranged from 34.0 to 6,700.0 nanograms per liter (ng/L). Analytical results from the single abatement well sampled (22-D) was 1,600.0 ng/L. Well 22-D has the greatest contaminant mass production of all the site abatement wells. A PFASs concentration of 1,500.0 ng/L was reported for the treatment system Influent sample and a concentration of 1,400.0 ng/L was reported for Effluent sample. All maximum concentrations were for PFOA. The maximum PFAS compound concentration detected in the soil was reported as 4.2 ng/L for PFOS in PFAS-SS-02.

Aqueous phase certified analytical laboratory results from the Preliminary Assessment were compared to the groundwater constituent standards for drinking water established by NJDEP for the three (3) NJDEP PFASs Contaminants of Emerging Concern. Each environmental sample collected from the seven (7) water collection locations exceeded the NJDEP Drinking Water Standards (MCLs) for PFOA (14.0 ng/L), PFOS (13.0 ng/L) and PFNA (13.0 ng/L). There are currently no MCLs for PFASs in soil. These results were reported to the USEPA in a letter sent to Mr. Clifford Ng, dated December 17th, 2019 (Leppert Associates, 2019b).

2 PFAS CHARACTERIZATION REMEDIAL INVESTIGATION REPORT

Results from the Bridgeport Preliminary Assessment to determine the presence of PFASs in facility environmental media indicated that PFASs are present in site shallow groundwater at concentrations that exceed NJDEP Drinking Water Standards established for PFOS, PFOA, and PFNA. Based upon requirements described in N.J.A.C 7:26E-4.1: *Remedial Investigation Requirements*, these results triggered a remedial investigation at each area of concern with contaminants which exceeded any applicable remediation standard. The purposes of a remedial investigation are to:

1) Delineate the horizontal and vertical extent of PFAS contaminants in all media at the site;
2) Determine the general surface and subsurface characteristics of the site, including, without limitation, the depth to ground water;
3) Identify the migration paths and actual or potential receptors of contaminants on or through air, soil, bedrock, sediment, ground water, surface water, and structures at a contaminated site;
4) Collect and evaluate all data necessary to evaluate remedial action alternatives. These data may be gathered through studies including, without limitation, treatability studies, bench scale studies and pilot scale studies (these studies may be conducted pursuant to EPA 540/2-89/058 "Guide for Conducting Treatability Studies Under CERCLA"). Any such data collection, shall be initiated as soon as the general extent of contamination is known, usually after the first delineation phase and, at a minimum, these studies shall be initiated by the end of the second delineation phase;
5) Collect and evaluate all data necessary to evaluate the actual and potential ecological impacts and to characterize all natural resource injuries, including the nature and extent of injury to soil, water, flora and fauna, caused by the contaminants of potential ecological concern at the site;
6) Collect all data necessary to develop permit limitations for any discharge to an environmental medium which may be required for any remedial action alternative under consideration;
7) Identify containment and/or stabilization activities to prevent contaminant exposure to onsite receptors and to prevent the offsite migration of contaminants while remedial alternatives are being evaluated.

The Supplemental PFAS Characterization Work Plan, presented here as Appendix A: *Supplemental PFAS Characterization Work Plan*, was developed to prescribe the first delineation phase of the Remedial Investigation prescribed above. The work plan focuses on *1) Delineate the horizontal and vertical extent of contaminants in all media at the site*. Note that objectives *2) Determine the general surface and subsurface characteristics of the site, including, without limitation, the depth to ground water* and *3) Identify the migration paths and actual or potential receptors of contaminants on or through air, soil, bedrock, sediment, ground water, surface water, and structures at a contaminated site* have been completed and are presented in the Corrective Measures Report, Bridgeport Disposal, LLC, Bridgeport, New Jersey submitted to the USEPA and NJDEP in November 2020.

2.1 SCHEDULE

Provided below is a detailed schedule for the PFAS remedial investigation activities, including timelines and target dates for the completion of field activities, receipt of analytical results, and the submission of reports to the USEPA and NJDEP.

- The start and completion of all field activities: the PFAS sampling event was conducted between October 11th and October 19th, 2021.
- The analytical laboratory results were received within four (4) weeks after the conclusion of field work; November 9th, 2021.
- A results summary report is to be submitted to the USEPA and NJDEP sixty (60) days after the acceptance of final reports from the analytical laboratory; January 9th, 2022. Submittals for time extensions were subsequently requested.

2.2 PRINCIPAL PERSONNEL

Provided in the table below is the information pertinent to project personnel, including the project manager, and as applicable, a facility contact, legal contact, and contractor and subcontractor contacts. In addition, the telephone number of the project manager is provided.

Personnel	Responsibility	Company Name	Authority on Project	Phone Number
Geoff Jones	Project Manager	Clean Harbors	Project Oversight	(803) 603-3979
Steve Fleming	WWT Operator of Record	Clean Harbors	Facility WWT Oversight	(513) 227-5340
Bill Vanneman	Site Facility Manager	Clean Harbors	Site Management Contact	(856) 467-3102
Shawn Leppert	PFAS Plan Contractor	Leppert Associates	PFAS Plan and Report Development	(303) 216-2428

2.3 HISTORICAL INFORMATION

The PFAS investigation conducted at the Bridgeport Disposal facility was not directed at any single known source associated with either a specific discharge event, a particular area of concern at the Site, or an underground tank or underground tank system with the exception of two (2) soil samples discussed in

Section 2.7.2: *Soil Samples*; therefore, it is applicable to present historical information for the entire site. The Facility is an industrial facility that formerly served as a hazardous waste treatment facility under a Resource Conservation and Recovery Act (RCRA) permit. The NJDEP issued the Facility a USEPA Hazardous Waste and Solid Waste Amendments of 1984 Permit (HSWA; I.D. Number: NJD 053 288 239) effective March 31st, 1989. The first regulatorily documented environmental contamination detected at the facility was described and addressed by the Administrative Consent Order issued to Rollins Environmental Services by the NJDEP in 1981 (NJDEP, 1981). Regulatory oversight of the facility environmental contamination was transferred to the USEPA under Section 3008(h) of the RCRA, as amended, 42 U.S.C§6928(h) through the issuance of the Administrative Consent Order, Rollins Environmental Services (NJ), Rt. 322, Lot-16, Blk.-51 Bridgeport, N.J. 08014 (USEPA, 1987; NJD 053 288 239). The 1987 ACO required the facility to implement site-wide RCRA corrective action for environmental contamination detected at the Site.

The Bridgeport Disposal facility has a long environmental history that has been documented in various RCRA driven reports including a Corrective Action Program (CAP) that was initiated as part of the 1987 ACO. Per the 1987 ACO, a Corrective Measures Study was submitted to the NJDEP and USEPA in 1989 for the facility formerly owned by Safety-Kleen (Bridgeport), Inc. Due to changing Site conditions and operations over time, the CMS was last revised and resubmitted in 2020. The second stage in the site-wide CAP was to perform a comprehensive multi-media RCRA Facility Investigation (RFI); the scope of the investigation was detailed in the 1987 ACO. The RFI was conducted from 1990 through 1993; the RCRA Facility Investigation Report was submitted to the USEPA and NJDEP in April 1993 (ENCOTEC, 1993).

Most recently, the historical background of the Site was presented in a Corrective Measures Study Report (CMR) dated November 12, 2020. The CMR documents the environmental media Corrective Measures Study (CMS) conducted for the entire hazardous waste management facility. The objective of the CMR was to the describe the CMS conducted for the BD facility to identify, screen and develop the alternatives for removal, containment, treatment and/or other remediation of the contamination based on the objectives established for the corrective action. The 1993 RFI conducted for the Facility delineated site-wide contamination in four (4) environmental media within the shallow subsurface beneath the Facility: 1.) Site Soil; 2.) Site Sediment; 3.) Site Groundwater; and 4.) Site Soil Gas. An independent CMS evaluation for each of the four (4) environmental media was included in the 2020 CMR. The CMR is currently under review by the USEPA and NJDEP.

To support the conclusions developed in the CMR, a thorough description of the historical Facility operations was developed in the report. Specifically, report Section 2.3: Historical Facility Operations, presented a written narrative along with a comprehensive timeline of Facility operations and milestones

that was provided in CMR Table 2.4: Facility Chronology. Section 2.3.1: Closed SWMU/AOCs describes the status of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) that have been closed at the Site and historical operations that were conducted at the Site from 1969 through May 2001. Historical site conditions were also presented as CMR Figures: Figure 2.7: *Main Site Features*; Figure 2.8: *Former Basins and Areas of Concern*; and Figure 2.11: *Regulated Units*. No documentation exists of PFAS containing materials received at the site (e.g. fire-fighting foam), or that PFAS-based AFFF was used during the tank farm fire in 1977. The fire system upgrades at the facility subsequent to the fire did include the installation of a fire-fighting foam system, which is still in place for the chemical warehouse at the site, but there have been no documented releases from the system since the upgrade.

The groundwater and corrective measure monitoring program consist of collecting daily flow volume measurements from the abatement wells, determining groundwater elevations semi-annually, collecting groundwater samples semi-annually from select wells for analysis of target analytes, and performing operation and maintenance (O&M) activities on the abatement system and treatment plant. Groundwater and corrective action monitoring reports are submitted semi-annually to the USEPA and NJDEP,

2.4 SITE DESCRIPTION

As described above, a thorough description of the Site was most recently presented to the USEPA and NJDEP in a Corrective Measures Study Report (CMR) dated November 12, 2020. The CMR documents the environmental media Corrective Measures Studies conducted for the entire hazardous waste management facility. To support the conclusions developed in the CMR, thorough descriptions of the Site physical features, subsurface (groundwater and soil), and above ground components of the Site Conceptual Model were developed. Physical setting components such as the Site climate, geomorphology, groundwater, surface hydrology, and Site features were described. In addition, an overview of the current Facility operations and the regulatory setting was also provided. The 2020 CMR conducted for the Facility presented the nature and extent of contamination in support of an independent Corrective Measures Study evaluation for each of the four (4) environmental media within the shallow subsurface beneath the Facility including Site Soil, Site Sediment, Site Groundwater, and Site Soil Gas. A Conceptual Site Model was developed for each media. The Site description presented in the CMR included the following subsections of Section 2.2: Physical Setting: Section 2.2.1: *Site Features*; Section 2.2.2: *Surrounding Land and Water Use*; Section 2.2.3: *Site Climate*; Section 2.2.4: *Geomorphology*; Section 2.2.5: *Surface Hydrology*; and Section 2.2.6: *Groundwater*. Geologic units and hydrostratigraphy is described in detail in Section 5: *Groundwater Corrective Measures Study*. The boundary of a wetland's delineation conducted in 2015 and approved by the NJDEP in 2016 is presented in Figure 2.5: *Main Site Features*.

2.5 AREA OF CONCERN

The Area of Concern (AOC) targeted in the *Corrective Measures Report, Bridgeport Disposal, LLC Bridgeport, New Jersey* (Leppert Associates, 2020) is site-wide, the former hazardous waste permit boundary generally defines the AOC, although there are site-related contaminant detections in a few locations somewhat beyond the former permit boundary (e.g., towards the North Marsh). This Supplemental PFAS Characterization Work Plan targets the same site-wide AOC. A detailed description of the facility property has been provided within Chapter 2: *Facility/Site Description* of the *Corrective Measures Report*.

2.6 SAMPLING SUMMARY TABLE

An Area of Concern sampling summary table of PFAS sample location/dates and analytical results is included in this report as Table 1: *Summary of Samples Targeted for PFASs Analyses*.

2.7 SAMPLE LOCATIONS

The focus of the remedial investigation was the delineation of the nature and extent of PFASs in facility environmental media as focused by the Preliminary Assessment screening results and information from the site Corrective Measures program. Characterization was accomplished through the certified laboratory analysis of twenty-six (26) primary samples collected from groundwater monitoring wells, six (6) primary samples collected from abatement wells, four (4) primary soil samples, and ten (10) primary samples from discharge related sample locations, as further described in the text subsections below. In addition to the primary samples, associated quality assurance/quality control (QA/QC) samples were collected and analyzed as further described in Section 2.9.6. The samples were obtained from the sampling locations, as described in detail below.

2.7.1 GROUNDWATER MONITORING WELL SAMPLES

Monitoring and abatement wells that are a part of the Corrective Measures groundwater well network described in the semi-annual Groundwater and Corrective Measures Monitoring Reports provided to USEPA and NJDEP were targeted for groundwater sampling as part of the Remedial Investigation Workplan. There are three (3) groundwater-bearing zones that are monitored by the facility's monitoring well network, which with increasing depth are: the Water Table zone, the Intermediate zone, and the Shallow Artesian zone. As discussed further in the November 2020 CMS submittal, there is more interconnectedness between the two upper zones, Water Table zone and the Intermediate zone.

The facility has one-hundred and six (106) groundwater monitoring or abatement wells in the monitoring well network located within and around the facility property boundary. Currently there are twenty-two (22) abatement wells which extract groundwater as part of the facility groundwater abatement system. Six (6) abatement wells and twenty-six (26) groundwater monitoring wells were sampled as part of the Remedial Investigation, per the PFAS Characterization Work Plan. The listing of the sampled wells is described below and presented in Figure 2: *Remedial Investigation Sample Locations*.

These locations were selected in order to analyze three (3) areas of investigation. The Preliminary Assessment previously performed at the facility found concentrations of PFASs over standards in five (5) wells across the central area of the site, where concentrations of other site contaminants (VOCs in particular) are also over standards. The Remedial Investigation groundwater sampling was designed to investigate the sources of PFASs migrating onto to the Facility, further investigate possible sources of PFASs from within the facility, and to determine the concentrations of PFASs along the hydraulically down-gradient perimeter of the facility. The wells are divided into the groups detailed below:

- Wells generally hydraulically up-gradient from the former and current facility operations to be considered as background samples (11 primary samples collected):
    - Monitoring Wells in the Water Table Zone: 101S, 102S, W-19, W-17 and CAMU-3-W,
    - Monitoring Wells in the Intermediate Zone: 101D, 102D, MA-5D and CAMU-3-I, and
    - Monitoring Wells in the Shallow Artesian Zone: DP-4 and 88-7-SA.

- Wells that are located within the former and current operating area of the facility (8 primary samples collected):
    - Monitoring Wells in the Shallow Artesian Zone: 88-1-SA, 88-2-SA, 88-5-SA, and 88-8-SA,
    - Abatement Wells in the Water Table Zone: 34S, 35S, and 25-b, and
    - Abatement Wells in the Intermediate Zone: 31D, 33D and 22D.

- Wells that are located hydraulically down-gradient from the former and current operating portion of the facility (9 primary samples collected):
    - Monitoring Wells in the Water Table Zone: MW-40, MW-41, MA-10S, and L2
    - Monitoring Wells in the Intermediate Zone: DP-1, DP-5, and 88-2-I

In total, thirty-two (32) groundwater sampling locations were included in the Remedial Investigation PFAS sampling event.

2.7.2 SOIL SAMPLES

Soil samples were collected in conjunction with the groundwater samples. The Preliminary Assessment previously performed at the facility found concentrations of PFASs in the four (4) sample locations tested near soil sample locations previously determined to have other contaminant impacts (e.g., VOCs or PCBs) during historical soil sampling events. Samples from the central area of the site had a greater number of PFASs, and one sample, PFAS-SS-02, had an order of magnitude higher concentrations then the other PFAS soil samples. Four (4) selected surface soil samples were collected at the locations indicated on Figure 2. Two (2) of the soil sample locations, PFAS-SS-102 and PFAS-SS-103, were targeted to collect background soil samples, away from historical soil contamination, in an up-gradient topographic and groundwater flow direction. One location, PFAS-SS101, was to investigate an area of possible increased risk for PFAS contamination in what historically has been the surface water runoff direction associated with the previously higher soil detection. One (1) location, PFAS-SS-104, is just off the pavement near where PFAS is stored for the site warehouse fire system and near where there is a drain outlet on the side of the warehouse for draining the warehouse system, if needed.

2.8 OTHER SAMPLING PROPOSED

In an email dated August 18th, 2021 and a follow-up email with clarifications dated August 31, 2021, the NJDEP had requested effluent sampling from discharge locations associated with the site NJPDES permit, with the samples to be analyzed for twelve (12) specific PFASs using a laboratory certified for a non-potable water user-defined method. Two (2) grab samples at least 30 days apart were taken from every designated active discharge monitoring location identified in the NJPDES permit. There are four (4) discharge monitoring locations identified in the site permit. One (1) is the treatment plant discharge, and the other three (3) are stormwater discharge monitoring locations. The facility stormwater discharges are managed with a discharge basin and two (2) discharge tanks, which serve as the stormwater discharge monitoring locations. The email request also required that the results of the sampling be reported to dwqpretreatment@dep.nj.gov by December 15, 2021 (NJDEP, 2021b) and that field reagent blanks and other QA/QC blank samples be collected as indicated by guidance associated with EPA analytical methods.

Influent and effluent samples were collected as part of the Preliminary Assessment, however additional samples were needed to fulfill the NJDEP requirement that resamples be collected thirty (30) days apart

from the primary samples. The effluent samples requested by the NJDEP were collected within the context of the overall PFAS investigation. The samples were analyzed for the same PFAS suite of constituents as the groundwater samples, which includes the twelve (12) constituents requested by the NJDEP, and the collection of treatment system effluent samples were paired with treatment system influent samples. As part of the PFAS Characterization Work Plan, two (2) samples were collected from the on-site waste-water treatment plant (WWTP) used in conjunction with the site groundwater abatement system when the effluent samples were collected. One (1) sample was collected from the Influent sampling port on the manifold of the air stripper, and another was collected from the Effluent sampling port on the NJPDES discharge pipe coming from the WWTP (effluent or outfall sample). Two sets of WWTP samples were collected at least thirty (30) days apart.

In total, ten (10) discharge related samples were collected; two (2) from each of three (3) designated discharge monitoring locations at least 30 days apart, two (2) system effluent samples, and two (2) system influent samples to be taken in conjunction with the system effluent samples.

2.9 QUALITY ASSURANCE PROJECT PLAN

PFASs are new and emerging contaminants of concern in the environment. Because PFASs have only recently been recognized as an important contaminant, there are few monitoring regulations related to sampling techniques and frequency. The SAP developed and presented in the approved PFAS Investigation Work Plan was to provide a comprehensive environmental media PFASs characterization. Therefore, the SAP targeted a list of forty (40) PFASs that represent the broader range of compound classes, each having unique physical, chemical, and/or environmental migration and persistence properties. The PFASs compounds targeted for analysis had been recently recommended for analysis by the USEPA and USDoD PFAS workshops (USDoD Environmental Monitoring and Data Quality, 2020). Analysis Methods for the compounds on the SAP list are further discussed in the text of Section 2.9.4 below.

2.9.1 PFAS SOURCES AND BEHAVIOR

Per- and Poly-fluoroalkyl Substances (PFASs) are a large family of complex and ever-expanding group of man-made fluorine-containing chemicals. These chemicals have been developed to impart unique properties when applied to surfaces, including resistance to water, grease and stains that are widely used to make various types of everyday products (NIH, 2021). PFASs are perfluorinated or polyfluorinated substances, synthetic organofluorine chemical compounds that have multiple fluorine atoms attached to an alkyl chain. As such, they contain at least one perfluoroalkyl moiety, –CnF2n–. Each PFAS compound has

unique chemical and physical properties resulting in a particular migration potential through the environment. According to the Organization for Economic Co-operation and Development (OECD, 2021), the current global database includes four-thousand, seven-hundred and thirty (4,730) different PFAS species. A U.S. Environmental Protection Agency toxicity database, *DSSTox*, lists eight-thousand, one-hundred and sixty-three (8,163) individual PFASs (USEPA, 2021a). It can be cumbersome to write out the molecular name for PFASs, therefore the molecular name for each acronym provided in this text is available in the List of Acronyms.

The USEPA has classified two (2) PFASs, Perfluorooctane Sulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA), specifically as "emerging contaminants." While these two compounds are known to be particularly harmful to human health and the environment and therefore the most studied (Kucharzyk et al., 2017; Domingo and Nadal, 2019), many other new and emerging contaminants in the PFAS family have been shown to negatively impact the environment. An "emerging contaminant" is a chemical or material that is characterized by a perceived, potential, or real threat to human health or the environment or by a lack of published health standards. A contaminant may also be "emerging" because a new source or a new pathway to humans has been discovered or a new detection method or treatment technology has been developed (US Department of Defense, 2011).

The NJDEP currently considers three (3) specific PFASs as Contaminants of Emerging Concern: PFNA; PFOA; and PFOS. "*A site must comply with the Technical Requirements for Site Remediation (N.J.A.C. 7:26E), all contamination, including all discharged hazardous substances, hazardous wastes, and pollutants, must be addressed. Contaminants of emerging concern, if discharged to the waters or onto the lands of the State, are pollutants that must be remediated using a Licensed Site Remediation Professional (LSRP) even if the contaminant is not a hazardous substance. When the site or area of concern under remediation is currently or was formerly occupied by facilities that manufactured, stored, handled, or used contaminants of emerging concern, LSRPs must consider these contaminants during the investigation and remedial action. LSRPs must evaluate the site must be evaluated for potential spills and releases through air, water, and waste discharges*" (NJDEP, 2021a).

Due to their toxicity, persistence, and prevalence, PFASs continue to be an active focus of research and investigation. Areas of research include site characterization, environmental fate and transport, bioavailability, degradation processes, and potential risks to humans and ecosystems. Advances in laboratory analytical methods allow for detection of PFASs at extremely low concentrations within environmental media. Due to the presence of significant molecular mass of organic fluorine in PFASs, appropriately equipped laboratories can apply sophisticated analytical methods to detect PFAS concentrations within environmental media, often at concentrations of less than 1.0 nanograms per liter

(ng/L). For instance, the Method Detection Limit (MDL) has been established for PFOS in drinking water at 0.54 ng/L (USEPA Method 537.1: *Determination of Selected Per- and Polyflourinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry*).

2.9.1.1 Distribution in the Environment

PFASs have been released to the environment from a variety of sources over time. The persistence and mobility of some PFASs has resulted in the presence of detectable concentrations of PFASs in most environmental media worldwide (ITRC, 2020). The concentrations of these anthropogenic concentrations may vary widely, based on proximity to industrial areas, mobility through environmental media, degradation rates, and other factors. PFASs are continuously being discovered within the environment and could be related to the use of any number of different commercial, industrial or waste products. Due to the persistence of many PFASs within the environment, measured environmental media concentrations represent the cumulation of anthropogenic impacts from past as well as current uses (USFDA, 2021).

PFAS releases to the environment generally do not occur as a single compound but rather as complex blended mixtures with unique proportions of various PFASs. The mixtures can include PFCAs and PFSAs: (1) PFAS terminal degradation surfactants, the last stage in biological and chemical degradation of many compounds; (2) PFAS precursor surfactants, principal parents of PFAS terminal degradation surfactants; (3) PFASs intermediate transformation compounds; and (4) many other miscellaneous PFASs. After being released into the environment, the composition of these mixtures may change with time due to differential degradation and migration processes within the environment.

2.9.1.2 Migration Potential

Each PFAS can behave differently in the environment due to various chemical, physical, and biological properties and processes. Examples of these process include sorption, volatilization, degradation, and bioaccumulation (Miranda et al, 2021; Sima and Jaffé, 2021). Some PFASs (e.g., perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are very resistant to breakdown and often migrate readily through the environment. As a result, they may be found throughout the environment in groundwater, surface water, soil, and air, and they have been detected in food, breast milk, and human blood serum. Molecular chain length is also a major factor in mobility, as the size of the PFAS molecule has an impact on its mobility, solubility, bioavailability, bioaccumulation rate and ecotoxicity (OECD, 2021). PFASs have been used for decades in many common products, but their behavior in the environment is still an area of ongoing research (Anderson et al. 2021; MADEP, 2018).

2.9.1.3 Toxicology

PFASs, collectively, are emerging contaminants, with evolving toxicological data. The potential toxicities of PFASs are complicated by the fact that certain PFASs may become more concentrated as they are propagated through the food chain, a process known as bioaccumulation (Miranda et al., 2021; Sima and Jaffé, 2021). The general population is exposed to PFASs through various sources, including drinking water and ingesting PFAS-contaminated food (Domingo and Nadal, 2019). One epidemiological study of 69,000 people in the Mid-Ohio Valley showed that drinking water contaminated with at least 50 ng/L of PFOA for at least one year led to high cholesterol, ulcerative colitis, thyroid disease, testicular and kidney cancers, and pregnancy-induced hypertension amongst the population (Cordner et al., 2019).

The current consensus amongst toxicologists is that data is still lacking on toxicity criteria for the vast majority of PFASs in commercial use. This has led to the use of additional uncertainty factors by regulators who have established health-based standards for PFASs in the environment (Simon et al., 2019). Due to the vast list of individual PFASs and the lack of resources to develop regulatory standards for each one, a call has been made to begin to regulate PFASs as a class of compounds rather than by individual species (Simon et al., 2019). However, some states have begun implementing their own specific standards for PFASs, as some research has suggested that the USEPA's goal of 70 ng/L for PFOA and PFOS is not sufficiently protective (Cordner et al., 2019).

The best studied PFASs are PFOS and PFOA, although considerable information is available for some other PFASs, including PFNA, PFHxS, PFBA, PFBS, and the GenX chemical HFPO-DA. Laboratory animal toxicology studies and human epidemiological studies suggest that health effects may occur as a result from long-term exposure to PFOA and PFOS at environmentally relevant levels. The USEPA has completed draft toxicity assessments for the GenX chemicals and PFBS (USEPA 2018a, b), and USEPA announced in December 2018 that five (5) additional PFAAs (PFNA, PFBA, PFHxA, PFHxS, PFDA) will be reviewed for toxicity assessment through the Integrated Risk Information System (IRIS), but no timeline has been established (USEPA 2019).

2.9.2 TARGET PFAS ANALYTES

To characterize the presence of PFASs within the groundwater and soil medias at the Bridgeport Facility, groundwater and soil quality samples collected from the site were analyzed for a comprehensive list of forty (40) PFASs, which included PFOS, PFOA, and PFNA. The PFASs targeted for laboratory analysis as part of the Remedial Investigation included a proactive, comprehensive list of PFASs established by the USEPA and USDoD (USDoD Environmental Monitoring and Data Quality Workshop Webinar, 2020). The CAS

Registry Number, target laboratory Reporting Limited (RL) and the analytical Method Detection Limit, for both soil and groundwater environmental media have been tabulated for each of the forty (40) PFAS analytes in Table 2: Per- and Poly- Fluoroalkyl Substances (PFASs) Targeted for Certified Analytical Laboratory Analysis. The 2020 USDoD Environmental Monitoring and Data Quality Workshop Webinar, sponsored by Strategic Environmental Research and Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP), recommended a list of forty (40) PFASs for quantitative analysis of media concentrations. This list spans all of the USEPA 537.1 and USEPA 533 target analytes as well as several additional precursors. The list was developed to maximize the information collected when performing environmental characterization activities with specific recognition of the ability for the greater class of PFASs to act as efficient environmental tracers. This group of targeted PFAS analytes was developed to represent PFAS classes having a wide variety of:

1) chemical and physical properties;
2) migration potential and persistence within the environment; and
3) potential risk to human health and the environment.

On January 18th, 2022 during internal review of this report, the NJDEP released an Interim Specific Ground Water Quality Criterion (ISGWQ) for the PFAS Chloroperfluoropolyether Carboxylates (ClPFPECAs) of 0.002 ug/L. ClPFPECAs were not included on the analyte list of the approved PFASs Characterization Workplan, nor are ClPFPECAs included in the above list of forty (40) PFASs analytes that can be analyzed using the certified analytical laboratory methods described below, in Section 2.9.4: *Certified Analytical Laboratory Method(s)*.

2.9.3 PFAS CHARACTERIZATION ANALYTE GROUPS

For the purposes of quantitative interpretation and environmental tracking, the forty (40) targeted PFAS analytes were grouped according to their chemical class and structure, usage, environmental fate, and potential health concerns (see Table 3: PFAS Analyte Signature Groupings). These analysis groupings include Long-chain Perfluorocarboxylic Acids (PFCAs), Perfluorooctanoic Acid (PFOA), Long-chain Perfluorosulfonic Acids (PFSAs), Perfluorooctane Sulfonic Acid (PFOS), Short-chain PFCAs, Short-chain PFSAs, Potential PFCA Precursors, Potential PFSA and/or PFCA Precursors, and PFASs Replacement Chemistries.

1) Long-Chain PFCAs– Long-chain perfluorosulfonic acids are perfluorocaroboxylic acids with chain lengths of at least eight (8) carbons. In general, the potential for sorption to soils increases with chain

length in both the PFCA and PFSA groupings. PFSAs generally have a higher sorption potential than PFCAs of the same chain length, making the PFSA groupings slightly less mobile than the PFCA groupings (ITRC, 2020). The analytes contained in this group include: PFDA; PFNA; PFTeDA; PFTrDA; PFUnA; and PFDoA.

2) Perfluorooctanoic Acid – PFOA is a Long-Chain PFCA, however it is evaluated individually because many regulatory bodies have developed PFOA-specific screening levels and reporting requirements.

3) Long-Chain PFSAs - Perfluorosulfonic acids with chain lengths of at least six (6) carbons. These long-chain groups contain compounds that are believed to present some of the highest health risks to humans and animals, as they are highly soluble relative to their potential toxicities, have been observed to bioaccumulate in human receptors, and have relatively low sorption coefficients compared to other analyte groupings (ITRC, 2020). The analytes contain in this group include: PFDS; PFHpS; PFHxS; PFNS; and PFDoS.

4) Perfluorooctane Sulfonic Acid – PFOS is a Long-Chain PFSA, however like PFOA it is evaluated individually due to specific reporting requirements developed by a variety of regulatory bodies.

5) Short-Chain PFCAs – Most interim water quality guidelines developed at the State and Federal levels target the eight-carbon PFCA PFOA and the eight-carbon PFSA PFOS, though it should be noted that the health effects of these compounds as well as short-chain PFCAs and PFSAs is an active area of research. The analytes contained in this group include: PFBA; PFHpA; PFHxA; and PFPeA.

6) Short-Chain PFSAs – Most interim water quality guidelines developed at the State and Federal levels target the eight-carbon PFCA perfluorooctanoate (PFOA) and the eight-carbon PFSA PFOS, though it should be noted that the health effects of these compounds as well as short-chain PFCAs and PFSAs is an active area of research. The analytes contained in this group include: PFBS and PFPeS.

7) Potential PFCA Precursors – Both the Potential PFCA Precursors and the Potential PFSA and/or PFCA Precursor groups are generally much less mobile than PFCAs and PFSAs: they are less soluble than their terminal degradation products and have high sorption potentials (ITRC, 2020). Releases of these compounds tend to exist as PFCA and PFSA sources in the environment. The analytes contained in this group include: 3:3FTCA, 5:3 FTCA, 7:3 FTCA, 4:2 FTS; 6:2 FTS; and 8:2 FTS.

8) Potential PFSA and/or PFCA Precursors – Both the Potential PFCA Precursors and the Potential PFSA and/or PFCA Precursor groups are generally much less mobile than PFCAs and PFSAs: they are less soluble than their terminal degradation products and have high sorption potentials (ITRC,

2020). The analytes contained in this group include: EtFOSAA; MeFOSAA; N-MeFOSE; N-EtFOSE, N-EtFOSA, N-MeFOSA; and PFOSA.

9) PFAS Replacement Chemistries – PFAS Replacement chemistries are PFASs that have replaced other PFASs that have been phased out of manufacturing processes and/or final consumer products due to concerns surrounding the persistence and potential health risks associated with long-chain PFCAs and PFSAs. Some of these replacement compounds have the potential to degrade into short-chain PFCAs and PFSAs. The analytes contained in this group include: 11Cl-PF3OUdS; 99Cl-PF3ONS; ADONA; and HFPO-DA.

10) Ungrouped Compounds – The Ungrouped analytes consists of compounds that do not fit cleanly into the other seven (7) analyte groupings and have little information regarding their use, degradation pathways, mobility, and health risks. Monitoring these compounds is recommended because the implications of these compounds and their degradation products with regards to environmental and human health is an area of active research and potential regulatory action (ITRC, 2020). The analytes contained in this group include: NFDHA; PFEESA; PFMBA; and PFMPA.

2.9.4 CERTIFIED ANALYTICAL LABORATORY METHOD(S)

As PFASs are new contaminants of concern, the laboratory methods available for the low concentrations of concern are limited to drinking water methods that are compound specific. There were no EPA approved analytical laboratory methods available for non-potable water at the time this investigation was proposed in the approved workplan. This means that despite the large array of individual PFASs, only a few are truly regulated or targeted for laboratory media concentration analysis with EPA approved methods. However, state and federal regulatory agencies have been working toward the development of standards for certified analytical laboratory quantification of PFAS concentrations in environmental media on a broader scale. The SGS analytical lab has assisted the regulatory agencies in establishing new analysis methods to investigate a comprehensive list of diagnostic PFASs to create a better characterization of site environments. SGS is an accredited, certified lab to investigate and sample PFASs, and SGS has recently completed a single-lab validation for a universal isotope dilution method to measure PFASs in groundwater, surface water, wastewater, leachate, soil, sediment, biosolid, and tissue. This method is based on SGS AXYS method MLA-110, which had been previously validated and accredited under DoD QSM 5.3 for thirty-three (33) PFASs (SGS AXYS, 2020). A multi-lab validation for the new draft Method 1633 is planned for 2022.

The laboratory analytical method selected to estimate the concentrations of the forty (40) targeted PFASs was selected and included in the agency approved workplan as the SGS AXYS method MLA-110; Solid

Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) (SGS AXYS, 2021; SGS AXYS, 2022; USEPA, 2021b). This analytical method is the platform for the new EPA 1600 series universal isotope dilution method to measure the concentration of PFASs in groundwater, surface water, wastewater, leachate, soil, sediment, biosolid and tissue and offered the state-of-the-art in PFAS best practices at the time of the workplan preparation. The USEPA currently recommends the use of draft Method 1633 for PFASs analyses in all non-drinking water samples and any permit regulated under the Clean Water Act (CWA) such as pollutant discharge programs (USEPA, 2021d).

There have been common misconceptions regarding the state of laboratory analytical methods that are appropriate for measuring PFASs in samples other than potable water. USEPA Methods 533 and 537.1 have been approved for analyses of PFASs in drinking water since the methods were published in December 2019 and March 2020, respectively, but were never approved for other media such as wastewater, groundwater, soil, or tissue (USEPA, 2019; USEPA, 2020; USEPA, 2021d). Analyses of PFASs in non-potable fluids and solid matrices had until recently been accomplished by laboratory-specific modifications to Method 537.1, commonly but unofficially referred to as Modified 537 (USEPA, 2021d). Each laboratory develops its own standard operating procedures that ensure their modifications to Method 537 produce valid results. The specific modifications to Methods 537 and 533 may differ between laboratories and may bear little resemblance to the procedures outlined in the method standards (USEPA, 2021d). The applicability of the use of Modified 537 or 533 has generally been permit-specific, where its use is approved on a case-by-case basis by the regulatory bodies overseeing the implementation of the permit in question. Validity of analytical results produced by Modified 537 is assessed by the laboratory itself and the person doing the data analyses; a broader USEPA certification or even laboratory-specific accreditations for Modified 537 do not exist (USEPA, 2021d).

The USEPA's SW-846 Method 8327 has been approved for use with non-potable water in RCRA programs and has been validated for twenty-four (24) PFASs (USEPA, 2021e). However, widespread nationwide use will not be prescribed via 40 CFR Part 136. The USEPA cites a variety of factors for this decision, one of which was a less robust validation process for methods used in RCRA programs than is generally required for other USEPA programs such as the CWA. During the multi-lab validation of Method 8327, only one (1) non-potable water sample was used. This sample was the final effluent of a publicly owned wastewater treatment facility and was not intended to be representative of groundwater or general wastewaters samples. In addition, SW-846 Method 8327 has never been validated for non-aqueous matrices like soil and tissue (USEPA, 2021d).

Given the above limitations of the Method 533 and 537.1 with regards to either suitability for groundwater and leachate samples and the limitations of SW-846 Method 8327 with regards to the number of PFASs

that can be accurately measured, the SGS AXYS MLA-110 method was proposed and approved for laboratory analyses of samples collected during the October 2021 sampling event. SGS AXYS MLA-110 is the precursor to draft EPA Method 1633, which is currently the preferred analytical method for PFASs analyses in non-potable water, soil, and tissue (USEPA, 2021b; USEPA, 2021d).

2.9.5 PFAS CHARACTERIZATION RESULTS

Analytical laboratory media concentration analysis results reported for groundwater monitoring well samples collected as part of the PFASs Remedial Investigation were used to create sample-specific PFAS concentration signatures to assist in empirical data evaluation. These signatures are represented by a circular histogram plot (Rose Diagram) which displays the summed concentration of PFAS analytes contained in nine (9) of the ten (10) analyte groups designated in Subsection 2.9.3: PFAS Characterization Analyte Groups ("petals of the rose"). Note that the Ungrouped Compounds analyte grouping was not presented here because there were no detections of these analytes in any sample, nor is there sufficient information about these analytes to use them as environmental tracers in fate and transport forensic investigations. The diagram concentrations are plotted on a radial base-10 log scale, where the scale ranges from 0.001 ug/L to 10 ug/L. The Rose Diagram signatures are spatially represented on figure(s) plotting the relative locations of groundwater monitoring well samples collected and analyzed. These diagrams can be used to determine if the PFASs measured in different locations are from similar sources, based on the distribution of the PFASs amongst the chemical classes. Similar Rose diagrams would indicate that measured PFASs are from a similar source, while a unique diagram from those that are juxtaposed may indicate that a different source of PFASs is present or has existed in the past. In addition, a quantitative cluster analysis is used to categorize the signatures into different groups to assist in establishing potential sources and distributions of PFASs.

2.9.5.1 Distribution in the Environment

Twenty (20) of the forty (40) targeted PFAS analytes were detected in at least one sample during the remedial investigation. PFASs were detected in all sampled media: groundwater, soil, and surface water. Long-chain PFCAs were detected in nearly every groundwater and surface water sample with detection rates of 96.9% for PFNA and 100.0% for PFOA and PFHpA. PFASs were detected in groundwater in all water-bearing zones, including the Shallow Artesian. Although there are areas of significant overlap, there appear to be differences in the distributions of PFASs versus other site contamination addressed in Section 5 of the CMS. In particular, other site contaminants are largely localized to the Water Table and Intermediate Zones in the vicinity of the site, whereas the PFASs are generally detected throughout the Shallow Artesian Zone as well.

2.9.5.1.1 Potential Contaminant Source and Migration

Laboratory analytical results of the remedial investigation sampling campaign show that PFASs are widespread across the BD Facility, including areas that are hydraulically upgradient of the historical operations area. Both a cluster analysis and signature evaluation suggest that multiple sources of environmental PFASs contamination exist in the region: PFOA was detected in every surface water and groundwater sample above the NJDEP drinking water screening level of 0.013 ug/L in all but one sampling location (88-5-WT at 0.012 ug/L). Corrective measures objectives and a recommended corrective action are intended to address the PFASs impacts that were likely associated with the BD facility itself (specifically, potential AFFF releases during the emergency response to the 1977 explosion and fire). Corrective actions developed here do not address the background PFASs contamination observed in the Potomac-Raritan-Magothy Aquifer or PFASs concentrations that may be due to wet deposition from airborne contaminants. The differentiation between the background contamination and potential Site impacts is discussed here. Establishing the extent of non-PFASs Site impacts is covered in Section 2.3.3: *Current Contaminant Distribution* of the CMR.

2.9.5.1.2 Cluster Analysis

Quantitatively grouping the different PFASs signatures compiled during the remedial investigation was accomplished with a cluster analysis. All samples except the four (4) soil samples were included in the cluster analysis for a total of thirty-seven (37) unique sample signatures: groundwater from monitoring and abatement wells, surface water from stormwater collection points, and the wastewater treatment plant's influent and effluent. The cluster analysis suggests that sampling locations can be divided into four distinct groups that appear to represent at least two distinct PFASs sources. One group is presumed to represent background PFASs concentrations that are likely associated with off-site contamination migrating onto the BD Facility via groundwater flow from some unidentified upgradient PFASs release. The other three groups represent PFASs that likely resulted from the application of AFFF during fire suppression efforts in association with the 1977 explosion and fire. Cluster analyses were accomplished using multiple algorithms implemented via Python's Scikit-learn package: KMeans (variance-based clustering), Agglomerative (hierarchical clustering), and BIRCH (hierarchical clustering). Cluster analyses were performed on both raw observations and concentration-normalized observations.

With the raw concentration data, the optimum number of clusters using the KMeans algorithm was assigned using the elbow method, where the numbers of clusters were plotted against the corresponding sum of squared errors (Figure 3: Cluster Analyses Results Elbow Method and Dendrograms). The optimum number of clusters corresponds to the 'bend' in this plot, where increasing the number of clusters does little to

reduce the sum of squared errors calculated by the KMeans algorithm. In this case the optimum number of clusters assigned by the KMeans algorithm appears to be four (4). The optimum number of hierarchically assigned clusters using the Agglomerative and BIRCH algorithms is generally interpreted from a dendrogram where the optimum number is such that the distance between clusters is maximized (Figure 3). Note that both hierarchical clustering methods yielded the same results, therefore dendrograms presented in Figure 3 were generated by the Agglomerative method only; the BIRCH algorithm's dendrogram was identical to the Agglomerative dendrogram therefore was omitted in Figure 3.

The KMeans cluster analysis groupings of the raw data were spatially correlated and consistent with the Site conceptual model, even though no weighting or spatial information was passed to the KMeans algorithm. In addition, hierarchical clustering of the raw data assigned observations to nearly identical cluster groups. Cluster analyses of normalized data was not as informative as the cluster analyses of raw data; a clear 'bend' in the KMeans elbow method is not readily apparent relative to the raw data plot. This is not unexpected, as the KMeans algorithm is variance-based and differences in the variance between signatures can be lost when normalizing the data. Concentration magnitudes are important in this investigation, where both source fingerprinting and PFAS migration are of interest. However, normalized data cluster groups also agreed well with the hydrogeologic conceptual model, for example one cluster group consisted solely of Shallow Artesian sample locations while the surface water sample containing relatively high concentrations of PFAS replacement compounds was assigned its own group. Interpretation of the four (4) cluster analyses as a whole yields numerous conclusions:

1. Both hierarchical and KMeans clustering indicated that the suspected source zone of AFFF impacts, in the vicinity of monitoring well 17-a, has a unique signature relative to the rest of the observations. This reinforces the hypothesis that the long- and short-chain perfluorosulfonic acids in Facility groundwater may have originated from emergency-response actions in this immediate area.

2. Abatement well 22D, which operates at the highest rate of all Facility abatement wells and has a significantly larger capture zone than other abatement wells, was also assigned its own group by both the KMeans and Agglomerative clustering algorithms. If multiple sources are impacting Facility groundwater, concentrations observed in 22D would likely represent considerable comingling given the size of its capture zone.

3. The grouping of Shallow Artesian wells 88-1-SA, 88-2-SA, 88-7-SA, and 88-8-SA by agglomerative clustering of normalized data is strong statistical evidence of potentially more widespread contamination of the Potomac aquifer unrelated to historical Facility operations. Shallow Artesian wells have been consistently unimpacted by the organic compounds detected in

the Magothy aquifer over the course of regular groundwater monitoring yet show PFASs concentrations above the NJDEP drinking water standards. The cluster analyses indicates that signatures observed in these wells are unique relative to the signatures observed in Facility Magothy aquifer wells yet are consistent between each other, indicating that these impacts are likely from the same unidentified source.

4. A single surface water sample collected from the stormwater collection tank on the western portion of the Facility was assigned its own unique cluster by the agglomerative clustering of normalized data. This sample has high concentrations of PFAS replacement compounds relative to other observations, and most samples with PFAS replacement compound detections are located on the western portion of the sampling area. Detections of PFAS replacement compounds were not expected due to their more recent widespread adoption in industrial processes and the timing of the 1977 explosion that resulted in releases of organic compounds, during which AFFF may have been used and released to Facility soil and groundwater. One hypothesis for the source of these compounds was deposition of airborne contaminants via precipitation. This hypothesis is strengthened by the fact that the western-most stormwater sample has a statistically unique PFAS signature in addition to having one of the highest PFAS replacement compound concentrations of all samples collected in this investigation.

5. Cluster analyses was not sufficient in and of itself to assign clear statistically significant source zones due to the considerable comingling of numerous PFASs via both natural and abatement-well driven groundwater advection and contaminant dispersion. Cluster analyses does, however, provide statistical evidence that PFASs detected in Facility groundwater likely originated from numerous sources both on and off the Facility. Conclusions regarding potential source zones and source concentrations are established via generating hypotheses based on how the observations and cluster analyses fit into the hydrogeologic conceptual model and testing those hypotheses using quantitative numerical groundwater flow and contaminant transport modeling.

PFASs signatures are presented in the following four (4) figures for data visualization purposes, one for each of the four (4) cluster groups identically assigned by both the variance-based KMeans cluster algorithm and the hierarchical (Agglomerative and BIRCH) cluster algorithms. These groups do not represent diagnostic source zone signatures in and of themselves, described further below, but do appear to provide a relatively clear visualization of how observed PFASs agree with the Site hydrogeologic conceptual model. The final groupings are as follows:

Cluster #1: This group, consisting solely of monitoring well 17-a, had the highest concentrations of PFASs and is a Water Table zone well in the central portion of the former permitted area, located generally where the greatest impacts from the 1977 explosion would be expected (Figure 4: *Cluster #1*).

Cluster #2: Another group, consisting solely of Intermediate Zone abatement well 22D, likely represents a mixture of a variety of PFASs signatures found across the site (Figure 5: *Cluster #2*). Abatement well 22D has a large capture zone and pumping rate relative to other abatement wells under the current pumping regime, therefore it is assumed that PFASs signatures compiled from 22D analytical results represent a comingling and aggregation of multiple distinct PFASs source signatures via the sustained hydraulic gradient created by the operation of the Facility abatement well system. The fact that 22D falls into its own unique cluster is evidence of the validity of this interpretation.

Cluster #3: Eight wells belong to the third cluster group, which generally occupy the facility periphery and likely represent a mixing between background PFASs that arrived beneath the facility via upgradient groundwater contamination and PFASs that have migrated from the AFFF-impacted source zone in the vicinity of monitoring well 17-A (Figure 6: *Cluster #3*). This differs from the interpretation of Cluster #2 in that the comingling within these clusters is likely driven by contaminant migration along the natural groundwater flow regime as well as the abatement well system. The influent and effluent samples taken at the wastewater treatment plant also fit into this cluster. Two (2) of the monitoring wells that constitute this cluster are screened in the Shallow Artesian Zone along the southern facility boundary, 88-1-SA and 88-2-SA. Concentrations of PFOA and PFNA in 88-2-SA, measured at 1.090 ug/L and 1.420 ug/L respectively, are higher than those measured in Intermediate Zone wells 88-2-I (PFOA at 0.614 ug/L and PFNA 0.950 ug/L). 88-2-I and 88-2-SA are co-located along the South Marsh but screened in different water bearing units. 88-2-I is an Intermediate Zone monitoring well, while 88-2-SA is a Shallow Artesian monitoring well. These concentration observations are consistent with the hydrological conceptual model of the Site, where groundwater flows from the Potomac Aquifer (of which the shallow artesian is the uppermost water-bearing unit underlying the Site) into the Magothy Aquifer (of which the intermediate zone is the lowermost water-bearing unit underlying the Site) at a relatively slow rate of 650 ft^3/day across a semi-confining unit. General hydrogeology of the BD Facility is discussed in Sections 2.2: *Physical Setting* and 5.1.1.1: *Conceptual Site Model* of the CMS.

Cluster #4: The final cluster group seems to be dominated by apparent background PFASs contamination of the Potomac-Raritan-Magothy Aquifer in this area (Figure 7: *Cluster #4*). Twenty-five (25) of the thirty-seven (37) sample locations included in the cluster analysis were grouped together by the clustering algorithms. These sample locations are distributed across the Site and include four (4) of the six (6) sampled Shallow Artesian wells as well as all three (3) stormwater samples. General spatial distribution of Cluster

#4 sample locations favors the northern and eastern areas of the facility, though some sample locations are within the operations area of the facility itself. The assignment of observations within the operations area is further evidence of off-site contamination impacting the Facility: these signatures are statistically more similar to the upgradient PFASs signatures than those observed in the vicinity of suspected Facility groundwater impacts.

2.9.5.1.3 Durov Analysis

Samples were taken from nine (9) select locations during the PFASs remedial investigation for analysis of general groundwater chemistry parameters. These analytical laboratory results were used in a Durov plot to assess whether the observed PFASs signatures reflected underlying differences in general groundwater geochemistry that may have influenced the migration of PFASs across the Site, or if any correlations between general groundwater geochemistry and the observed PFASs groupings could be established (Figure 8: *Durov Plot October 2021*). As seen in Figure 8, there is limited evidence of any correlation between PFASs signatures and general groundwater chemistry signatures; this suggests that the neither the observed PFASs signatures nor the PFASs groupings established in the cluster analysis illustrate underlying differences in groundwater geochemistry that may have influenced PFASs migration and retention across the Site.

2.9.5.1.4 Signature Evaluation

The cluster analysis described above provided statistical evidence that PFASs detected in Facility groundwater may have originated from multiple sources but does not automatically assign likely PFASs source locations and source concentrations. Such designations require further qualitative and semi-quantitative assessments of PFASs signatures and an application of the scientific method to hypothesize sources based on a larger body of information than the laboratory results alone. This information includes the hydrogeologic conceptual model, the operational history of the Facility, expected PFASs signatures that might be diagnostic of specific PFASs sources (for example, AFFF products manufactured over particular years each have their own PFASs signatures that differ from signatures expected from PFAS releases related to manufacturing processes), and an assessment of potential source processes that are associated with specific PFASs (i.e. PFAS replacement compounds found in the environment are often a result of wet deposition of stack emissions from manufacturing facilities (NC PFAST Network, 2019), and high concentrations of PFSAs are often associated with AFFF (Houtz, 2013)). A semi-quantitative examination of how the PFASs signatures developed from the remedial investigation data agree with the factors listed above indicates at least three unique sources of environmental PFASs contamination impacting the BD Site: inflow of contaminated groundwater from off-site, potential wet deposition of PFAS Replacement

Compounds emanating from a nearby point source, and groundwater contamination associated with application of AFFF. Each signature and its diagnostic criteria are discussed below.

Background groundwater contamination: These PFASs signatures consist primarily of PFOA, Long-chain PFCAs, and Short-chain PFCAs. The individual concentrations of all three analyte groups do not generally exceed 0.200 ug/L. PFOS can be present in these signatures, but does not exceed 0.100 ug/L. Other analyte groups may be present in these signatures near the edge of what is assumed to be the AFFF-impact source zone, but do not exceed 0.01 ug/L (with the exception of PFAS Replacements, see below). Intermediate zone monitoring well DP-5 has summed PFCA Precursors of 0.039 ug/L but is otherwise consistent with the background contamination signature. DP-5 is located southeast of the facility and outside of expected groundwater flow from the operations area of the BD facility, therefore has been categorized as background. This is reinforced by the cluster analysis, where DP-5 was grouped with the other background data points.

Two (2) Shallow Artesian monitoring wells, 88-1-SA and 88-2-SA, showed the same basic background signature that consisted almost entirely of PFOA, Long-Chain PFCAs, and Short-Chain PFCAS, but at much greater magnitudes than the rest of the background signatures (for example, PFOA was measured in 88-1-SA and 88-2-SA at concentrations of 1.269 ug/L and 1.090 ug/L, respectively. For context, these are the 5th and 6th highest PFOA measurements across all 37 water samples). Groundwater flow within the Shallow Artesian zone is relatively complex and interconnected with the Delaware River, along which the Potomac-Raritan-Magothy Aquifer outcrops, therefore an exact source of these elevated PFOA concentrations cannot be easily identified with certainty even though the wells are directly down-gradient of the facility.

Site impacts: Based on preliminary investigation results, PFASs associated with BD historical operations are anticipated to be primarily sourced from the application of AFFF during the emergency response to the 1977 explosion and fire, despite the inability to confirm the historical use. Numerous PFASs signatures compiled from the subsequent remedial investigation data are consistent with AFFF releases, in that there are significant concentrations of both Long- and Short-Chain PFSAs (Houtz, 2013). Signatures that show both Long- and Short-Chain PFSAs over 0.100 ug/L are consistent with areas of greatest site environmental impacts and establish diagnostic criteria for the Site-related PFASs source areas. Signatures where these groups are present but either one is below the 0.100 ug/L threshold are interpreted to indicate migration from the AFFF-impacted source areas and/or potential comingling with background PFASs or other source concentrations. Spatial distribution of these signatures is consistent with the Site Conceptual Model, both in source area location (see 2.3.3: *Current Contaminant Distribution* in the CMS) and groundwater migration pathways.

Monitoring wells 17-a and 4-b show signatures that are diagnostic of an AFFF source area. As expected, the source area signatures are concentrated within the same area, as discussed thoroughly in Section 5 of the CMS, that was impacted by volatile organic compounds as a result of the 1977 explosion and fire. Monitoring wells MW-41, L2, 88-2-I, 88-5-WT, MA-9S, MW-40, and MW-4-A all have PFASs signatures that suggest migration of AFFF-derived PFASs from the AFFF source area, which is consistent with both the Site conceptual model and quantitative fate and transport modeling and analysis work performed during the CMS.

Background atmospheric deposition signatures: The results of the remedial investigation provided compelling evidence of additional PFASs impacts via deposition of airborne contaminants. Specifically, the distribution of the PFAS Replacements analyte group across the Site is not consistent with the suspected AFFF impact distribution nor the background signatures defined by upgradient wells. HFPO, also known as Gen-X, is the only compound of the four (4) analytes in the PFAS Replacements analyte group that was detected in any sample. HFPO is a relatively newer compound that wasn't commercially produced until 2009, though it was likely in use prior to this date. However, this compound would be unexpected in pre-2009 AFFF mixtures, especially an AFFF mixture that was potentially applied by the incinerator fire-suppression system during the 1977 explosion and fire. A literature search indicates that airborne deposition of HFPO has been well documented (NC PFAST Network, 2019), and the distribution of HFPO across the western portion of the Site appears consistent with precipitation-driven deposition of PFASs entrained in an atmospheric plume emanating from a single point, such as a stack emission.

2.9.5.1.5 Current Contaminant Distribution in Groundwater

The current distribution of the PFASs in groundwater associated with AFFF, and therefore clearly considered Facility-derived PFASs, is very similar to the VOC plume delineated in Section 5 of the CMS. Distributions of the three (3) NJDEP-regulated PFASs (PFOA, PFNA, and PFOS) in each of the major aquifer units at the site are presented on figures and discussed in text subsections following. Isopleth distributions shown on the figures were interpolated from investigation monitoring well data using Inverse Distance Weighting in QGIS (QGIS.org, 2022) with a distance coefficient of 2.0.

2.9.5.1.5.1 PFOA

Distribution of PFOA in the Magothy aquifer (Water Table Zone and Intermediate Zone) is shown in Figure 9*: Perfluorooctanoic Acid (PFOA) Distribution, Magothy Aquifer*. Concentrations of PFOA in the Magothy aquifer range from 0.0093 ug/L in monitoring well DP-1 to 4.56 ug/L in monitoring well 17. The highest measured PFOA concentrations are located within the suspected AFFF impacted area; though it should be noted that all PFOA concentrations measured in the Magothy aquifer were above the NJDEP's MCL for

PFOA (0.014 ug/L) with the exception of monitoring well DP-1, which is on the down-gradient side of the site.

Distribution of PFOA in the Shallow Artesian zone of the Potomac aquifer is shown in Figure 10: *Perfluorooctanoic Acid (PFOA) Distribution, Potomac Aquifer, Shallow Artesian Zone*. Concentrations of PFOA in the Shallow Artesian zone range from 0.0045 in monitoring well 88-7-SA to 1.27 ug/L in monitoring well 88-1-SA. Although the highest concentrations are on the down-gradient side of the site, the upgradient well, DP-4 has a concentration an order of magnitude higher than Shallow Artesian wells in the central portion of the site where the 1979 fire and fire-suppression activities occurred.

2.9.5.1.5.2 PFNA

Distribution of PFNA in the Magothy aquifer is shown in Figure 11*: Perfluorononanoic Acid (PFNA) Distribution, Magothy Aquifer*. PFNA was measured above NJDEP drinking water MCL of 0.013 ug/L in all Magothy monitoring well samples, with concentrations ranging from 0.0187 ug/L in monitoring well DP-1 to 1.670 ug/L in monitoring well 88-5-WT. The highest being from monitoring well 88-5-WT does not correlate with the location of the highest concentration of PFOA or other site contaminants.

Distribution of PFNA in the Shallow Artesian zone of the Potomac aquifer is shown in Figure 12: *Perfluorononanoic Acid (PFNA) Distribution, Potomac Aquifer, Shallow Artesian Zone*. Shallow Artesian Zone PFNA concentrations range from 0.0021 ug/L in 88-5-SA to 1.42 ug/L I 88-2-SA.

2.9.5.1.5.3 PFOS

Distribution of PFOS in the Magothy Aquifer is shown in Figure 13: *Perfluorooctane Sulfonic Acid (PFOS) Distribution, Magothy Aquifer*. Measured PFOS concentrations range from non-detection in monitoring well CAMU-3-I to 0.526 ug/L in monitoring well 4-b. Samples from twelve (12) of twenty (20) Magothy monitoring wells wells yielded PFOS concentrations greater than the NJDEP MCL for PFOS (0.013 ug/L).

Measured concentrations of PFOS in the Shallow Artesian zone of the Potomac Aquifer range from non-detections in monitoring wells 88-7-SA and 88-8-SA to 0.0052 ug/L in monitoring well 88-2-SA. The maximum measured concentration is roughly half the NJDEP MCL for PFOS of 0.013 ug/L and is below the lowest concentration contour used in preceding distribution plots, therefore no figure depicting PFOS distribution in the Potomac Aquifer is provided here.

2.9.5.1.5.4 ClPFPECAs

The distribution of ClPFPECAs is addressed here in response to the January 18th, 2022 adoption of NJDEP ISGWCQs for ClPFPECAs. ClPFPECAs were not included in the approved list of target PFASs analytes for the Remedial Investigation, therefore no data is currently available to indicate whether or not

ClPFPECAs are present in groundwater underlying the BD Facility. However, known discharges of ClPFPECAs to air and water occurred annually from 1996 to 2018 from a Solvay facility located in West Deptford, NJ, within ten (10) miles of the BD Facility (Post, 2021). BD Facility obligations regarding ClPFPECAs according to N.J.A.C. 7:26D-2.2(a) are: "At a minimum, the person responsible for conducting the remediation is required to evaluate whether there is the potential that ClPFPECAs may have been manufactured, used, handled, stored, disposed, or discharged at the site or area of concern" (NJDEP, 2022). While manufacture and use of ClPFPECAs did not occur at the BD Facility, the handling, storage, or disposal of ClPFPECAs may have occurred at the BD Facility, although records of such a possibility are not readily available. While it is possible that ClPFPECAs have been incorporated in hazardous waste accepted at the BD Facility for disposal, it is unlikely that any ClPFPECAs disposed of at the BD Facility have migrated to environmental media: the known extent of groundwater and soil contamination at the BD Facility is predominately attributed to the 1977 explosion and fire, which predates the use of ClPFPECAs in manufacturing processes by two (2) decades. If ClPFPECAs exist in BD Facility environmental media, such contamination is likely due to migration from Solvay's West Deptford, NJ facility via airborne deposition. Migration via groundwater is unlikely given the regional groundwater flow regime, discussed thoroughly in Section 5 of the CMS.

2.9.5.1.6 Current Contaminant Distribution in Stormwater Runoff

Stormwater signatures are depicted in Figure 7. The two (2) western stormwater collection points (sample names STORMWATER-001 and STORMWATER-003) show relatively high levels of PFAS Replacement compounds, which is further evidence of atmospheric deposition of HFPO across the western portion of the BD Facility. Other PFASs detected in these two (2) samples are unlikely to be a result of runoff across the Facility based on the analytical results of soil samples, in which only long-chain PFCAs were detected. Contaminant distribution in soil is discussed below. However, the signatures in STORMWATER-001 and STORMWATER-003 have some consistency with groundwater signatures in their collection areas. The water table elevation at the Facility is relatively shallow and at some times equal to ground surface elevation therefore it is probable that groundwater will occasionally be captured by the stormwater collection system. The easternmost stormwater runoff sample, STORMWATER-002 collected from the stormwater collection basin, shows a signature that is nearly identical to the groundwater signatures in its immediate vicinity, indicating possible inflow of groundwater to the stormwater basin due to the relatively high water table at the Facility.

2.9.5.1.7 Current Contaminant Distribution in Soil

All four (4) soil sample locations showed similar analytical results, with most detected PFASs falling into the long-chain PFCA grouping (Figure 14: *Soil Sample PFASs Signatures*). Sample location PFAS-SS-104, selected due to its proximity to the current AFFF storage location, did not show PFASs that would be indicative of potential AFFF releases: no perfluorosulfonic acids were detected in the soil sample whatsoever.

2.9.5.2 Migration Potential

Investigation data indicate PFASs are migrating onto the BD Facility via groundwater within all water-bearing hydrogeologic units at concentrations above NJDEP screening levels, as noted in the previous subsections. The majority of PFASs migrating onto the site or migrating from the former operational areas on the site are captured by the abatement well system. Any groundwater not captured by the abatement well system in operation at the BD Facility is eventually discharging to Raccoon Creek and/or the Delaware River, per the groundwater conceptual site model as described in section 5.1.1 of the CMS. The PFAS remedial investigation data also found evidence of aerial migration from off-site and subsequent deposition of PFASs in the vicinity of the BD Facility.

PFAS migration off-site is also occurring via the BD Facility's wastewater treatment system, which treats the groundwater pumped by the abatement system. The current groundwater extraction well pumping configuration largely surrounds the site in three directions and targets the previously identified groundwater contamination that has been attributed to historical Facility operations. The air-stripper treatment associated with the system is directed at the VOC contamination that has been the primary indicator of system performance and requires treatment to meet NJPDS permit limits. The pump and treat system is also expected to capture PFASs associated with the BD Facility, as discussed in forthcoming sections. However, the filter and air-stripper processes in the treatment system were not designed to remediate non-volatile organic compounds like PFASs, therefore the discharge from the current wastewater treatment plant into Raccoon Creek is a pathway for PFASs to migrate from impacted groundwater at the Facility to the environment. Capture of Facility-related PFAS contamination in groundwater is the primary focus of potential corrective measures targeting PFAS contamination at the BD Facility.

In addition to groundwater flow and wastewater treatment discharge, PFASs are likely migrating from the BD Facility into the environment via bioaccumulation in the food chain. Longer-chain PFASs are known to bioaccumulate in organisms, which can result in elevated concentrations of long-chain PFASs in higher-trophic receptors such as Blue Herons and Minks. Additionally, herbivores can also be exposed to PFASs

via ingestion of plants that have consumed PFAS-contaminated water. Ecological risk resulting from PFASs in BD Facility groundwater is discussed in a forthcoming section.

2.9.5.2.1 Background Groundwater Quality

Numerous PFASs were detected in wells that are hydraulically upgradient from the BD facility. Given the Site proximity to relatively large urban areas and numerous industrial facilities, these background PFASs concentrations are not unexpected given the prevalence of such compounds at the low levels of interest. PFOA, long-chain PFCAs (specifically PFNA and PFHpA), and short-chain PFCAs (specifically PFBA, PFPeA, PFHxA) were detected in every upgradient sample. PFOA was detected above the NJDEP's screening level of 0.014 ug/L in eight (8) of the ten (10) upgradient monitoring wells, with values ranging from 0.0045 ug/L to 0.099 ug/L.

Potential corrective measures objectives targeting PFASs contamination at the BD Facility are focused on PFAS contributions from the BD facility and not the capture of any underlying background contamination. Results of the remedial investigation indicate that PFAS contamination of the Potomac-Raritan-Magothy aquifer is widespread. Impacts that were likely caused by historical BD Facility operations appear to be contained by the current abatement well pumping regime and track closely to the VOC plume that has been identified beneath the Site.

2.9.5.2.2 Potential Source Delineation

Facility-derived PFASs were likely sourced from the same catastrophic event that resulted in the majority of VOC releases on the Site, specifically the 1977 explosion and fire. In addition, PFASs are known to sorb onto organic co-contaminants and migrate according to the sorbent's transport behavior (ITRC, 2020). Therefore, the distributions of PFASs released from the BD Facility are expected to roughly correlate with the distribution of VOCs in groundwater, which is consistent with the results of the remedial investigation. However, the remedial investigation found evidence of significant PFASs concentrations in groundwater migrating onto the Facility from an upgradient source zone as well as evidence of aerial deposition of airborne PFASs such as HFPO-DA (GenX). Likely sources of PFASs impacting environmental media in the vicinity of the BD Facility are depicted in Figure 15: *Potential Sources of Per- and Polyfloroalkyl Substances (PFASs) Environmental Media Contamination*.

2.9.5.2.3 Quantitative Migration Potential Analysis

The above hypotheses regarding potential sources of PFASs impacting BD Facility groundwater were further evaluated using quantitative fate and transport modeling. A robust MODFLOW-SURFACT numerical groundwater flow and contaminant transport model was previously developed for the BD

Facility, which is described in detail in Appendix E of the CMS. This same model was used here, with the addition of source zones to incorporate the AFFF impacts as one source zone and the off-site contamination as another. The model run time was iteratively adjusted such that the background concentrations assigned to the edge of the model domain had sufficient time to migrate across the Facility; the final simulations used a simulation time of thirty (30) years. Concentrations of the various representative source zones were assigned using the results of the remedial investigation: the AFFF source zone was assigned the same concentrations measured in Well 17-A, and the off-site contamination was assigned the average of all background signatures (Cluster Group #4, see Figure 7). PFASs were simulated by grouping, rather than individual compound. Eight (8) of the ten (10) total groups were simulated; the PFAS Replacements group was not included in the groundwater model to reduce overall run time, and because those impacts are suspected to be from deposition and subsequent infiltration of contaminants sourced from an airborne plume. Including the PFAS Replacements group in the quantitative groundwater migration analysis would not properly assess the hypothesis of airborne deposition. Source zone concentrations were all held constant throughout the simulations. No additional adjustments were made to the existing groundwater flow model and source zone concentrations or compound-specific transport parameters, such as retardation factor and dispersion, were estimated from site data. For this initial simulation evaluation, the transport parameters were not further calibrated to refine the fit of the simulated results to the observed data distribution. The retardation factors were calculated using estimates of organic carbon content and bulk density of the subsurface, as well as water-organic carbon partitioning coefficients (K_{oc}) established for the various PFASs groupings. K_{oc} values used in the groundwater flow model are tabulated in Table 5: *PFASs Grouping Transport Parameters*.

Model results are presented in Figure 16: *Simulated versus Observed PFASs Concentrations*. The simulated PFASs signatures are consistent with observations in both magnitude and relative ratios between PFASs groupings. In general, the quantitative migration potential analysis supports the source zone hypotheses presented above: 1) the majority of BD Facility impacts are a result of the application of AFFF, with a source zone localized in the vicinity of monitoring wells 17-A and 4b; and 2) off-site PFASs sources are impacting groundwater underlying the BD Facility and its vicinity, including the Shallow Artesian zone of the Potomac Aquifer.

2.9.5.3 Toxicology

General background on the toxicity of PFASs is discussed in Section 2.9.1.3. In short, the human health and ecological risks of more commonly occurring PFASs such as PFBA, PFOA, PFNA, PFBS, PFHxS, PFOS and HFPO-DA (GenX) have been the focus of most research efforts, and a variety of regulatory

bodies have established concentration thresholds for both drinking water and environmental media that are considered protective of human and ecological health. Expanding the general understanding of the potential harmful effects of PFASs continues to be an active area of research, and one can reasonably expect that additional guidance from regulatory agencies will be provided in the coming years as the state of the science regarding the risks of environmental PFASs advances.

2.9.5.3.1 Human Health

Ground Water Quality Standards for three (3) PFASs have been established by the NJDEP for the State of New Jersey: 0.014 ug/L for PFOA, 0.013 ug/L for PFNA, and 0.013 ug/L for PFOS. Twenty-eight (28) of the thirty-two (32) groundwater samples collected during the remedial investigation exceeded Ground Water Quality Standards for PFOA, and PFOA was detected in all samples (samples taken from monitoring wells 88-5-SA, 88-7-SA, 88-8-SA, and DP-1 were below standards). Twenty-nine (29) of the thirty-two (32) groundwater samples exceeded standards for PFNA (wells 88-5-SA, 88-7-SA, and 88-8-SA were below standards). Twenty (20) of the thirty-two (32) groundwater samples were over NJDEP's Ground Water Quality Standard for PFOS (monitoring wells 88-1-SA, 88-2-SA, 88-5-SA, 101D, 101S, 102D, 102S, DP-1, DP-4, MA-5D, W-19, and extraction well 33D were all below limits for PFOS). In addition, the effluent sample from the WWTP was above the limit for all three (3) NJDEP-regulated PFASs.

There is no direct exposure pathway between BD Facility groundwater or WWTP effluent concentrations and human receptors prior to discharge to Raccoon Creek. Therefore, there is little to no additional risk to human health associated with BD Facility-derived PFASs groundwater contamination.

2.9.5.3.2 Ecological Risk

Quantitative ecological risk assessment tools traditionally employed for bioaccumulative organic compounds, such the ecological risk assessment conducted as part of the CMS for PCBs in the North Marsh, are not fully appropriate for PFASs (ITRC, 2020). The mechanism behind bioaccumulation of PFASs in ecological receptors is likely different than PCBs, and empirical relationships between concentrations of PFASs in environmental media and organisms that are exposed to such media are still being established. In addition, the state of the science is still lacking in species-specific Toxicity Reference Values to compare modelled tissue PFASs concentrations to in order to quantify the risk associated with environmental PFAS contamination. USEPA and NJDEP technical guidance is not currently available regarding quantitative ecological risk assessments associated with environmental PFAS contamination, however numerous government and private entities have developed environmental and risk-based screening levels (ESLs and RBSLs, respectively) for PFOS and PFOA (ITRC, 2020). PFOS screening levels range from Canada's Federal Environmental Quality Guideline of 6.8 ug/L to Michigan's Tier II Final Chronic Value of 140

ug/L (Ankley et al, 2020). A comprehensive table of screening levels and regulatory thresholds can be found in Ankley et al, 2020. The upper and lower screening levels listed above do not include ecotoxicity threshold values because those values rely on the assumption that higher-trophic ecological receptors have 100% exposure to the impacted media; the spatial extent of PFASs impacts at the BD Facility are significantly smaller than the ranges established for potential receptors in the North Marsh, as described in Section 4 and Appendix D of the CMS. In addition, the quantification of bioaccumulation factors used in establishing ecotoxicity screening levels remains an evolving area of study; the ITRC recommends not using bioaccumulation models for risk management decision-making at this time (ITRC, 2020).

The screening levels are used here for the purposes of establishing a qualitative assessment of ecological risk resulting from historical PFAS releases from the BD Facility are the most protectively conservative screening levels established in the United States to date: Minnesota's continuous chronic criterion of 19 ug/L for PFOS (Stevens and Cory, 2007) and Michigan's Tier II Final Chronic Value of 880 ug/L for PFOA. All groundwater PFOS and PFOA concentrations measured in BD Facility groundwater samples are well below these screening levels: the highest PFOS concentration measured in the remedial investigation was 0.526 ug/L in monitoring well 4B, while the highest PFOA concentration was 4.56 ug/L in monitoring well 17. Based on the current understanding of the ecological risk that environmental PFAS contamination may pose, it can be concluded that the PFASs observed in groundwater underlying the BD Facility do not pose a significant risk to the ecosystem of the North Marsh or surrounding region.

2.9.6 QUALITY ASSURANCE/QUALITY CONTROL

Quality Assurance/Quality Control (QA/QC) samples were used to help evaluate the efficacy of the final data. Field quality control samples help evaluate conditions resulting from field activities and are intended to assess potential field contamination and sampling variability. Laboratory quality control samples measure errors associated with the laboratory instruments, sample handling, and monitor for laboratory-induced contamination. Collection and analysis of QA/QC samples is especially important for PFASs analyses because of very low detection limits and widespread use of PFAS-containing products. The QA/QC samples described in section 4 of Appendix B: Per-and Polyfluoroalkyl Substances (PFAS) Environmental Media Sampling Standard Operating Procedures (SOP) were collected at the facility. The process for taking the samples is outlined in Appendix B. The following section details the number of QA/QC samples that were taken and the results of the laboratory analysis.

2.9.6.1 Equipment Rinseate Blanks

An Equipment Rinseate Blank was collected each day. One (1) blank was collected for each sampling procedure. These Rinseate Blank samples were analyzed for the MLA-110 analytical method described above. A total of six (6) equipment blanks were collected. The equipment used for the rinseate blanks was at the discretion of the sampling team and varied each day; the team generally collected rinseate from the bladder pump immediately after conducting equipment decontamination procedures between sample locations but also used a variety of other equipment sources of potential cross-contamination over the course of the sampling event, such as the twine used to lower the pump into monitoring wells and the trowel used to collect soil samples.

There were no detections of PFASs in any equipment rinseate blank samples collected during the Remedial Investigation.

2.9.6.2 Field Blanks

One (1) field blank was collected at the beginning of every day, for a total of six (6) field blanks. Per the SOP, these samples were taken near each day's first sample location. Once this blank was collected, the sample was placed in a cooler on ice. Field blanks were analyzed using the MLA-110 analytical method described above.

No PFASs were detected in any field blank collected during the Remedial Investigation.

2.9.6.3 Duplicate Samples

One duplicate sample was collected per ten (10) primary samples, for a total of three (3) duplicate groundwater samples, one (1) duplicate stormwater sample, and one (1) duplicate soil sample. The duplicate locations were chosen by the field crew and were collected at the same time as the primary sample. The name and time on the label were changed so that no correlation between duplicate and primary samples would be evident to the laboratory. The duplicates samples were collected using the same method as the primary samples. The duplicate samples were analyzed using the MLA-110 analytical method described above. The relative percent difference (RPD) method was used to compare the duplicate and primary sample analytical results (Table 4: *Duplicate Sample Evaluation*).

Five (5) analytes showed RPDs greater than 30% between the primary and duplicate samples. However, three (3) of the five (5) had J-flagged data for one of the samples and a non-detect for its corresponding

pair. The J-flagged data are considered estimated values therefore these RPDs are artificially high. Two (2) analytes showed RPDs greater than 30% between primary and duplicate samples without J-flagged data. Both samples were taken from monitoring well DP-5: 6:2 FTS was measured at a concentration of 0.034 ug/L but was not detected in the duplicate sample (detection limit of 0.016 ug/L); PFOS was measured at a concentration of 0.021 ug/L in the primary sample and 0.006 in the duplicate sample (detection limit of 0.004 ug/L). All thirty-eight (38) other analytes had RPDs less than 30% between the DP-5 primary and duplicate samples.

On the basis of the QA/QC and data review, the data collected for the PFAS investigation are considered valid and representative.

2.10 COMPLETED CASE INVENTORY DOCUMENT

The site has remained under USEPA Corrective Action oversight with comments and input from the NJDEP. As such, the site is not part of the NJDEP LSRP program. There is no separate NJDEP PFAS case established that would require the submittal of a Completed Case Inventory document per NJDEP guidance at this time, and therefore no Case Inventory document is included in this report.

3 PFASS CORRECTIVE MEASURES STUDY

The following sections serve as an addendum to the CMR for the BD Facility submitted to the EPA in November 2020 (Leppert Associates, 2020). This CMR addendum is to review potential Corrective Measures associated with the emerging contaminant PFASs detected during the 2019 Preliminary Assessment and subsequent 2021 Remedial Investigation. Based on the data evaluation in the preceding sections, this PFAS Corrective Measures review is for the PFAS contamination in groundwater underlying the BD Facility attributed to BD facility. Remedial actions assessed and proposed here satisfy goal #7 of the Remedial Investigation as prescribed in Section 7:26E: *Technical Requirements for Site Remediation*, Subchapter 4: *Remedial Investigations*, Section 4.9: *Remedial Investigation Report* of the N.J.A.C.: "Identify containment and/or stabilization activities to prevent contaminant exposure to onsite receptors and to prevent the offsite migration of contaminants while remedial alternatives are being evaluated" (NJAC, 2009).

3.1 CORRECTIVE MEASURES OBJECTIVES

The remediation goals established for PFAS contamination in groundwater underlying the BD Facility are twofold: 1) Capture and extract groundwater that is impacted by PFASs due to historical Facility operations, and 2) Ensure that PFASs concentrations in the effluent from the WWTP are below appropriate environmental screening levels for surface waters.

Capture of PFASs-impacted groundwater is accomplished in the same way as the VOC contamination discussed in Section 5 of the CMR. PFASs-specific considerations regarding potential Corrective Measures are discussed below in the Corrective Measures Alternatives analysis.

As of this report, the State of New Jersey and the NJDEP have not established any quantitative regulatory limits for non-potable surface water. Other regulatory entities, however, have established concentrations for PFOA and PFOS that are considered protectively conservative of environmental health and safety as discussed in Section 2.9.5.3.2: Ecological Risk. In lieu of NJDEP regulatory limits for PFASs concentrations in surface waters, the screening levels established in Section 2.9.5.3.2 regarding ecological risk thresholds is used as Corrective Measures Objectives for BD Facility WWTP effluent for the purposes of this review of potential Corrective Measure alternatives. The specific screening levels used are Minnesota's continuous chronic criterion of 19 ug/L for PFOS (Stevens and Cory, 2007) and Michigan's Tier II Final Chronic Value of 880 ug/L for PFOA. Current effluent concentrations of PFOA and PFOS are below these relevant screening levels; the concentration of PFOA in WWTP effluent was measured at 1.430 ug/L, while the concentration of PFOS in WWTP effluent was measured at 0.106 ug/L.

3.2 INTERIM MEASURES

No interim measures have been implemented that target PFASs in groundwater, specifically. However, the extent of PFAS contamination in groundwater that is the focus of the alternatives review is co-located and spatially smaller than the VOC impacts that are described in detail in Section 5 of the CMR. VOCs in groundwater are currently contained by the abatement well system operated by the BD Facility, therefore PFASs in groundwater attributed to the BD facility are likewise being captured. In addition, though the air stripper treatment system targeting VOCs in groundwater likely has little if any effect in removing or destroying PFASs, current WWTP effluent concentrations meet the Corrective Measures Objectives described above.

3.3 EVALUATION OF THE CORRECTIVE MEASURES ALTERNATIVE(S)

An Alternatives Analysis was conducted for each of the groundwater Corrective Measures Alternatives advanced from the preliminary screening described in Section 5 of the CMR (Leppert Associates, 2020). The preliminary screening results were detailed in subsection 5.1.3: *Identification of the Corrective Measures Alternative or Alternatives*. The three (3) Groundwater Corrective Measures Alternatives that were evaluated are: 1) Hydraulic Containment; 2) Hydraulic Containment with Bioremediation in the Source Areas, and 3) Hydraulic Containment with In-Situ Chemical Oxidation in the source Area. The alternatives were evaluated from five (5) perspectives: Technology, Environmental, Human Health, Institutional, and Cost. Further details of the basis of the evaluation of the Corrective Measures Alternatives can be found in subsection 5.2 of the CMR.

3.3.1 TECHNOLOGY

Technology was evaluated for each of the Corrective Measure Alternatives in subsection 5.2.1: *Technology* of the CMR (Leppert Associates, 2020). This evaluation examined Technology based on performance, reliability, implementability, and safety. Effectiveness was evaluated in terms of the ability to perform the intended functions, such as containment, diversion, removal, destruction, or treatment. Each corrective measure was evaluated in terms of the projected service lives of its component technologies. The reliability of each Corrective Measure, including their operation and maintenance requirements as well as their demonstrated reliability, were all examined. The availability of labor and materials to meet these requirements was also considered. The Alternatives Analysis evaluated whether the technologies have been used effectively under analogous conditions; whether the combination of technologies have been used together effectively; whether failure of any one technology has an immediate impact on receptors; and whether the corrective measure has the flexibility to deal with uncontrollable change at the site. The Alternatives Analysis evaluated the implementability of each Corrective Measure including the relative ease of installation (constructability) and the time required to achieve a given level of response. The analysis also contained an evaluation of each Corrective Measures Alternative with regards to safety.

3.3.2 ENVIRONMENTAL

An Environmental Assessment was conducted for each alternative in the CMS. The environmental Assessment focused on the facility conditions and pathways of contamination addressed by each alternative. The Environmental Assessment for each alternative included an evaluation of the short- and long-term

beneficial and adverse effects of the response alternative; any adverse effects on environmentally sensitive areas; and an analysis of measures to mitigate adverse effects.

3.3.3 HUMAN HEALTH

An assessment of each alternative regarding mitigation of short- and long-term potential exposure to any residual contamination and protection of human health both during and after implementation of the Corrective Measure was conducted in the CMS. The assessment described the levels and characterizations of contaminants on-Site, potential exposure routes, and potential affected populations. Each alternative was evaluated to determine the level of exposure to contaminants and the reduction of exposure over time. For management of mitigation measures, the relative reduction of impact was determined by comparing residual levels of each alternative with existing USEPA and NJDEP criteria, standards, or guidelines.

3.3.4 INSTITUTIONAL

An assessment of relevant institutional needs for each alternative was conducted in the CMS. Specifically, the effects of federal, state, and local environmental and public health standards, regulations, guidance, advisories, ordinances, or community relations on the design, operation, and timing of each alternative.

3.3.5 COST

In the CMS as applicable, a cost estimate was developed for each Corrective Measure Alternative (and for each phase or segment of the alternative). The cost estimate included both capital and operation and maintenance costs. A complete detailed explanation of the cost breakdown was presented in subsection 3.3.5: *Cost* of the CMR (Leppert Associates, 2020). This includes cost estimates for Capital, Operation and Maintenance.

3.3.6 ALTERNATIVE 1: HYDRAULIC CONTAINMENT

The first alternative outlined in the CMS was hydraulic containment. The preliminary screening evaluated Hydraulic Containment technologies: Vertical Recovery Wells and Horizontal Recovery Wells (trench, drain or horizontal well). An in-depth description of the containment system can be found in CMR subsection 5.2.6: *Alternative 1: Hydraulic Containment* (Leppert Associates, 2020).

3.3.6.1 Technical

Groundwater Interim Measures implemented at the Site since 1989 have demonstrated effectiveness at recovering aqueous phase contaminants detected in groundwater samples collected from the Magothy Aquifer beneath the Site, as described in subsection 5.2.6.1: *Technical* of the CMR (Leppert Associates, 2020). The containment system has been proven to remove large amounts of VOCs from groundwater and targets an area that encompasses both the Facility-derived PFASs source zone and the majority of Facility-derived PFASs impacts to groundwater.

3.3.6.2 Environmental

A comprehensive Environmental Assessment was conducted for the Hydraulic Containment Alternatives detailed in the CMS. This is detailed in subsection 5.2.6.2: *Environmental* of the CMR (Leppert Associates, 2020). The assessment indicated that Groundwater Interim Measures have been highly beneficial in both the short- and long-term.

3.3.6.3 Human Health

The Environmental Assessment described in the CMR indicated that Groundwater Interim Measures have been highly effective at mitigating the short- and long-term potential exposure to any residual contamination and protects human health both during and after implementation of the Groundwater Corrective Measure (Leppert Associates, 2020).

3.3.6.4 Institutional

Groundwater Interim Measures implementation and operations has met or is consistent with federal, state and local environmental and public health standards, regulations, guidance, advisories, ordinances, and community relations.

3.3.6.5 Cost

A general cost estimate was developed for the Hydraulic Containment Alternative advanced from the preliminary screening of Corrective Measures technology. This is detailed in subsection 5.2.6.5: *Cost* of the CMR and includes capital, operation, and maintenance costs for system implementation and ten (10) years of operation (Leppert Associates, 2020).

3.3.7 Alternative 2: Hydraulic Containment with Bioremediation in the Source Areas

The second alternative that was identified in the CMS Alternatives Analysis was in-Situ Bioremediation. In-Situ Bioremediation was identified as a suitable supplemental (focused source area) remedial alternative for groundwater at the BD Site given that a Hydraulic Containment system will remain in operation until concentrations of specific VOCs and SVOCs are reduced below their respective groundwater quality criteria, or until mass recovery of VOCs and SVOCS across the entire Site asymptotically flattens (Technical Requirements for Site Remediation; NDEP, 2013). This is detailed further in CMR subsection 5.2.7: *Alternative 2: Hydraulic Containment with Bioremediation in the Source Areas* (Leppert Associates, 2020). However, Bioremediation has not been proven effective in destroying or immobilizing PFASs. Microbial degradation of PFASs has been observed to occur only with polyfluoroalkyl substances which contain some carbon-hydrogen bonds instead of C-F bonds (ITRC, 2020).

3.3.7.1 Technology

As shown in CMR subsection 5.2.7.1: *Technology*, bioremediation is effective at the removal of VOCs (Leppert Associates, 2020). However, it is not effective at the degradation of PFASs (ITRC, 2020). This is not a viable method for additional containment for PFAS, therefore no further discussion of the alternative is provided.

3.3.8 Alternative 3: Hydraulic Containment with In-Situ Chemical Oxidation in the Source Area

The third alternative that was identified as a viable technology in the CMS was hydraulic containment with in-situ chemical oxidation in the source area. While in-Situ chemical oxidation is capable of destroying VOCs and SVOCs, it is not effective at the destruction of PFASs. It has been demonstrated that activated persulfate can destroy some PFCAs under acidic conditions; however, in-situ chemical oxidation has also been shown to be incapable of destroying other PFASs such as PFOS and other PFSAs (ITRC, 2020).

3.3.8.1 Technology

In-situ chemical oxidation is detailed in subsection 5.2.8.1: *Technology* of the CMR (Leppert Associates, 2020). The two chemicals that were investigated were activated persulfate and Fenton's reagent, which have shown the potential to destroy some PFCAs under specific conditions but have been investigated in a limited capacity. PFSAs are largely unaffected by in-situ chemical oxidation, therefore this is not an

appropriate treatment technology to apply to the BD Facility. No further discussion of in-situ chemical oxidation as a Corrective Measures Alternative targeting PFASs in BD Facility groundwater is provided.

3.3.9 HYDRAULIC CONTROL (ABATEMENT SYSTEM) OPTIMIZATION

It was suggested in the CMS that the abatement system be optimized to better and more efficiently contain the VOC/SVOC contaminant source areas. This is detailed in subsection 5.2.9: *Hydraulic Control (Abatement System) Optimization* of the CMR (Leppert Associates, 2020). The CMR included details of the optimization process for the abatement system, where initial changes would be made, and the resulting capture performance further considered as part of a stepwise approach to a more optimized system. The viability of an optimized system was evaluated by incrementally adjusting the abatement well operation configuration, with regard to both the number of wells and their pumping rates, in the numerical groundwater flow and contaminant transport model detailed in Appendix E of the CMR (Leppert Associates, 2020). Success was evaluated using particle tracking analyses of simulation results. The optimization of the hydraulic control system outlined in the CMR is expected to effectively contain the BD Facility-derived PFASs impacts to groundwater.

3.4 JUSTIFICATION AND RECOMMENDATION OF THE CORRECTIVE MEASURES

As stated in the CMR, Hydraulic Containment is expected to be the most effective Groundwater Corrective Measures technology at achieving each of the Groundwater Remediation Objectives established for VOCs and SVOCs. This is demonstrated in CMR subsection 5.3: *Justification and Recommendation of the Corrective Measures* (Leppert Associates, 2020). The Hydraulic Containment System outlined in the CMR is expected to be effective at containing PFASs-impacted groundwater attributable to the BD Facility, in addition to containing PFAS-impacted groundwater that appears to be migrating across the site from upgradient sources, therefore hydraulic containment is the recommended Corrective Measures Alternative targeting BD Facility-derived PFAS contamination of Site groundwater. The optimized hydraulic containment system described in Section 5 of the CMR is expected to achieve Corrective Measures Objective #1, stated above in Section 3.1: Capture and extract groundwater that is impacted by PFASs due to historical Facility operations. As stated previously, Corrective Measures Objective #2: Ensure that PFASs concentrations in the effluent from the WWTP are below appropriate environmental screening levels for surface waters, has already been achieved in that effluent concentrations of PFOA and PFOS are below current, protectively conservative environmental screening levels for surface water. There is limited filtering of groundwater in the current system to reduce PCB and metals concentrations in the effluent, and

if additional discharge limits are promulgated, it is technically feasible to add more filtering to reduce PFAS concentrations. The extent and cost of such treatment system changes would depend on the optimized discharge characteristics and the concentrations reductions required, and possible designs have not been further evaluated at this time.

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Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	35	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	35	4:2 Fluorotelomer sulfonate	0.008	0.016	J	ug/l	Water
10/14/2021	35	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	35	6:2 FTS	0.340	0.016		ug/l	Water
10/14/2021	35	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	35	8:2 FTS	0.251	0.016		ug/l	Water
10/14/2021	35	DONA	ND	0.016		ug/l	Water
10/14/2021	35	EtFOSA	ND	0.016		ug/l	Water
10/14/2021	35	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	35	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	35	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	35	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	35	HFPO-DA	0.270	0.008		ug/l	Water
10/14/2021	35	MeFOSA	ND	0.016		ug/l	Water
10/14/2021	35	MeFOSE	ND	0.040		ug/l	Water
10/14/2021	35	NFDHA	ND	0.016		ug/l	Water
10/14/2021	35	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	35	Perfluorobutanesulfonic acid	0.004	0.004	J	ug/l	Water
10/14/2021	35	Perfluorobutanoic acid	0.078	0.008		ug/l	Water
10/14/2021	35	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	35	Perfluorodecanoic acid	0.061	0.004		ug/l	Water
10/14/2021	35	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	35	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	35	Perfluoroheptanesulfonic Acid	0.004	0.004	J	ug/l	Water
10/14/2021	35	Perfluoroheptanoic acid	0.166	0.004		ug/l	Water
10/14/2021	35	Perfluorohexanesulfonic acid	0.034	0.004		ug/l	Water
10/14/2021	35	Perfluorohexanoic acid	0.129	0.004		ug/l	Water
10/14/2021	35	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	35	Perfluorononanoic acid	0.287	0.004		ug/l	Water
10/14/2021	35	Perfluorooctanesulfonic acid	0.319	0.004		ug/l	Water
10/14/2021	35	Perfluorooctanoic acid	0.192	0.004		ug/l	Water
10/14/2021	35	Perfluoropentanesulfonic acid	0.002	0.004	J	ug/l	Water
10/14/2021	35	Perfluoropentanoic acid	0.186	0.004		ug/l	Water
10/14/2021	35	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	35	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	35	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	35	PFEESA	ND	0.016		ug/l	Water
10/14/2021	35	PFMBA	ND	0.016		ug/l	Water
10/14/2021	35	PFMPA	ND	0.016		ug/l	Water
10/14/2021	35	PFOSA	ND	0.008		ug/l	Water
10/16/2021	101D	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	101D	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/16/2021	101D	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	101D	6:2 FTS	ND	0.016		ug/l	Water
10/16/2021	101D	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	101D	8:2 FTS	ND	0.016		ug/l	Water
10/16/2021	101D	DONA	ND	0.016		ug/l	Water
10/16/2021	101D	EtFOSA	ND	0.016		ug/l	Water
10/16/2021	101D	EtFOSAA	ND	0.008		ug/l	Water
10/16/2021	101D	EtFOSE	ND	0.040		ug/l	Water
10/16/2021	101D	F-53B Major	ND	0.016		ug/l	Water
10/16/2021	101D	F-53B Minor	ND	0.016		ug/l	Water
10/16/2021	101D	HFPO-DA	ND	0.008		ug/l	Water
10/16/2021	101D	MeFOSA	ND	0.016		ug/l	Water
10/16/2021	101D	MeFOSE	ND	0.040		ug/l	Water
10/16/2021	101D	NFDHA	ND	0.016		ug/l	Water
10/16/2021	101D	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/16/2021	101D	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	101D	Perfluorobutanoic acid	0.015	0.008		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/16/2021	101D	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	101D	Perfluorodecanoic acid	ND	0.004		ug/l	Water
10/16/2021	101D	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/16/2021	101D	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/16/2021	101D	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/16/2021	101D	Perfluoroheptanoic acid	0.015	0.004		ug/l	Water
10/16/2021	101D	Perfluorohexanesulfonic acid	0.002	0.004	J	ug/l	Water
10/16/2021	101D	Perfluorohexanoic acid	0.024	0.004		ug/l	Water
10/16/2021	101D	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	101D	Perfluorononanoic acid	0.075	0.004		ug/l	Water
10/16/2021	101D	Perfluorooctanesulfonic acid	0.004	0.004		ug/l	Water
10/16/2021	101D	Perfluorooctanoic acid	0.068	0.004		ug/l	Water
10/16/2021	101D	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	101D	Perfluoropentanoic acid	0.015	0.004		ug/l	Water
10/16/2021	101D	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/16/2021	101D	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/16/2021	101D	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/16/2021	101D	PFEESA	ND	0.016		ug/l	Water
10/16/2021	101D	PFMBA	ND	0.016		ug/l	Water
10/16/2021	101D	PFMPA	ND	0.016		ug/l	Water
10/16/2021	101D	PFOSA	ND	0.008		ug/l	Water
10/16/2021	101S	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	101S	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/16/2021	101S	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	101S	6:2 FTS	ND	0.016		ug/l	Water
10/16/2021	101S	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	101S	8:2 FTS	ND	0.016		ug/l	Water
10/16/2021	101S	DONA	ND	0.016		ug/l	Water
10/16/2021	101S	EtFOSA	ND	0.016		ug/l	Water
10/16/2021	101S	EtFOSAA	ND	0.008		ug/l	Water
10/16/2021	101S	EtFOSE	ND	0.040		ug/l	Water
10/16/2021	101S	F-53B Major	ND	0.016		ug/l	Water
10/16/2021	101S	F-53B Minor	ND	0.016		ug/l	Water
10/16/2021	101S	HFPO-DA	ND	0.008		ug/l	Water
10/16/2021	101S	MeFOSA	ND	0.016		ug/l	Water
10/16/2021	101S	MeFOSE	ND	0.040		ug/l	Water
10/16/2021	101S	NFDHA	ND	0.016		ug/l	Water
10/16/2021	101S	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/16/2021	101S	Perfluorobutanesulfonic acid	0.003	0.004	J	ug/l	Water
10/16/2021	101S	Perfluorobutanoic acid	0.032	0.008		ug/l	Water
10/16/2021	101S	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	101S	Perfluorodecanoic acid	ND	0.004		ug/l	Water
10/16/2021	101S	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/16/2021	101S	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/16/2021	101S	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/16/2021	101S	Perfluoroheptanoic acid	0.035	0.004		ug/l	Water
10/16/2021	101S	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	101S	Perfluorohexanoic acid	0.032	0.004		ug/l	Water
10/16/2021	101S	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	101S	Perfluorononanoic acid	0.075	0.004		ug/l	Water
10/16/2021	101S	Perfluorooctanesulfonic acid	0.002	0.004	J	ug/l	Water
10/16/2021	101S	Perfluorooctanoic acid	0.099	0.004		ug/l	Water
10/16/2021	101S	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	101S	Perfluoropentanoic acid	0.041	0.004		ug/l	Water
10/16/2021	101S	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/16/2021	101S	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/16/2021	101S	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/16/2021	101S	PFEESA	ND	0.016		ug/l	Water
10/16/2021	101S	PFMBA	ND	0.016		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/16/2021	101S	PFMPA	ND	0.016		ug/l	Water
10/16/2021	101S	PFOSA	ND	0.008		ug/l	Water
10/17/2021	102D	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	102D	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/17/2021	102D	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	102D	6:2 FTS	ND	0.016		ug/l	Water
10/17/2021	102D	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	102D	8:2 FTS	ND	0.016		ug/l	Water
10/17/2021	102D	DONA	ND	0.016		ug/l	Water
10/17/2021	102D	EtFOSA	ND	0.016		ug/l	Water
10/17/2021	102D	EtFOSAA	ND	0.008		ug/l	Water
10/17/2021	102D	EtFOSE	ND	0.040		ug/l	Water
10/17/2021	102D	F-53B Major	ND	0.016		ug/l	Water
10/17/2021	102D	F-53B Minor	ND	0.016		ug/l	Water
10/17/2021	102D	HFPO-DA	ND	0.008		ug/l	Water
10/17/2021	102D	MeFOSA	ND	0.016		ug/l	Water
10/17/2021	102D	MeFOSE	ND	0.040		ug/l	Water
10/17/2021	102D	NFDHA	ND	0.016		ug/l	Water
10/17/2021	102D	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/17/2021	102D	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	102D	Perfluorobutanoic acid	0.012	0.008		ug/l	Water
10/17/2021	102D	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	102D	Perfluorodecanoic acid	0.008	0.004		ug/l	Water
10/17/2021	102D	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/17/2021	102D	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/17/2021	102D	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/17/2021	102D	Perfluoroheptanoic acid	0.010	0.004		ug/l	Water
10/17/2021	102D	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	102D	Perfluorohexanoic acid	0.019	0.004		ug/l	Water
10/17/2021	102D	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	102D	Perfluorononanoic acid	0.074	0.004		ug/l	Water
10/17/2021	102D	Perfluorooctanesulfonic acid	0.007	0.004		ug/l	Water
10/17/2021	102D	Perfluorooctanoic acid	0.037	0.004		ug/l	Water
10/17/2021	102D	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	102D	Perfluoropentanoic acid	0.012	0.004		ug/l	Water
10/17/2021	102D	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/17/2021	102D	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/17/2021	102D	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/17/2021	102D	PFEESA	ND	0.016		ug/l	Water
10/17/2021	102D	PFMBA	ND	0.016		ug/l	Water
10/17/2021	102D	PFMPA	ND	0.016		ug/l	Water
10/17/2021	102D	PFOSA	ND	0.008		ug/l	Water
10/17/2021	102S	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	102S	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/17/2021	102S	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	102S	6:2 FTS	ND	0.016		ug/l	Water
10/17/2021	102S	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	102S	8:2 FTS	ND	0.016		ug/l	Water
10/17/2021	102S	DONA	ND	0.016		ug/l	Water
10/17/2021	102S	EtFOSA	ND	0.016		ug/l	Water
10/17/2021	102S	EtFOSAA	ND	0.008		ug/l	Water
10/17/2021	102S	EtFOSE	ND	0.040		ug/l	Water
10/17/2021	102S	F-53B Major	ND	0.016		ug/l	Water
10/17/2021	102S	F-53B Minor	ND	0.016		ug/l	Water
10/17/2021	102S	HFPO-DA	ND	0.008		ug/l	Water
10/17/2021	102S	MeFOSA	ND	0.016		ug/l	Water
10/17/2021	102S	MeFOSE	ND	0.040		ug/l	Water
10/17/2021	102S	NFDHA	ND	0.016		ug/l	Water
10/17/2021	102S	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/17/2021	102S	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	102S	Perfluorobutanoic acid	0.011	0.008		ug/l	Water
10/17/2021	102S	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	102S	Perfluorodecanoic acid	0.014	0.004		ug/l	Water
10/17/2021	102S	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/17/2021	102S	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/17/2021	102S	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/17/2021	102S	Perfluoroheptanoic acid	0.008	0.004		ug/l	Water
10/17/2021	102S	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	102S	Perfluorohexanoic acid	0.014	0.004		ug/l	Water
10/17/2021	102S	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	102S	Perfluorononanoic acid	0.036	0.004		ug/l	Water
10/17/2021	102S	Perfluorooctanesulfonic acid	0.009	0.004		ug/l	Water
10/17/2021	102S	Perfluorooctanoic acid	0.015	0.004		ug/l	Water
10/17/2021	102S	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	102S	Perfluoropentanoic acid	0.012	0.004		ug/l	Water
10/17/2021	102S	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/17/2021	102S	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/17/2021	102S	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/17/2021	102S	PFEESA	ND	0.016		ug/l	Water
10/17/2021	102S	PFMBA	ND	0.016		ug/l	Water
10/17/2021	102S	PFMPA	ND	0.016		ug/l	Water
10/17/2021	102S	PFOSA	ND	0.008		ug/l	Water
10/18/2021	17-a	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	17-a	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/18/2021	17-a	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	17-a	5:3 Fluorotelomer carboxylate	1.050	0.160		ug/l	Water
10/18/2021	17-a	6:2 FTS	0.054	0.016		ug/l	Water
10/18/2021	17-a	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	17-a	7:3 Fluorotelomer carboxylate	1.360	0.160		ug/l	Water
10/18/2021	17-a	8:2 FTS	0.029	0.016		ug/l	Water
10/18/2021	17-a	DONA	ND	0.016		ug/l	Water
10/18/2021	17-a	EtFOSA	ND	0.160		ug/l	Water
10/18/2021	17-a	EtFOSAA	ND	0.008		ug/l	Water
10/18/2021	17-a	EtFOSE	ND	0.040		ug/l	Water
10/18/2021	17-a	F-53B Major	ND	0.016		ug/l	Water
10/18/2021	17-a	F-53B Minor	ND	0.016		ug/l	Water
10/18/2021	17-a	HFPO-DA	0.183	0.008		ug/l	Water
10/18/2021	17-a	MeFOSA	ND	0.160		ug/l	Water
10/18/2021	17-a	MeFOSE	ND	0.400		ug/l	Water
10/18/2021	17-a	NFDHA	ND	0.016		ug/l	Water
10/18/2021	17-a	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/18/2021	17-a	Perfluorobutanesulfonic acid	0.041	0.004		ug/l	Water
10/18/2021	17-a	Perfluorobutanoic acid	0.363	0.008		ug/l	Water
10/18/2021	17-a	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	17-a	Perfluorodecanoic acid	1.650	0.040		ug/l	Water
10/18/2021	17-a	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/18/2021	17-a	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/18/2021	17-a	Perfluoroheptanesulfonic Acid	0.002	0.004	J	ug/l	Water
10/18/2021	17-a	Perfluoroheptanoic acid	0.939	0.040		ug/l	Water
10/18/2021	17-a	Perfluorohexanesulfonic acid	0.047	0.004		ug/l	Water
10/18/2021	17-a	Perfluorohexanoic acid	1.170	0.040		ug/l	Water
10/18/2021	17-a	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	17-a	Perfluorononanoic acid	0.544	0.004		ug/l	Water
10/18/2021	17-a	Perfluorooctanesulfonic acid	0.352	0.004		ug/l	Water
10/18/2021	17-a	Perfluorooctanoic acid	4.560	0.040		ug/l	Water
10/18/2021	17-a	Perfluoropentanesulfonic acid	0.005	0.004		ug/l	Water
10/18/2021	17-a	Perfluoropentanoic acid	0.601	0.004		ug/l	Water
10/18/2021	17-a	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/18/2021	17-a	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/18/2021	17-a	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/18/2021	17-a	PFEESA	ND	0.016		ug/l	Water
10/18/2021	17-a	PFMBA	ND	0.016		ug/l	Water
10/18/2021	17-a	PFMPA	ND	0.016		ug/l	Water
10/18/2021	17-a	PFOSA	0.007	0.008	J	ug/l	Water
7/12/2019	22D	6:2 FTS	100.000	1.900		ng/l	Water
7/12/2019	22D	8:2 FTS	27.000	1.900		ng/l	Water
7/12/2019	22D	DONA	ND	0.170		ng/l	Water
7/12/2019	22D	F-53B Major	ND	0.220		ng/l	Water
7/12/2019	22D	F-53B Minor	ND	0.300		ng/l	Water
7/12/2019	22D	HFPO-DA	40.000	1.400		ng/l	Water
7/12/2019	22D	N-ethylperfluorooctanesulfonamidoacetic acid	6.800	1.800		ng/l	Water
7/12/2019	22D	N-methylperfluorooctanesulfonamidoacetic acid	ND	2.900		ng/l	Water
7/12/2019	22D	Perfluorobutanesulfonic acid	3.900	0.190		ng/l	Water
7/12/2019	22D	Perfluorobutanoic acid	54.000	0.330		ng/l	Water
7/12/2019	22D	Perfluorodecanesulfonic acid	ND	0.300		ng/l	Water
7/12/2019	22D	Perfluorodecanoic acid	32.000	0.290		ng/l	Water
7/12/2019	22D	Perfluorododecanoic acid	ND	0.510		ng/l	Water
7/12/2019	22D	Perfluoroheptanesulfonic Acid	3.500	0.180		ng/l	Water
7/12/2019	22D	Perfluoroheptanoic acid	99.000	0.230		ng/l	Water
7/12/2019	22D	Perfluorohexanesulfonic acid	43.000	0.160		ng/l	Water
7/12/2019	22D	Perfluorohexanoic acid	93.000	0.540		ng/l	Water
7/12/2019	22D	Perfluorononanoic acid	83.000	0.250		ng/l	Water
7/12/2019	22D	Perfluorooctanesulfonamide	2.500	0.330		ng/l	Water
7/12/2019	22D	Perfluorooctanesulfonic acid	300.000	0.510		ng/l	Water
7/12/2019	22D	Perfluorooctanoic acid	1600.000	8.000		ng/l	Water
7/12/2019	22D	Perfluoropentanoic acid	120.000	0.460		ng/l	Water
7/12/2019	22D	Perfluorotetradecanoic acid	ND	0.270		ng/l	Water
7/12/2019	22D	Perfluorotridecanoic acid	ND	1.200		ng/l	Water
7/12/2019	22D	Perfluoroundecanoic acid	ND	1.000		ng/l	Water
10/14/2021	22D	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	22D	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/14/2021	22D	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	22D	6:2 FTS	0.132	0.016		ug/l	Water
10/14/2021	22D	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	22D	8:2 FTS	0.023	0.016		ug/l	Water
10/14/2021	22D	DONA	ND	0.016		ug/l	Water
10/14/2021	22D	EtFOSA	ND	0.160		ug/l	Water
10/14/2021	22D	EtFOSAA	0.008	0.008		ug/l	Water
10/14/2021	22D	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	22D	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	22D	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	22D	HFPO-DA	0.017	0.008		ug/l	Water
10/14/2021	22D	MeFOSA	ND	0.160		ug/l	Water
10/14/2021	22D	MeFOSE	ND	0.400		ug/l	Water
10/14/2021	22D	NFDHA	ND	0.016		ug/l	Water
10/14/2021	22D	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	22D	Perfluorobutanesulfonic acid	0.007	0.004		ug/l	Water
10/14/2021	22D	Perfluorobutanoic acid	0.057	0.008		ug/l	Water
10/14/2021	22D	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	22D	Perfluorodecanoic acid	0.690	0.004		ug/l	Water
10/14/2021	22D	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	22D	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	22D	Perfluoroheptanesulfonic Acid	0.002	0.004	J	ug/l	Water
10/14/2021	22D	Perfluoroheptanoic acid	0.836	0.040		ug/l	Water
10/14/2021	22D	Perfluorohexanesulfonic acid	0.028	0.004		ug/l	Water
10/14/2021	22D	Perfluorohexanoic acid	0.097	0.004		ug/l	Water
10/14/2021	22D	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	22D	Perfluorononanoic acid	3.340	0.040		ug/l	Water
10/14/2021	22D	Perfluorooctanesulfonic acid	0.164	0.004		ug/l	Water
10/14/2021	22D	Perfluorooctanoic acid	2.010	0.040		ug/l	Water
10/14/2021	22D	Perfluoropentanesulfonic acid	0.002	0.004	J	ug/l	Water
10/14/2021	22D	Perfluoropentanoic acid	0.095	0.004		ug/l	Water
10/14/2021	22D	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	22D	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	22D	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	22D	PFEESA	ND	0.016		ug/l	Water
10/14/2021	22D	PFMBA	ND	0.016		ug/l	Water
10/14/2021	22D	PFMPA	ND	0.016		ug/l	Water
10/14/2021	22D	PFOSA	ND	0.008		ug/l	Water
10/14/2021	25-b	3:3 Fluorotelomer carboxylate	ND	0.017		ug/l	Water
10/14/2021	25-b	4:2 Fluorotelomer sulfonate	0.009	0.017	J	ug/l	Water
10/14/2021	25-b	5:3 Fluorotelomer carboxylate	0.015	0.017	J	ug/l	Water
10/14/2021	25-b	6:2 FTS	0.295	0.017		ug/l	Water
10/14/2021	25-b	7:3 Fluorotelomer carboxylate	ND	0.017		ug/l	Water
10/14/2021	25-b	8:2 FTS	0.093	0.017		ug/l	Water
10/14/2021	25-b	DONA	ND	0.017		ug/l	Water
10/14/2021	25-b	EtFOSA	ND	0.083		ug/l	Water
10/14/2021	25-b	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	25-b	EtFOSE	ND	0.042		ug/l	Water
10/14/2021	25-b	F-53B Major	ND	0.017		ug/l	Water
10/14/2021	25-b	F-53B Minor	ND	0.017		ug/l	Water
10/14/2021	25-b	HFPO-DA	0.266	0.008		ug/l	Water
10/14/2021	25-b	MeFOSA	ND	0.083		ug/l	Water
10/14/2021	25-b	MeFOSE	ND	0.042		ug/l	Water
10/14/2021	25-b	NFDHA	ND	0.017		ug/l	Water
10/14/2021	25-b	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	25-b	Perfluorobutanesulfonic acid	0.004	0.004	J	ug/l	Water
10/14/2021	25-b	Perfluorobutanoic acid	0.091	0.008		ug/l	Water
10/14/2021	25-b	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	25-b	Perfluorodecanoic acid	0.083	0.004		ug/l	Water
10/14/2021	25-b	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	25-b	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	25-b	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/14/2021	25-b	Perfluoroheptanoic acid	0.096	0.004		ug/l	Water
10/14/2021	25-b	Perfluorohexanesulfonic acid	0.015	0.004		ug/l	Water
10/14/2021	25-b	Perfluorohexanoic acid	0.082	0.004		ug/l	Water
10/14/2021	25-b	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	25-b	Perfluorononanoic acid	0.239	0.004		ug/l	Water
10/14/2021	25-b	Perfluorooctanesulfonic acid	0.131	0.004		ug/l	Water
10/14/2021	25-b	Perfluorooctanoic acid	0.158	0.004		ug/l	Water
10/14/2021	25-b	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	25-b	Perfluoropentanoic acid	0.104	0.004		ug/l	Water
10/14/2021	25-b	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	25-b	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	25-b	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	25-b	PFEESA	ND	0.017		ug/l	Water
10/14/2021	25-b	PFMBA	ND	0.017		ug/l	Water
10/14/2021	25-b	PFMPA	ND	0.017		ug/l	Water
10/14/2021	25-b	PFOSA	ND	0.008		ug/l	Water
10/14/2021	31D	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	31D	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/14/2021	31D	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	31D	6:2 FTS	0.010	0.016	J	ug/l	Water
10/14/2021	31D	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	31D	8:2 FTS	ND	0.016		ug/l	Water
10/14/2021	31D	DONA	ND	0.016		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	31D	EtFOSA	ND	0.016		ug/l	Water
10/14/2021	31D	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	31D	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	31D	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	31D	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	31D	HFPO-DA	0.015	0.008		ug/l	Water
10/14/2021	31D	MeFOSA	ND	0.016		ug/l	Water
10/14/2021	31D	MeFOSE	ND	0.040		ug/l	Water
10/14/2021	31D	NFDHA	ND	0.016		ug/l	Water
10/14/2021	31D	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	31D	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	31D	Perfluorobutanoic acid	0.020	0.008		ug/l	Water
10/14/2021	31D	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	31D	Perfluorodecanoic acid	0.049	0.004		ug/l	Water
10/14/2021	31D	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	31D	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	31D	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/14/2021	31D	Perfluoroheptanoic acid	0.131	0.004		ug/l	Water
10/14/2021	31D	Perfluorohexanesulfonic acid	0.004	0.004	J	ug/l	Water
10/14/2021	31D	Perfluorohexanoic acid	0.034	0.004		ug/l	Water
10/14/2021	31D	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	31D	Perfluorononanoic acid	0.367	0.004		ug/l	Water
10/14/2021	31D	Perfluorooctanesulfonic acid	0.018	0.004		ug/l	Water
10/14/2021	31D	Perfluorooctanoic acid	0.230	0.004		ug/l	Water
10/14/2021	31D	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	31D	Perfluoropentanoic acid	0.017	0.004		ug/l	Water
10/14/2021	31D	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	31D	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	31D	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	31D	PFEESA	ND	0.016		ug/l	Water
10/14/2021	31D	PFMBA	ND	0.016		ug/l	Water
10/14/2021	31D	PFMPA	ND	0.016		ug/l	Water
10/14/2021	31D	PFOSA	ND	0.008		ug/l	Water
10/14/2021	33D	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	33D	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/14/2021	33D	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	33D	6:2 FTS	ND	0.016		ug/l	Water
10/14/2021	33D	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	33D	8:2 FTS	ND	0.016		ug/l	Water
10/14/2021	33D	DONA	ND	0.016		ug/l	Water
10/14/2021	33D	EtFOSA	ND	0.016		ug/l	Water
10/14/2021	33D	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	33D	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	33D	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	33D	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	33D	HFPO-DA	ND	0.008		ug/l	Water
10/14/2021	33D	MeFOSA	ND	0.016		ug/l	Water
10/14/2021	33D	MeFOSE	ND	0.040		ug/l	Water
10/14/2021	33D	NFDHA	ND	0.016		ug/l	Water
10/14/2021	33D	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	33D	Perfluorobutanesulfonic acid	0.002	0.004	J	ug/l	Water
10/14/2021	33D	Perfluorobutanoic acid	0.025	0.008		ug/l	Water
10/14/2021	33D	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	33D	Perfluorodecanoic acid	0.072	0.004		ug/l	Water
10/14/2021	33D	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	33D	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	33D	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/14/2021	33D	Perfluoroheptanoic acid	0.447	0.004		ug/l	Water
10/14/2021	33D	Perfluorohexanesulfonic acid	0.005	0.004		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	33D	Perfluorohexanoic acid	0.026	0.004		ug/l	Water
10/14/2021	33D	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	33D	Perfluorononanoic acid	0.882	0.008		ug/l	Water
10/14/2021	33D	Perfluorooctanesulfonic acid	0.011	0.004		ug/l	Water
10/14/2021	33D	Perfluorooctanoic acid	0.370	0.004		ug/l	Water
10/14/2021	33D	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	33D	Perfluoropentanoic acid	0.017	0.004		ug/l	Water
10/14/2021	33D	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	33D	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	33D	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	33D	PFEESA	ND	0.016		ug/l	Water
10/14/2021	33D	PFMBA	ND	0.016		ug/l	Water
10/14/2021	33D	PFMPA	ND	0.016		ug/l	Water
10/14/2021	33D	PFOSA	ND	0.008		ug/l	Water
10/18/2021	34S	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	34S	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/18/2021	34S	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	34S	6:2 FTS	ND	0.016		ug/l	Water
10/18/2021	34S	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	34S	8:2 FTS	ND	0.016		ug/l	Water
10/18/2021	34S	DONA	ND	0.016		ug/l	Water
10/18/2021	34S	EtFOSA	ND	0.016		ug/l	Water
10/18/2021	34S	EtFOSAA	ND	0.008		ug/l	Water
10/18/2021	34S	EtFOSE	ND	0.040		ug/l	Water
10/18/2021	34S	F-53B Major	ND	0.016		ug/l	Water
10/18/2021	34S	F-53B Minor	ND	0.016		ug/l	Water
10/18/2021	34S	HFPO-DA	ND	0.008		ug/l	Water
10/18/2021	34S	MeFOSA	ND	0.016		ug/l	Water
10/18/2021	34S	MeFOSE	ND	0.040		ug/l	Water
10/18/2021	34S	NFDHA	ND	0.016		ug/l	Water
10/18/2021	34S	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/18/2021	34S	Perfluorobutanesulfonic acid	0.003	0.004	J	ug/l	Water
10/18/2021	34S	Perfluorobutanoic acid	0.016	0.008		ug/l	Water
10/18/2021	34S	Perfluorodecanoic acid	0.067	0.004		ug/l	Water
10/18/2021	34S	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/18/2021	34S	Perfluorododecanesulfonic acid	ND	0.040		ug/l	Water
10/18/2021	34S	Perfluorododecanoic acid	ND	0.020		ug/l	Water
10/18/2021	34S	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/18/2021	34S	Perfluoroheptanoic acid	0.163	0.004		ug/l	Water
10/18/2021	34S	Perfluorohexanesulfonic acid	0.004	0.004		ug/l	Water
10/18/2021	34S	Perfluorohexanoic acid	0.016	0.004		ug/l	Water
10/18/2021	34S	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	34S	Perfluorononanoic acid	0.488	0.004		ug/l	Water
10/18/2021	34S	Perfluorooctanesulfonic acid	0.023	0.004		ug/l	Water
10/18/2021	34S	Perfluorooctanoic acid	0.156	0.004		ug/l	Water
10/18/2021	34S	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	34S	Perfluoropentanoic acid	0.015	0.004		ug/l	Water
10/18/2021	34S	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/18/2021	34S	Perfluorotridecanoic acid	ND	0.020		ug/l	Water
10/18/2021	34S	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/18/2021	34S	PFEESA	ND	0.016		ug/l	Water
10/18/2021	34S	PFMBA	ND	0.016		ug/l	Water
10/18/2021	34S	PFMPA	ND	0.016		ug/l	Water
10/18/2021	34S	PFOSA	ND	0.008		ug/l	Water
10/18/2021	4-b	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	4-b	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/18/2021	4-b	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	4-b	5:3 Fluorotelomer carboxylate	0.041	0.160	J	ug/l	Water
10/18/2021	4-b	6:2 FTS	0.091	0.016		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/18/2021	4-b	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	4-b	8:2 FTS	0.006	0.016	J	ug/l	Water
10/18/2021	4-b	DONA	ND	0.016		ug/l	Water
10/18/2021	4-b	EtFOSA	ND	0.160		ug/l	Water
10/18/2021	4-b	EtFOSAA	ND	0.080		ug/l	Water
10/18/2021	4-b	EtFOSE	ND	0.400		ug/l	Water
10/18/2021	4-b	F-53B Major	ND	0.016		ug/l	Water
10/18/2021	4-b	F-53B Minor	ND	0.160		ug/l	Water
10/18/2021	4-b	HFPO-DA	0.039	0.008		ug/l	Water
10/18/2021	4-b	MeFOSA	ND	0.160		ug/l	Water
10/18/2021	4-b	MeFOSE	ND	0.400		ug/l	Water
10/18/2021	4-b	NFDHA	ND	0.016		ug/l	Water
10/18/2021	4-b	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/18/2021	4-b	Perfluorobutanesulfonic acid	0.017	0.004		ug/l	Water
10/18/2021	4-b	Perfluorobutanoic acid	0.134	0.008		ug/l	Water
10/18/2021	4-b	Perfluorodecanesulfonic acid	ND	0.040		ug/l	Water
10/18/2021	4-b	Perfluorodecanoic acid	0.096	0.004		ug/l	Water
10/18/2021	4-b	Perfluorododecanesulfonic acid	ND	0.080		ug/l	Water
10/18/2021	4-b	Perfluorododecanoic acid	ND	0.040		ug/l	Water
10/18/2021	4-b	Perfluoroheptanesulfonic Acid	0.006	0.004		ug/l	Water
10/18/2021	4-b	Perfluoroheptanoic acid	0.161	0.004		ug/l	Water
10/18/2021	4-b	Perfluorohexanesulfonic acid	0.059	0.004		ug/l	Water
10/18/2021	4-b	Perfluorohexanoic acid	0.211	0.004		ug/l	Water
10/18/2021	4-b	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	4-b	Perfluorononanoic acid	0.342	0.004		ug/l	Water
10/18/2021	4-b	Perfluorooctanesulfonic acid	0.526	0.004		ug/l	Water
10/18/2021	4-b	Perfluorooctanoic acid	1.010	0.040		ug/l	Water
10/18/2021	4-b	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	4-b	Perfluoropentanoic acid	0.147	0.004		ug/l	Water
10/18/2021	4-b	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/18/2021	4-b	Perfluorotridecanoic acid	ND	0.040		ug/l	Water
10/18/2021	4-b	Perfluoroundecanoic acid	ND	0.040		ug/l	Water
10/18/2021	4-b	PFEESA	ND	0.016		ug/l	Water
10/18/2021	4-b	PFMBA	ND	0.016		ug/l	Water
10/18/2021	4-b	PFMPA	ND	0.016		ug/l	Water
10/18/2021	4-b	PFOSA	ND	0.080		ug/l	Water
10/17/2021	88-1-SA	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	6:2 FTS	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	8:2 FTS	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	DONA	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	EtFOSA	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	EtFOSAA	ND	0.008		ug/l	Water
10/17/2021	88-1-SA	EtFOSE	ND	0.040		ug/l	Water
10/17/2021	88-1-SA	F-53B Major	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	F-53B Minor	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	HFPO-DA	ND	0.008		ug/l	Water
10/17/2021	88-1-SA	MeFOSA	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	MeFOSE	ND	0.040		ug/l	Water
10/17/2021	88-1-SA	NFDHA	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/17/2021	88-1-SA	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluorobutanoic acid	0.035	0.008		ug/l	Water
10/17/2021	88-1-SA	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluorodecanoic acid	0.032	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/17/2021	88-1-SA	Perfluorododecanoic acid	ND	0.004		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/17/2021	88-1-SA	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluoroheptanoic acid	0.788	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluorohexanoic acid	0.010	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluorononanoic acid	0.687	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluorooctanesulfonic acid	0.003	0.004	J	ug/l	Water
10/17/2021	88-1-SA	Perfluorooctanoic acid	1.270	0.020		ug/l	Water
10/17/2021	88-1-SA	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluoropentanoic acid	0.003	0.004	J	ug/l	Water
10/17/2021	88-1-SA	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/17/2021	88-1-SA	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/17/2021	88-1-SA	PFEESA	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	PFMBA	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	PFMPA	ND	0.016		ug/l	Water
10/17/2021	88-1-SA	PFOSA	ND	0.008		ug/l	Water
10/14/2021	88-2-I	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	88-2-I	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/14/2021	88-2-I	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	88-2-I	6:2 FTS	ND	0.016		ug/l	Water
10/14/2021	88-2-I	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	88-2-I	8:2 FTS	ND	0.016		ug/l	Water
10/14/2021	88-2-I	DONA	ND	0.016		ug/l	Water
10/14/2021	88-2-I	EtFOSA	ND	0.016		ug/l	Water
10/14/2021	88-2-I	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	88-2-I	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	88-2-I	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	88-2-I	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	88-2-I	HFPO-DA	0.017	0.008		ug/l	Water
10/14/2021	88-2-I	MeFOSA	ND	0.016		ug/l	Water
10/14/2021	88-2-I	MeFOSE	ND	0.040		ug/l	Water
10/14/2021	88-2-I	NFDHA	ND	0.016		ug/l	Water
10/14/2021	88-2-I	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	88-2-I	Perfluorobutanesulfonic acid	0.004	0.004	J	ug/l	Water
10/14/2021	88-2-I	Perfluorobutanoic acid	0.016	0.008		ug/l	Water
10/14/2021	88-2-I	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluorodecanoic acid	0.098	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	88-2-I	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluoroheptanoic acid	0.483	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluorohexanesulfonic acid	0.009	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluorohexanoic acid	0.022	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluorononanoic acid	0.950	0.020		ug/l	Water
10/14/2021	88-2-I	Perfluorooctanesulfonic acid	0.018	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluorooctanoic acid	0.614	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluoropentanoic acid	0.017	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-I	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-I	PFEESA	ND	0.016		ug/l	Water
10/14/2021	88-2-I	PFMBA	ND	0.016		ug/l	Water
10/14/2021	88-2-I	PFMPA	ND	0.016		ug/l	Water
10/14/2021	88-2-I	PFOSA	ND	0.008		ug/l	Water
10/14/2021	88-2-SA	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	88-2-SA	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	6:2 FTS	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	8:2 FTS	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	DONA	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	EtFOSA	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	88-2-SA	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	88-2-SA	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	HFPO-DA	ND	0.008		ug/l	Water
10/14/2021	88-2-SA	MeFOSA	ND	0.080		ug/l	Water
10/14/2021	88-2-SA	MeFOSE	ND	0.040		ug/l	Water
10/14/2021	88-2-SA	NFDHA	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	88-2-SA	Perfluorobutanesulfonic acid	0.002	0.004	J	ug/l	Water
10/14/2021	88-2-SA	Perfluorobutanoic acid	0.022	0.008		ug/l	Water
10/14/2021	88-2-SA	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluorodecanoic acid	0.053	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	88-2-SA	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluoroheptanoic acid	1.250	0.020		ug/l	Water
10/14/2021	88-2-SA	Perfluorohexanesulfonic acid	0.008	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluorohexanoic acid	0.022	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluorononanoic acid	1.420	0.020		ug/l	Water
10/14/2021	88-2-SA	Perfluorooctanesulfonic acid	0.005	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluorooctanoic acid	1.090	0.020		ug/l	Water
10/14/2021	88-2-SA	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluoropentanoic acid	0.005	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-SA	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	88-2-SA	PFEESA	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	PFMBA	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	PFMPA	ND	0.016		ug/l	Water
10/14/2021	88-2-SA	PFOSA	ND	0.008		ug/l	Water
10/16/2021	88-5-SA	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	6:2 FTS	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	8:2 FTS	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	DONA	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	EtFOSA	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	EtFOSAA	ND	0.008		ug/l	Water
10/16/2021	88-5-SA	EtFOSE	ND	0.040		ug/l	Water
10/16/2021	88-5-SA	F-53B Major	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	F-53B Minor	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	HFPO-DA	ND	0.008		ug/l	Water
10/16/2021	88-5-SA	MeFOSA	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	MeFOSE	ND	0.040		ug/l	Water
10/16/2021	88-5-SA	NFDHA	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/16/2021	88-5-SA	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluorobutanoic acid	0.004	0.008	J	ug/l	Water
10/16/2021	88-5-SA	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluorodecanoic acid	ND	0.004		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/16/2021	88-5-SA	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/16/2021	88-5-SA	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluoroheptanoic acid	0.009	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluorohexanoic acid	0.004	0.004	J	ug/l	Water
10/16/2021	88-5-SA	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluorononanoic acid	0.002	0.004	J	ug/l	Water
10/16/2021	88-5-SA	Perfluorooctanesulfonic acid	0.004	0.004	J	ug/l	Water
10/16/2021	88-5-SA	Perfluorooctanoic acid	0.007	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluoropentanoic acid	0.002	0.004	J	ug/l	Water
10/16/2021	88-5-SA	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-5-SA	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-5-SA	PFEESA	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	PFMBA	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	PFMPA	ND	0.016		ug/l	Water
10/16/2021	88-5-SA	PFOSA	ND	0.008		ug/l	Water
10/18/2021	88-5-WT	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	6:2 FTS	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	8:2 FTS	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	DONA	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	EtFOSA	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	EtFOSAA	ND	0.008		ug/l	Water
10/18/2021	88-5-WT	EtFOSE	ND	0.040		ug/l	Water
10/18/2021	88-5-WT	F-53B Major	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	F-53B Minor	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	HFPO-DA	0.004	0.008	J	ug/l	Water
10/18/2021	88-5-WT	MeFOSA	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	MeFOSE	ND	0.040		ug/l	Water
10/18/2021	88-5-WT	NFDHA	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/18/2021	88-5-WT	Perfluorobutanesulfonic acid	0.003	0.004	J	ug/l	Water
10/18/2021	88-5-WT	Perfluorobutanoic acid	0.035	0.008		ug/l	Water
10/18/2021	88-5-WT	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluorodecanoic acid	0.844	0.020		ug/l	Water
10/18/2021	88-5-WT	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/18/2021	88-5-WT	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluoroheptanoic acid	0.052	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluorohexanesulfonic acid	0.011	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluorohexanoic acid	0.058	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluorononanoic acid	1.670	0.020		ug/l	Water
10/18/2021	88-5-WT	Perfluorooctanesulfonic acid	0.363	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluorooctanoic acid	0.309	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluoropentanoic acid	0.078	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/18/2021	88-5-WT	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/18/2021	88-5-WT	PFEESA	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	PFMBA	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	PFMPA	ND	0.016		ug/l	Water
10/18/2021	88-5-WT	PFOSA	ND	0.008		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/16/2021	88-7-SA	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	6:2 FTS	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	8:2 FTS	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	DONA	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	EtFOSA	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	EtFOSAA	ND	0.008		ug/l	Water
10/16/2021	88-7-SA	EtFOSE	ND	0.040		ug/l	Water
10/16/2021	88-7-SA	F-53B Major	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	F-53B Minor	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	HFPO-DA	ND	0.008		ug/l	Water
10/16/2021	88-7-SA	MeFOSA	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	MeFOSE	ND	0.040		ug/l	Water
10/16/2021	88-7-SA	NFDHA	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/16/2021	88-7-SA	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorobutanoic acid	ND	0.008		ug/l	Water
10/16/2021	88-7-SA	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorodecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/16/2021	88-7-SA	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluoroheptanoic acid	0.011	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorohexanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorononanoic acid	0.006	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorooctanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorooctanoic acid	0.004	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluoropentanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-7-SA	PFEESA	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	PFMBA	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	PFMPA	ND	0.016		ug/l	Water
10/16/2021	88-7-SA	PFOSA	ND	0.008		ug/l	Water
10/16/2021	88-8-SA	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	6:2 FTS	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	8:2 FTS	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	DONA	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	EtFOSA	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	EtFOSAA	ND	0.008		ug/l	Water
10/16/2021	88-8-SA	EtFOSE	ND	0.040		ug/l	Water
10/16/2021	88-8-SA	F-53B Major	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	F-53B Minor	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	HFPO-DA	ND	0.008		ug/l	Water
10/16/2021	88-8-SA	MeFOSA	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	MeFOSE	ND	0.040		ug/l	Water
10/16/2021	88-8-SA	NFDHA	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/16/2021	88-8-SA	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluorobutanoic acid	ND	0.008		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/16/2021	88-8-SA	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluorodecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/16/2021	88-8-SA	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluoroheptanoic acid	0.013	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluorohexanoic acid	0.002	0.004	J	ug/l	Water
10/16/2021	88-8-SA	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluorononanoic acid	0.010	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluorooctanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluorooctanoic acid	0.009	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluoropentanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/16/2021	88-8-SA	PFEESA	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	PFMBA	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	PFMPA	ND	0.016		ug/l	Water
10/16/2021	88-8-SA	PFOSA	ND	0.008		ug/l	Water
10/15/2021	CAMU-3-I	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	6:2 FTS	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	8:2 FTS	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	DONA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	EtFOSA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	EtFOSAA	ND	0.008		ug/l	Water
10/15/2021	CAMU-3-I	EtFOSE	ND	0.040		ug/l	Water
10/15/2021	CAMU-3-I	F-53B Major	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	F-53B Minor	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	HFPO-DA	ND	0.008		ug/l	Water
10/15/2021	CAMU-3-I	MeFOSA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	MeFOSE	ND	0.040		ug/l	Water
10/15/2021	CAMU-3-I	NFDHA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorobutanoic acid	0.005	0.008	J	ug/l	Water
10/15/2021	CAMU-3-I	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorodecanoic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluoroheptanoic acid	0.016	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorohexanoic acid	0.015	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorononanoic acid	0.051	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorooctanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorooctanoic acid	0.044	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluoropentanoic acid	0.012	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-I	PFEESA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	PFMBA	ND	0.016		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/15/2021	CAMU-3-I	PFMPA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-I	PFOSA	ND	0.008		ug/l	Water
10/15/2021	CAMU-3-W	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	6:2 FTS	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	8:2 FTS	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	DONA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	EtFOSA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	EtFOSAA	ND	0.008		ug/l	Water
10/15/2021	CAMU-3-W	EtFOSE	ND	0.040		ug/l	Water
10/15/2021	CAMU-3-W	F-53B Major	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	F-53B Minor	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	HFPO-DA	ND	0.008		ug/l	Water
10/15/2021	CAMU-3-W	MeFOSA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	MeFOSE	ND	0.040		ug/l	Water
10/15/2021	CAMU-3-W	NFDHA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorobutanoic acid	0.006	0.008	J	ug/l	Water
10/15/2021	CAMU-3-W	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorodecanoic acid	0.107	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluoroheptanoic acid	0.005	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorohexanoic acid	0.007	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorononanoic acid	0.066	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorooctanesulfonic acid	0.034	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorooctanoic acid	0.012	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluoropentanoic acid	0.007	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-W	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/15/2021	CAMU-3-W	PFEESA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	PFMBA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	PFMPA	ND	0.016		ug/l	Water
10/15/2021	CAMU-3-W	PFOSA	ND	0.008		ug/l	Water
10/17/2021	DP-1	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	DP-1	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/17/2021	DP-1	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	DP-1	6:2 FTS	ND	0.016		ug/l	Water
10/17/2021	DP-1	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	DP-1	8:2 FTS	ND	0.016		ug/l	Water
10/17/2021	DP-1	DONA	ND	0.016		ug/l	Water
10/17/2021	DP-1	EtFOSA	ND	0.016		ug/l	Water
10/17/2021	DP-1	EtFOSAA	ND	0.008		ug/l	Water
10/17/2021	DP-1	EtFOSE	ND	0.040		ug/l	Water
10/17/2021	DP-1	F-53B Major	ND	0.016		ug/l	Water
10/17/2021	DP-1	F-53B Minor	ND	0.016		ug/l	Water
10/17/2021	DP-1	HFPO-DA	ND	0.008		ug/l	Water
10/17/2021	DP-1	MeFOSA	ND	0.016		ug/l	Water
10/17/2021	DP-1	MeFOSE	ND	0.040		ug/l	Water
10/17/2021	DP-1	NFDHA	ND	0.016		ug/l	Water
10/17/2021	DP-1	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/17/2021	DP-1	Perfluorobutanesulfonic acid	0.004	0.004	J	ug/l	Water
10/17/2021	DP-1	Perfluorobutanoic acid	0.006	0.008	J	ug/l	Water
10/17/2021	DP-1	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	DP-1	Perfluorodecanoic acid	0.004	0.004		ug/l	Water
10/17/2021	DP-1	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/17/2021	DP-1	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/17/2021	DP-1	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/17/2021	DP-1	Perfluoroheptanoic acid	0.006	0.004		ug/l	Water
10/17/2021	DP-1	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	DP-1	Perfluorohexanoic acid	0.008	0.004		ug/l	Water
10/17/2021	DP-1	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	DP-1	Perfluorononanoic acid	0.019	0.004		ug/l	Water
10/17/2021	DP-1	Perfluorooctanesulfonic acid	0.011	0.004		ug/l	Water
10/17/2021	DP-1	Perfluorooctanoic acid	0.009	0.004		ug/l	Water
10/17/2021	DP-1	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	DP-1	Perfluoropentanoic acid	0.008	0.004		ug/l	Water
10/17/2021	DP-1	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/17/2021	DP-1	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/17/2021	DP-1	Perfluoroundecanoic acid	0.004	0.004	J	ug/l	Water
10/17/2021	DP-1	PFEESA	ND	0.016		ug/l	Water
10/17/2021	DP-1	PFMBA	ND	0.016		ug/l	Water
10/17/2021	DP-1	PFMPA	ND	0.016		ug/l	Water
10/17/2021	DP-1	PFOSA	ND	0.008		ug/l	Water
10/15/2021	DP-4	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	DP-4	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/15/2021	DP-4	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	DP-4	6:2 FTS	ND	0.016		ug/l	Water
10/15/2021	DP-4	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	DP-4	8:2 FTS	ND	0.016		ug/l	Water
10/15/2021	DP-4	DONA	ND	0.016		ug/l	Water
10/15/2021	DP-4	EtFOSA	ND	0.016		ug/l	Water
10/15/2021	DP-4	EtFOSAA	ND	0.008		ug/l	Water
10/15/2021	DP-4	EtFOSE	ND	0.040		ug/l	Water
10/15/2021	DP-4	F-53B Major	ND	0.016		ug/l	Water
10/15/2021	DP-4	F-53B Minor	ND	0.016		ug/l	Water
10/15/2021	DP-4	HFPO-DA	ND	0.008		ug/l	Water
10/15/2021	DP-4	MeFOSA	ND	0.016		ug/l	Water
10/15/2021	DP-4	MeFOSE	ND	0.040		ug/l	Water
10/15/2021	DP-4	NFDHA	ND	0.016		ug/l	Water
10/15/2021	DP-4	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/15/2021	DP-4	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	DP-4	Perfluorobutanoic acid	0.009	0.008		ug/l	Water
10/15/2021	DP-4	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	DP-4	Perfluorodecanoic acid	0.003	0.004	J	ug/l	Water
10/15/2021	DP-4	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/15/2021	DP-4	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/15/2021	DP-4	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/15/2021	DP-4	Perfluoroheptanoic acid	0.014	0.004		ug/l	Water
10/15/2021	DP-4	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	DP-4	Perfluorohexanoic acid	0.017	0.004		ug/l	Water
10/15/2021	DP-4	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	DP-4	Perfluorononanoic acid	0.027	0.004		ug/l	Water
10/15/2021	DP-4	Perfluorooctanesulfonic acid	0.004	0.004	J	ug/l	Water
10/15/2021	DP-4	Perfluorooctanoic acid	0.042	0.004		ug/l	Water
10/15/2021	DP-4	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	DP-4	Perfluoropentanoic acid	0.010	0.004		ug/l	Water
10/15/2021	DP-4	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/15/2021	DP-4	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/15/2021	DP-4	Perfluoroundecanoic acid	ND	0.004		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/15/2021	DP-4	PFEESA	ND	0.016		ug/l	Water
10/15/2021	DP-4	PFMBA	ND	0.016		ug/l	Water
10/15/2021	DP-4	PFMPA	ND	0.016		ug/l	Water
10/15/2021	DP-4	PFOSA	ND	0.008		ug/l	Water
10/15/2021	DP-5	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	DP-5	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/15/2021	DP-5	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	DP-5	6:2 FTS	0.034	0.016		ug/l	Water
10/15/2021	DP-5	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	DP-5	8:2 FTS	0.005	0.016	J	ug/l	Water
10/15/2021	DP-5	DONA	ND	0.016		ug/l	Water
10/15/2021	DP-5	EtFOSA	ND	0.016		ug/l	Water
10/15/2021	DP-5	EtFOSAA	ND	0.008		ug/l	Water
10/15/2021	DP-5	EtFOSE	ND	0.040		ug/l	Water
10/15/2021	DP-5	F-53B Major	ND	0.016		ug/l	Water
10/15/2021	DP-5	F-53B Minor	ND	0.016		ug/l	Water
10/15/2021	DP-5	HFPO-DA	ND	0.008		ug/l	Water
10/15/2021	DP-5	MeFOSA	ND	0.016		ug/l	Water
10/15/2021	DP-5	MeFOSE	ND	0.040		ug/l	Water
10/15/2021	DP-5	NFDHA	ND	0.016		ug/l	Water
10/15/2021	DP-5	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/15/2021	DP-5	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	DP-5	Perfluorobutanoic acid	0.014	0.008		ug/l	Water
10/15/2021	DP-5	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	DP-5	Perfluorodecanoic acid	0.009	0.004		ug/l	Water
10/15/2021	DP-5	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/15/2021	DP-5	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/15/2021	DP-5	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/15/2021	DP-5	Perfluoroheptanoic acid	0.022	0.004		ug/l	Water
10/15/2021	DP-5	Perfluorohexanesulfonic acid	0.004	0.004	J	ug/l	Water
10/15/2021	DP-5	Perfluorohexanoic acid	0.019	0.004		ug/l	Water
10/15/2021	DP-5	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	DP-5	Perfluorononanoic acid	0.056	0.004		ug/l	Water
10/15/2021	DP-5	Perfluorooctanesulfonic acid	0.021	0.004		ug/l	Water
10/15/2021	DP-5	Perfluorooctanoic acid	0.040	0.004		ug/l	Water
10/15/2021	DP-5	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	DP-5	Perfluoropentanoic acid	0.021	0.004		ug/l	Water
10/15/2021	DP-5	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/15/2021	DP-5	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/15/2021	DP-5	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/15/2021	DP-5	PFEESA	ND	0.016		ug/l	Water
10/15/2021	DP-5	PFMBA	ND	0.016		ug/l	Water
10/15/2021	DP-5	PFMPA	ND	0.016		ug/l	Water
10/15/2021	DP-5	PFOSA	ND	0.008		ug/l	Water
7/12/2019	EB-02	6:2 FTS	ND	1.900		ng/l	Water
7/12/2019	EB-02	8:2 FTS	ND	1.900		ng/l	Water
7/12/2019	EB-02	DONA	ND	0.170		ng/l	Water
7/12/2019	EB-02	F-53B Major	ND	0.230		ng/l	Water
7/12/2019	EB-02	F-53B Minor	ND	0.300		ng/l	Water
7/12/2019	EB-02	HFPO-DA	ND	1.400		ng/l	Water
7/12/2019	EB-02	N-ethylperfluorooctanesulfonamidoacetic acid	ND	1.800		ng/l	Water
7/12/2019	EB-02	N-methylperfluorooctanesulfonamidoacetic acid	ND	2.900		ng/l	Water
7/12/2019	EB-02	Perfluorobutanesulfonic acid	ND	0.190		ng/l	Water
7/12/2019	EB-02	Perfluorobutanoic acid	ND	0.330		ng/l	Water
7/12/2019	EB-02	Perfluorodecanesulfonic acid	ND	0.300		ng/l	Water
7/12/2019	EB-02	Perfluorodecanoic acid	ND	0.290		ng/l	Water
7/12/2019	EB-02	Perfluorododecanoic acid	ND	0.520		ng/l	Water
7/12/2019	EB-02	Perfluoroheptanesulfonic Acid	ND	0.180		ng/l	Water
7/12/2019	EB-02	Perfluoroheptanoic acid	ND	0.240		ng/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
7/12/2019	EB-02	Perfluorohexanesulfonic acid	0.320	0.160		ng/l	Water
7/12/2019	EB-02	Perfluorohexanoic acid	ND	0.550		ng/l	Water
7/12/2019	EB-02	Perfluorononanoic acid	ND	0.250		ng/l	Water
7/12/2019	EB-02	Perfluorooctanesulfonamide	ND	0.330		ng/l	Water
7/12/2019	EB-02	Perfluorooctanesulfonic acid	ND	0.510		ng/l	Water
7/12/2019	EB-02	Perfluorooctanoic acid	ND	0.800		ng/l	Water
7/12/2019	EB-02	Perfluoropentanoic acid	ND	0.460		ng/l	Water
7/12/2019	EB-02	Perfluorotetradecanoic acid	ND	0.270		ng/l	Water
7/12/2019	EB-02	Perfluorotridecanoic acid	ND	1.200		ng/l	Water
7/12/2019	EB-02	Perfluoroundecanoic acid	ND	1.000		ng/l	Water
7/12/2019	EB-03	6:2 FTS	ND	1.800		ng/l	Water
7/12/2019	EB-03	8:2 FTS	ND	1.800		ng/l	Water
7/12/2019	EB-03	DONA	ND	0.160		ng/l	Water
7/12/2019	EB-03	F-53B Major	ND	0.210		ng/l	Water
7/12/2019	EB-03	F-53B Minor	ND	0.280		ng/l	Water
7/12/2019	EB-03	HFPO-DA	ND	1.300		ng/l	Water
7/12/2019	EB-03	N-ethylperfluorooctanesulfonamidoacetic acid	ND	1.700		ng/l	Water
7/12/2019	EB-03	N-methylperfluorooctanesulfonamidoacetic acid	ND	2.800		ng/l	Water
7/12/2019	EB-03	Perfluorobutanesulfonic acid	ND	0.180		ng/l	Water
7/12/2019	EB-03	Perfluorobutanoic acid	ND	0.310		ng/l	Water
7/12/2019	EB-03	Perfluorodecanesulfonic acid	ND	0.280		ng/l	Water
7/12/2019	EB-03	Perfluorodecanoic acid	ND	0.280		ng/l	Water
7/12/2019	EB-03	Perfluorododecanoic acid	ND	0.490		ng/l	Water
7/12/2019	EB-03	Perfluoroheptanesulfonic Acid	ND	0.170		ng/l	Water
7/12/2019	EB-03	Perfluoroheptanoic acid	ND	0.220		ng/l	Water
7/12/2019	EB-03	Perfluorohexanesulfonic acid	0.240	0.150		ng/l	Water
7/12/2019	EB-03	Perfluorohexanoic acid	ND	0.520		ng/l	Water
7/12/2019	EB-03	Perfluorononanoic acid	ND	0.240		ng/l	Water
7/12/2019	EB-03	Perfluorooctanesulfonamide	ND	0.310		ng/l	Water
7/12/2019	EB-03	Perfluorooctanesulfonic acid	ND	0.480		ng/l	Water
7/12/2019	EB-03	Perfluorooctanoic acid	ND	0.760		ng/l	Water
7/12/2019	EB-03	Perfluoropentanoic acid	ND	0.440		ng/l	Water
7/12/2019	EB-03	Perfluorotetradecanoic acid	ND	0.260		ng/l	Water
7/12/2019	EB-03	Perfluorotridecanoic acid	ND	1.200		ng/l	Water
7/12/2019	EB-03	Perfluoroundecanoic acid	ND	0.980		ng/l	Water
7/12/2019	EFFLUENT	6:2 FTS	98.000	1.900		ng/l	Water
7/12/2019	EFFLUENT	8:2 FTS	19.000	1.900		ng/l	Water
7/12/2019	EFFLUENT	DONA	ND	0.170		ng/l	Water
7/12/2019	EFFLUENT	F-53B Major	ND	0.230		ng/l	Water
7/12/2019	EFFLUENT	F-53B Minor	ND	0.300		ng/l	Water
7/12/2019	EFFLUENT	HFPO-DA	48.000	1.400		ng/l	Water
7/12/2019	EFFLUENT	N-ethylperfluorooctanesulfonamidoacetic acid	2.400	1.800		ng/l	Water
7/12/2019	EFFLUENT	N-methylperfluorooctanesulfonamidoacetic acid	ND	2.900		ng/l	Water
7/12/2019	EFFLUENT	Perfluorobutanesulfonic acid	4.700	0.190		ng/l	Water
7/12/2019	EFFLUENT	Perfluorobutanoic acid	43.000	0.330		ng/l	Water
7/12/2019	EFFLUENT	Perfluorodecanesulfonic acid	ND	0.300		ng/l	Water
7/12/2019	EFFLUENT	Perfluorodecanoic acid	11.000	0.290		ng/l	Water
7/12/2019	EFFLUENT	Perfluorododecanoic acid	ND	0.520		ng/l	Water
7/12/2019	EFFLUENT	Perfluoroheptanesulfonic Acid	0.980	0.180		ng/l	Water
7/12/2019	EFFLUENT	Perfluoroheptanoic acid	51.000	0.240		ng/l	Water
7/12/2019	EFFLUENT	Perfluorohexanesulfonic acid	19.000	0.160		ng/l	Water
7/12/2019	EFFLUENT	Perfluorohexanoic acid	75.000	0.550		ng/l	Water
7/12/2019	EFFLUENT	Perfluorononanoic acid	59.000	0.250		ng/l	Water
7/12/2019	EFFLUENT	Perfluorooctanesulfonamide	0.480	0.330		ng/l	Water
7/12/2019	EFFLUENT	Perfluorooctanesulfonic acid	79.000	0.510		ng/l	Water
7/12/2019	EFFLUENT	Perfluorooctanoic acid	1400.000	8.000		ng/l	Water
7/12/2019	EFFLUENT	Perfluoropentanoic acid	47.000	0.460		ng/l	Water
7/12/2019	EFFLUENT	Perfluorotetradecanoic acid	ND	0.270		ng/l	Water
7/12/2019	EFFLUENT	Perfluorotridecanoic acid	ND	1.200		ng/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
7/12/2019	EFFLUENT	Perfluoroundecanoic acid	ND	1.000		ng/l	Water
10/14/2021	EFFLUENT	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	5:3 Fluorotelomer carboxylate	0.007	0.016	J	ug/l	Water
10/14/2021	EFFLUENT	6:2 FTS	0.089	0.016		ug/l	Water
10/14/2021	EFFLUENT	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	8:2 FTS	0.033	0.016		ug/l	Water
10/14/2021	EFFLUENT	DONA	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	EtFOSA	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	EFFLUENT	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	EFFLUENT	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	HFPO-DA	0.056	0.008		ug/l	Water
10/14/2021	EFFLUENT	MeFOSA	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	MeFOSE	ND	0.040		ug/l	Water
10/14/2021	EFFLUENT	NFDHA	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	EFFLUENT	Perfluorobutanesulfonic acid	0.006	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluorobutanoic acid	0.052	0.008		ug/l	Water
10/14/2021	EFFLUENT	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluorodecanoic acid	0.261	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	EFFLUENT	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluoroheptanoic acid	0.593	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluorohexanesulfonic acid	0.017	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluorohexanoic acid	0.088	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluorononanoic acid	1.680	0.040		ug/l	Water
10/14/2021	EFFLUENT	Perfluorooctanesulfonic acid	0.106	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluorooctanoic acid	1.430	0.040		ug/l	Water
10/14/2021	EFFLUENT	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluoropentanoic acid	0.056	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	EFFLUENT	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	EFFLUENT	PFEESA	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	PFMBA	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	PFMPA	ND	0.016		ug/l	Water
10/14/2021	EFFLUENT	PFOSA	ND	0.008		ug/l	Water
7/12/2019	FB-02	6:2 FTS	ND	1.800		ng/l	Water
7/12/2019	FB-02	8:2 FTS	ND	1.800		ng/l	Water
7/12/2019	FB-02	DONA	ND	0.160		ng/l	Water
7/12/2019	FB-02	F-53B Major	ND	0.210		ng/l	Water
7/12/2019	FB-02	F-53B Minor	ND	0.280		ng/l	Water
7/12/2019	FB-02	HFPO-DA	ND	1.300		ng/l	Water
7/12/2019	FB-02	N-ethylperfluorooctanesulfonamidoacetic acid	ND	1.700		ng/l	Water
7/12/2019	FB-02	N-methylperfluorooctanesulfonamidoacetic acid	ND	2.700		ng/l	Water
7/12/2019	FB-02	Perfluorobutanesulfonic acid	ND	0.180		ng/l	Water
7/12/2019	FB-02	Perfluorobutanoic acid	ND	0.310		ng/l	Water
7/12/2019	FB-02	Perfluorodecanesulfonic acid	ND	0.280		ng/l	Water
7/12/2019	FB-02	Perfluorodecanoic acid	ND	0.270		ng/l	Water
7/12/2019	FB-02	Perfluorododecanoic acid	ND	0.490		ng/l	Water
7/12/2019	FB-02	Perfluoroheptanesulfonic Acid	ND	0.170		ng/l	Water
7/12/2019	FB-02	Perfluoroheptanoic acid	ND	0.220		ng/l	Water
7/12/2019	FB-02	Perfluorohexanesulfonic acid	0.260	0.150		ng/l	Water
7/12/2019	FB-02	Perfluorohexanoic acid	ND	0.510		ng/l	Water
7/12/2019	FB-02	Perfluorononanoic acid	ND	0.240		ng/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
7/12/2019	FB-02	Perfluorooctanesulfonamide	ND	0.310		ng/l	Water
7/12/2019	FB-02	Perfluorooctanesulfonic acid	ND	0.480		ng/l	Water
7/12/2019	FB-02	Perfluorooctanoic acid	ND	0.750		ng/l	Water
7/12/2019	FB-02	Perfluoropentanoic acid	ND	0.430		ng/l	Water
7/12/2019	FB-02	Perfluorotetradecanoic acid	ND	0.260		ng/l	Water
7/12/2019	FB-02	Perfluorotridecanoic acid	ND	1.100		ng/l	Water
7/12/2019	FB-02	Perfluoroundecanoic acid	ND	0.970		ng/l	Water
7/12/2019	INFLUENT	6:2 FTS	97.000	2.000		ng/l	Water
7/12/2019	INFLUENT	8:2 FTS	20.000	2.000		ng/l	Water
7/12/2019	INFLUENT	DONA	ND	0.180		ng/l	Water
7/12/2019	INFLUENT	F-53B Major	ND	0.240		ng/l	Water
7/12/2019	INFLUENT	F-53B Minor	ND	0.320		ng/l	Water
7/12/2019	INFLUENT	HFPO-DA	55.000	1.500		ng/l	Water
7/12/2019	INFLUENT	N-ethylperfluorooctanesulfonamidoacetic acid	3.200	1.900		ng/l	Water
7/12/2019	INFLUENT	N-methylperfluorooctanesulfonamidoacetic acid	ND	3.100		ng/l	Water
7/12/2019	INFLUENT	Perfluorobutanesulfonic acid	4.200	0.200		ng/l	Water
7/12/2019	INFLUENT	Perfluorobutanoic acid	41.000	0.350		ng/l	Water
7/12/2019	INFLUENT	Perfluorodecanesulfonic acid	ND	0.320		ng/l	Water
7/12/2019	INFLUENT	Perfluorodecanoic acid	11.000	0.310		ng/l	Water
7/12/2019	INFLUENT	Perfluorododecanoic acid	ND	0.540		ng/l	Water
7/12/2019	INFLUENT	Perfluoroheptanesulfonic Acid	0.940	0.190		ng/l	Water
7/12/2019	INFLUENT	Perfluoroheptanoic acid	54.000	0.250		ng/l	Water
7/12/2019	INFLUENT	Perfluorohexanesulfonic acid	16.000	0.170		ng/l	Water
7/12/2019	INFLUENT	Perfluorohexanoic acid	61.000	0.570		ng/l	Water
7/12/2019	INFLUENT	Perfluorononanoic acid	59.000	0.270		ng/l	Water
7/12/2019	INFLUENT	Perfluorooctanesulfonamide	0.560	0.350		ng/l	Water
7/12/2019	INFLUENT	Perfluorooctanesulfonic acid	76.000	0.530		ng/l	Water
7/12/2019	INFLUENT	Perfluorooctanoic acid	1500.000	8.400		ng/l	Water
7/12/2019	INFLUENT	Perfluoropentanoic acid	46.000	0.480		ng/l	Water
7/12/2019	INFLUENT	Perfluorotetradecanoic acid	0.330	0.290		ng/l	Water
7/12/2019	INFLUENT	Perfluorotridecanoic acid	ND	1.300		ng/l	Water
7/12/2019	INFLUENT	Perfluoroundecanoic acid	ND	1.100		ng/l	Water
10/14/2021	INFLUENT	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	5:3 Fluorotelomer carboxylate	0.006	0.016	J	ug/l	Water
10/14/2021	INFLUENT	6:2 FTS	0.088	0.016		ug/l	Water
10/14/2021	INFLUENT	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	8:2 FTS	0.032	0.016		ug/l	Water
10/14/2021	INFLUENT	DONA	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	EtFOSA	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	INFLUENT	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	INFLUENT	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	HFPO-DA	0.055	0.008		ug/l	Water
10/14/2021	INFLUENT	MeFOSA	ND	0.160		ug/l	Water
10/14/2021	INFLUENT	MeFOSE	ND	0.040		ug/l	Water
10/14/2021	INFLUENT	NFDHA	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	INFLUENT	Perfluorobutanesulfonic acid	0.006	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluorobutanoic acid	0.053	0.008		ug/l	Water
10/14/2021	INFLUENT	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluorodecanoic acid	0.257	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	INFLUENT	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluoroheptanoic acid	0.585	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluorohexanesulfonic acid	0.016	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluorohexanoic acid	0.086	0.004		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	INFLUENT	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluorononanoic acid	1.680	0.040		ug/l	Water
10/14/2021	INFLUENT	Perfluorooctanesulfonic acid	0.100	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluorooctanoic acid	1.410	0.040		ug/l	Water
10/14/2021	INFLUENT	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluoropentanoic acid	0.056	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	INFLUENT	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	INFLUENT	PFEESA	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	PFMBA	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	PFMPA	ND	0.016		ug/l	Water
10/14/2021	INFLUENT	PFOSA	ND	0.008		ug/l	Water
10/16/2021	L2	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	L2	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/16/2021	L2	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	L2	6:2 FTS	ND	0.016		ug/l	Water
10/16/2021	L2	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	L2	8:2 FTS	ND	0.016		ug/l	Water
10/16/2021	L2	DONA	ND	0.016		ug/l	Water
10/16/2021	L2	EtFOSA	ND	0.016		ug/l	Water
10/16/2021	L2	EtFOSAA	0.010	0.008		ug/l	Water
10/16/2021	L2	EtFOSE	ND	0.040		ug/l	Water
10/16/2021	L2	F-53B Major	ND	0.016		ug/l	Water
10/16/2021	L2	F-53B Minor	ND	0.016		ug/l	Water
10/16/2021	L2	HFPO-DA	0.004	0.008	J	ug/l	Water
10/16/2021	L2	MeFOSA	ND	0.016		ug/l	Water
10/16/2021	L2	MeFOSE	ND	0.040		ug/l	Water
10/16/2021	L2	NFDHA	ND	0.016		ug/l	Water
10/16/2021	L2	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/16/2021	L2	Perfluorobutanesulfonic acid	0.005	0.004		ug/l	Water
10/16/2021	L2	Perfluorobutanoic acid	0.050	0.008		ug/l	Water
10/16/2021	L2	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	L2	Perfluorodecanoic acid	0.565	0.004		ug/l	Water
10/16/2021	L2	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/16/2021	L2	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/16/2021	L2	Perfluoroheptanesulfonic Acid	0.003	0.004	J	ug/l	Water
10/16/2021	L2	Perfluoroheptanoic acid	0.075	0.004		ug/l	Water
10/16/2021	L2	Perfluorohexanesulfonic acid	0.058	0.004		ug/l	Water
10/16/2021	L2	Perfluorohexanoic acid	0.059	0.004		ug/l	Water
10/16/2021	L2	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	L2	Perfluorononanoic acid	1.190	0.020		ug/l	Water
10/16/2021	L2	Perfluorooctanesulfonic acid	0.284	0.004		ug/l	Water
10/16/2021	L2	Perfluorooctanoic acid	0.113	0.004		ug/l	Water
10/16/2021	L2	Perfluoropentanesulfonic acid	0.002	0.004	J	ug/l	Water
10/16/2021	L2	Perfluoropentanoic acid	0.080	0.004		ug/l	Water
10/16/2021	L2	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/16/2021	L2	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/16/2021	L2	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/16/2021	L2	PFEESA	ND	0.016		ug/l	Water
10/16/2021	L2	PFMBA	ND	0.016		ug/l	Water
10/16/2021	L2	PFMPA	ND	0.016		ug/l	Water
10/16/2021	L2	PFOSA	ND	0.008		ug/l	Water
10/19/2021	MA-5D	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/19/2021	MA-5D	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/19/2021	MA-5D	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/19/2021	MA-5D	6:2 FTS	ND	0.016		ug/l	Water
10/19/2021	MA-5D	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/19/2021	MA-5D	8:2 FTS	ND	0.016		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/19/2021	MA-5D	DONA	ND	0.016		ug/l	Water
10/19/2021	MA-5D	EtFOSA	ND	0.016		ug/l	Water
10/19/2021	MA-5D	EtFOSAA	ND	0.008		ug/l	Water
10/19/2021	MA-5D	EtFOSE	ND	0.040		ug/l	Water
10/19/2021	MA-5D	F-53B Major	ND	0.016		ug/l	Water
10/19/2021	MA-5D	F-53B Minor	ND	0.016		ug/l	Water
10/19/2021	MA-5D	HFPO-DA	ND	0.008		ug/l	Water
10/19/2021	MA-5D	MeFOSA	ND	0.016		ug/l	Water
10/19/2021	MA-5D	MeFOSE	ND	0.040		ug/l	Water
10/19/2021	MA-5D	NFDHA	ND	0.016		ug/l	Water
10/19/2021	MA-5D	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/19/2021	MA-5D	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorobutanoic acid	0.013	0.008		ug/l	Water
10/19/2021	MA-5D	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorodecanoic acid	0.008	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/19/2021	MA-5D	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluoroheptanoic acid	0.013	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorohexanoic acid	0.022	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorononanoic acid	0.065	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorooctanesulfonic acid	0.006	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorooctanoic acid	0.048	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluoropentanoic acid	0.014	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/19/2021	MA-5D	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/19/2021	MA-5D	PFEESA	ND	0.016		ug/l	Water
10/19/2021	MA-5D	PFMBA	ND	0.016		ug/l	Water
10/19/2021	MA-5D	PFMPA	ND	0.016		ug/l	Water
10/19/2021	MA-5D	PFOSA	ND	0.008		ug/l	Water
10/18/2021	MA-9S	3:3 Fluorotelomer carboxylate	ND	0.017		ug/l	Water
10/18/2021	MA-9S	4:2 Fluorotelomer sulfonate	ND	0.017		ug/l	Water
10/18/2021	MA-9S	5:3 Fluorotelomer carboxylate	ND	0.017		ug/l	Water
10/18/2021	MA-9S	6:2 FTS	0.012	0.017	J	ug/l	Water
10/18/2021	MA-9S	7:3 Fluorotelomer carboxylate	ND	0.017		ug/l	Water
10/18/2021	MA-9S	8:2 FTS	ND	0.017		ug/l	Water
10/18/2021	MA-9S	DONA	ND	0.017		ug/l	Water
10/18/2021	MA-9S	EtFOSA	ND	0.017		ug/l	Water
10/18/2021	MA-9S	EtFOSAA	ND	0.008		ug/l	Water
10/18/2021	MA-9S	EtFOSE	ND	0.042		ug/l	Water
10/18/2021	MA-9S	F-53B Major	ND	0.017		ug/l	Water
10/18/2021	MA-9S	F-53B Minor	ND	0.017		ug/l	Water
10/18/2021	MA-9S	HFPO-DA	0.022	0.008		ug/l	Water
10/18/2021	MA-9S	MeFOSA	ND	0.017		ug/l	Water
10/18/2021	MA-9S	MeFOSE	ND	0.042		ug/l	Water
10/18/2021	MA-9S	NFDHA	ND	0.017		ug/l	Water
10/18/2021	MA-9S	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/18/2021	MA-9S	Perfluorobutanesulfonic acid	0.005	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluorobutanoic acid	0.040	0.008		ug/l	Water
10/18/2021	MA-9S	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluorodecanoic acid	0.133	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/18/2021	MA-9S	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluoroheptanoic acid	0.084	0.004		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/18/2021	MA-9S	Perfluorohexanesulfonic acid	0.054	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluorohexanoic acid	0.049	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluorononanoic acid	0.487	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluorooctanesulfonic acid	0.198	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluorooctanoic acid	0.110	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluoropentanesulfonic acid	0.002	0.004	J	ug/l	Water
10/18/2021	MA-9S	Perfluoropentanoic acid	0.037	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/18/2021	MA-9S	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/18/2021	MA-9S	PFEESA	ND	0.017		ug/l	Water
10/18/2021	MA-9S	PFMBA	ND	0.017		ug/l	Water
10/18/2021	MA-9S	PFMPA	ND	0.017		ug/l	Water
10/18/2021	MA-9S	PFOSA	ND	0.008		ug/l	Water
7/12/2019	MW-17-A	6:2 FTS	85.000	1.800		ng/l	Water
7/12/2019	MW-17-A	8:2 FTS	31.000	1.800		ng/l	Water
7/12/2019	MW-17-A	DONA	ND	0.170		ng/l	Water
7/12/2019	MW-17-A	F-53B Major	ND	0.220		ng/l	Water
7/12/2019	MW-17-A	F-53B Minor	ND	0.290		ng/l	Water
7/12/2019	MW-17-A	HFPO-DA	230.000	14.000		ng/l	Water
7/12/2019	MW-17-A	N-ethylperfluorooctanesulfonamidoacetic acid	3.300	1.800		ng/l	Water
7/12/2019	MW-17-A	N-methylperfluorooctanesulfonamidoacetic acid	ND	2.900		ng/l	Water
7/12/2019	MW-17-A	Perfluorobutanesulfonic acid	46.000	0.180		ng/l	Water
7/12/2019	MW-17-A	Perfluorobutanoic acid	530.000	3.200		ng/l	Water
7/12/2019	MW-17-A	Perfluorodecanesulfonic acid	ND	0.290		ng/l	Water
7/12/2019	MW-17-A	Perfluorodecanoic acid	1400.000	2.900		ng/l	Water
7/12/2019	MW-17-A	Perfluorododecanoic acid	ND	0.510		ng/l	Water
7/12/2019	MW-17-A	Perfluoroheptanesulfonic Acid	2.900	0.180		ng/l	Water
7/12/2019	MW-17-A	Perfluoroheptanoic acid	970.000	2.300		ng/l	Water
7/12/2019	MW-17-A	Perfluorohexanesulfonic acid	66.000	0.160		ng/l	Water
7/12/2019	MW-17-A	Perfluorohexanoic acid	2000.000	5.300		ng/l	Water
7/12/2019	MW-17-A	Perfluorononanoic acid	290.000	0.250		ng/l	Water
7/12/2019	MW-17-A	Perfluorooctanesulfonamide	5.000	0.320		ng/l	Water
7/12/2019	MW-17-A	Perfluorooctanesulfonic acid	380.000	5.000		ng/l	Water
7/12/2019	MW-17-A	Perfluorooctanoic acid	6700.000	39.000		ng/l	Water
7/12/2019	MW-17-A	Perfluoropentanoic acid	710.000	4.500		ng/l	Water
7/12/2019	MW-17-A	Perfluorotetradecanoic acid	ND	0.270		ng/l	Water
7/12/2019	MW-17-A	Perfluorotridecanoic acid	ND	1.200		ng/l	Water
7/12/2019	MW-17-A	Perfluoroundecanoic acid	ND	1.000		ng/l	Water
10/18/2021	MW-40	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	MW-40	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/18/2021	MW-40	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	MW-40	6:2 FTS	ND	0.016		ug/l	Water
10/18/2021	MW-40	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	MW-40	8:2 FTS	ND	0.016		ug/l	Water
10/18/2021	MW-40	DONA	ND	0.016		ug/l	Water
10/18/2021	MW-40	EtFOSA	ND	0.016		ug/l	Water
10/18/2021	MW-40	EtFOSAA	ND	0.008		ug/l	Water
10/18/2021	MW-40	EtFOSE	ND	0.040		ug/l	Water
10/18/2021	MW-40	F-53B Major	ND	0.016		ug/l	Water
10/18/2021	MW-40	F-53B Minor	ND	0.016		ug/l	Water
10/18/2021	MW-40	HFPO-DA	0.111	0.008		ug/l	Water
10/18/2021	MW-40	MeFOSA	ND	0.016		ug/l	Water
10/18/2021	MW-40	MeFOSE	ND	0.040		ug/l	Water
10/18/2021	MW-40	NFDHA	ND	0.016		ug/l	Water
10/18/2021	MW-40	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/18/2021	MW-40	Perfluorobutanesulfonic acid	0.002	0.004	J	ug/l	Water
10/18/2021	MW-40	Perfluorobutanoic acid	0.009	0.008		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/18/2021	MW-40	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	MW-40	Perfluorodecanoic acid	0.005	0.004		ug/l	Water
10/18/2021	MW-40	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/18/2021	MW-40	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/18/2021	MW-40	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/18/2021	MW-40	Perfluoroheptanoic acid	0.015	0.004		ug/l	Water
10/18/2021	MW-40	Perfluorohexanesulfonic acid	0.005	0.004		ug/l	Water
10/18/2021	MW-40	Perfluorohexanoic acid	0.014	0.004		ug/l	Water
10/18/2021	MW-40	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	MW-40	Perfluorononanoic acid	0.275	0.004		ug/l	Water
10/18/2021	MW-40	Perfluorooctanesulfonic acid	0.017	0.004		ug/l	Water
10/18/2021	MW-40	Perfluorooctanoic acid	0.070	0.004		ug/l	Water
10/18/2021	MW-40	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	MW-40	Perfluoropentanoic acid	0.015	0.004		ug/l	Water
10/18/2021	MW-40	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/18/2021	MW-40	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/18/2021	MW-40	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/18/2021	MW-40	PFEESA	ND	0.016		ug/l	Water
10/18/2021	MW-40	PFMBA	ND	0.016		ug/l	Water
10/18/2021	MW-40	PFMPA	ND	0.016		ug/l	Water
10/18/2021	MW-40	PFOSA	ND	0.008		ug/l	Water
10/17/2021	MW-41	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	MW-41	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/17/2021	MW-41	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	MW-41	6:2 FTS	ND	0.016		ug/l	Water
10/17/2021	MW-41	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/17/2021	MW-41	8:2 FTS	ND	0.016		ug/l	Water
10/17/2021	MW-41	DONA	ND	0.016		ug/l	Water
10/17/2021	MW-41	EtFOSA	ND	0.032		ug/l	Water
10/17/2021	MW-41	EtFOSAA	ND	0.008		ug/l	Water
10/17/2021	MW-41	EtFOSE	ND	0.040		ug/l	Water
10/17/2021	MW-41	F-53B Major	ND	0.016		ug/l	Water
10/17/2021	MW-41	F-53B Minor	ND	0.016		ug/l	Water
10/17/2021	MW-41	HFPO-DA	0.009	0.008		ug/l	Water
10/17/2021	MW-41	MeFOSA	ND	0.032		ug/l	Water
10/17/2021	MW-41	MeFOSE	ND	0.040		ug/l	Water
10/17/2021	MW-41	NFDHA	ND	0.016		ug/l	Water
10/17/2021	MW-41	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/17/2021	MW-41	Perfluorobutanesulfonic acid	0.007	0.004		ug/l	Water
10/17/2021	MW-41	Perfluorobutanoic acid	0.043	0.008		ug/l	Water
10/17/2021	MW-41	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	MW-41	Perfluorodecanoic acid	0.086	0.004		ug/l	Water
10/17/2021	MW-41	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/17/2021	MW-41	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/17/2021	MW-41	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/17/2021	MW-41	Perfluoroheptanoic acid	0.043	0.004		ug/l	Water
10/17/2021	MW-41	Perfluorohexanesulfonic acid	0.028	0.004		ug/l	Water
10/17/2021	MW-41	Perfluorohexanoic acid	0.043	0.004		ug/l	Water
10/17/2021	MW-41	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	MW-41	Perfluorononanoic acid	0.895	0.008		ug/l	Water
10/17/2021	MW-41	Perfluorooctanesulfonic acid	0.058	0.004		ug/l	Water
10/17/2021	MW-41	Perfluorooctanoic acid	0.207	0.004		ug/l	Water
10/17/2021	MW-41	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/17/2021	MW-41	Perfluoropentanoic acid	0.043	0.004		ug/l	Water
10/17/2021	MW-41	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/17/2021	MW-41	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/17/2021	MW-41	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/17/2021	MW-41	PFEESA	ND	0.016		ug/l	Water
10/17/2021	MW-41	PFMBA	ND	0.016		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/17/2021	MW-41	PFMPA	ND	0.016		ug/l	Water
10/17/2021	MW-41	PFOSA	ND	0.008		ug/l	Water
7/12/2019	MW-4-a	6:2 FTS	ND	1.900		ng/l	Water
7/12/2019	MW-4-a	6:2 FTS	ND	2.000		ng/l	Water
7/12/2019	MW-4-a	8:2 FTS	5.800	2.000		ng/l	Water
7/12/2019	MW-4-a	8:2 FTS	5.700	1.900		ng/l	Water
7/12/2019	MW-4-a	DONA	ND	0.170		ng/l	Water
7/12/2019	MW-4-a	DONA	ND	0.180		ng/l	Water
7/12/2019	MW-4-a	F-53B Major	ND	0.240		ng/l	Water
7/12/2019	MW-4-a	F-53B Major	ND	0.230		ng/l	Water
7/12/2019	MW-4-a	F-53B Minor	ND	0.320		ng/l	Water
7/12/2019	MW-4-a	F-53B Minor	ND	0.300		ng/l	Water
7/12/2019	MW-4-a	HFPO-DA	36.000	1.500		ng/l	Water
7/12/2019	MW-4-a	HFPO-DA	34.000	1.400		ng/l	Water
7/12/2019	MW-4-a	N-ethylperfluorooctanesulfonamidoacetic acid	2.100	1.800		ng/l	Water
7/12/2019	MW-4-a	N-ethylperfluorooctanesulfonamidoacetic acid	2.100	1.900		ng/l	Water
7/12/2019	MW-4-a	N-methylperfluorooctanesulfonamidoacetic acid	ND	3.100		ng/l	Water
7/12/2019	MW-4-a	N-methylperfluorooctanesulfonamidoacetic acid	ND	3.000		ng/l	Water
7/12/2019	MW-4-a	Perfluorobutanesulfonic acid	1.300	0.190		ng/l	Water
7/12/2019	MW-4-a	Perfluorobutanesulfonic acid	1.400	0.200		ng/l	Water
7/12/2019	MW-4-a	Perfluorobutanoic acid	35.000	0.350		ng/l	Water
7/12/2019	MW-4-a	Perfluorobutanoic acid	36.000	0.330		ng/l	Water
7/12/2019	MW-4-a	Perfluorodecanesulfonic acid	3.900	0.320		ng/l	Water
7/12/2019	MW-4-a	Perfluorodecanesulfonic acid	3.800	0.300		ng/l	Water
7/12/2019	MW-4-a	Perfluorodecanoic acid	17.000	0.300		ng/l	Water
7/12/2019	MW-4-a	Perfluorodecanoic acid	17.000	0.310		ng/l	Water
7/12/2019	MW-4-a	Perfluorododecanoic acid	6.400	0.550		ng/l	Water
7/12/2019	MW-4-a	Perfluorododecanoic acid	6.100	0.520		ng/l	Water
7/12/2019	MW-4-a	Perfluoroheptanesulfonic Acid	0.300	0.190		ng/l	Water
7/12/2019	MW-4-a	Perfluoroheptanesulfonic Acid	0.370	0.180		ng/l	Water
7/12/2019	MW-4-a	Perfluoroheptanoic acid	47.000	0.240		ng/l	Water
7/12/2019	MW-4-a	Perfluoroheptanoic acid	46.000	0.250		ng/l	Water
7/12/2019	MW-4-a	Perfluorohexanesulfonic acid	15.000	0.160		ng/l	Water
7/12/2019	MW-4-a	Perfluorohexanesulfonic acid	16.000	0.170		ng/l	Water
7/12/2019	MW-4-a	Perfluorohexanoic acid	39.000	0.550		ng/l	Water
7/12/2019	MW-4-a	Perfluorohexanoic acid	36.000	0.580		ng/l	Water
7/12/2019	MW-4-a	Perfluorononanoic acid	28.000	0.270		ng/l	Water
7/12/2019	MW-4-a	Perfluorononanoic acid	27.000	0.260		ng/l	Water
7/12/2019	MW-4-a	Perfluorooctanesulfonamide	1.700	0.330		ng/l	Water
7/12/2019	MW-4-a	Perfluorooctanesulfonamide	1.500	0.350		ng/l	Water
7/12/2019	MW-4-a	Perfluorooctanesulfonic acid	29.000	0.540		ng/l	Water
7/12/2019	MW-4-a	Perfluorooctanesulfonic acid	30.000	0.510		ng/l	Water
7/12/2019	MW-4-a	Perfluorooctanoic acid	34.000	0.810		ng/l	Water
7/12/2019	MW-4-a	Perfluorooctanoic acid	36.000	0.850		ng/l	Water
7/12/2019	MW-4-a	Perfluoropentanoic acid	28.000	0.470		ng/l	Water
7/12/2019	MW-4-a	Perfluoropentanoic acid	30.000	0.490		ng/l	Water
7/12/2019	MW-4-a	Perfluorotetradecanoic acid	ND	0.290		ng/l	Water
7/12/2019	MW-4-a	Perfluorotetradecanoic acid	ND	0.280		ng/l	Water
7/12/2019	MW-4-a	Perfluorotridecanoic acid	93.000	1.300		ng/l	Water
7/12/2019	MW-4-a	Perfluorotridecanoic acid	91.000	1.200		ng/l	Water
7/12/2019	MW-4-a	Perfluoroundecanoic acid	18.000	1.100		ng/l	Water
7/12/2019	MW-4-a	Perfluoroundecanoic acid	18.000	1.000		ng/l	Water
10/18/2021	MW-4-a	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	6:2 FTS	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	8:2 FTS	0.006	0.016	J	ug/l	Water
10/18/2021	MW-4-a	DONA	ND	0.016		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/18/2021	MW-4-a	EtFOSA	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	EtFOSAA	ND	0.008		ug/l	Water
10/18/2021	MW-4-a	EtFOSE	ND	0.040		ug/l	Water
10/18/2021	MW-4-a	F-53B Major	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	F-53B Minor	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	HFPO-DA	0.049	0.008		ug/l	Water
10/18/2021	MW-4-a	MeFOSA	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	MeFOSE	ND	0.040		ug/l	Water
10/18/2021	MW-4-a	NFDHA	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/18/2021	MW-4-a	Perfluorobutanesulfonic acid	0.002	0.004	J	ug/l	Water
10/18/2021	MW-4-a	Perfluorobutanoic acid	0.035	0.008		ug/l	Water
10/18/2021	MW-4-a	Perfluorodecanesulfonic acid	0.002	0.004	J	ug/l	Water
10/18/2021	MW-4-a	Perfluorodecanoic acid	0.013	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/18/2021	MW-4-a	Perfluorododecanoic acid	0.005	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluoroheptanoic acid	0.079	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluorohexanesulfonic acid	0.016	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluorohexanoic acid	0.048	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluorononanoic acid	0.052	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluorooctanesulfonic acid	0.024	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluorooctanoic acid	0.055	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluoropentanoic acid	0.049	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/18/2021	MW-4-a	Perfluoroundecanoic acid	0.010	0.004		ug/l	Water
10/18/2021	MW-4-a	PFEESA	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	PFMBA	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	PFMPA	ND	0.016		ug/l	Water
10/18/2021	MW-4-a	PFOSA	ND	0.008		ug/l	Water
7/12/2019	MW-4-B	6:2 FTS	2800.000	19.000		ng/l	Water
7/12/2019	MW-4-B	8:2 FTS	ND	19.000		ng/l	Water
7/12/2019	MW-4-B	DONA	ND	0.170		ng/l	Water
7/12/2019	MW-4-B	F-53B Major	ND	0.230		ng/l	Water
7/12/2019	MW-4-B	F-53B Minor	ND	0.300		ng/l	Water
7/12/2019	MW-4-B	HFPO-DA	30.000	1.400		ng/l	Water
7/12/2019	MW-4-B	N-ethylperfluorooctanesulfonamidoacetic acid	28.000	1.800		ng/l	Water
7/12/2019	MW-4-B	N-methylperfluorooctanesulfonamidoacetic acid	ND	2.900		ng/l	Water
7/12/2019	MW-4-B	Perfluorobutanesulfonic acid	3.600	0.190		ng/l	Water
7/12/2019	MW-4-B	Perfluorobutanoic acid	100.000	0.330		ng/l	Water
7/12/2019	MW-4-B	Perfluorodecanesulfonic acid	ND	0.300		ng/l	Water
7/12/2019	MW-4-B	Perfluorodecanoic acid	37.000	0.290		ng/l	Water
7/12/2019	MW-4-B	Perfluorododecanoic acid	ND	0.520		ng/l	Water
7/12/2019	MW-4-B	Perfluoroheptanesulfonic Acid	3.000	0.180		ng/l	Water
7/12/2019	MW-4-B	Perfluoroheptanoic acid	95.000	0.240		ng/l	Water
7/12/2019	MW-4-B	Perfluorohexanesulfonic acid	30.000	0.160		ng/l	Water
7/12/2019	MW-4-B	Perfluorohexanoic acid	420.000	5.500		ng/l	Water
7/12/2019	MW-4-B	Perfluorononanoic acid	31.000	0.260		ng/l	Water
7/12/2019	MW-4-B	Perfluorooctanesulfonamide	0.680	0.330		ng/l	Water
7/12/2019	MW-4-B	Perfluorooctanesulfonic acid	290.000	0.510		ng/l	Water
7/12/2019	MW-4-B	Perfluorooctanoic acid	160.000	0.800		ng/l	Water
7/12/2019	MW-4-B	Perfluoropentanoic acid	210.000	0.460		ng/l	Water
7/12/2019	MW-4-B	Perfluorotetradecanoic acid	ND	0.270		ng/l	Water
7/12/2019	MW-4-B	Perfluorotridecanoic acid	ND	1.200		ng/l	Water
7/12/2019	MW-4-B	Perfluoroundecanoic acid	ND	1.000		ng/l	Water
7/12/2019	MW-88-5-WT	6:2 FTS	11.000	1.800		ng/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
7/12/2019	MW-88-5-WT	8:2 FTS	4.200	1.800		ng/l	Water
7/12/2019	MW-88-5-WT	DONA	ND	0.160		ng/l	Water
7/12/2019	MW-88-5-WT	F-53B Major	ND	0.220		ng/l	Water
7/12/2019	MW-88-5-WT	F-53B Minor	ND	0.290		ng/l	Water
7/12/2019	MW-88-5-WT	HFPO-DA	2.300	1.400		ng/l	Water
7/12/2019	MW-88-5-WT	N-ethylperfluorooctanesulfonamidoacetic acid	2.700	1.700		ng/l	Water
7/12/2019	MW-88-5-WT	N-methylperfluorooctanesulfonamidoacetic acid	ND	2.800		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorobutanesulfonic acid	1.600	0.180		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorobutanoic acid	36.000	0.320		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorodecanesulfonic acid	ND	0.290		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorodecanoic acid	19.000	0.280		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorododecanoic acid	ND	0.500		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluoroheptanesulfonic Acid	2.100	0.170		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluoroheptanoic acid	54.000	0.230		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorohexanesulfonic acid	15.000	0.150		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorohexanoic acid	77.000	0.530		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorononanoic acid	67.000	0.250		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorooctanesulfonamide	1.500	0.320		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorooctanesulfonic acid	280.000	0.490		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorooctanoic acid	520.000	7.700		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluoropentanoic acid	90.000	0.440		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorotetradecanoic acid	ND	0.260		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluorotridecanoic acid	ND	1.200		ng/l	Water
7/12/2019	MW-88-5-WT	Perfluoroundecanoic acid	ND	1.000		ng/l	Water
7/12/2019	PFAS-SS-01	6:2 FTS	ND	0.160		ug/kg	Soil
7/12/2019	PFAS-SS-01	8:2 FTS	ND	0.270		ug/kg	Soil
7/12/2019	PFAS-SS-01	DONA	ND	0.020		ug/kg	Soil
7/12/2019	PFAS-SS-01	F-53B Major	ND	0.030		ug/kg	Soil
7/12/2019	PFAS-SS-01	F-53B Minor	ND	0.024		ug/kg	Soil
7/12/2019	PFAS-SS-01	HFPO-DA	0.280	0.120		ug/kg	Soil
7/12/2019	PFAS-SS-01	N-ethylperfluorooctanesulfonamidoacetic acid	ND	0.410		ug/kg	Soil
7/12/2019	PFAS-SS-01	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.430		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorobutanesulfonic acid	ND	0.027		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorobutanoic acid	0.110	0.031		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorodecanesulfonic acid	ND	0.043		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorodecanoic acid	ND	0.024		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorododecanoic acid	ND	0.074		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluoroheptanesulfonic Acid	ND	0.038		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluoroheptanoic acid	ND	0.032		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorohexanesulfonic acid	0.034	0.034		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorohexanoic acid	ND	0.046		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorononanoic acid	ND	0.040		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorooctanesulfonamide	ND	0.090		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorooctanesulfonic acid	ND	0.220		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorooctanoic acid	0.220	0.094		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluoropentanoic acid	0.180	0.085		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorotetradecanoic acid	ND	0.059		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluorotridecanoic acid	ND	0.056		ug/kg	Soil
7/12/2019	PFAS-SS-01	Perfluoroundecanoic acid	ND	0.040		ug/kg	Soil
7/12/2019	PFAS-SS-02	6:2 FTS	ND	0.170		ug/kg	Soil
7/12/2019	PFAS-SS-02	8:2 FTS	ND	0.280		ug/kg	Soil
7/12/2019	PFAS-SS-02	DONA	ND	0.020		ug/kg	Soil
7/12/2019	PFAS-SS-02	F-53B Major	ND	0.031		ug/kg	Soil
7/12/2019	PFAS-SS-02	F-53B Minor	ND	0.025		ug/kg	Soil
7/12/2019	PFAS-SS-02	HFPO-DA	ND	0.130		ug/kg	Soil
7/12/2019	PFAS-SS-02	N-ethylperfluorooctanesulfonamidoacetic acid	ND	0.420		ug/kg	Soil
7/12/2019	PFAS-SS-02	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.440		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorobutanesulfonic acid	0.052	0.028		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorobutanoic acid	0.520	0.032		ug/kg	Soil

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
7/12/2019	PFAS-SS-02	Perfluorodecanesulfonic acid	ND	0.044		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorodecanoic acid	0.360	0.025		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorododecanoic acid	0.730	0.076		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluoroheptanesulfonic Acid	ND	0.040		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluoroheptanoic acid	ND	0.033		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorohexanesulfonic acid	1.200	0.035		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorohexanoic acid	ND	0.048		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorononanoic acid	ND	0.041		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorooctanesulfonamide	0.180	0.093		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorooctanesulfonic acid	4.200	0.230		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorooctanoic acid	1.300	0.098		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluoropentanoic acid	0.260	0.088		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorotetradecanoic acid	0.880	0.061		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluorotridecanoic acid	ND	0.058		ug/kg	Soil
7/12/2019	PFAS-SS-02	Perfluoroundecanoic acid	0.540	0.041		ug/kg	Soil
7/12/2019	PFAS-SS-03	6:2 FTS	ND	0.170		ug/kg	Soil
7/12/2019	PFAS-SS-03	8:2 FTS	ND	0.280		ug/kg	Soil
7/12/2019	PFAS-SS-03	DONA	ND	0.020		ug/kg	Soil
7/12/2019	PFAS-SS-03	F-53B Major	ND	0.031		ug/kg	Soil
7/12/2019	PFAS-SS-03	F-53B Minor	ND	0.025		ug/kg	Soil
7/12/2019	PFAS-SS-03	HFPO-DA	ND	0.120		ug/kg	Soil
7/12/2019	PFAS-SS-03	N-ethylperfluorooctanesulfonamidoacetic acid	ND	0.420		ug/kg	Soil
7/12/2019	PFAS-SS-03	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.440		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorobutanesulfonic acid	ND	0.028		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorobutanoic acid	0.033	0.032		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorodecanesulfonic acid	ND	0.044		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorodecanoic acid	0.066	0.025		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorododecanoic acid	0.078	0.076		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluoroheptanesulfonic Acid	ND	0.040		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluoroheptanoic acid	ND	0.033		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorohexanesulfonic acid	0.120	0.035		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorohexanoic acid	ND	0.048		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorononanoic acid	ND	0.041		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorooctanesulfonamide	ND	0.093		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorooctanesulfonic acid	0.400	0.230		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorooctanoic acid	ND	0.098		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluoropentanoic acid	ND	0.087		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorotetradecanoic acid	ND	0.061		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluorotridecanoic acid	ND	0.058		ug/kg	Soil
7/12/2019	PFAS-SS-03	Perfluoroundecanoic acid	0.310	0.041		ug/kg	Soil
7/12/2019	PFAS-SS-04	6:2 FTS	ND	0.160		ug/kg	Soil
7/12/2019	PFAS-SS-04	8:2 FTS	ND	0.270		ug/kg	Soil
7/12/2019	PFAS-SS-04	DONA	ND	0.020		ug/kg	Soil
7/12/2019	PFAS-SS-04	F-53B Major	ND	0.029		ug/kg	Soil
7/12/2019	PFAS-SS-04	F-53B Minor	ND	0.024		ug/kg	Soil
7/12/2019	PFAS-SS-04	HFPO-DA	0.150	0.120		ug/kg	Soil
7/12/2019	PFAS-SS-04	N-ethylperfluorooctanesulfonamidoacetic acid	ND	0.400		ug/kg	Soil
7/12/2019	PFAS-SS-04	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.420		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorobutanesulfonic acid	ND	0.027		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorobutanoic acid	0.035	0.030		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorodecanesulfonic acid	ND	0.042		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorodecanoic acid	0.095	0.024		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorododecanoic acid	4.100	0.073		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluoroheptanesulfonic Acid	ND	0.038		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluoroheptanoic acid	0.038	0.032		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorohexanesulfonic acid	ND	0.034		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorohexanoic acid	ND	0.046		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorononanoic acid	ND	0.039		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorooctanesulfonamide	0.180	0.089		ug/kg	Soil

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
7/12/2019	PFAS-SS-04	Perfluorooctanesulfonic acid	ND	0.220		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorooctanoic acid	0.190	0.094		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluoropentanoic acid	ND	0.084		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorotetradecanoic acid	ND	0.059		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluorotridecanoic acid	ND	0.055		ug/kg	Soil
7/12/2019	PFAS-SS-04	Perfluoroundecanoic acid	ND	0.039		ug/kg	Soil
7/12/2019	PFAS-SS-10	6:2 FTS	ND	0.160		ug/kg	Soil
7/12/2019	PFAS-SS-10	8:2 FTS	ND	0.270		ug/kg	Soil
7/12/2019	PFAS-SS-10	DONA	ND	0.019		ug/kg	Soil
7/12/2019	PFAS-SS-10	F-53B Major	ND	0.029		ug/kg	Soil
7/12/2019	PFAS-SS-10	F-53B Minor	ND	0.024		ug/kg	Soil
7/12/2019	PFAS-SS-10	HFPO-DA	0.350	0.120		ug/kg	Soil
7/12/2019	PFAS-SS-10	N-ethylperfluorooctanesulfonamidoacetic acid	ND	0.400		ug/kg	Soil
7/12/2019	PFAS-SS-10	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.420		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorobutanesulfonic acid	ND	0.027		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorobutanoic acid	0.053	0.030		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorodecanesulfonic acid	ND	0.042		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorodecanoic acid	ND	0.024		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorododecanoic acid	ND	0.072		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluoroheptanesulfonic Acid	ND	0.038		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluoroheptanoic acid	ND	0.031		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorohexanesulfonic acid	ND	0.033		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorohexanoic acid	ND	0.045		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorononanoic acid	ND	0.039		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorooctanesulfonamide	ND	0.088		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorooctanesulfonic acid	ND	0.220		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorooctanoic acid	0.210	0.093		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluoropentanoic acid	0.098	0.083		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorotetradecanoic acid	ND	0.058		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluorotridecanoic acid	ND	0.055		ug/kg	Soil
7/12/2019	PFAS-SS-10	Perfluoroundecanoic acid	ND	0.039		ug/kg	Soil
10/14/2021	PFAS-SS-101	3:3 Fluorotelomer carboxylate	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	4:2 Fluorotelomer sulfonate	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	5:3 Fluorotelomer carboxylate	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	6:2 FTS	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	7:3 Fluorotelomer carboxylate	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	8:2 FTS	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	DONA	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	EtFOSA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	EtFOSAA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	EtFOSE	ND	3.000		ug/kg	Soil
10/14/2021	PFAS-SS-101	F-53B Major	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	F-53B Minor	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	HFPO-DA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	MeFOSA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	MeFOSE	ND	3.000		ug/kg	Soil
10/14/2021	PFAS-SS-101	NFDHA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	N-methylperfluorooctanesulfonamidoacetic acid	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorobutanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorobutanoic acid	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorodecanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorodecanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorododecanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorododecanoic acid	0.320	0.590	J	ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluoroheptanesulfonic Acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluoroheptanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorohexanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorohexanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorononanesulfonic acid	ND	0.590		ug/kg	Soil

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	PFAS-SS-101	Perfluorononanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorooctanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorooctanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluoropentanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluoropentanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorotetradecanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluorotridecanoic acid	0.460	0.590	J	ug/kg	Soil
10/14/2021	PFAS-SS-101	Perfluoroundecanoic acid	0.900	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-101	PFEESA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	PFMBA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	PFMPA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-101	PFOSA	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-102	3:3 Fluorotelomer carboxylate	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	4:2 Fluorotelomer sulfonate	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	5:3 Fluorotelomer carboxylate	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	6:2 FTS	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	7:3 Fluorotelomer carboxylate	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	8:2 FTS	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	DONA	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	EtFOSA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	EtFOSAA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	EtFOSE	ND	2.800		ug/kg	Soil
10/14/2021	PFAS-SS-102	F-53B Major	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	F-53B Minor	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	HFPO-DA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	MeFOSA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	MeFOSE	ND	2.800		ug/kg	Soil
10/14/2021	PFAS-SS-102	NFDHA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	N-methylperfluorooctanesulfonamidoacetic acid	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorobutanesulfonic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorobutanoic acid	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorodecanesulfonic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorodecanoic acid	0.360	0.570	J	ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorododecanesulfonic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorododecanoic acid	0.530	0.570	J	ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluoroheptanesulfonic Acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluoroheptanoic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorohexanesulfonic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorohexanoic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorononanesulfonic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorononanoic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorooctanesulfonic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorooctanoic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluoropentanesulfonic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluoropentanoic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorotetradecanoic acid	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluorotridecanoic acid	0.600	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	Perfluoroundecanoic acid	3.600	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-102	PFEESA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	PFMBA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	PFMPA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-102	PFOSA	ND	0.570		ug/kg	Soil
10/14/2021	PFAS-SS-103	3:3 Fluorotelomer carboxylate	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	4:2 Fluorotelomer sulfonate	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	5:3 Fluorotelomer carboxylate	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	6:2 FTS	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	7:3 Fluorotelomer carboxylate	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	8:2 FTS	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	DONA	ND	0.590		ug/kg	Soil

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	PFAS-SS-103	EtFOSA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	EtFOSAA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	EtFOSE	ND	3.000		ug/kg	Soil
10/14/2021	PFAS-SS-103	F-53B Major	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	F-53B Minor	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	HFPO-DA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	MeFOSA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	MeFOSE	ND	3.000		ug/kg	Soil
10/14/2021	PFAS-SS-103	NFDHA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	N-methylperfluorooctanesulfonamidoacetic acid	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorobutanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorobutanoic acid	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorodecanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorodecanoic acid	0.580	0.590	J	ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorododecanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorododecanoic acid	0.410	0.590	J	ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluoroheptanesulfonic Acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluoroheptanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorohexanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorohexanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorononanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorononanoic acid	0.540	0.590	J	ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorooctanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorooctanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluoropentanesulfonic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluoropentanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorotetradecanoic acid	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluorotridecanoic acid	0.480	0.590	J	ug/kg	Soil
10/14/2021	PFAS-SS-103	Perfluoroundecanoic acid	3.000	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-103	PFEESA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	PFMBA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	PFMPA	ND	1.200		ug/kg	Soil
10/14/2021	PFAS-SS-103	PFOSA	ND	0.590		ug/kg	Soil
10/14/2021	PFAS-SS-104	3:3 Fluorotelomer carboxylate	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	4:2 Fluorotelomer sulfonate	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	5:3 Fluorotelomer carboxylate	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	6:2 FTS	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	7:3 Fluorotelomer carboxylate	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	8:2 FTS	0.990	1.100	J	ug/kg	Soil
10/14/2021	PFAS-SS-104	DONA	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	EtFOSA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	EtFOSAA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	EtFOSE	ND	2.700		ug/kg	Soil
10/14/2021	PFAS-SS-104	F-53B Major	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	F-53B Minor	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	HFPO-DA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	MeFOSA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	MeFOSE	ND	2.700		ug/kg	Soil
10/14/2021	PFAS-SS-104	NFDHA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	N-methylperfluorooctanesulfonamidoacetic acid	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorobutanesulfonic acid	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorobutanoic acid	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorodecanesulfonic acid	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorodecanoic acid	1.900	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorododecanesulfonic acid	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorododecanoic acid	1.700	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluoroheptanesulfonic Acid	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluoroheptanoic acid	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorohexanesulfonic acid	ND	0.540		ug/kg	Soil

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	PFAS-SS-104	Perfluorohexanoic acid	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorononanesulfonic acid	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorononanoic acid	0.570	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorooctanesulfonic acid	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorooctanoic acid	0.390	0.540	J	ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluoropentanesulfonic acid	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluoropentanoic acid	ND	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorotetradecanoic acid	0.970	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluorotridecanoic acid	1.300	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	Perfluoroundecanoic acid	2.400	0.540		ug/kg	Soil
10/14/2021	PFAS-SS-104	PFEESA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	PFMBA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	PFMPA	ND	1.100		ug/kg	Soil
10/14/2021	PFAS-SS-104	PFOSA	ND	0.540		ug/kg	Soil
10/14/2021	STORMWATER-001	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	6:2 FTS	0.008	0.016	J	ug/l	Water
10/14/2021	STORMWATER-001	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	8:2 FTS	0.008	0.016	J	ug/l	Water
10/14/2021	STORMWATER-001	DONA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	EtFOSA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-001	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	STORMWATER-001	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	HFPO-DA	0.109	0.008		ug/l	Water
10/14/2021	STORMWATER-001	MeFOSA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	MeFOSE	ND	0.040		ug/l	Water
10/14/2021	STORMWATER-001	NFDHA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorobutanoic acid	0.020	0.008		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorodecanoic acid	0.003	0.004	J	ug/l	Water
10/14/2021	STORMWATER-001	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluoroheptanoic acid	0.010	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorohexanoic acid	0.027	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorononanoic acid	0.003	0.004	J	ug/l	Water
10/14/2021	STORMWATER-001	Perfluorooctanesulfonic acid	0.006	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorooctanoic acid	0.006	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluoropentanoic acid	0.020	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-001	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-001	PFEESA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	PFMBA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	PFMPA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-001	PFOSA	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-002	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	6:2 FTS	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	STORMWATER-002	8:2 FTS	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	DONA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	EtFOSA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-002	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	STORMWATER-002	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	HFPO-DA	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-002	MeFOSA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	MeFOSE	ND	0.040		ug/l	Water
10/14/2021	STORMWATER-002	NFDHA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorobutanoic acid	0.016	0.008		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorodecanoic acid	0.005	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluoroheptanoic acid	0.009	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorohexanoic acid	0.016	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorononanoic acid	0.023	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorooctanesulfonic acid	0.014	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorooctanoic acid	0.014	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluoropentanoic acid	0.019	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-002	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-002	PFEESA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	PFMBA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	PFMPA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-002	PFOSA	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-003	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-003	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-003	5:3 Fluorotelomer carboxylate	0.010	0.016	J	ug/l	Water
10/14/2021	STORMWATER-003	6:2 FTS	0.030	0.016		ug/l	Water
10/14/2021	STORMWATER-003	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-003	8:2 FTS	0.033	0.016		ug/l	Water
10/14/2021	STORMWATER-003	DONA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-003	EtFOSA	ND	0.080		ug/l	Water
10/14/2021	STORMWATER-003	EtFOSAA	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-003	EtFOSE	ND	0.040		ug/l	Water
10/14/2021	STORMWATER-003	F-53B Major	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-003	F-53B Minor	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-003	HFPO-DA	0.022	0.008		ug/l	Water
10/14/2021	STORMWATER-003	MeFOSA	ND	0.080		ug/l	Water
10/14/2021	STORMWATER-003	MeFOSE	ND	0.040		ug/l	Water
10/14/2021	STORMWATER-003	NFDHA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-003	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorobutanesulfonic acid	0.009	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorobutanoic acid	0.054	0.008		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorodecanoic acid	0.018	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorododecanoic acid	0.004	0.004	J	ug/l	Water
10/14/2021	STORMWATER-003	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/14/2021	STORMWATER-003	Perfluoroheptanoic acid	0.035	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorohexanesulfonic acid	0.004	0.004	J	ug/l	Water
10/14/2021	STORMWATER-003	Perfluorohexanoic acid	0.087	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorononanoic acid	0.029	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorooctanesulfonic acid	0.039	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorooctanoic acid	0.042	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluoropentanoic acid	0.097	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/14/2021	STORMWATER-003	Perfluoroundecanoic acid	0.004	0.004	J	ug/l	Water
10/14/2021	STORMWATER-003	PFEESA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-003	PFMBA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-003	PFMPA	ND	0.016		ug/l	Water
10/14/2021	STORMWATER-003	PFOSA	ND	0.008		ug/l	Water
10/16/2021	W-17	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	W-17	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/16/2021	W-17	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	W-17	6:2 FTS	0.005	0.016	J	ug/l	Water
10/16/2021	W-17	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/16/2021	W-17	8:2 FTS	ND	0.016		ug/l	Water
10/16/2021	W-17	DONA	ND	0.016		ug/l	Water
10/16/2021	W-17	EtFOSA	ND	0.016		ug/l	Water
10/16/2021	W-17	EtFOSAA	ND	0.008		ug/l	Water
10/16/2021	W-17	EtFOSE	ND	0.040		ug/l	Water
10/16/2021	W-17	F-53B Major	ND	0.016		ug/l	Water
10/16/2021	W-17	F-53B Minor	ND	0.016		ug/l	Water
10/16/2021	W-17	HFPO-DA	ND	0.008		ug/l	Water
10/16/2021	W-17	MeFOSA	ND	0.016		ug/l	Water
10/16/2021	W-17	MeFOSE	ND	0.040		ug/l	Water
10/16/2021	W-17	NFDHA	ND	0.016		ug/l	Water
10/16/2021	W-17	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/16/2021	W-17	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	W-17	Perfluorobutanoic acid	0.015	0.008		ug/l	Water
10/16/2021	W-17	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	W-17	Perfluorodecanoic acid	0.033	0.004		ug/l	Water
10/16/2021	W-17	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/16/2021	W-17	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/16/2021	W-17	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/16/2021	W-17	Perfluoroheptanoic acid	0.023	0.004		ug/l	Water
10/16/2021	W-17	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	W-17	Perfluorohexanoic acid	0.015	0.004		ug/l	Water
10/16/2021	W-17	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	W-17	Perfluorononanoic acid	0.131	0.004		ug/l	Water
10/16/2021	W-17	Perfluorooctanesulfonic acid	0.025	0.004		ug/l	Water
10/16/2021	W-17	Perfluorooctanoic acid	0.054	0.004		ug/l	Water
10/16/2021	W-17	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/16/2021	W-17	Perfluoropentanoic acid	0.016	0.004		ug/l	Water
10/16/2021	W-17	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/16/2021	W-17	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/16/2021	W-17	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/16/2021	W-17	PFEESA	ND	0.016		ug/l	Water
10/16/2021	W-17	PFMBA	ND	0.016		ug/l	Water
10/16/2021	W-17	PFMPA	ND	0.016		ug/l	Water
10/16/2021	W-17	PFOSA	ND	0.008		ug/l	Water
10/15/2021	W-19	3:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	W-19	4:2 Fluorotelomer sulfonate	ND	0.016		ug/l	Water
10/15/2021	W-19	5:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water

Table 1:
Summary of Samples Targeted for PFASs Analyses
Bridgeport Disposal, LLC

Date	Location	Parameter Name	Value	Detection Limit	Data Qualifier	Unit	Matrix
10/15/2021	W-19	6:2 FTS	ND	0.016		ug/l	Water
10/15/2021	W-19	7:3 Fluorotelomer carboxylate	ND	0.016		ug/l	Water
10/15/2021	W-19	8:2 FTS	ND	0.016		ug/l	Water
10/15/2021	W-19	DONA	ND	0.016		ug/l	Water
10/15/2021	W-19	EtFOSA	ND	0.016		ug/l	Water
10/15/2021	W-19	EtFOSAA	ND	0.008		ug/l	Water
10/15/2021	W-19	EtFOSE	ND	0.040		ug/l	Water
10/15/2021	W-19	F-53B Major	ND	0.016		ug/l	Water
10/15/2021	W-19	F-53B Minor	ND	0.016		ug/l	Water
10/15/2021	W-19	HFPO-DA	ND	0.008		ug/l	Water
10/15/2021	W-19	MeFOSA	ND	0.016		ug/l	Water
10/15/2021	W-19	MeFOSE	ND	0.040		ug/l	Water
10/15/2021	W-19	NFDHA	ND	0.016		ug/l	Water
10/15/2021	W-19	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ug/l	Water
10/15/2021	W-19	Perfluorobutanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	W-19	Perfluorobutanoic acid	0.024	0.008		ug/l	Water
10/15/2021	W-19	Perfluorodecanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	W-19	Perfluorodecanoic acid	0.003	0.004	J	ug/l	Water
10/15/2021	W-19	Perfluorododecanesulfonic acid	ND	0.008		ug/l	Water
10/15/2021	W-19	Perfluorododecanoic acid	ND	0.004		ug/l	Water
10/15/2021	W-19	Perfluoroheptanesulfonic Acid	ND	0.004		ug/l	Water
10/15/2021	W-19	Perfluoroheptanoic acid	0.013	0.004		ug/l	Water
10/15/2021	W-19	Perfluorohexanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	W-19	Perfluorohexanoic acid	0.046	0.004		ug/l	Water
10/15/2021	W-19	Perfluorononanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	W-19	Perfluorononanoic acid	0.029	0.004		ug/l	Water
10/15/2021	W-19	Perfluorooctanesulfonic acid	0.005	0.004		ug/l	Water
10/15/2021	W-19	Perfluorooctanoic acid	0.023	0.004		ug/l	Water
10/15/2021	W-19	Perfluoropentanesulfonic acid	ND	0.004		ug/l	Water
10/15/2021	W-19	Perfluoropentanoic acid	0.035	0.004		ug/l	Water
10/15/2021	W-19	Perfluorotetradecanoic acid	ND	0.004		ug/l	Water
10/15/2021	W-19	Perfluorotridecanoic acid	ND	0.004		ug/l	Water
10/15/2021	W-19	Perfluoroundecanoic acid	ND	0.004		ug/l	Water
10/15/2021	W-19	PFEESA	ND	0.016		ug/l	Water
10/15/2021	W-19	PFMBA	ND	0.016		ug/l	Water
10/15/2021	W-19	PFMPA	ND	0.016		ug/l	Water
10/15/2021	W-19	PFOSA	ND	0.008		ug/l	Water

J = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit. Concentration is an approximate value

ND = Result is less than the sample detection limit

Table 2:
Per- and Polyfluoroalkyl Substances (PFASs) Targeted for Certified Analytical Laboratory Analysis
Bridgeport Disposal, LLC

Analytical Method	Analyte	Analyte ID	CAS #	Water Samples			Soil Samples		
				Reporting Limit	Method Detection Limit	Units	Reporting Limit	Method Detection Limit	Units
MLA-110	Perfluorooctanoic acid	PFOA	45285-51-6	2.00	0.85	ng/L	0.20	0.086	ug/Kg
MLA-110	Perfluorodecanoic acid	PFDA	73829-36-4	2.00	0.31	ng/L	0.20	0.022	ug/Kg
MLA-110	Perfluorononanoic acid	PFNA	72007-68-2	2.00	0.27	ng/L	0.20	0.036	ug/Kg
MLA-110	Perfluorotetradecanoic acid	PFTeDA	365971-87-5	2.00	0.29	ng/L	0.20	0.054	ug/Kg
MLA-110	Perfluorotridecanoic acid	PFTrDA	862374-87-6	2.00	1.30	ng/L	0.20	0.051	ug/Kg
MLA-110	Perfluoroundecanoic acid	PFUnA	196859-54-8	2.00	1.10	ng/L	0.20	0.036	ug/Kg
MLA-110	Perfluorododecanoic acid	PFDoA	171978-95-3	2.00	0.55	ng/L	0.20	0.067	ug/Kg
MLA-110	Perfluorooctanesulfonic acid	PFOS	45298-90-6	2.00	0.54	ng/L	0.50	0.20	ug/Kg
MLA-110	Perfluorodecanesulfonic acid	PFDS	126105-34-8	2.00	0.32	ng/L	0.20	0.20	ug/Kg
MLA-110	Perfluoroheptanesulfonic acid	PFHpS	146689-46-5	2.00	0.19	ng/L	0.20	0.20	ug/Kg
MLA-110	Perfluorohexanesulfonic acid	PFHxS	108427-53-8	2.00	0.17	ng/L	0.20	0.031	ug/Kg
MLA-110	Perfluorononanesulfonic acid	PFNS	68259-12-1	4.00	2.00	ng/L	0.20	0.018	ug/Kg
MLA-110	Perfluordodecansulfonsaure	PFDoS	79780-39-5	8.00	4.00	ng/L	0.20	0.018	ug/Kg
MLA-110	Perfluorobutanoic acid	PFBA	45048-62-2	2.00	0.35	ng/L	0.20	0.028	ug/Kg
MLA-110	Perfluoroheptanoic acid	PFHpA	120885-29-2	2.00	0.25	ng/L	0.20	0.029	ug/Kg
MLA-110	Perfluorohexanoic acid	PFHxA	92612-52-7	2.00	0.58	ng/L	0.20	0.042	ug/Kg
MLA-110	Perfluoropentanoic acid	PFPeA	45167-47-3	2.00	0.49	ng/L	0.20	0.077	ug/Kg
MLA-110	Perfluorobutanesulfonic acid	PFBS	45187-15-3	2.00	0.20	ng/L	0.20	0.025	ug/Kg
MLA-110	Perfluoropentane-1-sulfonic acid	PFPeS	2706-91-4	4.00	2.00	ng/L	0.20	0.018	ug/Kg
MLA-110	3-Perfluoropropyl Propanoic acid	3:3FTCA	356-02-5	16.00	4.00	ng/L	0.20	0.2	ug/Kg
MLA-110	Undecafluorooctanoic acid	5:3 FTCA	914637-49-3	16.00	4.00	ng/L	0.20	0.2	ug/Kg
MLA-110	3-Perfluoroheptyl Propanoic acid	7:3 FTCA	812-70-4	16.00	4.00	ng/L	0.20	0.2	ug/Kg
MLA-110	4:2 fluorotelomersulfonic acid	4:2 FTS	414911-30-1	2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	6:2 fluorotelomersulfonic acid	6:2 FTS	425670-75-3	20.00	2.00	ng/L	0.20	0.20	ug/Kg
MLA-110	8:2 fluorotelomersulfonic acid	8:2 FTS	481071-78-7	20.00	2.00	ng/L	0.20	0.20	ug/Kg
MLA-110	N-Ethylperfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6	2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	N-Methylperfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9	20.00	3.10	ng/L	0.20	0.20	ug/Kg
MLA-110	N-Ethylperfluorooctanesulfonamidoethanol	N-EtFOSE	1691-99-2	2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	N-Methylperfluorooctanesulfonamidoethanol	N-MeFOSE	24448-09-7	2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	N-Ethylperfluorooctanesulfonamide	N-EtFOSA	4151-50-2	20.00	1.90	ng/L	0.20	0.20	ug/Kg
MLA-110	N-Methylperfluorooctanesulfonamide	N-MeFOSA	31506-32-8	2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	Perfluorooctanesulfonamide	PFOSA	754-91-6	2.00	0.35	ng/L	0.20	0.20	ug/Kg
MLA-110	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	2196242-82-5	2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	1621485-21-9	2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	4,8-dioxa-3H-perfluorononanoic acid	ADONA	2127366-90-7	2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	Hexafluoropropylene oxide dimer acid	HFPO-DA	122499-17-6	2.00	0.24	ng/L	0.20	0.027	ug/Kg
MLA-110	Perfluoro-3,6-dioxaheptanoic acid	NFDHA		2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA		2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	Perfluoro-4-methoxybutanoic acid	PFMBA		2.00	0.24	ng/L	0.20	0.018	ug/Kg
MLA-110	Perfluoro-3-methoxypropanoic acid	PFMPA		2.00	0.24	ng/L	0.20	0.018	ug/Kg

ug/Kg - micrograms per liter
ng/L - nanograms per Lite

Table 3:
PFAS Analyte Signature Groupings
Bridgeport Disposal, LLC

Analyte ID	Analyte	CAS	Analysis Group	Use and/or Fate in the Envrionment
PFOA	Perfluorooctanoic acid	335-67-1	Long-chain (at least eight single-bonded carbon atoms Perfluorocarboxylic Acids (PFCAs)	Surfactants and potential terminal degradation products
PFDA	Perfluorodecanoic acid	335-76-2		
PFNA	Perfluorononanoic acid	375-95-1		
PFTeA	Perfluorotetradecanoic acid	376-06-7		
PFTriA	Perfluorotridecanoic acid	72629-94-8		
PFUnA	Perfluoroundecanoic acid	2058-94-8		
PFDoA	Perfluorododecanoic acid	307-55-1		
PFOS	Perfluorooctanesulfonic acid	1763-23-1	Long-chain (at least eight single-bonded carbon atoms) Perfluorocarboxylic Acids (PFCAs)	Surfactants and potential terminal degradation products
PFDS	Perfluorodecanesulfonic acid	335-77-3		
PFHpS	Perfluoroheptanesulfonic acid	375-92-8		
PFHxS	Perfluorohexanesulfonic acid	355-46-4		
PFNS	Perfluorononanesulfonic acid	68259-12-1		
PFDoDS	Perfluordodecansulfonsaure	79780-39-5		
PFBA	Perfluorobutanoic acid	375-22-4	Short-chain (less than eight single-bonded carbon atoms) Perfluorocarboxylic Acids (PFCAs)	Surfactants and potential terminal degradation products
PFHpA	Perfluoroheptanoic acid	375-85-9		
PFHxA	Perfluorohexanoic acid	307-24-4		
PFPeA	Perfluoropentanoic acid	2706-90-3		
PFBS	Perfluorobutanesulfonic acid	375-73-5	Short-chain (less than six single-bonded carbon atoms) Perfluorosulfonic Acids (PFSAs)	Surfactants and potential terminal degradation products
PFPeS	Perfluoropentane-1-sulfonic acid	2706-91-4		
3:3 FTCA	3-Perfluoropropyl Propanoic acid	356-02-5	Potential PFCA Precursor	Intermediate environmental transformation product
5:3 FTCA	Undecafluorooctanoic acid	914637-49-3		
7:3 FTCA	3-Perfluoroheptyl Propanoic acid	812-70-4		
4:2 FTS	4:2 fluorotelomersulfonic acid	757124-72-4		Surfactants and Intermediate environmental transformation product
6:2 FTS	6:2 fluorotelomersulfonic acid	27619-97-2		
8:2 FTS	8:2 fluorotelomersulfonic acid	39108-34-4		
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid	2991-50-6	Potential PFSA and/or PFCA Precursor	Intermediate environmental transformation product
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid	2355-31-9		
N-EtFOSE	N-Ethylperfluorooctanesulfonamidoethanol	1691-99-2		Major raw material for perfluoroalkane sulfonyl-based surfactant and surface protection products
N-MeFOSE	N-Methylperfluorooctanesulfonamidoethanol	24448-09-7		
N-EtFOSA	N-Ethylperfluorooctanesulfonamide	4151-50-2		Raw material for surfactants and surface protection products
N-MeFOSA	N-Methylperfluorooctanesulfonamide	31506-32-8		
PFOSA	Perfluorooctanesulfonamide	754-91-6		
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	763051-92-9	PFAS Replacement Chemistry	Compounds intended to replace PFAS in products or manufacturing processes
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	756426-58-1		
ADONA	4,8-dioxa-3H-perfluorononanoic acid	919005-14-4		
HFPO-DA	Hexafluoropropylene oxide dimer acid	13252-13-6		
NFDHA	Perfluoro-3,6-dioxaheptanoic acid	151772-58-6	Ungrouped	
PFEESA	Perfluoro(2-ethoxyethane)sulfonic acid	113507-82-7		
PFMBA	Perfluoro-4-methoxybutanoic acid	863090-89-5		
PFMPA	Perfluoro-3-methoxypropanoic acid	377-73-1		

notes:
MDL = method detection limits
ug/l = micro grams per liter
RL = Reporting Limit

Table 4:
Duplicate Sample Evaluation
Bridgeport Disposal, LLC

Location	Duplicate Sample Field ID	Date	Parameter Name	Primary Sample			Duplicate Sample			Units	Relative Percent Difference
				Value	Detection Limit	Data Qualifier	Value	Detection Limit	Data Qualifier		
33D	DUP-3	10/14/2021	3:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	4:2 Fluorotelomer sulfonate	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	5:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	6:2 FTS	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	7:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	8:2 FTS	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	DONA	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	EtFOSA	ND	0.016		ND	0.080		ug/L	0%
33D	DUP-3	10/14/2021	EtFOSAA	ND	0.008		ND	0.008		ug/L	0%
33D	DUP-3	10/14/2021	EtFOSE	ND	0.040		ND	0.040		ug/L	0%
33D	DUP-3	10/14/2021	F-53B Major	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	F-53B Minor	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	HFPO-DA	ND	0.008		ND	0.008		ug/L	0%
33D	DUP-3	10/14/2021	MeFOSA	ND	0.016		ND	0.080		ug/L	0%
33D	DUP-3	10/14/2021	MeFOSE	ND	0.040		ND	0.040		ug/L	0%
33D	DUP-3	10/14/2021	NFDHA	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ND	0.008		ug/L	0%
33D	DUP-3	10/14/2021	Perfluorobutanesulfonic acid	0.002	0.004	J	0.002	0.004	J	ug/L	17%
33D	DUP-3	10/14/2021	Perfluorobutanoic acid	0.025	0.008		0.025	0.008		ug/L	0%
33D	DUP-3	10/14/2021	Perfluorodecanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
33D	DUP-3	10/14/2021	Perfluorodecanoic acid	0.072	0.004		0.075	0.004		ug/L	-4%
33D	DUP-3	10/14/2021	Perfluorododecanesulfonic acid	ND	0.008		ND	0.008		ug/L	0%
33D	DUP-3	10/14/2021	Perfluorododecanoic acid	ND	0.004		ND	0.004		ug/L	0%
33D	DUP-3	10/14/2021	Perfluoroheptanesulfonic Acid	ND	0.004		ND	0.004		ug/L	0%
33D	DUP-3	10/14/2021	Perfluoroheptanoic acid	0.447	0.004		0.454	0.004		ug/L	-2%
33D	DUP-3	10/14/2021	Perfluorohexanesulfonic acid	0.005	0.004		0.005	0.004		ug/L	8%
33D	DUP-3	10/14/2021	Perfluorohexanoic acid	0.026	0.004		0.025	0.004		ug/L	3%
33D	DUP-3	10/14/2021	Perfluorononanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
33D	DUP-3	10/14/2021	Perfluorononanoic acid	0.882	0.008		0.916	0.020		ug/L	-4%
33D	DUP-3	10/14/2021	Perfluorooctanesulfonic acid	0.011	0.004		0.012	0.004		ug/L	-9%
33D	DUP-3	10/14/2021	Perfluorooctanoic acid	0.370	0.004		0.367	0.004		ug/L	1%
33D	DUP-3	10/14/2021	Perfluoropentanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
33D	DUP-3	10/14/2021	Perfluoropentanoic acid	0.017	0.004		0.016	0.004		ug/L	2%
33D	DUP-3	10/14/2021	Perfluorotetradecanoic acid	ND	0.004		ND	0.004		ug/L	0%
33D	DUP-3	10/14/2021	Perfluorotridecanoic acid	ND	0.004		ND	0.004		ug/L	0%
33D	DUP-3	10/14/2021	Perfluoroundecanoic acid	ND	0.004		ND	0.004		ug/L	0%
33D	DUP-3	10/14/2021	PFEESA	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	PFMBA	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	PFMPA	ND	0.016		ND	0.016		ug/L	0%
33D	DUP-3	10/14/2021	PFOSA	ND	0.008		ND	0.008		ug/L	0%
88-1-SA	DUP-1	10/17/2021	3:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	4:2 Fluorotelomer sulfonate	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	5:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	6:2 FTS	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	7:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	8:2 FTS	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	DONA	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	EtFOSA	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	EtFOSAA	ND	0.008		ND	0.008		ug/L	0%
88-1-SA	DUP-1	10/17/2021	EtFOSE	ND	0.040		ND	0.040		ug/L	0%
88-1-SA	DUP-1	10/17/2021	F-53B Major	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	F-53B Minor	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	HFPO-DA	ND	0.008		ND	0.008		ug/L	0%
88-1-SA	DUP-1	10/17/2021	MeFOSA	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	MeFOSE	ND	0.040		ND	0.040		ug/L	0%
88-1-SA	DUP-1	10/17/2021	NFDHA	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ND	0.008		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluorobutanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluorobutanoic acid	0.035	0.008		0.032	0.008		ug/L	9%
88-1-SA	DUP-1	10/17/2021	Perfluorodecanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluorodecanoic acid	0.032	0.004		0.030	0.004		ug/L	6%
88-1-SA	DUP-1	10/17/2021	Perfluorododecanesulfonic acid	ND	0.008		ND	0.008		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluorododecanoic acid	ND	0.004		ND	0.004		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluoroheptanesulfonic Acid	ND	0.004		ND	0.004		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluoroheptanoic acid	0.788	0.004		0.744	0.004		ug/L	6%
88-1-SA	DUP-1	10/17/2021	Perfluorohexanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluorohexanoic acid	0.010	0.004		0.010	0.004		ug/L	5%
88-1-SA	DUP-1	10/17/2021	Perfluorononanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluorononanoic acid	0.687	0.004		0.649	0.004		ug/L	6%
88-1-SA	DUP-1	10/17/2021	Perfluorooctanesulfonic acid	0.003	0.004	J	0.003	0.004	J	ug/L	16%
88-1-SA	DUP-1	10/17/2021	Perfluorooctanoic acid	1.270	0.020		1.190	0.020		ug/L	7%
88-1-SA	DUP-1	10/17/2021	Perfluoropentanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluoropentanoic acid	0.003	0.004	J	0.003	0.004	J	ug/L	6%
88-1-SA	DUP-1	10/17/2021	Perfluorotetradecanoic acid	ND	0.004		ND	0.004		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluorotridecanoic acid	ND	0.004		ND	0.004		ug/L	0%
88-1-SA	DUP-1	10/17/2021	Perfluoroundecanoic acid	ND	0.004		ND	0.004		ug/L	0%
88-1-SA	DUP-1	10/17/2021	PFEESA	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	PFMBA	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	PFMPA	ND	0.016		ND	0.016		ug/L	0%
88-1-SA	DUP-1	10/17/2021	PFOSA	ND	0.008		ND	0.008		ug/L	0%
DP-5	DUP-2	10/15/2021	3:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	4:2 Fluorotelomer sulfonate	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	5:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	6:2 FTS	0.034	0.016		ND	0.016		ug/L	200%
DP-5	DUP-2	10/15/2021	7:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	8:2 FTS	0.005	0.016	J	ND	0.016		ug/L	200%
DP-5	DUP-2	10/15/2021	DONA	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	EtFOSA	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	EtFOSAA	ND	0.008		ND	0.008		ug/L	0%
DP-5	DUP-2	10/15/2021	EtFOSE	ND	0.040		ND	0.040		ug/L	0%
DP-5	DUP-2	10/15/2021	F-53B Major	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	F-53B Minor	ND	0.016		ND	0.016		ug/L	0%

Table 4:
Duplicate Sample Evaluation
Bridgeport Disposal, LLC

Location	Duplicate Sample Field ID	Date	Parameter Name	Primary Sample			Duplicate Sample			Units	Relative Percent Difference
				Value	Detection Limit	Data Qualifier	Value	Detection Limit	Data Qualifier		
DP-5	DUP-2	10/15/2021	HFPO-DA	ND	0.008		ND	0.008		ug/L	0%
DP-5	DUP-2	10/15/2021	MeFOSA	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	MeFOSE	ND	0.040		ND	0.040		ug/L	0%
DP-5	DUP-2	10/15/2021	NFDHA	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ND	0.008		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluorobutanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluorobutanoic acid	0.014	0.008		0.013	0.008		ug/L	6%
DP-5	DUP-2	10/15/2021	Perfluorodecanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluorodecanoic acid	0.009	0.004		0.009	0.004		ug/L	5%
DP-5	DUP-2	10/15/2021	Perfluorododecanesulfonic acid	ND	0.008		ND	0.008		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluorododecanoic acid	ND	0.004		ND	0.004		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluoroheptanesulfonic Acid	ND	0.004		ND	0.004		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluoroheptanoic acid	0.022	0.004		0.020	0.004		ug/L	7%
DP-5	DUP-2	10/15/2021	Perfluorohexanesulfonic acid	0.004	0.004	J	ND	0.004		ug/L	200%
DP-5	DUP-2	10/15/2021	Perfluorohexanoic acid	0.019	0.004		0.015	0.004		ug/L	19%
DP-5	DUP-2	10/15/2021	Perfluorononanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluorononanoic acid	0.056	0.004		0.056	0.004		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluorooctanesulfonic acid	0.021	0.004		0.006	0.004		ug/L	117%
DP-5	DUP-2	10/15/2021	Perfluorooctanoic acid	0.040	0.004		0.037	0.004		ug/L	7%
DP-5	DUP-2	10/15/2021	Perfluoropentanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluoropentanoic acid	0.021	0.004		0.018	0.004		ug/L	14%
DP-5	DUP-2	10/15/2021	Perfluorotetradecanoic acid	ND	0.004		ND	0.004		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluorotridecanoic acid	ND	0.004		ND	0.004		ug/L	0%
DP-5	DUP-2	10/15/2021	Perfluoroundecanoic acid	ND	0.004		ND	0.004		ug/L	0%
DP-5	DUP-2	10/15/2021	PFEESA	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	PFMBA	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	PFMPA	ND	0.016		ND	0.016		ug/L	0%
DP-5	DUP-2	10/15/2021	PFOSA	ND	0.008		ND	0.008		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	3:3 Fluorotelomer carboxylate	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	4:2 Fluorotelomer sulfonate	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	5:3 Fluorotelomer carboxylate	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	6:2 FTS	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	7:3 Fluorotelomer carboxylate	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	8:2 FTS	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	DONA	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	EtFOSA	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	EtFOSAA	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	EtFOSE	ND	3.000		ND	3.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	F-53B Major	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	F-53B Minor	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	HFPO-DA	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	MeFOSA	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	MeFOSE	ND	3.000		ND	3.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	NFDHA	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	N-methylperfluorooctanesulfonamidoacetic acid	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorobutanesulfonic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorobutanoic acid	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorodecanesulfonic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorodecanoic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorododecanesulfonic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorododecanoic acid	0.320	0.590	J	ND	0.670		ug/L	200%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluoroheptanesulfonic Acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluoroheptanoic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorohexanesulfonic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorohexanoic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorononanesulfonic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorononanoic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorooctanesulfonic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorooctanoic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluoropentanesulfonic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluoropentanoic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorotetradecanoic acid	ND	0.590		ND	0.670		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluorotridecanoic acid	0.460	0.590	J	0.450	0.670	J	ug/L	2%
PFAS-SS-101	PFAS-SS-101	10/14/2021	Perfluoroundecanoic acid	0.900	0.590		0.790	0.670		ug/L	13%
PFAS-SS-101	PFAS-SS-101	10/14/2021	PFEESA	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	PFMBA	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	PFMPA	ND	1.200		ND	1.300		ug/L	0%
PFAS-SS-101	PFAS-SS-101	10/14/2021	PFOSA	ND	0.590		ND	0.670		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	3:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	4:2 Fluorotelomer sulfonate	ND	0.016		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	5:3 Fluorotelomer carboxylate	0.010	0.016	J	0.010	0.016	J	ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	6:2 FTS	0.030	0.016		0.030	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	7:3 Fluorotelomer carboxylate	ND	0.016		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	8:2 FTS	0.033	0.016		0.034	0.016		ug/L	-3%
STORMWATER-003	STORMWATER-003	10/14/2021	DONA	ND	0.016		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	EtFOSA	ND	0.080		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	EtFOSAA	ND	0.008		ND	0.008		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	EtFOSE	ND	0.040		ND	0.040		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	F-53B Major	ND	0.016		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	F-53B Minor	ND	0.016		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	HFPO-DA	0.022	0.008		0.023	0.008		ug/L	-5%
STORMWATER-003	STORMWATER-003	10/14/2021	MeFOSA	ND	0.080		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	MeFOSE	ND	0.040		ND	0.040		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	NFDHA	ND	0.016		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	N-methylperfluorooctanesulfonamidoacetic acid	ND	0.008		ND	0.008		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorobutanesulfonic acid	0.009	0.004		0.009	0.004		ug/L	-1%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorobutanoic acid	0.054	0.008		0.054	0.008		ug/L	1%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorodecanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorodecanoic acid	0.018	0.004		0.019	0.004		ug/L	-2%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorododecanesulfonic acid	ND	0.008		ND	0.008		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorododecanoic acid	0.004	0.004	J	0.003	0.004	J	ug/L	3%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluoroheptanesulfonic Acid	ND	0.004		ND	0.004		ug/L	0%

Table 4:
Duplicate Sample Evaluation
Bridgeport Disposal, LLC

Location	Duplicate Sample Field ID	Date	Parameter Name	Primary Sample			Duplicate Sample			Units	Relative Percent Difference
				Value	Detection Limit	Data Qualifier	Value	Detection Limit	Data Qualifier		
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluoroheptanoic acid	0.035	0.004		0.034	0.004		ug/L	2%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorohexanesulfonic acid	0.004	0.004	J	0.004	0.004	J	ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorohexanoic acid	0.087	0.004		0.087	0.004		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorononanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorononanoic acid	0.029	0.004		0.028	0.004		ug/L	2%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorooctanesulfonic acid	0.039	0.004		0.037	0.004		ug/L	5%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorooctanoic acid	0.042	0.004		0.042	0.004		ug/L	1%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluoropentanesulfonic acid	ND	0.004		ND	0.004		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluoropentanoic acid	0.097	0.004		0.097	0.004		ug/L	1%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorotetradecanoic acid	ND	0.004		ND	0.004		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluorotridecanoic acid	ND	0.004		ND	0.004		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	Perfluoroundecanoic acid	0.004	0.004	J	0.004	0.004	J	ug/L	-3%
STORMWATER-003	STORMWATER-003	10/14/2021	PFEESA	ND	0.016		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	PFMBA	ND	0.016		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	PFMPA	ND	0.016		ND	0.016		ug/L	0%
STORMWATER-003	STORMWATER-003	10/14/2021	PFOSA	ND	0.008		ND	0.008		ug/L	0%

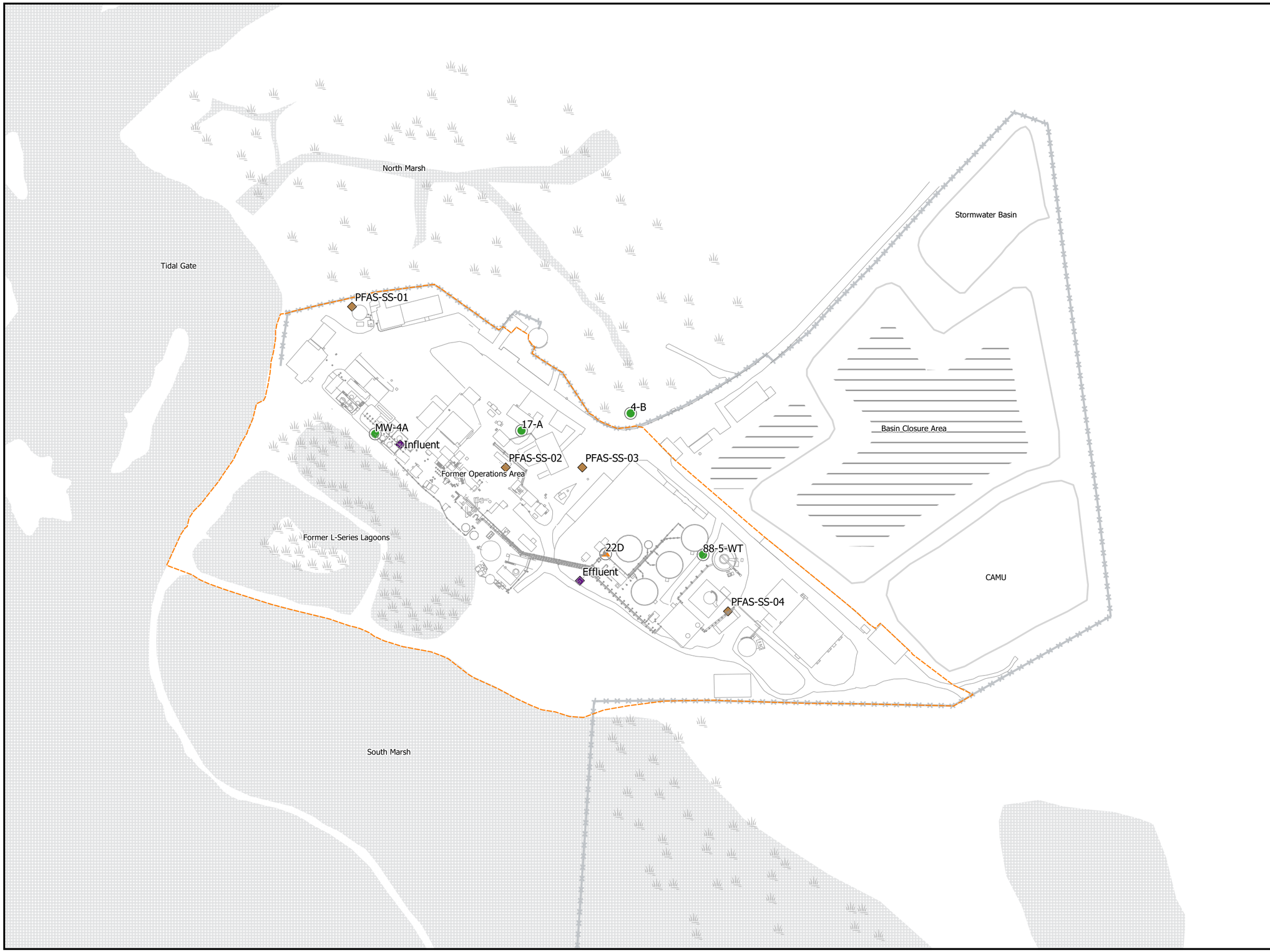
Abbreviations
ND = Analyte not detected in sample
J = Measured value is below the detection limit. Result is an estimate.
ug/L = Micrograms per Liter

Table 5:
PFASs Grouping Transport Parameters
Bridgeport Disposal, LLC

PFASs Group	$\log_{10} K_{oc}$ (Lower Bound) L/kg	$\log_{10} K_{oc}$ (Upper Bound) L/kg	$\log_{10} K_{oc}$ (Average) (L/kg)
PFOS	2.40	3.70	3.05
PFOA	1.89	2.63	2.26
Long-Chain PFCAs	1.89	4.66	3.40
Short-Chain PFCAs	1.30	1.90	1.55
Long-Chain PFSAs	2.40	3.53	2.80
Short-Chain PFSAs	1.20	1.68	1.44
PFCA Precursors	No Data	No Data	No Data
PFCA/PFSA Precursors	No Data	No Data	No Data
Replacement Compounds	No Data	No Data	No Data

Reference:

ITRC, 2020. *PFAS – Per- and Polyfluoroalkyl Substances* . Interstate Technology Regulatory Council, March 2018.



Legend

Scale (feet)

0 100 200 300 400

N

Monitoring Wells
- Water Table

Extraction Wells
- Intermediate Zone

Other Sample Locations
- Water Treatment Plant
- Soil

Site Features
- Facility Boundary
- Fence

Clean Harbors
Bridgeport Disposal, LLC

Figure 1:
Preliminary Assessment
Sample Locations

Drawn By: AJE
12/08/21
PFAS_Characterization
_Oct2021.qgs

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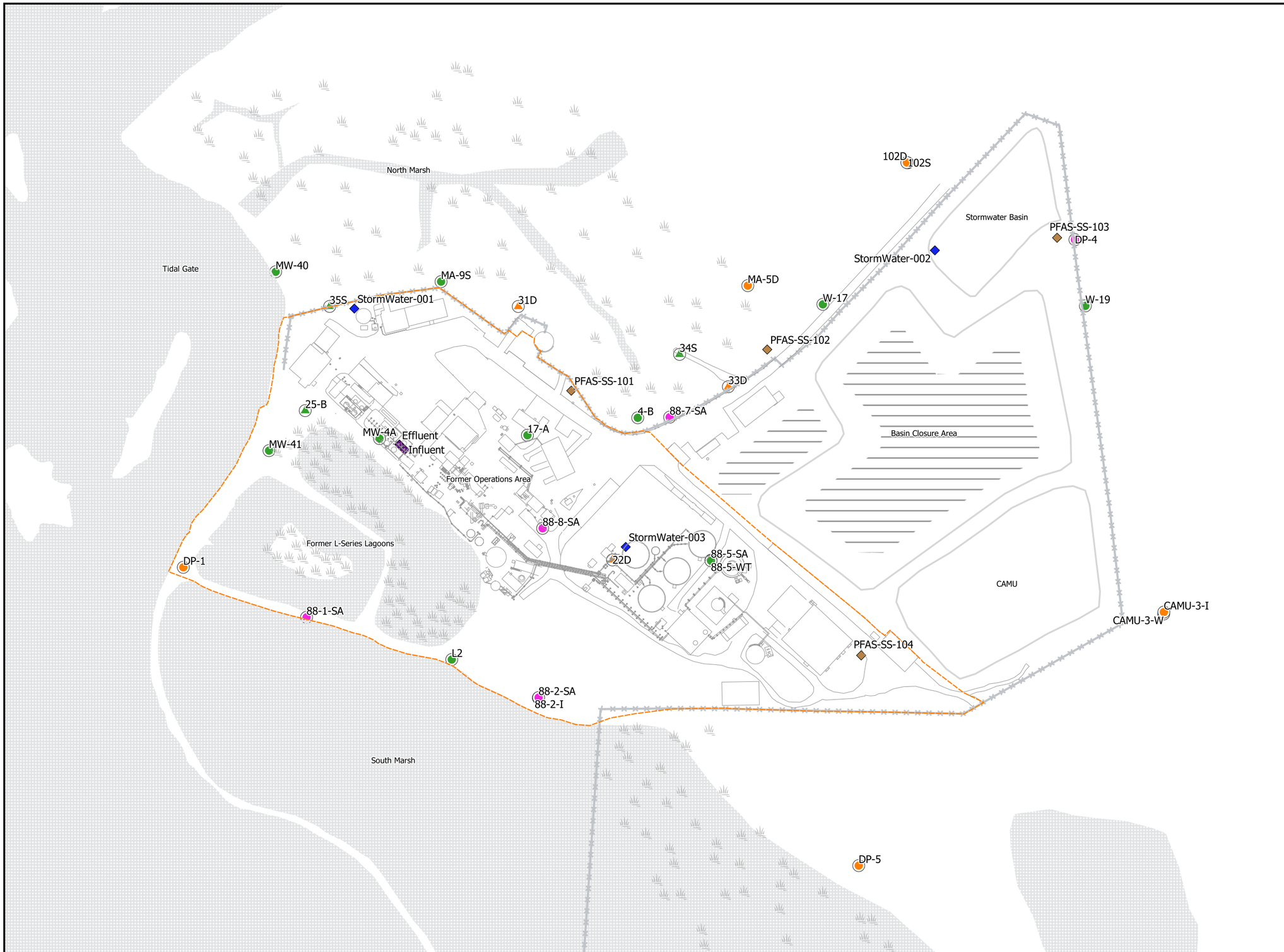

Legend

Scale (feet)

0 100 200 300 400

N

Monitoring Wells
- Water Table
- Intermediate Zone
- Shallow Artesian

Extraction Wells
- Water Table
- Intermediate Zone

Other Sample Locations
- Water Treatment Plant
- Soil
- Stormwater

Site Features
- Facility Boundary
- Fence

Clean Harbors
Bridgeport Disposal, LLC

Figure N:
Remedial Investigation
Sampling Locations

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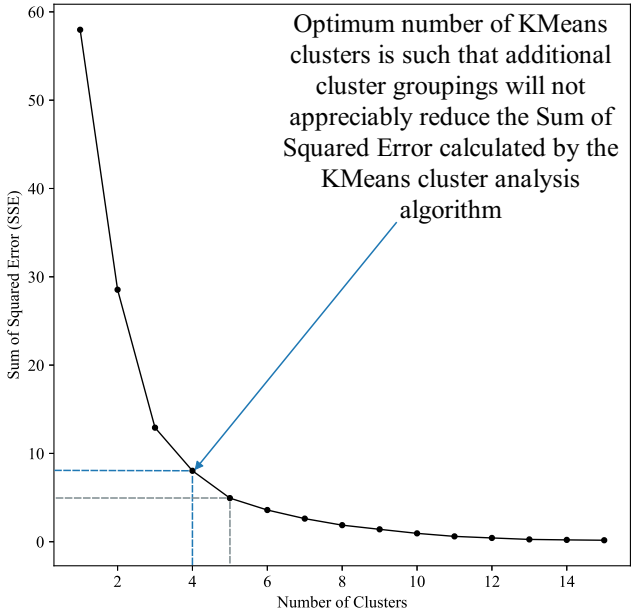
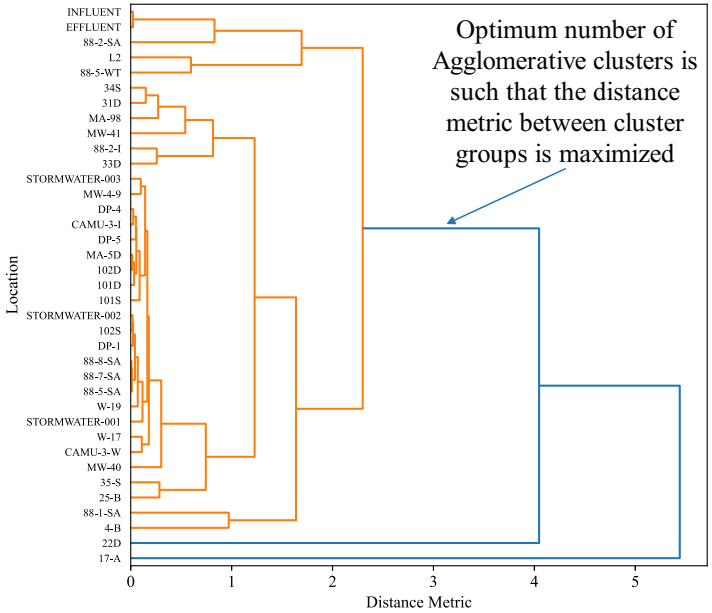
12/08/21
PFAS_Characterization
_Oct2021.qgs

Leppert Associates

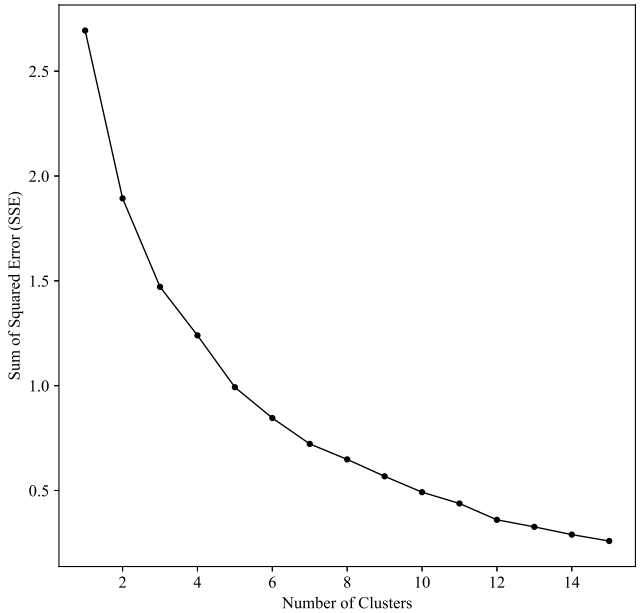
Raw Data Elbow Method



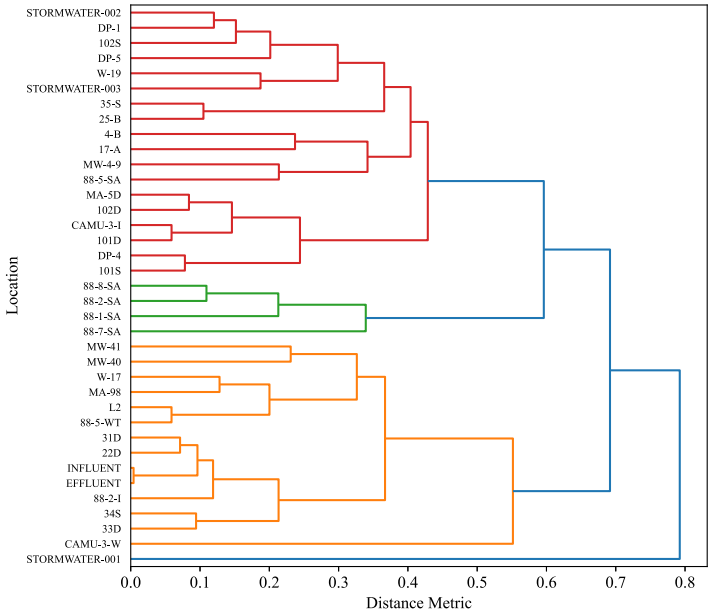
Raw Data Dendrogram



Normalized Data Elbow Method



Normalized Data Dendrogram



Legend

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Figure 3: Cluster Analysis Results Elbow Method and Dendrograms

Drawn By: AJE
03/26/21
PFAS_Characterization _Oct2021.qgs

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Legend

Scale (feet)

0 100 200 300 400 500 600

N

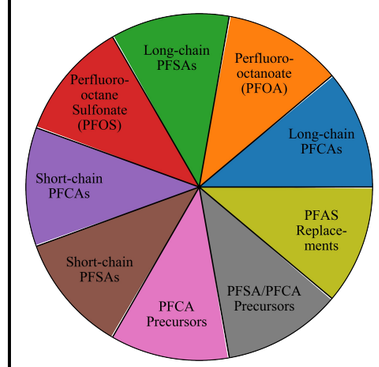
Monitoring Wells

Water Table

Site Features

Facility Boundary

Fence



Plotted data is log10 transformed. Concentric rings are one (1) order of magnitude apart
Units: micrograms per liter (ug/L)

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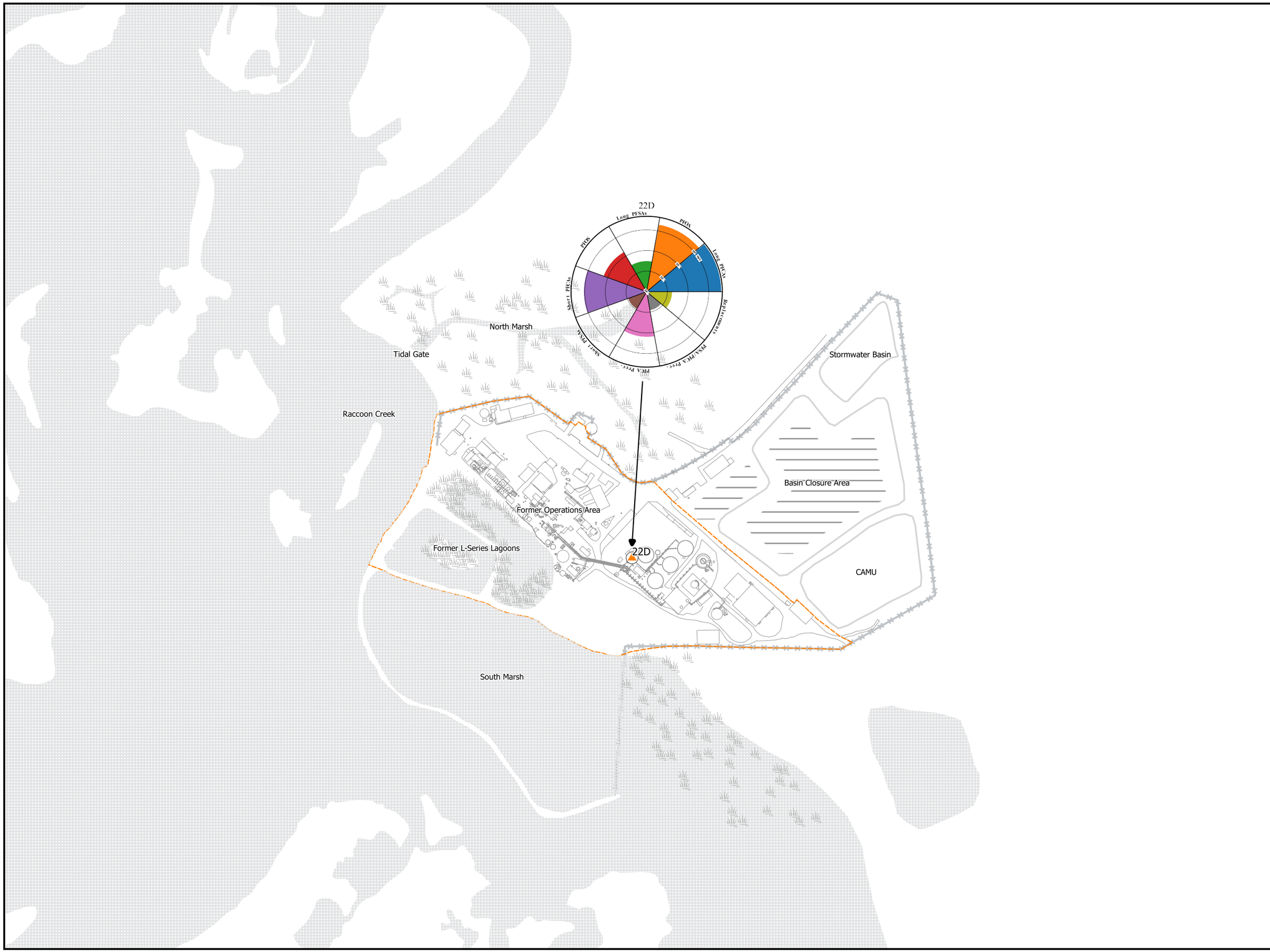
Figure 4: Signature Evaluation, Cluster #1

Drawn By: AJE
11/10/21
PFAS_Characterization
_Oct2021.qgs

Leppert Associates



Legend

Scale (feet)

0 100 200 300 400 500 600

N

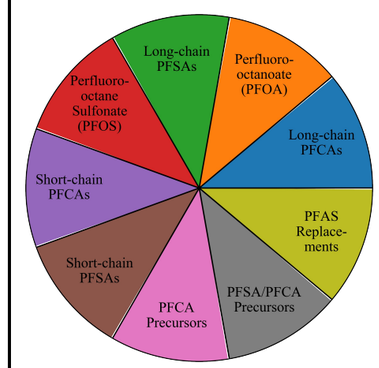
Extraction Wells

Intermediate Zone

Site Features

Facility Boundary

Fence



Plotted data is log10 transformed. Concentric rings are one (1) order of magnitude apart
Units: micrograms per liter (ug/L)

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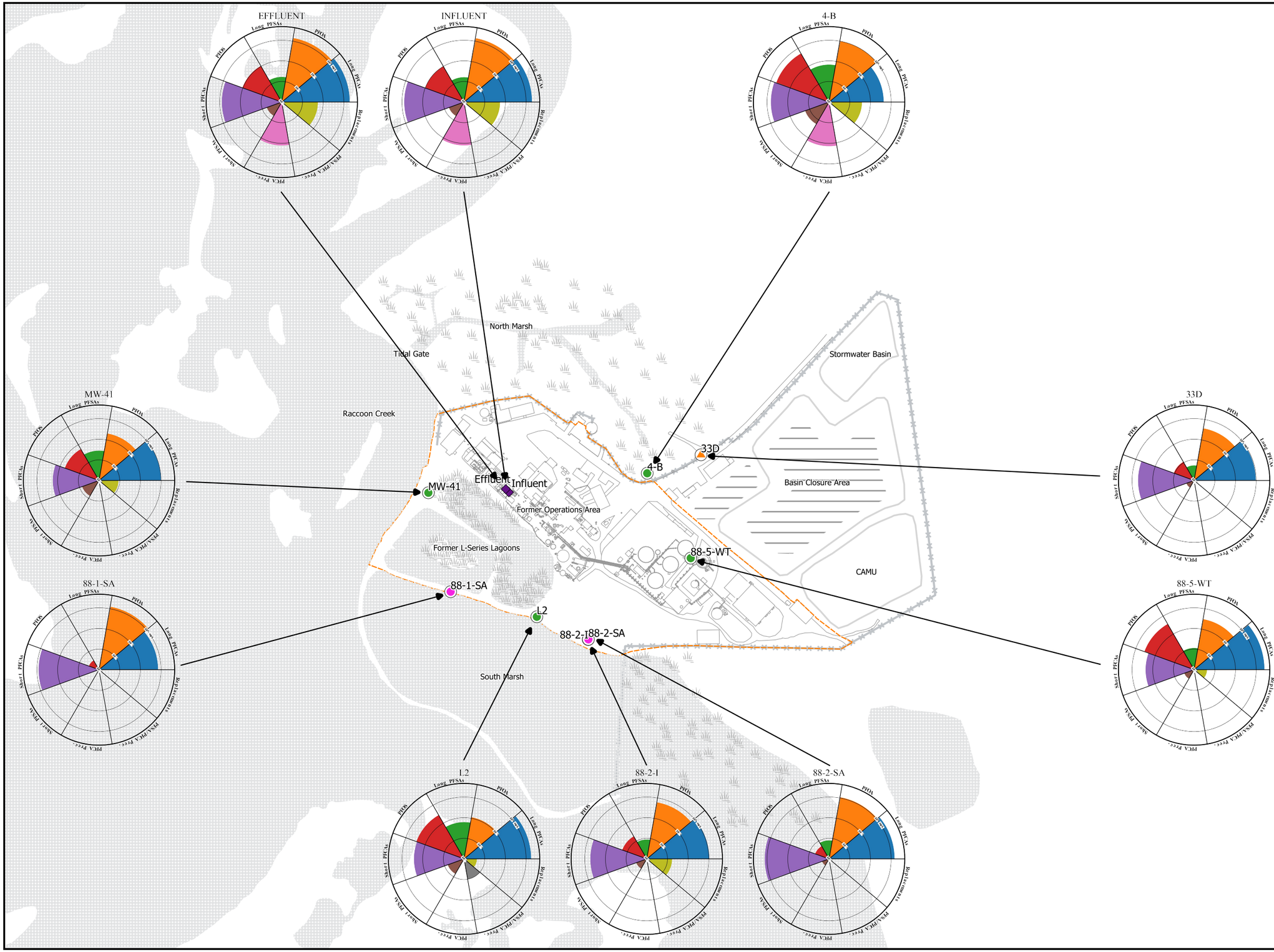
Bridgeport Disposal, LLC

Figure 5:
Signature Evaluation
Cluster #2

Drawn By: AJE
11/10/21
PFAS_Characterization
_Oct2021.qgs

Leppert Associates



Legend

Scale (feet)

0 100 200 300 400 500 600

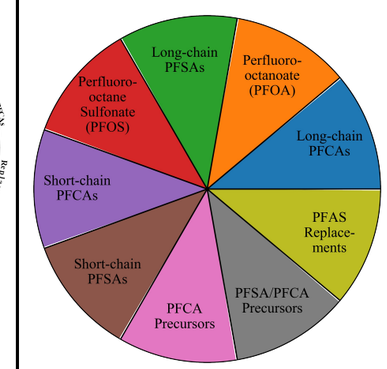
N

Monitoring Wells
- Water Table
- Intermediate Zone
- Shallow Artesian

Extraction Wells
- Intermediate Zone

Other Sample Locations
- Water Treatment Plant

Site Features
- Facility Boundary
- Fence



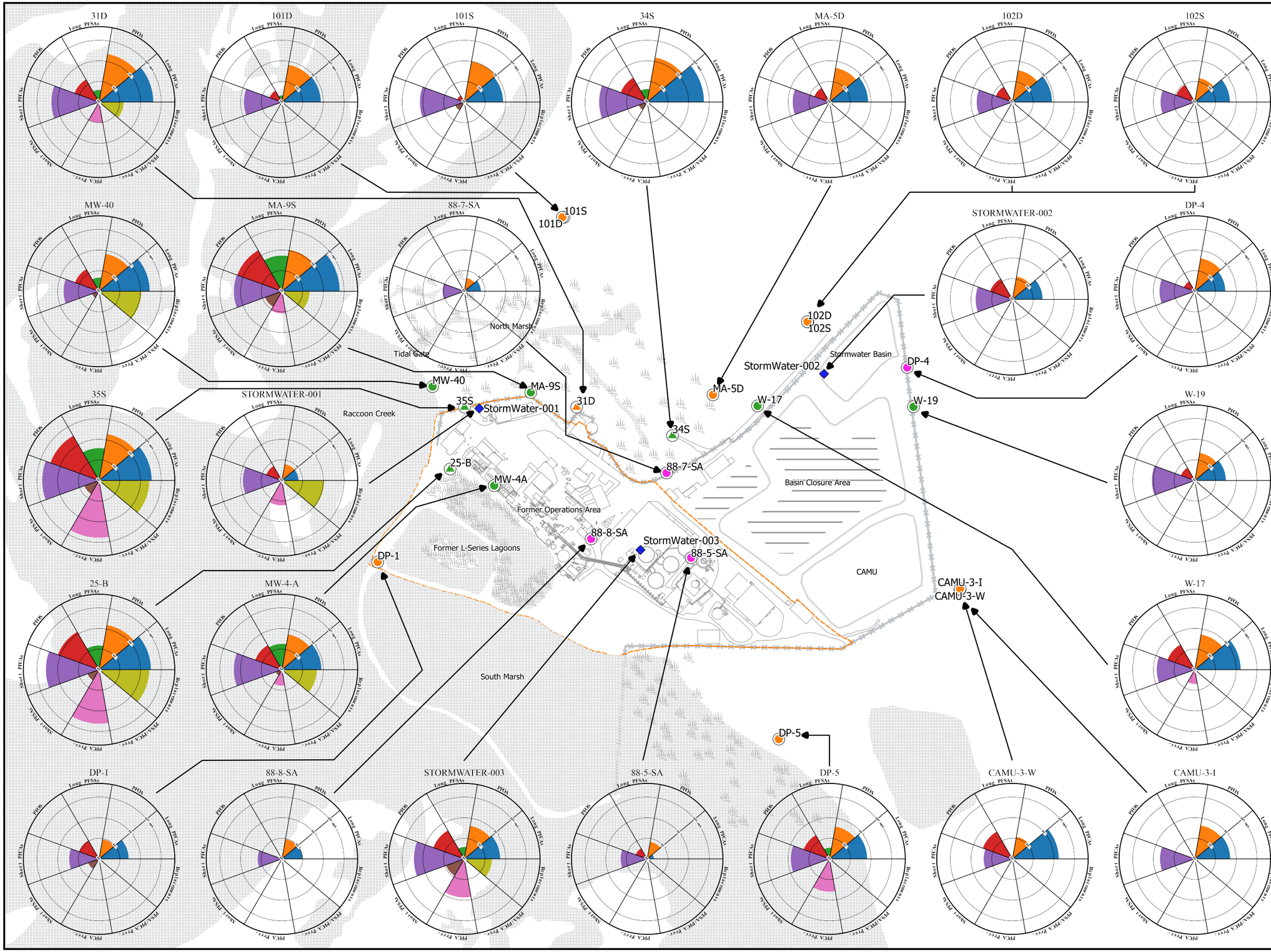
Plotted data is log10 transformed. Concentric rings are one (1) order of magnitude apart
Units: micrograms per liter (ug/L)

Clean Harbors
Bridgeport Disposal, LLC

Figure 6:
Signature Evaluation,
Cluster #3

Drawn By: AJE
11/10/21
PFAS_Characterization
_Oct2021.qgs

Leppert Associates



Legend

Scale (feet)

0 100 200 300 400 500 600

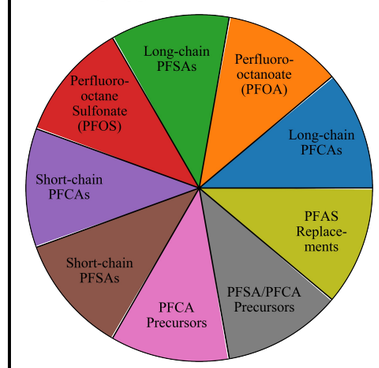
N

Monitoring Wells
- Water Table
- Intermediate Zone
- Shallow Artesian

Extraction Wells
- Water Table
- Intermediate Zone

Other Sample Locations
- Stormwater Collection Point

Site Features
- Facility Boundary
- Fence



Plotted data is log10 transformed. Concentric rings are one (1) order of magnitude apart
Units: micrograms per liter (ug/L)

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Figure 7: Signature Evaluation, Cluster #4

Drawn By: AJE
11/10/21
PFAS_Characterization _Oct2021.qgs

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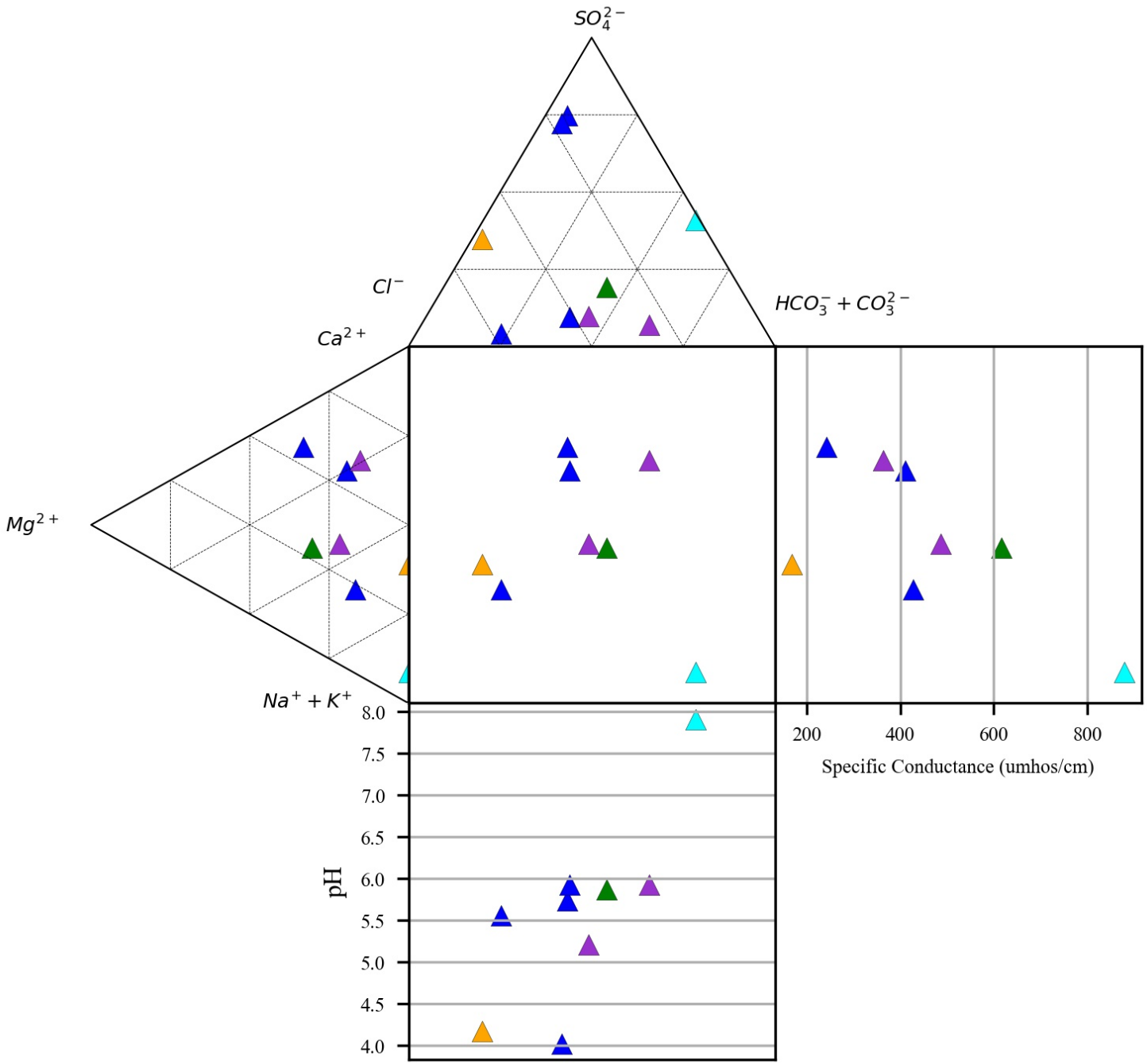

Legend

- Cluster #4 (Upgradient Wells)
- Cluster #2 (Well 22D)
- Cluster #4 (Operations Area Wells)
- Surface Water (CAMU)
- Cluster #4 (Downgradient Wells)

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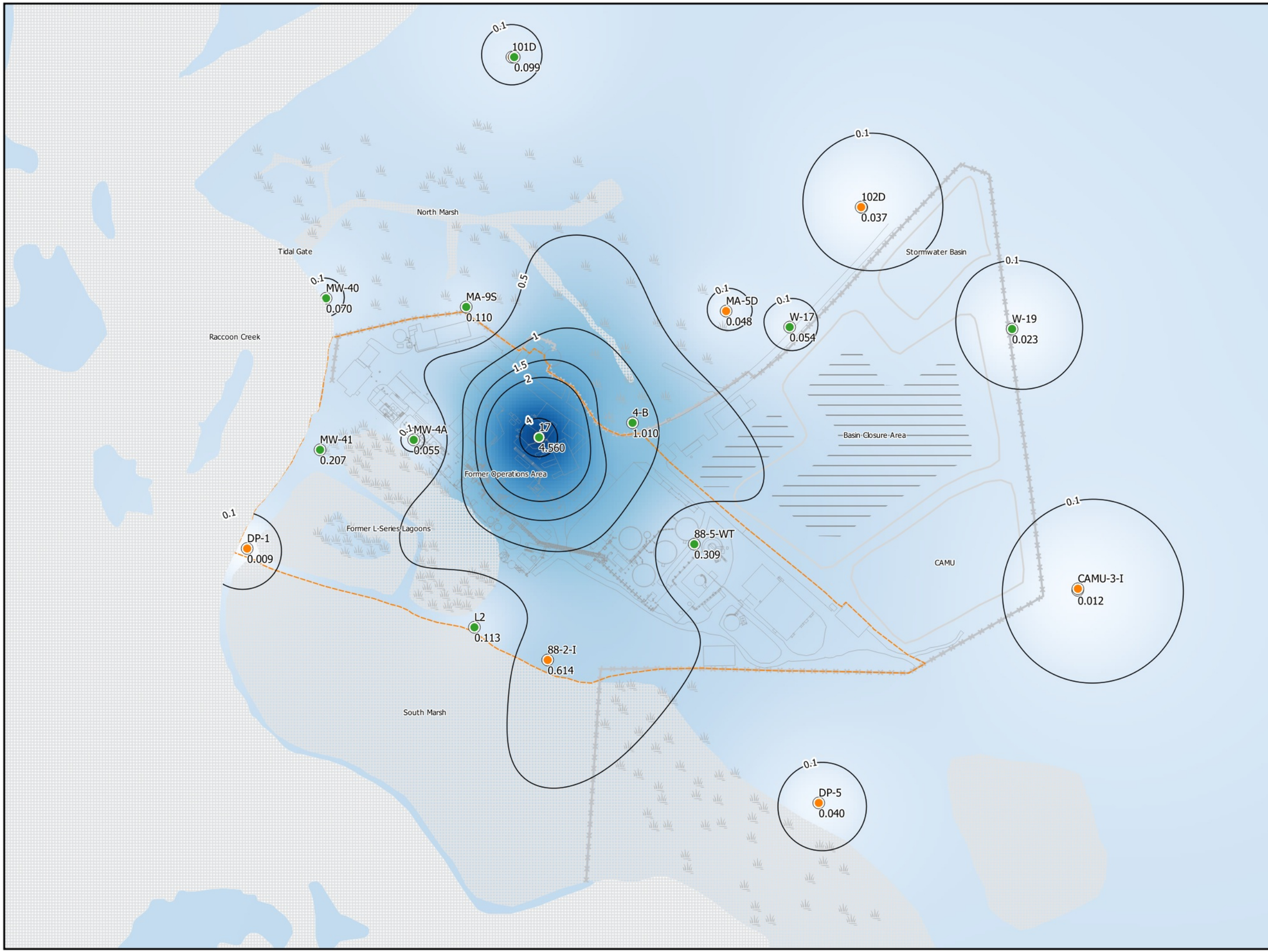
Bridgeport Disposal, LLC

Figure 8:
Durov Plot
October 2021

Drawn By: LA CC
Generator
2022-02-08

Leppert Associates



Legend

Scale (feet)
0 100 200 300 400

N

Monitoring Wells
- Water Table
- Intermediate Zone

Perfluorooctanoic Acid (PFOA) Concentration Contours in Micrograms per Liter (ug/L)
- 0.014
- 0.100
- 0.500
- 1.000
- 2.000
- 3.000
- 4.000
- 5.000

Site Features
- Facility Boundary
- Fence

Clean Harbors Bridgeport Disposal, LLC

Figure 9: Perfluorooctanoic Acid (PFOA) Distribution, Magothy Aquifer

Drawn By: AJE
12/08/21
PFAS_Characterization_Oct2021.qgs

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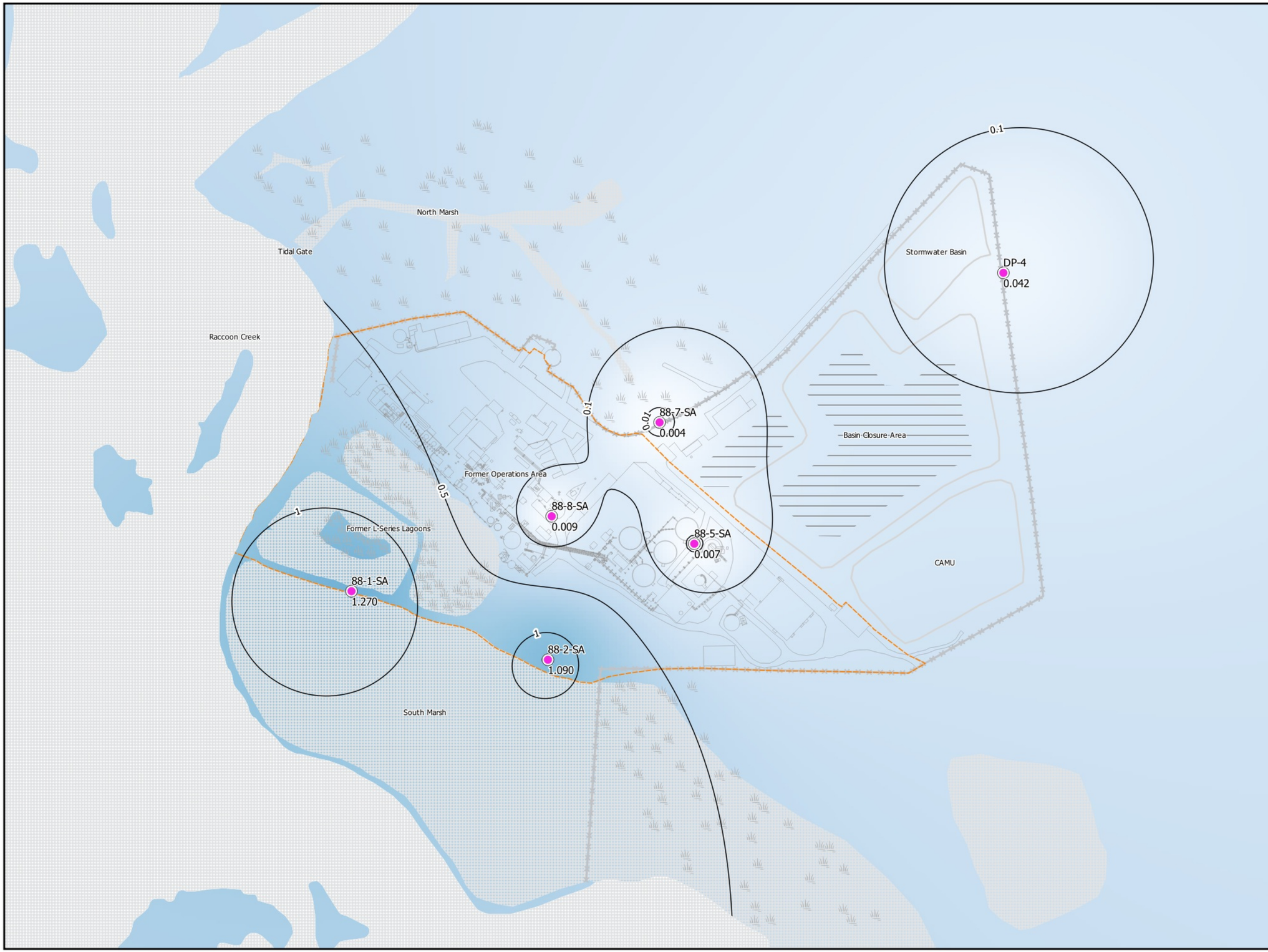

Legend

Scale (feet)
0 100 200 300 400

N

Monitoring Wells
- Shallow Artesian

Perfluorooctanoic Acid (PFOA) Concentration Contours in Micrograms per Liter (ug/L)
- 0.014
- 0.100
- 0.500
- 1.000
- 2.000
- 3.000
- 4.000
- 5.000

Site Features
- Facility Boundary
- Fence

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Figure 10: Perfluorooctanoic Acid (PFOA) Distribution, Potomac Aquifer, Shallow Artesian Zone

Drawn By: AJE
12/08/21
PFAS_Characterization_Oct2021.qgs

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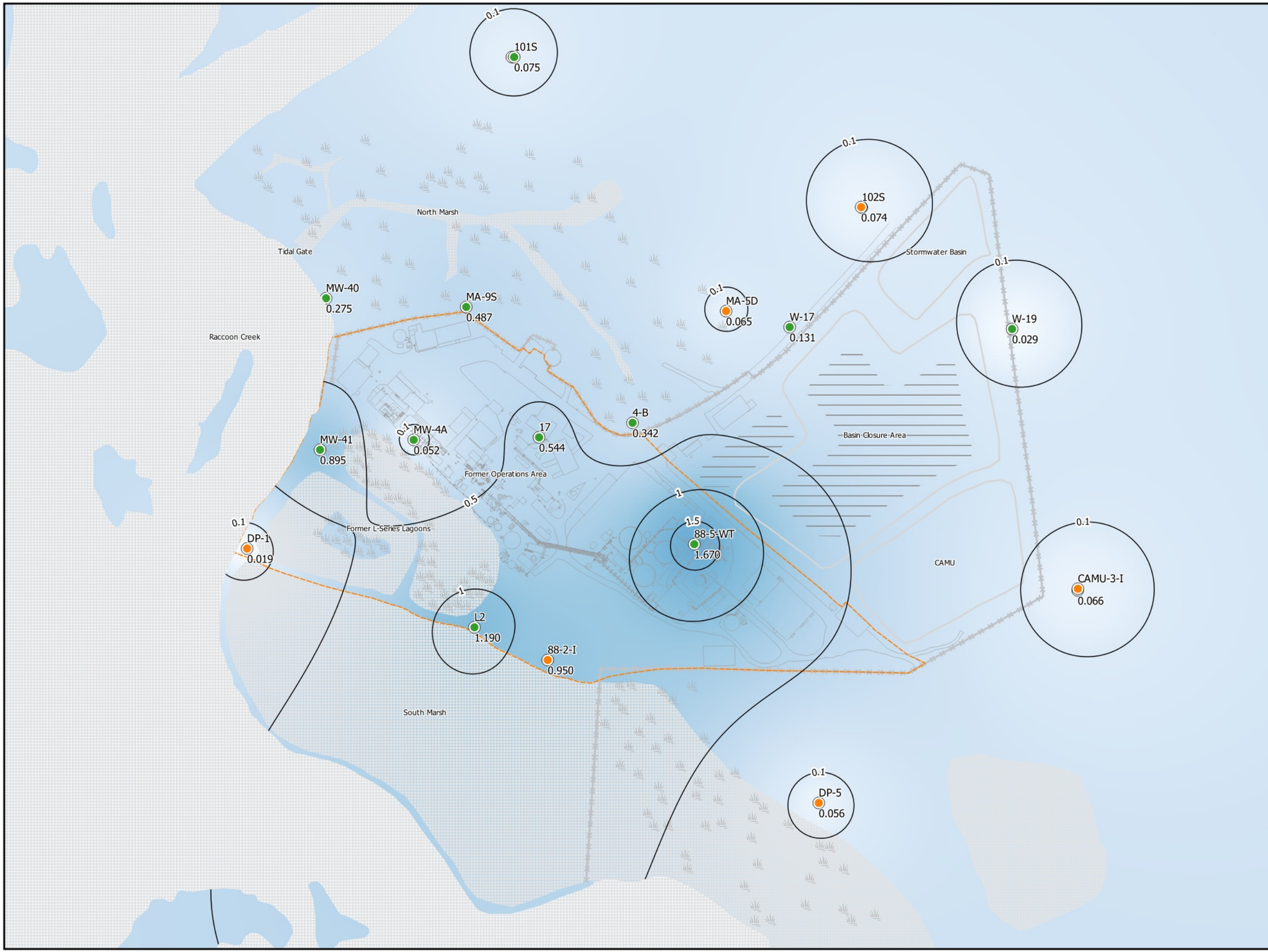


Legend

Scale (feet)
0 100 200 300 400

Monitoring Wells
- Water Table
- Intermediate Zone

Perfluorononanoic Acid (PFNA) Concentration Contours in Micrograms per Liter (ug/L)
- 0.014
- 0.100
- 0.500
- 1.000
- 2.000
- 3.000
- 4.000
- 5.000

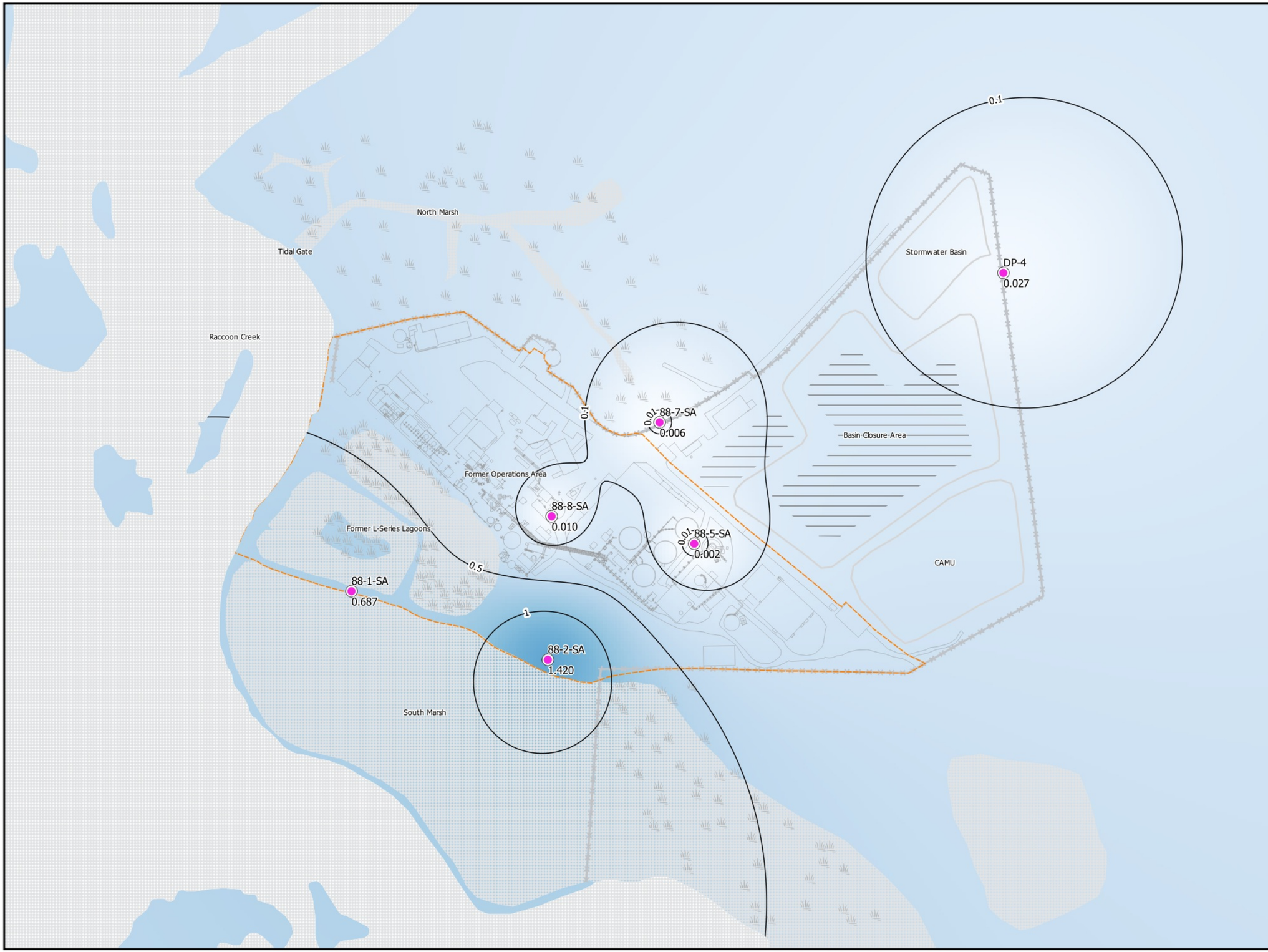
Site Features
- Facility Boundary
- Fence

Clean Harbors Bridgeport Disposal, LLC

Figure 11: Perfluorononanoic Acid (PFNA) Distribution, Magothy Aquifer

Drawn By: AJE
12/08/21
PFAS_Characterization_Oct2021.qgs

Leppert Associates



Legend

Scale (feet)
0 100 200 300 400

N

Monitoring Wells
- Shallow Artesian

Perfluorooctanoic Acid (PFOA) Concentration Contours in Micrograms per Liter (ug/L)
- 0.014
- 0.100
- 0.500
- 1.000
- 2.000
- 3.000
- 4.000
- 5.000

Site Features
- Facility Boundary
- Fence

Clean Harbors Bridgeport Disposal, LLC

Figure 12: Perfluorononanoic Acid (PFNA) Distribution, Potomac Aquifer, Shallow Artesian Zone

Drawn By: AJE
12/08/21
PFAS_Characterization_Oct2021.qgs

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Legend

Scale (feet)

0 100 200 300 400

N

Monitoring Wells
- Water Table
- Intermediate Zone

Perfluorooctane Sulfonic Acid Concentration Contours in Micrograms per Liter (ug/L)
- 0.014
- 0.100
- 0.500
- 1.000
- 2.000
- 3.000
- 4.000
- 5.000

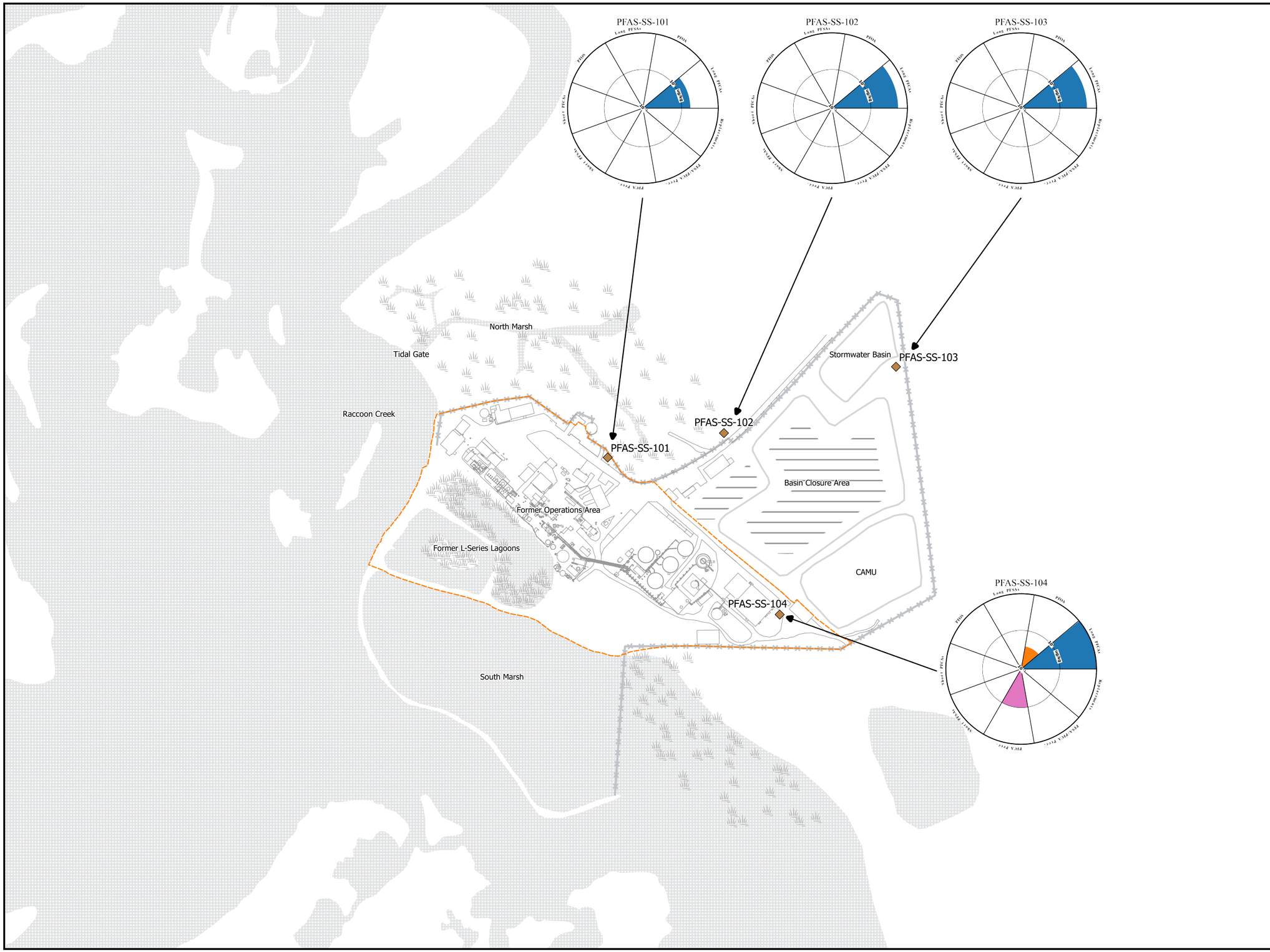
Site Features
- Facility Boundary
- Fence

Clean Harbors Bridgeport Disposal, LLC

Figure 13: Perfluorooctane Sulfonic Acid (PFOS) Distribution, Magothy Aquifer

Drawn By: AJE
12/08/21
PFAS_Characterization_Oct2021.qgs

Leppert Associates



Legend

Scale (feet)

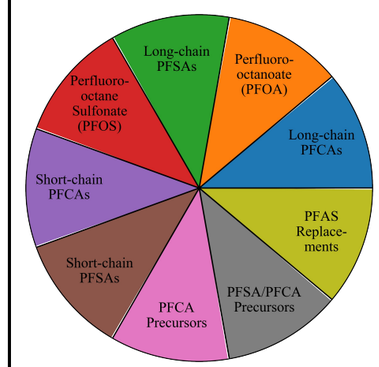
0 100 200 300 400 500 600

N

- Soil Sample Locations

Site Features

- Facility Boundary
- Fence



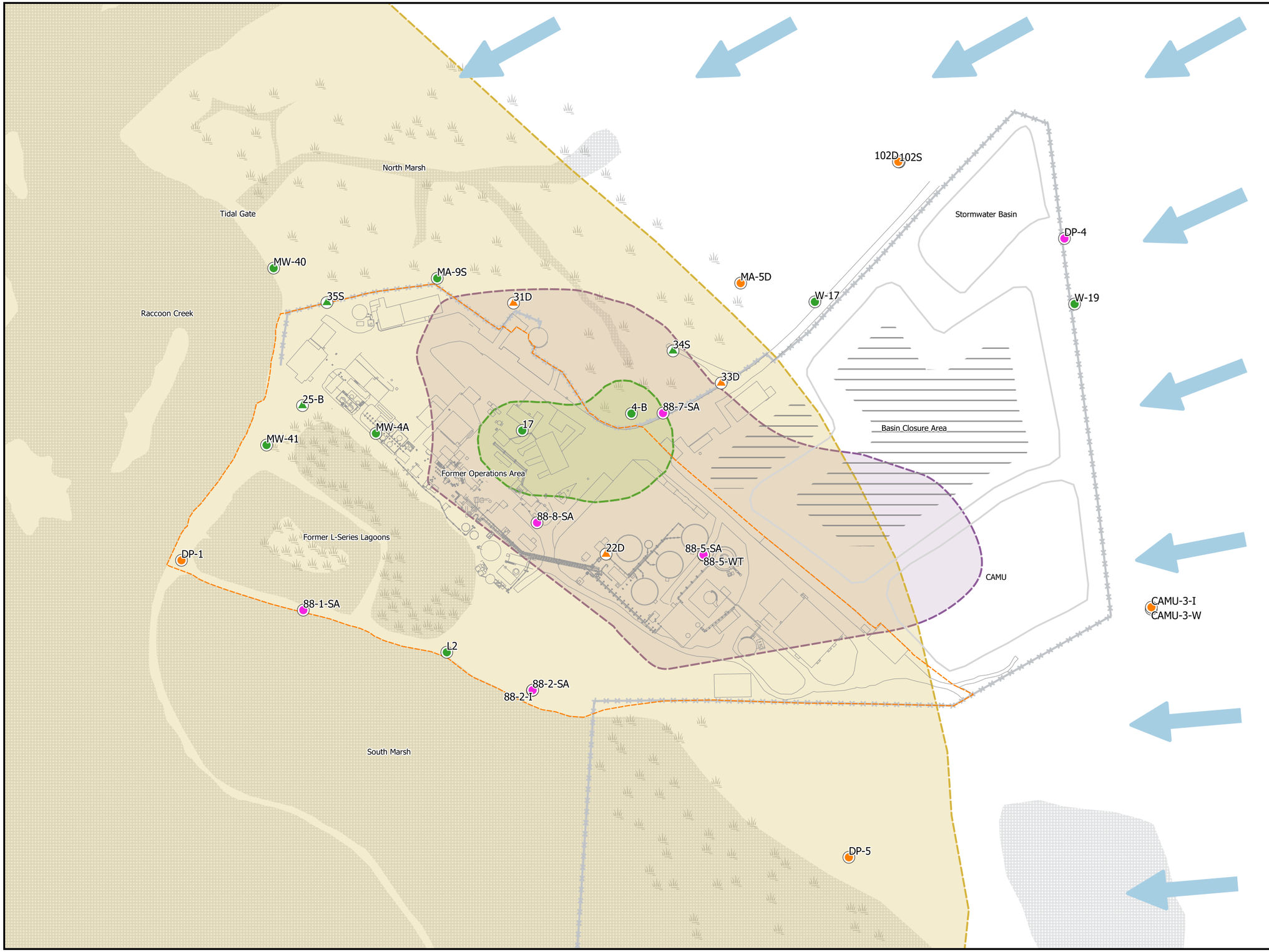
Plotted data is log10 transformed. Concentric rings are one (1) order of magnitude apart
Units: micrograms per kilogram (ug/kg)

Clean Harbors
Bridgeport Disposal, LLC

Figure 14:
Soil Sample Signatures

Drawn By: AJE
11/10/21
PFAS_Characterization
_Oct2021.qgs

Leppert Associates



Legend

Scale (feet)

0 100 200 300 400

N

- Historical impacts from use of Aqueous Film-Forming Foam for fire suppression
- Potential deposition of airborne PFASs, specifically HFPO (GenX) and other stack-emitted PFASs
- Extent of volatile organic compound (VOC) impacts as described in Section 5 of the Corrective Measures Study (CMS)
- Approximate migration direction of contamination from off-site PFASs sources

Monitoring Wells
- Water Table
- Intermediate Zone
- Shallow Artesian

Extraction Wells
- Water Table
- Intermediate Zone

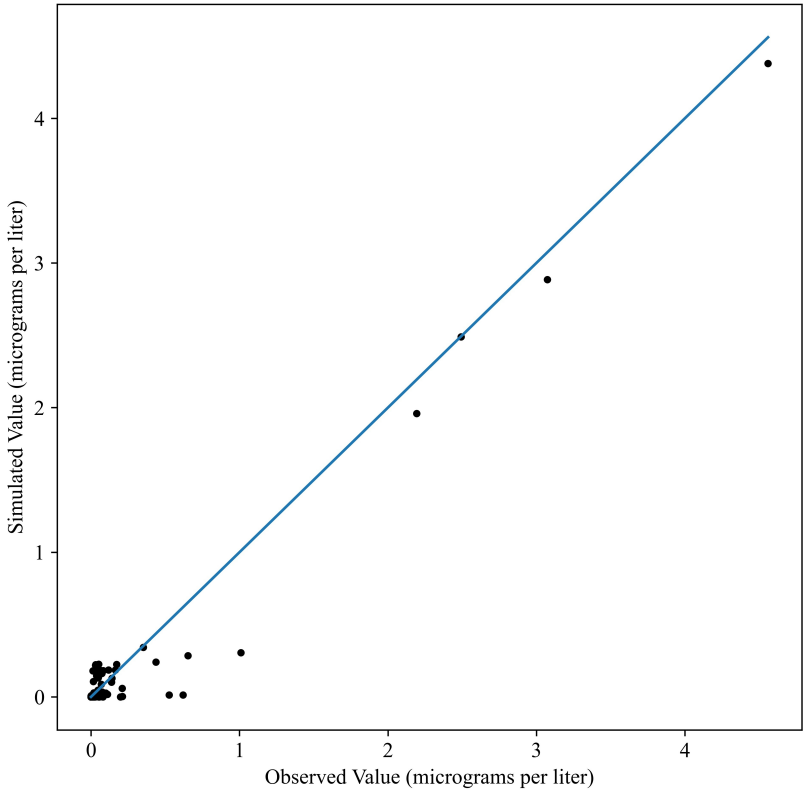
Site Features
- Facility Boundary
- Fence

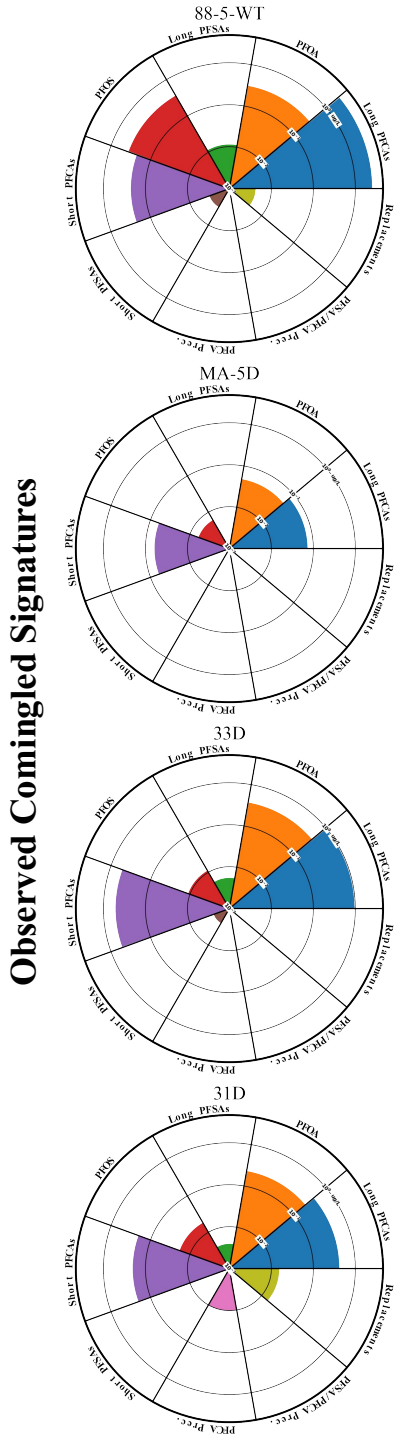
Clean Harbors
Bridgeport Disposal, LLC

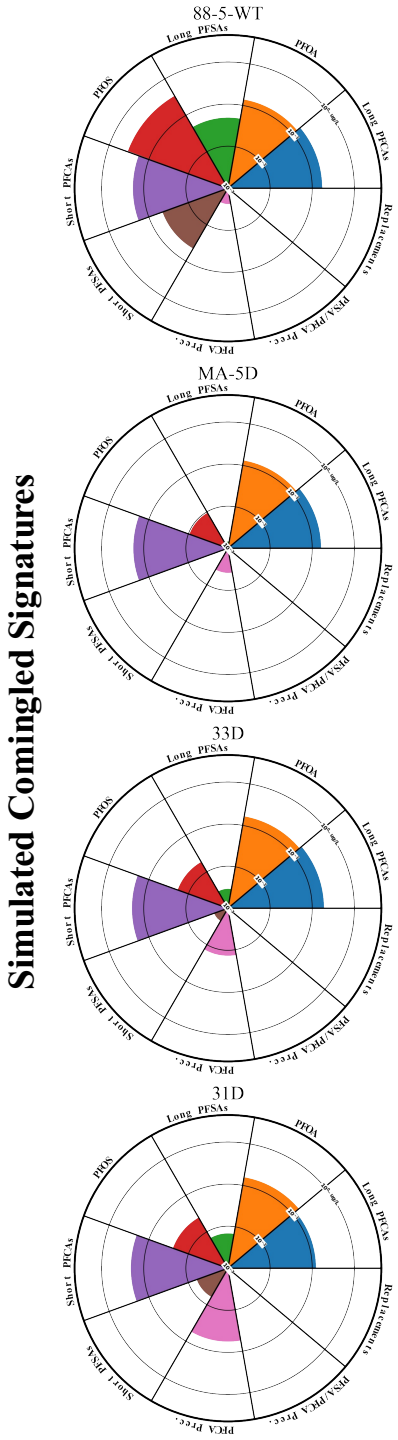
Figure 15:
Potential Sources of Per- and Polyfluoroalkyl Substances (PFASs) Environmental Media Contamination

Drawn By: AJE
01/10/21
PFAS_Characterization
_Oct2021.qgs

Leppert Associates







Legend

Clean Harbors Bridgeport Disposal, LLC

Figure 16: Simulated versus Observed PFASs Concentrations

Drawn By: AJE
1/31/22
PFAS_Characterization
_Oct2021.qgs

Leppert Associates

Appendix A - Supplemental PFAS Characterization Work Plan

600 Crossroads Blvd.
Logan Township, NJ 08085
USEPA Identification Number NJD053288239

Prepared for:

Prepared by:

1422 Washington Avenue
Golden, CO 80401

October 26th, 2021

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APPENDIX A: PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS) ENVIRONMENTAL MEDIA SAMPLING STANDARD OPERATING PROCEDURES (SOP)

List of Acronyms

µG/L	MICROGRAMS PER LITER
11 CL-PF3OUDS	11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACID
3:3 FTCA	3-PERFLUOROPROPYL PROPANOIC ACID
4:2 FTS	4:2 FLUOROTELOMERSULFONIC ACID
5:3 FTCA	UNDECAFLUOROOCTANOIC ACID
6:2 FTS	6:2 FLUOROTELOMERSULFONIC ACID
7:3 FTCA	3-PERFLUOROHEPTYL PROPANOIC ACID
8:2 FTS	8:2 FLUOROTELOMERSULFONIC ACID
9 CL-PF3ONS	9-CHLOROHEXADECAFLUORO-3-OXANONANE-1-SULFONIC ACID
ADONA	4,8-DIOXA-3H-PERFLUORONONANOIC ACID
AFFF	AQUEOUS FILM FORMING FOAM
BGS	BELOW GROUND SURFACE
CDPHE	COLORADO DEPARTMENT OF PUBLIC HEALTH AND THE ENVIRONMENT
ESTCP	ENVIRONMENTAL SECURITY TECHNOLOGY CERTIFICATION PROGRAM
HFPO-DA	HEXAFLUOROPROPYLENE OXIDE DIMER ACID
ITRC	INTERSTATE TECHNOLOGY REGULATORY COUNCIL

LA	LEPPERT ASSOCIATES
MDL	METHOD DETECTION LIMIT
MG/KG	MILLIGRAMS PER KILOGRAM
N-ETFOSA	N-ETHYLPERFLUOROOCTANESULFONAMIDE
NETFOSAA	N-ETHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID
N-ETFOSE	N-ETHYLPERFLUOROOCTANESULFONAMIDOETHANOL
NFDHA	PERFLUORO-3,6-DIOXAHEPTANOIC ACID
NG/L	NANOGRAMS PER LITER
N.J.A.C.	NEW JERSEY ADMINISTRATIVE CODE
NJDEP	NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
N-MEFOSA	N-METHYLPERFLUOROOCTANESULFONAMIDE
NMEFOSAA	N-METHYLPERFLUOROOCTANESULFONAMIDOACETIC ACID
N-MEFOSE	N-METHYLPERFLUOROOCTANESULFONAMIDOETHANOL
NORM	NATURAL OCCURRING RADIOACTIVE MATERIALS
OECD	ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT
PFAS	PER-AND POLY- FLUORO ALKYL SUBSTANCES
PFBA	PERFLUOROBUTANOIC ACID
PFBS	PERFLUOROBUTANESULFONIC ACID
PFCAS	PERFLUOROCARBOXYLIC ACIDS
PFDA	PERFLUORODECANOIC ACID
PFDOA	PERFLUORODODECANOIC ACID
PFDOS	PERFLUORODODECANESULFONIC ACID
PFDS	PERFLUORODECANESULFONIC ACID
PFEESA	PERFLUORO(2-ETHOXYETHANE)SULFONIC ACID
PFHPA	PERFLUOROHEPTANOIC ACID
PFHPS	PERFLUOROHEPTANESULFONIC ACID
PFHXA	PERFLUOROHEXANOIC ACID
PFHXS	PERFLUOROHEXANESULFONIC ACID
PFMBA	PERFLUORO-4-METHOXYBUTANOIC ACID
PFMPA	PERFLUORO-3-METHOXYPROPANOIC ACID
PFNA	PERFLUORONONANOIC ACID
PFNS	1-NONANESULFONIC ACID
PFOA	PERFLUOROOCTANOIC ACID
PFOS	PERFLUOROOCTANESULFONIC ACID
PFOSA	PERFLUOROOCTANESULFONAMIDE

PFPeA	Perfluoropentanoic acid
PFPeS	Perfluoropentanesulfonic acid
PFSA	Perfluorosulfonic acid
PFTeDA	Perfluorotetradecanoic acid
PFTrDA	Perfluorotridecanoic acid
PFUnA	Perfluoroundecanoic acid
QA/QC	Quality Assurance/Quality Control
RL	Reporting Limit
SAP	Sampling and Analysis Plan
SERDP	Strategic Environmental Research and Development Program
SOP	Standard Operating Procedure
TENORM	Technically Enhanced Natural Occurring Radioactive Materials
USDoD	U.S. Department of Defense
USEPA	U.S. Environmental Protection Agency

1 INTRODUCTION

Leppert Associates (LA) prepared this Supplemental PFAS Characterization Work Plan to prescribe the collection and analysis of environmental media samples from the Clean Harbors Bridgeport Disposal, LLC facility located at 600 Crossroads Blvd., Logan Township, NJ 08085 (USEPA Identification Number NJD053288239). This work plan is a follow up to a Preliminary Assessment of PFAS compounds conducted for the Bridgeport facility as submitted to the United States Environmental Protection Agency (USEPA) on December 4, 2019. This work plan and associated investigation of the nature and extent of PFAS contamination is an emerging contaminant activity supplemental to site ongoing Corrective Action activities and the *Corrective Measures Report, Bridgeport Disposal, LLC Bridgeport, New Jersey* submitted to the USEPA and New Jersey Department of Environmental Quality (NJDEP) November 12th, 2020 (Leppert Associates, 2020). This plan also includes sampling to satisfy an NJDEP request for PFAS Monitoring of NJPDES discharges dated August 18, 2021 and associated follow-up email from NJDEP dated August 31, 2021. It was developed following reporting requirements prescribed for a Remedial Investigation Workplan delineated in New Jersey Administrative Code (N.J.A.C.) 7:26E: *Technical Requirements for Site Remediation* (specifically, Subchapter 4: *Remedial Investigations*; Section 4.2: *Remedial Investigation Workplan*).

Note that PFAS molecular compound names are cumbersome; for the purposes of this work plan, the molecular compound acronym is used in the text; definitions of each acronym are defined in the List of Acronyms.

1.1 SITE REGULATORY SETTING

The Bridgeport facility is an industrial facility that formerly served as a hazardous waste treatment facility under a Resource Conservation and Recovery Act (RCRA) permit. The NJDEP, Division of Hazardous Waste Management issued the facility a USEPA Hazardous Waste and Solid Waste Amendments of 1984 Permit (HSWA; I.D. Number: NJD 053 288 239) effective March 31st, 1989. In 2001, the Facility ceased hazardous waste treatment operations and has since been utilized for consolidation of used oil and as a 10-day Transfer station.

In 1977, an explosion and fire occurred at the facility which resulted in soil and groundwater contamination that is being addressed through a Corrective Action program. The initial investigation of the facility was initiated by the USEPA. Ongoing groundwater and corrective measure monitoring activities are part of the overall facility RCRA corrective action Interim Measure in place since 1972 to

mitigate potential threats to human health and the environment. The current corrective measures include groundwater pumping from twenty-two (22) abatement wells, onsite water treatment using a shallow tray air stripper with final discharge to Raccoon Creek under New Jersey Pollutant Discharge Elimination System (NJPDES) Permit #NJ0005240. Groundwater monitoring events are conducted semi-annually, and Groundwater and Corrective Measure Monitoring Reports are submitted semi-annually as well, with the report submission at the end of the year serving as an annual report.

A meeting was held on March 13th, 2018 between the USEPA, the NJDEP, Clean Harbors and Leppert Associates to discuss the preparation of the pending revisions to the Corrective Measures Study (CMS) previously submitted to the USEPA and NJDEP for the facility. During the meeting, a general request was made by the USEPA and NJDEP for the facility to perform screening level sampling and analysis for the potential occurrence of Per- and Poly-fluoroalkyl Substances (PFAS) prior to the resubmission of the CMS. A Preliminary Assessment for the occurrence of PFAS compounds in facility environmental media was conducted following N.J.A.C. 7:26E *Technical Requirements for Site Remediation*; Subchapter 3: *Preliminary Assessment and Site Investigation* (Leppert Associates, 2019b).

1.2 PRELIMINARY ASSESSMENT

In response to the request made by the USEPA and the NJDEP, following New Jersey Administrative Code (N.J.A.C.) 7:26E Technical Requirements for Site Remediation, a Preliminary Assessment of PFAS compound occurrence in environmental media was conducted for the Bridgeport facility in July of 2019. Environmental media sampling and analysis for the event followed the USEPA and NJDEP approved Sampling and Analysis Plan (SAP) for the PFAS Screening Event (Leppert Associates, 2019a). The SAP was implemented using procedures consistent with the NJDEP Field Sampling Procedures Manual (August 2005), the USEPA Methods for Collection, Storage and Manipulation of Sediments for Chemical and Toxicological Analyses: Technical Manual (October 2001) and the USEPA Field Equipment Cleaning and Decontamination (December 2011).

During the PFAS Preliminary Assessment, eleven (11) water samples and five (5) soil samples were collected. Aqueous phase samples were collected from the following seven (7) locations: one (1) abatement well: Well 22D; four (4) groundwater monitoring wells: Well MW-4-a, Well 4-b, Well 17-a and Well 88-5-WT; and two (2) samples associated with the on-site waste water treatment plant (WWTP). One of the WWTP samples was collected from the inflow a sampling port on the manifold of the air stripper (influent sample), and the other was collected from a sampling port on the NJPDES discharge

pipe coming from the WWTP discharge tanks (effluent sample). In addition, four (4) QA/QC samples were collected.

The PFAS samples collected from groundwater and soil were analyzed using the USEPA Method 537.1 to investigate samples for PFAS. The method used for the analysis measured the concentrations of twenty-one (21) PFAS analyte compounds. PFAS compound concentrations detected in groundwater samples collected from the four (4) monitoring wells during the assessment ranged from 34.0 to 6,700.0 nanograms per liter (ng/L). Analytical results from the single abatement well sampled (22-D) was 1,600.0 ng/L. A PFASs concentration of 1,500.0 ng/L was reported for the treatment system Influent sample and a concentration of 1,400.0 ng/L was reported for Effluent sample. All maximum concentrations were for PFOA. The maximum PFAS compound concentration detected in the soil was reported as 4.2 ng/L for PFOS in PFAS-SS-02.

Aqueous phase certified analytical laboratory results from the Preliminary Assessment were compared to the groundwater constituent standards for drinking water established for the three (3) NJDEP PFAS compounds Contaminants of Emerging Concern. Each environmental sample collected from the seven (7) locations exceeded the NJDEP Drinking Water Standards (MCLs) for PFOA (10.0 ng/L), PFOS (10.0 ng/L) and PFNA (13.0 ng/L). There are currently no MCLs for PFASs in soil. These results were reported to the USEPA in a letter sent to Mr. Clifford Ng, dated December 17th, 2019 (Leppert Associates, 2019b).

2 PFAS CHARACTERIZATION WORKPLAN

Results from the Bridgeport Preliminary Assessment to determine the presence of PFAS compounds in facility environmental media indicate that PFAS compounds are present in site shallow groundwater at concentrations that exceed NJDEP Drinking Water Standards established for PFOS, PFOA and PFNA. Based upon requirements delineated in N.J.A.C 7:26E-4.1: *Remedial Investigation Requirements*, these results trigger a remedial investigation at each area of concern with contaminants which exceed any applicable remediation standard. The purposes of a remedial investigation are to:

1) Delineate the horizontal and vertical extent of PFAS contaminants in all media at the site;
2) Determine the general surface and subsurface characteristics of the site, including, without limitation, the depth to ground water;
3) Identify the migration paths and actual or potential receptors of contaminants on or through air, soil, bedrock, sediment, ground water, surface water, and structures at a contaminated site;

4) Collect and evaluate all data necessary to evaluate remedial action alternatives. These data may be gathered through studies including, without limitation, treatability studies, bench scale studies and pilot scale studies (these studies may be conducted pursuant to EPA 540/2-89/058 "Guide for Conducting Treatability Studies Under CERCLA"). Any such data collection, shall be initiated as soon as the general extent of contamination is known, usually after the first delineation phase and, at a minimum, these studies shall be initiated by the end of the second delineation phase;
5) Collect and evaluate all data necessary to evaluate the actual and potential ecological impacts and to characterize all natural resource injuries, including the nature and extent of injury to soil, water, flora and fauna, caused by the contaminants of potential ecological concern at the site;
6) Collect all data necessary to develop permit limitations for any discharge to an environmental medium which may be required for any remedial action alternative under consideration;
7) Identify containment and/or stabilization activities to prevent contaminant exposure to onsite receptors and to prevent the offsite migration of contaminants while remedial alternatives are being evaluated.

This Supplemental PFAS Characterization Work Plan has been developed to prescribe the first delineation phase of the Remedial Investigation prescribed above. The work plan focuses on *1) Delineate the horizontal and vertical extent of contaminants in all media at the site*. Note that objectives *2) Determine the general surface and subsurface characteristics of the site, including, without limitation, the depth to ground water* and *3) Identify the migration paths and actual or potential receptors of contaminants on or through air, soil, bedrock, sediment, ground water, surface water, and structures at a contaminated site* have been completed and are presented in the Corrective Measures Report, Bridgeport Disposal, LLC, Bridgeport, New Jersey submitted to the USEPA and NJDEP in November 2020. It should be noted that the work done in the Corrective Measures Report is done to focus on PCBs. The work that will be done with PFAS but use the processes that have been identified in the Corrective Measures Report.

2.1 SCHEDULE

Provided below is a detailed schedule for all remedial investigation activities, including timeliness and target dates for the completion of field activities, receipt of analytical results, and the submission of reports to the USEPA and NJDEP.

- The anticipated start and completion of all field activities: the PFAS sampling event is currently scheduled to begin in the 2nd week of October 2021 and conclude within ten (10) days of starting field work. The planned dates of field work are October 11th through October 20th, 2021.

- The anticipated receipt of analytical laboratory results is expected four (4) weeks after the conclusion of field work; November 17th, 2021.

- Submission of NJPDES discharge analytical data is required by December 15, 2021. A results summary report is to be submitted to the USEPA and NJDEP sixty (60) days after the acceptance of final reports from the analytical laboratory; January 15th, 2022.

2.2 PRINCIPAL PERSONNEL

Provided in the table below is the information pertinent to project personnel, including the project manager, and as applicable, a facility contact, legal contact, and contractor and subcontractor contacts. In addition, the telephone number of the project manager is provided.

Personnel	Responsibility	Company Name	Authority on Project	Phone Number
Geoff Jones	Project Manager	Clean Harbors	Project Oversight	(803) 603-3979
Steve Fleming	Facility Contact	Clean Harbors	Facility WWT Oversight	(513) 227-5340
Frank Helpa	WWT Operator	Clean Harbors	WWT Operations	(856) 889-3235
Shawn Leppert	PFAS Plan Contractor	Leppert Associates	PFAS Sampling Plan Development	(303) 216-2428

If the principal personnel designated on the project change, information for the new personnel will be submitted to the Department within 30 calendar days of such change.

2.3 HISTORICAL INFORMATION

Considering that the PFAS investigation to be conducted at the Bridgeport Disposal facility is not directed at source associated with either a specific discharge event, a particular area of concern at the Site, or an underground tank or underground tank system, it is applicable to present historical information for the entire site. The Facility is an industrial facility that formerly served as a hazardous waste treatment facility under a Resource Conservation and Recovery Act (RCRA) permit. The NJDEP issued the Facility a USEPA Hazardous Waste and Solid Waste Amendments of 1984 Permit (HSWA; I.D. Number: NJD 053 288 239) effective March 31st, 1989. The first regulatorily documented environmental contamination detected at the facility was addressed by the Administrative Consent Order issued to Rollins Environmental Services by the NJDEP in 1981 (NJDEP, 1981). Regulatory oversight of the facility environmental contamination was transferred to the USEPA under Section 3008(h) of the RCRA, as amended, 42 U.S.C§6928(h) through the issuance of the Administrative Consent Order, Rollins Environmental Services (NJ), Rt. 322, Lot-16, Blk.-51 Bridgeport, N.J. 08014 (USEPA, 1987; NJD 053 288 239). The 1987 ACO required the facility to implement site-wide RCRA corrective action for environmental contamination detected at the Site.

The Bridgeport Disposal facility has a long environmental history that has been documented in various RCRA driven reports including a Corrective Action Program (CAP) that was initiated as part of the 1987 ACO. Per the 1987 ACO, a Corrective Measures Study was submitted to the NJDEP and USEPA in 1989 for the facility formerly owned by Safety-Kleen (Bridgeport), Inc. Due to changing Site conditions and operations over time, the CMS was conducted again in 2020. The second stage in the site-wide CAP was to perform a comprehensive multi-media RCRA Facility Investigation (RFI); the scope of the investigation was detailed in the 1987 ACO. The RFI was conducted from 1990 through 1993; the RCRA Facility Investigation Report was submitted to the USEPA and NJDEP in April 1993 (ENCOTEC, 1993).

Most recently, the historical background of the Site was presented in a Corrective Measures Study Report (CMR) dated November 12, 2020. The CMR documents the environmental media Corrective Measures Study (CMS) conducted for the entire hazardous waste management facility. The objective of the CMR was to the describe the CMS conducted for the BD facility to identify, screen and develop the alternatives for removal, containment, treatment and/or other remediation of the contamination based on the objectives established for the corrective action. The 1993 RFI conducted for the Facility delineated site-wide contamination in four (4) environmental media within the shallow subsurface beneath the Facility: 1.) Site Soil; 2.) Site Sediment; 3.) Site Groundwater; and 4.) Site Soil Gas. An independent CMS for

each of the four (4) environmental media was included in the 2020 CMR. The CMR is currently under review by the USEPA and NJDEP.

To support the conclusions developed in the CMR, a thorough description of the historical Facility operations was developed in the report. Specifically, report Section 2.3: Historical Facility Operations, presented a written narrative along with a comprehensive timeline of Facility operations and milestones that was provided in CMR Table 2.4: Facility Chronology. Section 2.3.1: Closed SWMU/AOCs describes the status of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) that have been closed at the Site and historical operations that were conducted at the Site from 1969 through May 2001. Historical site conditions were also presented as CMR Figures: Figure 2.7: *Main Site Features*; Figure 2.8: *Former Basins and Areas of Concern*; and Figure 2.11: *Regulated Units*.

The groundwater and corrective measure monitoring program consist of collecting daily flow volume measurements from the abatement wells, determining groundwater elevations semi-annually, collecting groundwater samples semi-annually from select wells for analysis of target analytes, and performing operation and maintenance (O&M) activities on the abatement system and treatment plant. Groundwater and corrective action monitoring reports are submitted semi-annually to the USEPA and NJDEP,

2.4 SITE DESCRIPTION

As described above, a thorough description of the Site was most recently presented to the USEPA and NJDEP in a Corrective Measures Study Report (CMR) dated November 12, 2020. The CMR documents the environmental media Corrective Measures Studies conducted for the entire hazardous waste management facility. To support the conclusions developed in the CMR, thorough descriptions of the Site physical features, subsurface (groundwater and soil), and above ground components of the Site Conceptual Model were developed. Physical setting components such as the Site climate, geomorphology, groundwater, surface hydrology, and Site features were described. In addition, an overview of the current Facility operations and the regulatory setting was also provided. The 2020 CMR conducted for the Facility presented the nature and extent of contamination in support of an independent Corrective Measures Study for each of the four (4) environmental media within the shallow subsurface beneath the Facility including Site Soil, Site Sediment, Site Groundwater, and Site Soil Gas. A Conceptual Site Model was developed for each media. The Site description presented in the CMR included the following subsections of Section 2.2: Physical Setting: Section 2.2.1: *Site Features*; Section 2.2.2: *Surrounding Land and Water Use*; Section 2.2.3: *Site Climate*; Section 2.2.4: *Geomorphology*; Section 2.2.5: *Surface Hydrology*; and Section 2.2.6: *Groundwater*. Geologic units and hydrostratigraphy

is described in detail in Section 5: *Groundwater Corrective Measures Study*. The boundary of a wetland's delineation conducted in 2015 and approved by the NJDEP in 2016 is presented in Figure 2.5: *Main Site Features*.

2.5 AREA OF CONCERN

The Area of Concern (AOC) targeted in the *Corrective Measures Report, Bridgeport Disposal, LLC Bridgeport, New Jersey* (Leppert Associates, 2020) is site-wide, the former hazardous waste permit boundary generally defines the AOC, although there are site-related contaminant detections in a few locations somewhat beyond the former permit boundary (e.g., towards the North Marsh). This Supplemental PFAS Characterization Work Plan targets the same site-wide AOC. A detailed description of the facility property has been provided within Chapter 2: *Facility/Site Description* of the *Corrective Measures Report*.

2.6 SAMPLING SUMMARY TABLE

An area of concern sampling summary table of proposed sampling and analysis is included in this workplan as Table 1: *Sample Summary*.

2.7 SAMPLE LOCATIONS

The focus of this PFAS Characterization Work Plan is delineation of the nature and extent of PFAS compounds in facility environmental media as focused by the Preliminary Assessment screening results and information from the site Corrective Measures program. Characterization will be accomplished through the certified laboratory analysis of twenty-two (22) primary samples collected from groundwater monitoring wells, six (6) primary samples collected from abatement wells, four (4) primary soil samples, and ten (10) primary samples from discharge related sample locations, as further described in the text subsections below. Along with these samples, four (4) additional samples will be collected that were from the locations initially sampled from in 2019. In addition to the primary samples, associated quality assurance/quality control (QA/QC) samples will be collected and analyzed as further described in Section 2.9.6. The samples will be obtained from the sampling locations, as described in detail below.

2.7.1 GROUNDWATER MONITORING WELL SAMPLES

Monitoring and abatement wells that are a part of the Corrective Measures groundwater well network described in the Groundwater and Corrective Measures Monitoring Reports provided to USEPA and NJDEP are targeted for groundwater sampling as part of this work plan. There are three (3) groundwater-bearing zones that are monitored by the facility's monitoring well network, which with increasing depth are: the Water Table zone, the Intermediate zone, and the Shallow Artesian zone. As discussed further in the November 2020 CMS submittal, there is more interconnectedness between the two upper zones, Water Table zone and the Intermediate zone.

The facility has one-hundred and six (106) groundwater monitoring and abatement wells in the monitoring well network located within and around the facility property boundary. Currently there are twenty-two (22) abatement wells which extract groundwater as part of the facility groundwater abatement system. As part of this work plan six (6) abatement wells will be sampled for PFAS compounds. There are twenty-two (22) groundwater monitoring wells that will be sampled as part of this PFAS Characterization Work Plan. The listing of the wells to be sampled is described below and presented in Figure 1: *Targeted Groundwater Well Sample Locations*.

These locations were selected in order to analyze three (3) zones of investigation. The Preliminary Assessment previously performed at the facility found concentrations of PFAS compounds over standards in five (5) wells across the central area of the site, where concentrations of other site contaminants (VOCs in particular) are also over standards. This proposed groundwater sampling is designed to investigate the sources of PFAS migrating onto to the Facility, further investigate possible sources of PFAS from within the facility and determine the concentrations of PFAS along the hydraulically down-gradient perimeter of the facility. The wells are divided into the groups detailed below:

- Wells generally hydraulically up-gradient from the former and current facility operations to be considered as background samples (11 primary samples collected):
    - Monitoring Wells in the Water Table Zone: 101S, 102S, W-19, W-17 and CAMU-3-W,
    - Monitoring Wells in the Intermediate Zone: 101D, 102D, MA-5D and CAMU-3-I, and
    - Monitoring Wells in the Shallow Artesian Zone: DP-4 and 88-7-SA.

- Wells that are located within the former and current operating area of the facility (8 primary samples collected):

- o Monitoring Wells in the Shallow Artesian Zone: 88-8-SA and 88-5-SA,
- o Abatement Wells in the Water Table Zone: 34S, 35S, and 25-b, and
- o Abatement Wells in the Intermediate Zone: 31D, 33D and 22D.

- Wells that are located hydraulically down-gradient from the former and current operating portion of the facility (9 primary samples collected):

  - o Monitoring Wells in the Water Table Zone: MW-40, MW-41, MA-10S, and L2
  - o Monitoring Wells in the Intermediate Zone: DP-1, DP-5, and 88-2-I
  - o Monitoring Wells in the Shallow Artesian Zone: 88-1-SA and 88-2-SA.

In total, twenty-eight (28) groundwater sampling locations are included in this PFAS sampling event.

2.7.2 SOIL SAMPLES

In conjunction with the groundwater samples to be collected, additional soil samples will be collected. The Preliminary Assessment previously performed at the facility found concentrations of PFAS compounds in the four (4) sample locations tested near soil sample locations previously determined to have other contaminant impacts (e.g., VOCs or PCBs) during historical soil sampling events. Samples from the central area of the site had a greater number of PFAS compounds, and one sample, PFAS-SS-02, had an order of magnitude higher concentrations then the other PFAS soil samples. Four (4) selected surface soil samples will be collected at the proposed locations indicated on Figure 2: Targeted Soil Sample Locations. Two (2) of the soil sample locations, PFAS-SS-102 and PFAS-SS-103, have been targeted to collect background soil samples, away from historical soil contamination, in an up-gradient topographic and groundwater flow direction. One location, PFAS-SS101, is to investigate an area of possible increased risk for PFAS contamination in what historically has been the surface water runoff direction associated with the previously higher soil detection. One (1) location, PFAS-SS-104, is just off the pavement near where PFAS is stored for the site warehouse fire system and near where there is a drain outlet on the side of the warehouse for draining the warehouse system, if needed. These locations will be modified if it is determined once on site that a capped surface will interfere with the collection of the samples.

2.8 OTHER SAMPLING PROPOSED

In an email dated August 18th, 2021 and a follow-up email with clarifications dated August 31, 2021, the NJDEP has requested effluent sampling from discharge locations associated with the site NJPDES permit, with the samples to be analyzed for twelve (12) specific PFAS compounds using a laboratory certified for a non-potable water user-defined method. Two (2) grab samples at least 30 days apart are to be taken from every designated active discharge monitoring location identified in the NJPDES permit. There are four (4) discharge monitoring locations identified in the site permit. One (1) is the treatment plant discharge, and the other three (3) are stormwater discharge monitoring locations. The facility stormwater discharges are managed with a discharge basin and two (2) discharge tanks, which serve as the stormwater discharge monitoring locations. The email request also required that the results of the sampling be reported to dwqpretreatment@dep.nj.gov by December 15, 2021 (NJDEP, 2021b) and that field reagent blanks and other QA/QC blank samples be collected as indicated by guidance associated with EPA analytical methods.

Influent and effluent samples were collected as part of the Preliminary Assessment, however additional samples are needed to fulfill the NJDEP requirement. The effluent samples requested by the NJDEP will be collected in the context of the overall PFAS investigation. The samples will be run for the same PFAS suite of constituents as the groundwater samples, which includes the twelve (12) constituents required, and the collection of treatment system effluent samples will be paired with treatment system influent samples. As part of this work plan, two (2) samples will be collected from the on-site waste-water treatment plant (WWTP) used in conjunction with the site groundwater abatement system when the effluent samples are collected. One (1) sample will be collected from the Influent sampling port on the manifold of the air stripper, and another will be collected from the Effluent sampling port on the NJPDES discharge pipe coming from the WWTP (effluent or outfall sample). Two sets of WWTP samples will be collected at least thirty (30) days apart.

In total, ten (10) discharge related samples will be collected; two (2) from each of four (4) designated discharge monitoring locations at least 30 days apart, and two (2) system influent samples to be taken in conjunction with the system effluent samples.

2.9 QUALITY ASSURANCE PROJECT PLAN

PFAS compounds are new and emerging contaminants of concern in the environment. Because PFAS compounds has only recently been recognized as an important contaminant, there are few monitoring

regulations related to sampling techniques and frequency. Clean Harbors Bridgeport developed this SAP to provide a comprehensive environmental media PFASs characterization. Therefore, this SAP targets a list of forty (40) PFASs that represent the broader range of compound classes, each having unique physical, chemical, and/or environmental migration and persistence properties. The PFASs compounds targeted for analysis are recently recommended for analysis by the USEPA and USDoD PFAS workshops (USDoD Environmental Monitoring and Data Quality, 2020).

2.9.1 PFAS Sources and Behavior

Per- and Poly-fluoroalkyl Substances (PFAS) are a large family of complex and ever-expanding group of man-made fluorine-containing chemicals. These chemicals have been developed to impart unique properties when applied to surfaces, including resistance to water, grease and stains that are widely used to make various types of everyday products (NIH, 2021). PFAS compounds are perfluorinated or polyfluorinated substances, synthetic organofluorine chemical compounds that have multiple fluorine atoms attached to an alkyl chain. As such, they contain at least one perfluoroalkyl moiety, –CnF2n–. Each PFAS compound has unique chemical and physical properties resulting in a particular migration potential through the environment. According to the Organization for Economic Co-operation and Development (OECD, 2021), the current global database includes four-thousand, seven-hundred and thirty (4,730) different PFAS species. A U.S. Environmental Protection Agency toxicity database, *DSSTox*, lists eight-thousand, one-hundred and sixty-three (8,163) individual PFAS compounds (USEPA, 2021). It can be cumbersome to write out the molecular name for PFAS compounds described in this Sampling and Analysis Plan, the molecule name for each acronym provided in this text is available in the List of Acronyms.

The USEPA has classified two (2) PFAS constituents, Perfluorooctane Sulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA), specifically as “emerging contaminants.” While these two compounds are known to be particularly harmful to human health and the environment and therefore the most studied (Kucharzyk et al., 2017; Domingo and Nadal, 2019), many other new and emerging contaminants in the PFAS family have been shown to negatively impact the environment. An "emerging contaminant" is a chemical or material that is characterized by a perceived, potential, or real threat to human health or the environment or by a lack of published health standards. A contaminant may also be "emerging" because a new source or a new pathway to humans has been discovered or a new detection method or treatment technology has been developed (US Department of Defense, 2011).

The NJDEP also considers PFAS compounds as Contaminants of Emerging Concern. Three (3) specific PFAS compounds are considered Contaminants of Emerging Concern: PFNA; PFOA; and PFOS. "*A site must comply with the Technical Requirements for Site Remediation (N.J.A.C. 7:26E), all contamination, including all discharged hazardous substances, hazardous wastes, and pollutants, must be addressed. Contaminants of emerging concern, if discharged to the waters or onto the lands of the State, are pollutants that must be remediated even if the contaminant is not a hazardous substance. When the site or area of concern under remediation is currently or was formerly occupied by facilities that manufactured, stored, handled, or used contaminants of emerging concern, LSRPs must consider these contaminants must be considered during the investigation and remedial action. must evaluate the site must be evaluated for potential spills and releases through air, water, and waste discharges*".

Due to their toxicity, persistence, and prevalence, PFAS compounds continue to be an active focus of research and investigation. Areas of research include site characterization, environmental fate and transport, bioavailability, degradation processes, and potential risks to humans and ecosystems. Advances in laboratory analytical methods allow for detection of PFAS compounds at extremely low concentrations within environmental media. Due to the presence of significant molecular mass of organic fluorine in PFAS compounds, appropriately equipped laboratories can apply sophisticated analytical methods to detect PFAS concentrations within environmental media, often at concentrations of less than 1.0 nanograms per liter (ng/L). For instance, the Method Detection Limit (MDL) has been established for PFOS in drinking water at 0.54 ng/L (USEPA Method 537.1: *Determination of Selected Per- and Polyflourinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry*).

2.9.1.1 Distribution in the Environment

PFAS compounds has been released to the environment from a variety of sources over time. The persistence and mobility of some PFAS species has resulted in the presence of detectable concentrations of PFAS compounds in most environmental media worldwide (ITRC, 2020). The concentrations of these anthropogenic concentrations may vary widely, based on proximity to industrial areas, mobility through environmental media, degradation rates, and other factors. PFAS compounds are continuously being discovered within the environment and could be related to the use of any number of different commercial, industrial or waste products. Due to the persistence of many PFAS species within the environment, measured environmental media concentrations represent the cumulation of anthropogenic impacts from past as well as current uses (USFDA, 2021).

PFAS releases to the environment generally do not occur as a single compound but rather as complex blended mixtures with unique proportions of various PFAS compounds. The mixtures can include PFCAs and PFSAs: (1) PFAS terminal degradation surfactants, the last stage in biological and chemical degradation of many compounds; (2) PFAS precursors surfactants, principal parents of a PFASs terminal degradation surfactant; (3) PFASs intermediate transformation compounds; and (4) many other miscellaneous PFAS compounds. After being released into the environment, the composition of these mixtures changes with time due to differential degradation and migration processes within the environment.

2.9.1.2 Migration Potential

Each PFAS compound behaves differently in the environment due to various chemical, physical, and biological processes. Examples of these process include sorption, volatilization, degradation, and bioaccumulation (Miranda et al, 2021; Sima and Jaffé, 2021). Some PFAS compounds (e.g., perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are very resistant to breakdown and migrate easily through the environment. As a result, they may be found throughout the environment in groundwater, surface water, soil, and air, and they have been detected in food, breast milk, and human blood serum. Molecular chain length is also a major factor in mobility, as the size of the PFAS molecule has an impact on its mobility, solubility, bioavailability, bioaccumulation rate and ecotoxicity (OECD, 2021). PFASs have been used for decades in many common products, but their behavior in the environment is still an area of ongoing research (Anderson et al. 2021; MADEP, 2018).

2.9.1.3 Toxicology

PFAS compounds, collectively, are emerging contaminants, with evolving toxicological data. The potential toxicity of PFAS compounds are complicated by the fact that certain PFAS species may become more concentrated as they are propagated through the food chain, a process known as bioaccumulation (Miranda et al., 2021; Sima and Jaffé, 2021). The general population is exposed to PFAS compounds through various sources, including drinking water and ingesting PFAS-contaminated food (Domingo and Nadal, 2019). One epidemiological study of 69,000 people in the Mid-Ohio Valley showed that drinking water contaminated with at least 50 ng/L of PFOA for at least one year led to high cholesterol, ulcerative colitis, thyroid disease, testicular and kidney cancers, and pregnancy-induced hypertension amongst the population (Cordner et al., 2019).

The current consensus amongst toxicologists is that data is still lacking on toxicity criteria for the vast majority of PFAS compounds in commercial use. This has led to the use of additional uncertainty factors by regulators who have established health-based standards for PFAS compounds in the environment (Simon et al., 2019). Due to the vast list of individual PFAS compounds and the lack of resources to develop regulatory standards for each one, a call has been made to begin to regulate PFAS as a class of compounds rather than by individual species (Simon et al., 2019). However, some states have begun implementing their own specific PFAS compound standards, as some research has suggested that the USEPA's goal of 70 ng/L for PFOA and PFOS is not sufficiently protective (Cordner et al., 2019).

The best studied PFAS compounds are PFOS and PFOA, although considerable information is available for some other PFAS compounds, including PFNA, PFHxS, PFBA, PFBS, and the GenX chemical HFPO-DA. Laboratory animal toxicology studies and human epidemiological studies suggest that health effects may occur as a result from long-term exposure to PFOA and PFOS at environmentally relevant levels. The USEPA has completed draft toxicity assessments for the GenX chemicals and PFBS (USEPA 2018a, b), and USEPA announced in December 2018 that five (5) additional PFAAs (PFNA, PFBA, PFHxA, PFHxS, PFDA) will be reviewed for toxicity assessment through the Integrated Risk Information System (IRIS), but no timeline has been established (USEPA 2019).

2.9.2 TARGET PFAS ANALYTES

To characterize the presence of PFAS compounds within the groundwater and soil medias at the Bridgeport Facility, groundwater and soil quality samples collected from the site will be analyzed for a comprehensive list of forty (40) PFASs compounds, which includes PFOS and PFOA. The PFAS constituents targeted for laboratory analysis as part of this SAP include a novel, comprehensive list of PFAS compounds established by the USEPA and USDoD (USDoD Environmental Monitoring and Data Quality Workshop Webinar, 2020). The CAS Registry Number, target laboratory Reporting Limited (RL) and the analytical Method Detection Limit, for both soil and groundwater environmental media have been tabulated for each of the forty (40) PFAS analytes in Table 2: Per- and Poly- Fluoroalkyl Substances (PFASs) Targeted for Certified Analytical Laboratory Analysis. The 2020 USDoD Environmental Monitoring and Data Quality Workshop Webinar, sponsored by Strategic Environmental Research and Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP), recommended a list of forty (40) PFAS compounds for quantitative analysis of media concentrations. This list spans all of the USEPA 537.1 and USEPA 533 target analytes as well as several additional precursors. The list was developed to maximize the information collected when performing environmental characterization activities with specific recognition of the ability for the greater class of

PFASs to act as efficient environmental tracers. This group of targeted PFAS analytes was developed to represent PFAS classes having a wide variety of:

1) chemical and physical properties;
2) migration potential and persistence within the environment; and
3) potential risk to human health and the environment.

2.9.3 PFAS CHARACTERIZATION ANALYTE GROUPS

For the purposes of quantitative interpretation and environmental tracking, the forty (40) targeted PFAS analytes were grouped according to their chemical class and structure, usage, environmental fate, and potential health concerns (see Table 3: PFAS Analyte Signature Groupings). These analysis groupings include: Long-chain Perfluorocarboxylic Acids (PFCAs), Long-chain Perfluorosulfonic Acids (PFSAs), Short-chain PFCAs, Short-chain PFSAs, Potential PFCA Precursors, Potential PFSA and/or PFCA Precursors, PFASs Replacement Chemistries, and Ungrouped Compounds.

1) Long-Chain PFSAs - Perfluorosulfonic acids with chain lengths of at least six (6) carbons. These long-chain groups contain compounds that are believed to present some of the highest health risks to humans and animals, as they are highly soluble relative to their potential toxicities, have been observed to bioaccumulate in human receptors, and have relatively low sorption coefficients compared to other analyte groupings (ITRC, 2020). The analytes contain in this group include: PFOS; PFDS; PFHpS; PFHxS; PFNS; and PFDoS.

2) Long-Chain PFCAs– Long-chain perfluorosulfonic acids are perfluorocaroboxylic acids with chain lengths of at least eight (8) carbons. In general, the potential for sorption to soils increases with chain length in both the PFCA and PFSA groupings. PFSAs generally have a higher sorption potential than PFCAs of the same chain length, making the PFSA groupings slightly less mobile than the PFCA groupings (ITRC, 2020). The analytes contained in this group include: PFOA; PFDA; PFNA; PFTeDA; PFTrDA; PFUnA; and PFDoA.

3) Short-Chain PFCAs – Most interim water quality guidelines developed at the State and Federal levels target the eight-carbon PFCA PFOA and the eight-carbon PFSA PFOS, though it should be noted that the health effects of these compounds as well as short-chain PFCAs and PFSAs is an active area of research. The analytes contained in this group include: PFBA; PFHpA; PFHxA; and PFPeA.

4) Short-Chain PFSAs – Most interim water quality guidelines developed at the State and Federal levels target the eight-carbon PFCA perfluorooctanoate (PFOA) and the eight-carbon PFSA PFOS, though it should be noted that the health effects of these compounds as well as short-chain PFCAs and PFSAs is an active area of research. The analytes contained in this group include: PFBS and PFPeS.

5) Potential PFCA Precursors – Both the Potential PFCA Precursors and the Potential PFSA and/or PFCA Precursor groups are generally much less mobile than PFCAs and PFSAs: they are less soluble than their terminal degradation products and have high sorption potentials (ITRC, 2020). Releases of these compounds tend to exist as PFCA and PFSA sources in the environment. The analytes contained in this group include: 3:3FTCA, 5:3 FTCA, 7:3 FTCA, 4:2 FTS; 6:2 FTS; and 8:2 FTS.

6) Potential PFSA and/or PFCA Precursors – Both the Potential PFCA Precursors and the Potential PFSA and/or PFCA Precursor groups are generally much less mobile than PFCAs and PFSAs: they are less soluble than their terminal degradation products and have high sorption potentials (ITRC, 2020). The analytes contained in this group include: EtFOSAA; MeFOSAA; N-MeFOSE; N-EtFOSE, N-EtFOSA, N-MeFOSA; and PFOSA.

7) PFAS Replacement Chemistries – PFAS Replacement chemistries are PFAS compounds that have replaced other PFAS compounds that have been phased out of manufacturing processes and/or final consumer products due to concerns surrounding the persistence and potential health risks associated with long-chain PFCAs and PFSAs. Some of these replacement compounds have the potential to degrade into short-chain PFCAs and PFSAs. The analytes contained in this group include: 11Cl-PF3OUdS; 99Cl-PF3ONS; ADONA; and HFPO-DA.

8) Ungrouped Compounds – The Ungrouped analytes consists of compounds that do not fit cleanly into the other seven (7) analyte groupings and have little information regarding their use, degradation pathways, mobility, and health risks. Monitoring these compounds is recommended because the implications of these compounds and their degradation products with regards to environmental and human health is an area of active research and potential regulatory action (ITRC, 2020). The analytes contained in this group include: NFDHA; PFEESA; PFMBA; and PFMPA.

2.9.4 CERTIFIED ANALYTICAL LABORATORY METHOD(S)

The laboratory analytical method selected to estimate the concentration of the forty (40) targeted PFAS compounds is prescribed to be the MLA-110; Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). This analytical method is the platform for the new EPA 1600 series universal isotope dilution method to measure the concentration of PFAS compounds in groundwater, surface water, wastewater, leachate, soil, sediment, biosolid and tissue and offers the state-of-the-art in PFASs best practices.

As PFAS compounds are new contaminants of concern, there are not many analytical laboratory standards currently available. This means that despite the large array of PFAS constituents, only a few are truly regulated or targeted for laboratory media concentration analysis. However, state and federal regulatory agencies are pushing to develop standards for certified analytical laboratory quantification of PFAS compound concentration in environmental media. The SGS analytical lab has assisted the regulatory agencies establish new analysis methods to investigate a comprehensive list of diagnostic PFAS constituents to create a better characterization of site environments. SGS is an accredited, certified lab to investigate and sample PFASs. SGS AXYS' lab has established a new method to better investigate PFAS samples. The lab has completed a single-lab validation for a universal isotope dilution method to measure PFAS compounds in groundwater, surface water, wastewater, leachate, soil, sediment, biosolid, and tissue. This method is based on SGS AXYS method MLA-110, which has been validated and accredited under DoD QSM 5.3 for thirty-three (33) PFAS compounds.

2.9.5 PFAS CHARACTERIZATION RESULTS

Analytical laboratory media concentration analysis results reported for groundwater monitoring well PFAS samples collected as part of this SAP will be used to create a sample-specific PFAS concentration signature to assist in empirical data evaluation. These signatures will be represented by a circular histogram plot (Rose Diagram) which displays the summed concentration of PFASs analytes contained in each of the eight (8) analyte groups designated in Subsection 3.2.1: PFAS Characterization Analyte Groups ("petals of the rose"). The diagram concentrations are plotted on a radial base-10 log scale, where the scale ranges from 1.0 to 100,000,000 ng/L. The Rose Diagram signatures will be spatially represented on figure(s) plotting the relative locations of groundwater monitoring well samples collected and analyzed. These diagrams can be used to determine if the PFAS compounds measured in different locations are from similar sources, based on the distribution of the PFAS compounds amongst the chemical classes. Similar Rose diagrams would indicate that measured PFAS compounds are from a

similar source, while a unique diagram from those that are juxtaposed may indicate that a different source of PFAS compounds is present or has existed in the past.

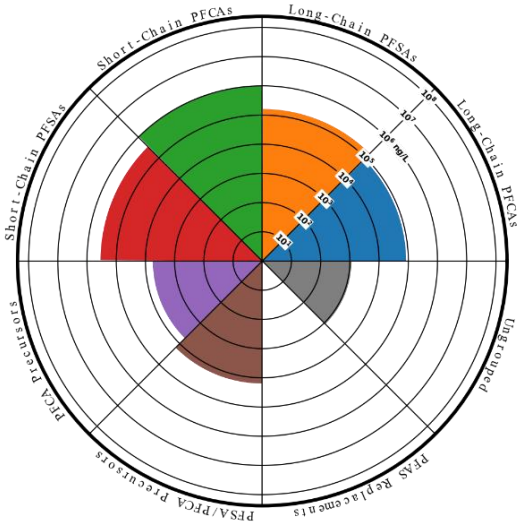
2.9.6 QUALITY ASSURANCE/QUALITY CONTROL

Quality Assurance/Quality Control (QA/QC) samples will be used to help evaluate the efficacy of the final data. Field quality control samples help evaluate conditions resulting from field activities and are intended to assess potential field contamination and sampling variability. Laboratory quality control samples measure errors associated with the laboratory instruments, sample handling, and monitor for laboratory-induced contamination. Collection and analysis of QA/QC samples is especially important for PFAS analyses because of very low detection limits and widespread use of PFAS-containing products. The QA/QC samples described in section 4 of Appendix A: Per-and Polyfluoroalkyl Substances (PFAS) Environmental Media Sampling Standard Operating Procedures (SOP) will be collected at the facility. The process for taking the samples is outlined in Appendix A. The following section details the number of QA/QC samples that are to be taken.

2.9.6.1 Equipment Rinseate Blanks

An Equipment Rinseate Blank is to be collected each day. There is to be one blank collected for each sampling procedure. These Rinseate Blank samples will be analyzed for the MLA-110 analytical method described above. It is estimated that the sampling will take five (5) days and with two (2) equipment rinseate blanks taken per day a total of ten (10) will be taken. Once the blanks are collected, they are to be stored in the cooler with the other samples.

Figure 3: Example Sample PFAS Concentration Signature



2.9.6.2 Field Blanks

There will be one field blank collected at the start of every day. It is anticipated that there will be five (5) days of sampling resulting in five (5) field blanks. These samples will be taken at the start of the near the first samples to be

taken. Once this blank is collected, the sample is to be placed in the cooler and maintained cold throughout the day of sampling. Field blanks will be analyzed using the MLA-110 analytical method described above.

2.9.6.3 Duplicate Samples

One duplicate sample is to be collected per ten (10) samples. This means that a total of five (5) duplicate groundwater samples will be collected and one (1) duplicate soil sample will be taken. The duplicate locations can be chosen by the field crew and should be taken at the same time as the sample and then the name and time on the label changed. These samples need to be sampled using the same method as the field samples. These duplicate samples will be analyzed using the MLA-110 analytical method described above.

2.9.7 GROUNDWATER SAMPLING PROCEDURES

Many materials used in environmental investigations can contain PFASs, which pose a significant cross-contamination risk. There is limited published research or guidance on how certain materials, such as sample bottles used by field staff, affect sample results (ITRC, March 2018). Great care must be exercised when collecting environmental media samples targeted for PFASs concentration analysis to avoid cross-contamination, especially given the prescribed reporting limits commonly approximately 1.0 nanogram per liter (ng/L). A PFAS Environmental Media Sampling Standard Operating Procedures (SOP) has been developed to prescribe media sampling procedures that limit the potential for cross-contamination of the PFASs samples from sampling equipment utilized during sampling.

Sampling methods and protocols to be used at the site during this event will follow the sampling procedure that is outlined in Appendix A: Per-and Polyfluoroalkyl Substances Environmental Media Sampling Standard Operating Procedure (SOP). The protocol must be strictly followed in order to ensure that sample analysis represents true environmental conditions and is not altered by cross-contamination. The sampling procedure should be read before arriving at the site to make sure that it is understood. Information on how to conduct a PFAS sampling event was compiled from the United States Environmental Protection Agency (USEPA), the New Jersey Department of Environmental Protection (NJDEP), and the Interstate Technology and Regulatory Council (ITRC). Information from the NJDEP was primarily used, as the state of New Jersey has the most robust and up to date information on PFAS sampling. Sampling and analysis will be conducted with the USEPA Field Equipment Cleaning and

Decontamination Manual (December 2011), and the NJDEP Field Sampling Procedures Manual (August 2005).

2.9.8 SOIL SAMPLING PROCEDURES

Similarly, to the cross-contamination issues presented in the groundwater sampling procedure section, there is a significant cross-contamination risk for soil sampling as well. Great care must be exercised when collecting the soil samples. A PFAS Environmental Media Sampling Standard Operating Procedures (SOP) has been developed to prescribe media sampling procedures that limit the potential for cross-contamination of the PFASs samples from sampling equipment utilized during sampling.

The samples that are to be taken at the site during this event will all follow the sampling procedure that is outlined in Appendix A: Per-and Polyfluoroalkyl Substances Environmental Media Sampling Standard Operating Procedure. The protocol for the sampling procedure is described there. The protocol must be strictly followed in order to ensure that sample analysis represents true environmental conditions and is not altered by cross-contamination. The sampling procedure should be read before arriving at the site to make sure that it is understood. Information on how to conduct a PFAS sampling event was compiled from the United States Environmental Protection Agency (USEPA), the New Jersey Department of Environmental Protection (NJDEP), and the Interstate Technology and Regulatory Council (ITRC). Information from the NJDEP was primarily used, as the state of New Jersey has the most robust and up to date information on PFAS sampling. Sampling and analysis will be conducted with the USEPA Field Equipment Cleaning and Decontamination Manual (December 2011), and the NJDEP Field Sampling Procedures Manual (August 2005).

2.10 HEALTH AND SAFETY PLAN

A comprehensive Site-specific Health and Safety Plan (HASP) has been developed for the Site and is to be followed during the collection of potentially impacted media sampling and Site remediation activities. The HASP was most recently presented as Appendix C: Health and Safety Plan within the TSCA Cleanup Work Plan dated November 12, 2020. The TSCA Work Plan was submitted by BD to the USEPA and NJDEP in November 2020. The HASP is a document in progress and will be carried forward with the Site and modified as needed to suit media characterization and cleanup efforts to be completed at the Site.

It is anticipated that subcontractors will have their own HASP developed by their respective companies. The primary responsibility for employee safety lies with each company for its own employees. However,

each field team member within the separate companies is responsible for identifying and correcting health and safety hazards so members are able to work together as safely as possible.

Any excavation where workers will be exposed to the soils at the Site must be conducted in accordance with a Site HASP meeting the requirements of 29 CFR 1910 and 1926. The plan must be designed to monitor for and restrict direct worker exposure to impacted soil which may be present at the Site. All workers must be equipped with appropriate personal protective equipment as required and specified in the plan.

The HASP is to be in compliance with applicable federal, state (pursuant to N.J.A.C. 7:26E-1.9), and local requirements. Field activities shall be conducted in accordance with US Department of Labor, Occupational Safety and Health Standards and Regulations. Prior to construction, all utility locations and depths if present will be marked. Site drawings, flags and/or paint will be used to identify buried utilities within the project area.

2.11 COMPLETED CASE INVENTORY DOCUMENT

This Supplemental PFAS Characterization Work Plan is being submitted to the USEPA with copies to the NJDEP as a supplement to the site Corrective Measures program activities, although the Work Plan has been developed to be consistent with NJDEP guidance for PFAS investigations subsequent to the preliminary screening assessment. The results of the effluent testing will be reported directly to the NJDEP pursuant to the site NJPDES discharge permit as described in Section 2.8. A report of the investigation findings will be submitted, as currently scheduled by January 15, 2022, as noted in Section 2.1. There is no separate NJDEP PFAS case established that would lead to the submittal of a Completed Case Inventory document per NJDEP guidance at this time.

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Appendix B - Per-and Polyfluoroalkyl Substances (PFASs) Environmental Media Sampling Standard Operating Procedures (SOP)

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List of Acronyms

AFFF	AQUEOUS FILM FORMING FOAM
BGS	BELOW GROUND SURFACE
CMS	CORRECTIVE MEASURES STUDY
COC	CHAIN OF CUSTODY
DOT	DEPARTMENT OF TRANSPORTATION
ETFE	ETHYLENE TETRAFLUOROETHYLENE
FACILITY	BRIDGEPORT DISPOSAL, LLC
FEP	FLUORINATED ETHYLENE PROPYLENE
GPS	GLOBAL POSITIONING SYSTEM
HDPE	HIGH DENSITY POLYETHYLENE
IDW	INVESTIGATION-DERIVED WASTE
ITRC	INTERSTATE TECHNOLOGY REGULATORY COUNCIL
LA	LEPPERT ASSOCIATES
LDPE	LOW DENSITY POLYETHYLENE
LFPS	LOW FLOW PURGING AND SAMPLING
µG/L	MICROGRAMS PER LITER
MG/KG	MILLIGRAMS PER KILOGRAM
ML/MIN	MILLILITERS PER MINUTE
NJAC	NEW JERSEY ADMINISTRATIVE CODE
NJDEP	NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
OVM	ORGANIC VAPOR MONITOR
PFASS	PER-AND POLYFLUOROALKYL SUBSTANCES
PFCS	POLYFLUORINATED COMPOUNDS
PFOA	PERFLUOROOCTANOIC ACID
PFOS	PERFLUOROOCTANE SULFONATE

PID	PHOTO IONIZATION DETECTOR
PPE	PERSONAL PROTECTIVE EQUIPMENT
PTFE	TEFLON, POLYTETRAFLUOROETHYLENE
PVDF	POLYVINYLIDENE FLUORIDE
QA/QC	QUALITY ASSURANCE/QUALITY CONTROL
SAP	SAMPLING AND ANALYSIS PLAN
SOP	STANDARD OPERATING PROCEDURE
USEPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
VOC	VOLATILE ORGANIC COMPOUND
WQIP	WATER QUALITY INDICATOR PARAMETERS

1 INTRODUCTION

This document presents a regimented Standard Operating Procedure (SOP) for collecting Per- and Polyfluoroalkyl Substances (PFASs) groundwater and soil samples. Due to the high potential for cross-contamination and the extremely low PFASs concentration Reporting Limits required by regulatory agencies, a highly detailed SOP is provided to ensure that Data Quality Objectives are met. This SOP prescribes PFASs constituent media-specific sampling methods, appropriate sampling equipment, and procedures detailing the transport of PFAS samples. The procedures compiled in this SOP are derived from currently available information from the United States Environmental Protection Agency (USEPA), the New Jersey Department of Environmental Protection (NJDEP), and the Interstate Technology and Regulatory Council (ITRC).

2 SAMPLING EQUIPMENT

Because of the ubiquitous nature of PFOS constituents, extra care must be used concerning sampling procedures and equipment that differ from more typical sampling activities. Additional factors must be considered in relating to PFASs behavior and issues associated with potential use of PFASs containing or adsorbing sampling equipment and supplies.

Upon arriving at the site the team must present the proper documentation to be on the site.

2.1 SAMPLING EQUIPMENT AND SUPPLIES

Many materials used in the course of environmental investigation can potentially contain PFASs. There is limited published research or guidance on how certain materials used by field staff affect sample results. Therefore, a conservative approach is recommended to exclude materials known to contain PFASs. Materials to avoid include:

- Teflon, polytetrafluoroethylene (PTFE),
- Waterproof coatings containing (PFAS),
- Food containers,
- Aluminum foil,
- Anything with “fluoro” in the name,
- Fluorinated ethylene propylene (FEP),

- Ethylene tetrafluoroethylene (ETFE), and
- Low density polyethylene (LDPE), polyvinylidene fluoride (PVDF).

Many waterproof coatings contain PFASs, such as Gore-tex treated personal protective equipment (PPE) or most waterproof papers, but some products are waterproofed with acceptable materials such as polyurethane, rubber, or PVC. Individual product specifications should be examined closely. In the case of Tyvek PPE, plain Tyvek does not contain PFASs while coated Tyvek does. In addition, materials incidentally transported to sites may contain PFASs. Typical items containing PFASs may include fast food wrappers or the shiny side of aluminum foil. Due to the ubiquitous nature of PFASs, sampling crews must review all materials used to avoid cross contamination (ITRC, March 2018).

A list of prohibited and acceptable items related to field equipment, field clothing and PPE, sample containers, decontamination and food considerations is provided in Table 1: *PFASs Environmental Medial Sampling Prohibited and Acceptable Items*. A checklist to be used in the field is provided in Table 2: *PFASs Media Sampling Checklist*.

2.1.1 EQUIPMENT CALIBRATION AND CERTIFICATION

As stated in the Field Sampling Procedure Manual (NJDEP, 2005), specifically in Section 6.9.2.2.4 “Laboratory Certification,” the New Jersey Administrative Code (NJAC 7:18) requires that any environmental laboratory* submitting analytical data to the Department, regardless of quality level, must be certified by the Office of Quality Assurance. This applies to those firms using Low Flow Purging Sampling (LFPS) instruments associated with the “analyze immediately” category of water quality indicator parameters (WQIPs) including pH, temperature, and dissolved oxygen, as discussed in Section 3.2: Monitoring Well Sampling Procedure. Regardless of whether the equipment in question is rented or privately owned, the requirement for certification cannot be ignored. All certification documentation must accompany the instrument into the field and accompany all WQIP data submitted to the Department. (*Environmental laboratory is defined as any laboratory, facility, consulting firm, government or private agency, business entity or other person that the Department has authorized, pursuant to N.J.A.C. 7:18, to perform analysis in accordance with the procedures of a given analytical method using a particular technique as set forth in a certain methods reference document and to report the results from the analysis of environmental samples in compliance with a Departmental regulatory program). (NJDEP, 2005, Section 6.9.2.2.4 Laboratory Certification).

Calibration of the probes used to monitor water quality indicator parameters must take place in the field prior to the day's events. Table 3: *Field Instrument and Calibration Data Sheet* will be utilized to record calibration information. As stated above, the Office of Quality Assurance must certify the environmental laboratory (or consulting firm) using probes for pH, dissolved oxygen and temperature measurement. Probe calibration is critical to the accurate and precise measurement of WQIPs.

For warranty purposes, all manufacturers' instructions for proper care and calibration must be followed. Solutions for probe calibration must be held to the temperature of the liquid (groundwater) being measured as temperature correlation is critical in calculating conductivity, dissolved oxygen and pH. Tables and equations to compensate for the difference between ambient groundwater and calibration solution temperature are sometimes provided in the operating manuals or with the calibration solutions. Some instruments are designed with internal features to compensate for this difference in temperature. The respective difference between calibration of conductivity and specific conductivity requires adjustment for groundwater temperature at the time of calibration vs. solution temperature adjusted to 25°C at the time of calibration. For dissolved oxygen, the flow cell itself must be maintained at the temperature of groundwater during calibration. All efforts made to account for proper temperature control of solutions during calibration must be reported to the end user. All steps must be recorded in the field notes. No sampling shall commence until all instruments are calibrated and operating properly.

3 ENVIRONMENTAL MEDIA SAMPLING PROCEDURES

The sampling procedures include all activities associated with the collection of water and soil samples for PFASs screening at the site. Specific sampling protocols are provided in subsections below. Appendix A: *Field Data Sheets* presents two (2) sets of field data forms that are to be completed during sampling: Well Stabilization and Sampling Field Forms. As previously stated, because of the ubiquitous nature of PFASs constituents, extra care must be taken concerning sampling procedures to obtain truly representative media samples.

3.1 GENERAL SAMPLING PROTOCOLS

The following general protocols will be used during all sampling activities conducted as part of the PFASs screening event:

1) Prior to collecting samples for chemical analyses at each location, all sampling instruments and equipment will be thoroughly cleaned in accordance with the steps presented in Section 5: Decontamination Procedures. In additional, all applicable sampling equipment will be calibrated as presented in Section 2.1.1 Equipment Calibration and Certification of this document.
2) Personal Protective Equipment (PPE) will be donned and Personal/Monitoring Environmental Sampling will be conducted as needed.
3) A new pair of disposable nitrile gloves will be used at each sampling location. Additional glove changes will be made if the gloves are observed to be torn, if the gloves are suspected of being soiled from a source other than the sample media, or for any other reason deemed necessary.
4) Containers for the collection of samples and sample preservatives will be used as stipulated by the analytical methods, as described in Section 6.3: Bottle Selection and Sample Amount. All collection containers will be provided by the laboratory and will be prepared using laboratory validated procedures.
5) For screening of concentration levels of PFAS, especially in water samples, the sampler will collect extra volume of sample for each water sample, as presented in Table 4: *PFASs Sampling and Hold Time* and further discussed in Section 6: Request for Analysis.
6) Quality Assurance/Quality Control (QA/QC) samples will be collected as described in Section 4: Quality Assurance/Quality Control Samples. All wastes generated from sampling activities will be collected and containerized for proper disposal as described in Section 3.5: Management of Investigation Derived Waste. These wastes include used PPE, disposable sampling equipment, purge water, and decontamination fluids.
7) All samples and sampling activities will be recorded on loose, non-water proof paper stored on metal field clipboards as described in Section 7: Field Documentation.
8) Samples will be identified using labels affixed to the sample container. Ball point pens (not permanent markers; see Table 1) will used to record the information on the labels as stipulated in Section 8: Labeling.
9) Chain of Custody (COC) forms will be completed as described in Section 9: Chain of Custody Records.

10) After collection and labeling, samples will be immediately iced in laboratory-supplied coolers. If samples are not shipped to the laboratory the same day the samples are collected in the field, additional ice will be placed in the coolers, the coolers will be re-sealed and kept in a designated secure area until they are shipped to the laboratory. Coolers will be prepared for shipment as stipulated in Section 10: Sample Shipping. Samples will be shipped to the designated laboratory under COC procedures as outlined in Section 9.

3.2 MONITORING WELL SAMPLING PROCEDURE

Groundwater samples obtained from monitoring wells will be collected using a low flow purging and sampling (LFPS) technique that allows for the collection of representative groundwater samples from the adjacent formation surrounding the screened section of the compliance well. Low-flow refers to the velocity with which the water enters the pump intake from the surrounding formation in the immediate vicinity of the well screen. The flow rate of the water, which is subsequently discharged at the ground surface, can be controlled by flow regulators or restrictions. By using this method, the sediment around the well is less disturbed and purging is kept to a minimum. The groundwater sampling procedures presented in this SOP were developed in part using the guidance provided in the New Jersey Department of Environmental Protection (NJDEP) Field Sampling Procedures Manual, dated August 2005 (NJDEP, 2005). Low-flow sampling techniques are also utilized during the semi-annual groundwater sampling events.

A peristaltic pump will be used to collect groundwater samples from the monitoring wells. Because the peristaltic pump is not lowered into the well, decontamination of the pump apparatus is not necessary. The inner diameter and total depths of the well need to be known so that the proper equipment can be used.

The flow rate of the water, which is subsequently discharged into containers at the ground surface, can be controlled by flow regulators or restrictions. The objective is to minimize drawdown (less than 4.0 inches) of the water column in the well, avoid disturbance of the stagnant water above the well screen, and draw fresh groundwater through the screen at a rate that minimizes well/sample disturbance. Once the pump rate is established, field parameters are measured using a flow cell meter. After drawdown has stabilized and indicator parameters have

stabilized, water in the screened area can be considered representative of water in the formation and the purging is considered complete. By using this method, the sediment around the well is less disturbed and purging volumes are kept to a minimum.

Silicon or HDPE tubing will be used for attachment to the peristaltic pump and flow cell meters. The inside diameter of tubing should be no greater than three-eighths of an inch (3/8 inches). Quarter-inch (1/4 inches) tubing is preferred. New tubing will be attached to the peristaltic pump before extraction and sampling activities commence at each well location. Flow cell meters will be used to obtain data during well stabilization. “T” or “Y” barbed tube fittings, which may be placed ahead of the flow cells, will be constructed of stainless steel. The sampling order will be conducted from the least to the most impacted well. The steps for sampling the monitoring wells with a peristaltic pump are as follows:

STEP 1: Thoroughly decontaminate any auxiliary equipment before use at each well, following the procedures presented in Section 5: *Decontamination Procedures*.

STEP 2: Open the well and measure the depth to water utilizing a clean electronic water level monitoring device. Using the *Well Stabilization and Sampling Form*s located in Appendix A, record the water level in the well immediately before placement of the tubing, using a marked reference point at the top of the inner well casing on the well. The depth to the top of the water column must be recorded prior to prior to purging.

STEP 3: Before placement in the well, attach new tubing to the pump and flow cell meter for groundwater extraction and sampling activities. To extract and collect groundwater from the wells for PFASs sampling, High Density Polyethylene (HDPE) tubing will be connected to the pump and lowered inside the well. A second, more flexible sterile silicone tubing will be connected with a tube fitting to flow cell meters and will also be used to collect the samples.

STEP 4: The tubing will be placed in the well in such a manner as to insure any disturbance in the well is kept to an absolute minimum. The actual level where the tubing intake is to be suspended must be predetermined. Under no circumstance should the tubing make contact with, or be “bounced” off, the bottom of the well.

STEP 5: Once the tubing is set within the screened interval at the desired location, a clean electronic water-level-monitoring device is lowered approximately 0.3 feet into the water column. To begin purging, the pump should be set at the lowest speed setting and adjusted to slowly increase until water begins to discharge. Start the peristaltic pump at a speed that results in a flow rate in the range of 100.0 to 500.0 ml/min. Pump the initial purge water to waste in order to prevent any fouling of the flow cell meter. Upon initial pump startup, it is good practice to not connect the pump discharge line to the flow cell meter. This will allow the sampler time to monitor drawdown, stabilize the flow rate and prevent fouling of probes by bacteria, sediment, etc. Once drawdown measurements indicate that the flow rate has been controlled and a few minutes (<10.0) have been allowed to clear any unwanted material, the pump discharge line can then be connected to the flow cell.

STEP 6: With the pump running, connect the tubing to the flow cell meter using a tube fitting. Make sure that all air is purged from the tubing and flow cell as the system fills with purge water. For LFPS, the pump speed must remain constant such that flow rates never exceed 500.0ml/min and, once stabilized, the flow rate must not be varied, even during sample collection. If drawdown continues to exceed 0.3 feet, reduce the pump speed until the drawdown has stabilized but do not adjust pump speed to a flow rate below 100.0 ml/min. Flow rates below this level may induce pump stalling and undo the effort to reach stabilization. If drawdown does not come under control at 100.0 ml/min, then a field decision should be rendered as to how far to allow drawdown to continue until sample collection. At no time should evacuation allow any portion of the well screen to be exposed (for wells screened below the water table) or bring the well to dryness.

STEP 7: Record water levels simultaneously with Water Quality Indicator Parameters (WQIP) measurements once every five (5) minutes on the *Well Stabilization and Sampling Forms* located in Appendix A. For groundwater investigations utilizing LFPS, the following parameters must be measured in order to determine when well stability has been achieved prior to sampling.

Water Level Drawdown ..... < 0.3 feet*
pH ..... ± 0.1 unit
Specific Conductance ..... ± 3.0%
Temperature ..... ± 3.0%

Dissolved Oxygen..... ± 10.0%
Turbidity ..... ± 10% for values greater than 1 NTU
ORP/Eh ..... ± 10.0 millivolts
* During pump start-up, drawdown may exceed the 0.3-feet target and then recover as flow-rate adjustments are made.
The respective measurements for the WQIP must fall within the stated range listed above for three (3) consecutive readings. If the anticipated "third" reading of any individual parameter does not fall within the stated range, then the process to achieve three consecutive readings for that parameter must be restarted.

In some cases, it may take considerable time to achieve stabilization of the WQIPs. In other cases, they may never stabilize. However, as provided in USEPA guidance, the following options are available if stability has not been achieved after four (4) hours of purging: 1) continue purging until stabilization occurs, no matter how long it takes; 2) discontinue purging, do not collect a sample and document the attempts to reach stabilization; or 3) discontinue purging, collect a sample and document the attempts to reach stabilization. In situations where WQIPs do not stabilize, the sampler must document that LFPS could not be performed and document in the report how the samples were collected.

For the purposes of this SOP, Option 3 will be used - if WQIPs do not stabilize, samples will be collected, and it will be noted in the report.

STEP 8: Once stability has been attained and recorded, disconnect the flow cell meter and begin sample collection. Do not collect the sample with the meter attached. Collect groundwater samples as indicated in Section 6: *Request for Analysis*.

STEP 9: Collect and record a final temperature measurement, to determine whether pumping activities have increased water temperature in the well.

STEP 10: After all sampling activities are completed at a well, disconnect and discard tubing along with other investigation derived waste (IDW), as presented in Section 3.5: *Management of Investigation Derived Wastes*.

3.3 GROUNDWATER EXTRACTION WELL SAMPLING PROCEDURE

After the monitoring well samples are obtained, samples from groundwater extraction wells will be collected. These wells are considered purged at the time of sampling, and therefore require no further purging prior to sampling. A peristaltic pump will be used to collect groundwater samples from groundwater extraction wells. Prior to sample collection, the pumps that are related to groundwater extraction should be turned off to reduce disturbance within the wells. The basic steps for sampling the abatement well with a peristaltic pump are as follows:

STEP 1: Turn off the pumps that are related to the pump-and-treat system.

STEP 2: Open the well, and utilizing a clean electronic water level monitoring device, record the reading on the supplied field forms.

STEP 3: Attach new HDPE or silicon tubing to the peristaltic pump for groundwater extraction. Decontamination of the peristaltic pump is not necessary, at it is not lowered into the well. Place the tubing in the well for sample extraction.

STEP 4: Turn on the peristaltic pump and collect samples directly from HPDE or silicon tubing into laboratory-cleaned sample bottle, as indicated in Section 6: *Request for Analysis*.

STEP 5: After all sampling activities are completed at a well, disconnect and discard tubing along with other investigation derived waste (IDW), as presented in Section 3.5: *Management of Investigation Derived Wastes*.

Use the well stabilization form located in Appendix A to record other information as applicable to the abatement well location, such as time of arrival at location, sampling personnel, etc.

3.4 SOIL SAMPLING

Sampling of soil will be conducted sequentially, starting with the area suspected to be least (or not at all) contaminated based on previous sampling events and ending with the area suspected to be most contaminated (as per NJDEP, 2005, Section 5: Decontamination Procedures). The basic steps for soil sampling are as follows:

STEP 1: Field personnel will first confirm that the soil location chosen are not covered by capped material such as asphalt or concrete. If the location is capped, another uncapped location will be selected nearby.

STEP 2: Once the location has been selected, field personnel will record that sample location coordinates in the hand-held field device. This device takes readings from a Global Positioning system (GPS) unit using real-time satellite access.

STEP 3: Sheeting made of high density polyethylene (HDPE) material will be laid at the sample location to provide a protective work surface. (Note: low density polyethylene (LDPE) materials cannot be used, refer to Table 1:). A decontamination area will be established adjacent to the work area to provide decontamination of tools used for soil excavation.

STEP 4: A stainless steel hand trowel will be used to collect the soil sample and place the soil into the container.

STEP 5: Sample information for each soil location which includes visual descriptions of the samples will be recorded in the Soil Samples Field Form located in Appendix A: Field Data Sheets.

STEP 6: Equipment will be decontaminated between locations as described in section 5: Decontamination Procedures.

All surface soil samples will be collected to a depth not to exceed 24 inches. Each extracted soil sample will be placed directly in pre-cleaned 8 once HDPE containers with unlined polypropylene caps.

A visual description of the sample will be documented by the sampling technician. There will be no manipulation of samples by sampling technician, to prevent cross-contamination; rather, separation of twigs, rocks, roots, large biota and debris from the sample will be done by the lab prior to analysis. Sample jars will be closed as soon as they are filled, labeled and placed in coolers for preservation under 4°C.

3.5 MANAGEMENT OF INVESTIGATION DERIVED WASTES

The Investigation Derived Waste (IDW) materials that are expected to be produced during the investigation activities include decontamination water, purge water, used PPE, and used disposable sampling equipment. Each of these waste streams will be managed as discussed below:

- All wash and rinse waters associated with decontamination procedures and all purge waters generated during investigation activities will be containerized in storage tanks or Department of Transportation (DOT) approved 55 gallon drums (or equivalent). Purge water and decontamination fluids will be disposed of in the on-site wastewater treatment facility.
- Used PPE and disposable sampling equipment will be discarded in site refuse dumpsters.

4 QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

Quality Assurance/Quality Control (QA/QC) samples will be used to help evaluate the efficacy of the final data. Field quality control samples help evaluate conditions resulting from field activities and are intended to assess potential field contamination and sampling variability. Laboratory quality control samples measure errors associated with the laboratory instruments, sample handling, and monitor for laboratory-induced contamination. Collection and analysis of QA/QC samples are especially important for PFASs analyses because of very low detection limits and widespread use of PFASs containing products. The QA/QC samples described below will be collected in laboratory supplied containers and will be analyzed for the same PFASs parameters as the soil and water samples as presented in Table 5: *Per- and Poly- Fluoroalkl Substances (PFASs) Targeted for Certified Analytical Laboratory Analysis*.

4.1 BLANK SAMPLES AND DUPLICATE SAMPLES

Blank samples include equipment blanks, field blanks, trip blanks, and temperature blanks. In order to have quality assurance duplicate samples will also be taken. These additional samples are to be collected from a chosen sample location. A site-specific number of equipment blanks, field blanks, trip blanks and duplicate samples will be collected. The equipment blanks, field blanks, trip blanks and duplicate samples will be analyzed for the same PFAS parameters as the samples. Temperature blanks (40.0 milliliter VOC vial of deionized water) will be included for each cooler shipment. This blank will be used by the sample custodian to check the temperature

of samples upon receipt at the laboratory. These QA/QC samples will be packaged and sealed in the same manner as non-QC samples. Separate sample identification will be assigned to each QA/QC sample.

4.1.1 EQUIPMENT RINSEATE BLANKS

Equipment rinseate blanks will be collected to evaluate field sampling and decontamination procedures. The rinseate blanks will be collected from laboratory-provided, certified PFASs-free water that has been poured over decontaminated equipment such as a water level meter. One (1) equipment blank will be collected from the stainless-steel spray bottle which contains PFASs-free laboratory supplied water. All reusable equipment will be thoroughly decontaminated following the steps presented in Section 5 *Decontamination Procedures*.

4.2 FIELD BLANKS

Field blanks will be collected to evaluate whether contaminants have been introduced into the samples during the sampling process due to ambient conditions or from sample containers. Field blanks will be obtained by pouring laboratory-certified PFASs-free water into clean sampling containers provided by the analytical laboratory.

4.3 DUPLICATE SAMPLES

A site-specific number of duplicate samples will be collected. When collecting the duplicate sample, bottles with the two different sample identification numbers will be filled simultaneously. Duplicate samples will be packaged and sealed in the same manner as non-QC samples. A separate sample number will be assigned to the sample, and it will be submitted blind to the laboratory. A duplicate sample will be taken for every ten (10) primary samples.

4.4 TRIP BLANKS

A site-specific number of trip blanks will be included in the samples. A trip blank will be collected to evaluate whether contaminants have been introduced during the transportation of the samples and laboratory preparation of the samples. These samples will be provided by the lab in a separate bottle. The sample will be taken and placed in the cooler without opening the sample container.

5 DECONTAMINATION PROCEDURES

All reusable equipment will be cleaned prior to the collection of any samples designated for chemical analyses. Equipment requiring decontamination includes, at a minimum, flow cell meters, stainless steel trowels, water level indicators, and any other non-dedicated equipment used at each sample location. Nitrile gloves will be worn when conducting decontamination procedures. New gloves will be worn for each sample location. Because detergents can include ingredients such as fluoro-surfactants which can compromise samples submitted for PFASs analysis, care must be taken in the selection of detergents used in decontamination procedures. As indicated in Table 1, only Alconox or Liquinox products can be used for decontamination of equipment for this project. Laboratory-certified PFASs-free water shall be used for the final rinse during the decontamination of sampling equipment. (ITRC, March 2018)

Because PFASs sample collection has unique requirements which prohibit or limit the use of most plastic-containing materials, care must be taken when choosing equipment for sampling and decontamination activities. However, it is difficult to eliminate all plastic-containing materials from the event. For example, stainless steel spray bottles will be used for decontamination steps; however, these bottles generally contain plastic parts. Deionized/Distilled water is purchased in plastic containers. Therefore, best practices will be used for decontamination procedures. An equipment blank will be collected from the stainless-steel spray bottle which contains PFASs free laboratory supplied water.

Equipment intended for one-time use will not be decontaminated, but will be packaged for appropriate disposal, as described in Section 3.5: *Management of Investigation Derived Wastes*. Wastewater generated from decontamination activities will be collected and stored properly for analysis and disposal, as also described in Section 3.5. *Management of Investigation Derived Wastes* for various equipment are provided in the following subsections. Because the peristaltic pump is not placed inside the well, decontamination of the pump is not necessary; therefore, these steps are omitted from this SOP.

5.1 DECONTAMINATION OF THE FLOW CELL METER

Flow cell decontamination is important, not only to reduce the potential for cross contamination, but also to ensure data integrity and consistent instrument performance. The cell and probes should be rinsed with distilled/deionized water and then with laboratory-certified PFASs-free water between each well, as accumulation of suspended material may impact probe performance. If the flow cell and probe are exposed to contaminants, use a mild detergent to clean them.

5.2 DECONTAMINATION OF OTHER FIELD EQUIPMENT

All other equipment used for the collection of samples includes, but is not limited to, water level indicators. This equipment will be decontaminated using the following procedures:

1) Lay HDPE protective sheeting down and set up stainless steel metal buckets to collect wash and rinse water.
2) Wash equipment with Alconox or Liquinox detergent using a stainless-steel brush to remove particulate matter or surface film, if any.
3) Using a stainless-steel hand-held pressure sprayer containing only de-ionized/distilled water, rinse thoroughly.
4) Using another stainless-steel hand-held pressure sprayer containing only laboratory-certified PFAS-free water, rinse thoroughly.
5) Visually inspect equipment to verify that it is free of soil particulates and other solid material which may contribute to possible sample cross contamination.
6) Air dry.
7) Wrap equipment in HDPE sheeting material. Keep wrapped during transport to the next sampling site and until equipment is needed. Note: DO NOT use aluminum foil to wrap decontaminated equipment.
8)

Wastewater generated from decontamination activities of this equipment will be collected and transferred to drums and/or an on-site wastewater tank pending final disposal, as per the guidance provided in Section 3.5 *Management of Investigation Derived Wastes*.

6 REQUEST FOR ANALYSIS

This section presents the necessary requirements for the analysis of the PFASs samples. This section details the requirements of the lab for running the samples and the needed analytical methods for running PFASs. Table 4: *PFASs Sampling and Hold Time* presents a summary of the information presented in the following sub-sections.

6.1 LABORATORY CERTIFICATION

As stated in the Field Sampling Procedure Manual (NJDEP, 2005), specifically in Section 6.9.2.2.4 Laboratory Certification, the New Jersey Administrative Code (NJAC 7:18) requires that any environmental laboratory or consulting firm submitting analytical data to the Department, regardless of quality level, must be certified by the Office of Quality Assurance.

6.2 ANALYTICAL METHOD AND CONSTITUENTS REQUESTED

The targeted PFAS constituents for analysis are a new and complete list that has been established to create a full understanding of the PFASs environment for sites. The method is the MLA-110 SGS AXYS' flagship method for PFAS. SGS AXYS Method is the platform for the new EPA 1600 series universal isotope dilution method to measure PFAS in groundwater, surface water, wastewater, leachate, soil, sediment, biosolid and tissue and offers the state-of-the-art in PFAS best practices. This method is already validated and accredited under DoD QSM 5.3 for 33 PFAS. DoD and EPA recently announced that the proposed PFAS list will include 40 PFAS to cover all EPA 537.1, EPA 533 and several additional precursors.

6.3 BOTTLE SELECTION AND SAMPLE AMOUNT

Containers will be supplied by the laboratory and will be certified by the lab to be PFASs-free. HDPE containers with unlined plastic caps will be used, as indicated in revised Table 4*: PFASs Sampling and Hold Time*. To minimize the effects from analyte sorption on sampling containers, the lab must analyze the entire sample, including the sample container rinseate (ITRC, 2018).

Because the concentration level of PFASs in aqueous samples determines whether the whole sample or an aliquot is used in the laboratory preparation, additional volume of each water sample is collected in a separate container, as indicated in revised Table 4: *PFASs Sampling and*

Hold Time. The lab can screen the extra sample for high concentrations without affecting the final sample result.

6.4 SAMPLE RECEIPT AND ANALYTICAL RESULTS

All samples will be shipped under Chain-of-Custody (COC) guidelines to the analytical laboratory, as described in Section 9: *Chain-of-Custody Records*. The laboratory will confirm receipt of the sample containers. The sample extraction and analysis will be performed within the holding times designated by the sample method, as listed in revised Table 4: *PFASs Sampling and Hold Time*. Analytical results will be examined by the laboratory to determine how well it meets established QA/QC practices. The results will then be delivered to Leppert Associates in the agreed upon electronic data deliverable format. A copy of the QA/QC information will be submitted with the final data deliverable package.

7 FIELD DOCUMENTATION

Because of the nature of this sampling program for PFASs analysis, water proof documents cannot be used. Non-treated unbound field data sheets will be used to document on-site activities, as presented in Appendix A: *Field Data Sheets*. On the *Well Stabilization Form*, entries will be made for each sampling location and will be recorded with ball point pens (not permanent markers, see Table 1). Record keeping in the field will be done through a combination of field data sheets and photographs.

Where possible, or should unusual phenomena occur during sampling, photographs of the samples or sampling locations will be taken. These will serve to verify information entered in the field data sheets. Field data sheets will be used to document on-site activities. The following information will be recorded, as appropriate, during the collection of each sample:

- Date,
- Time of arrival at the site (in 2400-hour time format),
- Names of all sampling team members present,
- Sample location and description,
- Site sampling area sketch showing sample location and measured distances,
- Date and time of sample collection,
- Type of sample,

- Type of sampling equipment used,
- Field observations and details related to analysis or integrity of samples (weather conditions, odors, colors, etc.),
- Water depth (if applicable),
- Preliminary sample descriptions
- Lot numbers of sample containers, sample identification numbers and any explanatory codes, and chain of custody form numbers,
- Shipping arrangements, and
- Name of laboratory.

In addition to the sampling information, the following specific information will also be recorded in the field data sheet for each day of sampling:

- Team members and responsibilities,
- Time of arrival/entry on site and time of site departure,
- Other personnel on site,
- Summary of any meetings or discussions with contractor,
- Deviations from the sampling plan, site safety plan, and quality assurance plan,
- Changes in personnel and responsibilities with reasons for the changes, and
- Level of health and safety protection.

For the soil samples, due to color distortion by some polarizing sun-glasses, assessment of soil color will be done with sun glasses removed. The sampling technician will also log any unusual events that may have occurred during sampling, such as possible sample contamination, equipment failure, unusual appearance of sediment integrity, control of vertical descent of the sampler and excessive disturbance of the sediment prior or during sampling. Sampling stations that could not be sampled will be documented with an explanation, along with any deviation from the approved work plan.

8 LABELING

All samples collected will be labeled in a clear and precise way for proper identification in the field and for tracking in the laboratory. The samples will have identifiable and unique numbers. Information on the sample label will include the following:

Site Name:	Project Number:	Sample Interval:
Lab Name:	Sample Name:	Time of Collection:

Date: Sample Number:
Name of Sampler: Analysis:

In addition, containers provided by the lab will contain unique bar-codes that will be scanned upon arrival to the laboratory and during each change in storage or handling.

9 CHAIN OF CUSTODY RECORDS

All samples will be shipped under Chain of Custody (COC) guidelines to the analytical laboratory. COC records will be used to track all samples from the time they are collected to the time of their arrival at the analytical laboratory in the cooler shipment. COCs are to accompany each cooler containing samples.

The COC form will identify the contents of each shipment and maintain the custodial integrity of the samples. A sample is considered to be in someone's custody if it is either in someone's physical possession, in someone's view, locked up, or kept in a secured area with access restricted to only authorized personnel. Until the samples are shipped, the custody of the samples will be the responsibility of the sampling team or a designee. The sampling team leader or designee will sign the COC form in the "relinquished by" box and note date, time, and air bill number, if needed. The sample numbers for all QC samples such as blanks and duplicates will also be documented on this form.

The COC form consists of multiple copies which are distributed to the sampler, shipper and contract laboratory. The sampler and shipper will maintain their copies while another copy is placed in a waterproof enclosure within the sample container. The laboratory, upon receiving the samples, will complete the remaining copy. The laboratory will maintain one copy for its records. A signed COC will be included with the data deliverables package.

Custody seals will be placed across the lids of the coolers any time they are not in someone's possession or view before shipping. The person receiving custody will sign and document the date and time when custody is assumed. All custody seals will be signed and dated. There will be no breaks in the custody chain from the time the sample is collected in the field, to the time it is received, analyzed and disposed of by the laboratory.

If the samples are sent by common carrier, a bill of lading will be used, and copies will be retained as permanent documentation. Commercial carriers are not required to sign the COC form as long as the form is sealed inside the sample cooler and the custody tape remains intact.

10 SAMPLE SHIPPING

After the sample is collected in the appropriate container and labeled, it will be placed in a cooler. Samples will remain in the custody of the field crew at all times prior to shipment and will be kept chilled. If held overnight, cooler temperatures will be checked the following morning, and additional ice provided, if necessary. Samples will be shipped via overnight delivery for delivery to the project laboratory. The specific sample shipment information will be documented in the form provided in Table 6: *Shipping Information Form PFAS Event*. The following outlines the packing procedures for sample shipment:

1) Line the inside of the coolers with a large plastic trash bag.
2) Line the bottom of the cooler with bubble wrap to prevent breakage during shipment.
3) Seal the drain plug of the coolers with clear packing tape to prevent melting ice from leaking out of the cooler.
4) Check screw caps of the sample containers for tightness.
5) Wrap all glass sample containers in bubble wrap to prevent breakage. Note: Sample containers will be made of HDPE material.
6) Enclose the COC in a plastic zip-lock type bag and affix to the underside of the cooler lid.
7) Fill empty space in the cooler with bubble wrap, vermiculite or Styrofoam, if needed. An adsorptive pad should also be placed in the cooler to absorb spills or melting ice.
8) Double bag ice with Ziplock bags and place on top and around the samples to chill them to the correct temperature. NOTE: Only wet ice is to be used. DO NOT use chemical (blue) ice packs.
9) Securely tape the cooler with fiberglass strapping tape, and affix two signed and dated custody seals to the front of each cooler. Clear tape will be placed over the seals to ensure that they are not accidentally broken during shipment.

In addition, the following information regarding the sample shipment will be entered into the field data sheets:

- Total number of samples shipped and sample matrix and

- Carrier name, air bill numbers, and method of shipment (next day, priority, etc).

Upon receipt at the laboratory, the cooler will be inspected by the designated sample custodian. The condition of the cooler and custody seals will be noted on the cooler receipt form and the custodian will document the date and time of receipt of the cooler and sign the COC forms.

The sample custodian then will check the contents of the cooler with those samples listed on the COC form. If damage or discrepancies are noticed, they will be recorded on the cooler receipt form, dated and signed. They will be reported to the laboratory supervisor who will inform the laboratory manager and QA officer.

Sample disposal will be the responsibility of the laboratory.

11 REFERENCES

ITRC, 2018. Site Characterization Considerations, Sampling Precautions, and Laboratory Analytical Methods for Pre- and Polyfluoroalkyl Substances (PFAS). Interstate Technology Regulatory Council, March 2018.

NJDEP, 2005. Field Sampling Procedure Manual. New Jersey Department of Environmental Protection, August 2005.

Appendix C - Laboratory Reports

Prepared by:

Leppert Associates, Inc.

1422 Washington Ave.
Golden, Colorado 80401

January 31st, 2021

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Leppert Associates

Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

SGS Job Number: FA89983

Sampling Dates: 10/14/21 - 10/15/21

Report to:

Leppert Associates
1422 Washington Ave
Golden, CO 80401
rrau@leppertassociates.com

ATTN: Robert Rau

Total number of pages in report: **140**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Andrea Colby 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, UT, VT, WA, WV

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EHS.US.CustomerCare@sgs.com

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SGS North America Inc.

Sample Summary

Leppert Associates

Job No: FA89983

Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA89983-1	10/15/21	15:32	RRAE	10/20/21	AQ	Ground Water	DP-4
FA89983-2	10/15/21	12:08	RRAE	10/20/21	AQ	Ground Water	CAMU-3-I
FA89983-3	10/15/21	09:45	RRAE	10/20/21	AQ	Ground Water	DP-5
FA89983-4	10/15/21	08:45	RRAE	10/20/21	AQ	Ground Water	DUP-2
FA89983-5	10/14/21	13:41	RRAE	10/20/21	AQ	Ground Water	22D
FA89983-6	10/15/21	11:08	RRAE	10/20/21	AQ	Ground Water	CAMU-3-W
FA89983-7	10/15/21	08:51	RRAE	10/20/21	AQ	Equipment Blank	EB-10-15
FA89983-8	10/15/21	08:47	RRAE	10/20/21	AQ	Field Blank Water	FB-10-15
FA89983-9	10/15/21	14:35	RRAE	10/20/21	AQ	Ground Water	W-19
FA89983-10	10/14/21	17:24	RRAE	10/20/21	AQ	Ground Water	88-2-SA
FA89983-11	10/14/21	12:30	RRAE	10/20/21	AQ	Ground Water	33D
FA89983-12	10/14/21	17:30	RRAE	10/20/21	AQ	Ground Water	DUP-3

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SGS North America Inc.

Sample Summary
(continued)

Leppert Associates

Job No: FA89983

Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA89983-13	10/14/21	08:40	RRAE	10/20/21	AQ	Equipment Blank	EB-01
FA89983-14	10/14/21	09:49	RRAE	10/20/21	AQ	Water	STORMWATER-003
FA89983-15	10/14/21	10:08	RRAE	10/20/21	AQ	Ground Water	INFLUENT
FA89983-16	10/14/21	08:43	RRAE	10/20/21	AQ	Field Blank Water	FB-01
FA89983-17	10/14/21	11:00	RRAE	10/20/21	AQ	Ground Water	35-S
FA89983-18	10/14/21	10:15	RRAE	10/20/21	AQ	Ground Water	EFFLUENT
FA89983-19	10/14/21	16:26	RRAE	10/20/21	AQ	Ground Water	88-2-I
FA89983-20	10/14/21	09:37	RRAE	10/20/21	AQ	Water	STORMWATER-002
FA89983-21	10/14/21	10:30	RRAE	10/20/21	AQ	Water	STORMWATER-001
FA89983-22	10/14/21	10:50	RRAE	10/20/21	AQ	Ground Water	DUP-4
FA89983-23	10/14/21	11:33	RRAE	10/20/21	AQ	Ground Water	25-B
FA89983-24	10/14/21	12:13	RRAE	10/20/21	AQ	Ground Water	31D
FA89983-25	10/14/21	09:25	RRAE	10/20/21	SO	Soil	PFAS-SS-103

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SGS North America Inc.

Sample Summary
(continued)

Leppert Associates

Job No: FA89983

Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA89983-26	10/14/21	09:03	RRAE	10/20/21	SO	Soil	PFAS-SS-101
FA89983-27	10/14/21	14:00	RRAE	10/20/21	SO	Soil	PFAS-DUP
FA89983-28	10/14/21	08:50	RRAE	10/20/21	SO	Soil	PFAS-SS-104
FA89983-29	10/14/21	09:15	RRAE	10/20/21	SO	Soil	PFAS-SS-102

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Leppert Associates **Job No:** FA89983

Site: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ **Report Date** 11/8/2021 7:13:44 PM

On 10/20/2021, 27 Sample(s), 0 Trip Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 18.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of FA89983 was Assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method EPA 537M BY ID

Matrix: AQ **Batch ID:** OP88016

Sample(s) FA89983-1MS, FA89983-2DUP were used as the QC samples indicated.

Sample(s) FA89983-10, FA89983-12, FA89983-14, FA89983-15, FA89983-5 have surrogates outside control limits.

FA89983-5 for d3-MeFOSA: Outside control limits.

FA89983-5 for d5-EtFOSA: Outside control limits.

FA89983-5 for d7-MeFOSE: Outside control limits.

FA89983-10 for d3-MeFOSA: Outside control limits.

FA89983-12 for d3-MeFOSA: Outside control limits.

FA89983-12 for d5-EtFOSA: Outside control limits.

FA89983-14 for d3-MeFOSA: Outside control limits.

FA89983-14 for d5-EtFOSA: Outside control limits.

FA89983-14: Dilution required due to matrix interference (ID recovery standard failure).

FA89983-15 for d3-MeFOSA: Outside control limits.

Matrix: AQ **Batch ID:** OP88037

Sample(s) FA89984-1MS, FA89984-2DUP were used as the QC samples indicated.

Sample(s) FA89983-23 have surrogates outside control limits.

FA89983-23: Dilution required due to matrix interference (ID recovery standard failure).

FA89983-23 for d5-EtFOSA: Outside control limits.

FA89983-23 for d3-MeFOSA: Outside control limits.

Matrix: SO **Batch ID:** OP88053

Sample(s) FA89983-25MS, FA89983-25MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 3:3 Fluorotelomer carboxylate, 4:2 Fluorotelomer sulfonate, 5:3 Fluorotelomer carboxylate, 6:2 Fluorotelomer sulfonate, 8:2 Fluorotelomer sulfonate, ADONA, EtFOSAA, HFPO-DA (GenX), MeFOSAA, Perfluorobutanesulfonic acid, Perfluorobutanoic acid, Perfluorodecanesulfonic acid, Perfluorodecanoic acid, Perfluorododecanoic acid, Perfluoroheptanesulfonic acid, Perfluoroheptanoic acid, Perfluorohexanesulfonic acid, Perfluorohexanoic acid, Perfluorononanesulfonic acid, Perfluorononanoic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid, Perfluoropentanesulfonic acid, Perfluoropentanoic acid, Perfluorotetradecanoic acid, Perfluorotridecanoic acid, Perfluoroundecanoic acid, PFOSA are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 3:3 Fluorotelomer carboxylate, MeFOSAA, Perfluorobutanesulfonic acid, Perfluorododecanoic acid, Perfluoroheptanesulfonic acid, Perfluorohexanesulfonic acid, Perfluorohexanoic acid, Perfluorooctanoic acid, Perfluoropentanesulfonic acid, Perfluoropentanoic acid, Perfluorotetradecanoic acid are outside control limits. Probable cause is due to matrix interference.

Sample(s) FA89983-25 have surrogates outside control limits.

FA89983-25 for 13C4-PFHpA: Outside control limits.

FA89983-25 for 13C3-PFHxS: Outside control limits.

FA89983-25 for 13C3-HFPO-DA: Outside control limits.

FA89983-25 for 13C2-4:2FTS: Outside control limits.

FA89983-25 for PFEESA: Associated ID Standard outside control limits, Confirmed by batch QC.

FA89983-25 for Perfluoropentanoic acid: Associated ID Standard outside control limits, Confirmed by batch QC.

FA89983-25 for Perfluoroheptanoic acid: Associated ID Standard outside control limits, Confirmed by batch QC.

FA89983-25 for 13C5-PFPeA: Outside control limits.

FA89983-25 for HFPO-DA (GenX): Associated ID Standard outside control limits, Confirmed by batch QC.

FA89983-25 for 4:2 Fluorotelomer sulfonate: Associated ID Standard outside control limits, Confirmed by batch QC.

FA89983-25 for Perfluorohexanesulfonic acid: Associated ID Standard outside control limits, Confirmed by batch QC.
FA89983-25 for Perfluoroheptanesulfonic acid: Associated ID Standard outside control limits, Confirmed by batch QC.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN89642

Sample(s) FA90209-20DUP were used as the QC samples for Solids, Percent.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

_____
Ariel Hartney, Client Services (signature on file)

Summary of Hits

Job Number: FA89983
Account: Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ
Collected: 10/14/21 thru 10/15/21

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA89983-1	**DP-4**					
Perfluorobutanoic acid		0.0088	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0105	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0174	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.0142	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.0422	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.0271	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0026 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0036 J	0.0040	0.0020	ug/l	EPA 537M BY ID
FA89983-2	**CAMU-3-I**					
Perfluorobutanoic acid		0.0053 J	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0115	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0154	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.0162	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.0444	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.0511	0.0040	0.0020	ug/l	EPA 537M BY ID
FA89983-3	**DP-5**					
Perfluorobutanoic acid		0.0135	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0209	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0187	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.0216	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.0396	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.0564	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0090	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0035 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0214	0.0040	0.0020	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate		0.0340	0.016	0.0040	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate		0.0051 J	0.016	0.0040	ug/l	EPA 537M BY ID
FA89983-4	**DUP-2**					
Perfluorobutanoic acid		0.0127	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0181	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0154	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.0202	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.0368	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.0562	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0086	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0056	0.0040	0.0020	ug/l	EPA 537M BY ID

Summary of Hits

Job Number: FA89983
Account: Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ
Collected: 10/14/21 thru 10/15/21

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA89983-5	**22D**					
Perfluorobutanoic acid		0.0568	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0954	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0972	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.836	0.040	0.020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		2.01	0.040	0.020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		3.34	0.040	0.020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.690	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid		0.0068	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoropentanesulfonic acid		0.0022 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0284	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanesulfonic acid		0.0021 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.164	0.0040	0.0020	ug/l	EPA 537M BY ID
EtFOSAA		0.0081	0.0080	0.0040	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate		0.132	0.016	0.0040	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate		0.0227	0.016	0.0040	ug/l	EPA 537M BY ID
HFPO-DA (GenX)		0.0169	0.0080	0.0040	ug/l	EPA 537M BY ID
FA89983-6	**CAMU-3-W**					
Perfluorobutanoic acid		0.0061 J	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0070	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0068	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.0047	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.0123	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.0659	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.107	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0335	0.0040	0.0020	ug/l	EPA 537M BY ID
FA89983-7	**EB-10-15**					
No hits reported in this sample.						
FA89983-8	**FB-10-15**					
No hits reported in this sample.						
FA89983-9	**W-19**					
Perfluorobutanoic acid		0.0241	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0354	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0462	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.0129	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.0230	0.0040	0.0020	ug/l	EPA 537M BY ID

Summary of Hits

Job Number: FA89983
Account: Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ
Collected: 10/14/21 thru 10/15/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluorononanoic acid		0.0285	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0030 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0052	0.0040	0.0020	ug/l	EPA 537M BY ID
FA89983-10	**88-2-SA**					
Perfluorobutanoic acid		0.0216	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0046	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0224	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		1.25	0.020	0.010	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		1.09	0.020	0.010	ug/l	EPA 537M BY ID
Perfluorononanoic acid		1.42	0.020	0.010	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0526	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid		0.0023 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0079	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0052	0.0040	0.0020	ug/l	EPA 537M BY ID
FA89983-11	**33D**					
Perfluorobutanoic acid		0.0254	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0168	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0256	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.447	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.370	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.882	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0718	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid		0.0025 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0054	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0111	0.0040	0.0020	ug/l	EPA 537M BY ID
FA89983-12	**DUP-3**					
Perfluorobutanoic acid		0.0254	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0164	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0249	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.454	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.367	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.916	0.020	0.010	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0746	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid		0.0021 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0050	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0122	0.0040	0.0020	ug/l	EPA 537M BY ID

Summary of Hits

Job Number: FA89983
Account: Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ
Collected: 10/14/21 thru 10/15/21

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA89983-13	**EB-01**					
No hits reported in this sample.						
FA89983-14	**STORMWATER-003**					
Perfluorobutanoic acid		0.0544	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0975	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0870	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.0349	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.0424	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.0286	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0183	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroundecanoic acid		0.0036 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorododecanoic acid		0.0035 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid		0.0086	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0038 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0391	0.0040	0.0020	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate		0.0301	0.016	0.0040	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate		0.0334	0.016	0.0040	ug/l	EPA 537M BY ID
5:3 Fluorotelomer carboxylate		0.0105 J	0.016	0.0040	ug/l	EPA 537M BY ID
HFPO-DA (GenX)		0.0217	0.0080	0.0040	ug/l	EPA 537M BY ID
FA89983-15	**INFLUENT**					
Perfluorobutanoic acid		0.0532	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0555	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0864	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.585	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		1.41	0.040	0.020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		1.68	0.040	0.020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.257	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid		0.0060	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0161	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0998	0.0040	0.0020	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate		0.0882	0.016	0.0040	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate		0.0323	0.016	0.0040	ug/l	EPA 537M BY ID
5:3 Fluorotelomer carboxylate		0.0063 J	0.016	0.0040	ug/l	EPA 537M BY ID
HFPO-DA (GenX)		0.0553	0.0080	0.0040	ug/l	EPA 537M BY ID
FA89983-16	**FB-01**					
No hits reported in this sample.						

Summary of Hits

Job Number: FA89983
Account: Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ
Collected: 10/14/21 thru 10/15/21

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA89983-17	**35-S**					
Perfluorobutanoic acid		0.0783	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.186	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.129	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.166	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.192	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.287	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0612	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid		0.0035 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoropentanesulfonic acid		0.0022 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0338	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanesulfonic acid		0.0035 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.319	0.0040	0.0020	ug/l	EPA 537M BY ID
4:2 Fluorotelomer sulfonate		0.0084 J	0.016	0.0040	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate		0.340	0.016	0.0040	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate		0.251	0.016	0.0040	ug/l	EPA 537M BY ID
HFPO-DA (GenX)		0.270	0.0080	0.0040	ug/l	EPA 537M BY ID
FA89983-18	**EFFLUENT**					
Perfluorobutanoic acid		0.0525	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0560	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0877	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.593	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		1.43	0.040	0.020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		1.68	0.040	0.020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.261	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid		0.0059	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0166	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.106	0.0040	0.0020	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate		0.0890	0.016	0.0040	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate		0.0326	0.016	0.0040	ug/l	EPA 537M BY ID
5:3 Fluorotelomer carboxylate		0.0065 J	0.016	0.0040	ug/l	EPA 537M BY ID
HFPO-DA (GenX)		0.0562	0.0080	0.0040	ug/l	EPA 537M BY ID
FA89983-19	**88-2-I**					
Perfluorobutanoic acid		0.0160	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0174	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0223	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.483	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.614	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.950	0.020	0.010	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0984	0.0040	0.0020	ug/l	EPA 537M BY ID

Summary of Hits

Job Number: FA89983
Account: Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ
Collected: 10/14/21 thru 10/15/21

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Perfluorobutanesulfonic acid		0.0035 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0087	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0184	0.0040	0.0020	ug/l	EPA 537M BY ID
HFPO-DA (GenX)		0.0167	0.0080	0.0040	ug/l	EPA 537M BY ID
FA89983-20	**STORMWATER-002**					
Perfluorobutanoic acid		0.0160	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0187	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0160	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.0094	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.0135	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.0233	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0054	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0142	0.0040	0.0020	ug/l	EPA 537M BY ID
FA89983-21	**STORMWATER-001**					
Perfluorobutanoic acid		0.0196	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0202	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0271	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.010	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.0064	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.0034 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0029 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0064	0.0040	0.0020	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate		0.0082 J	0.016	0.0040	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate		0.0080 J	0.016	0.0040	ug/l	EPA 537M BY ID
HFPO-DA (GenX)		0.109	0.0080	0.0040	ug/l	EPA 537M BY ID
FA89983-22	**DUP-4**					
Perfluorobutanoic acid		0.0539	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid		0.0966	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid		0.0872	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid		0.0342	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid		0.0419	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid		0.0281	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid		0.0186	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroundecanoic acid		0.0037 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorododecanoic acid		0.0034 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid		0.0087	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid		0.0038 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid		0.0371	0.0040	0.0020	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate		0.0300	0.016	0.0040	ug/l	EPA 537M BY ID

Summary of Hits

Job Number: FA89983
Account: Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ
Collected: 10/14/21 thru 10/15/21

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
8:2 Fluorotelomer sulfonate	0.0343	0.016	0.0040	ug/l	EPA 537M BY ID
5:3 Fluorotelomer carboxylate	0.0105 J	0.016	0.0040	ug/l	EPA 537M BY ID
HFPO-DA (GenX)	0.0227	0.0080	0.0040	ug/l	EPA 537M BY ID
FA89983-23 25-B					
Perfluorobutanoic acid	0.0908	0.0083	0.0042	ug/l	EPA 537M BY ID
Perfluoropentanoic acid	0.104	0.0042	0.0021	ug/l	EPA 537M BY ID
Perfluorohexanoic acid	0.0820	0.0042	0.0021	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid	0.0958	0.0042	0.0021	ug/l	EPA 537M BY ID
Perfluorooctanoic acid	0.158	0.0042	0.0021	ug/l	EPA 537M BY ID
Perfluorononanoic acid	0.239	0.0042	0.0021	ug/l	EPA 537M BY ID
Perfluorodecanoic acid	0.0826	0.0042	0.0021	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid	0.0039 J	0.0042	0.0021	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid	0.0150	0.0042	0.0021	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid	0.131	0.0042	0.0021	ug/l	EPA 537M BY ID
4:2 Fluorotelomer sulfonate	0.0095 J	0.017	0.0042	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate	0.295	0.017	0.0042	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate	0.0931	0.017	0.0042	ug/l	EPA 537M BY ID
5:3 Fluorotelomer carboxylate	0.0150 J	0.017	0.0042	ug/l	EPA 537M BY ID
HFPO-DA (GenX)	0.266	0.0083	0.0042	ug/l	EPA 537M BY ID
FA89983-24 31D					
Perfluorobutanoic acid	0.0198	0.0080	0.0040	ug/l	EPA 537M BY ID
Perfluoropentanoic acid	0.0167	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanoic acid	0.0338	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid	0.131	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanoic acid	0.230	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorononanoic acid	0.367	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorodecanoic acid	0.0490	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid	0.0039 J	0.0040	0.0020	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid	0.0183	0.0040	0.0020	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate	0.0099 J	0.016	0.0040	ug/l	EPA 537M BY ID
HFPO-DA (GenX)	0.0154	0.0080	0.0040	ug/l	EPA 537M BY ID
FA89983-25 PFAS-SS-103					
Perfluorononanoic acid	0.54 J	0.59	0.30	ug/kg	EPA 537M BY ID
Perfluorodecanoic acid	0.58 J	0.59	0.30	ug/kg	EPA 537M BY ID
Perfluoroundecanoic acid	3.0	0.59	0.30	ug/kg	EPA 537M BY ID
Perfluorododecanoic acid	0.41 J	0.59	0.30	ug/kg	EPA 537M BY ID
Perfluorotridecanoic acid	0.48 J	0.59	0.31	ug/kg	EPA 537M BY ID

Summary of Hits

Job Number: FA89983
Account: Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ
Collected: 10/14/21 thru 10/15/21

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA89983-26	**PFAS-SS-101**					
Perfluoroundecanoic acid		0.90	0.59	0.30	ug/kg	EPA 537M BY ID
Perfluorododecanoic acid		0.32 J	0.59	0.30	ug/kg	EPA 537M BY ID
Perfluorotridecanoic acid		0.46 J	0.59	0.31	ug/kg	EPA 537M BY ID
FA89983-27	**PFAS-DUP**					
Perfluoroundecanoic acid		0.79	0.67	0.33	ug/kg	EPA 537M BY ID
Perfluorotridecanoic acid		0.45 J	0.67	0.35	ug/kg	EPA 537M BY ID
FA89983-28	**PFAS-SS-104**					
Perfluorooctanoic acid		0.39 J	0.54	0.27	ug/kg	EPA 537M BY ID
Perfluorononanoic acid		0.57	0.54	0.27	ug/kg	EPA 537M BY ID
Perfluorodecanoic acid		1.9	0.54	0.27	ug/kg	EPA 537M BY ID
Perfluoroundecanoic acid		2.4	0.54	0.27	ug/kg	EPA 537M BY ID
Perfluorododecanoic acid		1.7	0.54	0.27	ug/kg	EPA 537M BY ID
Perfluorotridecanoic acid		1.3	0.54	0.29	ug/kg	EPA 537M BY ID
Perfluorotetradecanoic acid		0.97	0.54	0.27	ug/kg	EPA 537M BY ID
8:2 Fluorotelomer sulfonate		0.99 J	1.1	0.27	ug/kg	EPA 537M BY ID
FA89983-29	**PFAS-SS-102**					
Perfluorodecanoic acid		0.36 J	0.57	0.28	ug/kg	EPA 537M BY ID
Perfluoroundecanoic acid		3.6	0.57	0.28	ug/kg	EPA 537M BY ID
Perfluorododecanoic acid		0.53 J	0.57	0.28	ug/kg	EPA 537M BY ID
Perfluorotridecanoic acid		0.60	0.57	0.30	ug/kg	EPA 537M BY ID

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	DP-4		
Lab Sample ID:	FA89983-1	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21311.D	1	11/02/21 16:25	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0088	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0105	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0174	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0142	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0422	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0271	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	0.0026	0.0040	0.0020	ug/l	J
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0036	0.0040	0.0020	ug/l	J
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DP-4		
Lab Sample ID:	FA89983-1	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	93%		35-135%
	13C5-PFPeA	93%		50-150%
	13C5-PFHxA	98%		50-150%
	13C4-PFHpA	97%		50-150%
	13C8-PFOA	95%		50-150%
	13C9-PFNA	95%		50-150%
	13C6-PFDA	95%		50-150%
	13C7-PFUnDA	95%		40-140%
	13C2-PFDoDA	90%		40-140%
	13C2-PFTeDA	85%		30-130%
	13C3-PFBS	96%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DP-4		
Lab Sample ID:	FA89983-1	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	95%		50-150%
	13C8-PFOS	92%		50-150%
	13C8-FOSA	84%		30-130%
	d3-MeFOSA	15%		10-130%
	d5-EtFOSA	11%		10-130%
	d3-MeFOSAA	90%		40-140%
	d5-EtFOSAA	88%		40-140%
	d7-MeFOSE	47%		10-130%
	d9-EtFOSE	39%		10-130%
	13C2-4:2FTS	93%		50-150%
	13C2-6:2FTS	91%		50-150%
	13C2-8:2FTS	93%		50-150%
	13C3-HFPO-DA	100%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CAMU-3-I		
Lab Sample ID:	FA89983-2	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21313.D	1	11/02/21 17:04	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0053	0.0080	0.0040	ug/l	J
2706-90-3	Perfluoropentanoic acid	0.0115	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0154	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0162	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0444	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0511	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CAMU-3-I		
Lab Sample ID:	FA89983-2	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	94%		35-135%
	13C5-PFPeA	94%		50-150%
	13C5-PFHxA	99%		50-150%
	13C4-PFHpA	96%		50-150%
	13C8-PFOA	95%		50-150%
	13C9-PFNA	95%		50-150%
	13C6-PFDA	93%		50-150%
	13C7-PFUnDA	90%		40-140%
	13C2-PFDoDA	85%		40-140%
	13C2-PFTeDA	86%		30-130%
	13C3-PFBS	96%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CAMU-3-I		
Lab Sample ID:	FA89983-2	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	93%		50-150%
	13C8-PFOS	92%		50-150%
	13C8-FOSA	91%		30-130%
	d3-MeFOSA	52%		10-130%
	d5-EtFOSA	42%		10-130%
	d3-MeFOSAA	82%		40-140%
	d5-EtFOSAA	82%		40-140%
	d7-MeFOSE	86%		10-130%
	d9-EtFOSE	86%		10-130%
	13C2-4:2FTS	91%		50-150%
	13C2-6:2FTS	92%		50-150%
	13C2-8:2FTS	89%		50-150%
	13C3-HFPO-DA	97%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DP-5		
Lab Sample ID:	FA89983-3	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21315.D	1	11/02/21 17:43	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0135	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0209	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0187	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0216	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0396	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0564	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	0.0090	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0035	0.0040	0.0020	ug/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0214	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DP-5		
Lab Sample ID:	FA89983-3	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0340	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0051	0.016	0.0040	ug/l	J
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	93%		35-135%
	13C5-PFPeA	93%		50-150%
	13C5-PFHxA	99%		50-150%
	13C4-PFHpA	98%		50-150%
	13C8-PFOA	97%		50-150%
	13C9-PFNA	99%		50-150%
	13C6-PFDA	97%		50-150%
	13C7-PFUnDA	94%		40-140%
	13C2-PFDoDA	86%		40-140%
	13C2-PFTeDA	87%		30-130%
	13C3-PFBS	94%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DP-5		
Lab Sample ID:	FA89983-3	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	94%		50-150%
	13C8-PFOS	96%		50-150%
	13C8-FOSA	88%		30-130%
	d3-MeFOSA	30%		10-130%
	d5-EtFOSA	23%		10-130%
	d3-MeFOSAA	89%		40-140%
	d5-EtFOSAA	86%		40-140%
	d7-MeFOSE	67%		10-130%
	d9-EtFOSE	60%		10-130%
	13C2-4:2FTS	93%		50-150%
	13C2-6:2FTS	94%		50-150%
	13C2-8:2FTS	96%		50-150%
	13C3-HFPO-DA	98%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2		
Lab Sample ID:	FA89983-4	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21316.D	1	11/02/21 18:02	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0127	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0181	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0154	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0202	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0368	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0562	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	0.0086	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0056	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2		
Lab Sample ID:	FA89983-4	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	89%		35-135%
	13C5-PFPeA	89%		50-150%
	13C5-PFHxA	94%		50-150%
	13C4-PFHpA	94%		50-150%
	13C8-PFOA	93%		50-150%
	13C9-PFNA	93%		50-150%
	13C6-PFDA	94%		50-150%
	13C7-PFUnDA	89%		40-140%
	13C2-PFDoDA	83%		40-140%
	13C2-PFTeDA	82%		30-130%
	13C3-PFBS	91%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-2		
Lab Sample ID:	FA89983-4	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	90%		50-150%
	13C8-PFOS	88%		50-150%
	13C8-FOSA	90%		30-130%
	d3-MeFOSA	66%		10-130%
	d5-EtFOSA	66%		10-130%
	d3-MeFOSAA	88%		40-140%
	d5-EtFOSAA	87%		40-140%
	d7-MeFOSE	96%		10-130%
	d9-EtFOSE	97%		10-130%
	13C2-4:2FTS	90%		50-150%
	13C2-6:2FTS	89%		50-150%
	13C2-8:2FTS	88%		50-150%
	13C3-HFPO-DA	93%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	22D		
Lab Sample ID:	FA89983-5	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21317.D	1	11/02/21 18:21	NG	10/26/21 09:30	OP88016	S4Q293
Run #2	4Q21419.D	10	11/04/21 16:38	NG	10/26/21 09:30	OP88016	S4Q294

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0568	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0954	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0972	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.836 [a]	0.040	0.020	ug/l	
335-67-1	Perfluorooctanoic acid	2.01 [a]	0.040	0.020	ug/l	
375-95-1	Perfluorononanoic acid	3.34 [a]	0.040	0.020	ug/l	
335-76-2	Perfluorodecanoic acid	0.690	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0068	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0022	0.0040	0.0020	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.0284	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0021	0.0040	0.0020	ug/l	J
1763-23-1	Perfluorooctanesulfonic acid	0.164	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND [a]	0.16	0.080	ug/l	
4151-50-2	EtFOSA	ND [a]	0.16	0.080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	0.0081	0.0080	0.0040	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	22D		
Lab Sample ID:	FA89983-5	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND [a]	0.40	0.16	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.132	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0227	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0169	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	68%	87%	35-135%
	13C5-PFPeA	73%	88%	50-150%
	13C5-PFHxA	80%	92%	50-150%
	13C4-PFHpA	76%	90%	50-150%
	13C8-PFOA	80%	90%	50-150%
	13C9-PFNA	87%	92%	50-150%
	13C6-PFDA	89%	91%	50-150%
	13C7-PFUnDA	87%	90%	40-140%
	13C2-PFDoDA	77%	83%	40-140%
	13C2-PFTeDA	66%	80%	30-130%
	13C3-PFBS	80%	93%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	22D		
Lab Sample ID:	FA89983-5	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	77%	87%	50-150%
	13C8-PFOS	82%	91%	50-150%
	13C8-FOSA	67%	81%	30-130%
	d3-MeFOSA	6% [b]	17%	10-130%
	d5-EtFOSA	6% [b]	16%	10-130%
	d3-MeFOSAA	93%	104%	40-140%
	d5-EtFOSAA	90%	108%	40-140%
	d7-MeFOSE	9% [b]	24%	10-130%
	d9-EtFOSE	10%	25%	10-130%
	13C2-4:2FTS	70%	89%	50-150%
	13C2-6:2FTS	88%	94%	50-150%
	13C2-8:2FTS	90%	97%	50-150%
	13C3-HFPO-DA	79%	91%	50-150%

(a) Result is from Run# 2
(b) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CAMU-3-W		
Lab Sample ID:	FA89983-6	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21420.D	1	11/04/21 16:57	NG	10/26/21 09:30	OP88016	S4Q294
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0061	0.0080	0.0040	ug/l	J
2706-90-3	Perfluoropentanoic acid	0.0070	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0068	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0047	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0123	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0659	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	0.107	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0335	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CAMU-3-W		
Lab Sample ID:	FA89983-6	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	92%		35-135%
	13C5-PFPeA	92%		50-150%
	13C5-PFHxA	96%		50-150%
	13C4-PFHpA	97%		50-150%
	13C8-PFOA	96%		50-150%
	13C9-PFNA	98%		50-150%
	13C6-PFDA	99%		50-150%
	13C7-PFUnDA	97%		40-140%
	13C2-PFDoDA	86%		40-140%
	13C2-PFTeDA	83%		30-130%
	13C3-PFBS	95%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CAMU-3-W		
Lab Sample ID:	FA89983-6	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	96%		50-150%
	13C8-PFOS	94%		50-150%
	13C8-FOSA	86%		30-130%
	d3-MeFOSA	19%		10-130%
	d5-EtFOSA	19%		10-130%
	d3-MeFOSAA	106%		40-140%
	d5-EtFOSAA	106%		40-140%
	d7-MeFOSE	39%		10-130%
	d9-EtFOSE	36%		10-130%
	13C2-4:2FTS	92%		50-150%
	13C2-6:2FTS	95%		50-150%
	13C2-8:2FTS	98%		50-150%
	13C3-HFPO-DA	99%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-10-15		
Lab Sample ID:	FA89983-7	**Date Sampled:**	10/15/21
Matrix:	AQ - Equipment Blank	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21321.D	1	11/02/21 19:39	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-10-15		
Lab Sample ID:	FA89983-7	**Date Sampled:**	10/15/21
Matrix:	AQ - Equipment Blank	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	84%		35-135%
	13C5-PFPeA	94%		50-150%
	13C5-PFHxA	101%		50-150%
	13C4-PFHpA	97%		50-150%
	13C8-PFOA	96%		50-150%
	13C9-PFNA	97%		50-150%
	13C6-PFDA	96%		50-150%
	13C7-PFUnDA	92%		40-140%
	13C2-PFDoDA	78%		40-140%
	13C2-PFTeDA	68%		30-130%
	13C3-PFBS	98%		50-150%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-10-15		
Lab Sample ID:	FA89983-7	**Date Sampled:**	10/15/21
Matrix:	AQ - Equipment Blank	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	94%		50-150%
	13C8-PFOS	93%		50-150%
	13C8-FOSA	88%		30-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	78%		10-130%
	d3-MeFOSAA	90%		40-140%
	d5-EtFOSAA	84%		40-140%
	d7-MeFOSE	87%		10-130%
	d9-EtFOSE	89%		10-130%
	13C2-4:2FTS	91%		50-150%
	13C2-6:2FTS	90%		50-150%
	13C2-8:2FTS	92%		50-150%
	13C3-HFPO-DA	97%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FB-10-15		
Lab Sample ID:	FA89983-8	**Date Sampled:**	10/15/21
Matrix:	AQ - Field Blank Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21322.D	1	11/02/21 19:58	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-10-15		
Lab Sample ID:	FA89983-8	**Date Sampled:**	10/15/21
Matrix:	AQ - Field Blank Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		35-135%
	13C5-PFPeA	86%		50-150%
	13C5-PFHxA	91%		50-150%
	13C4-PFHpA	87%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	84%		50-150%
	13C6-PFDA	81%		50-150%
	13C7-PFUnDA	80%		40-140%
	13C2-PFDoDA	73%		40-140%
	13C2-PFTeDA	70%		30-130%
	13C3-PFBS	88%		50-150%

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RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-10-15		
Lab Sample ID:	FA89983-8	**Date Sampled:**	10/15/21
Matrix:	AQ - Field Blank Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	84%		50-150%
	13C8-PFOS	78%		50-150%
	13C8-FOSA	82%		30-130%
	d3-MeFOSA	78%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	73%		40-140%
	d5-EtFOSAA	72%		40-140%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	92%		10-130%
	13C2-4:2FTS	83%		50-150%
	13C2-6:2FTS	82%		50-150%
	13C2-8:2FTS	79%		50-150%
	13C3-HFPO-DA	88%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-19		
Lab Sample ID:	FA89983-9	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21323.D	1	11/02/21 20:18	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0241	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0354	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0462	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0129	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0230	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0285	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	0.0030	0.0040	0.0020	ug/l	J
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0052	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-19		
Lab Sample ID:	FA89983-9	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	86%		35-135%
	13C5-PFPeA	87%		50-150%
	13C5-PFHxA	91%		50-150%
	13C4-PFHpA	91%		50-150%
	13C8-PFOA	95%		50-150%
	13C9-PFNA	95%		50-150%
	13C6-PFDA	97%		50-150%
	13C7-PFUnDA	93%		40-140%
	13C2-PFDoDA	83%		40-140%
	13C2-PFTeDA	74%		30-130%
	13C3-PFBS	93%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-19		
Lab Sample ID:	FA89983-9	**Date Sampled:**	10/15/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	90%		50-150%
	13C8-PFOS	88%		50-150%
	13C8-FOSA	85%		30-130%
	d3-MeFOSA	24%		10-130%
	d5-EtFOSA	20%		10-130%
	d3-MeFOSAA	102%		40-140%
	d5-EtFOSAA	115%		40-140%
	d7-MeFOSE	69%		10-130%
	d9-EtFOSE	67%		10-130%
	13C2-4:2FTS	90%		50-150%
	13C2-6:2FTS	95%		50-150%
	13C2-8:2FTS	103%		50-150%
	13C3-HFPO-DA	89%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	88-2-SA		
Lab Sample ID:	FA89983-10	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21324.D	1	11/02/21 20:37	NG	10/26/21 09:30	OP88016	S4Q293
Run #2	4Q21421.D	5	11/04/21 17:16	NG	10/26/21 09:30	OP88016	S4Q294

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0216	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0046	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0224	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	1.25 [a]	0.020	0.010	ug/l	
335-67-1	Perfluorooctanoic acid	1.09 [a]	0.020	0.010	ug/l	
375-95-1	Perfluorononanoic acid	1.42 [a]	0.020	0.010	ug/l	
335-76-2	Perfluorodecanoic acid	0.0526	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0023	0.0040	0.0020	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0079	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0052	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND [a]	0.080	0.040	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	88-2-SA		
Lab Sample ID:	FA89983-10	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	79%	89%	35-135%
	13C5-PFPeA	84%	89%	50-150%
	13C5-PFHxA	88%	94%	50-150%
	13C4-PFHpA	91%	90%	50-150%
	13C8-PFOA	89%	89%	50-150%
	13C9-PFNA	92%	91%	50-150%
	13C6-PFDA	92%	95%	50-150%
	13C7-PFUnDA	90%	90%	40-140%
	13C2-PFDoDA	83%	83%	40-140%
	13C2-PFTeDA	78%	86%	30-130%
	13C3-PFBS	89%	93%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	88-2-SA		
Lab Sample ID:	FA89983-10	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	89%	93%	50-150%
	13C8-PFOS	87%	92%	50-150%
	13C8-FOSA	73%	78%	30-130%
	d3-MeFOSA	8% [b]	26%	10-130%
	d5-EtFOSA	10%	27%	10-130%
	d3-MeFOSAA	91%	102%	40-140%
	d5-EtFOSAA	89%	100%	40-140%
	d7-MeFOSE	35%	50%	10-130%
	d9-EtFOSE	26%	51%	10-130%
	13C2-4:2FTS	87%	86%	50-150%
	13C2-6:2FTS	85%	88%	50-150%
	13C2-8:2FTS	89%	91%	50-150%
	13C3-HFPO-DA	87%	90%	50-150%

(a) Result is from Run# 2
(b) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	33D		
Lab Sample ID:	FA89983-11	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21422.D	1	11/04/21 17:36	NG	10/26/21 09:30	OP88016	S4Q294
Run #2	4Q21451.D	2	11/05/21 11:56	NG	10/26/21 09:30	OP88016	S4Q295

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0254	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0168	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0256	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.447	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.370	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.882 [a]	0.0080	0.0040	ug/l	
335-76-2	Perfluorodecanoic acid	0.0718	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0025	0.0040	0.0020	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0054	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0111	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	33D		
Lab Sample ID:	FA89983-11	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	79%	84%	35-135%
	13C5-PFPeA	80%	83%	50-150%
	13C5-PFHxA	83%	87%	50-150%
	13C4-PFHpA	83%	87%	50-150%
	13C8-PFOA	90%	88%	50-150%
	13C9-PFNA	93%	92%	50-150%
	13C6-PFDA	93%	94%	50-150%
	13C7-PFUnDA	88%	90%	40-140%
	13C2-PFDoDA	84%	86%	40-140%
	13C2-PFTeDA	84%	92%	30-130%
	13C3-PFBS	86%	86%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	33D		
Lab Sample ID:	FA89983-11	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	83%	88%	50-150%
	13C8-PFOS	87%	90%	50-150%
	13C8-FOSA	84%	81%	30-130%
	d3-MeFOSA	23%	22%	10-130%
	d5-EtFOSA	22%	24%	10-130%
	d3-MeFOSAA	105%	104%	40-140%
	d5-EtFOSAA	110%	110%	40-140%
	d7-MeFOSE	47%	52%	10-130%
	d9-EtFOSE	53%	53%	10-130%
	13C2-4:2FTS	88%	87%	50-150%
	13C2-6:2FTS	92%	89%	50-150%
	13C2-8:2FTS	94%	92%	50-150%
	13C3-HFPO-DA	86%	85%	50-150%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-3		
Lab Sample ID:	FA89983-12	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21326.D	1	11/02/21 21:16	NG	10/26/21 09:30	OP88016	S4Q293
Run #2	4Q21423.D	5	11/04/21 17:55	NG	10/26/21 09:30	OP88016	S4Q294

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0254	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0164	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0249	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.454	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.367	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.916 [a]	0.020	0.010	ug/l	
335-76-2	Perfluorodecanoic acid	0.0746	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0021	0.0040	0.0020	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0050	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0122	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND [a]	0.080	0.040	ug/l	
4151-50-2	EtFOSA	ND [a]	0.080	0.040	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-3		
Lab Sample ID:	FA89983-12	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	76%	87%	35-135%
	13C5-PFPeA	78%	86%	50-150%
	13C5-PFHxA	80%	91%	50-150%
	13C4-PFHpA	80%	91%	50-150%
	13C8-PFOA	88%	87%	50-150%
	13C9-PFNA	89%	92%	50-150%
	13C6-PFDA	91%	95%	50-150%
	13C7-PFUnDA	90%	91%	40-140%
	13C2-PFDoDA	83%	88%	40-140%
	13C2-PFTeDA	77%	90%	30-130%
	13C3-PFBS	86%	88%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-3		
Lab Sample ID:	FA89983-12	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	83%	92%	50-150%
	13C8-PFOS	87%	98%	50-150%
	13C8-FOSA	68%	72%	30-130%
	d3-MeFOSA	4% [b]	18%	10-130%
	d5-EtFOSA	8% [b]	22%	10-130%
	d3-MeFOSAA	95%	104%	40-140%
	d5-EtFOSAA	95%	109%	40-140%
	d7-MeFOSE	16%	38%	10-130%
	d9-EtFOSE	15%	40%	10-130%
	13C2-4:2FTS	87%	90%	50-150%
	13C2-6:2FTS	91%	88%	50-150%
	13C2-8:2FTS	90%	93%	50-150%
	13C3-HFPO-DA	82%	90%	50-150%

(a) Result is from Run# 2
(b) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-01		
Lab Sample ID:	FA89983-13	**Date Sampled:**	10/14/21
Matrix:	AQ - Equipment Blank	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21327.D	1	11/02/21 21:35	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-01		
Lab Sample ID:	FA89983-13	**Date Sampled:**	10/14/21
Matrix:	AQ - Equipment Blank	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	86%		35-135%
	13C5-PFPeA	93%		50-150%
	13C5-PFHxA	97%		50-150%
	13C4-PFHpA	93%		50-150%
	13C8-PFOA	92%		50-150%
	13C9-PFNA	90%		50-150%
	13C6-PFDA	86%		50-150%
	13C7-PFUnDA	83%		40-140%
	13C2-PFDoDA	76%		40-140%
	13C2-PFTeDA	72%		30-130%
	13C3-PFBS	95%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EB-01		
Lab Sample ID:	FA89983-13	**Date Sampled:**	10/14/21
Matrix:	AQ - Equipment Blank	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	90%		50-150%
	13C8-PFOS	82%		50-150%
	13C8-FOSA	89%		30-130%
	d3-MeFOSA	79%		10-130%
	d5-EtFOSA	83%		10-130%
	d3-MeFOSAA	80%		40-140%
	d5-EtFOSAA	79%		40-140%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	94%		10-130%
	13C2-4:2FTS	88%		50-150%
	13C2-6:2FTS	88%		50-150%
	13C2-8:2FTS	84%		50-150%
	13C3-HFPO-DA	93%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORMWATER-003		
Lab Sample ID:	FA89983-14	**Date Sampled:**	10/14/21
Matrix:	AQ - Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21328.D	1	11/02/21 21:54	NG	10/26/21 09:30	OP88016	S4Q293
Run #2 [a]	4Q21424.D	5	11/04/21 18:14	NG	10/26/21 09:30	OP88016	S4Q294

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0544	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0975	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0870	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0349	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0424	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0286	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	0.0183	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0036	0.0040	0.0020	ug/l	J
307-55-1	Perfluorododecanoic acid	0.0035	0.0040	0.0020	ug/l	J
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0086	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0038	0.0040	0.0020	ug/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0391	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND [b]	0.080	0.040	ug/l	
4151-50-2	EtFOSA	ND [b]	0.080	0.040	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORMWATER-003		
Lab Sample ID:	FA89983-14	**Date Sampled:**	10/14/21
Matrix:	AQ - Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0301	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0334	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	0.0105	0.016	0.0040	ug/l	J
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0217	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	75%	87%	35-135%
	13C5-PFPeA	81%	90%	50-150%
	13C5-PFHxA	81%	95%	50-150%
	13C4-PFHpA	85%	92%	50-150%
	13C8-PFOA	89%	91%	50-150%
	13C9-PFNA	89%	94%	50-150%
	13C6-PFDA	92%	95%	50-150%
	13C7-PFUnDA	88%	90%	40-140%
	13C2-PFDoDA	80%	84%	40-140%
	13C2-PFTeDA	73%	82%	30-130%
	13C3-PFBS	86%	93%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORMWATER-003		
Lab Sample ID:	FA89983-14	**Date Sampled:**	10/14/21
Matrix:	AQ - Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	84%	91%	50-150%
	13C8-PFOS	84%	90%	50-150%
	13C8-FOSA	80%	89%	30-130%
	d3-MeFOSA	7% [c]	20%	10-130%
	d5-EtFOSA	8% [c]	24%	10-130%
	d3-MeFOSAA	100%	105%	40-140%
	d5-EtFOSAA	100%	104%	40-140%
	d7-MeFOSE	17%	41%	10-130%
	d9-EtFOSE	13%	38%	10-130%
	13C2-4:2FTS	87%	87%	50-150%
	13C2-6:2FTS	93%	94%	50-150%
	13C2-8:2FTS	92%	93%	50-150%
	13C3-HFPO-DA	85%	93%	50-150%

(a) Dilution required due to matrix interference (ID recovery standard failure).
(b) Result is from Run# 2
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFLUENT		
Lab Sample ID:	FA89983-15	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21329.D	1	11/02/21 22:14	NG	10/26/21 09:30	OP88016	S4Q293
Run #2	4Q21425.D	10	11/04/21 18:34	NG	10/26/21 09:30	OP88016	S4Q294

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0532	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0555	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0864	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.585	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	1.41 [a]	0.040	0.020	ug/l	
375-95-1	Perfluorononanoic acid	1.68 [a]	0.040	0.020	ug/l	
335-76-2	Perfluorodecanoic acid	0.257	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0060	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0161	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0998	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND [a]	0.16	0.080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFLUENT		
Lab Sample ID:	FA89983-15	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0882	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0323	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	0.0063	0.016	0.0040	ug/l	J
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0553	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	79%	97%	35-135%
	13C5-PFPeA	87%	99%	50-150%
	13C5-PFHxA	90%	105%	50-150%
	13C4-PFHpA	92%	100%	50-150%
	13C8-PFOA	94%	98%	50-150%
	13C9-PFNA	100%	105%	50-150%
	13C6-PFDA	102%	105%	50-150%
	13C7-PFUnDA	101%	100%	40-140%
	13C2-PFDoDA	91%	92%	40-140%
	13C2-PFTeDA	83%	95%	30-130%
	13C3-PFBS	91%	102%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	INFLUENT		
Lab Sample ID:	FA89983-15	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	93%	95%	50-150%
	13C8-PFOS	97%	101%	50-150%
	13C8-FOSA	90%	98%	30-130%
	d3-MeFOSA	9% [b]	29%	10-130%
	d5-EtFOSA	10%	32%	10-130%
	d3-MeFOSAA	104%	110%	40-140%
	d5-EtFOSAA	104%	112%	40-140%
	d7-MeFOSE	25%	52%	10-130%
	d9-EtFOSE	22%	58%	10-130%
	13C2-4:2FTS	92%	93%	50-150%
	13C2-6:2FTS	98%	99%	50-150%
	13C2-8:2FTS	102%	104%	50-150%
	13C3-HFPO-DA	93%	103%	50-150%

(a) Result is from Run# 2
(b) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-01		
Lab Sample ID:	FA89983-16	**Date Sampled:**	10/14/21
Matrix:	AQ - Field Blank Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21330.D	1	11/02/21 22:33	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-01		
Lab Sample ID:	FA89983-16	**Date Sampled:**	10/14/21
Matrix:	AQ - Field Blank Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	86%		35-135%
	13C5-PFPeA	92%		50-150%
	13C5-PFHxA	97%		50-150%
	13C4-PFHpA	93%		50-150%
	13C8-PFOA	92%		50-150%
	13C9-PFNA	89%		50-150%
	13C6-PFDA	85%		50-150%
	13C7-PFUnDA	85%		40-140%
	13C2-PFDoDA	79%		40-140%
	13C2-PFTeDA	73%		30-130%
	13C3-PFBS	94%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FB-01		
Lab Sample ID:	FA89983-16	**Date Sampled:**	10/14/21
Matrix:	AQ - Field Blank Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	89%		50-150%
	13C8-PFOS	83%		50-150%
	13C8-FOSA	92%		30-130%
	d3-MeFOSA	91%		10-130%
	d5-EtFOSA	91%		10-130%
	d3-MeFOSAA	86%		40-140%
	d5-EtFOSAA	86%		40-140%
	d7-MeFOSE	96%		10-130%
	d9-EtFOSE	101%		10-130%
	13C2-4:2FTS	89%		50-150%
	13C2-6:2FTS	86%		50-150%
	13C2-8:2FTS	82%		50-150%
	13C3-HFPO-DA	93%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	35-S		
Lab Sample ID:	FA89983-17	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21334.D	1	11/02/21 23:51	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0783	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.186	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.129	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.166	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.192	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.287	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	0.0612	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0035	0.0040	0.0020	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	0.0022	0.0040	0.0020	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.0338	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0035	0.0040	0.0020	ug/l	J
1763-23-1	Perfluorooctanesulfonic acid	0.319	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	35-S		
Lab Sample ID:	FA89983-17	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	0.0084	0.016	0.0040	ug/l	J
27619-97-2	6:2 Fluorotelomer sulfonate	0.340	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.251	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.270	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	77%		35-135%
	13C5-PFPeA	81%		50-150%
	13C5-PFHxA	83%		50-150%
	13C4-PFHpA	86%		50-150%
	13C8-PFOA	90%		50-150%
	13C9-PFNA	90%		50-150%
	13C6-PFDA	93%		50-150%
	13C7-PFUnDA	92%		40-140%
	13C2-PFDoDA	85%		40-140%
	13C2-PFTeDA	81%		30-130%
	13C3-PFBS	87%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	35-S		
Lab Sample ID:	FA89983-17	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	84%		50-150%
	13C8-PFOS	86%		50-150%
	13C8-FOSA	77%		30-130%
	d3-MeFOSA	13%		10-130%
	d5-EtFOSA	12%		10-130%
	d3-MeFOSAA	92%		40-140%
	d5-EtFOSAA	93%		40-140%
	d7-MeFOSE	45%		10-130%
	d9-EtFOSE	40%		10-130%
	13C2-4:2FTS	89%		50-150%
	13C2-6:2FTS	102%		50-150%
	13C2-8:2FTS	100%		50-150%
	13C3-HFPO-DA	88%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	FA89983-18	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21335.D	1	11/03/21 00:10	NG	10/26/21 09:30	OP88016	S4Q293
Run #2	4Q21426.D	10	11/04/21 18:53	NG	10/26/21 09:30	OP88016	S4Q294

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0525	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0560	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0877	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.593	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	1.43 [a]	0.040	0.020	ug/l	
375-95-1	Perfluorononanoic acid	1.68 [a]	0.040	0.020	ug/l	
335-76-2	Perfluorodecanoic acid	0.261	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0059	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0166	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.106	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	FA89983-18	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0890	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0326	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	0.0065	0.016	0.0040	ug/l	J
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0562	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%	95%	35-135%
	13C5-PFPeA	86%	96%	50-150%
	13C5-PFHxA	89%	100%	50-150%
	13C4-PFHpA	90%	95%	50-150%
	13C8-PFOA	92%	93%	50-150%
	13C9-PFNA	96%	100%	50-150%
	13C6-PFDA	96%	98%	50-150%
	13C7-PFUnDA	95%	93%	40-140%
	13C2-PFDoDA	87%	84%	40-140%
	13C2-PFTeDA	82%	89%	30-130%
	13C3-PFBS	91%	100%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	FA89983-18	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	89%	100%	50-150%
	13C8-PFOS	88%	96%	50-150%
	13C8-FOSA	94%	99%	30-130%
	d3-MeFOSA	31%	59%	10-130%
	d5-EtFOSA	29%	61%	10-130%
	d3-MeFOSAA	97%	105%	40-140%
	d5-EtFOSAA	97%	105%	40-140%
	d7-MeFOSE	60%	94%	10-130%
	d9-EtFOSE	70%	95%	10-130%
	13C2-4:2FTS	92%	93%	50-150%
	13C2-6:2FTS	95%	98%	50-150%
	13C2-8:2FTS	96%	98%	50-150%
	13C3-HFPO-DA	91%	102%	50-150%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	88-2-I		
Lab Sample ID:	FA89983-19	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21336.D	1	11/03/21 00:29	NG	10/26/21 09:30	OP88016	S4Q293
Run #2	4Q21427.D	5	11/04/21 19:13	NG	10/26/21 09:30	OP88016	S4Q294

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0160	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0174	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0223	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.483	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.614	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.950 [a]	0.020	0.010	ug/l	
335-76-2	Perfluorodecanoic acid	0.0984	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0035	0.0040	0.0020	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0087	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0184	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	88-2-I		
Lab Sample ID:	FA89983-19	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0167	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	77%	86%	35-135%
	13C5-PFPeA	81%	86%	50-150%
	13C5-PFHxA	85%	92%	50-150%
	13C4-PFHpA	88%	88%	50-150%
	13C8-PFOA	87%	85%	50-150%
	13C9-PFNA	89%	89%	50-150%
	13C6-PFDA	90%	92%	50-150%
	13C7-PFUnDA	88%	89%	40-140%
	13C2-PFDoDA	81%	81%	40-140%
	13C2-PFTeDA	77%	84%	30-130%
	13C3-PFBS	84%	84%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	88-2-I		
Lab Sample ID:	FA89983-19	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	84%	90%	50-150%
	13C8-PFOS	82%	84%	50-150%
	13C8-FOSA	82%	88%	30-130%
	d3-MeFOSA	30%	46%	10-130%
	d5-EtFOSA	28%	48%	10-130%
	d3-MeFOSAA	90%	99%	40-140%
	d5-EtFOSAA	89%	99%	40-140%
	d7-MeFOSE	68%	82%	10-130%
	d9-EtFOSE	67%	82%	10-130%
	13C2-4:2FTS	84%	85%	50-150%
	13C2-6:2FTS	84%	85%	50-150%
	13C2-8:2FTS	87%	87%	50-150%
	13C3-HFPO-DA	85%	86%	50-150%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORMWATER-002		
Lab Sample ID:	FA89983-20	**Date Sampled:**	10/14/21
Matrix:	AQ - Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21337.D	1	11/03/21 00:49	NG	10/26/21 09:30	OP88016	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0160	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0187	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0160	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0094	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0135	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0233	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	0.0054	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0142	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORMWATER-002		
Lab Sample ID:	FA89983-20	**Date Sampled:**	10/14/21
Matrix:	AQ - Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	60%		35-135%
	13C5-PFPeA	71%		50-150%
	13C5-PFHxA	76%		50-150%
	13C4-PFHpA	77%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	88%		50-150%
	13C6-PFDA	90%		50-150%
	13C7-PFUnDA	91%		40-140%
	13C2-PFDoDA	84%		40-140%
	13C2-PFTeDA	68%		30-130%
	13C3-PFBS	78%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORMWATER-002		
Lab Sample ID:	FA89983-20	**Date Sampled:**	10/14/21
Matrix:	AQ - Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	76%		50-150%
	13C8-PFOS	82%		50-150%
	13C8-FOSA	68%		30-130%
	d3-MeFOSA	15%		10-130%
	d5-EtFOSA	14%		10-130%
	d3-MeFOSAA	120%		40-140%
	d5-EtFOSAA	122%		40-140%
	d7-MeFOSE	31%		10-130%
	d9-EtFOSE	32%		10-130%
	13C2-4:2FTS	81%		50-150%
	13C2-6:2FTS	93%		50-150%
	13C2-8:2FTS	99%		50-150%
	13C3-HFPO-DA	78%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORMWATER-001		
Lab Sample ID:	FA89983-21	**Date Sampled:**	10/14/21
Matrix:	AQ - Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21340.D	1	11/03/21 01:47	NG	10/27/21 09:00	OP88037	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0196	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0202	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0271	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.010	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0064	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0034	0.0040	0.0020	ug/l	J
335-76-2	Perfluorodecanoic acid	0.0029	0.0040	0.0020	ug/l	J
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0064	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORMWATER-001		
Lab Sample ID:	FA89983-21	**Date Sampled:**	10/14/21
Matrix:	AQ - Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0082	0.016	0.0040	ug/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	0.0080	0.016	0.0040	ug/l	J
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.109	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	77%		35-135%
	13C5-PFPeA	81%		50-150%
	13C5-PFHxA	82%		50-150%
	13C4-PFHpA	85%		50-150%
	13C8-PFOA	92%		50-150%
	13C9-PFNA	90%		50-150%
	13C6-PFDA	93%		50-150%
	13C7-PFUnDA	92%		40-140%
	13C2-PFDoDA	86%		40-140%
	13C2-PFTeDA	78%		30-130%
	13C3-PFBS	87%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STORMWATER-001		
Lab Sample ID:	FA89983-21	**Date Sampled:**	10/14/21
Matrix:	AQ - Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	84%		50-150%
	13C8-PFOS	83%		50-150%
	13C8-FOSA	82%		30-130%
	d3-MeFOSA	21%		10-130%
	d5-EtFOSA	16%		10-130%
	d3-MeFOSAA	114%		40-140%
	d5-EtFOSAA	114%		40-140%
	d7-MeFOSE	29%		10-130%
	d9-EtFOSE	25%		10-130%
	13C2-4:2FTS	89%		50-150%
	13C2-6:2FTS	98%		50-150%
	13C2-8:2FTS	98%		50-150%
	13C3-HFPO-DA	86%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-4		
Lab Sample ID:	FA89983-22	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21341.D	1	11/03/21 02:06	NG	10/27/21 09:00	OP88037	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0539	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0966	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0872	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0342	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.0419	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.0281	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	0.0186	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0037	0.0040	0.0020	ug/l	J
307-55-1	Perfluorododecanoic acid	0.0034	0.0040	0.0020	ug/l	J
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0087	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0038	0.0040	0.0020	ug/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0371	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-4		
Lab Sample ID:	FA89983-22	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0300	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0343	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	0.0105	0.016	0.0040	ug/l	J
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0227	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	77%		35-135%
	13C5-PFPeA	80%		50-150%
	13C5-PFHxA	80%		50-150%
	13C4-PFHpA	85%		50-150%
	13C8-PFOA	88%		50-150%
	13C9-PFNA	88%		50-150%
	13C6-PFDA	89%		50-150%
	13C7-PFUnDA	88%		40-140%
	13C2-PFDoDA	81%		40-140%
	13C2-PFTeDA	77%		30-130%
	13C3-PFBS	85%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-4		
Lab Sample ID:	FA89983-22	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	80%		50-150%
	13C8-PFOS	82%		50-150%
	13C8-FOSA	86%		30-130%
	d3-MeFOSA	26%		10-130%
	d5-EtFOSA	20%		10-130%
	d3-MeFOSAA	99%		40-140%
	d5-EtFOSAA	101%		40-140%
	d7-MeFOSE	39%		10-130%
	d9-EtFOSE	35%		10-130%
	13C2-4:2FTS	86%		50-150%
	13C2-6:2FTS	93%		50-150%
	13C2-8:2FTS	91%		50-150%
	13C3-HFPO-DA	83%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-B		
Lab Sample ID:	FA89983-23	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21342.D	1	11/03/21 02:25	NG	10/27/21 09:00	OP88037	S4Q293
Run #2 [a]	4Q21428.D	5	11/04/21 19:32	NG	10/27/21 09:00	OP88037	S4Q294

	Initial Volume	Final Volume
Run #1	120 ml	1.0 ml
Run #2	120 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0908	0.0083	0.0042	ug/l	
2706-90-3	Perfluoropentanoic acid	0.104	0.0042	0.0021	ug/l	
307-24-4	Perfluorohexanoic acid	0.0820	0.0042	0.0021	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0958	0.0042	0.0021	ug/l	
335-67-1	Perfluorooctanoic acid	0.158	0.0042	0.0021	ug/l	
375-95-1	Perfluorononanoic acid	0.239	0.0042	0.0021	ug/l	
335-76-2	Perfluorodecanoic acid	0.0826	0.0042	0.0021	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0042	0.0021	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0042	0.0021	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0042	0.0021	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0042	0.0021	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0039	0.0042	0.0021	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0042	0.0021	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0150	0.0042	0.0021	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0042	0.0021	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.131	0.0042	0.0021	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0042	0.0021	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0042	0.0021	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0083	0.0042	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0083	0.0042	ug/l	
31506-32-8	MeFOSA	ND [b]	0.083	0.042	ug/l	
4151-50-2	EtFOSA	ND [b]	0.083	0.042	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0083	0.0042	ug/l	
2991-50-6	EtFOSAA	ND	0.0083	0.0042	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-B		
Lab Sample ID:	FA89983-23	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.042	0.017	ug/l	
1691-99-2	EtFOSE	ND	0.042	0.017	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	0.0095	0.017	0.0042	ug/l	J
27619-97-2	6:2 Fluorotelomer sulfonate	0.295	0.017	0.0042	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0931	0.017	0.0042	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.017	0.0042	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	0.0150	0.017	0.0042	ug/l	J
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.017	0.0042	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.017	0.0042	ug/l	
863090-89-5	PFMBA	ND	0.017	0.0042	ug/l	
151772-58-6	NFDHA	ND	0.017	0.0042	ug/l	
113507-82-7	PFEESA	ND	0.017	0.0042	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.266	0.0083	0.0042	ug/l	
919005-14-4	ADONA	ND	0.017	0.0042	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.017	0.0042	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.017	0.0042	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	75%	92%	35-135%
	13C5-PFPeA	81%	94%	50-150%
	13C5-PFHxA	82%	99%	50-150%
	13C4-PFHpA	85%	96%	50-150%
	13C8-PFOA	91%	95%	50-150%
	13C9-PFNA	90%	97%	50-150%
	13C6-PFDA	93%	100%	50-150%
	13C7-PFUnDA	91%	95%	40-140%
	13C2-PFDoDA	83%	87%	40-140%
	13C2-PFTeDA	76%	87%	30-130%
	13C3-PFBS	87%	94%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	25-B		
Lab Sample ID:	FA89983-23	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	83%	97%	50-150%
	13C8-PFOS	83%	97%	50-150%
	13C8-FOSA	66%	78%	30-130%
	d3-MeFOSA	7% [c]	21%	10-130%
	d5-EtFOSA	8% [c]	22%	10-130%
	d3-MeFOSAA	96%	105%	40-140%
	d5-EtFOSAA	94%	103%	40-140%
	d7-MeFOSE	23%	46%	10-130%
	d9-EtFOSE	20%	45%	10-130%
	13C2-4:2FTS	88%	94%	50-150%
	13C2-6:2FTS	101%	105%	50-150%
	13C2-8:2FTS	96%	99%	50-150%
	13C3-HFPO-DA	86%	98%	50-150%

(a) Dilution required due to matrix interference (ID recovery standard failure).
(b) Result is from Run# 2
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31D		
Lab Sample ID:	FA89983-24	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21343.D	1	11/03/21 02:45	NG	10/27/21 09:00	OP88037	S4Q293
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0198	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0167	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	0.0338	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	0.131	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	0.230	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	0.367	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	0.0490	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0039	0.0040	0.0020	ug/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0183	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31D		
Lab Sample ID:	FA89983-24	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0099	0.016	0.0040	ug/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0154	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		35-135%
	13C5-PFPeA	82%		50-150%
	13C5-PFHxA	87%		50-150%
	13C4-PFHpA	88%		50-150%
	13C8-PFOA	86%		50-150%
	13C9-PFNA	85%		50-150%
	13C6-PFDA	83%		50-150%
	13C7-PFUnDA	80%		40-140%
	13C2-PFDoDA	76%		40-140%
	13C2-PFTeDA	68%		30-130%
	13C3-PFBS	87%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	31D		
Lab Sample ID:	FA89983-24	**Date Sampled:**	10/14/21
Matrix:	AQ - Ground Water	**Date Received:**	10/20/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	83%		50-150%
	13C8-PFOS	80%		50-150%
	13C8-FOSA	69%		30-130%
	d3-MeFOSA	14%		10-130%
	d5-EtFOSA	12%		10-130%
	d3-MeFOSAA	79%		40-140%
	d5-EtFOSAA	79%		40-140%
	d7-MeFOSE	46%		10-130%
	d9-EtFOSE	39%		10-130%
	13C2-4:2FTS	85%		50-150%
	13C2-6:2FTS	84%		50-150%
	13C2-8:2FTS	80%		50-150%
	13C3-HFPO-DA	86%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	PFAS-SS-103		
Lab Sample ID:	FA89983-25	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	80.2
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21393.D	1	11/03/21 19:38	NG	10/28/21 06:30	OP88053	S4Q293
Run #2							

	Initial Weight	Final Volume
Run #1	2.11 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid [a]	ND	0.59	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.59	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid [a]	ND	0.59	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.59	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	0.54	0.59	0.30	ug/kg	J
335-76-2	Perfluorodecanoic acid	0.58	0.59	0.30	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	3.0	0.59	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	0.41	0.59	0.30	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.48	0.59	0.31	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.59	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.59	0.30	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.59	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid [a]	ND	0.59	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid [a]	ND	0.59	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.59	0.30	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.59	0.30	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.59	0.30	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.59	0.30	ug/kg	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.59	0.30	ug/kg	
31506-32-8	MeFOSA	ND	1.2	0.59	ug/kg	
4151-50-2	EtFOSA	ND	1.2	0.59	ug/kg	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.59	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.59	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SS-103		
Lab Sample ID:	FA89983-25	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	80.2
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	3.0	1.2	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.2	ug/kg	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate [a]	ND	1.2	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	1.2	0.30	ug/kg	
863090-89-5	PFMBA	ND	1.2	0.30	ug/kg	
151772-58-6	NFDHA	ND	1.2	0.30	ug/kg	
113507-82-7	PFEESA [a]	ND	1.2	0.30	ug/kg	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX) [a]	ND	1.2	0.30	ug/kg	
919005-14-4	ADONA	ND	0.59	0.30	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.59	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.59	0.31	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	49%		40-140%
	13C5-PFPeA	47% [b]		50-150%
	13C5-PFHxA	50%		50-150%
	13C4-PFHpA	48% [b]		50-150%
	13C8-PFOA	50%		50-150%
	13C9-PFNA	51%		50-150%
	13C6-PFDA	54%		50-150%
	13C7-PFUnDA	51%		40-140%
	13C2-PFDoDA	51%		40-140%
	13C2-PFTeDA	51%		30-130%
	13C3-PFBS	50%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SS-103		
Lab Sample ID:	FA89983-25	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	80.2
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	49% [b]		50-150%
	13C8-PFOS	52%		50-150%
	13C8-FOSA	60%		30-130%
	d3-MeFOSA	56%		10-140%
	d5-EtFOSA	54%		10-140%
	d3-MeFOSAA	50%		40-140%
	d5-EtFOSAA	51%		40-140%
	d7-MeFOSE	53%		10-130%
	d9-EtFOSE	55%		10-130%
	13C2-4:2FTS	47% [b]		50-150%
	13C2-6:2FTS	50%		50-150%
	13C2-8:2FTS	55%		50-150%
	13C3-HFPO-DA	48% [b]		50-150%

(a) Associated ID Standard outside control limits, Confirmed by batch QC.
(b) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	PFAS-SS-101		
Lab Sample ID:	FA89983-26	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	83.1
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21396.D	1	11/03/21 20:36	NG	10/28/21 06:30	OP88053	S4Q293
Run #2							

	Initial Weight	Final Volume
Run #1	2.03 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.2	0.45	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.59	0.30	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.59	0.30	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.59	0.30	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.59	0.30	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.59	0.30	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.59	0.30	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.90	0.59	0.30	ug/kg	
307-55-1	Perfluorododecanoic acid	0.32	0.59	0.30	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.46	0.59	0.31	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.59	0.30	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.59	0.30	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.59	0.30	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.59	0.30	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.59	0.30	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.59	0.30	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.59	0.30	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.59	0.30	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.59	0.30	ug/kg	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.59	0.30	ug/kg	
31506-32-8	MeFOSA	ND	1.2	0.59	ug/kg	
4151-50-2	EtFOSA	ND	1.2	0.59	ug/kg	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.2	0.59	ug/kg	
2991-50-6	EtFOSAA	ND	1.2	0.59	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SS-101		
Lab Sample ID:	FA89983-26	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	83.1
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	3.0	1.2	ug/kg	
1691-99-2	EtFOSE	ND	3.0	1.2	ug/kg	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.2	0.30	ug/kg	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	1.2	0.30	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	1.2	0.30	ug/kg	
863090-89-5	PFMBA	ND	1.2	0.30	ug/kg	
151772-58-6	NFDHA	ND	1.2	0.30	ug/kg	
113507-82-7	PFEESA	ND	1.2	0.30	ug/kg	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	1.2	0.30	ug/kg	
919005-14-4	ADONA	ND	0.59	0.30	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.59	0.34	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.59	0.31	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	76%		40-140%
	13C5-PFPeA	74%		50-150%
	13C5-PFHxA	77%		50-150%
	13C4-PFHpA	74%		50-150%
	13C8-PFOA	76%		50-150%
	13C9-PFNA	80%		50-150%
	13C6-PFDA	81%		50-150%
	13C7-PFUnDA	77%		40-140%
	13C2-PFDoDA	74%		40-140%
	13C2-PFTeDA	73%		30-130%
	13C3-PFBS	75%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SS-101		
Lab Sample ID:	FA89983-26	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	83.1
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	74%		50-150%
	13C8-PFOS	79%		50-150%
	13C8-FOSA	85%		30-130%
	d3-MeFOSA	79%		10-140%
	d5-EtFOSA	73%		10-140%
	d3-MeFOSAA	87%		40-140%
	d5-EtFOSAA	91%		40-140%
	d7-MeFOSE	81%		10-130%
	d9-EtFOSE	70%		10-130%
	13C2-4:2FTS	71%		50-150%
	13C2-6:2FTS	74%		50-150%
	13C2-8:2FTS	78%		50-150%
	13C3-HFPO-DA	71%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-DUP		
Lab Sample ID:	FA89983-27	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	72.9
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21397.D	1	11/03/21 20:55	NG	10/28/21 06:30	OP88053	S4Q293
Run #2							

	Initial Weight	Final Volume
Run #1	2.06 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.3	0.51	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.67	0.33	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.67	0.33	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.67	0.33	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.67	0.33	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.67	0.33	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.67	0.33	ug/kg	
2058-94-8	Perfluoroundecanoic acid	0.79	0.67	0.33	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.67	0.33	ug/kg	
72629-94-8	Perfluorotridecanoic acid	0.45	0.67	0.35	ug/kg	J
376-06-7	Perfluorotetradecanoic acid	ND	0.67	0.33	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.67	0.33	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.67	0.33	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.67	0.33	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.67	0.33	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.67	0.33	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.67	0.33	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.67	0.33	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.67	0.33	ug/kg	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.67	0.33	ug/kg	
31506-32-8	MeFOSA	ND	1.3	0.67	ug/kg	
4151-50-2	EtFOSA	ND	1.3	0.67	ug/kg	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.3	0.67	ug/kg	
2991-50-6	EtFOSAA	ND	1.3	0.67	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-DUP		
Lab Sample ID:	FA89983-27	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	72.9
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	3.3	1.3	ug/kg	
1691-99-2	EtFOSE	ND	3.3	1.3	ug/kg	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.3	0.33	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.3	0.33	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.3	0.33	ug/kg	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.3	0.33	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	1.3	0.33	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	1.3	0.33	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	1.3	0.33	ug/kg	
863090-89-5	PFMBA	ND	1.3	0.33	ug/kg	
151772-58-6	NFDHA	ND	1.3	0.33	ug/kg	
113507-82-7	PFEESA	ND	1.3	0.33	ug/kg	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	1.3	0.33	ug/kg	
919005-14-4	ADONA	ND	0.67	0.33	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.67	0.39	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.67	0.35	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	80%		40-140%
	13C5-PFPeA	77%		50-150%
	13C5-PFHxA	80%		50-150%
	13C4-PFHpA	78%		50-150%
	13C8-PFOA	79%		50-150%
	13C9-PFNA	82%		50-150%
	13C6-PFDA	83%		50-150%
	13C7-PFUnDA	79%		40-140%
	13C2-PFDoDA	77%		40-140%
	13C2-PFTeDA	74%		30-130%
	13C3-PFBS	78%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-DUP		
Lab Sample ID:	FA89983-27	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	72.9
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	79%		50-150%
	13C8-PFOS	85%		50-150%
	13C8-FOSA	85%		30-130%
	d3-MeFOSA	76%		10-140%
	d5-EtFOSA	62%		10-140%
	d3-MeFOSAA	92%		40-140%
	d5-EtFOSAA	94%		40-140%
	d7-MeFOSE	72%		10-130%
	d9-EtFOSE	62%		10-130%
	13C2-4:2FTS	75%		50-150%
	13C2-6:2FTS	79%		50-150%
	13C2-8:2FTS	80%		50-150%
	13C3-HFPO-DA	73%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SS-104		
Lab Sample ID:	FA89983-28	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	87.5
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21398.D	1	11/03/21 21:15	NG	10/28/21 06:30	OP88053	S4Q293
Run #2							

	Initial Weight	Final Volume
Run #1	2.12 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.41	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.54	0.27	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.54	0.27	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.54	0.27	ug/kg	
335-67-1	Perfluorooctanoic acid	0.39	0.54	0.27	ug/kg	J
375-95-1	Perfluorononanoic acid	0.57	0.54	0.27	ug/kg	
335-76-2	Perfluorodecanoic acid	1.9	0.54	0.27	ug/kg	
2058-94-8	Perfluoroundecanoic acid	2.4	0.54	0.27	ug/kg	
307-55-1	Perfluorododecanoic acid	1.7	0.54	0.27	ug/kg	
72629-94-8	Perfluorotridecanoic acid	1.3	0.54	0.29	ug/kg	
376-06-7	Perfluorotetradecanoic acid	0.97	0.54	0.27	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.54	0.27	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.54	0.27	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.54	0.27	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.54	0.27	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.54	0.27	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.54	0.27	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.54	0.27	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.54	0.27	ug/kg	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.54	0.27	ug/kg	
31506-32-8	MeFOSA	ND	1.1	0.54	ug/kg	
4151-50-2	EtFOSA	ND	1.1	0.54	ug/kg	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.54	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.54	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SS-104		
Lab Sample ID:	FA89983-28	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	87.5
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	2.7	1.1	ug/kg	
1691-99-2	EtFOSE	ND	2.7	1.1	ug/kg	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.27	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	0.99	1.1	0.27	ug/kg	J
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	1.1	0.27	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	1.1	0.27	ug/kg	
863090-89-5	PFMBA	ND	1.1	0.27	ug/kg	
151772-58-6	NFDHA	ND	1.1	0.27	ug/kg	
113507-82-7	PFEESA	ND	1.1	0.27	ug/kg	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.27	ug/kg	
919005-14-4	ADONA	ND	0.54	0.27	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.54	0.31	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.54	0.28	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	72%		40-140%
	13C5-PFPeA	69%		50-150%
	13C5-PFHxA	73%		50-150%
	13C4-PFHpA	70%		50-150%
	13C8-PFOA	71%		50-150%
	13C9-PFNA	72%		50-150%
	13C6-PFDA	76%		50-150%
	13C7-PFUnDA	74%		40-140%
	13C2-PFDoDA	72%		40-140%
	13C2-PFTeDA	63%		30-130%
	13C3-PFBS	68%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SS-104		
Lab Sample ID:	FA89983-28	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	87.5
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	69%		50-150%
	13C8-PFOS	73%		50-150%
	13C8-FOSA	80%		30-130%
	d3-MeFOSA	80%		10-140%
	d5-EtFOSA	74%		10-140%
	d3-MeFOSAA	85%		40-140%
	d5-EtFOSAA	87%		40-140%
	d7-MeFOSE	78%		10-130%
	d9-EtFOSE	79%		10-130%
	13C2-4:2FTS	66%		50-150%
	13C2-6:2FTS	70%		50-150%
	13C2-8:2FTS	76%		50-150%
	13C3-HFPO-DA	68%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SS-102		
Lab Sample ID:	FA89983-29	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	87.9
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4Q21399.D	1	11/03/21 21:34	NG	10/28/21 06:30	OP88053	S4Q293
Run #2							

	Initial Weight	Final Volume
Run #1	2.01 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	1.1	0.43	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.57	0.28	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.57	0.28	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.57	0.28	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.57	0.28	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.57	0.28	ug/kg	
335-76-2	Perfluorodecanoic acid	0.36	0.57	0.28	ug/kg	J
2058-94-8	Perfluoroundecanoic acid	3.6	0.57	0.28	ug/kg	
307-55-1	Perfluorododecanoic acid	0.53	0.57	0.28	ug/kg	J
72629-94-8	Perfluorotridecanoic acid	0.60	0.57	0.30	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.57	0.28	ug/kg	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.57	0.28	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.57	0.28	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.57	0.28	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.57	0.28	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.57	0.28	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.57	0.28	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.57	0.28	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.57	0.28	ug/kg	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.57	0.28	ug/kg	
31506-32-8	MeFOSA	ND	1.1	0.57	ug/kg	
4151-50-2	EtFOSA	ND	1.1	0.57	ug/kg	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	1.1	0.57	ug/kg	
2991-50-6	EtFOSAA	ND	1.1	0.57	ug/kg	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SS-102		
Lab Sample ID:	FA89983-29	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	87.9
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	2.8	1.1	ug/kg	
1691-99-2	EtFOSE	ND	2.8	1.1	ug/kg	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.1	0.28	ug/kg	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.1	0.28	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	1.1	0.28	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	1.1	0.28	ug/kg	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	1.1	0.28	ug/kg	
863090-89-5	PFMBA	ND	1.1	0.28	ug/kg	
151772-58-6	NFDHA	ND	1.1	0.28	ug/kg	
113507-82-7	PFEESA	ND	1.1	0.28	ug/kg	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	1.1	0.28	ug/kg	
919005-14-4	ADONA	ND	0.57	0.28	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.57	0.33	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.57	0.29	ug/kg	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	64%		40-140%
	13C5-PFPeA	62%		50-150%
	13C5-PFHxA	64%		50-150%
	13C4-PFHpA	63%		50-150%
	13C8-PFOA	65%		50-150%
	13C9-PFNA	68%		50-150%
	13C6-PFDA	70%		50-150%
	13C7-PFUnDA	69%		40-140%
	13C2-PFDoDA	68%		40-140%
	13C2-PFTeDA	62%		30-130%
	13C3-PFBS	64%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SS-102		
Lab Sample ID:	FA89983-29	**Date Sampled:**	10/14/21
Matrix:	SO - Soil	**Date Received:**	10/20/21
Method:	EPA 537M BY ID IN HOUSE	**Percent Solids:**	87.9
Project:	Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	65%		50-150%
	13C8-PFOS	68%		50-150%
	13C8-FOSA	72%		30-130%
	d3-MeFOSA	78%		10-140%
	d5-EtFOSA	67%		10-140%
	d3-MeFOSAA	79%		40-140%
	d5-EtFOSAA	81%		40-140%
	d7-MeFOSE	65%		10-130%
	d9-EtFOSE	64%		10-130%
	13C2-4:2FTS	62%		50-150%
	13C2-6:2FTS	64%		50-150%
	13C2-8:2FTS	71%		50-150%
	13C3-HFPO-DA	62%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
4:2 Fluorotelomer sulfonate	757124-72-4	EPA 537M BY ID	AQ	Certified by SOP MS014
4:2 Fluorotelomer sulfonate	757124-72-4	EPA 537M BY ID	SO	Certified by SOP MS014
6:2 Fluorotelomer sulfonate	27619-97-2	EPA 537M BY ID	AQ	Certified by SOP MS014
6:2 Fluorotelomer sulfonate	27619-97-2	EPA 537M BY ID	SO	Certified by SOP MS014
8:2 Fluorotelomer sulfonate	39108-34-4	EPA 537M BY ID	AQ	Certified by SOP MS014
8:2 Fluorotelomer sulfonate	39108-34-4	EPA 537M BY ID	SO	Certified by SOP MS014
ADONA	919005-14-4	EPA 537M BY ID	AQ	Certified by SOP MS014
ADONA	919005-14-4	EPA 537M BY ID	SO	Certified by SOP MS014
11Cl-PF3OUdS (F-53B Minor)	763051-92-9	EPA 537M BY ID	SO	Certified by SOP MS014
11Cl-PF3OUdS (F-53B Minor)	763051-92-9	EPA 537M BY ID	AQ	Certified by SOP MS014
9Cl-PF3ONS (F-53B Major)	756426-58-1	EPA 537M BY ID	SO	Certified by SOP MS014
9Cl-PF3ONS (F-53B Major)	756426-58-1	EPA 537M BY ID	AQ	Certified by SOP MS014
EtFOSA	4151-50-2	EPA 537M BY ID	AQ	Certified by SOP MS014
EtFOSA	4151-50-2	EPA 537M BY ID	SO	Certified by SOP MS014
EtFOSAA	2991-50-6	EPA 537M BY ID	AQ	Certified by SOP MS014
EtFOSAA	2991-50-6	EPA 537M BY ID	SO	Certified by SOP MS014
EtFOSE	1691-99-2	EPA 537M BY ID	AQ	Certified by SOP MS014
EtFOSE	1691-99-2	EPA 537M BY ID	SO	Certified by SOP MS014
HFPO-DA (GenX)	13252-13-6	EPA 537M BY ID	AQ	Certified by SOP MS014
HFPO-DA (GenX)	13252-13-6	EPA 537M BY ID	SO	Certified by SOP MS014
MeFOSA	31506-32-8	EPA 537M BY ID	AQ	Certified by SOP MS014
MeFOSA	31506-32-8	EPA 537M BY ID	SO	Certified by SOP MS014
MeFOSAA	2355-31-9	EPA 537M BY ID	SO	Certified by SOP MS014
MeFOSAA	2355-31-9	EPA 537M BY ID	AQ	Certified by SOP MS014
MeFOSE	24448-09-7	EPA 537M BY ID	AQ	Certified by SOP MS014
MeFOSE	24448-09-7	EPA 537M BY ID	SO	Certified by SOP MS014
PFOSA	754-91-6	EPA 537M BY ID	SO	Certified by SOP MS014
PFOSA	754-91-6	EPA 537M BY ID	AQ	Certified by SOP MS014
Perfluorobutanesulfonic acid	375-73-5	EPA 537M BY ID	AQ	Certified by SOP MS014
Perfluorobutanesulfonic acid	375-73-5	EPA 537M BY ID	SO	Certified by SOP MS014
Perfluorobutanoic acid	375-22-4	EPA 537M BY ID	SO	Certified by SOP MS014
Perfluorobutanoic acid	375-22-4	EPA 537M BY ID	AQ	Certified by SOP MS014
Perfluorodecanesulfonic acid	335-77-3	EPA 537M BY ID	AQ	Certified by SOP MS014
Perfluorodecanesulfonic acid	335-77-3	EPA 537M BY ID	SO	Certified by SOP MS014
Perfluorodecanoic acid	335-76-2	EPA 537M BY ID	SO	Certified by SOP MS014
Perfluorodecanoic acid	335-76-2	EPA 537M BY ID	AQ	Certified by SOP MS014
Perfluorododecanoic acid	307-55-1	EPA 537M BY ID	SO	Certified by SOP MS014
Perfluorododecanoic acid	307-55-1	EPA 537M BY ID	AQ	Certified by SOP MS014
Perfluoroheptanesulfonic acid	375-92-8	EPA 537M BY ID	SO	Certified by SOP MS014
Perfluoroheptanesulfonic acid	375-92-8	EPA 537M BY ID	AQ	Certified by SOP MS014
Perfluoroheptanoic acid	375-85-9	EPA 537M BY ID	SO	Certified by SOP MS014
Perfluoroheptanoic acid	375-85-9	EPA 537M BY ID	AQ	Certified by SOP MS014

Parameter Certification Exceptions

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Perfluorohexanesulfonic acid	355-46-4	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluorohexanesulfonic acid	355-46-4	**EPA 537M BY ID**	AQ	Certified by SOP MS014
Perfluorohexanoic acid	307-24-4	**EPA 537M BY ID**	AQ	Certified by SOP MS014
Perfluorohexanoic acid	307-24-4	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluorononanesulfonic acid	68259-12-1	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluorononanesulfonic acid	68259-12-1	**EPA 537M BY ID**	AQ	Certified by SOP MS014
Perfluorononanoic acid	375-95-1	**EPA 537M BY ID**	AQ	Certified by SOP MS014
Perfluorononanoic acid	375-95-1	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluorooctanesulfonic acid	1763-23-1	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluorooctanesulfonic acid	1763-23-1	**EPA 537M BY ID**	AQ	Certified by SOP MS014
Perfluorooctanoic acid	335-67-1	**EPA 537M BY ID**	AQ	Certified by SOP MS014
Perfluorooctanoic acid	335-67-1	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluoropentanesulfonic acid	2706-91-4	**EPA 537M BY ID**	AQ	Certified by SOP MS014
Perfluoropentanesulfonic acid	2706-91-4	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluoropentanoic acid	2706-90-3	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluoropentanoic acid	2706-90-3	**EPA 537M BY ID**	AQ	Certified by SOP MS014
Perfluorotetradecanoic acid	376-06-7	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluorotetradecanoic acid	376-06-7	**EPA 537M BY ID**	AQ	Certified by SOP MS014
Perfluorotridecanoic acid	72629-94-8	**EPA 537M BY ID**	AQ	Certified by SOP MS014
Perfluorotridecanoic acid	72629-94-8	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluoroundecanoic acid	2058-94-8	**EPA 537M BY ID**	SO	Certified by SOP MS014
Perfluoroundecanoic acid	2058-94-8	**EPA 537M BY ID**	AQ	Certified by SOP MS014

FA89983

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 3

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: LEPPERT ASSOCIATES
Address: 1422 WASHINGTON AVE
City: GOLDEN State: CO Zip: 80401
Project Contact: ROB RAU Email: RRAU@leppertassociates.com
Phone #: (303) 216-2428
Sampler(s) Name(s) (Printed)
Sampler 1: ROB RAU Sampler 2: AARON ENGERS

Project Information

Project Name: BRIDGEPORT DISPOSAL
Street: 600 CROSSROADS BLVD
City: LOGAN TOWNSHIP State: NJ
Project #: 21
Fax #:
Client Purchase Order #:

Analytical Information

LCID537LIST40

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LCID537LIST40	LAB USE ONLY
1	DP-4	10/15	15:32	RR	GW	2		X								X	
2	CAMU-3-I	10/15	12:08	RR	GW	2		X								X	
3	DP-5	10/15	09:45	RR	GW	2		X								X	
4	Dup-2	10/15	08:45	RR	GW	2		X								X	
5	22D	10/14	13:41	RR	GW	2		X								X	
6	CAMU-3-W	10/15	11:08	RR	GW	2		X								X	
7	EB-10-15	10/15	08:51	RR	GW	2		X								X	
8	FB-10-15	10/15	08:47	RR	GW	2		X								X	
9	W-19	10/15	14:35	RR	GW	2		X								X	
10	88-2-SA	10/14	17:24	RR	GW	2		X								X	
11	33D	10/14	12:30	RR	GW	2		X								X	
12	Dup-3	10/14	17:30	RR	GW	2		X								X	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

INITIAL ASSESSMENT

LABEL VERIFICATION

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Robert Rau	10/15 16:50	2	3	10/20/21	4
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 18.8 IRLY Melted Ice NS

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FA89983: Chain of Custody
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FA89983

SGS North America Inc - Orlando
Chain of Custody

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TEL 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 2 OF 3

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: LEPPERT ASSOCIATES
Address: 1422 WASHINGTON AVE.
City: GOLDEN State: CO Zip: 80401
Project Contact: ROB RAU Email: rrau@leppertassocs.com
Phone #: (303) 216-2428
Sampler(s) Name(s) (Printed)
Sampler 1: ROB RAU Sampler 2: AARON ENGERS

Project Information

Project Name: BRIDGEPORT DISPOSAL
Street: 600 CROSSROADS BLVD
City: LOGAN TOWNSHIP State: NJ
Project # 21
Fax #
Client Purchase Order #

Analytical Information: LCIDS37LIST40

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAA	DI WATER	MEOH	LCIDS37LIST40	LAB USE ONLY
13	EB-01	10/14	08:40	RR	GW	2		X								X	
14	STORMWATER-003	10/14	09:49	RR	GW	2		X								X	
15	INFLUENT	10/14	10:08	RR	GW	2		X								X	
16	~~EB~~																
17	FB-01	10/14	08:43	RR	GW	2		X								X	
18	35-S	10/14	11:00	RR	GW	2		X								X	
18	EFFLUENT	10/14	10:15	RR	GW	2		X								X	
19	BB-2-I	10/14	16:26	RR	GW	2		X								X	
20	STORMWATER-002	10/14	09:37	RR	GW	2		X								X	
21	STORMWATER-001	10/14	10:30	RR	GW	2		X								X	
22	Dup-4	10/14	10:50	RR	GW	2		X								X	
	~~EB~~																

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Robert Rau	10/15 1650	2	3	10/20/14 1100	4 [signature]
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

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FA89983

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
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www.sgs.com

SGS - ORLANDO JOB # : PAGE 3 OF 3

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: LEPPERT ASSOCIATES
Address: 1422 WASHINGTON AVE
City: GOLDEN State: CO Zip: 80401
Project Contact: ROB RAU Email: rrau@leppertassociates.com
Phone #: (303) 216-2428
Sampler(s) Name(s) (Printed)
Sampler 1: ROB RAU Sampler 2: AARON ENGERS

Project Information

Project Name: BRIDGEPORT DISPOSAL
Street: 600 CROSSROADS BLVD
City: LOGAN TOWNSHIP State: NJ
Project #: 21
Fax #:
Client Purchase Order #:

Analytical Information

SGS Orlando Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LCID537LIST40	LAB USE ONLY
23	25-B	10/14	11:33	RR	GW	2		X								X	
24	31D	10/14	12:13	RR	GW	2		X								X	
25	PFAS-SS-103	10/14	09:25	RR	SO	1		X								X	
26	PFAS-SS-101	10/14	09:03	RR	SO	1		X								X	
27	PFAS-DUP	10/14	14:00	RR	SO	1		X								X	
28	PFAS-SS-104	10/14	08:50	RR	SO	1		X								X	
29	PFAS-SS-102	10/14	09:15	RR	SO	1		X								X	

Matrix Codes
DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Robert Rau	10/15 16:50	2	3	10/20/21	4 [signature]
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

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FA89983: Chain of Custody
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SGS Sample Receipt Summary

Job Number: FA89983 **Client:** LEPPERT ASSOCIATES **Project:** BRIDGEPORT DISPOSAL

Date / Time Received: 10/20/2021 10:00:00 AM **Delivery Method:** FX **Airbill #'s:** 2849 7402 7870

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (18.6);

Cooler Temps (Corrected) °C: Cooler 1: (18.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments COOLER RECEIVED OUT OF TEMP (18.8) DUE TO MELTED ICE.

Technician: NATHANS Date: 10/20/2021 10:00:00 A Reviewer: _____ Date: _____

SM001
Rev. Date 05/24/17

5.2

5

CSR: Andrea Colby **Response Date:** 10/20/21

Response: Please analyze the samples per Robert Rau

SM001
Rev. Date 05/24/17

FA89983: Chain of Custody
Page 5 of 5

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Instrument Blank

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q293-IBLK	4Q21305.D	1	11/02/21	NG	n/a	n/a	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-1, FA89983-2, FA89983-3, FA89983-4, FA89983-5, FA89983-7, FA89983-8, FA89983-9, FA89983-10, FA89983-12, FA89983-13, FA89983-14, FA89983-15, FA89983-16, FA89983-17, FA89983-18, FA89983-19, FA89983-20, FA89983-21, FA89983-22, FA89983-23, FA89983-24

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0040	0.0020	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0020	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.0010	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.0010	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.0010	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.0010	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.0010	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.0010	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.0010	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.0010	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.0010	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0040	0.0020	ug/l	
754-91-6	PFOSA	ND	0.0040	0.0020	ug/l	
31506-32-8	MeFOSA	ND	0.0040	0.0020	ug/l	
4151-50-2	EtFOSA	ND	0.0040	0.0020	ug/l	
2355-31-9	MeFOSAA	ND	0.0040	0.0020	ug/l	
2991-50-6	EtFOSAA	ND	0.0040	0.0020	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.0080	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0080	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0080	0.0020	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.0080	0.0020	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0020	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0020	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0020	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.0020	ug/l	

Instrument Blank

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q293-IBLK	4Q21305.D	1	11/02/21	NG	n/a	n/a	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-1, FA89983-2, FA89983-3, FA89983-4, FA89983-5, FA89983-7, FA89983-8, FA89983-9, FA89983-10, FA89983-12, FA89983-13, FA89983-14, FA89983-15, FA89983-16, FA89983-17, FA89983-18, FA89983-19, FA89983-20, FA89983-21, FA89983-22, FA89983-23, FA89983-24

CAS No.	Compound	Result	RL	MDL	Units	Q
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	103%	35-135%
	13C5-PFPeA	103%	50-150%
	13C5-PFHxA	107%	50-150%
	13C4-PFHpA	104%	50-150%
	13C8-PFOA	104%	50-150%
	13C9-PFNA	104%	50-150%
	13C6-PFDA	106%	50-150%
	13C7-PFUnDA	107%	40-140%
	13C2-PFDoDA	104%	40-140%
	13C2-PFTeDA	105%	30-130%
	13C3-PFBS	104%	50-150%
	13C3-PFHxS	104%	50-150%
	13C8-PFOS	103%	50-150%
	13C8-FOSA	109%	30-130%
	d3-MeFOSA	112%	30-130%
	d5-EtFOSA	114%	30-130%
	d3-MeFOSAA	104%	40-140%
	d5-EtFOSAA	107%	40-140%
	d7-MeFOSE	110%	30-130%
	d9-EtFOSE	116%	30-130%
	13C2-4:2FTS	98%	50-150%
	13C2-6:2FTS	99%	50-150%
	13C2-8:2FTS	101%	50-150%
	13C3-HFPO-DA	102%	50-150%

Instrument Blank

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q293-IBLK	4Q21305.D	1	11/02/21	NG	n/a	n/a	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-25, FA89983-26, FA89983-27, FA89983-28, FA89983-29

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.0	0.38	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.25	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.50	0.25	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.50	0.25	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.50	0.25	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.50	0.25	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.50	0.25	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.50	0.25	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.50	0.25	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.50	0.27	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.50	0.25	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	0.50	0.25	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.50	0.25	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.50	0.25	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.50	0.25	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.50	0.25	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.50	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.50	0.25	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.50	0.25	ug/kg	
754-91-6	PFOSA	ND	0.50	0.25	ug/kg	
31506-32-8	MeFOSA	ND	1.0	0.50	ug/kg	
4151-50-2	EtFOSA	ND	1.0	0.50	ug/kg	
2355-31-9	MeFOSAA	ND	1.0	0.50	ug/kg	
2991-50-6	EtFOSAA	ND	1.0	0.50	ug/kg	
24448-09-7	MeFOSE	ND	2.5	1.0	ug/kg	
1691-99-2	EtFOSE	ND	2.5	1.0	ug/kg	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.0	0.25	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	1.0	0.25	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	1.0	0.25	ug/kg	
377-73-1	PFMPA	ND	1.0	0.25	ug/kg	
863090-89-5	PFMBA	ND	1.0	0.25	ug/kg	
151772-58-6	NFDHA	ND	1.0	0.25	ug/kg	
113507-82-7	PFEESA	ND	1.0	0.25	ug/kg	

Instrument Blank

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q293-IBLK	4Q21305.D	1	11/02/21	NG	n/a	n/a	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-25, FA89983-26, FA89983-27, FA89983-28, FA89983-29

CAS No.	Compound	Result	RL	MDL	Units	Q
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.25	ug/kg	
919005-14-4	ADONA	ND	0.50	0.25	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.50	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.50	0.26	ug/kg	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	103%	40-140%
	13C5-PFPeA	103%	50-150%
	13C5-PFHxA	107%	50-150%
	13C4-PFHpA	104%	50-150%
	13C8-PFOA	104%	50-150%
	13C9-PFNA	104%	50-150%
	13C6-PFDA	106%	50-150%
	13C7-PFUnDA	107%	40-140%
	13C2-PFDoDA	104%	40-140%
	13C2-PFTeDA	105%	30-130%
	13C3-PFBS	104%	50-150%
	13C3-PFHxS	104%	50-150%
	13C8-PFOS	103%	50-150%
	13C8-FOSA	109%	30-130%
	d3-MeFOSA	112%	40-140%
	d5-EtFOSA	114%	40-140%
	d3-MeFOSAA	104%	40-140%
	d5-EtFOSAA	107%	40-140%
	d7-MeFOSE	110%	30-130%
	d9-EtFOSE	116%	30-130%
	13C2-4:2FTS	98%	50-150%
	13C2-6:2FTS	99%	50-150%
	13C2-8:2FTS	101%	50-150%
	13C3-HFPO-DA	102%	50-150%

Instrument Blank

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q294-IBLK	4Q21416.D	1	11/04/21	NG	n/a	n/a	S4Q294

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-5, FA89983-6, FA89983-10, FA89983-11, FA89983-12, FA89983-14, FA89983-15, FA89983-18, FA89983-19, FA89983-23

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0040	0.0020	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0020	0.0010	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0020	0.0010	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0020	0.0010	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0020	0.0010	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0020	0.0010	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0020	0.0010	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0020	0.0010	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0020	0.0010	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0020	0.0010	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0020	0.0010	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0020	0.0010	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0020	0.0010	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0020	0.0010	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0020	0.0010	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0020	0.0010	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0020	0.0010	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0020	0.0010	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0040	0.0020	ug/l	
754-91-6	PFOSA	ND	0.0040	0.0020	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0040	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0040	ug/l	
2355-31-9	MeFOSAA	ND	0.0040	0.0020	ug/l	
2991-50-6	EtFOSAA	ND	0.0040	0.0020	ug/l	
24448-09-7	MeFOSE	ND	0.020	0.0080	ug/l	
1691-99-2	EtFOSE	ND	0.020	0.0080	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0080	0.0020	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0080	0.0020	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.0080	0.0020	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.0080	0.0020	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0020	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0020	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0020	ug/l	
113507-82-7	PFEESA	ND	0.0080	0.0020	ug/l	

Instrument Blank

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q294-IBLK	4Q21416.D	1	11/04/21	NG	n/a	n/a	S4Q294

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-5, FA89983-6, FA89983-10, FA89983-11, FA89983-12, FA89983-14, FA89983-15, FA89983-18, FA89983-19, FA89983-23

CAS No.	Compound	Result	RL	MDL	Units	Q
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0020	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0020	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0020	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0020	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	109%	35-135%
	13C5-PFPeA	108%	50-150%
	13C5-PFHxA	112%	50-150%
	13C4-PFHpA	107%	50-150%
	13C8-PFOA	108%	50-150%
	13C9-PFNA	110%	50-150%
	13C6-PFDA	111%	50-150%
	13C7-PFUnDA	112%	40-140%
	13C2-PFDoDA	109%	40-140%
	13C2-PFTeDA	110%	30-130%
	13C3-PFBS	107%	50-150%
	13C3-PFHxS	106%	50-150%
	13C8-PFOS	108%	50-150%
	13C8-FOSA	117%	30-130%
	d3-MeFOSA	116%	10-130%
	d5-EtFOSA	115%	10-130%
	d3-MeFOSAA	124%	40-140%
	d5-EtFOSAA	126%	40-140%
	d7-MeFOSE	111%	10-130%
	d9-EtFOSE	115%	10-130%
	13C2-4:2FTS	102%	50-150%
	13C2-6:2FTS	101%	50-150%
	13C2-8:2FTS	108%	50-150%
	13C3-HFPO-DA	104%	50-150%

Method Blank Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88016-MB	4Q21310.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-1, FA89983-2, FA89983-3, FA89983-4, FA89983-5, FA89983-6, FA89983-7, FA89983-8, FA89983-9, FA89983-10, FA89983-11, FA89983-12, FA89983-13, FA89983-14, FA89983-15, FA89983-16, FA89983-17, FA89983-18, FA89983-19, FA89983-20

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	

Method Blank Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88016-MB	4Q21310.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-1, FA89983-2, FA89983-3, FA89983-4, FA89983-5, FA89983-6, FA89983-7, FA89983-8, FA89983-9, FA89983-10, FA89983-11, FA89983-12, FA89983-13, FA89983-14, FA89983-15, FA89983-16, FA89983-17, FA89983-18, FA89983-19, FA89983-20

CAS No.	Compound	Result	RL	MDL	Units	Q
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	87%	35-135%
	13C5-PFPeA	99%	50-150%
	13C5-PFHxA	105%	50-150%
	13C4-PFHpA	101%	50-150%
	13C8-PFOA	100%	50-150%
	13C9-PFNA	102%	50-150%
	13C6-PFDA	104%	50-150%
	13C7-PFUnDA	104%	40-140%
	13C2-PFDoDA	96%	40-140%
	13C2-PFTeDA	88%	30-130%
	13C3-PFBS	100%	50-150%
	13C3-PFHxS	99%	50-150%
	13C8-PFOS	100%	50-150%
	13C8-FOSA	100%	30-130%
	d3-MeFOSA	81%	10-130%
	d5-EtFOSA	80%	10-130%
	d3-MeFOSAA	100%	40-140%
	d5-EtFOSAA	99%	40-140%
	d7-MeFOSE	95%	10-130%
	d9-EtFOSE	97%	10-130%
	13C2-4:2FTS	96%	50-150%
	13C2-6:2FTS	96%	50-150%
	13C2-8:2FTS	100%	50-150%
	13C3-HFPO-DA	104%	50-150%

Method Blank Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88037-MB	4Q21339.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-21, FA89983-22, FA89983-23, FA89983-24

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.0080	0.0040	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0040	0.0020	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.0020	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.0020	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.0020	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.0020	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.0020	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.0020	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.0020	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.0020	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.0020	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.0020	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0040	0.0020	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.0020	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.0020	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.0020	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.0020	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.0020	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0080	0.0040	ug/l	
754-91-6	PFOSA	ND	0.0080	0.0040	ug/l	
31506-32-8	MeFOSA	ND	0.016	0.0080	ug/l	
4151-50-2	EtFOSA	ND	0.016	0.0080	ug/l	
2355-31-9	MeFOSAA	ND	0.0080	0.0040	ug/l	
2991-50-6	EtFOSAA	ND	0.0080	0.0040	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.016	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.016	ug/l	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.016	0.0040	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.016	0.0040	ug/l	
377-73-1	PFMPA	ND	0.016	0.0040	ug/l	
863090-89-5	PFMBA	ND	0.016	0.0040	ug/l	
151772-58-6	NFDHA	ND	0.016	0.0040	ug/l	
113507-82-7	PFEESA	ND	0.016	0.0040	ug/l	

Method Blank Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88037-MB	4Q21339.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-21, FA89983-22, FA89983-23, FA89983-24

CAS No.	Compound	Result	RL	MDL	Units	Q
13252-13-6	HFPO-DA (GenX)	ND	0.0080	0.0040	ug/l	
919005-14-4	ADONA	ND	0.016	0.0040	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.016	0.0040	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.016	0.0040	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	90%	35-135%
	13C5-PFPeA	96%	50-150%
	13C5-PFHxA	101%	50-150%
	13C4-PFHpA	97%	50-150%
	13C8-PFOA	96%	50-150%
	13C9-PFNA	97%	50-150%
	13C6-PFDA	98%	50-150%
	13C7-PFUnDA	97%	40-140%
	13C2-PFDoDA	89%	40-140%
	13C2-PFTeDA	81%	30-130%
	13C3-PFBS	99%	50-150%
	13C3-PFHxS	94%	50-150%
	13C8-PFOS	91%	50-150%
	13C8-FOSA	98%	30-130%
	d3-MeFOSA	89%	10-130%
	d5-EtFOSA	91%	10-130%
	d3-MeFOSAA	93%	40-140%
	d5-EtFOSAA	89%	40-140%
	d7-MeFOSE	104%	10-130%
	d9-EtFOSE	105%	10-130%
	13C2-4:2FTS	94%	50-150%
	13C2-6:2FTS	93%	50-150%
	13C2-8:2FTS	95%	50-150%
	13C3-HFPO-DA	99%	50-150%

Method Blank Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88053-MB	4Q21392.D	1	11/03/21	NG	10/28/21	OP88053	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-25, FA89983-26, FA89983-27, FA89983-28, FA89983-29

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	1.0	0.38	ug/kg	
2706-90-3	Perfluoropentanoic acid	ND	0.50	0.25	ug/kg	
307-24-4	Perfluorohexanoic acid	ND	0.50	0.25	ug/kg	
375-85-9	Perfluoroheptanoic acid	ND	0.50	0.25	ug/kg	
335-67-1	Perfluorooctanoic acid	ND	0.50	0.25	ug/kg	
375-95-1	Perfluorononanoic acid	ND	0.50	0.25	ug/kg	
335-76-2	Perfluorodecanoic acid	ND	0.50	0.25	ug/kg	
2058-94-8	Perfluoroundecanoic acid	ND	0.50	0.25	ug/kg	
307-55-1	Perfluorododecanoic acid	ND	0.50	0.25	ug/kg	
72629-94-8	Perfluorotridecanoic acid	ND	0.50	0.27	ug/kg	
376-06-7	Perfluorotetradecanoic acid	ND	0.50	0.25	ug/kg	
375-73-5	Perfluorobutanesulfonic acid	ND	0.50	0.25	ug/kg	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.50	0.25	ug/kg	
355-46-4	Perfluorohexanesulfonic acid	ND	0.50	0.25	ug/kg	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.50	0.25	ug/kg	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.50	0.25	ug/kg	
68259-12-1	Perfluorononanesulfonic acid	ND	0.50	0.25	ug/kg	
335-77-3	Perfluorodecanesulfonic acid	ND	0.50	0.25	ug/kg	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.50	0.25	ug/kg	
754-91-6	PFOSA	ND	0.50	0.25	ug/kg	
31506-32-8	MeFOSA	ND	1.0	0.50	ug/kg	
4151-50-2	EtFOSA	ND	1.0	0.50	ug/kg	
2355-31-9	MeFOSAA	ND	1.0	0.50	ug/kg	
2991-50-6	EtFOSAA	ND	1.0	0.50	ug/kg	
24448-09-7	MeFOSE	ND	2.5	1.0	ug/kg	
1691-99-2	EtFOSE	ND	2.5	1.0	ug/kg	
757124-72-4	4:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	1.0	0.25	ug/kg	
356-02-5	3:3 Fluorotelomer carboxylate	ND	1.0	0.25	ug/kg	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	1.0	0.25	ug/kg	
812-70-4	7:3 Fluorotelomer carboxylate	ND	1.0	0.25	ug/kg	
377-73-1	PFMPA	ND	1.0	0.25	ug/kg	
863090-89-5	PFMBA	ND	1.0	0.25	ug/kg	
151772-58-6	NFDHA	ND	1.0	0.25	ug/kg	
113507-82-7	PFEESA	ND	1.0	0.25	ug/kg	

Method Blank Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88053-MB	4Q21392.D	1	11/03/21	NG	10/28/21	OP88053	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-25, FA89983-26, FA89983-27, FA89983-28, FA89983-29

CAS No.	Compound	Result	RL	MDL	Units	Q
13252-13-6	HFPO-DA (GenX)	ND	1.0	0.25	ug/kg	
919005-14-4	ADONA	ND	0.50	0.25	ug/kg	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.50	0.29	ug/kg	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.50	0.26	ug/kg	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	65%	40-140%
	13C5-PFPeA	62%	50-150%
	13C5-PFHxA	64%	50-150%
	13C4-PFHpA	62%	50-150%
	13C8-PFOA	63%	50-150%
	13C9-PFNA	66%	50-150%
	13C6-PFDA	68%	50-150%
	13C7-PFUnDA	68%	40-140%
	13C2-PFDoDA	67%	40-140%
	13C2-PFTeDA	71%	30-130%
	13C3-PFBS	63%	50-150%
	13C3-PFHxS	62%	50-150%
	13C8-PFOS	67%	50-150%
	13C8-FOSA	77%	30-130%
	d3-MeFOSA	83%	10-140%
	d5-EtFOSA	98%	10-140%
	d3-MeFOSAA	69%	40-140%
	d5-EtFOSAA	72%	40-140%
	d7-MeFOSE	99%	10-130%
	d9-EtFOSE	102%	10-130%
	13C2-4:2FTS	58%	50-150%
	13C2-6:2FTS	63%	50-150%
	13C2-8:2FTS	66%	50-150%
	13C3-HFPO-DA	62%	50-150%

Blank Spike Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88016-BS	4Q21309.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-1, FA89983-2, FA89983-3, FA89983-4, FA89983-5, FA89983-6, FA89983-7, FA89983-8, FA89983-9, FA89983-10, FA89983-11, FA89983-12, FA89983-13, FA89983-14, FA89983-15, FA89983-16, FA89983-17, FA89983-18, FA89983-19, FA89983-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.16	0.152	95	70-130
2706-90-3	Perfluoropentanoic acid	0.16	0.149	93	70-130
307-24-4	Perfluorohexanoic acid	0.16	0.153	96	70-130
375-85-9	Perfluoroheptanoic acid	0.16	0.151	94	70-130
335-67-1	Perfluorooctanoic acid	0.16	0.152	95	70-130
375-95-1	Perfluorononanoic acid	0.16	0.153	96	70-130
335-76-2	Perfluorodecanoic acid	0.16	0.154	96	70-130
2058-94-8	Perfluoroundecanoic acid	0.16	0.155	97	70-130
307-55-1	Perfluorododecanoic acid	0.16	0.154	96	70-130
72629-94-8	Perfluorotridecanoic acid	0.16	0.152	95	60-140
376-06-7	Perfluorotetradecanoic acid	0.16	0.155	97	70-130
375-73-5	Perfluorobutanesulfonic acid	0.16	0.154	96	70-130
2706-91-4	Perfluoropentanesulfonic acid	0.16	0.156	98	70-130
355-46-4	Perfluorohexanesulfonic acid	0.16	0.154	96	70-130
375-92-8	Perfluoroheptanesulfonic acid	0.16	0.146	91	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.155	97	70-130
68259-12-1	Perfluorononanesulfonic acid	0.16	0.146	91	65-130
335-77-3	Perfluorodecanesulfonic acid	0.16	0.142	89	60-130
79780-39-5	Perfluorododecanesulfonic aci	0.16	0.151	94	60-130
754-91-6	PFOSA	0.16	0.154	96	70-130
31506-32-8	MeFOSA	0.16	0.143	89	70-130
4151-50-2	EtFOSA	0.16	0.176	110	70-130
2355-31-9	MeFOSAA	0.16	0.156	98	70-130
2991-50-6	EtFOSAA	0.16	0.148	93	70-130
24448-09-7	MeFOSE	0.8	0.845	106	70-130
1691-99-2	EtFOSE	0.8	0.860	108	70-130
757124-72-4	4:2 Fluorotelomer sulfonate	0.16	0.152	95	70-130
27619-97-2	6:2 Fluorotelomer sulfonate	0.16	0.152	95	70-130
39108-34-4	8:2 Fluorotelomer sulfonate	0.16	0.151	94	70-130
356-02-5	3:3 Fluorotelomer carboxylate	0.16	0.156	98	60-140
914637-49-3	5:3 Fluorotelomer carboxylate	0.16	0.159	99	60-140
812-70-4	7:3 Fluorotelomer carboxylate	0.16	0.139	87	60-140
377-73-1	PFMPA	0.16	0.150	94	60-140
863090-89-5	PFMBA	0.16	0.148	93	60-140
151772-58-6	NFDHA	0.16	0.139	87	60-140
113507-82-7	PFEESA	0.16	0.148	93	60-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88016-BS	4Q21309.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-1, FA89983-2, FA89983-3, FA89983-4, FA89983-5, FA89983-6, FA89983-7, FA89983-8, FA89983-9, FA89983-10, FA89983-11, FA89983-12, FA89983-13, FA89983-14, FA89983-15, FA89983-16, FA89983-17, FA89983-18, FA89983-19, FA89983-20

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
13252-13-6	HFPO-DA (GenX)	0.16	0.147	92	70-130
919005-14-4	ADONA	0.16	0.158	99	60-140
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.16	0.148	93	60-140
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.16	0.151	94	60-140

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	94%	35-135%
	13C5-PFPeA	95%	50-150%
	13C5-PFHxA	97%	50-150%
	13C4-PFHpA	96%	50-150%
	13C8-PFOA	94%	50-150%
	13C9-PFNA	90%	50-150%
	13C6-PFDA	89%	50-150%
	13C7-PFUnDA	90%	40-140%
	13C2-PFDoDA	87%	40-140%
	13C2-PFTeDA	85%	30-130%
	13C3-PFBS	95%	50-150%
	13C3-PFHxS	91%	50-150%
	13C8-PFOS	85%	50-150%
	13C8-FOSA	92%	30-130%
	d3-MeFOSA	76%	10-130%
	d5-EtFOSA	70%	10-130%
	d3-MeFOSAA	89%	40-140%
	d5-EtFOSAA	89%	40-140%
	d7-MeFOSE	89%	10-130%
	d9-EtFOSE	91%	10-130%
	13C2-4:2FTS	95%	50-150%
	13C2-6:2FTS	93%	50-150%
	13C2-8:2FTS	89%	50-150%
	13C3-HFPO-DA	99%	50-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88037-BS	4Q21338.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-21, FA89983-22, FA89983-23, FA89983-24

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.16	0.145	91	70-130
2706-90-3	Perfluoropentanoic acid	0.16	0.144	90	70-130
307-24-4	Perfluorohexanoic acid	0.16	0.145	91	70-130
375-85-9	Perfluoroheptanoic acid	0.16	0.144	90	70-130
335-67-1	Perfluorooctanoic acid	0.16	0.142	89	70-130
375-95-1	Perfluorononanoic acid	0.16	0.143	89	70-130
335-76-2	Perfluorodecanoic acid	0.16	0.141	88	70-130
2058-94-8	Perfluoroundecanoic acid	0.16	0.144	90	70-130
307-55-1	Perfluorododecanoic acid	0.16	0.154	96	70-130
72629-94-8	Perfluorotridecanoic acid	0.16	0.160	100	60-140
376-06-7	Perfluorotetradecanoic acid	0.16	0.160	100	70-130
375-73-5	Perfluorobutanesulfonic acid	0.16	0.144	90	70-130
2706-91-4	Perfluoropentanesulfonic acid	0.16	0.143	89	70-130
355-46-4	Perfluorohexanesulfonic acid	0.16	0.143	89	70-130
375-92-8	Perfluoroheptanesulfonic acid	0.16	0.142	89	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.16	0.143	89	70-130
68259-12-1	Perfluorononanesulfonic acid	0.16	0.135	84	65-130
335-77-3	Perfluorodecanesulfonic acid	0.16	0.128	80	60-130
79780-39-5	Perfluorododecanesulfonic aci	0.16	0.143	89	60-130
754-91-6	PFOSA	0.16	0.152	95	70-130
31506-32-8	MeFOSA	0.16	0.149	93	70-130
4151-50-2	EtFOSA	0.16	0.154	96	70-130
2355-31-9	MeFOSAA	0.16	0.148	93	70-130
2991-50-6	EtFOSAA	0.16	0.145	91	70-130
24448-09-7	MeFOSE	0.8	0.795	99	70-130
1691-99-2	EtFOSE	0.8	0.829	104	70-130
757124-72-4	4:2 Fluorotelomer sulfonate	0.16	0.145	91	70-130
27619-97-2	6:2 Fluorotelomer sulfonate	0.16	0.145	91	70-130
39108-34-4	8:2 Fluorotelomer sulfonate	0.16	0.144	90	70-130
356-02-5	3:3 Fluorotelomer carboxylate	0.16	0.156	98	60-140
914637-49-3	5:3 Fluorotelomer carboxylate	0.16	0.156	98	60-140
812-70-4	7:3 Fluorotelomer carboxylate	0.16	0.127	79	60-140
377-73-1	PFMPA	0.16	0.142	89	60-140
863090-89-5	PFMBA	0.16	0.142	89	60-140
151772-58-6	NFDHA	0.16	0.131	82	60-140
113507-82-7	PFEESA	0.16	0.142	89	60-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88037-BS	4Q21338.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-21, FA89983-22, FA89983-23, FA89983-24

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
13252-13-6	HFPO-DA (GenX)	0.16	0.136	85	70-130
919005-14-4	ADONA	0.16	0.149	93	60-140
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.16	0.136	85	60-140
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.16	0.148	93	60-140

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	100%	35-135%
	13C5-PFPeA	100%	50-150%
	13C5-PFHxA	102%	50-150%
	13C4-PFHpA	103%	50-150%
	13C8-PFOA	102%	50-150%
	13C9-PFNA	100%	50-150%
	13C6-PFDA	102%	50-150%
	13C7-PFUnDA	96%	40-140%
	13C2-PFDoDA	85%	40-140%
	13C2-PFTeDA	77%	30-130%
	13C3-PFBS	102%	50-150%
	13C3-PFHxS	99%	50-150%
	13C8-PFOS	97%	50-150%
	13C8-FOSA	90%	30-130%
	d3-MeFOSA	69%	10-130%
	d5-EtFOSA	76%	10-130%
	d3-MeFOSAA	93%	40-140%
	d5-EtFOSAA	88%	40-140%
	d7-MeFOSE	99%	10-130%
	d9-EtFOSE	95%	10-130%
	13C2-4:2FTS	102%	50-150%
	13C2-6:2FTS	102%	50-150%
	13C2-8:2FTS	100%	50-150%
	13C3-HFPO-DA	103%	50-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88053-BS	4Q21391.D	1	11/03/21	NG	10/28/21	OP88053	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-25, FA89983-26, FA89983-27, FA89983-28, FA89983-29

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
375-22-4	Perfluorobutanoic acid	10	10.8	108	70-130
2706-90-3	Perfluoropentanoic acid	10	10.8	108	70-130
307-24-4	Perfluorohexanoic acid	10	10.9	109	70-130
375-85-9	Perfluoroheptanoic acid	10	10.7	107	70-130
335-67-1	Perfluorooctanoic acid	10	10.9	109	70-130
375-95-1	Perfluorononanoic acid	10	10.5	105	70-130
335-76-2	Perfluorodecanoic acid	10	10.9	109	70-130
2058-94-8	Perfluoroundecanoic acid	10	10.8	108	70-130
307-55-1	Perfluorododecanoic acid	10	11.1	111	70-130
72629-94-8	Perfluorotridecanoic acid	10	10.2	102	70-130
376-06-7	Perfluorotetradecanoic acid	10	10.8	108	70-130
375-73-5	Perfluorobutanesulfonic acid	10	10.9	109	70-130
2706-91-4	Perfluoropentanesulfonic acid	10	11.2	112	70-130
355-46-4	Perfluorohexanesulfonic acid	10	11.0	110	70-130
375-92-8	Perfluoroheptanesulfonic acid	10	11.4	114	70-130
1763-23-1	Perfluorooctanesulfonic acid	10	10.7	107	70-130
68259-12-1	Perfluorononanesulfonic acid	10	10.7	107	70-130
335-77-3	Perfluorodecanesulfonic acid	10	10.7	107	65-135
79780-39-5	Perfluorododecanesulfonic aci	10	10.8	108	60-140
754-91-6	PFOSA	10	10.8	108	70-130
31506-32-8	MeFOSA	10	10.1	101	70-130
4151-50-2	EtFOSA	10	10.4	104	70-130
2355-31-9	MeFOSAA	10	11.5	115	70-130
2991-50-6	EtFOSAA	10	11.1	111	70-130
24448-09-7	MeFOSE	50	50.7	101	70-130
1691-99-2	EtFOSE	50	50.0	100	70-130
757124-72-4	4:2 Fluorotelomer sulfonate	10	10.8	108	70-130
27619-97-2	6:2 Fluorotelomer sulfonate	10	10.5	105	70-130
39108-34-4	8:2 Fluorotelomer sulfonate	10	10.7	107	70-130
356-02-5	3:3 Fluorotelomer carboxylate	10	12.7	127	60-140
914637-49-3	5:3 Fluorotelomer carboxylate	10	11.8	118	60-140
812-70-4	7:3 Fluorotelomer carboxylate	10	11.3	113	60-140
377-73-1	PFMPA	10	10.5	105	60-140
863090-89-5	PFMBA	10	10.6	106	60-140
151772-58-6	NFDHA	10	10.1	101	60-140
113507-82-7	PFEESA	10	10.3	103	60-140

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88053-BS	4Q21391.D	1	11/03/21	NG	10/28/21	OP88053	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-25, FA89983-26, FA89983-27, FA89983-28, FA89983-29

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
13252-13-6	HFPO-DA (GenX)	10	10.5	105	70-130
919005-14-4	ADONA	10	10.6	106	60-140
756426-58-1	9Cl-PF3ONS (F-53B Major)	10	10.6	106	60-140
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	10	10.9	109	60-140

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	80%	40-140%
	13C5-PFPeA	76%	50-150%
	13C5-PFHxA	78%	50-150%
	13C4-PFHpA	77%	50-150%
	13C8-PFOA	79%	50-150%
	13C9-PFNA	81%	50-150%
	13C6-PFDA	83%	50-150%
	13C7-PFUnDA	82%	40-140%
	13C2-PFDoDA	83%	40-140%
	13C2-PFTeDA	87%	30-130%
	13C3-PFBS	76%	50-150%
	13C3-PFHxS	77%	50-150%
	13C8-PFOS	80%	50-150%
	13C8-FOSA	90%	30-130%
	d3-MeFOSA	97%	10-140%
	d5-EtFOSA	107%	10-140%
	d3-MeFOSAA	90%	40-140%
	d5-EtFOSAA	90%	40-140%
	d7-MeFOSE	110%	10-130%
	d9-EtFOSE	110%	10-130%
	13C2-4:2FTS	78%	50-150%
	13C2-6:2FTS	82%	50-150%
	13C2-8:2FTS	84%	50-150%
	13C3-HFPO-DA	75%	50-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88016-MS	4Q21312.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293
FA89983-1	4Q21311.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-1, FA89983-2, FA89983-3, FA89983-4, FA89983-5, FA89983-6, FA89983-7, FA89983-8, FA89983-9, FA89983-10, FA89983-11, FA89983-12, FA89983-13, FA89983-14, FA89983-15, FA89983-16, FA89983-17, FA89983-18, FA89983-19, FA89983-20

CAS No.	Compound	FA89983-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	0.0088		0.16	0.160	95	70-130
2706-90-3	Perfluoropentanoic acid	0.0105		0.16	0.159	93	70-130
307-24-4	Perfluorohexanoic acid	0.0174		0.16	0.169	95	70-130
375-85-9	Perfluoroheptanoic acid	0.0142		0.16	0.165	94	70-130
335-67-1	Perfluorooctanoic acid	0.0422		0.16	0.195	96	70-130
375-95-1	Perfluorononanoic acid	0.0271		0.16	0.177	94	70-130
335-76-2	Perfluorodecanoic acid	0.0026	J	0.16	0.155	97	70-130
2058-94-8	Perfluoroundecanoic acid	ND		0.16	0.155	97	70-130
307-55-1	Perfluorododecanoic acid	ND		0.16	0.157	98	70-130
72629-94-8	Perfluorotridecanoic acid	ND		0.16	0.153	96	60-140
376-06-7	Perfluorotetradecanoic acid	ND		0.16	0.155	97	70-130
375-73-5	Perfluorobutanesulfonic acid	ND		0.16	0.150	94	70-130
2706-91-4	Perfluoropentanesulfonic acid	ND		0.16	0.153	96	70-130
355-46-4	Perfluorohexanesulfonic acid	ND		0.16	0.149	93	70-130
375-92-8	Perfluoroheptanesulfonic acid	ND		0.16	0.144	90	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.0036	J	0.16	0.152	93	70-130
68259-12-1	Perfluorononanesulfonic acid	ND		0.16	0.147	92	65-130
335-77-3	Perfluorodecanesulfonic acid	ND		0.16	0.145	91	60-130
79780-39-5	Perfluorododecanesulfonic aci	ND		0.16	0.155	97	60-130
754-91-6	PFOSA	ND		0.16	0.161	101	70-130
31506-32-8	MeFOSA	ND		0.16	0.152	95	70-130
4151-50-2	EtFOSA	ND		0.16	0.150	94	70-130
2355-31-9	MeFOSAA	ND		0.16	0.158	99	70-130
2991-50-6	EtFOSAA	ND		0.16	0.145	91	70-130
24448-09-7	MeFOSE	ND		0.8	0.818	102	70-130
1691-99-2	EtFOSE	ND		0.8	0.843	105	70-130
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.16	0.149	93	70-130
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.16	0.148	93	70-130
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.16	0.149	93	70-130
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.16	0.158	99	60-140
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.16	0.152	95	60-140
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.16	0.139	87	60-140
377-73-1	PFMPA	ND		0.16	0.148	93	60-140
863090-89-5	PFMBA	ND		0.16	0.146	91	60-140
151772-58-6	NFDHA	ND		0.16	0.136	85	60-140
113507-82-7	PFEESA	ND		0.16	0.144	90	60-140

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88016-MS	4Q21312.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293
FA89983-1	4Q21311.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-1, FA89983-2, FA89983-3, FA89983-4, FA89983-5, FA89983-6, FA89983-7, FA89983-8, FA89983-9, FA89983-10, FA89983-11, FA89983-12, FA89983-13, FA89983-14, FA89983-15, FA89983-16, FA89983-17, FA89983-18, FA89983-19, FA89983-20

CAS No.	Compound	FA89983-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
13252-13-6	HFPO-DA (GenX)	ND		0.16	0.147	92	70-130
919005-14-4	ADONA	ND		0.16	0.153	96	60-140
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.16	0.147	92	60-140
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.16	0.152	95	60-140

CAS No.	ID Standard Recoveries	MS	FA89983-1	Limits
	13C4-PFBA	90%	93%	35-135%
	13C5-PFPeA	90%	93%	50-150%
	13C5-PFHxA	93%	98%	50-150%
	13C4-PFHpA	95%	97%	50-150%
	13C8-PFOA	94%	95%	50-150%
	13C9-PFNA	93%	95%	50-150%
	13C6-PFDA	90%	95%	50-150%
	13C7-PFUnDA	88%	95%	40-140%
	13C2-PFDoDA	85%	90%	40-140%
	13C2-PFTeDA	84%	85%	30-130%
	13C3-PFBS	94%	96%	50-150%
	13C3-PFHxS	95%	95%	50-150%
	13C8-PFOS	88%	92%	50-150%
	13C8-FOSA	83%	84%	30-130%
	d3-MeFOSA	30%	15%	10-130%
	d5-EtFOSA	24%	11%	10-130%
	d3-MeFOSAA	86%	90%	40-140%
	d5-EtFOSAA	85%	88%	40-140%
	d7-MeFOSE	70%	47%	10-130%
	d9-EtFOSE	64%	39%	10-130%
	13C2-4:2FTS	95%	93%	50-150%
	13C2-6:2FTS	94%	91%	50-150%
	13C2-8:2FTS	92%	93%	50-150%
	13C3-HFPO-DA	95%	100%	50-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88037-MS	4Q21347.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293
FA89984-1	4Q21346.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-21, FA89983-22, FA89983-23, FA89983-24

CAS No.	Compound	FA89984-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	0.0041	J	0.16	0.155	94	70-130
2706-90-3	Perfluoropentanoic acid	0.0024	J	0.16	0.151	93	70-130
307-24-4	Perfluorohexanoic acid	0.0036	J	0.16	0.152	93	70-130
375-85-9	Perfluoroheptanoic acid	0.0091		0.16	0.160	94	70-130
335-67-1	Perfluorooctanoic acid	0.0070		0.16	0.158	94	70-130
375-95-1	Perfluorononanoic acid	0.0021	J	0.16	0.153	94	70-130
335-76-2	Perfluorodecanoic acid	ND		0.16	0.151	94	70-130
2058-94-8	Perfluoroundecanoic acid	ND		0.16	0.151	94	70-130
307-55-1	Perfluorododecanoic acid	ND		0.16	0.153	96	70-130
72629-94-8	Perfluorotridecanoic acid	ND		0.16	0.152	95	60-140
376-06-7	Perfluorotetradecanoic acid	ND		0.16	0.153	96	70-130
375-73-5	Perfluorobutanesulfonic acid	ND		0.16	0.151	94	70-130
2706-91-4	Perfluoropentanesulfonic acid	ND		0.16	0.151	94	70-130
355-46-4	Perfluorohexanesulfonic acid	ND		0.16	0.156	98	70-130
375-92-8	Perfluoroheptanesulfonic acid	ND		0.16	0.152	95	70-130
1763-23-1	Perfluorooctanesulfonic acid	0.0039	J	0.16	0.155	94	70-130
68259-12-1	Perfluorononanesulfonic acid	ND		0.16	0.140	88	65-130
335-77-3	Perfluorodecanesulfonic acid	ND		0.16	0.130	81	60-130
79780-39-5	Perfluorododecanesulfonic aci	ND		0.16	0.141	88	60-130
754-91-6	PFOSA	ND		0.16	0.156	98	70-130
31506-32-8	MeFOSA	ND		0.16	0.135	84	70-130
4151-50-2	EtFOSA	ND		0.16	0.154	96	70-130
2355-31-9	MeFOSAA	ND		0.16	0.153	96	70-130
2991-50-6	EtFOSAA	ND		0.16	0.147	92	70-130
24448-09-7	MeFOSE	ND		0.8	0.833	104	70-130
1691-99-2	EtFOSE	ND		0.8	0.838	105	70-130
757124-72-4	4:2 Fluorotelomer sulfonate	ND		0.16	0.149	93	70-130
27619-97-2	6:2 Fluorotelomer sulfonate	ND		0.16	0.148	93	70-130
39108-34-4	8:2 Fluorotelomer sulfonate	ND		0.16	0.151	94	70-130
356-02-5	3:3 Fluorotelomer carboxylate	ND		0.16	0.160	100	60-140
914637-49-3	5:3 Fluorotelomer carboxylate	ND		0.16	0.167	104	60-140
812-70-4	7:3 Fluorotelomer carboxylate	ND		0.16	0.154	96	60-140
377-73-1	PFMPA	ND		0.16	0.146	91	60-140
863090-89-5	PFMBA	ND		0.16	0.147	92	60-140
151772-58-6	NFDHA	ND		0.16	0.135	84	60-140
113507-82-7	PFEESA	ND		0.16	0.147	92	60-140

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88037-MS	4Q21347.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293
FA89984-1	4Q21346.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-21, FA89983-22, FA89983-23, FA89983-24

CAS No.	Compound	FA89984-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
13252-13-6	HFPO-DA (GenX)	ND		0.16	0.145	91	70-130
919005-14-4	ADONA	ND		0.16	0.155	97	60-140
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		0.16	0.142	89	60-140
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		0.16	0.147	92	60-140

CAS No.	ID Standard Recoveries	MS	FA89984-1	Limits
	13C4-PFBA	94%	95%	35-135%
	13C5-PFPeA	94%	95%	50-150%
	13C5-PFHxA	96%	102%	50-150%
	13C4-PFHpA	98%	99%	50-150%
	13C8-PFOA	95%	95%	50-150%
	13C9-PFNA	93%	93%	50-150%
	13C6-PFDA	93%	92%	50-150%
	13C7-PFUnDA	93%	92%	40-140%
	13C2-PFDoDA	88%	87%	40-140%
	13C2-PFTeDA	86%	86%	30-130%
	13C3-PFBS	96%	98%	50-150%
	13C3-PFHxS	91%	93%	50-150%
	13C8-PFOS	89%	88%	50-150%
	13C8-FOSA	90%	97%	30-130%
	d3-MeFOSA	56%	75%	10-130%
	d5-EtFOSA	47%	66%	10-130%
	d3-MeFOSAA	96%	94%	40-140%
	d5-EtFOSAA	96%	95%	40-140%
	d7-MeFOSE	84%	94%	10-130%
	d9-EtFOSE	87%	98%	10-130%
	13C2-4:2FTS	98%	95%	50-150%
	13C2-6:2FTS	97%	91%	50-150%
	13C2-8:2FTS	93%	90%	50-150%
	13C3-HFPO-DA	97%	100%	50-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88053-MS	4Q21394.D	1	11/03/21	NG	10/28/21	OP88053	S4Q293
OP88053-MSD	4Q21395.D	1	11/03/21	NG	10/28/21	OP88053	S4Q293
FA89983-25	4Q21393.D	1	11/03/21	NG	10/28/21	OP88053	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-25, FA89983-26, FA89983-27, FA89983-28, FA89983-29

CAS No.	Compound	FA89983-25 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
375-22-4	Perfluorobutanoic acid	ND		12.1	17.4	144*	12.4	16.1	130	8	70-130/30
2706-90-3	Perfluoropentanoic acid	ND		12.1	17.7	146*	12.4	16.3	131*	8	70-130/30
307-24-4	Perfluorohexanoic acid	ND		12.1	17.7	146*	12.4	16.2	131*	9	70-130/30
375-85-9	Perfluoroheptanoic acid	ND		12.1	17.5	145*	12.4	16.1	130	8	70-130/30
335-67-1	Perfluorooctanoic acid	ND		12.1	17.9	148*	12.4	16.3	131*	9	70-130/30
375-95-1	Perfluorononanoic acid	0.54	J	12.1	17.3	138*	12.4	16.1	125	7	70-130/30
335-76-2	Perfluorodecanoic acid	0.58	J	12.1	17.8	142*	12.4	16.3	127	9	70-130/30
2058-94-8	Perfluoroundecanoic acid	3.0		12.1	20.7	146*	12.4	18.3	123	12	70-130/30
307-55-1	Perfluorododecanoic acid	0.41	J	12.1	18.1	146*	12.4	16.7	131*	8	70-130/30
72629-94-8	Perfluorotridecanoic acid	0.48	J	12.1	17.8	143*	12.4	16.1	126	10	70-130/30
376-06-7	Perfluorotetradecanoic acid	ND		12.1	17.7	146*	12.4	16.2	131*	9	70-130/30
375-73-5	Perfluorobutanesulfonic acid	ND		12.1	17.2	142*	12.4	16.2	131*	6	70-130/30
2706-91-4	Perfluoropentanesulfonic acid	ND		12.1	17.8	147*	12.4	16.8	135*	6	70-130/30
355-46-4	Perfluorohexanesulfonic acid	ND		12.1	18.0	149*	12.4	16.3	131*	10	70-130/30
375-92-8	Perfluoroheptanesulfonic acid	ND		12.1	18.6	154*	12.4	16.6	134*	11	70-130/30
1763-23-1	Perfluorooctanesulfonic acid	ND		12.1	17.0	140*	12.4	15.9	128	7	70-130/30
68259-12-1	Perfluorononanesulfonic acid	ND		12.1	16.9	140*	12.4	15.9	128	6	70-130/30
335-77-3	Perfluorodecanesulfonic acid	ND		12.1	16.5	136*	12.4	15.3	123	8	65-135/30
79780-39-5	Perfluorododecanesulfonic aci	ND		12.1	16.2	134	12.4	15.0	121	8	60-140/30
754-91-6	PFOSA	ND		12.1	17.8	147*	12.4	15.7	127	13	70-130/30
31506-32-8	MeFOSA	ND		12.1	15.6	129	12.4	14.6	118	7	70-130/30
4151-50-2	EtFOSA	ND		12.1	14.4	119	12.4	13.1	106	9	70-130/30
2355-31-9	MeFOSAA	ND		12.1	19.0	157*	12.4	17.2	139*	10	70-130/30
2991-50-6	EtFOSAA	ND		12.1	18.1	150*	12.4	15.7	127	14	70-130/30
24448-09-7	MeFOSE	ND		60.5	72.9	120	62	69.3	112	5	70-130/30
1691-99-2	EtFOSE	ND		60.5	70.5	116	62	70.0	113	1	70-130/30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		12.1	17.1	141*	12.4	15.8	127	8	70-130/30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		12.1	16.8	139*	12.4	15.5	125	8	70-130/30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		12.1	16.9	140*	12.4	15.4	124	9	70-130/30
356-02-5	3:3 Fluorotelomer carboxylate	ND		12.1	18.8	155*	12.4	17.8	143*	5	60-140/30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		12.1	17.9	148*	12.4	16.6	134	8	60-140/30
812-70-4	7:3 Fluorotelomer carboxylate	ND		12.1	16.8	139	12.4	16.7	135	1	60-140/30
377-73-1	PFMPA	ND		12.1	17.0	140	12.4	15.6	126	9	60-140/30
863090-89-5	PFMBA	ND		12.1	16.3	135	12.4	15.3	123	6	60-140/30
151772-58-6	NFDHA	ND		12.1	16.2	134	12.4	14.8	119	9	60-140/30
113507-82-7	PFEESA	ND		12.1	16.4	135	12.4	15.2	123	8	60-140/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88053-MS	4Q21394.D	1	11/03/21	NG	10/28/21	OP88053	S4Q293
OP88053-MSD	4Q21395.D	1	11/03/21	NG	10/28/21	OP88053	S4Q293
FA89983-25	4Q21393.D	1	11/03/21	NG	10/28/21	OP88053	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-25, FA89983-26, FA89983-27, FA89983-28, FA89983-29

CAS No.	Compound	FA89983-25 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
13252-13-6	HFPO-DA (GenX)	ND		12.1	16.5	136*	12.4	15.3	123	8	70-130/30
919005-14-4	ADONA	ND		12.1	17.2	142*	12.4	15.7	127	9	60-140/30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		12.1	16.6	137	12.4	15.6	126	6	60-140/30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		12.1	16.8	139	12.4	15.7	127	7	60-140/30

CAS No.	ID Standard Recoveries	MS	MSD	FA89983-25	Limits
	13C4-PFBA	47%	60%	49%	40-140%
	13C5-PFPeA	45%* [a]	58%	47%* [a]	50-150%
	13C5-PFHxA	47%* [a]	59%	50%	50-150%
	13C4-PFHpA	46%* [a]	58%	48%* [a]	50-150%
	13C8-PFOA	47%* [a]	60%	50%	50-150%
	13C9-PFNA	49%* [a]	61%	51%	50-150%
	13C6-PFDA	51%	64%	54%	50-150%
	13C7-PFUnDA	50%	63%	51%	40-140%
	13C2-PFDoDA	50%	62%	51%	40-140%
	13C2-PFTeDA	49%	62%	51%	30-130%
	13C3-PFBS	48%* [a]	60%	50%	50-150%
	13C3-PFHxS	47%* [a]	61%	49%* [a]	50-150%
	13C8-PFOS	50%	60%	52%	50-150%
	13C8-FOSA	52%	67%	60%	30-130%
	d3-MeFOSA	54%	68%	56%	10-140%
	d5-EtFOSA	69%	81%	54%	10-140%
	d3-MeFOSAA	53%	70%	50%	40-140%
	d5-EtFOSAA	54%	74%	51%	40-140%
	d7-MeFOSE	68%	80%	53%	10-130%
	d9-EtFOSE	69%	78%	55%	10-130%
	13C2-4:2FTS	49%* [a]	61%	47%* [a]	50-150%
	13C2-6:2FTS	51%	65%	50%	50-150%
	13C2-8:2FTS	55%	71%	55%	50-150%
	13C3-HFPO-DA	45%* [a]	55%	48%* [a]	50-150%

(a) Outside control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88016-DUP	4Q21314.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293
FA89983-2	4Q21313.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-1, FA89983-2, FA89983-3, FA89983-4, FA89983-5, FA89983-6, FA89983-7, FA89983-8, FA89983-9, FA89983-10, FA89983-11, FA89983-12, FA89983-13, FA89983-14, FA89983-15, FA89983-16, FA89983-17, FA89983-18, FA89983-19, FA89983-20

CAS No.	Compound	FA89983-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.0053	J	0.0058	J	9	30
2706-90-3	Perfluoropentanoic acid	0.0115		0.0117		2	30
307-24-4	Perfluorohexanoic acid	0.0154		0.0160		4	30
375-85-9	Perfluoroheptanoic acid	0.0162		0.0168		4	30
335-67-1	Perfluorooctanoic acid	0.0444		0.0460		4	30
375-95-1	Perfluorononanoic acid	0.0511		0.0539		5	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	ND		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	ND		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
113507-82-7	PFEESA	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88016-DUP	4Q21314.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293
FA89983-2	4Q21313.D	1	11/02/21	NG	10/26/21	OP88016	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-1, FA89983-2, FA89983-3, FA89983-4, FA89983-5, FA89983-6, FA89983-7, FA89983-8, FA89983-9, FA89983-10, FA89983-11, FA89983-12, FA89983-13, FA89983-14, FA89983-15, FA89983-16, FA89983-17, FA89983-18, FA89983-19, FA89983-20

CAS No.	Compound	FA89983-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FA89983-2	Limits
	13C4-PFBA	93%	94%	35-135%
	13C5-PFPeA	93%	94%	50-150%
	13C5-PFHxA	98%	99%	50-150%
	13C4-PFHpA	95%	96%	50-150%
	13C8-PFOA	94%	95%	50-150%
	13C9-PFNA	92%	95%	50-150%
	13C6-PFDA	90%	93%	50-150%
	13C7-PFUnDA	88%	90%	40-140%
	13C2-PFDoDA	81%	85%	40-140%
	13C2-PFTeDA	83%	86%	30-130%
	13C3-PFBS	93%	96%	50-150%
	13C3-PFHxS	90%	93%	50-150%
	13C8-PFOS	86%	92%	50-150%
	13C8-FOSA	91%	91%	30-130%
	d3-MeFOSA	61%	52%	10-130%
	d5-EtFOSA	58%	42%	10-130%
	d3-MeFOSAA	82%	82%	40-140%
	d5-EtFOSAA	81%	82%	40-140%
	d7-MeFOSE	90%	86%	10-130%
	d9-EtFOSE	93%	86%	10-130%
	13C2-4:2FTS	90%	91%	50-150%
	13C2-6:2FTS	89%	92%	50-150%
	13C2-8:2FTS	87%	89%	50-150%
	13C3-HFPO-DA	97%	97%	50-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88037-DUP	4Q21349.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293
FA89984-2	4Q21348.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-21, FA89983-22, FA89983-23, FA89983-24

CAS No.	Compound	FA89984-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.0317		0.0325		2	30
2706-90-3	Perfluoropentanoic acid	0.0408		0.0408		0	30
307-24-4	Perfluorohexanoic acid	0.0325		0.0330		2	30
375-85-9	Perfluoroheptanoic acid	0.0353		0.0358		1	30
335-67-1	Perfluorooctanoic acid	0.0992		0.100		1	30
375-95-1	Perfluorononanoic acid	0.0753		0.0756		0	30
335-76-2	Perfluorodecanoic acid	ND		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	ND		ND		nc	30
307-55-1	Perfluorododecanoic acid	ND		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	ND		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	ND		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	0.0029	J	0.0028	J	4	30
2706-91-4	Perfluoropentanesulfonic acid	ND		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	ND		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	ND		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	0.0023	J	0.0024	J	4	30
68259-12-1	Perfluorononanesulfonic acid	ND		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	ND		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	ND		ND		nc	30
754-91-6	PFOSA	ND		ND		nc	30
31506-32-8	MeFOSA	ND		ND		nc	30
4151-50-2	EtFOSA	ND		ND		nc	30
2355-31-9	MeFOSAA	ND		ND		nc	30
2991-50-6	EtFOSAA	ND		ND		nc	30
24448-09-7	MeFOSE	ND		ND		nc	30
1691-99-2	EtFOSE	ND		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	ND		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	ND		ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	ND		ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	ND		ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	ND		ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	ND		ND		nc	30
377-73-1	PFMPA	ND		ND		nc	30
863090-89-5	PFMBA	ND		ND		nc	30
151772-58-6	NFDHA	ND		ND		nc	30
113507-82-7	PFEESA	ND		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA89983
Account: LEPPACOG Leppert Associates
Project: Bridgeport Disposal; 600 Crossroads Blvd, Logan Township, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP88037-DUP	4Q21349.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293
FA89984-2	4Q21348.D	1	11/03/21	NG	10/27/21	OP88037	S4Q293

The QC reported here applies to the following samples: **Method:** EPA 537M BY ID

FA89983-21, FA89983-22, FA89983-23, FA89983-24

CAS No.	Compound	FA89984-2 ug/l	Q	DUP ug/l	Q	RPD	Limits
13252-13-6	HFPO-DA (GenX)	ND		ND		nc	30
919005-14-4	ADONA	ND		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND		ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FA89984-2	Limits
	13C4-PFBA	94%	88%	35-135%
	13C5-PFPeA	95%	87%	50-150%
	13C5-PFHxA	102%	95%	50-150%
	13C4-PFHpA	103%	95%	50-150%
	13C8-PFOA	101%	93%	50-150%
	13C9-PFNA	100%	91%	50-150%
	13C6-PFDA	97%	89%	50-150%
	13C7-PFUnDA	95%	88%	40-140%
	13C2-PFDoDA	87%	83%	40-140%
	13C2-PFTeDA	89%	85%	30-130%
	13C3-PFBS	98%	91%	50-150%
	13C3-PFHxS	99%	90%	50-150%
	13C8-PFOS	92%	87%	50-150%
	13C8-FOSA	93%	93%	30-130%
	d3-MeFOSA	76%	60%	10-130%
	d5-EtFOSA	84%	56%	10-130%
	d3-MeFOSAA	88%	88%	40-140%
	d5-EtFOSAA	88%	88%	40-140%
	d7-MeFOSE	102%	91%	10-130%
	d9-EtFOSE	106%	94%	10-130%
	13C2-4:2FTS	99%	90%	50-150%
	13C2-6:2FTS	98%	89%	50-150%
	13C2-8:2FTS	94%	86%	50-150%
	13C3-HFPO-DA	102%	91%	50-150%

* = Outside of Control Limits.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Clean Harbors

Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ

SGS Job Number: JD35983

Sampling Date: 12/01/21

Report to:

Leppert Associates

Jernstberger@leppertassociates.com

ATTN: Jean Ernstberger

Total number of pages in report: 37

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Mike Earp
General Manager

Client Service contact: Beth Stopen 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

SGS North America Inc. • 2235 Route 130 • Dayton, NJ 08810 • tel: 732-329-0200 • fax: 732-329-3499

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EHS.US.CustomerCare@sgs.com

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SGS LabLink@1124787 10:46 31-Jan-2022

Sample Summary

Clean Harbors

Job No: JD35983

Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD35983-1	12/01/21	07:50	PAS	12/01/21	AQ	Surface Water	PFAS-SW-001
JD35983-2	12/01/21	07:59	PAS	12/01/21	AQ	Surface Water	PFAS-SW-002
JD35983-3	12/01/21	08:10	PAS	12/01/21	AQ	Surface Water	PFAS-SW-003
JD35983-4	12/01/21	08:15	PAS	12/01/21	AQ	Water	PFAS-WW-INLET
JD35983-5	12/01/21	08:17	PAS	12/01/21	AQ	Water	PFAS-WW-OUTLET
JD35983-6	12/01/21	08:20	PAS	12/01/21	AQ	Water	PFAS-DUP
JD35983-7	12/01/21	07:30	PAS	12/01/21	AQ	Field Blank Water	FIELD BLANK
JD35983-8	12/01/21	07:30	PAS	12/01/21	AQ	Equipment Blank	EQUIPMENT BLANK

Summary of Hits

Job Number: JD35983
Account: Clean Harbors
Project: Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ
Collected: 12/01/21

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD35983-1	**PFAS-SW-001**					
Perfluorobutanoic acid [a]		0.0119	0.0030	0.0015	ug/l	EPA 537M BY ID
Perfluoropentanoic acid [a]		0.0172	0.0015	0.00076	ug/l	EPA 537M BY ID
Perfluorohexanoic acid [a]		0.0207	0.0015	0.00076	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid [a]		0.0080	0.0015	0.00076	ug/l	EPA 537M BY ID
Perfluorooctanoic acid [a]		0.0067	0.0015	0.00076	ug/l	EPA 537M BY ID
Perfluorononanoic acid [a]		0.0025	0.0015	0.00076	ug/l	EPA 537M BY ID
Perfluorodecanoic acid [a]		0.0021	0.0015	0.00076	ug/l	EPA 537M BY ID
Perfluoroundecanoic acid [a]		0.00097 J	0.0015	0.00076	ug/l	EPA 537M BY ID
Perfluorododecanoic acid [a]		0.00095 J	0.0015	0.00076	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid [a]		0.0014 J	0.0015	0.00076	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid [a]		0.0010 J	0.0015	0.00076	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid [a]		0.0038	0.0015	0.00076	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate [a]		0.0087	0.0061	0.0015	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate [a]		0.0076	0.0061	0.0015	ug/l	EPA 537M BY ID
HFPO-DA (GenX) [a]		0.0477	0.0030	0.0015	ug/l	EPA 537M BY ID
JD35983-2	**PFAS-SW-002**					
Perfluorobutanoic acid [a]		0.0103	0.0029	0.0015	ug/l	EPA 537M BY ID
Perfluoropentanoic acid [a]		0.0080	0.0015	0.00074	ug/l	EPA 537M BY ID
Perfluorohexanoic acid [a]		0.0149	0.0015	0.00074	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid [a]		0.0094	0.0015	0.00074	ug/l	EPA 537M BY ID
Perfluorooctanoic acid [a]		0.0122	0.0015	0.00074	ug/l	EPA 537M BY ID
Perfluorononanoic acid [a]		0.0185	0.0015	0.00074	ug/l	EPA 537M BY ID
Perfluorodecanoic acid [a]		0.0035	0.0015	0.00074	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid [a]		0.0014 J	0.0015	0.00074	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid [a]		0.0012 J	0.0015	0.00074	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid [a]		0.0098	0.0015	0.00074	ug/l	EPA 537M BY ID
JD35983-3	**PFAS-SW-003**					
Perfluorobutanoic acid [a]		0.0164	0.0033	0.0017	ug/l	EPA 537M BY ID
Perfluoropentanoic acid [a]		0.0214	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorohexanoic acid [a]		0.0260	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid [a]		0.0193	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorooctanoic acid [a]		0.0240	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorononanoic acid [a]		0.0300	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorodecanoic acid [a]		0.0115	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluoroundecanoic acid [a]		0.0023	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorododecanoic acid [a]		0.0021	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid [a]		0.0048	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid [a]		0.0022	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid [a]		0.0286	0.0017	0.00083	ug/l	EPA 537M BY ID

Summary of Hits

Job Number: JD35983
Account: Clean Harbors
Project: Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ
Collected: 12/01/21

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
6:2 Fluorotelomer sulfonate [a]	0.0271	0.0067	0.0017	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate [a]	0.0089	0.0067	0.0017	ug/l	EPA 537M BY ID
5:3 Fluorotelomer carboxylate [a]	0.0018 J	0.0067	0.0017	ug/l	EPA 537M BY ID
HFPO-DA (GenX) [a]	0.0150	0.0033	0.0017	ug/l	EPA 537M BY ID
JD35983-4 PFAS-WW-INLET					
Perfluorobutanoic acid [a]	0.0782	0.0033	0.0017	ug/l	EPA 537M BY ID
Perfluoropentanoic acid [a]	0.0770	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorohexanoic acid [a]	0.133	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid [a]	0.877	0.017	0.0083	ug/l	EPA 537M BY ID
Perfluorooctanoic acid [a]	2.24	0.017	0.0083	ug/l	EPA 537M BY ID
Perfluorononanoic acid [a]	2.88	0.017	0.0083	ug/l	EPA 537M BY ID
Perfluorodecanoic acid [a]	0.469	0.017	0.0083	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid [a]	0.0091	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluoropentanesulfonic acid [a]	0.0021	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid [a]	0.0239	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluoroheptanesulfonic acid [a]	0.0022	0.0017	0.00083	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid [a]	0.146	0.0017	0.00083	ug/l	EPA 537M BY ID
EtFOSAA [a]	0.0046	0.0033	0.0017	ug/l	EPA 537M BY ID
4:2 Fluorotelomer sulfonate [a]	0.0017 J	0.0067	0.0017	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate [a]	0.118	0.0067	0.0017	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate [a]	0.0248	0.0067	0.0017	ug/l	EPA 537M BY ID
5:3 Fluorotelomer carboxylate [a]	0.0041 J	0.0067	0.0017	ug/l	EPA 537M BY ID
7:3 Fluorotelomer carboxylate [a]	0.0026 J	0.0067	0.0017	ug/l	EPA 537M BY ID
HFPO-DA (GenX) [a]	0.0758	0.0033	0.0017	ug/l	EPA 537M BY ID
JD35983-5 PFAS-WW-OUTLET					
Perfluorobutanoic acid [a]	0.0819	0.0032	0.0016	ug/l	EPA 537M BY ID
Perfluoropentanoic acid [a]	0.0807	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluorohexanoic acid [a]	0.140	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid [a]	0.935	0.016	0.0081	ug/l	EPA 537M BY ID
Perfluorooctanoic acid [a]	2.48	0.016	0.0081	ug/l	EPA 537M BY ID
Perfluorononanoic acid [a]	3.00	0.016	0.0081	ug/l	EPA 537M BY ID
Perfluorodecanoic acid [a]	0.482	0.016	0.0081	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid [a]	0.010	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluoropentanesulfonic acid [a]	0.0028	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid [a]	0.0237	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluoroheptanesulfonic acid [a]	0.0017	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid [a]	0.154	0.0016	0.00081	ug/l	EPA 537M BY ID
PFOSA [a]	0.0017 J	0.0032	0.0016	ug/l	EPA 537M BY ID
EtFOSAA [a]	0.0062	0.0032	0.0016	ug/l	EPA 537M BY ID
4:2 Fluorotelomer sulfonate [a]	0.0016 J	0.0065	0.0016	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate [a]	0.121	0.0065	0.0016	ug/l	EPA 537M BY ID

Summary of Hits

Job Number: JD35983
Account: Clean Harbors
Project: Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ
Collected: 12/01/21

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
8:2 Fluorotelomer sulfonate [a]		0.0254	0.0065	0.0016	ug/l	EPA 537M BY ID
5:3 Fluorotelomer carboxylate [a]		0.0069	0.0065	0.0016	ug/l	EPA 537M BY ID
7:3 Fluorotelomer carboxylate [a]		0.0034 J	0.0065	0.0016	ug/l	EPA 537M BY ID
HFPO-DA (GenX) [a]		0.0822	0.0032	0.0016	ug/l	EPA 537M BY ID
JD35983-6	**PFAS-DUP**					
Perfluorobutanoic acid [a]		0.0794	0.0032	0.0016	ug/l	EPA 537M BY ID
Perfluoropentanoic acid [a]		0.0782	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluorohexanoic acid [a]		0.135	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluoroheptanoic acid [a]		0.898	0.016	0.0081	ug/l	EPA 537M BY ID
Perfluorooctanoic acid [a]		2.33	0.016	0.0081	ug/l	EPA 537M BY ID
Perfluorononanoic acid [a]		2.90	0.016	0.0081	ug/l	EPA 537M BY ID
Perfluorodecanoic acid [a]		0.489	0.016	0.0081	ug/l	EPA 537M BY ID
Perfluorobutanesulfonic acid [a]		0.0097	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluoropentanesulfonic acid [a]		0.0028	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluorohexanesulfonic acid [a]		0.0234	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluoroheptanesulfonic acid [a]		0.0018	0.0016	0.00081	ug/l	EPA 537M BY ID
Perfluorooctanesulfonic acid [a]		0.156	0.0016	0.00081	ug/l	EPA 537M BY ID
EtFOSAA [a]		0.0050	0.0032	0.0016	ug/l	EPA 537M BY ID
4:2 Fluorotelomer sulfonate [a]		0.0018 J	0.0065	0.0016	ug/l	EPA 537M BY ID
6:2 Fluorotelomer sulfonate [a]		0.121	0.0065	0.0016	ug/l	EPA 537M BY ID
8:2 Fluorotelomer sulfonate [a]		0.0256	0.0065	0.0016	ug/l	EPA 537M BY ID
5:3 Fluorotelomer carboxylate [a]		0.0061 J	0.0065	0.0016	ug/l	EPA 537M BY ID
7:3 Fluorotelomer carboxylate [a]		0.0031 J	0.0065	0.0016	ug/l	EPA 537M BY ID
HFPO-DA (GenX) [a]		0.0775	0.0032	0.0016	ug/l	EPA 537M BY ID

JD35983-7 FIELD BLANK

No hits reported in this sample.

JD35983-8 EQUIPMENT BLANK

No hits reported in this sample.

(a) Analysis performed at SGS Orlando, FL.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	PFAS-SW-001		
Lab Sample ID:	JD35983-1	**Date Sampled:**	12/01/21
Matrix:	AQ - Surface Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4Q24210.D	1	12/22/21 23:42	AFL	12/16/21 09:00	F:OP88863	F:S4Q331
Run #2 [b]	4Q24211.D	5	12/23/21 00:00	AFL	12/16/21 09:00	F:OP88863	F:S4Q331

	Initial Volume	Final Volume
Run #1	330 ml	1.0 ml
Run #2	330 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0119	0.0030	0.0015	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0172	0.0015	0.00076	ug/l	
307-24-4	Perfluorohexanoic acid	0.0207	0.0015	0.00076	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0080	0.0015	0.00076	ug/l	
335-67-1	Perfluorooctanoic acid	0.0067	0.0015	0.00076	ug/l	
375-95-1	Perfluorononanoic acid	0.0025	0.0015	0.00076	ug/l	
335-76-2	Perfluorodecanoic acid	0.0021	0.0015	0.00076	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.00097	0.0015	0.00076	ug/l	J
307-55-1	Perfluorododecanoic acid	0.00095	0.0015	0.00076	ug/l	J
72629-94-8	Perfluorotridecanoic acid	ND	0.0015	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0015	0.00076	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0014	0.0015	0.00076	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0015	0.00076	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0010	0.0015	0.00076	ug/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0015	0.00076	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0038	0.0015	0.00076	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0015	0.00076	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0015	0.00076	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0030	0.0015	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0030	0.0015	ug/l	
31506-32-8	MeFOSA [c]	ND [d]	0.030	0.015	ug/l	
4151-50-2	EtFOSA [c]	ND [d]	0.030	0.015	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0030	0.0015	ug/l	
2991-50-6	EtFOSAA	ND	0.0030	0.0015	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SW-001		
Lab Sample ID:	JD35983-1	**Date Sampled:**	12/01/21
Matrix:	AQ - Surface Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND [d]	0.076	0.030	ug/l	
1691-99-2	EtFOSE	ND [d]	0.076	0.030	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0061	0.0015	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0087	0.0061	0.0015	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0076	0.0061	0.0015	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0061	0.0015	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.0061	0.0015	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.0061	0.0015	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.0061	0.0015	ug/l	
863090-89-5	PFMBA	ND	0.0061	0.0015	ug/l	
151772-58-6	NFDHA	ND	0.0061	0.0015	ug/l	
113507-82-7	PFEESA	ND	0.0061	0.0015	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0477	0.0030	0.0015	ug/l	
919005-14-4	ADONA	ND	0.0061	0.0015	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0061	0.0015	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0061	0.0015	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	74%	92%	35-135%
	13C5-PFPeA	94%	101%	50-150%
	13C5-PFHxA	95%	100%	50-150%
	13C4-PFHpA	97%	100%	50-150%
	13C8-PFOA	98%	100%	50-150%
	13C9-PFNA	97%	103%	50-150%
	13C6-PFDA	94%	100%	50-150%
	13C7-PFUnDA	84%	91%	40-140%
	13C2-PFDoDA	69%	75%	40-140%
	13C2-PFTeDA	33%	41%	30-130%
	13C3-PFBS	95%	104%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SW-001		
Lab Sample ID:	JD35983-1	**Date Sampled:**	12/01/21
Matrix:	AQ - Surface Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	93%	107%	50-150%
	13C8-PFOS	95%	103%	50-150%
	13C8-FOSA	34%	64%	30-130%
	d3-MeFOSA	2% [e]	6% [e]	10-130%
	d5-EtFOSA	4% [e]	5% [e]	10-130%
	d3-MeFOSAA	107%	105%	40-140%
	d5-EtFOSAA	109%	101%	40-140%
	d7-MeFOSE	5% [e]	16%	10-130%
	d9-EtFOSE	4% [e]	14%	10-130%
	13C2-4:2FTS	93%	97%	50-150%
	13C2-6:2FTS	98%	102%	50-150%
	13C2-8:2FTS	96%	99%	50-150%
	13C3-HFPO-DA	92%	99%	50-150%

(a) Analysis performed at SGS Orlando, FL.
(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
(c) Associated ID Standard outside control limits, Confirmed by batch QC.
(d) Result is from Run# 2
(e) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SW-002		
Lab Sample ID:	JD35983-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Surface Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4Q24212.D	1	12/23/21 00:18	AFL	12/16/21 09:00	F:OP88863	F:S4Q331
Run #2 [b]	4Q24213.D	5	12/23/21 00:37	AFL	12/16/21 09:00	F:OP88863	F:S4Q331

	Initial Volume	Final Volume
Run #1	340 ml	1.0 ml
Run #2	340 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0103	0.0029	0.0015	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0080	0.0015	0.00074	ug/l	
307-24-4	Perfluorohexanoic acid	0.0149	0.0015	0.00074	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0094	0.0015	0.00074	ug/l	
335-67-1	Perfluorooctanoic acid	0.0122	0.0015	0.00074	ug/l	
375-95-1	Perfluorononanoic acid	0.0185	0.0015	0.00074	ug/l	
335-76-2	Perfluorodecanoic acid	0.0035	0.0015	0.00074	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0015	0.00074	ug/l	
307-55-1	Perfluorododecanoic acid [c]	ND [d]	0.0074	0.0037	ug/l	
72629-94-8	Perfluorotridecanoic acid [c]	ND [d]	0.0074	0.0037	ug/l	
376-06-7	Perfluorotetradecanoic acid [c]	ND [d]	0.0074	0.0037	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0014	0.0015	0.00074	ug/l	J
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0015	0.00074	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0012	0.0015	0.00074	ug/l	J
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0015	0.00074	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0098	0.0015	0.00074	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0015	0.00074	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0015	0.00074	ug/l	
79780-39-5	Perfluorododecanesulfonic ac [c]	ND [d]	0.015	0.0074	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA [c]	ND [d]	0.015	0.0074	ug/l	
31506-32-8	MeFOSA [c]	ND [d]	0.029	0.015	ug/l	
4151-50-2	EtFOSA [c]	ND [d]	0.029	0.015	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0029	0.0015	ug/l	
2991-50-6	EtFOSAA	ND	0.0029	0.0015	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SW-002		
Lab Sample ID:	JD35983-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Surface Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE [c]	ND [d]	0.074	0.029	ug/l	
1691-99-2	EtFOSE [c]	ND [d]	0.074	0.029	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0059	0.0015	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0059	0.0015	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0059	0.0015	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0059	0.0015	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.0059	0.0015	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.0059	0.0015	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.0059	0.0015	ug/l	
863090-89-5	PFMBA	ND	0.0059	0.0015	ug/l	
151772-58-6	NFDHA	ND	0.0059	0.0015	ug/l	
113507-82-7	PFEESA	ND	0.0059	0.0015	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0029	0.0015	ug/l	
919005-14-4	ADONA	ND	0.0059	0.0015	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0059	0.0015	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Mino [c]	ND [d]	0.029	0.0074	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	66%	88%	35-135%
	13C5-PFPeA	80%	94%	50-150%
	13C5-PFHxA	84%	95%	50-150%
	13C4-PFHpA	89%	96%	50-150%
	13C8-PFOA	94%	100%	50-150%
	13C9-PFNA	92%	98%	50-150%
	13C6-PFDA	80%	86%	50-150%
	13C7-PFUnDA	53%	60%	40-140%
	13C2-PFDoDA	26% [e]	29% [e]	40-140%
	13C2-PFTeDA	11% [e]	14% [e]	30-130%
	13C3-PFBS	82%	95%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SW-002		
Lab Sample ID:	JD35983-2	**Date Sampled:**	12/01/21
Matrix:	AQ - Surface Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	89%	100%	50-150%
	13C8-PFOS	82%	83%	50-150%
	13C8-FOSA	12% [e]	22% [e]	30-130%
	d3-MeFOSA	1% [e]	1% [e]	10-130%
	d5-EtFOSA	3% [e]	3% [e]	10-130%
	d3-MeFOSAA	77%	80%	40-140%
	d5-EtFOSAA	66%	65%	40-140%
	d7-MeFOSE	1% [e]	2% [e]	10-130%
	d9-EtFOSE	1% [e]	2% [e]	10-130%
	13C2-4:2FTS	80%	91%	50-150%
	13C2-6:2FTS	94%	97%	50-150%
	13C2-8:2FTS	86%	87%	50-150%
	13C3-HFPO-DA	83%	92%	50-150%

(a) Analysis performed at SGS Orlando, FL.
(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
(c) Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.
(d) Result is from Run# 2
(e) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SW-003		
Lab Sample ID:	JD35983-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Surface Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4Q24214.D	1	12/23/21 00:55	AFL	12/16/21 09:00	F:OP88863	F:S4Q331
Run #2 [b]	4Q24215.D	5	12/23/21 01:14	AFL	12/16/21 09:00	F:OP88863	F:S4Q331

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0164	0.0033	0.0017	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0214	0.0017	0.00083	ug/l	
307-24-4	Perfluorohexanoic acid	0.0260	0.0017	0.00083	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0193	0.0017	0.00083	ug/l	
335-67-1	Perfluorooctanoic acid	0.0240	0.0017	0.00083	ug/l	
375-95-1	Perfluorononanoic acid	0.0300	0.0017	0.00083	ug/l	
335-76-2	Perfluorodecanoic acid	0.0115	0.0017	0.00083	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0023	0.0017	0.00083	ug/l	
307-55-1	Perfluorododecanoic acid	0.0021	0.0017	0.00083	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0017	0.00083	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0017	0.00083	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0048	0.0017	0.00083	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0017	0.00083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0022	0.0017	0.00083	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0017	0.00083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0286	0.0017	0.00083	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0017	0.00083	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0017	0.00083	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0033	0.0017	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0033	0.0017	ug/l	
31506-32-8	MeFOSA	ND [c]	0.033	0.017	ug/l	
4151-50-2	EtFOSA	ND [c]	0.033	0.017	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0033	0.0017	ug/l	
2991-50-6	EtFOSAA	ND	0.0033	0.0017	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SW-003		
Lab Sample ID:	JD35983-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Surface Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.017	0.0067	ug/l	
1691-99-2	EtFOSE	ND	0.017	0.0067	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0067	0.0017	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	0.0271	0.0067	0.0017	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0089	0.0067	0.0017	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0067	0.0017	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	0.0018	0.0067	0.0017	ug/l	J
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.0067	0.0017	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.0067	0.0017	ug/l	
863090-89-5	PFMBA	ND	0.0067	0.0017	ug/l	
151772-58-6	NFDHA	ND	0.0067	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0067	0.0017	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0150	0.0033	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0067	0.0017	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0067	0.0017	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0067	0.0017	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	86%	96%	35-135%
	13C5-PFPeA	99%	99%	50-150%
	13C5-PFHxA	101%	97%	50-150%
	13C4-PFHpA	103%	101%	50-150%
	13C8-PFOA	106%	100%	50-150%
	13C9-PFNA	107%	103%	50-150%
	13C6-PFDA	106%	100%	50-150%
	13C7-PFUnDA	98%	97%	40-140%
	13C2-PFDoDA	87%	88%	40-140%
	13C2-PFTeDA	70%	70%	30-130%
	13C3-PFBS	103%	104%	50-150%

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-SW-003		
Lab Sample ID:	JD35983-3	**Date Sampled:**	12/01/21
Matrix:	AQ - Surface Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	103%	109%	50-150%
	13C8-PFOS	102%	103%	50-150%
	13C8-FOSA	48%	61%	30-130%
	d3-MeFOSA	2% [d]	10%	10-130%
	d5-EtFOSA	5% [d]	11%	10-130%
	d3-MeFOSAA	118%	106%	40-140%
	d5-EtFOSAA	115%	105%	40-140%
	d7-MeFOSE	13%	27%	10-130%
	d9-EtFOSE	11%	24%	10-130%
	13C2-4:2FTS	98%	98%	50-150%
	13C2-6:2FTS	108%	101%	50-150%
	13C2-8:2FTS	107%	99%	50-150%
	13C3-HFPO-DA	94%	96%	50-150%

(a) Analysis performed at SGS Orlando, FL.
(b) Dilution required due to matrix interference (ID recovery standard failure). Analysis performed at SGS Orlando, FL.
(c) Result is from Run# 2
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-WW-INLET		
Lab Sample ID:	JD35983-4	**Date Sampled:**	12/01/21
Matrix:	AQ - Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4Q24216.D	1	12/23/21 01:32	AFL	12/16/21 09:00	F:OP88863	F:S4Q331
Run #2 [a]	4Q24264.D	10	12/23/21 16:24	AFL	12/16/21 09:00	F:OP88863	F:S4Q331

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0782	0.0033	0.0017	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0770	0.0017	0.00083	ug/l	
307-24-4	Perfluorohexanoic acid	0.133	0.0017	0.00083	ug/l	
375-85-9	Perfluoroheptanoic acid	0.877 [b]	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	2.24 [b]	0.017	0.0083	ug/l	
375-95-1	Perfluorononanoic acid	2.88 [b]	0.017	0.0083	ug/l	
335-76-2	Perfluorodecanoic acid	0.469 [b]	0.017	0.0083	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0017	0.00083	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0017	0.00083	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0017	0.00083	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0017	0.00083	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0091	0.0017	0.00083	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0021	0.0017	0.00083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0239	0.0017	0.00083	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0022	0.0017	0.00083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.146	0.0017	0.00083	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0017	0.00083	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0017	0.00083	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0033	0.0017	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA [c]	ND [b]	0.033	0.017	ug/l	
31506-32-8	MeFOSA [c]	ND [b]	0.067	0.033	ug/l	
4151-50-2	EtFOSA	ND [b]	0.067	0.033	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0033	0.0017	ug/l	
2991-50-6	EtFOSAA	0.0046	0.0033	0.0017	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-WW-INLET		
Lab Sample ID:	JD35983-4	**Date Sampled:**	12/01/21
Matrix:	AQ - Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND [b]	0.17	0.067	ug/l	
1691-99-2	EtFOSE	ND [b]	0.17	0.067	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	0.0017	0.0067	0.0017	ug/l	J
27619-97-2	6:2 Fluorotelomer sulfonate	0.118	0.0067	0.0017	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0248	0.0067	0.0017	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0067	0.0017	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	0.0041	0.0067	0.0017	ug/l	J
812-70-4	7:3 Fluorotelomer carboxylate	0.0026	0.0067	0.0017	ug/l	J
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.0067	0.0017	ug/l	
863090-89-5	PFMBA	ND	0.0067	0.0017	ug/l	
151772-58-6	NFDHA	ND	0.0067	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0067	0.0017	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0758	0.0033	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0067	0.0017	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0067	0.0017	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0067	0.0017	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	63%	101%	35-135%
	13C5-PFPeA	91%	116%	50-150%
	13C5-PFHxA	93%	113%	50-150%
	13C4-PFHpA	96%	117%	50-150%
	13C8-PFOA	91%	117%	50-150%
	13C9-PFNA	96%	113%	50-150%
	13C6-PFDA	100%	115%	50-150%
	13C7-PFUnDA	97%	110%	40-140%
	13C2-PFDoDA	88%	105%	40-140%
	13C2-PFTeDA	81%	103%	30-130%
	13C3-PFBS	95%	115%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-WW-INLET		
Lab Sample ID:	JD35983-4	**Date Sampled:**	12/01/21
Matrix:	AQ - Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	99%	124%	50-150%
	13C8-PFOS	98%	120%	50-150%
	13C8-FOSA	15% [d]	26% [d]	30-130%
	d3-MeFOSA	2% [d]	5% [d]	10-130%
	d5-EtFOSA	5% [d]	13%	10-130%
	d3-MeFOSAA	92%	110%	40-140%
	d5-EtFOSAA	116%	128%	40-140%
	d7-MeFOSE	3% [d]	16%	10-130%
	d9-EtFOSE	7% [d]	19%	10-130%
	13C2-4:2FTS	82%	107%	50-150%
	13C2-6:2FTS	99%	125%	50-150%
	13C2-8:2FTS	104%	119%	50-150%
	13C3-HFPO-DA	94%	126%	50-150%

(a) Analysis performed at SGS Orlando, FL.
(b) Result is from Run# 2
(c) Associated ID Standard outside control limits, Confirmed by re-analysis.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-WW-OUTLET		
Lab Sample ID:	JD35983-5	**Date Sampled:**	12/01/21
Matrix:	AQ - Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4Q24220.D	1	12/23/21 02:45	AFL	12/16/21 09:00	F:OP88863	F:S4Q331
Run #2 [a]	4Q24265.D	10	12/23/21 16:42	AFL	12/16/21 09:00	F:OP88863	F:S4Q331

	Initial Volume	Final Volume
Run #1	310 ml	1.0 ml
Run #2	310 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0819	0.0032	0.0016	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0807	0.0016	0.00081	ug/l	
307-24-4	Perfluorohexanoic acid	0.140	0.0016	0.00081	ug/l	
375-85-9	Perfluoroheptanoic acid	0.935 [b]	0.016	0.0081	ug/l	
335-67-1	Perfluorooctanoic acid	2.48 [b]	0.016	0.0081	ug/l	
375-95-1	Perfluorononanoic acid	3.00 [b]	0.016	0.0081	ug/l	
335-76-2	Perfluorodecanoic acid	0.482 [b]	0.016	0.0081	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0016	0.00081	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0016	0.00081	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0016	0.00081	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND [b]	0.016	0.0081	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.010	0.0016	0.00081	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0028	0.0016	0.00081	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0237	0.0016	0.00081	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0017	0.0016	0.00081	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.154	0.0016	0.00081	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0016	0.00081	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0016	0.00081	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0032	0.0016	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0017	0.0032	0.0016	ug/l	J
31506-32-8	MeFOSA [c]	ND [b]	0.065	0.032	ug/l	
4151-50-2	EtFOSA	ND [b]	0.065	0.032	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0032	0.0016	ug/l	
2991-50-6	EtFOSAA	0.0062	0.0032	0.0016	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-WW-OUTLET		
Lab Sample ID:	JD35983-5	**Date Sampled:**	12/01/21
Matrix:	AQ - Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND [b]	0.16	0.065	ug/l	
1691-99-2	EtFOSE	ND [b]	0.16	0.065	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	0.0016	0.0065	0.0016	ug/l	J
27619-97-2	6:2 Fluorotelomer sulfonate	0.121	0.0065	0.0016	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0254	0.0065	0.0016	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0065	0.0016	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	0.0069	0.0065	0.0016	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	0.0034	0.0065	0.0016	ug/l	J
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.0065	0.0016	ug/l	
863090-89-5	PFMBA	ND	0.0065	0.0016	ug/l	
151772-58-6	NFDHA	ND	0.0065	0.0016	ug/l	
113507-82-7	PFEESA	ND	0.0065	0.0016	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0822	0.0032	0.0016	ug/l	
919005-14-4	ADONA	ND	0.0065	0.0016	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0065	0.0016	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0065	0.0016	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	62%	97%	35-135%
	13C5-PFPeA	91%	111%	50-150%
	13C5-PFHxA	92%	110%	50-150%
	13C4-PFHpA	96%	113%	50-150%
	13C8-PFOA	88%	110%	50-150%
	13C9-PFNA	94%	111%	50-150%
	13C6-PFDA	96%	117%	50-150%
	13C7-PFUnDA	81%	106%	40-140%
	13C2-PFDoDA	50%	88%	40-140%
	13C2-PFTeDA	9% [d]	32%	30-130%
	13C3-PFBS	94%	110%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-WW-OUTLET		
Lab Sample ID:	JD35983-5	**Date Sampled:**	12/01/21
Matrix:	AQ - Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	101%	110%	50-150%
	13C8-PFOS	93%	117%	50-150%
	13C8-FOSA	31%	61%	30-130%
	d3-MeFOSA	1% [d]	3% [d]	10-130%
	d5-EtFOSA	4% [d]	11%	10-130%
	d3-MeFOSAA	78%	106%	40-140%
	d5-EtFOSAA	88%	106%	40-140%
	d7-MeFOSE	4% [d]	20%	10-130%
	d9-EtFOSE	6% [d]	14%	10-130%
	13C2-4:2FTS	80%	104%	50-150%
	13C2-6:2FTS	99%	124%	50-150%
	13C2-8:2FTS	98%	116%	50-150%
	13C3-HFPO-DA	90%	116%	50-150%

(a) Analysis performed at SGS Orlando, FL.
(b) Result is from Run# 2
(c) Associated ID Standard outside control limits due to matrix interference. Confirmed by reanalysis.
(d) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-DUP		
Lab Sample ID:	JD35983-6	**Date Sampled:**	12/01/21
Matrix:	AQ - Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4Q24222.D	1	12/23/21 03:22	AFL	12/16/21 09:00	F:OP88863	F:S4Q331
Run #2 [a]	4Q24266.D	10	12/23/21 17:01	AFL	12/16/21 09:00	F:OP88863	F:S4Q331

	Initial Volume	Final Volume
Run #1	310 ml	1.0 ml
Run #2	310 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0794	0.0032	0.0016	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0782	0.0016	0.00081	ug/l	
307-24-4	Perfluorohexanoic acid	0.135	0.0016	0.00081	ug/l	
375-85-9	Perfluoroheptanoic acid	0.898 [b]	0.016	0.0081	ug/l	
335-67-1	Perfluorooctanoic acid	2.33 [b]	0.016	0.0081	ug/l	
375-95-1	Perfluorononanoic acid	2.90 [b]	0.016	0.0081	ug/l	
335-76-2	Perfluorodecanoic acid	0.489 [b]	0.016	0.0081	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0016	0.00081	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0016	0.00081	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0016	0.00081	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0016	0.00081	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	0.0097	0.0016	0.00081	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	0.0028	0.0016	0.00081	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0234	0.0016	0.00081	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	0.0018	0.0016	0.00081	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.156	0.0016	0.00081	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0016	0.00081	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0016	0.00081	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0032	0.0016	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0032	0.0016	ug/l	
31506-32-8	MeFOSA	ND [b]	0.065	0.032	ug/l	
4151-50-2	EtFOSA	ND [b]	0.065	0.032	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0032	0.0016	ug/l	
2991-50-6	EtFOSAA	0.0050	0.0032	0.0016	ug/l	

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E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-DUP		
Lab Sample ID:	JD35983-6	**Date Sampled:**	12/01/21
Matrix:	AQ - Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND [b]	0.16	0.065	ug/l	
1691-99-2	EtFOSE	ND	0.016	0.0065	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	0.0018	0.0065	0.0016	ug/l	J
27619-97-2	6:2 Fluorotelomer sulfonate	0.121	0.0065	0.0016	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	0.0256	0.0065	0.0016	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0065	0.0016	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	0.0061	0.0065	0.0016	ug/l	J
812-70-4	7:3 Fluorotelomer carboxylate	0.0031	0.0065	0.0016	ug/l	J
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.0065	0.0016	ug/l	
863090-89-5	PFMBA	ND	0.0065	0.0016	ug/l	
151772-58-6	NFDHA	ND	0.0065	0.0016	ug/l	
113507-82-7	PFEESA	ND	0.0065	0.0016	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	0.0775	0.0032	0.0016	ug/l	
919005-14-4	ADONA	ND	0.0065	0.0016	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0065	0.0016	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0065	0.0016	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	62%	90%	35-135%
	13C5-PFPeA	90%	102%	50-150%
	13C5-PFHxA	91%	102%	50-150%
	13C4-PFHpA	96%	105%	50-150%
	13C8-PFOA	88%	103%	50-150%
	13C9-PFNA	92%	102%	50-150%
	13C6-PFDA	97%	102%	50-150%
	13C7-PFUnDA	92%	98%	40-140%
	13C2-PFDoDA	78%	91%	40-140%
	13C2-PFTeDA	47%	76%	30-130%
	13C3-PFBS	94%	106%	50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	PFAS-DUP		
Lab Sample ID:	JD35983-6	**Date Sampled:**	12/01/21
Matrix:	AQ - Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	99%	114%	50-150%
	13C8-PFOS	91%	105%	50-150%
	13C8-FOSA	33%	62%	30-130%
	d3-MeFOSA	2% [c]	11%	10-130%
	d5-EtFOSA	5% [c]	10%	10-130%
	d3-MeFOSAA	88%	104%	40-140%
	d5-EtFOSAA	105%	100%	40-140%
	d7-MeFOSE	6% [c]	33%	10-130%
	d9-EtFOSE	10%	27%	10-130%
	13C2-4:2FTS	80%	97%	50-150%
	13C2-6:2FTS	96%	114%	50-150%
	13C2-8:2FTS	100%	100%	50-150%
	13C3-HFPO-DA	92%	101%	50-150%

(a) Analysis performed at SGS Orlando, FL.
(b) Result is from Run# 2
(c) Outside control limits.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	JD35983-7	**Date Sampled:**	12/01/21
Matrix:	AQ - Field Blank Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4Q24224.D	1	12/23/21 03:59	AFL	12/16/21 09:00	F:OP88863	F:S4Q331
Run #2							

	Initial Volume	Final Volume
Run #1	330 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0030	0.0015	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0015	0.00076	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0015	0.00076	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0015	0.00076	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0015	0.00076	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0015	0.00076	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0015	0.00076	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0015	0.00076	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0015	0.00076	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0015	0.00076	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0015	0.00076	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0015	0.00076	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0015	0.00076	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0015	0.00076	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0015	0.00076	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0015	0.00076	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0015	0.00076	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0015	0.00076	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0030	0.0015	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0030	0.0015	ug/l	
31506-32-8	MeFOSA	ND	0.0061	0.0030	ug/l	
4151-50-2	EtFOSA	ND	0.0061	0.0030	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0030	0.0015	ug/l	
2991-50-6	EtFOSAA	ND	0.0030	0.0015	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	JD35983-7	**Date Sampled:**	12/01/21
Matrix:	AQ - Field Blank Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.015	0.0061	ug/l	
1691-99-2	EtFOSE	ND	0.015	0.0061	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0061	0.0015	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0061	0.0015	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0061	0.0015	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0061	0.0015	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.0061	0.0015	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.0061	0.0015	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.0061	0.0015	ug/l	
863090-89-5	PFMBA	ND	0.0061	0.0015	ug/l	
151772-58-6	NFDHA	ND	0.0061	0.0015	ug/l	
113507-82-7	PFEESA	ND	0.0061	0.0015	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0030	0.0015	ug/l	
919005-14-4	ADONA	ND	0.0061	0.0015	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0061	0.0015	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0061	0.0015	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	102%		35-135%
	13C5-PFPeA	103%		50-150%
	13C5-PFHxA	103%		50-150%
	13C4-PFHpA	105%		50-150%
	13C8-PFOA	106%		50-150%
	13C9-PFNA	106%		50-150%
	13C6-PFDA	105%		50-150%
	13C7-PFUnDA	101%		40-140%
	13C2-PFDoDA	99%		40-140%
	13C2-PFTeDA	100%		30-130%
	13C3-PFBS	107%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	FIELD BLANK		
Lab Sample ID:	JD35983-7	**Date Sampled:**	12/01/21
Matrix:	AQ - Field Blank Water	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	105%		50-150%
	13C8-PFOS	97%		50-150%
	13C8-FOSA	91%		30-130%
	d3-MeFOSA	68%		10-130%
	d5-EtFOSA	71%		10-130%
	d3-MeFOSAA	99%		40-140%
	d5-EtFOSAA	98%		40-140%
	d7-MeFOSE	89%		10-130%
	d9-EtFOSE	88%		10-130%
	13C2-4:2FTS	103%		50-150%
	13C2-6:2FTS	102%		50-150%
	13C2-8:2FTS	97%		50-150%
	13C3-HFPO-DA	100%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	JD35983-8	**Date Sampled:**	12/01/21
Matrix:	AQ - Equipment Blank	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4Q24227.D	1	12/23/21 04:54	AFL	12/16/21 09:00	F:OP88863	F:S4Q331
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	ND	0.0033	0.0017	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0017	0.00083	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0017	0.00083	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0017	0.00083	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0017	0.00083	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0017	0.00083	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0017	0.00083	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0017	0.00083	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0017	0.00083	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0017	0.00083	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0017	0.00083	ug/l	
PERFLUOROALKYLSULFONIC ACIDS						
375-73-5	Perfluorobutanesulfonic acid	ND	0.0017	0.00083	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0017	0.00083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0017	0.00083	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0017	0.00083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0017	0.00083	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0017	0.00083	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0017	0.00083	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0033	0.0017	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	ND	0.0033	0.0017	ug/l	
31506-32-8	MeFOSA	ND	0.0067	0.0033	ug/l	
4151-50-2	EtFOSA	ND	0.0067	0.0033	ug/l	
PERFLUOROOCTANESULFONAMIDOACETIC ACIDS						
2355-31-9	MeFOSAA	ND	0.0033	0.0017	ug/l	
2991-50-6	EtFOSAA	ND	0.0033	0.0017	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	JD35983-8	**Date Sampled:**	12/01/21
Matrix:	AQ - Equipment Blank	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	Compound	Result	RL	MDL	Units	Q
PERFLUOROOCTANESULFONAMIDOETHANOLS						
24448-09-7	MeFOSE	ND	0.017	0.0067	ug/l	
1691-99-2	EtFOSE	ND	0.017	0.0067	ug/l	
FLUOROTELOMER SULFONATES						
757124-72-4	4:2 Fluorotelomer sulfonate	ND	0.0067	0.0017	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.0067	0.0017	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.0067	0.0017	ug/l	
FLUOROTELOMER CARBOXYLATES						
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.0067	0.0017	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.0067	0.0017	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.0067	0.0017	ug/l	
PER and POLYFLUOROETHER CARBOXYLIC and SULFONIC ACIDS						
377-73-1	PFMPA	ND	0.0067	0.0017	ug/l	
863090-89-5	PFMBA	ND	0.0067	0.0017	ug/l	
151772-58-6	NFDHA	ND	0.0067	0.0017	ug/l	
113507-82-7	PFEESA	ND	0.0067	0.0017	ug/l	
NEXT GENERATION PFAS ANALYTES						
13252-13-6	HFPO-DA (GenX)	ND	0.0033	0.0017	ug/l	
919005-14-4	ADONA	ND	0.0067	0.0017	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.0067	0.0017	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.0067	0.0017	ug/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	108%		35-135%
	13C5-PFPeA	109%		50-150%
	13C5-PFHxA	109%		50-150%
	13C4-PFHpA	110%		50-150%
	13C8-PFOA	109%		50-150%
	13C9-PFNA	106%		50-150%
	13C6-PFDA	104%		50-150%
	13C7-PFUnDA	101%		40-140%
	13C2-PFDoDA	101%		40-140%
	13C2-PFTeDA	99%		30-130%
	13C3-PFBS	109%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EQUIPMENT BLANK		
Lab Sample ID:	JD35983-8	**Date Sampled:**	12/01/21
Matrix:	AQ - Equipment Blank	**Date Received:**	12/01/21
Method:	EPA 537M BY ID EPA 537 MOD	**Percent Solids:**	n/a
Project:	Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C3-PFHxS	105%		50-150%
	13C8-PFOS	102%		50-150%
	13C8-FOSA	102%		30-130%
	d3-MeFOSA	76%		10-130%
	d5-EtFOSA	73%		10-130%
	d3-MeFOSAA	108%		40-140%
	d5-EtFOSAA	106%		40-140%
	d7-MeFOSE	102%		10-130%
	d9-EtFOSE	101%		10-130%
	13C2-4:2FTS	101%		50-150%
	13C2-6:2FTS	103%		50-150%
	13C2-8:2FTS	95%		50-150%
	13C3-HFPO-DA	104%		50-150%

(a) Analysis performed at SGS Orlando, FL.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Chain of Custody (SGS Orlando, FL)

SW
WW
FB
EB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

Page 1 of 1

PN

EHSA-QAC-0023-04-FORM-Standard COC

FED-EX Tracking #	Bottle Order Control #
SGS Quote #	SGS Job # JD35983

Client / Reporting Information

BRIDGEPORT DISPOSAL, LLC
600 Crossroads Blvd.
Logan Twp. NJ 08085

Project Information

Project Name:

Billing Information (if different from Report to)

State | Company Name

Project # | Street Address

Phone # 609 617 1813 | Client Purchase Order # | City | State | Zip

Sampler(s) Name(s) Paul Straub | Phone # | Project Manager | Attention:

Requested Analysis

LCID 537 List 40

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)	LAB USE ONLY
1	PFAS-SW-001		12/1/21	07:50	PAS	G		SW	2					X				X	SUB
2	PFAS-SW-002			07:59	↓	↓		SW	2					X				X	
3	PFAS-SW-003			8:10				SW	2					X				X	
4	PFAS-WW-inlet			8:15				WW	2					X				X	
5	PFAS-WW-outlet			8:17				WW	2					X				X	
6	PFAS-DUP			8:20	↓	↓		WW	2					X				X	
7	Field Blank																		
8	Equipment Blank																		

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- ☐ 10 Business Days
- ☐ 5 Business Days
- ☐ 3 Business Days*
- ☐ 2 Business Days*
- ☐ 1 Business Day*
- ☐ Other

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ NJ Reduced (Level 3)
- ☐ Full Tier I (Level 4)
- ☐ Commercial "C"
- ☐ NJ DKQP
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ MA MCP Criteria
- ☐ CT RCP Criteria
- ☐ State Forms
- ☐ EDD Format
- ☐ DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Initial Assessment ARZA
Label Verification

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 Christopher Raba	12-1-21 11:15	1 Frederic Hendrix	2 Frederic Hendrix	12-1-21 1414	2 [signature]
3		3	4		4
5		5			

Custody Seal # ☐ Intact ☐ Not intact ☐ Absent ☐ Therm ID: See Sample Receipt Summary ☐ On Ice ☐ Cooler Temp. °C

4.1

4

JD35983: Chain of Custody
Page 1 of 3

SGS Sample Receipt Summary

Job Number: JD35983 **Client:** BRIDGEPORT DISPOSAL, LLC **Project:**

Date / Time Received: 12/1/2021 2:14:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.4);

Cooler Temps (Corrected) °C: Cooler 1: (1.0);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify) _____ _____

Comments 1.) Received 1x 500ml np half full for Field Blank and 1 x 500ml np half full for Equipment blank, samples added to COC as -7 and -8 respectively. Sampling time for both not written on bottles. No collection date written for 2 through -8. Please verify analysis and sampling dates/times.

SM089-02 Rev. Date 12/1/16

4.1

4

JD35983: Chain of Custody
Page 2 of 3

Responded to by: Beth Stopen Response Date: 12/2/21

All samples were collected 12/1/21. -7 and -8 collection time is 07:30. Run both for LCID537LIST40.
Per Paul Straub

JD35983: Chain of Custody
Page 3 of 3

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #:
Bottle Order Control #:
SGS Quote #:
SGS Job #: JD35983

Client / Reporting Information

Company Name:
Street Address:
City State Zip:
Project Contact E-mail: Beth.Stopen@sgs.com
Phone #:
Sampler(s) Name(s) Phone: PAS

Project Information

Project Name: Bridgeport Disposal, LLC, 600 Crossroads Boulevard, Logan Township, NJ
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager:
Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	LCIDS37LIST40										LAB USE ONLY
1	PFAS-SW-001		12/1/21	7:50:00 AM	PAS	AQ										X										
2	PFAS-SW-002		12/1/21	7:59:00 AM	PAS	AQ										X										
3	PFAS-SW-003		12/1/21	8:10:00 AM	PAS	AQ										X										
4	PFAS-WW-INLET		12/1/21	8:15:00 AM	PAS	AQ										X										
5	PFAS-WW-OUTLET		12/1/21	8:17:00 AM	PAS	AQ										X										
6	PFAS-DUP		12/1/21	8:20:00 AM	PAS	AQ										X										
7	FIELD BLANK		12/1/21	7:30:00 AM	PAS	AQ										X										
8	EQUIPMENT BLANK		12/1/21	7:30:00 AM	PAS	AQ										X										

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Standard 10 Business Days
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [x] Other 12/15/2021

Emergency & Rush T/A data available via Lablink. Approval needed for RUSH/Emergency TAT

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [x] Other COMMA

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Direct sub to ALSE shipped 12/1: 5272 0636 7491

INITIAL ASSESSMENT

LABEL VERIFICATION

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1		1	2	12/2/21 1550	2
3		3	4		4

Relinquished by: | Date / Time: | Received By: | Custody Seal # | Intact | Preserved where applicable | On Ice | Cooler Temp. °C 2.8-1.1

JD35983: Chain of Custody
Page 1 of 2
SGS Orlando, FL

SGS Sample Receipt Summary

Job Number: JD35983 **Client:** SGS NJ **Project:** BRIDGEPORT DISPOSAL, LLC, 600 CROSSRO

Date / Time Received: 12/2/2021 3:30:00 PM **Delivery Method:** FX **Airbill #'s:** 5272 0636 7491

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: STEPHENP Date: 12/2/2021 3:30:00 PM Reviewer: _____ Date: _____

JD35983: Chain of Custody
Page 2 of 2