

SEDIMENT CHARACTERIZATION REPORT

Coal River Lock and Dam No. 3



Prepared for:

Capitol Conservation District
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Prepared by:

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Coal River Lock and Dam No. 3
Kanawha County, West Virginia
GFT Project No. 084562

February 2026

SEDIMENT CHARACTERIZATION REPORT

**Capitol Conservation District
Coal River Watershed Planning Study – Lock and Dam No. 3
Kanawha County, West Virginia**

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INTRODUCTION

GFT Infrastructure, Inc. (GFT) is providing engineering services to assist the Capitol Conservation District (CCD) with the preparation of a Watershed Plan and Environmental Assessment (Plan-EA) for the Coal River Watershed to address resource concerns with watershed protection, public recreation, fish and wildlife, water quality and other resource concerns that may be identified during the development of the Plan-EA. The project focuses on a low-head concrete dam that spans the Coal River near the town of Tornado, in Kanawha County, West Virginia. Constructed across a rock outcrop (referred to as the Upper Falls) in the 1920s to improve water flow to a gristmill located on the west riverbank, the concrete dam is located in the same general area as a navigational timber crib lock and dam (referred to as Lock and Dam No. 3) constructed in the 1850s to support the local coal industry. The 1850s structure has since been removed; however, remnants of the lock which were cut into the bedrock remain to this day. GFT was retained by CCD to perform a sediment sampling analysis at the dam site as part of the Plan-EA.

On August 26 and 27 2025, GFT environmental scientists collected sediment samples from locations upstream and downstream of the concrete dam. The samples were delivered to ALS Global, a West Virginia-accredited laboratory located in Middletown, PA. The results of the laboratory analyses were used to characterize the sediments by comparing them to standards provided by the U.S. EPA and West Virginia Department of Environmental Protection (WVDEP) Screening Levels. This report presents the results of sediment characterization efforts and provides recommendations for future handling and considerations.

PROJECT DESCRIPTION

The low-head concrete dam and the remnants of Lock No. 3 are located in the town of Tornado in Kanawha County, West Virginia (38° 20' 32.24'' N, 81° 50' 30.343'' W). See **Attachment 1** for the Sample Location Map.

When alternatives are being considered, it is pertinent to evaluate baseline conditions to address future dredging needs, potential for sediment releases and the condition of the sediment to be disturbed during construction. Bathymetric survey data indicate that very little sediment accumulation has occurred upstream of the dam. Bedrock comprises most of the substrate along the center to right bank when facing downstream towards the dam.

Accumulated sediments are mostly associated with the left side of the Coal River when facing downstream from a location upstream of the dam. Sands, gravels and other accumulated debris are more prevalent on the downstream side below the falls. As a result, to prevent the mobilization of accumulated sediments and to protect water quality within the Coal River, a preliminary test of the Coal River sediments was performed to determine the levels of any contaminants that may present a human health or ecological concern if disturbed, handled or dredged as part of the project's preferred alternative. The investigation included field sampling of sediments, laboratory analysis, and sediment characterization. The results of

the sediment analyses were compared to the U.S. EPA and WVDEP Screening Levels to determine if any constituents of concern were present at concentrations where special handling, transportation or disposal needs would be needed when working with river sediments. The results were compared to residential soil screening values, industrial soil screening values and sediment screening values. A sediment sampling and characterization plan, dated August 2025, described the approach to characterizing the sediment to support the sediment characterization **Attachment 2**. The laboratory analytical results are summarized in tables provided in **Attachment 3**.

ANALYTICAL PARAMETERS

The following analytical parameters were selected based on the known history of the site as well as WVDEP de minimis criteria for residential soils, industrial soils, and ecological benchmarks. Due to the large size of the Coal River watershed and the variety of current and historic land uses within it, there is a potential for a wide range of contaminants or their residual compounds to have occurred in the watershed and that may persist in the fine sediment layer of the reservoir. Volatile organic compounds (VOCs) are not expected to occur in the sands and gravel deposits of the river system; however, metals, semi-volatile organic compounds, PCBs, PFAS, and agricultural chemicals may be present from various sources including the localized weathered bedrock, industrial, historic coal mining, agricultural activities, and legacy sediment issues from the contributing watershed that have accumulated in fine sediments.

Based on the site history and watershed size, the following broad-spectrum analyses were selected to characterize the sediments within the project study area:

- Total Metals EPA Method 6020B
 - Hexavalent Chromium EPA Method 7196
 - Trivalent Chromium, Method calculation
 - Mercury EPA Method 6020B
- Semi-volatile organic compounds (SVOCs) EPA Method 8270
- Polychlorinated Biphenyls (PCBs) EPA Method 8082
- Chlorinated Pesticides using EPA Method 8081A
- Herbicides using EPA Method 8151A
- pH using EPA Method 9045C
- Grain size analysis
- Total Organic Carbon (TOC) EPA Method 9060
- PFAS EPA Method 1633 (40 constituents)
- Total PAH EPA Method 8270 or 8310
- Total Cyanide EPA Method 9012B
- Nitrate/Nitrite EPA Method 300.0(M)
- Chlorides EPA Method 9212

FIELD SAMPLING EVENT

On August 26, 2025, GFT's environmental team established a total of ten (10) sampling locations consisting of seven (7) sampling locations upstream of the concrete dam and three (3) sampling locations downstream of the concrete dam. The sample collection methodology and sample handling procedures reflected the approach outlined in the Sediment Sampling Plan. The sampling locations were recorded using GPS and depicted in **Attachment 1**.

Weather conditions on August 26, 2025, were clear, no precipitation, and high temperature of 80°F.

SEDIMENT SAMPLE COLLECTION PROCEDURE

David Graff served as GFT's lead environmental scientist guiding the sampling effort and preparing the samples for laboratory submission. Field technicians used a small boat equipped with electric motor to access the Coal River and create a stable work platform to advance hand augers and sampling equipment. Field technicians utilized an Ekman Bottom Grab Sampler and sediment augers with extension rods to obtain sediment samples.

Following sample collection, grab samples were equally portioned into designated stainless steel mixing container for the creation of the composite sample. Standard decontamination procedures were used on equipment and the work surface between composite samples to ensure the integrity of sampling results. The final composite samples were placed into laboratory supplied bottles, preserved with ice and packaged for shipment to the laboratory under chain of custody.

A Photo Log documenting the field effort is provided as **Attachment 4**. The sediment samples were delivered to ALS Global, a WV-accredited and certified laboratory for analysis. The chain of custody reports are included as **Attachment 5**.

RESULTS AND CHARACTERIZATION

GFT received the laboratory analytical report from ALS and reviewed the data for use in determining if any contaminants of concern were present within the river sediments that would present a potential ecological or human health concern or require special handling procedures or disposal requirements. The laboratory analytical results are summarized below and presented in the following tables provided in **Attachment 3**.

Table 1 - Inorganic Compounds (Metals) and Wet Chemistry - lists the inorganic compounds (metals) and wet chemistry readings that were analyzed and reported for this sampling effort. The results were compared to the U.S. EPA and WVDEP Screening Levels for Residential and Industrial Soil.

The following metals were detected but did not have concentrations that exceeded screening levels:

- Aluminum

- Barium
- Calcium
- Chromium
- Cobalt
- Iron
- Lead
- Magnesium
- Manganese
- Nickel
- Potassium
- Sodium
- Trivalent Chromium
- Vanadium
- Zinc

The following metal (Arsenic) was detected at concentrations that exceeded its respective soil screening level for residential soils; however, concentrations did not exceed its respective ecological benchmark value for sediment.

Metal concentrations in Coal River sediments did not exceed their respective ecological benchmark values for sediment therefore the sediment can be used within the Coal River system without concern. Arsenic concentrations were detected above residential soil screening values which indicate that sediments may require additional characterization if removal and placement of dredged material on residential properties is considered. Arsenic concentrations did not exceed its industrial soil benchmark value which indicates that beneficial reuse of sediments on industrial properties may be an option.

Wet chemistry parameters were analyzed and reported in Table 1. The results of the wet chemistry parameters did not indicate detections, readings, or concentrations that require additional evaluation. The wet chemistry results were considered typical conditions for river sediments.

Table 2 – Semi-Volatile Organic Compounds - lists the semi-volatile organic compounds (SVOCs) that were analyzed, reported and compared to their respective Residential and Industrial Soil Screening Levels.

The following SVOCs were detected in the samples but did not have concentrations that exceeded their respective screening values:

- 2-Methylnaphthalene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Chrysene

- Dibenzofuran
- Fluoranthene
- Naphthalene
- Phenanthrene
- Pyrene

SVOC were not detected at concentrations that exceeded their respective Residential and Industrial Soil Screening Values, therefore SVOCs do not present a contamination concern to the sediment. Table 2 supports the conclusion that the sediment does not contain SVOCs at regulatory concentration concerns.

Table 3 – Polychlorinated Biphenyls (PCBs) - lists the polychlorinated biphenyls (PCBs) that were analyzed and reported against their respective Residential and Industrial Soil Screening Values.

The following PCBs were detected in the samples but did not have concentrations that exceeded screening values:

- PCB-1254

PCBs were not detected at concentration that exceeded their respective Residential and Industrial Soil Screening values, therefore PCBs do not present a contamination concern to the sediment. Table 3 supports the conclusion that the sediments do not contain concentrations of PCBs that exceed their respective screening values.

Table 4 – Organochlorine Pesticides- lists the organochlorine pesticides that were analyzed, reported and compared to their respective Residential and Industrial Soil Screening Values.

- No Detections

Pesticides were not detected above the laboratory detection limits and were determined to not be present in the sediments at detectable concentrations. Table 4 supports the conclusion that the sediments do not contain pesticides.

Table 5 – Herbicides- lists the herbicides that were analyzed, reported and compared to their respective Residential and Industrial Soil Screening Values.

- No Detections

Herbicides were not detected above the laboratory detection limits and were determined to not be present in the sediments at detectable concentrations. Table 5 supports a conclusion that the sediments do not contain herbicides.

Table 6 – Grain Size Analysis- provides the results of a sieve analysis to determine the grain size distribution of the material.

- The material is predominantly sand ranging from 61.1% to 96.4%.
- The silt, clay and colloids components ranged from 3.16% to 16.6%
- The gravel component of the samples ranged from 0% to 29.1%

Table 7 – PFAS - lists the PFAS and PFOA compounds that were analyzed, reported and compared to their respective Residential and Industrial Soil Screening Values.

The following PFAS were detected in the samples but did not have concentrations that exceeded their respective screening values:

- Perfluorobutanoic acid (PFBA)

PFAS compounds were detected; however, they did not exceed their respective Residential and Industrial Soil screening values where values existed, therefore PFAS concentrations do not present a contamination concern to the Coal River sediments given the current regulatory understanding. Table 7 supports a conclusion that the sediments do not contain PFAS at regulatory concentration concerns.

QUALITY ASSURANCE AND QUALITY CONTROL QA/QC

Quality assurance and quality control samples were collected to verify the field procedures and check the laboratory results in order to confirm the results of the field effort with confidence. GFT technicians collected one (1) duplicate sample from the sampling effort for quality assurance and quality control purposes. Sample number 7 (SD-07) and 11 (SD-11) were collected from the same location and had similar results supporting the conclusion that the results given by ALS Global can be relied upon.

GFT technicians also collected an equipment rinsate blank during the course of the fieldwork to ensure the quality of the decontamination procedures. The equipment rinsate sample was submitted for laboratory analyses following the same constituents list as the sediment samples. The rinsate did not have any detection for Herbicides, Pesticides, PCBs, PFAS, and SVOCs. Calcium, magnesium, sodium and zinc compounds were detected in the rinsate blank results and may be attributed to the metal tools used during the field sampling collection. These constituents did not present at concentrations of concern, and their detections are not uncommon when using metal tools that are considered resistant to corrosion. The laboratory conducted their own internal quality assurance and quality control procedures and determined that the results reported were accurate and may be used with integrity.

CONCLUSIONS

GFT implemented the Sampling and Testing (SAT) Plan and provided the samples to the laboratory for analyses. The analytical results provided by ALS met the quality assurance and quality controls of the

laboratory and were determined to be reliable to support a characterization of the Coal River sediments. GFT accepted the results of the laboratory and compared detections to respective U.S. EPA and WVDEP Screening Levels.

All soil samples were compared to the WV DEP screening level for residential soil values. The arsenic benchmark value of 0.68 mg/kg was used as the screening value for residential soil and the results (5.6 mg/kg) exceeded the residential soil value but were less than the screening value for industrial soil (30 mg/kg). The ecological screening benchmark for arsenic in sediment was 9.8 mg/kg which is higher than the sediment results for Coal River.

Based on the analytical results provided, the Coal River sediments may be used within the Coal River system for beneficial reuse in habitat creation, sandbar development, aquatic benches, and other natural resource habitat initiatives. The Coal River sediment results indicated that arsenic concentrations may exceed their respective soil screening value for residential soils, therefore if material is dredged from the Coal River, it would be advisable to re-characterize that specific volume for off site disposal to ensure that it meets residential criteria or it may need to be disposed of on an industrial site or landfill as results dictate.

Attachment 1

Sample Location Map

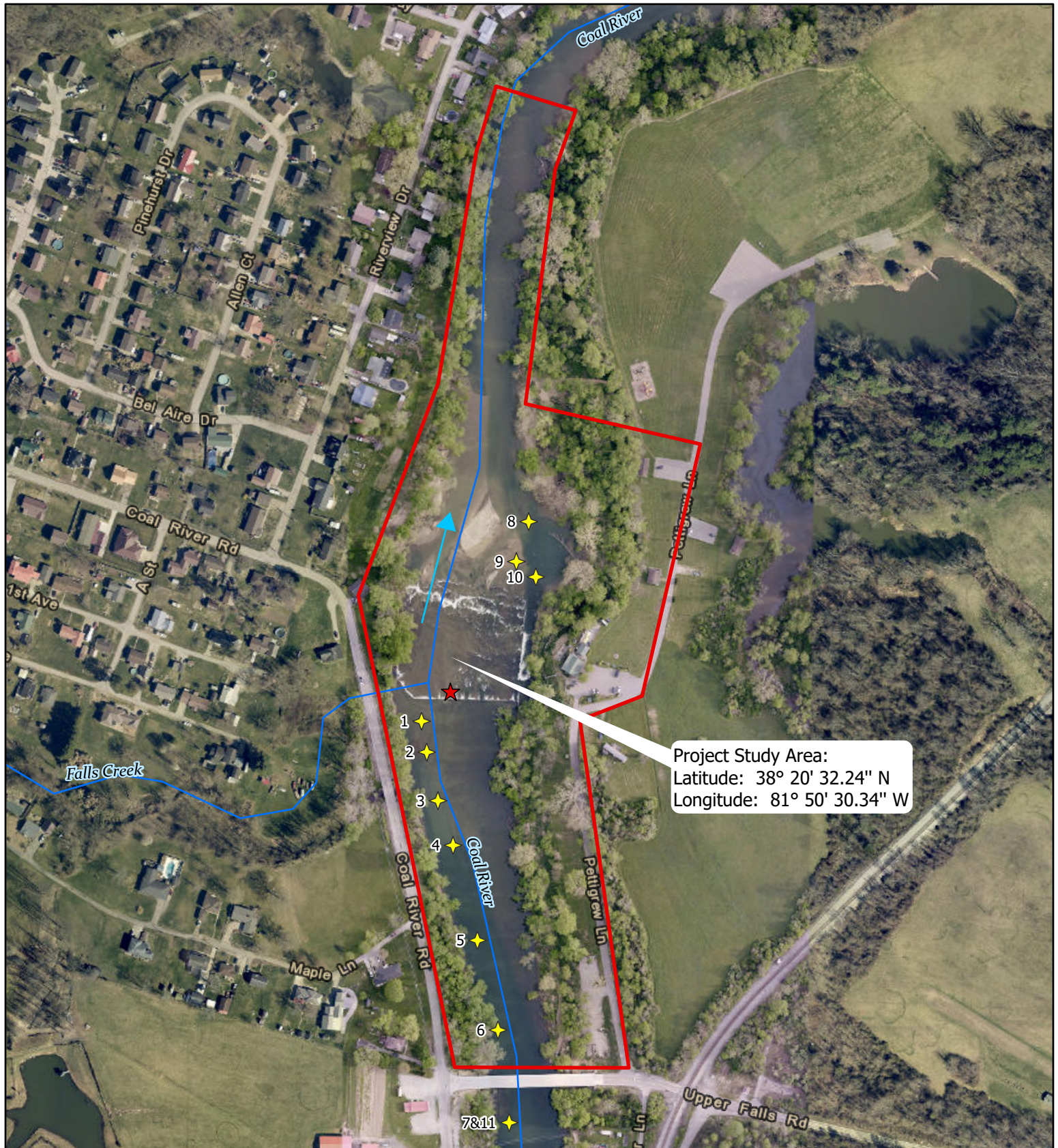
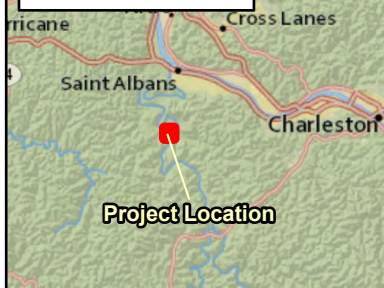


Figure 1: Sample Location Map

**Coal River Watershed Planning Study
Lock and Dam No. 3**

Kanawha County, West Virginia

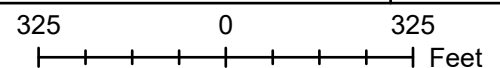
OVERVIEW MAP:



Legend

- Project Study Area
- ★ Dam
- ★ Sample Locations
- Streams

GFT



Attachment 2

Sediment Sampling Plan

SEDIMENT SAMPLING PLAN

COAL RIVER LOCK AND DAM NO. 3



Prepared for:

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Cross Lanes, WV 25313



Prepared by:

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Coal River Lock and Dam No. 3
Kanawha County, West Virginia
GFT Project No. 084562

August 2025

Sediment Sampling Plan

Coal River Watershed Planning Study

Coal River Lock and Dam No. 3

Prepared For: Capitol Conservation District

Prepared By: GFT Infrastructure, Inc.
300 Sterling Parkway
Suite 200
Mechanicsburg, PA 17050

Subject: Coal River Lock and Dam No. 3 Sediment Sampling Plan

Date: August 8, 2025

PROJECT DESCRIPTION

GFT Infrastructure, Inc. (GFT) is providing engineering services to assist the Capitol Conservation District (CCD) with the preparation of a Watershed Plan and Environmental Assessment (Plan-EA) for the Coal River Watershed to address resource concerns with watershed protection, public recreation, public fish and wildlife, water quality and other resource concerns that may be identified during the development of the Plan-EA. The study area includes a low-head concrete dam that spans the Coal River near the town of Tornado, in Kanawha County, West Virginia. Constructed across a rock outcrop (referred to as the Upper Falls) in the 1920s to improve water flow to a gristmill located on the west riverbank, the concrete dam is located in the same general area as a navigational timber crib lock and dam (referred to as Lock and Dam No. 3) constructed in the 1850s to support the local coal industry. The 1850s structure has since been removed; however, remnants of the lock which were cut into the bedrock remain to this day.

GFT was retained by CCD to perform a sediment survey and characterization at the dam site as part of the Plan-EA.

It is unknown if sediment that has accumulated behind the dam will need to be dredged to prevent the mobilization of accumulated sediments and to protect water quality within the Coal River. GFT plans to evaluate the sediments to determine appropriate reuse or disposal methods. This Sediment Sampling Plan (SAP) was created in preparation for sediment sampling activities.

The SAP includes site background information, proposed analytical parameters to be analyzed by an accredited laboratory, proposed sediment sampling locations and depths, and an overview of sampling methods, including field methods, sample identification procedures, quality assurance and quality control (QA/QC) methods, decontamination procedures, sample handling procedures, and a health and safety plan. The plan will serve as a basis for scheduling the sampling event and coordinating with a laboratory to analyze the samples.



Following the sampling event, GFT will prepare a technical Sediment Characterization Report to document the field activities, sediment sample locations, and analytical results. The report will include a field log, site photographs, and analytical tables. The report will compare the laboratory analytical results to the freshwater threshold values and soil remediation criteria to determine if detected concentrations were below or above their respective values. The report will be used to recommend an appropriate course for handling transport and disposal of site sediments. Recommendations may include off-site agricultural application or disposal at a permitted landfill depending upon the sediment characterization results. Copies of the lab report and chain of custody will be attached to the technical report.

BACKGROUND INFORMATION / SITE HISTORY

Sediment characterization efforts began with a literature search on known and suspected contaminants that could occur in the sediments of the Coal River as a result of past and present land-uses within its respective drainage area, along with regional conditions beyond the drainage area. See the attached **Figure 1 USGS Topographic Location Map** and **Figure 2 Project Location and Study Area Map** for an overview of the site and surrounding features.

From 1851 to 1857, the Coal River Navigation Company constructed nine lock and dam structures on the Coal River, Big Coal River and Little Coal River with the primary purpose of transporting coal from Peytona, in the headwaters of the Big Coal River, to St. Albans, at the confluence of the Coal River with the Kanawha River. The lock and dam system was the nation's first series of locks and dams constructed on an inland river and allowed steamboats to tow loaded coal barges 50 miles between the coal mines in Peytona to the Kanawha River. Lock and Dam No. 3, located between river miles 11 and 12 near the town of Tornado, herein referred to as the Coal River Dam, allowed river traffic to traverse the Upper Falls of the Coal River.

The mines at Peytona produced cannel coal, which was used to produce crude oil. In the 1850s and 1860s, the demand for cannel coal was high, but the demand decreased following the discovery of natural oil fields, and the Peytona Cannel Coal Mining Company closed in 1880. Subsequently, the Coal River Lock and Dam system began to fall into disrepair. The dam which is present today was constructed in the 1920s to support a gristmill on the left riverbank (looking downstream). Today, the river is primarily used for recreational purposes, such as fishing and boating, and the project area is part of the Coal River Water Trail. The dangerous flow conditions produced by the dam and lock have resulted in numerous deaths in the past. CCD is evaluating options which would improve public safety, enhance water quality, and restore aquatic movement.

The drainage area of the Coal River at Tornado encompasses 868 square miles according to USGS StreamStats (2025). StreamStats reports that land cover in the watershed is dominated by forest and shrublands (86%), grassland/herbaceous (6%), and development (4%). The remaining land cover is composed of agriculture, open water, and barren/rocky land.

PROPOSED ANALYTICAL PARAMETERS

The following proposed analytical parameters were selected based on the known history of the site as well as West Virginia Department of Environmental Protection (WVDEP) de minimis criteria

for residential and industrial soil. Due to the large size of the Coal River watershed and the variety of current and historic land uses within it, there is a potential for a wide range of contaminants or their residual compounds to have occurred in the watershed and that may persist in the fine sediment layer of the reservoir. Volatile organic compounds (VOCs) are not expected to occur in the muck and sediments of the river system; however, metals, semi-volatile organic compounds, PCBs, PFAS, and agricultural chemicals may be present from various sources including the localized weathered bedrock, historical construction practices, historic coal mining, maintenance activities, and legacy sediment issues from the contributing watershed that have accumulated in fine sediments.

Based on the site history and watershed size, the following broad-spectrum analyses are suggested to characterize sediments at Coal River Lock and Dam No. 3:

- Total Metals EPA Method 6020B
 - Hexavalent Chromium EPA Method 7196
 - Trivalent Chromium, Method calculation
 - Mercury EPA Method 6020B
- Semi-volatile organic compounds (SVOCs) EPA Method 8270
- Polyaromatic Chlorinated Biphenyls (PCBs) EPA Method 8082
- Chlorinated Pesticides using EPA Method 8081A
- Herbicides using EPA Method 8151A
- pH using EPA Method 9045C
- Grain size analysis
- Total Organic Carbon (TOC) EPA Method 9060
- PFAS EPA Method 1633 (40 constituents)
- Total PAH EPA Method 8270 or 8310
- Total Cyanide EPA Method 9012B
- Nitrate/Nitrite EPA Method 300.0(M)
- Chlorides EPA Method 9212

SEDIMENT SAMPLING LOCATIONS AND DEPTHS

GFT proposes to collect up to twelve (12) composite sediment samples in the Coal River. Sample locations will primarily be located upstream of the dam where sediments have accumulated. Two (2) samples downstream of the dam will be collected for comparison purposes. A probe will be used to determine sediment depths in the field, and the depth of each sample location will be recorded. FEMA Flood Insurance mapping shows a change in elevation downstream of the County Road 9 Bridge. Consequently, sediment at risk of being released as a result of removing the dam is likely located in this area. Initial estimates of potential sediment accumulation indicate that less than 3,000 cubic yards of sediment are likely to be accumulated between the County Bridge and the dam. A separate sediment depth survey will be conducted to confirm the volume of accumulated sediment behind the dam.

Sampling locations will be selected in the field based on field observations of accumulated sediment. **Figure 3** Proposed Sample Location Map provides an illustration depicting the proposed

sampling locations. These locations are approximate and are subject to change based on field observations at the time of the sampling effort.

SEDIMENT SAMPLE COLLECTION PROCEDURES

Field methods to physically locate and collect sediment samples at multiple depths will require the use of varying techniques. GFT will deploy a small boat(s) equipped with sampling gear to position and collect sediments at specified locations and from specified depths. Sediment sample locations will be surveyed using GPS with sub-meter accuracy to locate the sampling point for placement on project mapping. GFT proposes to utilize the following tools and devices to obtain the sediment samples:

- ☐ Ekman Bottom Grab Sampler - (Top of Sediment to 1 ft. in depth)
- ☐ Sediment augers and extension rods (Top of Sediment up to 3 ft. in depth)

GFT proposes to collect up to twelve (12) composite samples at designated intervals in the riverbed where sediment accumulation is noted. The composite samples consisting of four (4) grab samples each. The collected samples will be placed into laboratory-supplied bottles and submitted to ALS Environmental laboratory in Middletown, PA (State Lab ID 343, Certificate ID: WV-C25-00114).

SAMPLE QA/QC

Quality assurance and quality control samples will be collected to verify the field procedures and check the laboratory results in order to confirm the results of the field effort with confidence. GFT proposes to collect one (1) duplicate sample from the sampling effort for quality assurance and quality control purposes. This sample will be given a similar naming nomenclature and placed in the next sequential order of the sampling scheme. GFT proposes to collect one (1) equipment rinsate blank during the course of fieldwork to ensure the quality of the decontamination procedures.

QA/QC Samples

- 1 equipment blanks – SVOCs, Metals, PCBs, Pesticides, Herbicides, pH, PFAS and TOC
- 1 duplicate sample – Composite - SVOCs, Metals, PCBs, Pesticides, Herbicides, pH, and TOC.

Decontamination Procedures and Investigation Derived Waste (IDW) are part of the sampling plan. Sampling equipment will require decontamination procedures to prevent cross-contamination issues during field collection efforts. Where feasible, sampling equipment will be dedicated to avoid the need for decontamination and generation of decontamination fluid. The advancing samplers will need to be decontaminated between borings and will be decontaminated in accordance with EPA Standard Operating Procedures. The decontamination procedure of the sediment sampling equipment hardware will consist of the following:

- Physical removal of soil and debris;

- Non-phosphate detergent wash;
- Tap water rinse;
 - Distilled/deionized water rinse;
 - 10% nitric acid rinse;
 - Distilled/deionized water rinse;
- Solvent rinse (Acetone);
- Air dry; and
- Distilled/deionized water rinse

The equipment supplier will provide pre-cleaned auger heads. To check the cleanliness of the equipment prior to sampling, one equipment rinsate sample will be collected and submitted for laboratory analyses of Target Analyte List (TAL) Metals, semi-volatile organic compounds (SVOCs) and pesticides. Auger heads will be wrapped and sealed prior to sampling. Other IDW including disposable gloves and acetate sleeves will be disposed of as residual waste. The decontamination fluid will be passed through activated carbon and discharged in uplands directly to the ground surface.

SEDIMENT CHARACTERIZATION REPORT

GFT will prepare a Sediment Characterization Report to document the field activities, sediment sample locations and analytical results. The report will include field soil log, site photographs, methodologies, mapping, and analytical tables. The report will compare the laboratory analytical results to the West Virginia Department of Environmental Protection (WVDEP) de minimis criteria for residential and industrial soils. The report will be used to determine the most appropriate course of handling and disposal. Recommendations may include upland field disposal or disposal at a permitted landfill. Depending upon the sampling results, additional sampling may be recommended under preliminary/final design activities as may be required to support permit applications. Copies of the lab report and chain of custody will be attached to the technical report.

SAFETY AND ACCESS PROTOCOLS

The sampling reach is accessible via Meadowood Park. This park has open public access, public parking, and kayak launches downstream and upstream of the dam. Samples will only be collected during safe flow conditions. Safe flow conditions are limited to when the local USGS stream gage on the Coal River in Tornado (USGS-03200500) reads 10 ft or less in height. A Health and Safety Plan (HASP) for the sampling event is included as an attachment.

PERSONNEL

David H. Graff, SPWS, CSE, CWB, Chief Environmental Scientist
40-hour OSHA HAZWOPER Training Certification
8-hour OSHA HAZWOPER Supervisor Training Certification
Professional Experience: 27 Years
Education: B.S., Environmental Studies
M.A.Ed., Environmental Studies



Emily Hegedus, Environmental Scientist
24-Hour OSHA HAZWOPER Training Certification
Professional Experience: 3 years
Education: B.S., Geoenvironmental Studies
M.S., Geoenvironmental Science & Sustainability

Anju Ghimirey, Associate Environmental Scientist
24-Hour OSHA HAZWOPER Training Certification
Professional Experience: 2 years
Education: B.S., Environmental Science
M.S., Fisheries and Wildlife Science

LIST OF ATTACHMENTS

- Figure 1: USGS Topographic Location Map
- Figure 2: Project Location and Study Area Map
- Figure 3: Proposed Sample Locations Map
- Health and Safety Plan

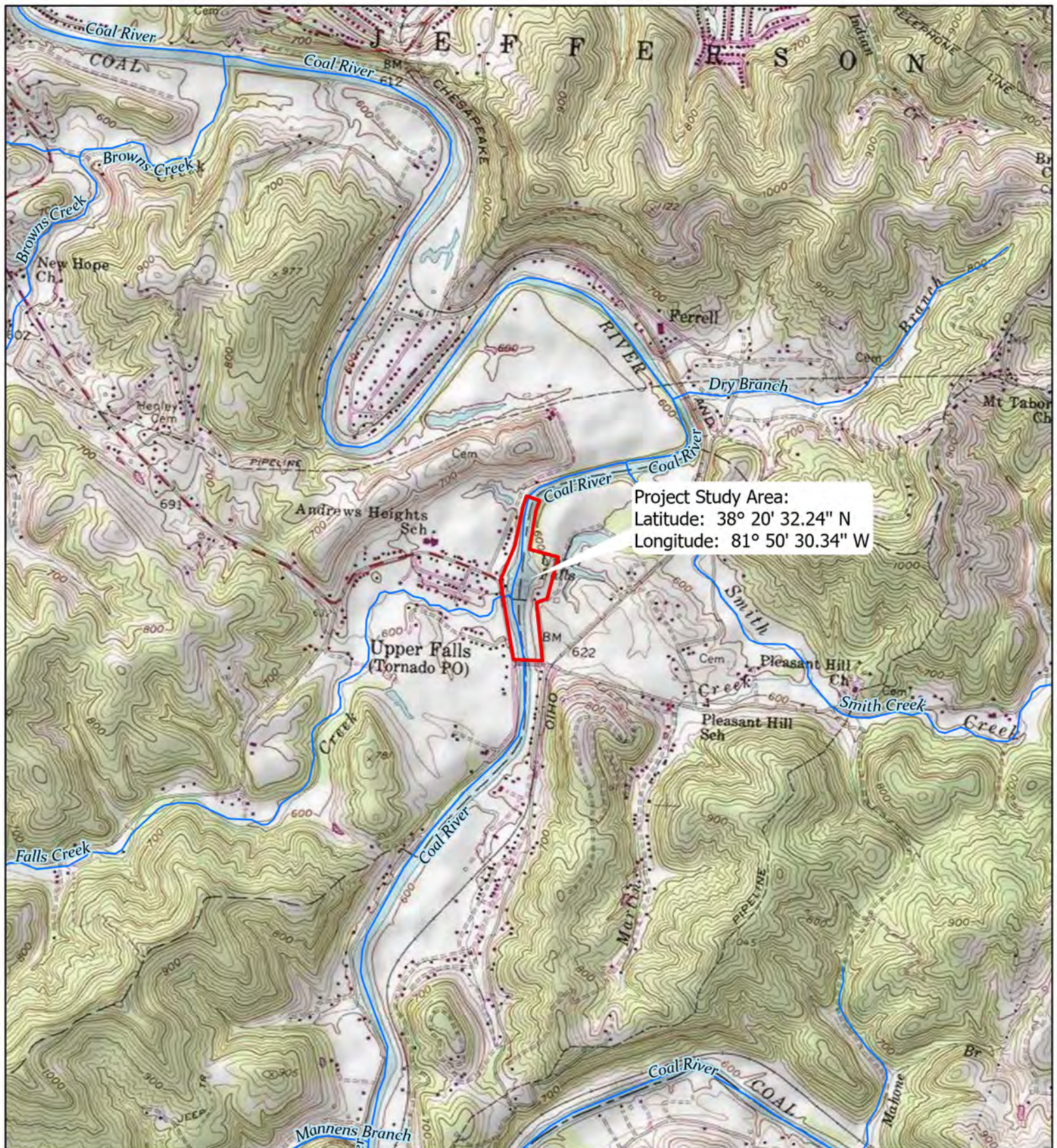


Figure 1: USGS Topographic Location Map

**Coal River Watershed Planning Study
Lock and Dam No. 3**

Kanawha County, West Virginia



Legend

- Project Study Area
- Streams

GFT



2,000 1,000 0 2,000
Feet

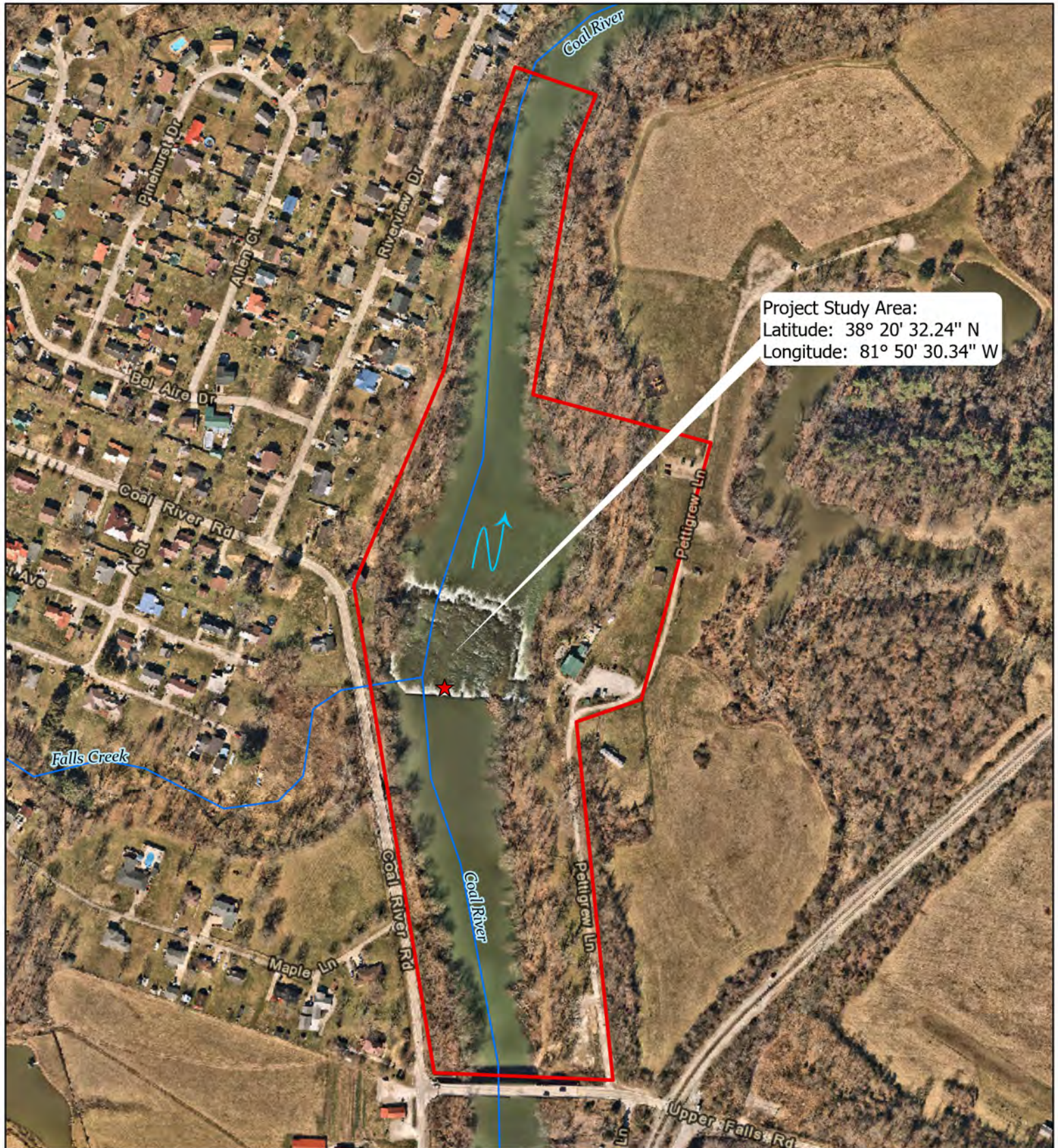


Figure 2: Project Location and Study Area Map

**Coal River Watershed Planning Study
Lock and Dam No. 3**

Kanawha County, West Virginia

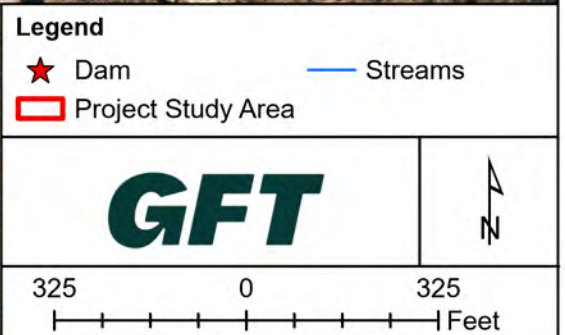
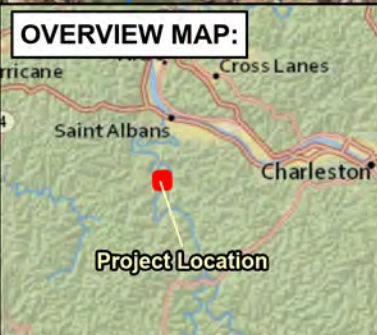
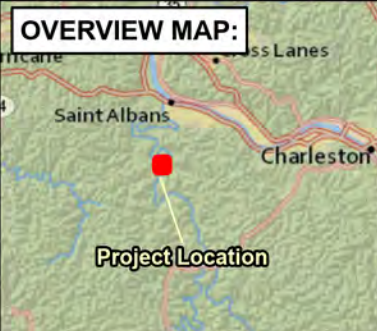




Figure 3: Proposed Sample Locations Map

**Coal River Watershed Planning Study
Lock and Dam No. 3**

Kanawha County, West Virginia



Legend

★ Dam

⊕ Proposed Sample Location

□ Project Study Area

GFT



325 0 325
Feet

Source: Basemapping provided by ArcGIS Online Web Services. Proj Number: 84562

GFT Infrastructure, Inc. (GFT)

SHORT-FORM HEALTH AND SAFETY PLAN

All Green fields must be completed prior to site use

This short form Health and Safety Plan (HASP) is intended for use only on small-scale, short duration projects with limited complexity. GFT Infrastructure Inc. (GFT) developed this HASP for use only by GF employees. The HASP has been developed relative to federal, state, and local guidelines and regulations and GFT policies and procedures.

Compliance with this HASP will help reduce but cannot guarantee total elimination of hazards associated with project site activities. This HASP was prepared specifically for this project and should not be used for any other project or site. GFT cannot guarantee the health and safety of any person in this project area.

Site Name	Coal River Lock and Dam No. 3
Project Number	084562
Location	Tornado, Kanawha County, West Virginia (38° 20' 32.24" N, 81° 50' 30.343" W)
Document Date	8/8/2025

	Printed Name	Signature	Date
HASP Prepared by	Emily Hegedus		7/28/2025
Reviewed by (Corporate Safety Representative)			
GFT Project Manager	Eric Neast		

1.0 ON-SITE ORGANIZATION AND COORDINATION

The following GF personnel are designated to carry out the stated job functions on-site and have received the appropriate training to perform their site duties in accordance with applicable regulations.

Job Function	Name	Phone Number Office/Cell
GFT Project Manager:	Eric Neast	717-886-5453/717-576-6744
GF Corporate Safety Director:	David Albright	717-866-5735/717-877-7104
Site Safety & Health Supervisor (SSHS):	Dave Graff	717-886-5406/717-342-1418
Field Operations Leader (FOL):	Dave Graff	717-886-5406/717-342-1418
Field Team Members:	Dave Graff	717-886-5406/717-342-1418
	Emily Hegedus	717-886-5902/717-565-0349
	Anju Ghimirey	717-886-5901/717-775-0127
	Steven Smith	717-886-5413/717-701-0279
Contractor Representative:	N/A	N/A

2.0 SITE SETTING AND SCOPE OF WORK (Insert a short description of the site including its location, approximate size, site topography, accessibility, site history, past and current use, known or suspected contaminant information, etc.).

The Coal River Dam and Lock No. 3 is located on Coal River. The site includes Coal River, forested river banks, a local park, and local roadways. Access to the site is at the local park. The area, including the Coal River, is frequently used for recreation including boating. A group of four environmental scientists will split into teams to perform three field tasks: 1) Collect sediment samples from the river upstream and downstream of the dam 2) perform a wetlands and waterways investigation and 3) Macroinvertebrate sampling and identification.

The river sediments are not anticipated to be contaminated with hazardous materials. Low levels of pesticides, metals, and PFAS are likely to be present in the sediment, and PPE will be used to protect against exposure.

Attach a Site Map/Aerial Photograph demarcating the site (see attached).

SITE TYPE

Select One

☒ Active ☐ Inactive

Select One

☐ Secure ☒ Unsecure

Select All That Apply

☐ Agricultural	☐ Military	☐ Residential - Urban
☐ Commercial	☒ Natural Area	☐ Unknown
☐ Industrial	☒ Recreational	☐ Other
☐ Landfill	☐ Residential - Rural	

SURROUNDING POPULATION

☐ Industrial	☐ Suburban – Commercial
☐ Urban	☒ Rural- Farmland
☐ Urban- Inner City	☐ Rural – Industrial
☒ Suburban - Residential	☐ Other

3.0 ON-SITE ACTIVITIES **Anticipated Dates of Field Activities July 2025 – Specific dates TBD**

DESCRIPTION OF PROJECT

☐ Phase I ESA	☐ UST Removal
☐ Phase II ESA	☒ Wetland delineation/Identification
☐ Subsurface Investigation	☒ Ecological Studies
☐ Hazardous Materials Building Assessment	☐ Tunnel and Dam Inspections
☐ Preliminary Assessment	☐ Sewer Inspection/Cleaning
☐ Remedial Investigation	☐ Train Yards/Railroad (Active)
☐ Remedial Action (Limited)	☐ Feasibility Study
☐ Bridge/Roadway Inspections/Activities	☒ Other – Sediment sampling
☐ Train Yards/Railroad/ROW (Active)	☐ Other (describe)
☐ Train Yards/Railroad (Inactive)	☐ Other (describe)

SPECIFIC WORK TASKS

If more than two Work Tasks are selected, STOP. Contact Corporate Safety.

☒ Site Walkthrough	☐ Soil Gas Sampling
☐ HazMat Building Materials Sampling	☐ Ground Water Monitoring
☐ Groundwater/Soil Sampling	☐ Operations & Maintenance
☐ Drilling/Subsurface	☐ Other (describe)
☐ Surface Water Sampling	☐ Other (describe)
☒ Sediment Sampling	☐ Other (describe)

☐ Excavation	☐ Other (describe)
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4.0 HAZARD ASSESSMENT

Hazard Assessment & Control (Check all that apply)	
☒ Physical Hazards ☒ Slip/Trip/Fall ☐ Energized Sources ☐ Overhead Hazard (hoists, Forklifts) ☐ Eye/Noise Hazard ☒ Heat/Cold Stress ☒ Traffic ☐ Confined Space Entry ☒ Contaminant/Hazardous Air Pollutants ☒ Hand Tools (powered/nonpowered) ☐ Mechanical Equipment ☐ Heat Sources (boilers/furnaces, steam pipes, welding/burning) ☐ Heavy Equipment (excavators, loaders, etc.) ☐ Elevated Work Areas (scaffolds, ladders) ☒ Other - Boating	☒ Biological Hazard ☒ Poison Vegetation (Poison Ivy/Oak) ☐ Blood Borne Pathogens ☐ Infectious/Medical Waste ☒ Animals/Rodents/Reptiles/Insects ☐ Other (specify) ☐ Other (specify) ☐ Other (specify)
☒ Chemical Hazards ☐ Flammable ☐ Toxic (exceeded TCLP Parameters) ☐ Reactive (cyanide) ☒ Corrosives (Bases/Acids) ☐ Other (specify) ☐ Other (specify)	☐ Radiological Hazards ☐ Ionizing (α, β, γ, x-ray, neutron, etc) ☐ Non-Ionizing (UV, IR, laser, etc.) ☐ Other (specify) ☐ Other (specify)

4.1 The following substance(s) are known or suspected to be on-site. The primary hazards of each are identified.

Substances	Impacted Media	Concentrations	Exposure Limits	Primary Hazards Exposure Route (inhalation, absorption, ingestion, injection)
10% Nitric Acid	Container	0.95% Nitric Acid by weight	NIOSH TWA: 2 PPM OSHA PEL: 2 pmm	Inhalation, ingestion, skin, and/or eye contact
10% Acetone	Container	10% acetone by weight	OSHA PEL TWA 2400 mg/m3	Inhalation, skin adsorption, ingestion, skin and/or eye contact
Petroleum Hydrocarbons	Sediment	Unknown	NIOSH REL ca TWA: 0.001 mg/m3	Inhalation, skin adsorption, ingestion, skin and/or eye contact
PCBs	Sediment	Unknown	NIOSH REL TWA: 0.5 mg/m3 (Lindane)	Inhalation, skin adsorption, ingestion, skin and/or eye contact

			OSHA PEL TWA 0.5 mg/m3	
Chlorinated Pesticides	Sediment	Unknown	NIOSH REL TWA: 0.5 mg/m3 (Lindane) OSHA PEL TWA: 0.5 mg/m3	Inhalation, skin adsorption, ingestion, skin and/or eye contact
Herbicides	Sediment	Unknown	NIOSH REL TWA: 5 ppm (Pyridine) OSHA PEL TWA: 5 ppm	Inhalation, skin adsorption, ingestion, skin and/or eye contact
PFAS	Sediment	Unknown	No legal limits for sediment set by OSHA or NIOSH	Inhalation, skin adsorption, ingestion, skin and/or eye contact

Hazard Substances information is provided in the attached [NIOSH POCKET GUIDE SHEETS](#)

4.2 Hazard Awareness - Personnel are to eliminate or minimize their exposure to potentially hazardous conditions unless all appropriate hazard controls are in place.

5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

5.1 The maximum level of PPE without prior authorization from GFT Corporate Safety is Level D.

5.2 At a minimum all GFT Personal must don a hard hat, safety glasses and safety footwear when on a project site.

5.3 Any work requiring PPE above a Level D must be approved by GFT Corporate Safety

Hazard Controls and Personal Protective Equipment (PPE) (Check all that apply)	
☒ Head Protection ☒ Hard Hat ☐ High Visibility tape on Hard Hat ☐ Other (describe)	☒ Foot Protection ☒ Leather/Safety Toe Boots ☒ Rubber/Safety Toe Boots ☐ Other (describe)
☒ Eye Protection ☒ Safety Glasses ☐ Chemical Goggles ☐ Face Shield ☐ Other (describe)	☒ Body Protection ☒ Long Pants ☒ Shirt with 4" sleeves (minimum) ☒ High Visibility Vest (ANSI Approved) ☐ Cotton Coveralls ☐ Rain Suit ☐ Cold Weather Clothing ☐ Other (describe)
☒ Hand Protection ☐ Leather ☐ Cut Resistant (Kevlar) ☒ Chemical (Specify: nitrile, rubber, PVC) ☐ Other (describe)	☐ Hearing Protection ☐ Ear Plugs ☐ Earmuffs ☐ Other (describe)
☒ Other Equipment ☒ First Aid Kit ☒ Mobile Phone ☒ 2-Way Radios ☐ Flashlight ☒ Fluids/Drinking Water/Ice	☐ Additional Control/Remarks Please describe

☒	Towels/Towelettes	
☒	Hand Cleaner/Disinfectant	
☐	Hand/Foot Warmers	
☒	Eyewash bottle	
☐	Fire extinguisher	
☒	Other (Life Vests, Throw Ring)	

6.0 DECONTAMINATION PROCEDURES
6.1 Limited decontamination will be required for projects where this short-form HASP is applicable.

DECONTAMINATION PROCEDURES		
Type	Procedure	Equipment
Personnel	Hand/Face Washing	Soap/Water
Sampling/Small Equipment	Follow Project-Specific Sampling Plan	☒ Buckets ☒ Brushes ☐ Water Hoses ☒ Tubs ☐ Disposal Drums ☒ Cleaning Solution (Alconox, etc.)
Heavy Equipment	Follow Project- Specific Work Plan	☐ Decontamination Pad ☐ Steam Cleaner

7.0 AIR MONITORING ☒ *Check box if Air Monitoring Not Required*

Monitoring Instrument	Action Level
Oxygen Meter	<19.5% or >23%
Combustible Gas Indicator/LEL Meter	10% LEL
Carbon Monoxide Meter	35 ppm
Hydrogen Sulfide	10 ppm
Organic Vapor Monitor (PID)	Project-Specific
Colorimetric Detector Tubes	Project-Specific
Dust Monitor	Project-Specific

For project-specific action levels, contact Corporate Safety Representative. If action levels (above) are exceeded, contact Project Manager and Corporate Safety Representative.

8.0 COMMUNICATION AND TRAINING

8.1 A tailgate safety meeting must be conducted and documented for all personnel covered by this plan. (See page 7)

SITE CONTROL AND COMMUNICATIONS	
Traffic Control Plans	NA
Standard Operating Procedures (SOPs)	The following applicable SOPs are attached: NA

9.0 EMERGENCY INFORMATION

Emergency Information	
Phone Numbers:	Emergency Contacts:
Local Police: 911 or 304-727-2251	Project Mgr: Eric Neast Office: 717-886-5453; Cell: 717-576-6744
Local Ambulance: 911 or 304-357-0101	Corporate Safety Mgr: David Albright Office: 717-886-5735, Cell: 717-877-7104
Local Fire Department: 911 or 304-727-9111	Insurance Mgr: Steve Kuemmerle – 215-589-3976
Local Hospital: 304-766-3600 Thomas Memorial Hospital 4605 MacCorkle Ave SW, South Charleston, WV 25309 Local Urgent Care: 304-833-9359 UPMC-GoHealth Urgent Care 4812 Maccorkle Ave SW, Charleston, WV 25309 (Route maps attached)	Client Contact: Capitol Conservation District Office: 304-759-0736 Cell: Email: CCD@wvca.us
First Aid Trained Individual On-Site: Dave Graff: 717-342-1418 Emily Hegedus: 717-565-0349 Steven Smith: 717-701-0279 Anju Ghimirey: 717-775-0127	

10.0 INCIDENT REPORTING

10.1 An incident is an unplanned event involving a Company employee that results in personal injury/illness, property damage, or environmental release.

A near miss event is an event that could have resulted in an incident, as defined above, if circumstances were different. An event is considered a near miss if only a fortunate break in the chain of events prevented personal injury/illness, property damage, or environmental release.

10.2 Follow GFT SOP #5 – Incident/Near Miss Procedures.

Within 24 hours of an incident/near miss, the employee is required to report the incident to his or her Supervisor and submit an Initial Report of Incident or Near Miss (“Initial Report”) to IncidentReport@gfnet.com. The Initial Report Form is attached.

11.0 HASP TRAINING LOG

- 11.1 By signing the training log below, the individual certifies the contents of this Health and Safety Plan (HASP) have been explained to them, they have had the opportunity to read and review the HASP, they understand the information and hazards presented, and will abide by the HASP.

Printed Name	Organization	Signature	Date
Emily Hegedus	GFT, Inc.		
Dave Graff	GFT, Inc.		
Steven Smith	GFT, Inc.		
Anju Ghimirey	GFT, Inc.		

Daily Safety Briefing (Tailgate Safety Meeting) Check List

All Topics Must Be Discussed Every Day of Every Project Even If the Same Field Staff Are Present and at any time there is a change in scope of work, or incident on site.

A. "Administrative" Topics

1. Introduce all persons present.
2. Identify Roles & Responsibilities/Chain of Command [e.g., Client Project Manager (PM), GFT and Subcontractor PM/Supervisors, GFT and Subcontractor H&S Officers, Field Operations Leader (FOL), etc.].
3. Emphasize the GFT Stop Work Authority Policies:
Anyone has the authority and right to Stop Work because of Unsafe Conditions.
4. Identify and discuss the role of visitors (e.g., client representatives, regulatory representatives, citizens, GFT staff).
5. Identify persons who require an initial site briefing and provide the necessary information.

B. General Health and Safety Topics

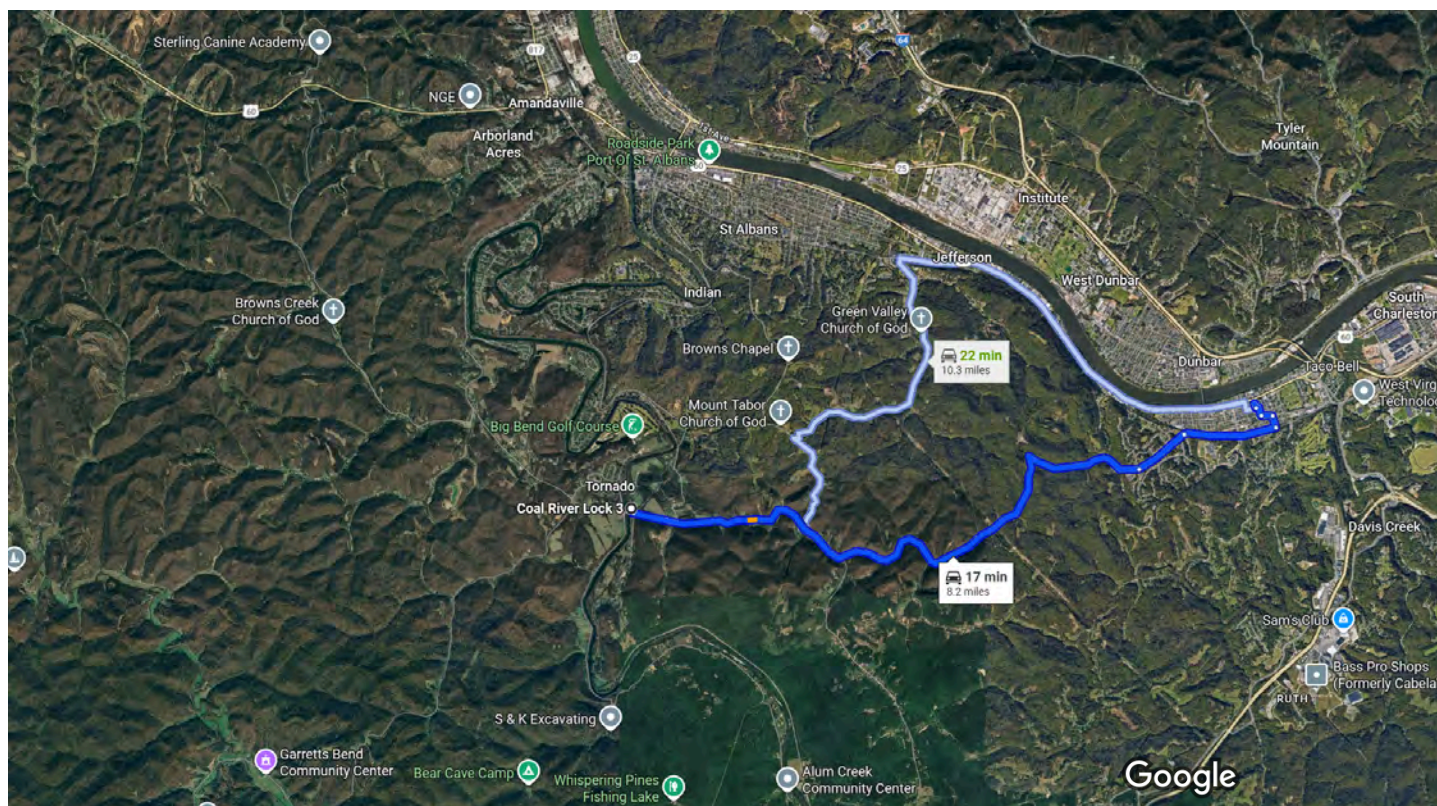
1. Emphasize that the Health and Safety of Workers, Residents, and Visitors Must Always be Considered First.
2. Weather forecast for the day.
3. Buddy system.
4. Physical, chemical and/or biological hazards anticipated.
5. PPE required.
6. Air monitoring requirements.
7. Site control requirements.
8. Communication requirements.
9. Decontamination requirements (Personal hygiene/decon and sanitary facilities available, not just equipment decon).
10. Material handling requirements (place emphasis on proper lifting techniques).
11. Fire and/or explosion hazards.
12. Emergency procedures including routes to hospital and escape, emergency medical treatment, medical evacuation from the site, and assembly/rally location for site workers to meet.
13. Emergency shut off for all equipment. Drill rig, Air Knife, Geoprobe - all members of a field team must know the location of the kill switches and how to operate them.

C. Specific Work to Be Conducted, and Related Health and Safety Issues and Hazards

1. Other Health and Safety Issues that others need to be aware of shall be discussed.
2. Less all-encompassing health and safety issues shall be addressed during task SPSAs.

D. Closing Activities

1. Set Mid-Day (e.g., Lunchtime) Safety Briefing.
2. Ensure all persons have signed the Initial HASP Training Log and the Initial Site Entry Briefing Log.
3. Document this Tailgate Safety Briefing in a Site Logbook. Include names and affiliations of all persons on-site.



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Coal River Lock 3

180 Pettigrew Ln, St Albans, WV 25177

- ↑ 1. Head south on Pettigrew Ln toward Smith Creek Rd
13 sec (249 ft)

Continue on Smith Creek Rd to South Charleston

- ↩ 2. Turn left onto Smith Creek Rd
14 min (7.8 mi)
- ↩ 3. Turn left onto Lincoln Dr
6.3 mi
- ↑ 4. Continue onto Kanawha Tpke/Kanawha Turnpike Access
0.6 mi
- ↑ 5. Continue onto Kanawha Tpke/Kanawha Turnpike Access
0.9 mi

Continue on Chesapeake St to your destination

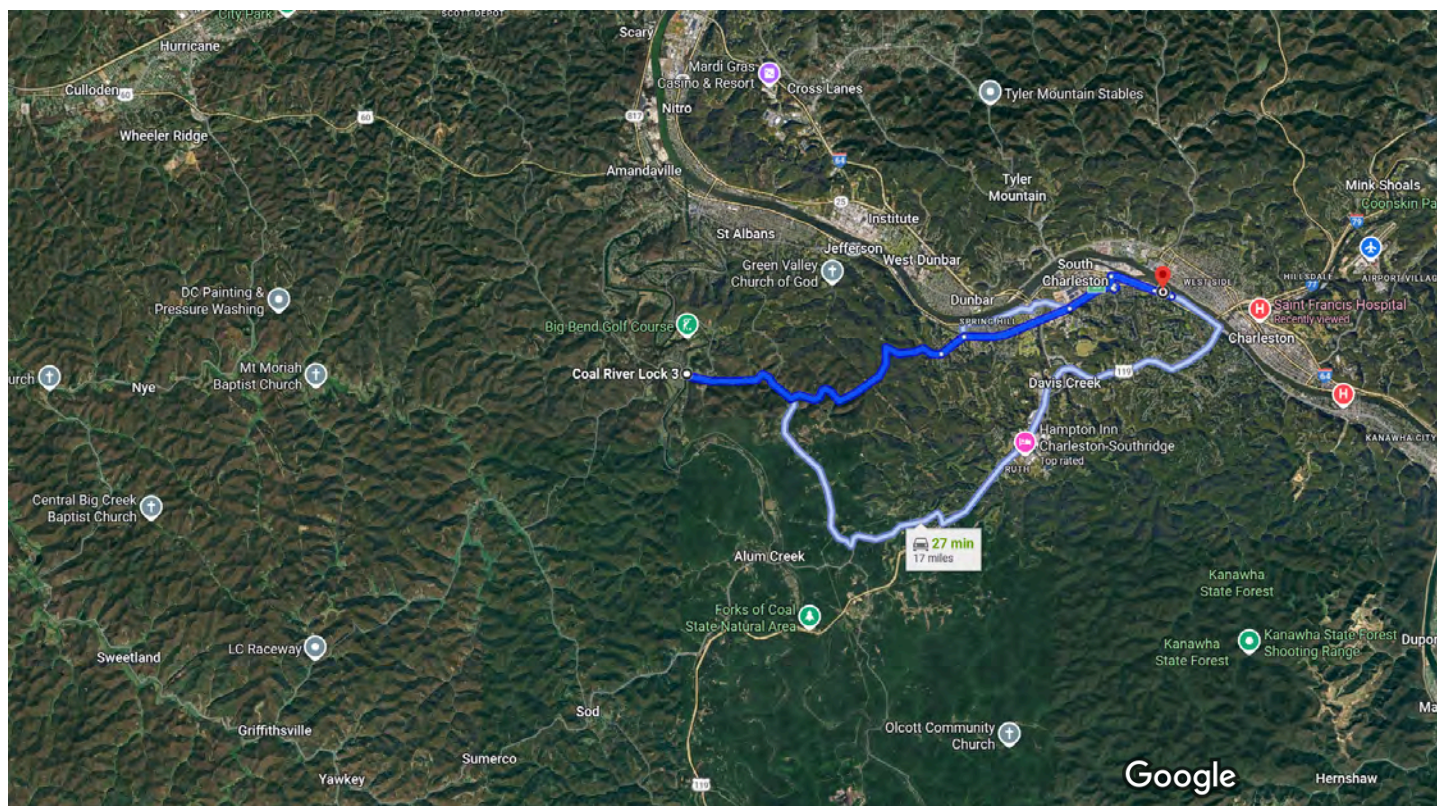
- ↩ 6. Turn left onto Chesapeake St
2 min (0.4 mi)
- ↩ 7. Turn left onto Pennsylvania Ave
0.1 mi
- ↩ 8. Turn left onto Pennsylvania Ave
0.1 mi

- 7. Turn right onto Poplar St
-
- 8. Turn right
- 📘 Destination will be on the right
-

0.1 mi

226 ft

WVU Medicine - Thomas Memorial Hospital
4605 MacCorkle Ave SW, South Charleston, WV 25309



Imagery ©2025 Airbus, Google, Map data ©2025, Map data ©2025 Google 2 mi

Coal River Lock 3

180 Pettigrew Ln, St Albans, WV 25177

- ↑ 1. Head south on Pettigrew Ln toward Smith Creek Rd
13 sec (249 ft)

Continue on Smith Creek Rd. Take Kanawha Tpke/Kanawha Turnpike Access to WV-61 N in Charleston

- ↩ 2. Turn left onto Smith Creek Rd
6.3 mi
- ↑ 3. Continue onto Lincoln Dr
0.6 mi
- ↑ 4. Continue onto Kanawha Tpke/Kanawha Turnpike Access
2.2 mi
- ⬆ 5. Use the left lane to merge onto I-64 E via the ramp to Charleston
1.0 mi
- ↘ 6. Take exit 56 for Montrose Dr
0.1 mi

- 7. Slight right onto the Montrose Drive ramp to MacCorkle Ave
259 ft
- 8. Merge onto Montrose Dr
0.2 mi
- 9. Turn right onto US-60 E
0.9 mi
- 10. Keep right to continue on WV-61 S
0.4 mi
- 11. Make a U-turn
0.1 mi

UPMC-GoHealth Urgent Care

1416 MacCorkle Ave SW, Charleston, WV 25303

Attachment 3

Sediment Results Analytical Tables

TABLE 1
INORGANIC COMPOUNDS
ANALYTICAL RESULTS TABLE

SEDIMENT SAMPLE DETAILS		Coal River Sediment Characterization																				WEST VIRGINIA DEP SCREENING LEVELS ¹				
		Name	SD-01	SD-02	SD-03	SD-04	SD-05	SD-06	SD-07	SD-08	SD-09	SD-10	SD-11	Units												
		Date	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025													
		Time	1020 hrs	1100 hrs	1140 hrs	1200 hrs	1240 hrs	1300 hrs	0920 hrs	1000 hrs	1210 hrs	1240 hrs	0930 hrs													
		Type	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite			Composite	Residential ²		Industrial ³							
Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment														
Summary of Detections	CAS No.	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result					DQ	Result	DQ			
Inorganics (Metals)																										
Aluminum, Total	7429-90-5	1,930	-	3,560	-	1,240	-	1,120	-	1,490	-	1,360	-	1,600	-	2,040	-	2,070	-	1,160	-	1,790	-	mg/kg	77,000	1,000,000
Antimony, Total	7440-36-0	<1.4	U	<1.1	U	<1.3	U	<1.2	U	<1.3	U	<1.3	U	<1.4	U	<1.2	U	<1.4	U	<1.3	U	<1.3	U	mg/kg	31	470
Arsenic, Total	7440-38-2	2.1	-	4.7	-	5.6	-	<1.8	U	<2.0	U	<2.0	-	2.1	-	<2.1	U	3.3	-	2.2	-	<2.0	U	mg/kg	0.68	30
Barium, Total	7440-39-3	14.3	-	97.0	-	8.1	-	8.9	-	10.7	-	6.9	-	15.9	-	13.1	-	19.6	-	10.7	-	17.3	-	mg/kg	15,000	220,000
Beryllium, Total	7440-41-7	<0.70	U	<0.56	U	<0.64	U	<0.60	U	<0.67	U	<0.67	U	<0.65	U	<0.70	U	<0.58	U	<0.69	U	<0.66	U	mg/kg	160	2,300
Cadmium, Total	7440-43-9	<0.70	U	<0.56	U	<0.64	U	<0.60	U	<0.67	U	<0.67	U	<0.65	U	<0.70	U	<0.58	U	<0.69	U	<0.66	U	mg/kg	37	530
Calcium, Total	7440-70-2	714	-	520	-	193	-	910	-	387	-	195	-	702	-	424	-	713	-	200	-	525	-	mg/kg	-	-
Chromium, Total	7440-47-3	3.4	-	5.1	-	3.1	-	2.0	-	3.0	-	1.8	-	3.6	-	2.8	-	3.6	-	2.7	-	2.7	-	mg/kg	120,000*	1,000,000*
Cobalt, Total	7440-48-4	4.2	-	6.3	-	4.3	-	3.7	-	4.4	-	4.2	-	4.9	-	5.3	-	5.1	-	6	-	5.3	-	mg/kg	23	350
Copper, Total	7440-50-8	<3.5	-	3.2	-	<3.2	-	<3.0	-	<3.3	U	<3.4	U	9.2	-	<3.5	U	3.2	-	<3.4	U	3.4	-	mg/kg	3,100	47,000
Iron, Total	7439-89-6	8,000	-	15,700	-	9,720	-	5,630	-	7,180	-	6,000	-	7,000	-	8,220	-	10,900	-	9,080	-	7,500	-	mg/kg	55,000	820,000
Lead, Total	7439-92-1	3.7	-	4.6	-	3.1	-	2.5	-	3.5	-	2.7	-	4.4	-	4.1	-	3.1	-	4.1	-	4.1	-	mg/kg	400	800
Magnesium, Total	7439-95-4	446	-	324	-	238	-	222	-	365	-	307	-	455	-	439	-	263	-	363	-	340	-	mg/kg	-	-
Manganese, Total	7439-96-5	107	-	173	-	86.9	-	110	-	114	-	100	-	170	-	153	-	128	-	179	-	178	-	mg/kg	1,800	26,000
Mercury, Total	7439-97-6	<0.066	U	<0.060	U	<0.059	U	<0.065	U	<0.064	U	<0.069	U	<0.069	U	<0.066	U	<0.061	U	<0.066	U	<0.068	U	mg/kg	3.1	3.1
Nickel, Total	7440-02-0	9.4	-	13.8	-	11.7	-	9.5	-	11.5	-	11.5	-	12.7	-	13.4	-	11.2	-	15.0	-	13.6	-	mg/kg	1,500	22,000
Potassium, Total	7440-09-7	270	-	147	-	116	-	109	-	369	-	160	-	287	-	203	-	184	-	211	-	160	-	mg/kg	2,300	34,000
Selenium, Total	7782-49-2	<3.5	U	<2.8	U	<3.2	U	<3.0	U	<3.3	U	<3.4	U	<3.2	U	<3.5	U	<2.9	U	<3.4	U	<3.3	U	mg/kg	390	5,800
Silver, Total	7440-22-4	<1.4	U	<1.1	U	<1.3	U	<1.2	U	<1.3	U	<1.3	U	<1.3	U	<1.4	U	<1.2	U	<1.4	U	<1.3	U	mg/kg	390	5,800
Sodium, Total	7440-23-5	74.4	-	75.1	-	73.4	-	66.7	-	<66.7	U	97.9	U	83	-	84.9	-	79.7	-	115	-	77.7	-	mg/kg	-	-
Thallium, Total	7440-28-0	<0.70	U	<0.56	U	<0.64	U	<0.60	U	<0.67	U	<0.67	U	<0.65	U	<0.70	U	<0.58	U	<0.69	U	<0.66	U	mg/kg	0.78	12
Trivalent Chromium	16065-83-1	3.4	-	5.1	-	3.1	-	<2.7	U	3.0	-	<2.8	U	3.6	-	<2.9	U	3.6	-	<2.7	U	<2.8	U	mg/kg	120,000	1,000,000
Vanadium, Total	7440-62-2	4.6	-	5.4	-	3.0	-	2.0	-	3.4	-	2.4	-	3.5	-	3.4	-	4.7	-	4.7	-	3.3	-	mg/kg	460	8,400
Zinc, Total	7440-66-6	26.6	-	36.4	-	28.5	-	23.1	-	26.3	-	25.3	-	29.4	-	33.3	-	30.5	-	35.4	-	31.4	-	mg/kg	23,000	350,000
Wet Chemistry																										
Moisture		30.1	-	20.00	-	27.9	-	28.3	-	29.0	-	29.6	-	28.9	-	31.4	-	25.2	-	28.3	-	30.0	-	%		
pH		6.51	-	6.60	-	6.80	-	6.63	-	6.53	-	6.73	-	6.79	-	8.8	-	7.25	-	7.19	-	7.22	-	pH_units		
Chloride	16887-00-6	<70.6	U	<61.7	U	<68.6	U	<68.8	U	<69.0	U	<69.8	U	<69.0	U	<71.6	U	<67.0	U	<68.3	U	<71.9	U	mg/kg	-	-
Cyanide, Total	57-12-5	<0.38	U	<0.33	U	<0.35	U	<0.35	U	<0.34	U	<0.36	U	<0.36	U	<0.36	U	<0.33	U	<0.34	U	<0.36	U	mg/kg	-	-
Hexavalent Chromium	18540-29-9	<2.9	U	<2.4	U	<2.8	U	<2.7	U	<2.8	U	<2.8	U	<2.9	U	<2.9	U	<2.6	U	<2.7	U	<2.8	U	mg/kg	0.3	63
Nitrate-N	14797-55-8	<7.1	U	<6.2	U	<6.9	U	<6.9	U	<6.9	U	<7.0	U	<6.9	U	<7.2	U	<6.7	U	<6.8	U	<7.2	U	mg/kg	130,000	1,000,000
Nitrite-N	14797-65-0	<7.1	U	<6.2	U	<6.9	U	<6.9	U	<6.9	U	<7.0	U	<6.9	U	<7.2	U	<6.7	U	<6.8	U	<7.2	U	mg/kg	-	-
Total Organic Carbon (TOC)		12,800	-	7,800	-	1,920	-	1,780	-	4,620	-	2,750	-	6,630	-	7,620	-	7,780	0	8,190	-	14,300	-	mg/kg		
Total Solids		69.9	-	80.0	-	72.1	-	71.7	-	71.0	-	70.4	-	71.1	-	68.6	-	74.8	-	71.7	-	70.0	-	%		

Notes:
1. U.S. EPA and WVDEP Screening Levels, effective December 5, 2024.
2. Residential = Residential Soil Limit, effective December 5, 2024.
3. Industrial = Industrial Soil Limit, effective December 5, 2024.
4. "CAS No." = Chemical Abstract Service Number
5. "mg/kg" = milligrams per kilograms or parts per million (ppm)
6. "U" indicates a compound was not detected above its respective Reporting Detection Limit (RDL) or its Method Detection Limit (MDL).
7. "<" indicates a compound was not detected above its RDL or MDL concentration.
8. Results in bold type indicate that the compound was detected at a concentration that exceeded its respective laboratory detection limit.
9. Results in bold and yellow shading indicates that the compound was detected, and it exceeded its respective MSC.
10. "-" indicates a cell with no value.
11. "*" indicates that the screening levels used for Trivalent Chromium were also used for Total Chromium.
12. "PQL" indicates practical quantitation limit for this project

TABLE 2
SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs)
ANALYTICAL RESULTS TABLE

SEDIMENT SAMPLE DETAILS	Location		Coal River Sediment Characterization																								WEST VIRGINIA DEP. SCREENING LEVELS ¹	
	Name	Date Time Type	SD-01		SD-02		SD-03		SD-04		SD-05		SD-06		SD-07		SD-08		SD-09		SD-10		SD-11		Units	Residential ²	Industrial ³	
			8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025					
			1020 hrs	1100 hrs	1140 hrs	1200 hrs	1240 hrs	1300 hrs	0920 hrs	1000 hrs	1210 hrs	1240 hrs	0930 hrs															
			Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite														
Matrix	CAS No.	Sediment	DQ	Sediment	DQ	Sediment	DQ	Sediment	DQ	Sediment	DQ	Sediment	DQ	Sediment	DQ	Sediment	DQ	Sediment	DQ	Sediment	DQ	Sediment	DQ	Residential ²	Industrial ³			
Summary of Detections																												
Semi-Volatile Organic Compounds (SVOCs)																												
1,2,4,5-Tetrachlorobenzene	95-94-3	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	17,000	150,000		
1,4-Dioxane	123-91-1	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	5,400	250,000		
2,3,4,6-Tetrachlorophenol	58-90-2	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	4,300	12,000		
2,4,5-Trichlorophenol	95-95-4	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	6,300,000	8,200,000		
2,4,6-Trichlorophenol	88-06-2	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	43,000	820,000		
2,4-Dichlorophenol	120-83-2	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	190,000	2,500,000		
2,4-Dimethylphenol	105-67-9	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	1,300,000	16,000,000		
2,4-Dinitrophenol	51-28-5	<20	U	<454	U	<495	U	<473	U	<531	U	<498	U	<469	U	<571	U	<477	U	<558	U	<501	U	ug/kg	130,000	1,600,000		
2,4-Dinitrotoluene	121-14-2	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	1,700	74,000		
2,6-Dinitrotoluene	605-20-2	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	360	21,000		
2-Chloronaphthalene	91-58-7	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	5,000,000	50,000,000		
2-Chlorophenol	95-57-8	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	340,000	3,900,000		
2-Methyl-4,6-dinitrophenol	534-52-1	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	-	-		
2-Methylnaphthalene	91-57-6	<130	U	<114	U	<124	U	<118	U	<133	U	629	-	174	-	<143	U	806	-	988	-	150	-	ug/kg	420,000	1,200,000		
2-Nitroaniline	88-74-4	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	490	2,100		
2-Nitrophenol	88-75-5	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	4,100	4,100		
3,3-Dichlorobenzidine	91-94-1	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	1,200	51,000		
3-Nitroaniline	99-09-2	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	-	-		
4-Bromophenyl-phenylether	101-55-3	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	-	-		
4-Chloro-3-methylphenol	59-50-7	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	-	-		
4-Chloroaniline	105-47-8	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	2,700	110,000		
4-Chlorophenyl-phenylether	7005-72-3	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	-	-		
4-Nitroaniline	100-01-6	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	-	-		
4-Nitrophenol	100-02-7	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	-	-		
Acenaphthene	83-32-9	<65.0	U	<56.8	U	<61.9	U	<59.1	U	<66.4	U	<62.3	U	<58.6	U	<71.4	U	<59.7	U	<69.8	U	<62.6	U	ug/kg	4,100,000	47,000,000		
Acenaphthylene	208-96-8	<65.0	U	<56.8	U	<61.9	U	<59.1	U	<66.4	U	<62.3	U	<58.6	U	<71.4	U	<59.7	U	<69.8	U	<62.6	U	ug/kg	4,200,000	51,000,000		
Acetophenone	98-86-2	<130	U	<118	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	2,500,000	2,500,000		
Anthracene	120-12-7	<65.0	U	<56.8	U	<61.9	U	<59.1	U	<66.4	U	62.3	U	<58.6	U	<71.4	U	<59.7	U	<69.8	U	<62.6	U	ug/kg	23,000,000	350,000,000		
Atrazine	1912-24-9	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	2,400	100,000		
Benzaldehyde	100-52-7	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	170,000	1,200,000		
Benzo(a)anthracene	56-55-3	<65.0	U	<56.8	U	<61.9	U	<59.1	U	<66.4	U	<62.3	U	<58.6	U	<71.4	U	<59.7	U	<69.8	U	<62.6	U	ug/kg	1,500	320,000		
Benzo(a)pyrene	50-32-8	<65.0	U	<56.8	U	<61.9	U	<59.1	U	<66.4	U	<62.3	U	<58.6	U	<71.4	U	90.6	-	121.4	-	<62.6	U	ug/kg	110	21,000		
Benzo(b)fluoranthene	205-99-2	<65.0	U	64.7	-	<61.9	U	<59.1	U	<66.4	U	<62.3	U	<58.6	U	<71.4	U	132	-	105	-	<62.6	U	ug/kg	1,100	21,000		
Benzo(g,h,i)perylene	191-24-2	<65.0	U	<56.8	U	<61.9	U	<59.1	U	<66.4	U	<62.3	U	<58.6	U	<71.4	U	<59.7	U	<69.8	U	<62.6	U	ug/kg	1,800,000	23,000,000		
Benzo(k)fluoranthene	207-08-9	<65.0	U	<56.8	U	<61.9	U	<59.1	U	<66.4	U	<62.3	U	<58.6	U	<71.4	U	<59.7	U	<69.8	U	<62.6	U	ug/kg	1,100	21,000		
Biphenyl	92-52-4	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	5,100	210,000		
bis(2-Chloroethoxy)methane	111-91-1	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	-	-		
bis(2-Chloroethyl)ether	111-44-4	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	240	1,100		
bis(2-Chloroisopropyl)ether	108-60-1	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	8,000	8,000		
bis(2-Ethylhexyl)phthalate	117-81-7	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	39,000	1,600,000		
Butylbenzylphthalate	85-68-7	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	290,000	12,000,000		
Caprolactam	105-60-2	<260	U	<227	U	<248	U	<236	U	<266	U	<249	U	<234	U	<286	U	<239	U	<279	U	<251	U	ug/kg	31,000,000	4,000,000,000		
Carbazole	86-74-8	<130	U	<114	U	<124	U	<118	U	<133	U	<125	U	<117	U	<143	U	<119	U	<140	U	<125	U	ug/kg	11,000	1,000,000		
Chrysene	218-01-9	<65.0	U	<56.8	U	<61.9	U	<59.1	U	<66.4	U	78.5	-	<58.6	U	<71.4	U	117	-	122	-	70.6	-	ug/kg	110,000	21,000,000		
Dibenzo(a,h)anthracene	53-70-3	<65.0	U	<56.8	U	<61.9	U	<59.1	U	<66.4	U	<62.3	U	<58.6														

TABLE 3
POLYCHLORINATED BIPHENYLS (PCBS)
ANALYTICAL RESULTS TABLE

		Coal River Sediment Characterization																										WEST VIRGINIA DEP SCREENING LEVELS ¹	
		SD-01		SD-02		SD-03		SD-04		SD-05		SD-06		SD-07		SD-08		SD-09		SD-10		SD-11							
SEDIMENT SAMPLE DETAILS		8/26/2025		8/26/2025		8/26/2025		8/26/2025		8/26/2025		8/26/2025		8/27/2025		8/27/2025		8/27/2025		8/27/2025		8/27/2025		Units					
CAS No.		1020 hrs Composite		1100 hrs Composite		1160 hrs Composite		1200 hrs Composite		1240 hrs Composite		1300 hrs Composite		1360 hrs Composite		1400 hrs Composite		1500 hrs Composite		0620 hrs Composite		1000 hrs Composite		1210 hrs Composite		1240 hrs Composite		0930 hrs Composite	
		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment	
Summary of Detections		Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ
Polychlorinated Biphenyls (PCBs) Aroclors																													
Total PCB Calculation		1336-36-3	<0.046	U	<0.041	U	<0.045	U	0.050	U	<0.045	U	<0.045	U	<0.045	U	<0.046	U	<0.043	U	<0.044	U	<0.046	U	ug/kg	0.32*	15*		
PCB-1016		12674-11-2	<0.046	U	<0.041	U	<0.045	U	<0.046	U	<0.045	U	<0.045	U	<0.045	U	<0.046	U	<0.043	U	<0.044	U	<0.046	U	ug/kg	6	82		
PCB-1221		11104-28-2	<0.046	U	<0.041	U	<0.045	U	<0.046	U	<0.045	U	<0.045	U	<0.045	U	<0.046	U	<0.043	U	<0.044	U	<0.046	U	ug/kg	0.26	12		
PCB-1232		11141-16-5	<0.046	U	<0.041	U	<0.045	U	<0.046	U	<0.045	U	<0.045	U	<0.045	U	<0.046	U	<0.043	U	<0.044	U	<0.046	U	ug/kg	0.22	10		
PCB-1242		53469-21-9	<0.046	U	<0.041	U	<0.045	U	<0.046	U	<0.045	U	<0.045	U	<0.045	U	<0.046	U	<0.043	U	<0.044	U	<0.046	U	ug/kg	0.31	15		
PCB-1248		12672-29-6	<0.046	U	<0.041	U	<0.045	U	<0.046	U	<0.045	U	<0.045	U	<0.045	U	<0.046	U	<0.043	U	<0.044	U	<0.046	U	ug/kg	0.30	15		
PCB-1254		11097-69-1	<0.046	U	<0.041	U	<0.045	U	0.050	-	<0.045	U	<0.045	U	<0.045	U	<0.046	U	<0.043	U	<0.044	U	<0.046	U	ug/kg	0.32	15		
PCB-1260		11096-82-5	<0.046	U	<0.041	U	<0.045	U	<0.046	U	<0.045	U	<0.045	U	<0.045	U	<0.046	U	<0.043	U	<0.044	U	<0.046	U	ug/kg	0.33	16		

Notes:
1. U.S. EPA and WVDEP Screening Levels, effective December 5, 2024.
2. Residential = Residential Soil Limit, effective December 5, 2024.
3. Industrial = Industrial Soil Limit, effective December 5, 2024.
4. "CAS No." = Chemical Abstract Service Number
5. "ug/kg" = micrograms per kilograms or parts per billion (ppb)
6. "<" indicates a compound was not detected above its RDL or MDL concentration.
7. "U" indicates a compound was not detected above its respective Reporting Detection Limit (RDL) or its Method Detection Limit (MDL).
8. "-" indicates a cell with no value.
9. "*" indicates that the value shown for Total PCB Calculation is the same as the value shown for PCB-1254

TABLE 4
ORGANOCHLORINE PESTICIDES
ANALYTICAL RESULTS TABLE

SEDIMENT SAMPLE DETAILS	CAS No.	Coal River Sediment Characterization																				Units	WEST VIRGINIA DEP SCREENING LEVELS ¹			
		SD-01	SD-02	SD-03	SD-04	SD-05	SD-06	SD-07	SD-08	SD-09	SD-10	SD-11														
		8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025														
		1020 hrs	1100 hrs	1140 hrs	1200 hrs	1240 hrs	1300 hrs	0920 hrs	1000 hrs	1210 hrs	1240 hrs	0930 hrs														
		Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite														
Summary of Detections		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Sediment		Residential ²	Industrial ³					
Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ							
Organochlorine Pesticides																										
p,p'-DDD	72-54-8	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	30,000	120,000
p,p'-DDE	72-55-9	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	41,000	170,000
p,p'-DDT	50-29-3	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	55,000	270,000
Aldrin	309-00-2	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	460	1,900
alpha-Chlordane	5103-71-9	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	-	-
alpha-BHC (alpha-HCH)	319-84-6	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	46	200
beta-BHC	319-85-7	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	210	880
delta-BHC	319-86-8	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	-	-
Dieldrin	60-57-1	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	110	470
Endosulfan I	959-98-8	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	110,000	260,000
Endosulfan II	33213-65-9	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	120,000	260,000
Endosulfan sulfate	1031-07-8	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	70,000	70,000
Endrin	72-20-8	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	5,500	5,500
Endrin aldehyde	7421-93-4	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	-	-
Endrin ketone	53494-70-5	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	-	-
gamma-BHC (Lindane)	58-89-9	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	72	72
gamma-Chlordane	5103-74-2	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	-	-
Heptachlor	76-44-8	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	680	680
Heptachlor epoxide	1024-57-3	<11.8	U	<10.5	U	<11.6	U	<11.8	U	<11.5	U	<11.5	U	<11.5	U	<11.8	U	<11.1	U	<11.3	U	<11.9	U	ug/kg	960	960
Methoxychlor	72-43-5	<22.8	U	<20.3	U	<22.6	U	<22.9	U	<22.3	U	<22.4	U	<22.3	U	<22.8	U	<21.5	U	<22.0	U	<23.1	U	ug/kg	480	2,000
Toxaphene	8001-35-2	<242	U	<216	U	<239	U	<243	U	<237	U	<237	U	<237	U	<242	U	<228	U	<233	U	<245	U	ug/kg	470	1,900

Notes:

1. U.S. EPA and WVDEP Screening Levels, effective December 5, 2024.
2. Residential = Residential Soil Limit, effective December 5, 2024.
3. Industrial = Industrial Soil Limit, effective December 5, 2024.
4. "CAS No." = Chemical Abstract Service Number
5. "ug/kg" = micrograms per kilograms or parts per billion (ppb)
6. "<" indicates a compound was not detected above its RDL or MDL concentration.
7. "U" indicates a compound was not detected above its respective Reporting Detection Limit (RDL) or its Method Detection Limit (MDL).
8. "-" indicates a cell with no value.

TABLE 5
HERBICIDES
ANALYTICAL RESULTS TABLE

SEDIMENT SAMPLE DETAILS	Location		Coal River Sediment Characterization																		Units	WEST VIRGINIA DEP SCREENING LEVELS ¹				
	Name	SD-01	SD-02		SD-03		SD-04		SD-05		SD-06		SD-07		SD-08		SD-09		SD-10					SD-11		
	Date	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025				8/27/2025		
	Time	1020 hrs	1100 hrs	1140 hrs	1200 hrs	1240 hrs	1300 hrs	0920 hrs	1000 hrs	1210 hrs	1240 hrs	0930 hrs														
	Type	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite														
	Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment		Sediment	Sediment			
Summary of Detections	CAS No.	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ		Residential ²	Industrial ³
Herbicides																										
2,4,5-T	93-76-5	<238	U	<209	U	<229	U	<236	U	<235	U	<238	U	<232	U	<245	U	<227	U	<231	U	<237	U	ug/kg	22,000	22,000
2,4,5-TP	93-72-1	<140	U	<123	U	<135	U	<139	U	<138	U	<140	U	<137	U	<144	U	<134	U	<136	U	<140	U	ug/kg	2,900	8,400
2,4-D	94-75-7	<140	U	<123	U	<135	U	<139	U	<138	U	<140	U	<137	U	<144	U	<134	U	<136	U	<140	U	ug/kg	1,800	1,800
2,4-DB	94-82-6	<140	U	<123	U	<135	U	<139	U	<138	U	<140	U	<137	U	<144	U	<134	U	<136	U	<140	U	ug/kg	-	-
Dalapon	75-99-0	<140	U	<123	U	<135	U	<139	U	<138	U	<140	U	<137	U	<144	U	<134	U	<136	U	<140	U	ug/kg	5,300	5,300
Dicamba	1918-00-9	<140	U	<123	U	<135	U	<139	U	<138	U	<140	U	<137	U	<144	U	<134	U	<136	U	<140	U	ug/kg	45,000	45,000
Dichloroprop	120-36-5	<140	U	<123	U	<135	U	<139	U	<138	U	<140	U	<137	U	<144	U	<134	U	<136	U	<140	U	ug/kg	-	-
Dinoseb	88-85-7	<238	U	<209	U	<229	U	<236	U	<235	U	<238	U	<232	U	<245	U	<227	U	<231	U	<237	U	ug/kg	85	350
Pentachlorophenol	87-86-5	<140	U	<123	U	<135	U	<139	U	<138	U	<140	U	<137	U	<144	U	<134	U	<136	U	<140	U	ug/kg	47,000	230,000

Notes:

1. U.S. EPA and WVDEP Screening Levels, effective December 5, 2024.
2. Residential – Residential Soil Limit, effective December 5, 2024.
3. Industrial – Industrial Soil Limit, effective December 5, 2024.
4. "CAS No." = Chemical Abstract Service Number
5. "ug/kg" = micrograms per kilograms or parts per billion (ppb)
6. "<" indicates a compound was not detected above its RDL or MDL concentration.
7. "U" indicates a compound was not detected above its respective Reporting Detection Limit (RDL) or its Method Detection Limit (MDL).
8. "-" indicates a cell with no value.

TABLE 6
GRAIN SIZE ANALYSIS RESULTS TABLE

SEDIMENT SAMPLE DETAILS		Location	Coal River Sediment Characterization									
		Name	SD-01	SD-02	SD-03	SD-04	SD-05	SD-06	SD-07	SD-08	SD-09	SD-10
		Date	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025
		Time	1020 hrs	1100 hrs	1140 hrs	1200 hrs	1240 hrs	1300 hrs	0920 hrs	1000 hrs	1210 hrs	1240 hrs
		Type	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite
		Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
Grain Size Analysis			Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
% Passing	Gravel	3-inch Sieve	100	100	100	100	100	100	100	100	100	100
		1.5-inch Sieve	100	100	100	100	100	100	100	100	100	100
		0.75-inch Sieve	100	100	100	100	100	100	100	100	100	100
		0.375-inch Sieve	100	100	100	100	100	100	100	100	100	100
		No. 4 Sieve (4.75 mm)	91.9	70.8	96.8	84.3	97.6	99.6	99.9	100	85.7	98.9
	Sand	No. 10 Sieve (2.00 mm)	88.4	61.0	96.6	81.9	96.6	99.3	98.9	99.9	82.4	95.8
		No. 16 Sieve (1.18 mm)	86.5	57.5	96.1	80.3	95.8	98.5	97.6	99.6	79.6	93.3
		No. 30 Sieve (0.60 mm)	75.8	41.0	79.1	61.3	84.1	84.3	83.0	91.7	56.5	73.6
		No. 50 Sieve (0.30 mm)	34.3	14.6	11.5	7.05	18.4	10.6	16.6	33.9	9.46	11.4
		No. 60 Sieve (0.25 mm)	26.4	12.7	6.58	4.44	12.4	5.33	9.41	20.5	7.11	7.67
	Silt or Clay	No. 100 Sieve (0.15 mm)	18.7	10.5	4.06	3.36	9.5	3.3	5.38	9.79	4.99	5.25
		No. 200 Sieve (0.075 mm)	16.6	9.75	3.85	3.21	9.2	3.16	5.04	8.59	4.7	4.99
		0.03 mm (Hydrometer)	5.0	8.0	6.0	4.0	2.0	2.0	4.0	4.0	2.0	2.0
		0.005 mm (Hydrometer)	4.0	8.0	4.0	2.0	2.0	2.0	3.0	3.0	2.0	2.0
		0.0015 mm (Hydrometer)	3.0	8.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
% Sample Composition		% Gravel	8.08	29.10	3.22	15.70	2.44	0.43	0.12	0.00	14.30	1.13
		% Sand	75.30	61.10	92.90	81.10	88.40	96.40	94.80	91.40	81.00	93.90
		% Silt, Clay, Colloids	16.60	9.75	3.85	3.21	9.20	3.16	5.04	8.59	4.70	4.99

Notes:

1. Samples were collected on 08-26-2025 and 08-27-2025 by GFT Infrastructure, Inc. Analytical results were reported by ALS Environmental, 301 Fulling Mill Road, Middletown, PA 17057.

TABLE 7
PFAS
ANALYTICAL RESULTS TABLE

SEDIMENT SAMPLE DETAILS	Location		Coal River Sediment Characterization																								Units	WEST VIRGINIA DEP SCREENING LEVELS ¹	
	Name	SD-01	SD-02	SD-03	SD-04	SD-05	SD-06	SD-07	SD-08	SD-09	SD-10	SD-11																	
	Date	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/26/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025	8/27/2025																	
	Time	1020 hrs	1100 hrs	1140 hrs	1200 hrs	1240 hrs	1300 hrs	0920 hrs	1000 hrs	1210 hrs	1240 hrs	0930 hrs																	
	Type	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite																	
Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment																	
Summary of Detections	CAS No.	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Result	DQ	Residential ²	Industrial ³		
PFAS Results																													
11-Chloroicosafuoro-3-oxaundecane-1-sulfonic acid	763051-92-9	0.206	U	0.208	U	0.207	U	0.208	U	0.207	U	0.204	U	0.206	U	0.206	U	0.205	U	0.207	U	0.207	U	0.207	U	ug/kg	-	-	
1H,1H,2H,2H-Perfluorodecanesulfonic acid	27619-97-2	0.136	U	0.137	U	0.137	U	0.137	U	0.136	U	0.136	U	0.136	U	0.136	U	0.136	U	0.136	U	0.137	U	0.137	U	ug/kg	-	-	
1H,1H,2H,2H-Perfluorododecane sulfonic acid	120226-60-0	0.004	U	0.115	U	0.114	U	0.115	U	0.114	U	0.114	U	0.11	U	0.114	U	0.114	U	0.114	U	0.114	U	0.115	U	ug/kg	-	-	
1H,1H,2H,2H-Perfluorohexanesulfonic acid	757124-72-4	0.101	U	0.102	U	0.101	U	0.102	U	0.101	U	0.101	U	0.101	U	0.101	U	0.101	U	0.101	U	0.101	U	0.102	U	ug/kg	-	-	
1H,1H,2H,2H-Perfluorooctanesulfonic acid	27619-97-2	0.17	U	0.174	U	0.174	U	0.174	U	0.174	U	0.174	U	0.173	U	0.173	U	0.172	U	0.174	U	0.174	U	0.174	U	ug/kg	-	-	
2H,2H,3H,3H-Perfluorodecanic acid	120885-29-2	2.17	U	2.19	U	2.18	U	2.18	U	2.18	U	2.18	U	2.17	U	2.17	U	2.16	U	2.18	U	2.18	U	2.18	U	ug/kg	-	-	
2H,2H,3H,3H-Perfluorohexanoic acid	356-02-5	4.4	U	4.43	U	4.41	U	4.42	U	4.41	U	4.41	U	4.38	U	4.4	U	4.38	U	4.41	U	4.42	U	4.42	U	ug/kg	-	-	
2H,2H,3H,3H-Perfluorooctanoic acid	914637-49-3	2.17	U	2.19	U	2.18	U	2.18	U	2.18	U	2.18	U	2.17	U	2.17	U	2.16	U	2.18	U	2.18	U	2.18	U	ug/kg	-	-	
4,8-Dioxo-3H-Perfluorononanoic acid	919005-14-4	0.129	U	0.13	U	0.13	U	0.13	U	0.13	U	0.129	U	0.129	U	0.129	U	0.129	U	0.13	U	0.13	U	0.13	U	ug/kg	-	-	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	73606-19-6	0.166	U	0.167	U	0.167	U	0.167	U	0.17	U	0.166	U	0.166	U	0.166	U	0.166	U	0.167	U	0.167	U	0.167	U	ug/kg	-	-	
Hexafluoropropyleneoxide dimer acid	13252-13-6	0.22	U	0.222	U	0.221	U	0.222	U	0.22	U	0.221	U	0.22	U	0.22	U	0.219	U	0.221	U	0.221	U	0.221	U	ug/kg	-	-	
N-Ethylperfluorooctane sulfonamide	4151-50-2	0.158	U	0.159	U	0.159	U	0.159	U	0.16	U	0.158	U	0.158	U	0.158	U	0.158	U	0.159	U	0.159	U	0.159	U	ug/kg	-	-	
N-Ethylperfluorooctane sulfonamido acetic acid	2991-50-6	0.404	U	0.406	U	0.405	U	0.406	U	0.405	U	0.404	U	0.402	U	0.404	U	0.402	U	0.405	U	0.405	U	0.405	U	ug/kg	-	-	
N-Ethylperfluorooctane sulfonamido ethanol	1691-99-2	0.17	U	0.172	U	0.171	U	0.171	U	0.171	U	0.17	U	0.17	U	0.17	U	0.17	U	0.171	U	0.171	U	0.171	U	ug/kg	-	-	
N-Methylperfluorooctane sulfonamide	31506-32-8	0.148	U	0.149	U	0.149	U	0.149	U	0.159	U	0.148	U	0.148	U	0.148	U	0.148	U	0.149	U	0.149	U	0.149	U	ug/kg	-	-	
N-Methylperfluorooctane sulfonamido acetic acid	2355-31-9	0.184	U	0.186	U	0.185	U	0.185	U	0.185	U	0.185	U	0.184	U	0.184	U	0.184	U	0.185	U	0.185	U	0.185	U	ug/kg	-	-	
N-Methylperfluorooctane sulfonamido ethanol	2448-09-7	0.2	U	0.201	U	0.2	U	0.2	U	0.200	U	0.2	U	0.199	U	0.199	U	0.198	U	0.2	U	0.2	U	0.2	U	ug/kg	-	-	
Nonafluoro-3,6-dioxahexanoic acid	151772-58-6	0.182	U	0.184	U	0.183	U	0.183	U	0.183	U	0.183	U	0.182	U	0.182	U	0.182	U	0.183	U	0.183	U	0.183	U	ug/kg	-	-	
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEsA)	113507-82-7	0.152	U	0.153	U	0.153	U	0.153	U	0.153	U	0.152	U	0.152	U	0.152	U	0.152	U	0.153	U	0.153	U	0.153	U	ug/kg	-	-	
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	0.206	U	0.208	U	0.207	U	0.208	U	0.207	U	0.207	U	0.206	U	0.206	U	0.205	U	0.207	U	0.207	U	0.207	U	ug/kg	-	-	
Perfluoro-4-ethylcyclohexanesulfonic acid (PFechS)	133201-07-7	0.167	U	0.168	U	0.168	U	0.168	U	0.168	U	0.168	U	0.167	U	0.167	U	0.166	U	0.168	U	0.168	U	0.168	U	ug/kg	-	-	
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	0.2	U	0.202	U	0.201	U	0.201	U	0.201	U	0.201	U	0.2	U	0.2	U	0.199	U	0.201	U	0.201	U	0.201	U	ug/kg	-	-	
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.096	U	0.097	U	0.096	U	0.097	U	0.096	U	0.096	U	0.096	U	0.096	U	0.096	U	0.096	U	0.097	U	0.097	U	ug/kg	-	-	
Perfluorobutanoic acid (PFBA)	375-22-4	0.057	J	0.0946	J	0.048	U	0.114	J	0.055	J	0.048	U	0.048	U	0.111	J	0.126	J	0.048	U	0.056	J	0.056	J	ug/kg	-	-	
Perfluorobutylsulfonamide (PFBSA)	30334-69-1	0.111	U	0.111	U	0.11	U	0.111	U	0.110	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.111	U	0.111	U	ug/kg	-	-	
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.117	U	0.118	U	0.118	U	0.118	U	0.117	U	0.117	U	0.117	U	0.117	U	0.117	U	0.117	U	0.118	U	0.118	U	ug/kg	-	-	
Perfluorodecanoic acid (PFDA)	335-76-2	0.163	U	0.164	U	0.164	U	0.164	U	0.164	U	0.16	U	0.163	U	0.163	U	0.162	U	0.164	U	0.164	U	0.164	U	ug/kg	-	-	
Perfluorododecane sulfonic acid (PFDS)	79780-39-5	0.156	U	0.157	U	0.157	U	0.157	U	0.157	U	0.16	U	0.156	U	0.156	U	0.156	U	0.157	U	0.157	U	0.157	U	ug/kg	-	-	
Perfluorodecane sulfonic acid (PFDOA)	307-55-1	0.066	U	0.067	U	0.067	U	0.067	U	0.066	U	0.066	U	0.066	U	0.066	U	0.066	U	0.066	U	0.067	U	0.067	U	ug/kg	-	-	
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.121	U	0.122	U	0.122	U	0.122	U	0.122	U	0.121	U	0.121	U	0.121	U	0.121	U	0.121	U	0.122	U	0.122	U	ug/kg	-	-	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.177	U	0.118	U	0.178	U	0.178	U	0.178	U	0.178	U	0.177	U	0.177	U	0.176	U	0.178	U	0.178	U	0.178	U	ug/kg	-	-	
Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	0.13	U	0.131	U	0.131	U	0.131	U	0.130	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.131	U	0.131	U	ug/kg	-	-	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.067	U	0.068	U	0.067	U	0.068	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	0.067	U	ug/kg	-	-	
Perfluorohexanesulfonamide (PFHxSA)	41997-13-1	0.112	U	0.113	U	0.112	U	0.113	U	0.112	U	0.112	U	0.112	U	0.112	U	0.112	U	0.112	U	0.113	U	0.113	U	ug/kg	-	-	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.113	U	0.134	U	0.134	U	0.134	U	0.134	U	0.133	U	0.133	U	0.133	U	0.133	U	0.134	U	0.134	U	0.134	U	ug/kg	-	-	
Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.149	U	0.15	U	0.15	U	0.15	U	0.150	U	0.15	U	0.149	U	0.149	U	0.149	U	0.15	U	0.15	U	0.15	U	ug/kg	-	-	
Perfluorononanoic acid (PFNA)	375-95-1	0.092	U	0.093	U	0.092	U	0.093	U	0.092	U	0.092	U	0.092	U	0.092	U	0.092	U	0.092	U	0.093	U	0.093	U	ug/kg	-	-	
Perfluorooctadecanoic acid (PFODA)	16517-11-6	0.233	U	0.234	U	0.233	U	0.234	U	0.233	U	0.233	U	0.232	U	0.232	U	0.231	U	0.233	U	0.233	U	0.233	U	ug/kg	-	-	
Perfluorooctane sulfonamide (PFOSAm)	754-91-6	0.15	U	0.151	U	0.151	U	0.151	U	0.151	U	0.15	U	0.15	U	0.15	U	0.15	U	0.151	U	0.151	U	0.151	U	ug/kg	-	-	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.183	U	0.185	U	0.184	U	0.184	U	0.184	U	0.184	U	0.183	U	0.183	U	0.182	U	0.184	U	0.184	U	0.184	U	ug/kg	-	-	
Perfluorooctanoic acid (PFOA)	335-67-1	0.101	U	0.102	U	0.101	U	0.102	U	0.101	U	0.101	U	0.101	U	0.101	U	0.101	U	0.101	U	0.102	U	0.102	U	ug/kg	-	-	
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.11	U	0.111	U	0.11	U	0.111	U	0.110	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.111	U	0.111	U	ug/kg	-	-	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.094	U	0.095	U	0.094	U	0.095	U	0.094	U	0.094	U	0.094	U	0.094	U	0.094	U	0.094	U	0.095	U	0.095	U	ug/kg	-	-	
Perfluorotetradecanoic acid (PFTeDA)	736-06-7	0.127	U	0.128	U	0.128	U	0.128	U	0.128	U	0.127	U	0.127	U	0.127	U	0.127	U	0.128	U	0.128	U	0.128	U	ug/kg	-	-	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.083	U	0.084	U	0.083	U	0.084	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.083	U	0.084	U	0.084	U	ug/kg	-	-	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.134	U	0.135																									

Attachment 4

Site Photos



Photo 1 (08-26-2025)

Overview of the boat used for sediment sampling on the Coal River, taken from the boat launch near the bridge.

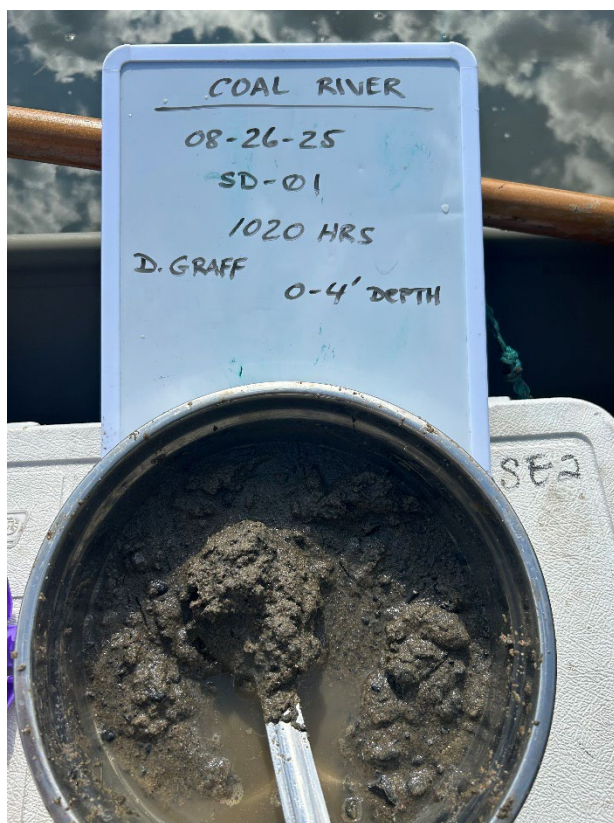


Photo 2 (08-26-2025)

View of composite sample SD-01. Composite samples were composed of four grab samples taken around a central sampling location. Grab samples were combined in metal bowls and placed into laboratory-supplied bottles.

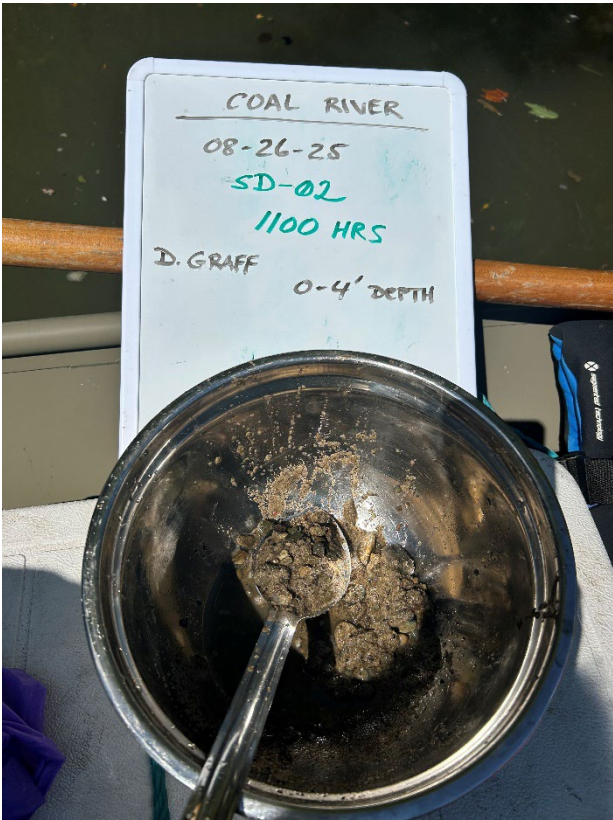


Photo 3 (08-26-2025)

View of composite sample SD-02.

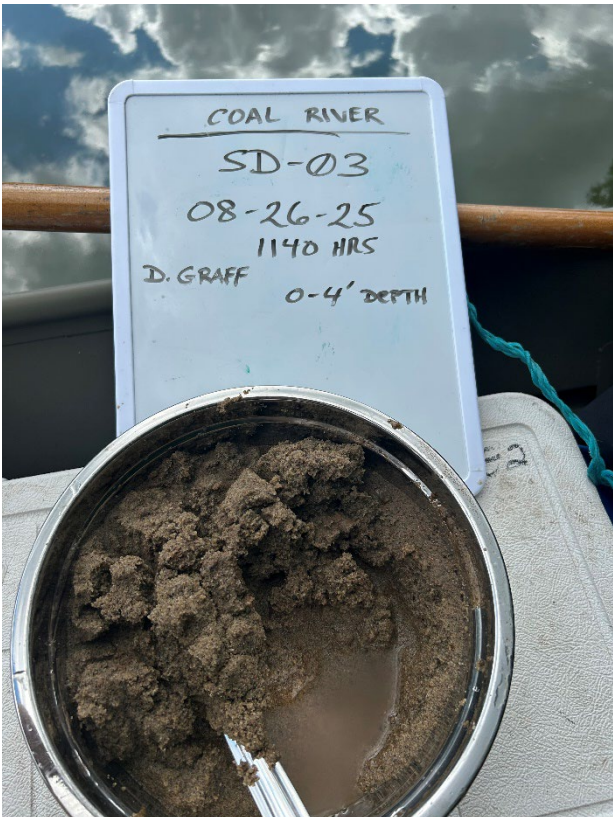


Photo 4 (08-26-2025)

View of composite sample SD-03.

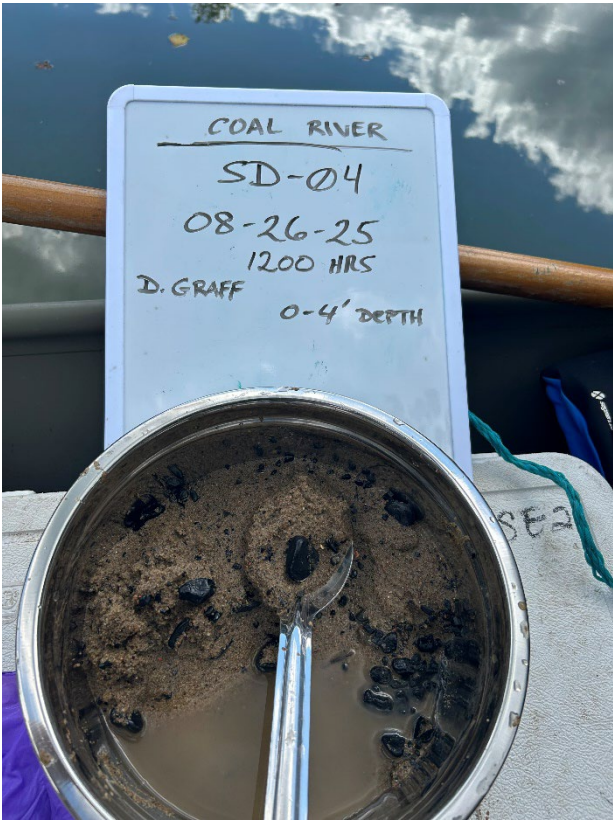


Photo 5 (08-26-2025)

View of composite sample SD-04.

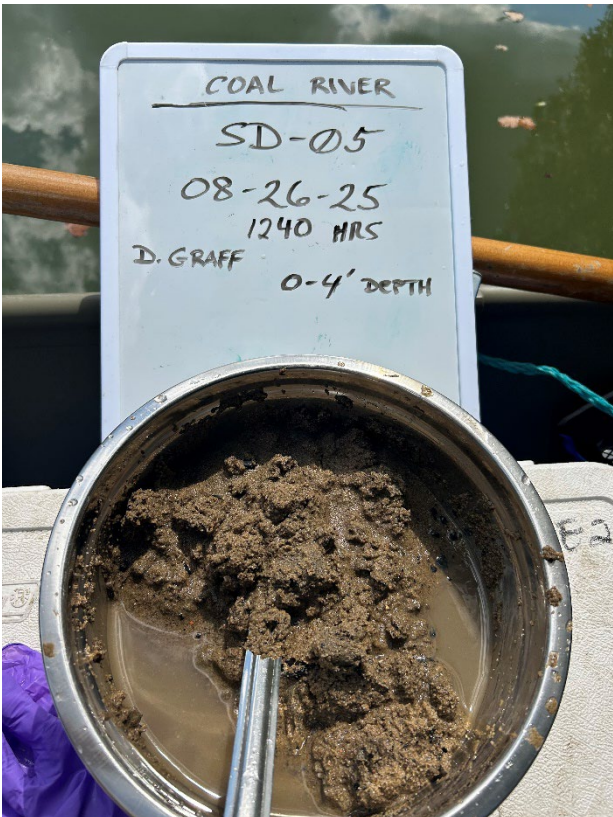


Photo 6 (08-26-2025)

View of composite sample SD-05.

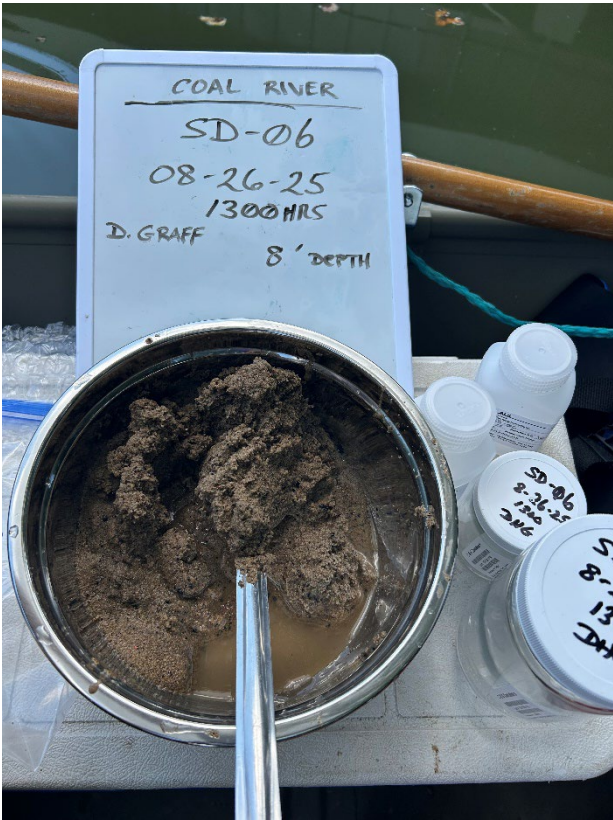


Photo 7 (08-26-2025)

View of composite sample SD-06.

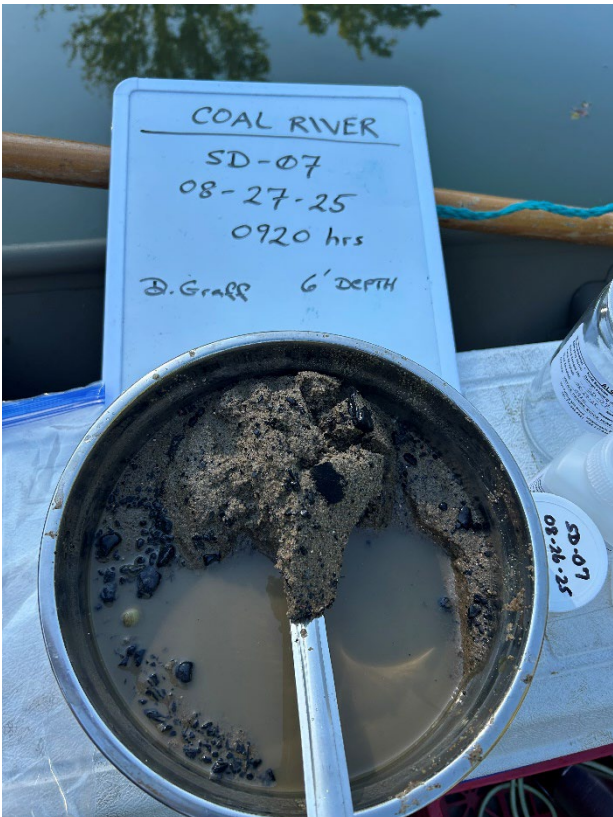


Photo 8 (08-27-2025)

View of composite sample SD-07

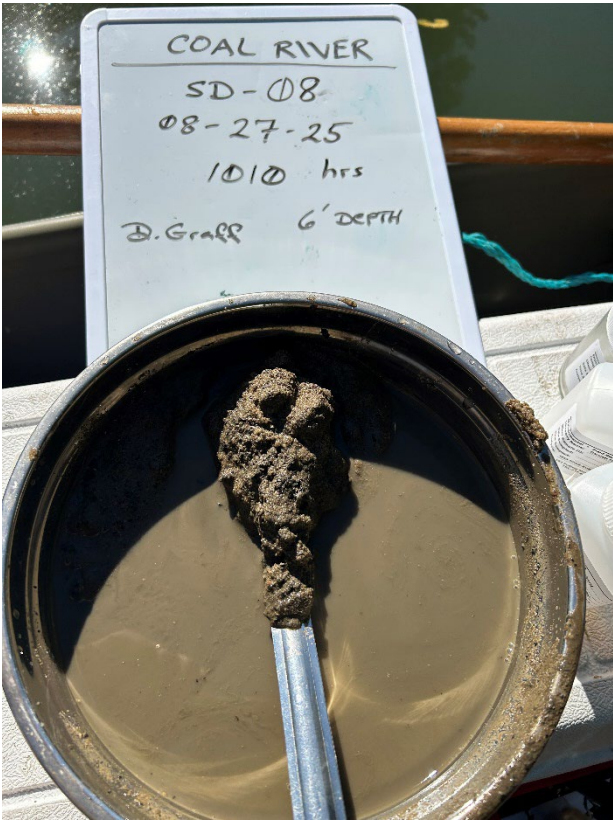


Photo 9 (08-27-2025)

View of composite sample SD-08.



Photo 10 (08-27-2025)

View of composite sample SD-09.



Photo 11 (08-27-2025)

View of composite sample SD-10.



Photo 12 (08-27-2025)

View of composite sample SD-11.

Attachment 5

Laboratory Analytical Results and Chain of Custody



Main Site: 301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | www.alsglobal.com
Associated Site: 20 Riverside Drive | Spring City, PA 19475 | Phone: 610-948-4903 |

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343, NJ PA101

Analytical Results Report For

Gannett Fleming-Harrisburg

Project 2025-PN084562 Coal Rvr Lock/Da
Workorder 3432966
Report ID 461119 on 9/24/2025

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Aug 28, 2025.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Cheyenne Petersen (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

This laboratory report may not be reproduced, except in full, without the written approval of ALS Global.
ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):

David Graff - Gannett Fleming Inc. (Hbg)

Cheyenne Petersen

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Cheyenne Petersen
Project Coordinator

(ALS Digital Signature)



Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3432966001	SD-01	Solid	08/26/2025 10:20	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966002	SD-02	Solid	08/26/2025 11:00	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966003	SD-03	Solid	08/26/2025 11:40	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966004	SD-04	Solid	08/26/2025 12:00	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966005	SD-05	Solid	08/26/2025 12:40	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966006	SD-06	Solid	08/26/2025 13:00	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966007	SD-07	Solid	08/27/2025 09:20	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966008	SD-08	Solid	08/27/2025 10:10	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966009	SD-09	Solid	08/27/2025 12:10	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966010	SD-10	Solid	08/27/2025 12:40	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966011	SD-11	Solid	08/27/2025 09:30	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)
3432966012	EB-01	Water	08/27/2025 13:20	08/28/2025 09:50	DG	Gannett Fleming Inc. (Hbg)



Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136, including but not limited to the following EPA Method reference revisions:
EPA 300.1 Rev. 1.0-1997
EPA 300.0 Rev. 2.1-1993
EPA 353.2 Rev. 2.0-1993
EPA 410.4 Rev. 1.0-1993
EPA 420.4 Rev. 1.0-1993
EPA 365.1 Rev. 2.0-1993
EPA 200.7 Rev. 4.4-1994
EPA 200.8 Rev. 5.4-1994
EPA 245.1 Rev. 3.0-1994
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix "S" followed by a method number (such as S2310B-97) refer to methods from "Standard Methods for the Examination of Water and Wastewater".
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.
- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND) above the MDL
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Practical Quantitation Limit for this Project
ND	Not Detected - indicates that the analyte was Not Detected
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits
#	Please reference the result in the Results Section for analyte-level flags.



Project Notations

Sample Notations

Lab ID

Sample ID



Result Notations

Notation Ref.	
1	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 52% in the bracketing CCV.
2	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 45% in the bracketing CCV.
3	The QC sample type LCS for method SW846 8270E was outside the control limits for the analyte Acenaphthylene. The % Recovery was reported as 62.8 and the control limits were 63 to 106.
4	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 82% in the bracketing CCV.
5	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 46% in the bracketing CCV.
6	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 40% in the bracketing CCV.
7	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 47% in the bracketing CCV.
8	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 53% in the bracketing CCV.
9	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 34% in the bracketing CCV.
10	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 59% in the bracketing CCV.
11	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 21% in the bracketing CCV.
12	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 73% in the bracketing CCV.
13	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 38% in the bracketing CCV.
14	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 30% in the bracketing CCV.
15	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased low 61% in the bracketing CCV.
16	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased low 53% in the bracketing CCV.
17	The QC sample type LCS for method SW846 8151A was outside the control limits for the analyte Dicamba. The % Recovery was reported as 94.6 and the control limits were 44 to 89.
18	The QC sample type LCS for method SW846 8151A was outside the control limits for the analyte Pentachlorophenol. The % Recovery was reported as 97.1 and the control limits were 43 to 90.
19	This sample was analyzed at a temperature of 21.9 degrees Celsius.



20	The pH analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.
21	ALS Holland subcontract results for Grain Size is attached.
22	ALS Holland subcontract results for PFAS 1633 is attached.
23	The QC sample type MSD for method SW846 8270E was outside the control limits for the analyte Biphenyl. The RPD was reported as 17.3 and the upper control limit is 14.
24	The QC sample type MSD for method SW846 8270E was outside the control limits for the analyte bis(2-Chloroethoxy)methane. The RPD was reported as 18.5 and the upper control limit is 18.
25	The QC sample type MSD for method SW846 8270E was outside the control limits for the analyte 2,4-Dimethylphenol. The RPD was reported as 28.9 and the upper control limit is 23.
26	The QC sample type MSD for method SW846 8270E was outside the control limits for the analyte N-Nitroso-di-n-propylamine. The RPD was reported as 20.7 and the upper control limit is 20.
27	The QC sample type Matrix Spike (MS) was outside the control limits. The % Recovery was reported as 49.5 and the control limits were 80 to 120.
28	The QC sample type LCS for method SW846 8270E was outside the control limits for the analyte Acenaphthylene. The % Recovery was reported as 57.8 and the control limits were 63 to 106.
29	The QC sample type LCS for method SW846 8270E was outside the control limits for the analyte Benzo(a)pyrene. The % Recovery was reported as 65.9 and the control limits were 68 to 121.
30	The QC sample type LCS for method SW846 8270E was outside the control limits for the analyte Carbazole. The % Recovery was reported as 63.1 and the control limits were 66 to 117.
31	The QC sample type Matrix Spike (MS) was outside the control limits. The % Recovery was reported as 194 and the control limits were 80 to 120.
32	The concentration of this analyte was greater than 4 times the concentration of the spike added to the matrix spike. According to protocol, the calculation for percent recovery of the matrix spike is not valid.
33	The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. The sample was post-digestion spiked, and this matrix spike was within acceptable recovery limits.
34	The QC sample type MSD for method SW846 6020B was outside the control limits for the analyte Calcium, Total. The % Recovery was reported as -27.9 and the control limits were 75 to 125.
35	The QC sample type MS for method SW846 6020B was outside the control limits for the analyte Calcium, Total. The % Recovery was reported as -39.7 and the control limits were 75 to 125.
36	The QC sample type CCV for method SW846 8270E was outside the control limits for the analyte Di-n-Octylphthalate. The % Recovery was reported as 125 and the control limits were 80 to 120.
37	The QC sample type CCV for method SW846 8270E was outside the control limits for the analyte bis(2-Ethylhexyl)phthalate. The % Recovery was reported as 124 and the control limits were 80 to 120.
38	The QC sample type CCV for method SW846 8270E was outside the control limits for the analyte Hexachlorocyclopentadiene. The % Recovery was reported as 125 and the control limits were 80 to 120.
39	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 24% in the bracketing CCV.
40	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 31% in the bracketing CCV.
41	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 23% in the bracketing CCV.



42	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased high 27% in the bracketing CCV.
43	Method criteria requires continuing calibration verification (CCV) standards be less than or equal to 20% of the initial calibration for the 8081 analysis. This compound was biased low 29% in the bracketing CCV.
44	The QC sample type LCS for method SW846 8151A was outside the control limits for the analyte MCP. The % Recovery was reported as 185 and the control limits were 26 to 150.
45	Analyte was analyzed past the 24 hour holding time.



Detected Results Summary

Client Sample ID	SD-01	Collected	08/26/2025 10:20
Lab Sample ID	3432966001	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	1930	mg/kg	56.7	SW846 6020B	#
Arsenic, Total	2.1	mg/kg	2.1	SW846 6020B	#
Barium, Total	14.3	mg/kg	3.5	SW846 6020B	#
Calcium, Total	714	mg/kg	70.8	SW846 6020B	#
Chromium, Total	3.4	mg/kg	1.4	SW846 6020B	#
Cobalt, Total	4.2	mg/kg	3.5	SW846 6020B	#
Iron, Total	8000	mg/kg	34.8	SW846 6020B	#
Lead, Total	3.7	mg/kg	1.4	SW846 6020B	#
Magnesium, Total	466	mg/kg	69.6	SW846 6020B	#
Manganese, Total	107	mg/kg	3.5	SW846 6020B	#
Nickel, Total	9.4	mg/kg	3.5	SW846 6020B	#
Potassium, Total	270	mg/kg	69.6	SW846 6020B	#
Sodium, Total	74.4	mg/kg	69.6	SW846 6020B	#
Trivalent Chromium	3.4	mg/kg	2.9	Calculation	#
Vanadium, Total	4.6	mg/kg	1.4	SW846 6020B	#
Zinc, Total	26.6	mg/kg	3.5	SW846 6020B	#
SEMIVOLATILES					
Phenanthrene	80.3	ug/kg	65.0	SW846 8270E	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	30.1	%		In-House	#
pH	6.51	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	12800	mg/kg	715	SW846 9060A	#
Total Solids	69.9	%		In-House	#



Detected Results Summary

Client Sample ID	SD-02	Collected	08/26/2025 11:00
Lab Sample ID	3432966002	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	3560	mg/kg	43.2	SW846 6020B	#
Arsenic, Total	4.7	mg/kg	1.7	SW846 6020B	#
Barium, Total	11.6	mg/kg	2.8	SW846 6020B	#
Calcium, Total	520	mg/kg	54.1	SW846 6020B	#
Chromium, Total	5.1	mg/kg	1.1	SW846 6020B	#
Cobalt, Total	6.3	mg/kg	2.8	SW846 6020B	#
Copper, Total	3.2	mg/kg	2.8	SW846 6020B	#
Iron, Total	15700	mg/kg	28.2	SW846 6020B	#
Lead, Total	4.6	mg/kg	1.1	SW846 6020B	#
Magnesium, Total	324	mg/kg	56.4	SW846 6020B	#
Manganese, Total	173	mg/kg	2.8	SW846 6020B	#
Nickel, Total	13.8	mg/kg	2.8	SW846 6020B	#
Potassium, Total	147	mg/kg	56.4	SW846 6020B	#
Sodium, Total	75.1	mg/kg	56.4	SW846 6020B	#
Trivalent Chromium	5.1	mg/kg	2.4	Calculation	#
Vanadium, Total	5.4	mg/kg	1.1	SW846 6020B	#
Zinc, Total	36.4	mg/kg	2.8	SW846 6020B	#
SEMIVOLATILES					
Benzo(b)fluoranthene	64.7	ug/kg	56.8	SW846 8270E	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	20.0	%		In-House	#
pH	6.60	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	7800	mg/kg	625	SW846 9060A	#
Total Solids	80.0	%		In-House	#



Detected Results Summary

Client Sample ID	SD-03	Collected	08/26/2025 11:40
Lab Sample ID	3432966003	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	1240	mg/kg	48.6	SW846 6020B	#
Arsenic, Total	5.6	mg/kg	1.9	SW846 6020B	#
Barium, Total	8.1	mg/kg	3.2	SW846 6020B	#
Calcium, Total	193	mg/kg	60.7	SW846 6020B	#
Chromium, Total	3.1	mg/kg	1.3	SW846 6020B	#
Cobalt, Total	4.3	mg/kg	3.2	SW846 6020B	#
Iron, Total	9720	mg/kg	32.2	SW846 6020B	#
Lead, Total	3.1	mg/kg	1.3	SW846 6020B	#
Magnesium, Total	238	mg/kg	64.4	SW846 6020B	#
Manganese, Total	86.9	mg/kg	3.2	SW846 6020B	#
Nickel, Total	11.7	mg/kg	3.2	SW846 6020B	#
Potassium, Total	116	mg/kg	64.4	SW846 6020B	#
Sodium, Total	73.4	mg/kg	64.4	SW846 6020B	#
Trivalent Chromium	3.1	mg/kg	2.8	Calculation	#
Vanadium, Total	3.0	mg/kg	1.3	SW846 6020B	#
Zinc, Total	28.5	mg/kg	3.2	SW846 6020B	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	27.9	%		In-House	#
pH	6.80	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	1920	mg/kg	693	SW846 9060A	#
Total Solids	72.1	%		In-House	#



Detected Results Summary

Client Sample ID	SD-04	Collected	08/26/2025 12:00
Lab Sample ID	3432966004	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	1120	mg/kg	51.5	SW846 6020B	#
Barium, Total	8.9	mg/kg	3.0	SW846 6020B	#
Calcium, Total	910	mg/kg	64.3	SW846 6020B	#
Chromium, Total	2.0	mg/kg	1.2	SW846 6020B	#
Cobalt, Total	3.7	mg/kg	3.0	SW846 6020B	#
Iron, Total	5630	mg/kg	30.2	SW846 6020B	#
Lead, Total	2.5	mg/kg	1.2	SW846 6020B	#
Magnesium, Total	222	mg/kg	60.3	SW846 6020B	#
Manganese, Total	110	mg/kg	3.0	SW846 6020B	#
Nickel, Total	9.5	mg/kg	3.0	SW846 6020B	#
Potassium, Total	109	mg/kg	60.3	SW846 6020B	#
Sodium, Total	66.7	mg/kg	60.3	SW846 6020B	#
Vanadium, Total	2.0	mg/kg	1.2	SW846 6020B	#
Zinc, Total	23.1	mg/kg	3.0	SW846 6020B	#
PCBs					
Aroclor-1254	0.050	mg/kg	0.046	SW846 8082A	#
Total Polychlorinated Biphenyl	0.050	mg/kg	0.046	SW846 8082A	#
SEMIVOLATILES					
Naphthalene	76.0	ug/kg	59.1	SW846 8270E	#
Phenanthrene	455	ug/kg	59.1	SW846 8270E	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	28.3	%		In-House	#
pH	6.63	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	1780	mg/kg	697	SW846 9060A	#
Total Solids	71.7	%		In-House	#



Detected Results Summary

Client Sample ID	SD-05	Collected	08/26/2025 12:40
Lab Sample ID	3432966005	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	1490	mg/kg	47.6	SW846 6020B	#
Barium, Total	10.7	mg/kg	3.3	SW846 6020B	#
Calcium, Total	387	mg/kg	59.6	SW846 6020B	#
Chromium, Total	3.0	mg/kg	1.3	SW846 6020B	#
Cobalt, Total	4.4	mg/kg	3.3	SW846 6020B	#
Iron, Total	7180	mg/kg	33.3	SW846 6020B	#
Lead, Total	3.5	mg/kg	1.3	SW846 6020B	#
Magnesium, Total	365	mg/kg	66.7	SW846 6020B	#
Manganese, Total	114	mg/kg	3.3	SW846 6020B	#
Nickel, Total	11.5	mg/kg	3.3	SW846 6020B	#
Potassium, Total	369	mg/kg	66.7	SW846 6020B	#
Trivalent Chromium	3.0	mg/kg	2.8	Calculation	#
Vanadium, Total	3.4	mg/kg	1.3	SW846 6020B	#
Zinc, Total	26.3	mg/kg	3.3	SW846 6020B	#
SEMIVOLATILES					
Phenanthrene	66.8	ug/kg	66.4	SW846 8270E	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	29.0	%		In-House	#
pH	6.53	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	4620	mg/kg	704	SW846 9060A	#
Total Solids	71.0	%		In-House	#



Detected Results Summary

Client Sample ID	SD-06	Collected	08/26/2025 13:00
Lab Sample ID	3432966006	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	1360	mg/kg	49.1	SW846 6020B	#
Barium, Total	6.9	mg/kg	3.4	SW846 6020B	#
Calcium, Total	195	mg/kg	61.4	SW846 6020B	#
Chromium, Total	1.8	mg/kg	1.3	SW846 6020B	#
Cobalt, Total	4.2	mg/kg	3.4	SW846 6020B	#
Iron, Total	6000	mg/kg	33.7	SW846 6020B	#
Lead, Total	2.7	mg/kg	1.3	SW846 6020B	#
Magnesium, Total	307	mg/kg	67.4	SW846 6020B	#
Manganese, Total	100	mg/kg	3.4	SW846 6020B	#
Nickel, Total	11.5	mg/kg	3.4	SW846 6020B	#
Potassium, Total	160	mg/kg	67.4	SW846 6020B	#
Sodium, Total	97.9	mg/kg	67.4	SW846 6020B	#
Vanadium, Total	2.4	mg/kg	1.3	SW846 6020B	#
Zinc, Total	25.3	mg/kg	3.4	SW846 6020B	#
SEMIVOLATILES					
2-Methylnaphthalene	629	ug/kg	125	SW846 8270E	#
Chrysene	78.5	ug/kg	62.3	SW846 8270E	#
Dibenzofuran	147	ug/kg	125	SW846 8270E	#
Naphthalene	168	ug/kg	62.3	SW846 8270E	#
Phenanthrene	312	ug/kg	62.3	SW846 8270E	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	29.6	%		In-House	#
pH	6.73	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	2750	mg/kg	710	SW846 9060A	#
Total Solids	70.4	%		In-House	#



Detected Results Summary

Client Sample ID	SD-07	Collected	08/27/2025 09:20
Lab Sample ID	3432966007	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	1600	mg/kg	47.3	SW846 6020B	#
Arsenic, Total	2.1	mg/kg	1.9	SW846 6020B	#
Barium, Total	15.9	mg/kg	3.2	SW846 6020B	#
Calcium, Total	702	mg/kg	59.1	SW846 6020B	#
Chromium, Total	3.6	mg/kg	1.3	SW846 6020B	#
Cobalt, Total	4.9	mg/kg	3.2	SW846 6020B	#
Copper, Total	9.2	mg/kg	3.2	SW846 6020B	#
Iron, Total	7000	mg/kg	32.3	SW846 6020B	#
Lead, Total	4.4	mg/kg	1.3	SW846 6020B	#
Magnesium, Total	455	mg/kg	64.6	SW846 6020B	#
Manganese, Total	170	mg/kg	3.2	SW846 6020B	#
Nickel, Total	12.7	mg/kg	3.2	SW846 6020B	#
Potassium, Total	287	mg/kg	64.6	SW846 6020B	#
Sodium, Total	83.0	mg/kg	64.6	SW846 6020B	#
Trivalent Chromium	3.6	mg/kg	2.8	Calculation	#
Vanadium, Total	3.5	mg/kg	1.3	SW846 6020B	#
Zinc, Total	29.4	mg/kg	3.2	SW846 6020B	#
SEMIVOLATILES					
2-Methylnaphthalene	174	ug/kg	117	SW846 8270E	#
Naphthalene	102	ug/kg	58.6	SW846 8270E	#
Phenanthrene	160	ug/kg	58.6	SW846 8270E	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	28.9	%		In-House	#
pH	6.79	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	6630	mg/kg	703	SW846 9060A	#
Total Solids	71.1	%		In-House	#



Detected Results Summary

Client Sample ID	SD-08	Collected	08/27/2025 10:10
Lab Sample ID	3432966008	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	2040	mg/kg	54.1	SW846 6020B	#
Barium, Total	13.1	mg/kg	3.5	SW846 6020B	#
Calcium, Total	424	mg/kg	67.6	SW846 6020B	#
Chromium, Total	2.8	mg/kg	1.4	SW846 6020B	#
Cobalt, Total	5.3	mg/kg	3.5	SW846 6020B	#
Iron, Total	8220	mg/kg	34.8	SW846 6020B	#
Lead, Total	4.1	mg/kg	1.4	SW846 6020B	#
Magnesium, Total	439	mg/kg	69.6	SW846 6020B	#
Manganese, Total	153	mg/kg	3.5	SW846 6020B	#
Nickel, Total	13.4	mg/kg	3.5	SW846 6020B	#
Potassium, Total	203	mg/kg	69.6	SW846 6020B	#
Sodium, Total	84.9	mg/kg	69.6	SW846 6020B	#
Vanadium, Total	3.4	mg/kg	1.4	SW846 6020B	#
Zinc, Total	33.3	mg/kg	3.5	SW846 6020B	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	31.4	%		In-House	#
pH	8.80	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	7620	mg/kg	728	SW846 9060A	#
Total Solids	68.6	%		In-House	#



Detected Results Summary

Client Sample ID	SD-09	Collected	08/27/2025 12:10
Lab Sample ID	3432966009	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	2070	mg/kg	51.2	SW846 6020B	#
Arsenic, Total	3.3	mg/kg	1.7	SW846 6020B	#
Barium, Total	19.6	mg/kg	2.9	SW846 6020B	#
Calcium, Total	713	mg/kg	64.0	SW846 6020B	#
Chromium, Total	3.6	mg/kg	1.2	SW846 6020B	#
Cobalt, Total	5.1	mg/kg	2.9	SW846 6020B	#
Copper, Total	3.2	mg/kg	2.9	SW846 6020B	#
Iron, Total	10900	mg/kg	29.2	SW846 6020B	#
Lead, Total	3.1	mg/kg	1.2	SW846 6020B	#
Magnesium, Total	263	mg/kg	58.3	SW846 6020B	#
Manganese, Total	128	mg/kg	2.9	SW846 6020B	#
Nickel, Total	11.2	mg/kg	2.9	SW846 6020B	#
Potassium, Total	184	mg/kg	58.3	SW846 6020B	#
Sodium, Total	79.7	mg/kg	58.3	SW846 6020B	#
Trivalent Chromium	3.6	mg/kg	2.6	Calculation	#
Vanadium, Total	4.7	mg/kg	1.2	SW846 6020B	#
Zinc, Total	30.5	mg/kg	2.9	SW846 6020B	#
SEMIVOLATILES					
2-Methylnaphthalene	806	ug/kg	119	SW846 8270E	#
Benzo(b)fluoranthene	66.3	ug/kg	59.7	SW846 8270E	#
Benzo(g,h,i)perylene	132	ug/kg	59.7	SW846 8270E	#
Chrysene	117	ug/kg	59.7	SW846 8270E	#
Dibenzofuran	165	ug/kg	119	SW846 8270E	#
Naphthalene	225	ug/kg	59.7	SW846 8270E	#
Phenanthrene	470	ug/kg	59.7	SW846 8270E	#
Pyrene	62.4	ug/kg	59.7	SW846 8270E	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	25.2	%		In-House	#
pH	7.25	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	7780	mg/kg	668	SW846 9060A	#
Total Solids	74.8	%		In-House	#



Detected Results Summary

Client Sample ID	SD-10	Collected	08/27/2025 12:40
Lab Sample ID	3432966010	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	1160	mg/kg	47.4	SW846 6020B	#
Arsenic, Total	2.2	mg/kg	2.1	SW846 6020B	#
Barium, Total	10.7	mg/kg	3.4	SW846 6020B	#
Calcium, Total	200	mg/kg	59.2	SW846 6020B	#
Chromium, Total	2.7	mg/kg	1.4	SW846 6020B	#
Cobalt, Total	6.0	mg/kg	3.4	SW846 6020B	#
Iron, Total	9080	mg/kg	34.3	SW846 6020B	#
Lead, Total	4.1	mg/kg	1.4	SW846 6020B	#
Magnesium, Total	363	mg/kg	68.7	SW846 6020B	#
Manganese, Total	179	mg/kg	3.4	SW846 6020B	#
Nickel, Total	15.0	mg/kg	3.4	SW846 6020B	#
Potassium, Total	211	mg/kg	68.7	SW846 6020B	#
Sodium, Total	115	mg/kg	68.7	SW846 6020B	#
Vanadium, Total	4.7	mg/kg	1.4	SW846 6020B	#
Zinc, Total	35.4	mg/kg	3.4	SW846 6020B	#
SEMIVOLATILES					
2-Methylnaphthalene	988	ug/kg	140	SW846 8270E	#
Benzo(b)fluoranthene	90.6	ug/kg	69.8	SW846 8270E	#
Benzo(g,h,i)perylene	105	ug/kg	69.8	SW846 8270E	#
Chrysene	122	ug/kg	69.8	SW846 8270E	#
Dibenzofuran	206	ug/kg	140	SW846 8270E	#
Fluoranthene	85.7	ug/kg	69.8	SW846 8270E	#
Naphthalene	472	ug/kg	69.8	SW846 8270E	#
Phenanthrene	441	ug/kg	69.8	SW846 8270E	#
Pyrene	88.1	ug/kg	69.8	SW846 8270E	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	28.3	%		In-House	#
pH	7.19	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	8190	mg/kg	698	SW846 9060A	#
Total Solids	71.7	%		In-House	#



Detected Results Summary

Client Sample ID	SD-11	Collected	08/27/2025 09:30
Lab Sample ID	3432966011	Lab Receipt	08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Aluminum, Total	1790	mg/kg	52.1	SW846 6020B	#
Barium, Total	17.3	mg/kg	3.3	SW846 6020B	#
Calcium, Total	525	mg/kg	65.2	SW846 6020B	#
Chromium, Total	2.7	mg/kg	1.3	SW846 6020B	#
Cobalt, Total	5.3	mg/kg	3.3	SW846 6020B	#
Copper, Total	3.4	mg/kg	3.3	SW846 6020B	#
Iron, Total	7500	mg/kg	33.1	SW846 6020B	#
Lead, Total	4.1	mg/kg	1.3	SW846 6020B	#
Magnesium, Total	340	mg/kg	66.1	SW846 6020B	#
Manganese, Total	178	mg/kg	3.3	SW846 6020B	#
Nickel, Total	13.6	mg/kg	3.3	SW846 6020B	#
Potassium, Total	160	mg/kg	66.1	SW846 6020B	#
Sodium, Total	77.7	mg/kg	66.1	SW846 6020B	#
Vanadium, Total	3.3	mg/kg	1.3	SW846 6020B	#
Zinc, Total	31.4	mg/kg	3.3	SW846 6020B	#
SEMIVOLATILES					
2-Methylnaphthalene	150	ug/kg	125	SW846 8270E	#
Chrysene	70.6	ug/kg	62.6	SW846 8270E	#
Phenanthrene	215	ug/kg	62.6	SW846 8270E	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#
WET CHEMISTRY					
Moisture	30.0	%		In-House	#
pH	7.22	pH_Units		SW846 9045D	#
Total Organic Carbon (TOC)	14300	mg/kg	714	SW846 9060A	#
Total Solids	70.0	%		In-House	#



Detected Results Summary

Client Sample ID

EB-01

Collected

08/27/2025 13:20

Lab Sample ID

3432966012

Lab Receipt

08/28/2025 09:50

Compound	Result	Units	RDL	Method	Flag
METALS					
Calcium, Total	0.51	mg/L	0.11	SW846 6020B	#
Magnesium, Total	0.12	mg/L	0.11	SW846 6020B	#
Sodium, Total	1.0	mg/L	0.11	SW846 6020B	#
Zinc, Total	0.0058	mg/L	0.0056	SW846 6020B	#
SUBCONTRACTED ANALYSIS					
Subcontracted Analysis	See attached			Subcontract	#



Results

Client Sample ID	SD-01	Collected	08/26/2025 10:20
Lab Sample ID	3432966001	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	238	SW846 8151A	1	09/06/2025 00:06	DXL	A
2,4,5-TP	ND	ND	ug/kg	140	SW846 8151A	1	09/06/2025 00:06	DXL	A
2,4-D	ND	ND	ug/kg	140	SW846 8151A	1	09/06/2025 00:06	DXL	A
2,4-DB	ND	ND	ug/kg	140	SW846 8151A	1	09/06/2025 00:06	DXL	A
Dalapon	ND	ND	ug/kg	140	SW846 8151A	1	09/06/2025 00:06	DXL	A
Dicamba	ND	ND,17	ug/kg	140	SW846 8151A	1	09/06/2025 00:06	DXL	A
Dichloroprop	ND	ND	ug/kg	140	SW846 8151A	1	09/06/2025 00:06	DXL	A
Dinoseb	ND	ND	ug/kg	238	SW846 8151A	1	09/06/2025 00:06	DXL	A
Pentachlorophenol	ND	ND,18	ug/kg	140	SW846 8151A	1	09/06/2025 00:06	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	78.9%	36 - 113	09/06/2025 00:06	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	1930		mg/kg	56.7	SW846 6020B	5	09/09/2025 14:00	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.4	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Arsenic, Total	2.1		mg/kg	2.1	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Barium, Total	14.3		mg/kg	3.5	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.70	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.70	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Calcium, Total	714		mg/kg	70.8	SW846 6020B	5	09/09/2025 14:00	KXH	A2
Chromium, Total	3.4		mg/kg	1.4	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Cobalt, Total	4.2		mg/kg	3.5	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Copper, Total	ND	ND	mg/kg	3.5	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Iron, Total	8000		mg/kg	34.8	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Lead, Total	3.7		mg/kg	1.4	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Magnesium, Total	466		mg/kg	69.6	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Manganese, Total	107		mg/kg	3.5	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.066	SW846 7471B	1	09/04/2025 17:58	RBP	A
Nickel, Total	9.4		mg/kg	3.5	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Potassium, Total	270		mg/kg	69.6	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Selenium, Total	ND	ND	mg/kg	3.5	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Silver, Total	ND	ND	mg/kg	1.4	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Sodium, Total	74.4		mg/kg	69.6	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.70	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Trivalent Chromium	3.4		mg/kg	2.9	Calculation	1	09/08/2025 14:03	CW	A
Vanadium, Total	4.6		mg/kg	1.4	SW846 6020B	5	09/04/2025 14:17	KXH	A1
Zinc, Total	26.6		mg/kg	3.5	SW846 6020B	5	09/04/2025 14:17	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 19:46	DXL	A



Results

Client Sample ID	SD-01	Collected	08/26/2025 10:20
Lab Sample ID	3432966001	Lab Receipt	08/28/2025 09:50

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 19:46	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 19:46	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 19:46	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 19:46	DXL	A
Aroclor-1254	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 19:46	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 19:46	DXL	A
Total Polychlorinated Biphenyl	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 19:46	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	64.5%	49 – 115	09/04/2025 19:46	
Tetrachloro-m-xylene	877-09-8	81%	27 – 137	09/04/2025 19:46	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	11.8	SW846 8081B	5	09/05/2025 13:47	KJH	A
Aldrin	ND	ND,6	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
beta-BHC	ND	ND,2	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
delta-BHC	ND	ND,4	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
Dieldrin	ND	ND,9	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
Endosulfan I	ND	ND,8	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
Endosulfan II	ND	ND,11	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
Endrin	ND	ND,10	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
Endrin Ketone	ND	ND	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
gamma-BHC	ND	ND,5	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
Heptachlor	ND	ND,5	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	11.8	SW846 8081B	5	09/08/2025 17:13	KJH	A
Methoxychlor	ND	ND,16	ug/kg	22.8	SW846 8081B	5	09/05/2025 13:47	KJH	A
Toxaphene	ND	ND	ug/kg	242	SW846 8081B	5	09/08/2025 17:13	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	116%	30 – 135	09/08/2025 17:13	
Decachlorobiphenyl	2051-24-3	52.9%	30 – 135	09/05/2025 13:47	
Tetrachloro-m-xylene	877-09-8	95.2%	30 – 111	09/08/2025 17:13	
Tetrachloro-m-xylene	877-09-8	71.9%	30 – 111	09/05/2025 13:47	



Results

Client Sample ID	SD-01	Collected	08/26/2025 10:20
Lab Sample ID	3432966001	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
1,4-Dioxane	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
2,4-Dichlorophenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
2,4-Dimethylphenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
2,4-Dinitrophenol	ND	ND	ug/kg	520	SW846 8270E	1	09/09/2025 08:57	M1O	A
2,4-Dinitrotoluene	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
2,6-Dinitrotoluene	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
2-Chloronaphthalene	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
2-Chlorophenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
2-Methylnaphthalene	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
2-Nitroaniline	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
2-Nitrophenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
3-Nitroaniline	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
4-Chloroaniline	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
4-Nitroaniline	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
4-Nitrophenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
Acenaphthene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Acenaphthylene	ND	ND,3	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Acetophenone	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Anthracene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Atrazine	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Benzaldehyde	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
Benzo(a)anthracene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Benzo(a)pyrene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Benzo(b)fluoranthene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Benzo(g,h,i)perylene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Benzo(k)fluoranthene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Biphenyl	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
bis(2-Chloroethoxy)methane	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Butylbenzylphthalate	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Caprolactam	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
Carbazole	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Chrysene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Dibenzofuran	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Diethylphthalate	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A



Results

Client Sample ID	SD-01	Collected	08/26/2025 10:20
Lab Sample ID	3432966001	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Di-n-Butylphthalate	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Di-n-Octylphthalate	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Fluoranthene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Fluorene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Hexachlorobenzene	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Hexachlorobutadiene	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
Hexachloroethane	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Isophorone	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
mp-Cresol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
Naphthalene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Nitrobenzene	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
N-Nitroso-di-n-propylamine	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	130	SW846 8270E	1	09/09/2025 08:57	M1O	A
o-Cresol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
Pentachlorophenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
Phenanthrene	80.3		ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A
Phenol	ND	ND	ug/kg	260	SW846 8270E	1	09/09/2025 08:57	M1O	A
Pyrene	ND	ND	ug/kg	65.0	SW846 8270E	1	09/09/2025 08:57	M1O	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	75.3%	19 – 132	09/09/2025 08:57	
2-Fluorobiphenyl	321-60-8	76.9%	40 – 110	09/09/2025 08:57	
2-Fluorophenol	367-12-4	68.9%	26 – 116	09/09/2025 08:57	
Nitrobenzene-d5	4165-60-0	74.4%	38 – 112	09/09/2025 08:57	
Phenol-d5	4165-62-2	68.5%	35 – 111	09/09/2025 08:57	
Terphenyl-d14	98904-43-9	86.5%	45 – 126	09/09/2025 08:57	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:39	SUB	B
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:35	SUB	D

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	70.6	SW846 9056A	5	09/01/2025 10:45	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.38	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.9	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	30.1		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-01	Collected	08/26/2025 10:20
Lab Sample ID	3432966001	Lab Receipt	08/28/2025 09:50

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrate-N	ND	ND	mg/kg	7.1	SW846 9056A	5	09/01/2025 10:45	MYM	A
Nitrite-N	ND	ND	mg/kg	7.1	SW846 9056A	5	09/01/2025 10:45	MYM	A
pH	6.51	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	12800		mg/kg	715	SW846 9060A	1	09/10/2025 16:00	PAG	A
Total Solids	69.9		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-02	Collected	08/26/2025 11:00
Lab Sample ID	3432966002	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	209	SW846 8151A	1	09/06/2025 00:33	DXL	A
2,4,5-TP	ND	ND	ug/kg	123	SW846 8151A	1	09/06/2025 00:33	DXL	A
2,4-D	ND	ND	ug/kg	123	SW846 8151A	1	09/06/2025 00:33	DXL	A
2,4-DB	ND	ND	ug/kg	123	SW846 8151A	1	09/06/2025 00:33	DXL	A
Dalapon	ND	ND	ug/kg	123	SW846 8151A	1	09/06/2025 00:33	DXL	A
Dicamba	ND	ND,17	ug/kg	123	SW846 8151A	1	09/06/2025 00:33	DXL	A
Dichloroprop	ND	ND	ug/kg	123	SW846 8151A	1	09/06/2025 00:33	DXL	A
Dinoseb	ND	ND	ug/kg	209	SW846 8151A	1	09/06/2025 00:33	DXL	A
Pentachlorophenol	ND	ND,18	ug/kg	123	SW846 8151A	1	09/06/2025 00:33	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	76.5 %	36 - 113	09/06/2025 00:33	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	3560		mg/kg	43.2	SW846 6020B	5	09/09/2025 14:19	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.1	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Arsenic, Total	4.7		mg/kg	1.7	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Barium, Total	11.6		mg/kg	2.8	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.56	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.56	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Calcium, Total	520		mg/kg	54.1	SW846 6020B	5	09/09/2025 14:19	KXH	A2
Chromium, Total	5.1		mg/kg	1.1	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Cobalt, Total	6.3		mg/kg	2.8	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Copper, Total	3.2		mg/kg	2.8	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Iron, Total	15700		mg/kg	28.2	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Lead, Total	4.6		mg/kg	1.1	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Magnesium, Total	324		mg/kg	56.4	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Manganese, Total	173		mg/kg	2.8	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.060	SW846 7471B	1	09/04/2025 17:59	RBP	A
Nickel, Total	13.8		mg/kg	2.8	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Potassium, Total	147		mg/kg	56.4	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Selenium, Total	ND	ND	mg/kg	2.8	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Silver, Total	ND	ND	mg/kg	1.1	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Sodium, Total	75.1		mg/kg	56.4	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.56	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Trivalent Chromium	5.1		mg/kg	2.4	Calculation	1	09/08/2025 14:04	CW	A
Vanadium, Total	5.4		mg/kg	1.1	SW846 6020B	5	09/04/2025 14:19	KXH	A1
Zinc, Total	36.4		mg/kg	2.8	SW846 6020B	5	09/04/2025 14:19	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.041	SW846 8082A	1	09/04/2025 19:57	DXL	A



Results

Client Sample ID	SD-02	Collected	08/26/2025 11:00
Lab Sample ID	3432966002	Lab Receipt	08/28/2025 09:50

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.041	SW846 8082A	1	09/04/2025 19:57	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.041	SW846 8082A	1	09/04/2025 19:57	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.041	SW846 8082A	1	09/04/2025 19:57	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.041	SW846 8082A	1	09/04/2025 19:57	DXL	A
Aroclor-1254	ND	ND	mg/kg	0.041	SW846 8082A	1	09/04/2025 19:57	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.041	SW846 8082A	1	09/04/2025 19:57	DXL	A
Total Polychlorinated Biphenyl	ND	ND	mg/kg	0.041	SW846 8082A	1	09/04/2025 19:57	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	73.1%	49 – 115	09/04/2025 19:57	
Tetrachloro-m-xylene	877-09-8	89.4%	27 – 137	09/04/2025 19:57	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	10.5	SW846 8081B	5	09/05/2025 13:59	KJH	A
Aldrin	ND	ND,6	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
beta-BHC	ND	ND,2	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
delta-BHC	ND	ND,4	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
Dieldrin	ND	ND,9	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
Endosulfan I	ND	ND,8	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
Endosulfan II	ND	ND,11	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
Endrin	ND	ND,10	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
Endrin Ketone	ND	ND	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
gamma-BHC	ND	ND,5	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
Heptachlor	ND	ND,5	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	10.5	SW846 8081B	5	09/08/2025 17:25	KJH	A
Methoxychlor	ND	ND,16	ug/kg	20.3	SW846 8081B	5	09/05/2025 13:59	KJH	A
Toxaphene	ND	ND	ug/kg	216	SW846 8081B	5	09/08/2025 17:25	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	132%	30 – 135	09/08/2025 17:25	
Decachlorobiphenyl	2051-24-3	58%	30 – 135	09/05/2025 13:59	
Tetrachloro-m-xylene	877-09-8	102%	30 – 111	09/08/2025 17:25	
Tetrachloro-m-xylene	877-09-8	72.1%	30 – 111	09/05/2025 13:59	



Results

Client Sample ID	SD-02	Collected	08/26/2025 11:00
Lab Sample ID	3432966002	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
1,4-Dioxane	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
2,4-Dichlorophenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
2,4-Dimethylphenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
2,4-Dinitrophenol	ND	ND	ug/kg	454	SW846 8270E	1	09/09/2025 09:23	M1O	A
2,4-Dinitrotoluene	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
2,6-Dinitrotoluene	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
2-Chloronaphthalene	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
2-Chlorophenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
2-Methylnaphthalene	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
2-Nitroaniline	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
2-Nitrophenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
3-Nitroaniline	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
4-Chloroaniline	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
4-Nitroaniline	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
4-Nitrophenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
Acenaphthene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Acenaphthylene	ND	ND,3	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Acetophenone	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Anthracene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Atrazine	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Benzaldehyde	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
Benzo(a)anthracene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Benzo(a)pyrene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Benzo(b)fluoranthene	64.7		ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Benzo(g,h,i)perylene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Benzo(k)fluoranthene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Biphenyl	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
bis(2-Chloroethoxy)methane	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Butylbenzylphthalate	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Caprolactam	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
Carbazole	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Chrysene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Dibenzofuran	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Diethylphthalate	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A



Results

Client Sample ID	SD-02	Collected	08/26/2025 11:00
Lab Sample ID	3432966002	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Di-n-Butylphthalate	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Di-n-Octylphthalate	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Fluoranthene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Fluorene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Hexachlorobenzene	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Hexachlorobutadiene	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
Hexachloroethane	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Isophorone	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
mp-Cresol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
Naphthalene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Nitrobenzene	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
N-Nitroso-di-n-propylamine	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	114	SW846 8270E	1	09/09/2025 09:23	M1O	A
o-Cresol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
Pentachlorophenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
Phenanthrene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A
Phenol	ND	ND	ug/kg	227	SW846 8270E	1	09/09/2025 09:23	M1O	A
Pyrene	ND	ND	ug/kg	56.8	SW846 8270E	1	09/09/2025 09:23	M1O	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	85.4%	19 – 132	09/09/2025 09:23	
2-Fluorobiphenyl	321-60-8	86.7%	40 – 110	09/09/2025 09:23	
2-Fluorophenol	367-12-4	76.8%	26 – 116	09/09/2025 09:23	
Nitrobenzene-d5	4165-60-0	78.8%	38 – 112	09/09/2025 09:23	
Phenol-d5	4165-62-2	77.5%	35 – 111	09/09/2025 09:23	
Terphenyl-d14	98904-43-9	101%	45 – 126	09/09/2025 09:23	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:41	SUB	B
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:36	SUB	D

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	61.7	SW846 9056A	5	09/01/2025 10:56	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.33	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.4	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	20.0		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-02	Collected	08/26/2025 11:00
Lab Sample ID	3432966002	Lab Receipt	08/28/2025 09:50

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrate-N	ND	ND	mg/kg	6.2	SW846 9056A	5	09/01/2025 10:56	MYM	A
Nitrite-N	ND	ND	mg/kg	6.2	SW846 9056A	5	09/01/2025 10:56	MYM	A
pH	6.60	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	7800		mg/kg	625	SW846 9060A	1	09/10/2025 16:00	PAG	A
Total Solids	80.0		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-03	Collected	08/26/2025 11:40
Lab Sample ID	3432966003	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	229	SW846 8151A	1	09/06/2025 02:45	DXL	A
2,4,5-TP	ND	ND	ug/kg	135	SW846 8151A	1	09/06/2025 02:45	DXL	A
2,4-D	ND	ND	ug/kg	135	SW846 8151A	1	09/06/2025 02:45	DXL	A
2,4-DB	ND	ND	ug/kg	135	SW846 8151A	1	09/06/2025 02:45	DXL	A
Dalapon	ND	ND	ug/kg	135	SW846 8151A	1	09/06/2025 02:45	DXL	A
Dicamba	ND	ND,17	ug/kg	135	SW846 8151A	1	09/06/2025 02:45	DXL	A
Dichloroprop	ND	ND	ug/kg	135	SW846 8151A	1	09/06/2025 02:45	DXL	A
Dinoseb	ND	ND	ug/kg	229	SW846 8151A	1	09/06/2025 02:45	DXL	A
Pentachlorophenol	ND	ND,18	ug/kg	135	SW846 8151A	1	09/06/2025 02:45	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	86.6%	36 - 113	09/06/2025 02:45	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	1240		mg/kg	48.6	SW846 6020B	5	09/09/2025 14:21	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.3	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Arsenic, Total	5.6		mg/kg	1.9	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Barium, Total	8.1		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.64	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.64	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Calcium, Total	193		mg/kg	60.7	SW846 6020B	5	09/09/2025 14:21	KXH	A2
Chromium, Total	3.1		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Cobalt, Total	4.3		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Copper, Total	ND	ND	mg/kg	3.2	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Iron, Total	9720		mg/kg	32.2	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Lead, Total	3.1		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Magnesium, Total	238		mg/kg	64.4	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Manganese, Total	86.9		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.059	SW846 7471B	1	09/04/2025 18:00	RBP	A
Nickel, Total	11.7		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Potassium, Total	116		mg/kg	64.4	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Selenium, Total	ND	ND	mg/kg	3.2	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Silver, Total	ND	ND	mg/kg	1.3	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Sodium, Total	73.4		mg/kg	64.4	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.64	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Trivalent Chromium	3.1		mg/kg	2.8	Calculation	1	09/08/2025 14:05	CW	A
Vanadium, Total	3.0		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:21	KXH	A1
Zinc, Total	28.5		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:21	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:18	DXL	A



Results

Client Sample ID	SD-03	Collected	08/26/2025 11:40
Lab Sample ID	3432966003	Lab Receipt	08/28/2025 09:50

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:18	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:18	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:18	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:18	DXL	A
Aroclor-1254	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:18	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:18	DXL	A
Total Polychlorinated Biphenyl	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:18	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	71.7%	49 – 115	09/04/2025 20:18	
Tetrachloro-m-xylene	877-09-8	88.6%	27 – 137	09/04/2025 20:18	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	11.6	SW846 8081B	5	09/05/2025 14:23	KJH	A
Aldrin	ND	ND,6	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
beta-BHC	ND	ND,2	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
delta-BHC	ND	ND,4	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
Dieldrin	ND	ND,9	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
Endosulfan I	ND	ND,8	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
Endosulfan II	ND	ND,11	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
Endrin	ND	ND,10	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
Endrin Ketone	ND	ND	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
gamma-BHC	ND	ND,5	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
Heptachlor	ND	ND,5	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	11.6	SW846 8081B	5	09/08/2025 17:48	KJH	A
Methoxychlor	ND	ND,16	ug/kg	22.6	SW846 8081B	5	09/05/2025 14:23	KJH	A
Toxaphene	ND	ND	ug/kg	239	SW846 8081B	5	09/08/2025 17:48	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	130%	30 – 135	09/08/2025 17:48	
Decachlorobiphenyl	2051-24-3	66.9%	30 – 135	09/05/2025 14:23	
Tetrachloro-m-xylene	877-09-8	102%	30 – 111	09/08/2025 17:48	
Tetrachloro-m-xylene	877-09-8	73.6%	30 – 111	09/05/2025 14:23	



Results

Client Sample ID	SD-03	Collected	08/26/2025 11:40
Lab Sample ID	3432966003	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
1,4-Dioxane	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
2,4-Dichlorophenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
2,4-Dimethylphenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
2,4-Dinitrophenol	ND	ND	ug/kg	495	SW846 8270E	1	09/09/2025 09:49	M1O	A
2,4-Dinitrotoluene	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
2,6-Dinitrotoluene	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
2-Chloronaphthalene	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
2-Chlorophenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
2-Methylnaphthalene	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
2-Nitroaniline	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
2-Nitrophenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
3-Nitroaniline	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
4-Chloroaniline	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
4-Nitroaniline	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
4-Nitrophenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
Acenaphthene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Acenaphthylene	ND	ND,3	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Acetophenone	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Anthracene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Atrazine	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Benzaldehyde	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
Benzo(a)anthracene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Benzo(a)pyrene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Benzo(b)fluoranthene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Benzo(g,h,i)perylene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Benzo(k)fluoranthene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Biphenyl	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
bis(2-Chloroethoxy)methane	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Butylbenzylphthalate	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Caprolactam	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
Carbazole	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Chrysene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Dibenzofuran	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Diethylphthalate	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A



Results

Client Sample ID	SD-03	Collected	08/26/2025 11:40
Lab Sample ID	3432966003	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Di-n-Butylphthalate	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Di-n-Octylphthalate	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Fluoranthene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Fluorene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Hexachlorobenzene	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Hexachlorobutadiene	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
Hexachloroethane	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Isophorone	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
mp-Cresol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
Naphthalene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Nitrobenzene	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
N-Nitroso-di-n-propylamine	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	124	SW846 8270E	1	09/09/2025 09:49	M1O	A
o-Cresol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
Pentachlorophenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
Phenanthrene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A
Phenol	ND	ND	ug/kg	248	SW846 8270E	1	09/09/2025 09:49	M1O	A
Pyrene	ND	ND	ug/kg	61.9	SW846 8270E	1	09/09/2025 09:49	M1O	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	70%	19 – 132	09/09/2025 09:49	
2-Fluorobiphenyl	321-60-8	72.4%	40 – 110	09/09/2025 09:49	
2-Fluorophenol	367-12-4	59.2%	26 – 116	09/09/2025 09:49	
Nitrobenzene-d5	4165-60-0	68%	38 – 112	09/09/2025 09:49	
Phenol-d5	4165-62-2	62.4%	35 – 111	09/09/2025 09:49	
Terphenyl-d14	98904-43-9	85.6%	45 – 126	09/09/2025 09:49	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:41	SUB	B
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:36	SUB	D

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	68.6	SW846 9056A	5	09/01/2025 11:07	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.35	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.8	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	27.9		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-03	Collected	08/26/2025 11:40
Lab Sample ID	3432966003	Lab Receipt	08/28/2025 09:50

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrate-N	ND	ND	mg/kg	6.9	SW846 9056A	5	09/01/2025 11:07	MYM	A
Nitrite-N	ND	ND	mg/kg	6.9	SW846 9056A	5	09/01/2025 11:07	MYM	A
pH	6.80	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	1920		mg/kg	693	SW846 9060A	1	09/10/2025 16:00	PAG	A
Total Solids	72.1		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-04	Collected	08/26/2025 12:00
Lab Sample ID	3432966004	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	236	SW846 8151A	1	09/06/2025 03:11	DXL	A
2,4,5-TP	ND	ND	ug/kg	139	SW846 8151A	1	09/06/2025 03:11	DXL	A
2,4-D	ND	ND	ug/kg	139	SW846 8151A	1	09/06/2025 03:11	DXL	A
2,4-DB	ND	ND	ug/kg	139	SW846 8151A	1	09/06/2025 03:11	DXL	A
Dalapon	ND	ND	ug/kg	139	SW846 8151A	1	09/06/2025 03:11	DXL	A
Dicamba	ND	ND,17	ug/kg	139	SW846 8151A	1	09/06/2025 03:11	DXL	A
Dichloroprop	ND	ND	ug/kg	139	SW846 8151A	1	09/06/2025 03:11	DXL	A
Dinoseb	ND	ND	ug/kg	236	SW846 8151A	1	09/06/2025 03:11	DXL	A
Pentachlorophenol	ND	ND,18	ug/kg	139	SW846 8151A	1	09/06/2025 03:11	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	83.3%	36 - 113	09/06/2025 03:11	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	1120		mg/kg	51.5	SW846 6020B	5	09/09/2025 14:24	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.2	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Arsenic, Total	ND	ND	mg/kg	1.8	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Barium, Total	8.9		mg/kg	3.0	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.60	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.60	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Calcium, Total	910		mg/kg	64.3	SW846 6020B	5	09/09/2025 14:24	KXH	A2
Chromium, Total	2.0		mg/kg	1.2	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Cobalt, Total	3.7		mg/kg	3.0	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Copper, Total	ND	ND	mg/kg	3.0	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Iron, Total	5630		mg/kg	30.2	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Lead, Total	2.5		mg/kg	1.2	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Magnesium, Total	222		mg/kg	60.3	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Manganese, Total	110		mg/kg	3.0	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.065	SW846 7471B	1	09/04/2025 18:01	RBP	A
Nickel, Total	9.5		mg/kg	3.0	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Potassium, Total	109		mg/kg	60.3	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Selenium, Total	ND	ND	mg/kg	3.0	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Silver, Total	ND	ND	mg/kg	1.2	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Sodium, Total	66.7		mg/kg	60.3	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.60	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Trivalent Chromium	ND	ND	mg/kg	2.7	Calculation	1	09/08/2025 14:06	CW	A
Vanadium, Total	2.0		mg/kg	1.2	SW846 6020B	5	09/04/2025 14:44	KXH	A1
Zinc, Total	23.1		mg/kg	3.0	SW846 6020B	5	09/04/2025 14:44	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 20:40	DXL	A



Results

Client Sample ID	SD-04	Collected	08/26/2025 12:00
Lab Sample ID	3432966004	Lab Receipt	08/28/2025 09:50

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 20:40	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 20:40	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 20:40	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 20:40	DXL	A
Aroclor-1254	0.050		mg/kg	0.046	SW846 8082A	1	09/04/2025 20:40	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 20:40	DXL	A
Total Polychlorinated Biphenyl	0.050		mg/kg	0.046	SW846 8082A	1	09/04/2025 20:40	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	72.3%	49 – 115	09/04/2025 20:40	
Tetrachloro-m-xylene	877-09-8	85.3%	27 – 137	09/04/2025 20:40	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	11.8	SW846 8081B	5	09/05/2025 14:35	KJH	A
Aldrin	ND	ND,6	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
beta-BHC	ND	ND,2	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
delta-BHC	ND	ND,4	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
Dieldrin	ND	ND,9	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
Endosulfan I	ND	ND,8	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
Endosulfan II	ND	ND,11	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
Endrin	ND	ND,10	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
Endrin Ketone	ND	ND	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
gamma-BHC	ND	ND,5	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
Heptachlor	ND	ND,5	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:00	KJH	A
Methoxychlor	ND	ND,16	ug/kg	22.9	SW846 8081B	5	09/05/2025 14:35	KJH	A
Toxaphene	ND	ND	ug/kg	243	SW846 8081B	5	09/08/2025 18:00	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	124%	30 – 135	09/08/2025 18:00	
Decachlorobiphenyl	2051-24-3	65.8%	30 – 135	09/05/2025 14:35	
Tetrachloro-m-xylene	877-09-8	93.4%	30 – 111	09/08/2025 18:00	
Tetrachloro-m-xylene	877-09-8	65.5%	30 – 111	09/05/2025 14:35	



Results

Client Sample ID	SD-04	Collected	08/26/2025 12:00
Lab Sample ID	3432966004	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
1,4-Dioxane	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
2,4-Dichlorophenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
2,4-Dimethylphenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
2,4-Dinitrophenol	ND	ND	ug/kg	473	SW846 8270E	1	09/09/2025 10:15	M1O	A
2,4-Dinitrotoluene	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
2,6-Dinitrotoluene	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
2-Chloronaphthalene	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
2-Chlorophenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
2-Methylnaphthalene	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
2-Nitroaniline	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
2-Nitrophenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
3-Nitroaniline	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
4-Chloroaniline	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
4-Nitroaniline	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
4-Nitrophenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
Acenaphthene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Acenaphthylene	ND	ND,3	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Acetophenone	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Anthracene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Atrazine	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Benzaldehyde	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
Benzo(a)anthracene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Benzo(a)pyrene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Benzo(b)fluoranthene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Benzo(g,h,i)perylene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Benzo(k)fluoranthene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Biphenyl	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
bis(2-Chloroethoxy)methane	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Butylbenzylphthalate	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Caprolactam	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
Carbazole	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Chrysene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Dibenzofuran	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Diethylphthalate	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A



Results

Client Sample ID	SD-04	Collected	08/26/2025 12:00
Lab Sample ID	3432966004	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Di-n-Butylphthalate	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Di-n-Octylphthalate	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Fluoranthene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Fluorene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Hexachlorobenzene	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Hexachlorobutadiene	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
Hexachloroethane	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Isophorone	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
mp-Cresol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
Naphthalene	76.0		ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Nitrobenzene	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
N-Nitroso-di-n-propylamine	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	118	SW846 8270E	1	09/09/2025 10:15	M1O	A
o-Cresol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
Pentachlorophenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
Phenanthrene	455		ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A
Phenol	ND	ND	ug/kg	236	SW846 8270E	1	09/09/2025 10:15	M1O	A
Pyrene	ND	ND	ug/kg	59.1	SW846 8270E	1	09/09/2025 10:15	M1O	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	79.1%	19 – 132	09/09/2025 10:15	
2-Fluorobiphenyl	321-60-8	77.8%	40 – 110	09/09/2025 10:15	
2-Fluorophenol	367-12-4	68%	26 – 116	09/09/2025 10:15	
Nitrobenzene-d5	4165-60-0	74.6%	38 – 112	09/09/2025 10:15	
Phenol-d5	4165-62-2	70.4%	35 – 111	09/09/2025 10:15	
Terphenyl-d14	98904-43-9	90.8%	45 – 126	09/09/2025 10:15	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:41	SUB	B
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:36	SUB	D

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	68.8	SW846 9056A	5	09/01/2025 11:19	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.35	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.7	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	28.3		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-04	Collected	08/26/2025 12:00
Lab Sample ID	3432966004	Lab Receipt	08/28/2025 09:50

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrate-N	ND	ND	mg/kg	6.9	SW846 9056A	5	09/01/2025 11:19	MYM	A
Nitrite-N	ND	ND	mg/kg	6.9	SW846 9056A	5	09/01/2025 11:19	MYM	A
pH	6.63	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	1780		mg/kg	697	SW846 9060A	1	09/10/2025 16:00	PAG	A
Total Solids	71.7		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-05	Collected	08/26/2025 12:40
Lab Sample ID	3432966005	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	235	SW846 8151A	1	09/06/2025 03:37	DXL	A
2,4,5-TP	ND	ND	ug/kg	138	SW846 8151A	1	09/06/2025 03:37	DXL	A
2,4-D	ND	ND	ug/kg	138	SW846 8151A	1	09/06/2025 03:37	DXL	A
2,4-DB	ND	ND	ug/kg	138	SW846 8151A	1	09/06/2025 03:37	DXL	A
Dalapon	ND	ND	ug/kg	138	SW846 8151A	1	09/06/2025 03:37	DXL	A
Dicamba	ND	ND,17	ug/kg	138	SW846 8151A	1	09/06/2025 03:37	DXL	A
Dichloroprop	ND	ND	ug/kg	138	SW846 8151A	1	09/06/2025 03:37	DXL	A
Dinoseb	ND	ND	ug/kg	235	SW846 8151A	1	09/06/2025 03:37	DXL	A
Pentachlorophenol	ND	ND,18	ug/kg	138	SW846 8151A	1	09/06/2025 03:37	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	59.2%	36 - 113	09/06/2025 03:37	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	1490		mg/kg	47.6	SW846 6020B	5	09/09/2025 14:26	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Arsenic, Total	ND	ND	mg/kg	2.0	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Barium, Total	10.7		mg/kg	3.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.67	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.67	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Calcium, Total	387		mg/kg	59.6	SW846 6020B	5	09/09/2025 14:26	KXH	A2
Chromium, Total	3.0		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Cobalt, Total	4.4		mg/kg	3.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Copper, Total	ND	ND	mg/kg	3.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Iron, Total	7180		mg/kg	33.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Lead, Total	3.5		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Magnesium, Total	365		mg/kg	66.7	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Manganese, Total	114		mg/kg	3.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.064	SW846 7471B	1	09/04/2025 18:03	RBP	A
Nickel, Total	11.5		mg/kg	3.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Potassium, Total	369		mg/kg	66.7	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Selenium, Total	ND	ND	mg/kg	3.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Silver, Total	ND	ND	mg/kg	1.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Sodium, Total	ND	ND	mg/kg	66.7	SW846 6020B	5	09/04/2025 15:03	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.67	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Trivalent Chromium	3.0		mg/kg	2.8	Calculation	1	09/08/2025 14:07	CW	A
Vanadium, Total	3.4		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1
Zinc, Total	26.3		mg/kg	3.3	SW846 6020B	5	09/04/2025 14:46	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:50	DXL	A



Results

Client Sample ID	SD-05	Collected	08/26/2025 12:40
Lab Sample ID	3432966005	Lab Receipt	08/28/2025 09:50

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:50	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:50	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:50	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:50	DXL	A
Aroclor-1254	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:50	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:50	DXL	A
Total Polychlorinated Biphenyl	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 20:50	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	72.3%	49 – 115	09/04/2025 20:50	
Tetrachloro-m-xylene	877-09-8	86.3%	27 – 137	09/04/2025 20:50	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	11.5	SW846 8081B	5	09/05/2025 14:47	KJH	A
Aldrin	ND	ND,6	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
beta-BHC	ND	ND,2	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
delta-BHC	ND	ND,4	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
Dieldrin	ND	ND,9	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
Endosulfan I	ND	ND,8	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
Endosulfan II	ND	ND,11	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
Endrin	ND	ND,10	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
Endrin Ketone	ND	ND	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
gamma-BHC	ND	ND,5	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
Heptachlor	ND	ND,5	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:12	KJH	A
Methoxychlor	ND	ND,16	ug/kg	22.3	SW846 8081B	5	09/05/2025 14:47	KJH	A
Toxaphene	ND	ND	ug/kg	237	SW846 8081B	5	09/08/2025 18:12	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	127%	30 – 135	09/08/2025 18:12	
Decachlorobiphenyl	2051-24-3	67.3%	30 – 135	09/05/2025 14:47	
Tetrachloro-m-xylene	877-09-8	98.5%	30 – 111	09/08/2025 18:12	
Tetrachloro-m-xylene	877-09-8	71.2%	30 – 111	09/05/2025 14:47	



Results

Client Sample ID	SD-05	Collected	08/26/2025 12:40
Lab Sample ID	3432966005	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
1,4-Dioxane	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
2,4-Dichlorophenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
2,4-Dimethylphenol	ND	ND,25	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
2,4-Dinitrophenol	ND	ND	ug/kg	531	SW846 8270E	1	09/10/2025 19:33	CGS	A
2,4-Dinitrotoluene	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
2,6-Dinitrotoluene	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
2-Chloronaphthalene	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
2-Chlorophenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
2-Methylnaphthalene	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
2-Nitroaniline	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
2-Nitrophenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
3-Nitroaniline	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
4-Chloroaniline	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
4-Nitroaniline	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
4-Nitrophenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
Acenaphthene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Acenaphthylene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Acetophenone	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Anthracene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Atrazine	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Benzaldehyde	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
Benzo(a)anthracene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Benzo(a)pyrene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Benzo(b)fluoranthene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Benzo(g,h,i)perylene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Benzo(k)fluoranthene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Biphenyl	ND	ND,23	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
bis(2-Chloroethoxy)methane	ND	ND,24	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Butylbenzylphthalate	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Caprolactam	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
Carbazole	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Chrysene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Dibenzofuran	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Diethylphthalate	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A



Results

Client Sample ID	SD-05	Collected	08/26/2025 12:40
Lab Sample ID	3432966005	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Di-n-Butylphthalate	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Di-n-Octylphthalate	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Fluoranthene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Fluorene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Hexachlorobenzene	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Hexachlorobutadiene	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
Hexachloroethane	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Isophorone	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
mp-Cresol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
Naphthalene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Nitrobenzene	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
N-Nitroso-di-n-propylamine	ND	ND,26	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	133	SW846 8270E	1	09/10/2025 19:33	CGS	A
o-Cresol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
Pentachlorophenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
Phenanthrene	66.8		ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A
Phenol	ND	ND	ug/kg	266	SW846 8270E	1	09/10/2025 19:33	CGS	A
Pyrene	ND	ND	ug/kg	66.4	SW846 8270E	1	09/10/2025 19:33	CGS	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	81.8%	19 – 132	09/10/2025 19:33	
2-Fluorobiphenyl	321-60-8	73.2%	40 – 110	09/10/2025 19:33	
2-Fluorophenol	367-12-4	69.3%	26 – 116	09/10/2025 19:33	
Nitrobenzene-d5	4165-60-0	70.7%	38 – 112	09/10/2025 19:33	
Phenol-d5	4165-62-2	74.7%	35 – 111	09/10/2025 19:33	
Terphenyl-d14	98904-43-9	95.5%	45 – 126	09/10/2025 19:33	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:41	SUB	B
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:36	SUB	D

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	69.0	SW846 9056A	5	09/01/2025 11:30	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.34	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.8	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	29.0		%		In-House	1	08/29/2025 13:25	MAN	A

Results

Client Sample ID	SD-05	Collected	08/26/2025 12:40
Lab Sample ID	3432966005	Lab Receipt	08/28/2025 09:50

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrate-N	ND	ND	mg/kg	6.9	SW846 9056A	5	09/01/2025 11:30	MYM	A
Nitrite-N	ND	ND	mg/kg	6.9	SW846 9056A	5	09/01/2025 11:30	MYM	A
pH	6.53	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	4620	27	mg/kg	704	SW846 9060A	1	09/10/2025 16:00	PAG	A
Total Solids	71.0		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-06	Collected	08/26/2025 13:00
Lab Sample ID	3432966006	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	238	SW846 8151A	1	09/09/2025 23:50	DXL	A
2,4,5-TP	ND	ND	ug/kg	140	SW846 8151A	1	09/09/2025 23:50	DXL	A
2,4-D	ND	ND	ug/kg	140	SW846 8151A	1	09/09/2025 23:50	DXL	A
2,4-DB	ND	ND	ug/kg	140	SW846 8151A	1	09/09/2025 23:50	DXL	A
Dalapon	ND	ND	ug/kg	140	SW846 8151A	1	09/09/2025 23:50	DXL	A
Dicamba	ND	ND	ug/kg	140	SW846 8151A	1	09/09/2025 23:50	DXL	A
Dichloroprop	ND	ND	ug/kg	140	SW846 8151A	1	09/09/2025 23:50	DXL	A
Dinoseb	ND	ND	ug/kg	238	SW846 8151A	1	09/09/2025 23:50	DXL	A
Pentachlorophenol	ND	ND	ug/kg	140	SW846 8151A	1	09/09/2025 23:50	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	56.4%	36 - 113	09/09/2025 23:50	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	1360		mg/kg	49.1	SW846 6020B	5	09/09/2025 14:29	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.3	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Arsenic, Total	ND	ND	mg/kg	2.0	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Barium, Total	6.9		mg/kg	3.4	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.67	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.67	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Calcium, Total	195		mg/kg	61.4	SW846 6020B	5	09/09/2025 14:29	KXH	A2
Chromium, Total	1.8		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Cobalt, Total	4.2		mg/kg	3.4	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Copper, Total	ND	ND	mg/kg	3.4	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Iron, Total	6000		mg/kg	33.7	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Lead, Total	2.7		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Magnesium, Total	307		mg/kg	67.4	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Manganese, Total	100		mg/kg	3.4	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.069	SW846 7471B	1	09/09/2025 12:02	RBP	A
Nickel, Total	11.5		mg/kg	3.4	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Potassium, Total	160		mg/kg	67.4	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Selenium, Total	ND	ND	mg/kg	3.4	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Silver, Total	ND	ND	mg/kg	1.3	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Sodium, Total	97.9		mg/kg	67.4	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.67	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Trivalent Chromium	ND	ND	mg/kg	2.8	Calculation	1	09/08/2025 14:08	CW	A
Vanadium, Total	2.4		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:48	KXH	A1
Zinc, Total	25.3		mg/kg	3.4	SW846 6020B	5	09/04/2025 14:48	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:01	DXL	A



Results

Client Sample ID	SD-06	Collected	08/26/2025 13:00
Lab Sample ID	3432966006	Lab Receipt	08/28/2025 09:50

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:01	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:01	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:01	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:01	DXL	A
Aroclor-1254	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:01	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:01	DXL	A
Total Polychlorinated Biphenyl	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:01	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	74%	49 – 115	09/04/2025 21:01	
Tetrachloro-m-xylene	877-09-8	88.9%	27 – 137	09/04/2025 21:01	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	11.5	SW846 8081B	5	09/05/2025 14:58	KJH	A
Aldrin	ND	ND,6	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
beta-BHC	ND	ND,2	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
delta-BHC	ND	ND,4	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
Dieldrin	ND	ND,9	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
Endosulfan I	ND	ND,8	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
Endosulfan II	ND	ND,11	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
Endrin	ND	ND,10	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
Endrin Ketone	ND	ND	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
gamma-BHC	ND	ND,5	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
Heptachlor	ND	ND,5	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:23	KJH	A
Methoxychlor	ND	ND,16	ug/kg	22.4	SW846 8081B	5	09/05/2025 14:58	KJH	A
Toxaphene	ND	ND	ug/kg	237	SW846 8081B	5	09/08/2025 18:23	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	130%	30 – 135	09/08/2025 18:23	
Decachlorobiphenyl	2051-24-3	55.9%	30 – 135	09/05/2025 14:58	
Tetrachloro-m-xylene	877-09-8	99.7%	30 – 111	09/08/2025 18:23	
Tetrachloro-m-xylene	877-09-8	68.4%	30 – 111	09/05/2025 14:58	



Results

Client Sample ID	SD-06	Collected	08/26/2025 13:00
Lab Sample ID	3432966006	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
1,4-Dioxane	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
2,4-Dichlorophenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
2,4-Dimethylphenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
2,4-Dinitrophenol	ND	ND	ug/kg	498	SW846 8270E	1	09/09/2025 02:24	M1O	A
2,4-Dinitrotoluene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
2,6-Dinitrotoluene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
2-Chloronaphthalene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
2-Chlorophenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
2-Methylnaphthalene	629		ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
2-Nitroaniline	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
2-Nitrophenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
3-Nitroaniline	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
4-Chloroaniline	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
4-Nitroaniline	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
4-Nitrophenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
Acenaphthene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Acenaphthylene	ND	ND,28	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Acetophenone	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Anthracene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Atrazine	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Benzaldehyde	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
Benzo(a)anthracene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Benzo(a)pyrene	ND	ND,29	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Benzo(b)fluoranthene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Benzo(g,h,i)perylene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Benzo(k)fluoranthene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Biphenyl	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
bis(2-Chloroethoxy)methane	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Butylbenzylphthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Caprolactam	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
Carbazole	ND	ND,30	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Chrysene	78.5		ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Dibenzofuran	147		ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Diethylphthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A



Results

Client Sample ID	SD-06	Collected	08/26/2025 13:00
Lab Sample ID	3432966006	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Di-n-Butylphthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Di-n-Octylphthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Fluoranthene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Fluorene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Hexachlorobenzene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Hexachlorobutadiene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
Hexachloroethane	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Isophorone	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
mp-Cresol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
Naphthalene	168		ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Nitrobenzene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
N-Nitroso-di-n-propylamine	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 02:24	M1O	A
o-Cresol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
Pentachlorophenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
Phenanthrene	312		ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A
Phenol	ND	ND	ug/kg	249	SW846 8270E	1	09/09/2025 02:24	M1O	A
Pyrene	ND	ND	ug/kg	62.3	SW846 8270E	1	09/09/2025 02:24	M1O	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	65.6%	19 – 132	09/09/2025 02:24	
2-Fluorobiphenyl	321-60-8	64.4%	40 – 110	09/09/2025 02:24	
2-Fluorophenol	367-12-4	59.1%	26 – 116	09/09/2025 02:24	
Nitrobenzene-d5	4165-60-0	58.7%	38 – 112	09/09/2025 02:24	
Phenol-d5	4165-62-2	55.4%	35 – 111	09/09/2025 02:24	
Terphenyl-d14	98904-43-9	87.4%	45 – 126	09/09/2025 02:24	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:42	SUB	B
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:37	SUB	D

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	69.8	SW846 9056A	5	09/01/2025 11:42	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.36	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.8	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	29.6		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-06	Collected	08/26/2025 13:00
Lab Sample ID	3432966006	Lab Receipt	08/28/2025 09:50

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrate-N	ND	ND	mg/kg	7.0	SW846 9056A	5	09/01/2025 11:42	MYM	A
Nitrite-N	ND	ND	mg/kg	7.0	SW846 9056A	5	09/01/2025 11:42	MYM	A
pH	6.73	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	2750		mg/kg	710	SW846 9060A	1	09/11/2025 16:00	PAG	A
Total Solids	70.4		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-07	Collected	08/27/2025 09:20
Lab Sample ID	3432966007	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	232	SW846 8151A	1	09/10/2025 00:16	DXL	A
2,4,5-TP	ND	ND	ug/kg	137	SW846 8151A	1	09/10/2025 00:16	DXL	A
2,4-D	ND	ND	ug/kg	137	SW846 8151A	1	09/10/2025 00:16	DXL	A
2,4-DB	ND	ND	ug/kg	137	SW846 8151A	1	09/10/2025 00:16	DXL	A
Dalapon	ND	ND	ug/kg	137	SW846 8151A	1	09/10/2025 00:16	DXL	A
Dicamba	ND	ND	ug/kg	137	SW846 8151A	1	09/10/2025 00:16	DXL	A
Dichloroprop	ND	ND	ug/kg	137	SW846 8151A	1	09/10/2025 00:16	DXL	A
Dinoseb	ND	ND	ug/kg	232	SW846 8151A	1	09/10/2025 00:16	DXL	A
Pentachlorophenol	ND	ND	ug/kg	137	SW846 8151A	1	09/10/2025 00:16	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	52.4%	36 - 113	09/10/2025 00:16	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	1600		mg/kg	47.3	SW846 6020B	5	09/09/2025 14:31	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.3	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Arsenic, Total	2.1		mg/kg	1.9	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Barium, Total	15.9		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.65	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.65	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Calcium, Total	702		mg/kg	59.1	SW846 6020B	5	09/09/2025 14:31	KXH	A2
Chromium, Total	3.6		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Cobalt, Total	4.9		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Copper, Total	9.2		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Iron, Total	7000		mg/kg	32.3	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Lead, Total	4.4		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Magnesium, Total	455		mg/kg	64.6	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Manganese, Total	170		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.069	SW846 7471B	1	09/09/2025 12:06	RBP	A
Nickel, Total	12.7		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Potassium, Total	287		mg/kg	64.6	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Selenium, Total	ND	ND	mg/kg	3.2	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Silver, Total	ND	ND	mg/kg	1.3	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Sodium, Total	83.0		mg/kg	64.6	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.65	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Trivalent Chromium	3.6		mg/kg	2.8	Calculation	1	09/08/2025 14:09	CW	A
Vanadium, Total	3.5		mg/kg	1.3	SW846 6020B	5	09/04/2025 14:51	KXH	A1
Zinc, Total	29.4		mg/kg	3.2	SW846 6020B	5	09/04/2025 14:51	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:12	DXL	A



Results

Client Sample ID	SD-07	Collected	08/27/2025 09:20
Lab Sample ID	3432966007	Lab Receipt	08/28/2025 09:50

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:12	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:12	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:12	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:12	DXL	A
Aroclor-1254	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:12	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:12	DXL	A
Total Polychlorinated Biphenyl	ND	ND	mg/kg	0.045	SW846 8082A	1	09/04/2025 21:12	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	63.5%	49 – 115	09/04/2025 21:12	
Tetrachloro-m-xylene	877-09-8	74.9%	27 – 137	09/04/2025 21:12	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	11.5	SW846 8081B	5	09/05/2025 15:10	KJH	A
Aldrin	ND	ND,6	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
beta-BHC	ND	ND,2	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
delta-BHC	ND	ND,4	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
Dieldrin	ND	ND,9	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
Endosulfan I	ND	ND,8	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
Endosulfan II	ND	ND,11	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
Endrin	ND	ND,10	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
Endrin Ketone	ND	ND	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
gamma-BHC	ND	ND,5	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
Heptachlor	ND	ND,5	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	11.5	SW846 8081B	5	09/08/2025 18:35	KJH	A
Methoxychlor	ND	ND,16	ug/kg	22.3	SW846 8081B	5	09/05/2025 15:10	KJH	A
Toxaphene	ND	ND	ug/kg	237	SW846 8081B	5	09/08/2025 18:35	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	113%	30 – 135	09/08/2025 18:35	
Decachlorobiphenyl	2051-24-3	57.3%	30 – 135	09/05/2025 15:10	
Tetrachloro-m-xylene	877-09-8	85.1%	30 – 111	09/08/2025 18:35	
Tetrachloro-m-xylene	877-09-8	61.2%	30 – 111	09/05/2025 15:10	



Results

Client Sample ID	SD-07	Collected	08/27/2025 09:20
Lab Sample ID	3432966007	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
1,4-Dioxane	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
2,4-Dichlorophenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
2,4-Dimethylphenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
2,4-Dinitrophenol	ND	ND	ug/kg	469	SW846 8270E	1	09/09/2025 02:50	M1O	A
2,4-Dinitrotoluene	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
2,6-Dinitrotoluene	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
2-Chloronaphthalene	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
2-Chlorophenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
2-Methylnaphthalene	174		ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
2-Nitroaniline	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
2-Nitrophenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
3-Nitroaniline	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
4-Chloroaniline	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
4-Nitroaniline	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
4-Nitrophenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
Acenaphthene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Acenaphthylene	ND	ND,28	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Acetophenone	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Anthracene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Atrazine	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Benzaldehyde	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
Benzo(a)anthracene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Benzo(a)pyrene	ND	ND,29	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Benzo(b)fluoranthene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Benzo(g,h,i)perylene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Benzo(k)fluoranthene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Biphenyl	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
bis(2-Chloroethoxy)methane	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Butylbenzylphthalate	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Caprolactam	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
Carbazole	ND	ND,30	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Chrysene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Dibenzofuran	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Diethylphthalate	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A



Results

Client Sample ID	SD-07	Collected	08/27/2025 09:20
Lab Sample ID	3432966007	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Di-n-Butylphthalate	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Di-n-Octylphthalate	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Fluoranthene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Fluorene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Hexachlorobenzene	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Hexachlorobutadiene	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
Hexachloroethane	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Isophorone	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
mp-Cresol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
Naphthalene	102		ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Nitrobenzene	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
N-Nitroso-di-n-propylamine	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	117	SW846 8270E	1	09/09/2025 02:50	M1O	A
o-Cresol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
Pentachlorophenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
Phenanthrene	160		ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A
Phenol	ND	ND	ug/kg	234	SW846 8270E	1	09/09/2025 02:50	M1O	A
Pyrene	ND	ND	ug/kg	58.6	SW846 8270E	1	09/09/2025 02:50	M1O	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	72.1%	19 – 132	09/09/2025 02:50	
2-Fluorobiphenyl	321-60-8	62.9%	40 – 110	09/09/2025 02:50	
2-Fluorophenol	367-12-4	60.6%	26 – 116	09/09/2025 02:50	
Nitrobenzene-d5	4165-60-0	58.6%	38 – 112	09/09/2025 02:50	
Phenol-d5	4165-62-2	58.2%	35 – 111	09/09/2025 02:50	
Terphenyl-d14	98904-43-9	85.4%	45 – 126	09/09/2025 02:50	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:42	SUB	B
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:38	SUB	D

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	69.0	SW846 9056A	5	09/01/2025 11:53	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.36	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.8	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	28.9		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-07	Collected	08/27/2025 09:20
Lab Sample ID	3432966007	Lab Receipt	08/28/2025 09:50

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrate-N	ND	ND	mg/kg	6.9	SW846 9056A	5	09/01/2025 11:53	MYM	A
Nitrite-N	ND	ND	mg/kg	6.9	SW846 9056A	5	09/01/2025 11:53	MYM	A
pH	6.79	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	6630		mg/kg	703	SW846 9060A	1	09/11/2025 16:00	PAG	A
Total Solids	71.1		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-08	Collected	08/27/2025 10:10
Lab Sample ID	3432966008	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	245	SW846 8151A	1	09/10/2025 01:35	DXL	A
2,4,5-TP	ND	ND	ug/kg	144	SW846 8151A	1	09/10/2025 01:35	DXL	A
2,4-D	ND	ND	ug/kg	144	SW846 8151A	1	09/10/2025 01:35	DXL	A
2,4-DB	ND	ND	ug/kg	144	SW846 8151A	1	09/10/2025 01:35	DXL	A
Dalapon	ND	ND	ug/kg	144	SW846 8151A	1	09/10/2025 01:35	DXL	A
Dicamba	ND	ND	ug/kg	144	SW846 8151A	1	09/10/2025 01:35	DXL	A
Dichloroprop	ND	ND	ug/kg	144	SW846 8151A	1	09/10/2025 01:35	DXL	A
Dinoseb	ND	ND	ug/kg	245	SW846 8151A	1	09/10/2025 01:35	DXL	A
Pentachlorophenol	ND	ND	ug/kg	144	SW846 8151A	1	09/10/2025 01:35	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	58.8%	36 - 113	09/10/2025 01:35	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	2040		mg/kg	54.1	SW846 6020B	5	09/09/2025 14:33	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.4	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Arsenic, Total	ND	ND	mg/kg	2.1	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Barium, Total	13.1		mg/kg	3.5	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.70	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.70	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Calcium, Total	424		mg/kg	67.6	SW846 6020B	5	09/09/2025 14:33	KXH	A2
Chromium, Total	2.8		mg/kg	1.4	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Cobalt, Total	5.3		mg/kg	3.5	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Copper, Total	ND	ND	mg/kg	3.5	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Iron, Total	8220		mg/kg	34.8	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Lead, Total	4.1		mg/kg	1.4	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Magnesium, Total	439		mg/kg	69.6	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Manganese, Total	153		mg/kg	3.5	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.066	SW846 7471B	1	09/09/2025 12:08	RBP	A
Nickel, Total	13.4		mg/kg	3.5	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Potassium, Total	203		mg/kg	69.6	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Selenium, Total	ND	ND	mg/kg	3.5	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Silver, Total	ND	ND	mg/kg	1.4	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Sodium, Total	84.9		mg/kg	69.6	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.70	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Trivalent Chromium	ND	ND	mg/kg	2.9	Calculation	1	09/08/2025 14:10	CW	A
Vanadium, Total	3.4		mg/kg	1.4	SW846 6020B	5	09/04/2025 14:53	KXH	A1
Zinc, Total	33.3		mg/kg	3.5	SW846 6020B	5	09/04/2025 14:53	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:22	DXL	A



Results

Client Sample ID	SD-08	Collected	08/27/2025 10:10
Lab Sample ID	3432966008	Lab Receipt	08/28/2025 09:50

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:22	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:22	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:22	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:22	DXL	A
Aroclor-1254	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:22	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:22	DXL	A
Total Polychlorinated Biphenyl	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:22	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	59.2%	49 – 115	09/04/2025 21:22	
Tetrachloro-m-xylene	877-09-8	70.5%	27 – 137	09/04/2025 21:22	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	11.8	SW846 8081B	5	09/05/2025 15:22	KJH	A
Aldrin	ND	ND,6	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
beta-BHC	ND	ND,2	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
delta-BHC	ND	ND,4	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
Dieldrin	ND	ND,9	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
Endosulfan I	ND	ND,8	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
Endosulfan II	ND	ND,11	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
Endrin	ND	ND,10	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
Endrin Ketone	ND	ND	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
gamma-BHC	ND	ND,5	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
Heptachlor	ND	ND,5	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	11.8	SW846 8081B	5	09/08/2025 18:47	KJH	A
Methoxychlor	ND	ND,16	ug/kg	22.8	SW846 8081B	5	09/05/2025 15:22	KJH	A
Toxaphene	ND	ND	ug/kg	242	SW846 8081B	5	09/08/2025 18:47	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	108%	30 – 135	09/08/2025 18:47	
Decachlorobiphenyl	2051-24-3	52.5%	30 – 135	09/05/2025 15:22	
Tetrachloro-m-xylene	877-09-8	81.5%	30 – 111	09/08/2025 18:47	
Tetrachloro-m-xylene	877-09-8	61.6%	30 – 111	09/05/2025 15:22	



Results

Client Sample ID	SD-08	Collected	08/27/2025 10:10
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SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
1,4-Dioxane	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
2,4-Dichlorophenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
2,4-Dimethylphenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
2,4-Dinitrophenol	ND	ND	ug/kg	571	SW846 8270E	1	09/09/2025 03:16	M1O	A
2,4-Dinitrotoluene	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
2,6-Dinitrotoluene	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
2-Chloronaphthalene	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
2-Chlorophenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
2-Methylnaphthalene	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
2-Nitroaniline	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
2-Nitrophenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
3-Nitroaniline	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
4-Chloroaniline	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
4-Nitroaniline	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
4-Nitrophenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
Acenaphthene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Acenaphthylene	ND	ND,28	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Acetophenone	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Anthracene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Atrazine	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Benzaldehyde	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
Benzo(a)anthracene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Benzo(a)pyrene	ND	ND,29	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Benzo(b)fluoranthene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Benzo(g,h,i)perylene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Benzo(k)fluoranthene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Biphenyl	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
bis(2-Chloroethoxy)methane	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Butylbenzylphthalate	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Caprolactam	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
Carbazole	ND	ND,30	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Chrysene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Dibenzofuran	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Diethylphthalate	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A



Results

Client Sample ID	SD-08	Collected	08/27/2025 10:10
Lab Sample ID	3432966008	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Di-n-Butylphthalate	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Di-n-Octylphthalate	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Fluoranthene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Fluorene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Hexachlorobenzene	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Hexachlorobutadiene	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
Hexachloroethane	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Isophorone	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
mp-Cresol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
Naphthalene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Nitrobenzene	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
N-Nitroso-di-n-propylamine	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	143	SW846 8270E	1	09/09/2025 03:16	M1O	A
o-Cresol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
Pentachlorophenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
Phenanthrene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A
Phenol	ND	ND	ug/kg	286	SW846 8270E	1	09/09/2025 03:16	M1O	A
Pyrene	ND	ND	ug/kg	71.4	SW846 8270E	1	09/09/2025 03:16	M1O	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	65.6%	19 – 132	09/09/2025 03:16	
2-Fluorobiphenyl	321-60-8	64.2%	40 – 110	09/09/2025 03:16	
2-Fluorophenol	367-12-4	57.3%	26 – 116	09/09/2025 03:16	
Nitrobenzene-d5	4165-60-0	57.2%	38 – 112	09/09/2025 03:16	
Phenol-d5	4165-62-2	57.5%	35 – 111	09/09/2025 03:16	
Terphenyl-d14	98904-43-9	85.6%	45 – 126	09/09/2025 03:16	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:42	SUB	B
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:38	SUB	D

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	71.6	SW846 9056A	5	09/01/2025 12:04	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.36	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.9	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	31.4		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-08	Collected	08/27/2025 10:10
Lab Sample ID	3432966008	Lab Receipt	08/28/2025 09:50

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrate-N	ND	ND	mg/kg	7.2	SW846 9056A	5	09/01/2025 12:04	MYM	A
Nitrite-N	ND	ND	mg/kg	7.2	SW846 9056A	5	09/01/2025 12:04	MYM	A
pH	8.80	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	7620	31	mg/kg	728	SW846 9060A	1	09/11/2025 16:00	PAG	A
Total Solids	68.6		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-09	Collected	08/27/2025 12:10
Lab Sample ID	3432966009	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	227	SW846 8151A	1	09/10/2025 02:01	DXL	A
2,4,5-TP	ND	ND	ug/kg	134	SW846 8151A	1	09/10/2025 02:01	DXL	A
2,4-D	ND	ND	ug/kg	134	SW846 8151A	1	09/10/2025 02:01	DXL	A
2,4-DB	ND	ND	ug/kg	134	SW846 8151A	1	09/10/2025 02:01	DXL	A
Dalapon	ND	ND	ug/kg	134	SW846 8151A	1	09/10/2025 02:01	DXL	A
Dicamba	ND	ND	ug/kg	134	SW846 8151A	1	09/10/2025 02:01	DXL	A
Dichloroprop	ND	ND	ug/kg	134	SW846 8151A	1	09/10/2025 02:01	DXL	A
Dinoseb	ND	ND	ug/kg	227	SW846 8151A	1	09/10/2025 02:01	DXL	A
Pentachlorophenol	ND	ND	ug/kg	134	SW846 8151A	1	09/10/2025 02:01	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	60%	36 - 113	09/10/2025 02:01	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	2070	32	mg/kg	51.2	SW846 6020B	5	09/10/2025 15:15	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.2	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Arsenic, Total	3.3		mg/kg	1.7	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Barium, Total	19.6		mg/kg	2.9	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.58	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.58	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Calcium, Total	713	33,34,35	mg/kg	64.0	SW846 6020B	5	09/10/2025 15:15	KXH	A2
Chromium, Total	3.6		mg/kg	1.2	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Cobalt, Total	5.1		mg/kg	2.9	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Copper, Total	3.2		mg/kg	2.9	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Iron, Total	10900		mg/kg	29.2	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Lead, Total	3.1		mg/kg	1.2	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Magnesium, Total	263		mg/kg	58.3	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Manganese, Total	128		mg/kg	2.9	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.061	SW846 7471B	1	09/09/2025 12:09	RBP	A
Nickel, Total	11.2		mg/kg	2.9	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Potassium, Total	184		mg/kg	58.3	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Selenium, Total	ND	ND	mg/kg	2.9	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Silver, Total	ND	ND	mg/kg	1.2	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Sodium, Total	79.7		mg/kg	58.3	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.58	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Trivalent Chromium	3.6		mg/kg	2.6	Calculation	1	09/08/2025 14:11	CW	A
Vanadium, Total	4.7		mg/kg	1.2	SW846 6020B	5	09/04/2025 14:55	KXH	A1
Zinc, Total	30.5		mg/kg	2.9	SW846 6020B	5	09/04/2025 14:55	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.043	SW846 8082A	1	09/04/2025 21:33	DXL	A



Results

Client Sample ID	SD-09	Collected	08/27/2025 12:10
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PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.043	SW846 8082A	1	09/04/2025 21:33	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.043	SW846 8082A	1	09/04/2025 21:33	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.043	SW846 8082A	1	09/04/2025 21:33	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.043	SW846 8082A	1	09/04/2025 21:33	DXL	A
Aroclor-1254	ND	ND	mg/kg	0.043	SW846 8082A	1	09/04/2025 21:33	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.043	SW846 8082A	1	09/04/2025 21:33	DXL	A
Total Polychlorinated Biphenyl	ND	ND	mg/kg	0.043	SW846 8082A	1	09/04/2025 21:33	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	72.6%	49 – 115	09/04/2025 21:33	
Tetrachloro-m-xylene	877-09-8	83.7%	27 – 137	09/04/2025 21:33	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	11.1	SW846 8081B	5	09/05/2025 15:34	KJH	A
Aldrin	ND	ND,6	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
beta-BHC	ND	ND,2	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
delta-BHC	ND	ND,4	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
Dieldrin	ND	ND,9	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
Endosulfan I	ND	ND,8	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
Endosulfan II	ND	ND,11	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
Endrin	ND	ND,10	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
Endrin Ketone	ND	ND	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
gamma-BHC	ND	ND,5	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
Heptachlor	ND	ND,5	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	11.1	SW846 8081B	5	09/08/2025 18:59	KJH	A
Methoxychlor	ND	ND,16	ug/kg	21.5	SW846 8081B	5	09/05/2025 15:34	KJH	A
Toxaphene	ND	ND	ug/kg	228	SW846 8081B	5	09/08/2025 18:59	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	122%	30 – 135	09/08/2025 18:59	
Decachlorobiphenyl	2051-24-3	69%	30 – 135	09/05/2025 15:34	
Tetrachloro-m-xylene	877-09-8	90.1%	30 – 111	09/08/2025 18:59	
Tetrachloro-m-xylene	877-09-8	68.3%	30 – 111	09/05/2025 15:34	



Results

Client Sample ID	SD-09	Collected	08/27/2025 12:10
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SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
1,4-Dioxane	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
2,4-Dichlorophenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
2,4-Dimethylphenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
2,4-Dinitrophenol	ND	ND	ug/kg	477	SW846 8270E	1	09/09/2025 03:43	M1O	A
2,4-Dinitrotoluene	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
2,6-Dinitrotoluene	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
2-Chloronaphthalene	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
2-Chlorophenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
2-Methylnaphthalene	806		ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
2-Nitroaniline	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
2-Nitrophenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
3-Nitroaniline	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
4-Chloroaniline	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
4-Nitroaniline	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
4-Nitrophenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
Acenaphthene	ND	ND	ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Acenaphthylene	ND	ND,28	ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Acetophenone	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Anthracene	ND	ND	ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Atrazine	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Benzaldehyde	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
Benzo(a)anthracene	ND	ND	ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Benzo(a)pyrene	ND	ND,29	ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Benzo(b)fluoranthene	66.3		ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Benzo(g,h,i)perylene	132		ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Benzo(k)fluoranthene	ND	ND	ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Biphenyl	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
bis(2-Chloroethoxy)methane	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Butylbenzylphthalate	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Caprolactam	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
Carbazole	ND	ND,30	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Chrysene	117		ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Dibenzofuran	165		ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Diethylphthalate	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A



Results

Client Sample ID	SD-09	Collected	08/27/2025 12:10
Lab Sample ID	3432966009	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Di-n-Butylphthalate	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Di-n-Octylphthalate	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Fluoranthene	ND	ND	ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Fluorene	ND	ND	ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Hexachlorobenzene	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Hexachlorobutadiene	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
Hexachloroethane	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Isophorone	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
mp-Cresol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
Naphthalene	225		ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Nitrobenzene	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
N-Nitroso-di-n-propylamine	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	119	SW846 8270E	1	09/09/2025 03:43	M1O	A
o-Cresol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
Pentachlorophenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
Phenanthrene	470		ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A
Phenol	ND	ND	ug/kg	239	SW846 8270E	1	09/09/2025 03:43	M1O	A
Pyrene	62.4		ug/kg	59.7	SW846 8270E	1	09/09/2025 03:43	M1O	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	66.7%	19 – 132	09/09/2025 03:43	
2-Fluorobiphenyl	321-60-8	66.9%	40 – 110	09/09/2025 03:43	
2-Fluorophenol	367-12-4	64.8%	26 – 116	09/09/2025 03:43	
Nitrobenzene-d5	4165-60-0	64.6%	38 – 112	09/09/2025 03:43	
Phenol-d5	4165-62-2	62.1%	35 – 111	09/09/2025 03:43	
Terphenyl-d14	98904-43-9	93.1%	45 – 126	09/09/2025 03:43	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:42	SUB	B
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:38	SUB	D

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	67.0	SW846 9056A	5	09/01/2025 12:16	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.33	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.6	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	25.2		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-09	Collected	08/27/2025 12:10
Lab Sample ID	3432966009	Lab Receipt	08/28/2025 09:50

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrate-N	ND	ND	mg/kg	6.7	SW846 9056A	5	09/01/2025 12:16	MYM	A
Nitrite-N	ND	ND	mg/kg	6.7	SW846 9056A	5	09/01/2025 12:16	MYM	A
pH	7.25	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	7780		mg/kg	668	SW846 9060A	1	09/11/2025 16:00	PAG	A
Total Solids	74.8		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-10	Collected	08/27/2025 12:40
Lab Sample ID	3432966010	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	231	SW846 8151A	1	09/10/2025 02:28	DXL	A
2,4,5-TP	ND	ND	ug/kg	136	SW846 8151A	1	09/10/2025 02:28	DXL	A
2,4-D	ND	ND	ug/kg	136	SW846 8151A	1	09/10/2025 02:28	DXL	A
2,4-DB	ND	ND	ug/kg	136	SW846 8151A	1	09/10/2025 02:28	DXL	A
Dalapon	ND	ND	ug/kg	136	SW846 8151A	1	09/10/2025 02:28	DXL	A
Dicamba	ND	ND	ug/kg	136	SW846 8151A	1	09/10/2025 02:28	DXL	A
Dichloroprop	ND	ND	ug/kg	136	SW846 8151A	1	09/10/2025 02:28	DXL	A
Dinoseb	ND	ND	ug/kg	231	SW846 8151A	1	09/10/2025 02:28	DXL	A
Pentachlorophenol	ND	ND	ug/kg	136	SW846 8151A	1	09/10/2025 02:28	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	56.5%	36 - 113	09/10/2025 02:28	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	1160		mg/kg	47.4	SW846 6020B	5	09/10/2025 15:25	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Arsenic, Total	2.2		mg/kg	2.1	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Barium, Total	10.7		mg/kg	3.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.69	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.69	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Calcium, Total	200		mg/kg	59.2	SW846 6020B	5	09/10/2025 15:25	KXH	A2
Chromium, Total	2.7		mg/kg	1.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Cobalt, Total	6.0		mg/kg	3.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Copper, Total	ND	ND	mg/kg	3.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Iron, Total	9080		mg/kg	34.3	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Lead, Total	4.1		mg/kg	1.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Magnesium, Total	363		mg/kg	68.7	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Manganese, Total	179		mg/kg	3.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.066	SW846 7471B	1	09/09/2025 12:10	RBP	A
Nickel, Total	15.0		mg/kg	3.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Potassium, Total	211		mg/kg	68.7	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Selenium, Total	ND	ND	mg/kg	3.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Silver, Total	ND	ND	mg/kg	1.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Sodium, Total	115		mg/kg	68.7	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.69	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Trivalent Chromium	ND	ND	mg/kg	2.7	Calculation	1	09/08/2025 14:12	CW	A
Vanadium, Total	4.7		mg/kg	1.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1
Zinc, Total	35.4		mg/kg	3.4	SW846 6020B	5	09/04/2025 14:58	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.044	SW846 8082A	1	09/04/2025 21:44	DXL	A



Results

Client Sample ID	SD-10	Collected	08/27/2025 12:40
Lab Sample ID	3432966010	Lab Receipt	08/28/2025 09:50

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.044	SW846 8082A	1	09/04/2025 21:44	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.044	SW846 8082A	1	09/04/2025 21:44	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.044	SW846 8082A	1	09/04/2025 21:44	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.044	SW846 8082A	1	09/04/2025 21:44	DXL	A
Aroclor-1254	ND	ND	mg/kg	0.044	SW846 8082A	1	09/04/2025 21:44	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.044	SW846 8082A	1	09/04/2025 21:44	DXL	A
Total Polychlorinated Biphenyl	ND	ND	mg/kg	0.044	SW846 8082A	1	09/04/2025 21:44	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	69.8%	49 – 115	09/04/2025 21:44	
Tetrachloro-m-xylene	877-09-8	81.7%	27 – 137	09/04/2025 21:44	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	11.3	SW846 8081B	5	09/05/2025 17:04	KJH	A
Aldrin	ND	ND,6	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
beta-BHC	ND	ND,2	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
delta-BHC	ND	ND,4	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
Dieldrin	ND	ND,9	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
Endosulfan I	ND	ND,8	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
Endosulfan II	ND	ND,11	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
Endrin	ND	ND,10	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
Endrin Ketone	ND	ND	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
gamma-BHC	ND	ND,5	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
Heptachlor	ND	ND,5	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	11.3	SW846 8081B	5	09/08/2025 19:11	KJH	A
Methoxychlor	ND	ND,16	ug/kg	22.0	SW846 8081B	5	09/05/2025 17:04	KJH	A
Toxaphene	ND	ND	ug/kg	233	SW846 8081B	5	09/08/2025 19:11	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	125%	30 – 135	09/08/2025 19:11	
Decachlorobiphenyl	2051-24-3	45.5%	30 – 135	09/05/2025 17:04	
Tetrachloro-m-xylene	877-09-8	94%	30 – 111	09/08/2025 19:11	
Tetrachloro-m-xylene	877-09-8	55.1%	30 – 111	09/05/2025 17:04	



Results

Client Sample ID	SD-10	Collected	08/27/2025 12:40
Lab Sample ID	3432966010	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
1,4-Dioxane	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
2,4-Dichlorophenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
2,4-Dimethylphenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
2,4-Dinitrophenol	ND	ND	ug/kg	558	SW846 8270E	1	09/09/2025 04:09	M1O	A
2,4-Dinitrotoluene	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
2,6-Dinitrotoluene	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
2-Chloronaphthalene	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
2-Chlorophenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
2-Methylnaphthalene	988		ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
2-Nitroaniline	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
2-Nitrophenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
3-Nitroaniline	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
4-Chloroaniline	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
4-Nitroaniline	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
4-Nitrophenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
Acenaphthene	ND	ND	ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Acenaphthylene	ND	ND,28	ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Acetophenone	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Anthracene	ND	ND	ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Atrazine	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Benzaldehyde	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
Benzo(a)anthracene	ND	ND	ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Benzo(a)pyrene	ND	ND,29	ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Benzo(b)fluoranthene	90.6		ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Benzo(g,h,i)perylene	105		ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Benzo(k)fluoranthene	ND	ND	ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Biphenyl	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
bis(2-Chloroethoxy)methane	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Butylbenzylphthalate	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Caprolactam	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
Carbazole	ND	ND,30	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Chrysene	122		ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Dibenzofuran	206		ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Diethylphthalate	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A



Results

Client Sample ID	SD-10	Collected	08/27/2025 12:40
Lab Sample ID	3432966010	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Di-n-Butylphthalate	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Di-n-Octylphthalate	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Fluoranthene	85.7		ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Fluorene	ND	ND	ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Hexachlorobenzene	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Hexachlorobutadiene	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
Hexachloroethane	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Isophorone	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
mp-Cresol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
Naphthalene	472		ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Nitrobenzene	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
N-Nitroso-di-n-propylamine	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	140	SW846 8270E	1	09/09/2025 04:09	M1O	A
o-Cresol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
Pentachlorophenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
Phenanthrene	441		ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A
Phenol	ND	ND	ug/kg	279	SW846 8270E	1	09/09/2025 04:09	M1O	A
Pyrene	88.1		ug/kg	69.8	SW846 8270E	1	09/09/2025 04:09	M1O	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	81.4%	19 – 132	09/09/2025 04:09	
2-Fluorobiphenyl	321-60-8	80.9%	40 – 110	09/09/2025 04:09	
2-Fluorophenol	367-12-4	71.6%	26 – 116	09/09/2025 04:09	
Nitrobenzene-d5	4165-60-0	70.2%	38 – 112	09/09/2025 04:09	
Phenol-d5	4165-62-2	70.1%	35 – 111	09/09/2025 04:09	
Terphenyl-d14	98904-43-9	103%	45 – 126	09/09/2025 04:09	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:43	SUB	B
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:39	SUB	D

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	68.3	SW846 9056A	5	09/01/2025 12:27	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.34	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.7	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	28.3		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-10	Collected	08/27/2025 12:40
Lab Sample ID	3432966010	Lab Receipt	08/28/2025 09:50

WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Nitrate-N	ND	ND	mg/kg	6.8	SW846 9056A	5	09/01/2025 12:27	MYM	A
Nitrite-N	ND	ND	mg/kg	6.8	SW846 9056A	5	09/01/2025 12:27	MYM	A
pH	7.19	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	8190		mg/kg	698	SW846 9060A	1	09/11/2025 16:00	PAG	A
Total Solids	71.7		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	SD-11	Collected	08/27/2025 09:30
Lab Sample ID	3432966011	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/kg	237	SW846 8151A	1	09/10/2025 02:54	DXL	A
2,4,5-TP	ND	ND	ug/kg	140	SW846 8151A	1	09/10/2025 02:54	DXL	A
2,4-D	ND	ND	ug/kg	140	SW846 8151A	1	09/10/2025 02:54	DXL	A
2,4-DB	ND	ND	ug/kg	140	SW846 8151A	1	09/10/2025 02:54	DXL	A
Dalapon	ND	ND	ug/kg	140	SW846 8151A	1	09/10/2025 02:54	DXL	A
Dicamba	ND	ND	ug/kg	140	SW846 8151A	1	09/10/2025 02:54	DXL	A
Dichloroprop	ND	ND	ug/kg	140	SW846 8151A	1	09/10/2025 02:54	DXL	A
Dinoseb	ND	ND	ug/kg	237	SW846 8151A	1	09/10/2025 02:54	DXL	A
Pentachlorophenol	ND	ND	ug/kg	140	SW846 8151A	1	09/10/2025 02:54	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	56.5%	36 - 113	09/10/2025 02:54	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	1790		mg/kg	52.1	SW846 6020B	5	09/10/2025 15:27	KXH	A2
Antimony, Total	ND	ND	mg/kg	1.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Arsenic, Total	ND	ND	mg/kg	2.0	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Barium, Total	17.3		mg/kg	3.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Beryllium, Total	ND	ND	mg/kg	0.66	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Cadmium, Total	ND	ND	mg/kg	0.66	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Calcium, Total	525		mg/kg	65.2	SW846 6020B	5	09/10/2025 15:27	KXH	A2
Chromium, Total	2.7		mg/kg	1.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Cobalt, Total	5.3		mg/kg	3.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Copper, Total	3.4		mg/kg	3.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Iron, Total	7500		mg/kg	33.1	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Lead, Total	4.1		mg/kg	1.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Magnesium, Total	340		mg/kg	66.1	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Manganese, Total	178		mg/kg	3.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Mercury, Total	ND	ND	mg/kg	0.068	SW846 7471B	1	09/09/2025 12:13	RBP	A
Nickel, Total	13.6		mg/kg	3.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Potassium, Total	160		mg/kg	66.1	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Selenium, Total	ND	ND	mg/kg	3.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Silver, Total	ND	ND	mg/kg	1.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Sodium, Total	77.7		mg/kg	66.1	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Thallium, Total	ND	ND	mg/kg	0.66	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Trivalent Chromium	ND	ND	mg/kg	2.8	Calculation	1	09/08/2025 14:13	CW	A
Vanadium, Total	3.3		mg/kg	1.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1
Zinc, Total	31.4		mg/kg	3.3	SW846 6020B	5	09/04/2025 15:00	KXH	A1

PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:54	DXL	A



Results

Client Sample ID	SD-11	Collected	08/27/2025 09:30
Lab Sample ID	3432966011	Lab Receipt	08/28/2025 09:50

PCBs (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1221	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:54	DXL	A
Aroclor-1232	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:54	DXL	A
Aroclor-1242	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:54	DXL	A
Aroclor-1248	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:54	DXL	A
Aroclor-1254	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:54	DXL	A
Aroclor-1260	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:54	DXL	A
Total Polychlorinated Biphenyl	ND	ND	mg/kg	0.046	SW846 8082A	1	09/04/2025 21:54	DXL	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	69.2%	49 – 115	09/04/2025 21:54	
Tetrachloro-m-xylene	877-09-8	80.4%	27 – 137	09/04/2025 21:54	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,12	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
4,4'-DDE	ND	ND,9	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
4,4'-DDT	ND	ND,15	ug/kg	11.9	SW846 8081B	5	09/05/2025 17:16	KJH	A
Aldrin	ND	ND,6	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
alpha-Chlordane	ND	ND,13	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
alpha-HCH (alpha-BHC)	ND	ND,1	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
beta-BHC	ND	ND,2	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
delta-BHC	ND	ND,4	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
Dieldrin	ND	ND,9	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
Endosulfan I	ND	ND,8	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
Endosulfan II	ND	ND,11	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
Endosulfan Sulfate	ND	ND	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
Endrin	ND	ND,10	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
Endrin Aldehyde	ND	ND	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
Endrin Ketone	ND	ND	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
gamma-BHC	ND	ND,5	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
gamma-Chlordane	ND	ND,14	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
Heptachlor	ND	ND,5	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
Heptachlor Epoxide	ND	ND,7	ug/kg	11.9	SW846 8081B	5	09/08/2025 19:22	KJH	A
Methoxychlor	ND	ND,16	ug/kg	23.1	SW846 8081B	5	09/05/2025 17:16	KJH	A
Toxaphene	ND	ND	ug/kg	245	SW846 8081B	5	09/08/2025 19:22	KJH	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	37.2%	30 – 135	09/05/2025 17:16	
Decachlorobiphenyl	2051-24-3	123%	30 – 135	09/08/2025 19:22	
Tetrachloro-m-xylene	877-09-8	56.1%	30 – 111	09/05/2025 17:16	
Tetrachloro-m-xylene	877-09-8	91.5%	30 – 111	09/08/2025 19:22	



Results

Client Sample ID	SD-11	Collected	08/27/2025 09:30
Lab Sample ID	3432966011	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
1,4-Dioxane	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
2,3,4,6-Tetrachlorophenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
2,4,5-Trichlorophenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
2,4,6-Trichlorophenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
2,4-Dichlorophenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
2,4-Dimethylphenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
2,4-Dinitrophenol	ND	ND	ug/kg	501	SW846 8270E	1	09/09/2025 04:35	M1O	A
2,4-Dinitrotoluene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
2,6-Dinitrotoluene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
2-Chloronaphthalene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
2-Chlorophenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
2-Methyl-4,6-dinitrophenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
2-Methylnaphthalene	150		ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
2-Nitroaniline	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
2-Nitrophenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
3,3-Dichlorobenzidine	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
3-Nitroaniline	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
4-Bromophenyl-phenylether	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
4-Chloro-3-methylphenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
4-Chloroaniline	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
4-Chlorophenyl-phenylether	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
4-Nitroaniline	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
4-Nitrophenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
Acenaphthene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Acenaphthylene	ND	ND,28	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Acetophenone	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Anthracene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Atrazine	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Benzaldehyde	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
Benzo(a)anthracene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Benzo(a)pyrene	ND	ND,29	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Benzo(b)fluoranthene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Benzo(g,h,i)perylene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Benzo(k)fluoranthene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Biphenyl	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
bis(2-Chloroethoxy)methane	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
bis(2-Chloroethyl)ether	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
bis(2-Chloroisopropyl)ether	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
bis(2-Ethylhexyl)phthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Butylbenzylphthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Caprolactam	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
Carbazole	ND	ND,30	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Chrysene	70.6		ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Dibenzo(a,h)anthracene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Dibenzofuran	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Diethylphthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A



Results

Client Sample ID	SD-11	Collected	08/27/2025 09:30
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SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Dimethylphthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Di-n-Butylphthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Di-n-Octylphthalate	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Fluoranthene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Fluorene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Hexachlorobenzene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Hexachlorobutadiene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Hexachlorocyclopentadiene	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
Hexachloroethane	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
Indeno(1,2,3-cd)pyrene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Isophorone	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
mp-Cresol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
Naphthalene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Nitrobenzene	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
N-Nitroso-di-n-propylamine	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
N-Nitrosodiphenylamine	ND	ND	ug/kg	125	SW846 8270E	1	09/09/2025 04:35	M1O	A
o-Cresol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
Pentachlorophenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
Phenanthrene	215		ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A
Phenol	ND	ND	ug/kg	251	SW846 8270E	1	09/09/2025 04:35	M1O	A
Pyrene	ND	ND	ug/kg	62.6	SW846 8270E	1	09/09/2025 04:35	M1O	A

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	59.2%	19 – 132	09/09/2025 04:35	
2-Fluorobiphenyl	321-60-8	52.6%	40 – 110	09/09/2025 04:35	
2-Fluorophenol	367-12-4	39.3%	26 – 116	09/09/2025 04:35	
Nitrobenzene-d5	4165-60-0	41%	38 – 112	09/09/2025 04:35	
Phenol-d5	4165-62-2	42.7%	35 – 111	09/09/2025 04:35	
Terphenyl-d14	98904-43-9	74.4%	45 – 126	09/09/2025 04:35	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	21			Subcontract	1	09/24/2025 14:39	SUB	B

WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Chloride	ND	ND	mg/kg	71.9	SW846 9056A	5	09/01/2025 13:24	MYM	A
Cyanide, Total	ND	ND	mg/kg	0.36	SW846 9012B	1	09/09/2025 13:30	GED	A
Hexavalent Chromium	ND	ND	mg/kg	2.8	SW846 7196A	1	09/05/2025 10:10	AYS	A
Moisture	30.0		%		In-House	1	08/29/2025 13:25	MAN	A
Nitrate-N	ND	ND	mg/kg	7.2	SW846 9056A	5	09/01/2025 13:24	MYM	A
Nitrite-N	ND	ND	mg/kg	7.2	SW846 9056A	5	09/01/2025 13:24	MYM	A



Results

Client Sample ID	SD-11	Collected	08/27/2025 09:30
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WET CHEMISTRY (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
pH	7.22	19,20	pH_Units		SW846 9045D	1	09/05/2025 07:56	AYS	A
Total Organic Carbon (TOC)	14300		mg/kg	714	SW846 9060A	1	09/11/2025 16:00	PAG	A
Total Solids	70.0		%		In-House	1	08/29/2025 13:25	MAN	A



Results

Client Sample ID	EB-01	Collected	08/27/2025 13:20
Lab Sample ID	3432966012	Lab Receipt	08/28/2025 09:50

HERBICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
2,4,5-T	ND	ND	ug/L	1.0	SW846 8151A	1	09/06/2025 07:35	DXL	E1
2,4,5-TP	ND	ND	ug/L	1.0	SW846 8151A	1	09/06/2025 07:35	DXL	E1
2,4-D	ND	ND	ug/L	2.0	SW846 8151A	1	09/06/2025 07:35	DXL	E1
2,4-DB	ND	ND	ug/L	1.0	SW846 8151A	1	09/06/2025 07:35	DXL	E1
Dalapon	ND	ND	ug/L	2.0	SW846 8151A	1	09/06/2025 07:35	DXL	E1
Dicamba	ND	ND	ug/L	1.0	SW846 8151A	1	09/06/2025 07:35	DXL	E1
Dichloroprop	ND	ND	ug/L	1.0	SW846 8151A	1	09/06/2025 07:35	DXL	E1
Dinoseb	ND	ND	ug/L	1.0	SW846 8151A	1	09/06/2025 07:35	DXL	E1
MCPA	ND	ND	ug/L	200	SW846 8151A	1	09/06/2025 07:35	DXL	E1
MCPP	ND	ND,44	ug/L	200	SW846 8151A	1	09/06/2025 07:35	DXL	E1
Pentachlorophenol	ND	ND	ug/L	1.0	SW846 8151A	1	09/06/2025 07:35	DXL	E1

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4-Dichlorophenylacetic acid	19719-28-9	123 %	14 - 172	09/06/2025 07:35	

METALS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aluminum, Total	ND	ND	mg/L	0.090	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Antimony, Total	ND	ND	mg/L	0.0022	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Arsenic, Total	ND	ND	mg/L	0.0033	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Barium, Total	ND	ND	mg/L	0.0056	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Beryllium, Total	ND	ND	mg/L	0.0011	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Cadmium, Total	ND	ND	mg/L	0.0011	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Calcium, Total	0.51		mg/L	0.11	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Chromium, Total	ND	ND	mg/L	0.0022	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Cobalt, Total	ND	ND	mg/L	0.0056	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Copper, Total	ND	ND	mg/L	0.0056	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Iron, Total	ND	ND	mg/L	0.056	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Lead, Total	ND	ND	mg/L	0.0022	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Magnesium, Total	0.12		mg/L	0.11	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Manganese, Total	ND	ND	mg/L	0.0056	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Mercury, Total	ND	ND	mg/L	0.00050	SW846 7470A	1	09/05/2025 11:28	RBP	A
Nickel, Total	ND	ND	mg/L	0.0056	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Potassium, Total	ND	ND	mg/L	0.11	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Selenium, Total	ND	ND	mg/L	0.0056	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Silver, Total	ND	ND	mg/L	0.0022	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Sodium, Total	1.0		mg/L	0.11	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Thallium, Total	ND	ND	mg/L	0.0011	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Trivalent Chromium	ND	ND	mg/L	0.010	Calculation	1	09/10/2025 13:03	CW	C
Vanadium, Total	ND	ND	mg/L	0.0022	SW846 6020B	1	09/09/2025 10:03	KXH	A1
Zinc, Total	0.0058		mg/L	0.0056	SW846 6020B	1	09/09/2025 10:03	KXH	A1



Results

Client Sample ID	EB-01	Collected	08/27/2025 13:20
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METALS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
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PCBs

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Aroclor-1016	ND	ND	ug/L	0.48	SW846 8082A	1	09/02/2025 17:46	DXL	F
Aroclor-1221	ND	ND	ug/L	0.48	SW846 8082A	1	09/02/2025 17:46	DXL	F
Aroclor-1232	ND	ND	ug/L	0.48	SW846 8082A	1	09/02/2025 17:46	DXL	F
Aroclor-1242	ND	ND	ug/L	0.48	SW846 8082A	1	09/02/2025 17:46	DXL	F
Aroclor-1248	ND	ND	ug/L	0.48	SW846 8082A	1	09/02/2025 17:46	DXL	F
Aroclor-1254	ND	ND	ug/L	0.48	SW846 8082A	1	09/02/2025 17:46	DXL	F
Aroclor-1260	ND	ND	ug/L	0.48	SW846 8082A	1	09/02/2025 17:46	DXL	F
Aroclor-1262	ND	ND	ug/L	0.48	SW846 8082A	1	09/02/2025 17:46	DXL	F
Aroclor-1268	ND	ND	ug/L	0.48	SW846 8082A	1	09/02/2025 17:46	DXL	F

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	69.6%	30 - 140	09/02/2025 17:46	
Tetrachloro-m-xylene	877-09-8	65.5%	30 - 133	09/02/2025 17:46	

PESTICIDES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
4,4'-DDD	ND	ND,41	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
4,4'-DDE	ND	ND,42	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
4,4'-DDT	ND	ND	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Aldrin	ND	ND,39	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
alpha-Chlordane	ND	ND,42	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
alpha-HCH (alpha-BHC)	ND	ND,42	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
beta-BHC	ND	ND,40	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
delta-BHC	ND	ND	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Dieldrin	ND	ND	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Endosulfan I	ND	ND,40	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Endosulfan II	ND	ND,14	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Endosulfan Sulfate	ND	ND,43	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Endrin	ND	ND	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Endrin Aldehyde	ND	ND,11	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Endrin Ketone	ND	ND	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
gamma-BHC	ND	ND,41	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
gamma-Chlordane	ND	ND	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Heptachlor	ND	ND	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Heptachlor Epoxide	ND	ND	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Methoxychlor	ND	ND	ug/L	0.40	SW846 8081B	1	09/03/2025 12:51	WDA	G
Toxaphene	ND	ND	ug/L	20.0	SW846 8081B	1	09/03/2025 12:51	WDA	G



Results

Client Sample ID	EB-01	Collected	08/27/2025 13:20
Lab Sample ID	3432966012	Lab Receipt	08/28/2025 09:50

PESTICIDES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
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SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
Decachlorobiphenyl	2051-24-3	56.7%	30 – 140	09/03/2025 12:51	
Tetrachloro-m-xylene	877-09-8	47.8%	30 – 123	09/03/2025 12:51	

SEMIVOLATILES

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
1,2,4,5-Tetrachlorobenzene	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
1,4-Dioxane	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2,3,4,6-Tetrachlorophenol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2,4,5-Trichlorophenol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2,4,6-Trichlorophenol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2,4-Dichlorophenol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2,4-Dimethylphenol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2,4-Dinitrophenol	ND	ND	ug/L	7.1	SW846 8270E	1	09/03/2025 15:16	CGS	D
2,4-Dinitrotoluene	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2,6-Dinitrotoluene	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2-Chloronaphthalene	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2-Chlorophenol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2-Methyl-4,6-dinitrophenol	ND	ND	ug/L	7.1	SW846 8270E	1	09/03/2025 15:16	CGS	D
2-Methylnaphthalene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
2-Nitroaniline	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
2-Nitrophenol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
3,3-Dichlorobenzidine	ND	ND	ug/L	19.0	SW846 8270E	1	09/03/2025 15:16	CGS	D
3-Nitroaniline	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
4-Bromophenyl-phenylether	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
4-Chloro-3-methylphenol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
4-Chloroaniline	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
4-Chlorophenyl-phenylether	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
4-Nitroaniline	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
4-Nitrophenol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Acenaphthene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Acenaphthylene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Acetophenone	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Anthracene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Atrazine	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Benzaldehyde	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Benzo(a)anthracene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Benzo(a)pyrene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Benzo(b)fluoranthene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Benzo(g,h,i)perylene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Benzo(k)fluoranthene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Biphenyl	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
bis(2-Chloroethoxy)methane	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D



Results

Client Sample ID	EB-01	Collected	08/27/2025 13:20
Lab Sample ID	3432966012	Lab Receipt	08/28/2025 09:50

SEMIVOLATILES (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
bis(2-Chloroethyl)ether	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
bis(2-Chloroisopropyl)ether	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
bis(2-Ethylhexyl)phthalate	ND	ND,37	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Butylbenzylphthalate	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Caprolactam	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Carbazole	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Chrysene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Dibenzo(a,h)anthracene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Dibenzofuran	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Diethylphthalate	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Dimethylphthalate	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Di-n-Butylphthalate	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Di-n-Octylphthalate	ND	ND,36	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Fluoranthene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Fluorene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Hexachlorobenzene	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Hexachlorobutadiene	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Hexachlorocyclopentadiene	ND	ND,38	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Hexachloroethane	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Indeno(1,2,3-cd)pyrene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Isophorone	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
mp-Cresol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Naphthalene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Nitrobenzene	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
N-Nitroso-di-n-propylamine	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
N-Nitrosodiphenylamine	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
o-Cresol	ND	ND	ug/L	3.6	SW846 8270E	1	09/03/2025 15:16	CGS	D
Pentachlorophenol	ND	ND	ug/L	9.5	SW846 8270E	1	09/03/2025 15:16	CGS	D
Phenanthrene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D
Phenol	ND	ND	ug/L	9.5	SW846 8270E	1	09/03/2025 15:16	CGS	D
Pyrene	ND	ND	ug/L	1.8	SW846 8270E	1	09/03/2025 15:16	CGS	D

SURROGATES

Compound	CAS No	Recovery	Limits(%)	Analysis Date/Time	Qualifiers
2,4,6-Tribromophenol	118-79-6	83.8%	23 – 131	09/03/2025 15:16	
2-Fluorobiphenyl	321-60-8	73.9%	24 – 116	09/03/2025 15:16	
2-Fluorophenol	367-12-4	56.3%	10 – 85	09/03/2025 15:16	
Nitrobenzene-d5	4165-60-0	82.9%	32 – 125	09/03/2025 15:16	
Phenol-d5	4165-62-2	49.3%	7 – 56	09/03/2025 15:16	
Terphenyl-d14	98904-43-9	76.5%	41 – 145	09/03/2025 15:16	

SUBCONTRACTED ANALYSIS

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Subcontracted Analysis	See attached	22			Subcontract	1	09/24/2025 14:43	SUB	H



Results

Client Sample ID	EB-01	Collected	08/27/2025 13:20
Lab Sample ID	3432966012	Lab Receipt	08/28/2025 09:50

SUBCONTRACTED ANALYSIS (cont.)

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
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WET CHEMISTRY

Compound	Result	Flag	Units	RDL	Method	Dilution	Analysis Date/Time	By	Cntr
Hexavalent Chromium	ND	ND,45	mg/L	0.010	SW846 7196A	1	08/30/2025 11:35	NPF	C



Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3432966001	SD-01	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	
3432966002	SD-02	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	
3432966003	SD-03	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	



Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3432966004	SD-04	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	
3432966005	SD-05	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	
3432966006	SD-06	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	



Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3432966007	SD-07	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	
3432966008	SD-08	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	
3432966009	SD-09	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	



Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3432966010	SD-10	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	
3432966011	SD-11	SW846 6020B	SW846 3051A	
		SW846 6020B	SW846 3051A	
		SW846 7471B	SW846 7471B	
		Subcontract	N/A	
		SW846 8081B	SW846 3546	
		SW846 8082A	SW846 3546	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3546	
		Calculation	N/A	
		In-House	N/A	
		SW846 7196A	SW846 3060A	
		SW846 9012B	SW846 9012B	
		SW846 9045D	N/A	
		SW846 9056A	SW846 9056A	
		SW846 9060A	N/A	
3432966012	EB-01	SW846 6020B	SW846 3015A	
		SW846 7470A	SW846 7470A	
		Subcontract	N/A	
		SW846 8081B	SW846 3511	
		SW846 8082A	SW846 3511	
		SW846 8151A	SW846 8151A	
		SW846 8270E	SW846 3510C	
		Calculation	N/A	
		SW846 7196A	N/A	



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3432966001	SD-01	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1466973	09/08/2025 12:13	J1K	SW846 6020B	1467582
		SW846 7471B	1466025	09/04/2025 16:04	ZAS	SW846 7471B	1466181
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1465051	09/05/2025 09:10	BMP	SW846 8151A	1466368
		SW846 3546	1466020	09/08/2025 00:00	RXR	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1467779
3432966002	SD-02	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1466973	09/08/2025 12:13	J1K	SW846 6020B	1467582
		SW846 7471B	1466025	09/04/2025 16:04	ZAS	SW846 7471B	1466181
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1465051	09/05/2025 09:10	BMP	SW846 8151A	1466368
		SW846 3546	1466020	09/08/2025 00:00	RXR	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1467779
3432966003	SD-03	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1466973	09/08/2025 12:13	J1K	SW846 6020B	1467582
		SW846 7471B	1466025	09/04/2025 16:04	ZAS	SW846 7471B	1466181
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1465051	09/05/2025 09:10	BMP	SW846 8151A	1466368
		SW846 3546	1466020	09/08/2025 00:00	RXR	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1467779



Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3432966004	SD-04	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1466973	09/08/2025 12:13	J1K	SW846 6020B	1467582
		SW846 7471B	1466025	09/04/2025 16:04	ZAS	SW846 7471B	1466181
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1465051	09/05/2025 09:10	BMP	SW846 8151A	1466368
		SW846 3546	1466020	09/08/2025 00:00	RXR	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1467779
3432966005	SD-05	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1466973	09/08/2025 12:13	J1K	SW846 6020B	1467582
		SW846 7471B	1466025	09/04/2025 16:04	ZAS	SW846 7471B	1466181
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1465051	09/05/2025 09:10	BMP	SW846 8151A	1466368
		SW846 3546	1466020	09/08/2025 00:00	RXR	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1467779
3432966006	SD-06	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1466973	09/08/2025 12:13	J1K	SW846 6020B	1467582
		SW846 7471B	1466654	09/08/2025 14:08	ZAS	SW846 7471B	1467669
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1466058	09/09/2025 09:00	BMP	SW846 8151A	1467722
		SW846 3546	1466234	09/08/2025 05:15	J1H	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1468098
3432966007	SD-07	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1466973	09/08/2025 12:13	J1K	SW846 6020B	1467582
		SW846 7471B	1466654	09/08/2025 14:08	ZAS	SW846 7471B	1467669
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1466058	09/09/2025 09:00	BMP	SW846 8151A	1467722
		SW846 3546	1466234	09/08/2025 05:15	J1H	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1468098



Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3432966008	SD-08	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1466973	09/08/2025 12:13	J1K	SW846 6020B	1467582
		SW846 7471B	1466654	09/08/2025 14:08	ZAS	SW846 7471B	1467669
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1466058	09/09/2025 09:00	BMP	SW846 8151A	1467722
		SW846 3546	1466234	09/08/2025 05:15	J1H	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1468098
3432966009	SD-09	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1467649	09/09/2025 14:48	J1K	SW846 6020B	1467814
		SW846 7471B	1466654	09/08/2025 14:08	ZAS	SW846 7471B	1467669
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1466058	09/09/2025 09:00	BMP	SW846 8151A	1467722
		SW846 3546	1466234	09/08/2025 05:15	J1H	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1468098
3432966010	SD-10	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1467649	09/09/2025 14:48	J1K	SW846 6020B	1467814
		SW846 7471B	1466654	09/08/2025 14:08	ZAS	SW846 7471B	1467669
		N/A	N/A	N/A		Subcontract	
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1466058	09/09/2025 09:00	BMP	SW846 8151A	1467722
		SW846 3546	1466234	09/08/2025 05:15	J1H	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1468098
3432966011	SD-11	SW846 3051A	1464090	08/29/2025 10:05	J1K	SW846 6020B	1465039
		SW846 3051A	1467649	09/09/2025 14:48	J1K	SW846 6020B	1467814
		SW846 7471B	1466654	09/08/2025 14:08	ZAS	SW846 7471B	1467669
		N/A	N/A	N/A		Subcontract	
		SW846 3546	1465079	09/04/2025 06:10	J1H	SW846 8081B	1466209
		SW846 3546	1465080	09/04/2025 06:10	J1H	SW846 8082A	1466185
		SW846 8151A	1466058	09/09/2025 09:00	BMP	SW846 8151A	1467722
		SW846 3546	1466234	09/08/2025 05:15	J1H	SW846 8270E	1467473
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		In-House	1464122
		SW846 3060A	1465897	09/05/2025 06:33	AYS	SW846 7196A	1466255
		SW846 9012B	1466019	09/04/2025 11:30	GED	SW846 9012B	1467041
		N/A	N/A	N/A		SW846 9045D	1465052
		SW846 9056A	1464757	09/01/2025 09:20	MYM	SW846 9056A	1464763
		N/A	N/A	N/A		SW846 9060A	1468098



Lab ID	Sample ID	Preparation Method	Prep Batch	Prep Date/Time	By	Analysis Method	Anly Batch
3432966012	EB-01	SW846 3015A	1467002	09/08/2025 09:46	RMH	SW846 6020B	1467581
		SW846 7470A	1466031	09/04/2025 14:45	ZAS	SW846 7470A	1466332
		N/A	N/A	N/A		Subcontract	
		SW846 3511	1464984	09/02/2025 00:00	RXR	SW846 8081B	1465910
		SW846 3511	1464982	09/02/2025 00:00	RXR	SW846 8082A	1465455
		SW846 8151A	1464141	08/29/2025 17:30	JEK	SW846 8151A	1466369
		SW846 3510C	1465026	09/02/2025 16:30	RRB	SW846 8270E	1465936
		N/A	N/A	N/A		Calculation	
		N/A	N/A	N/A		SW846 7196A	1464359



Middletown Sample Condition Form

Client GFT Workorder 3432966
Temp °C 4⁰ Therm ID 649 Ice? (Y) N N/A Initials & Date DB 8/28/25
Fedex UPS (Client) ALS Other Tracking # _____

	Yes	No ¹	N/A	Comments
Cooler Custody Seals present & intact			✓	
Sample Custody Seals present & intact			✓	
Chain-of-Custody present	✓			
Sample collector name present <i>If not present, must contact PM/client to request name.</i>	✓			
COC/bottle labels complete & in agreement	✓			
•Sample location	✓			
•Date and time of sample collection	✓			
•Type(s) of preservation	✓			
•Number of containers	✓			
•Composite or grab	✓			
•Matrix	✓			
Proper containers, preservation, and volume per method	✓			
Received within hold time	✓			
Containers intact	✓			
Trip blanks present (EPA 504, EPA 524)			✓	
Field blanks present (Hg 1631, PFAS)			✓	
NJ ≤ 4 Days			✓	
CR6 Samples Filtered			✓	
OP Samples Filtered			✓	
WV Containers 0-6°C	✓			
SDWA compliance reporting			✓	

¹ If No, provide comment

Rad Screen (uCi) _____

PM - PM to contact client
N/A - Not Applicable
UC - Updated coc with missing information

Review Comments:



right solutions.
right partner.

September 24, 2025

Cheyenne Peterson
ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057

Re: **40-3432966**

Date Received: **09/03/2025**

Work Order: **HN2512651**

Dear Cheyenne,

Enclosed are the results of the sample(s) submitted to our laboratory.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Chelsey Cook

/S/ CHELSEY COOK

Project Manager



Client: ALS Environmental
Project: 40-3432966

Work Order: HN2512651
Date Received: 03-Sep-2025

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt

12 soil/solid, water samples were received for analysis at ALS Environmental on 03-Sep-2025. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Organics

EPA 1633-S

Run ID: 3495004

The Independent Calibration Verification did not meet method acceptance criteria for the following analytes, results are to be considered estimated: NMeFOSA, High bias, LCS1/2 recoveries within range.

The Independent Calibration Verification did not meet acceptance criteria with high bias, however, all sample/MBLK results were non-detect for the following analytes: NMeFOSA.

HN2512651-001: 13C2-PFHxDA - The Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, results are to be considered estimated: (Confirmed through re-analysis. High bias, surrogate within range and corresponding analytes non-detect in samples)

HN2512651-001: Perfluorooctadecanoic acid (PFODA) - The Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, results are to be considered estimated: (confirmed through re-analysis. Suspect matrixes)

HN2512651-001: 13C2-FtS 10:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.

HN2512651-001: 13C2-FtS 4:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.

HN2512651-002: d5-N-EtFOSAA - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.

HN2512651-002: 13C2-FtS 10:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.

Run ID: 3518527

The Independent Calibration Verification did not meet method acceptance criteria for the following analytes, results are to be considered estimated: NMeFOSA, high bias, LCS1/LCS2 recoveries within range.

The Independent Calibration Verification did not meet acceptance criteria with high bias, however, the MBLK/all sample results were non-detect for the following analytes: NMeFOSA

EPA 1633-W

Run ID: 3484334

The Independent Calibration Verification did not meet acceptance criteria with high bias, however, all sample/MBLK results were non-detect for the following analytes: NMeFOSA.

The Independent Calibration Verification did not meet method acceptance criteria for the following analytes, results are to be considered estimated: High bias NMeFOSA, LCS1/LCS2 recoveries within range.

HN2512651-012: 13C2-FtS 10:2 - One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: 3432966-001				Lab ID: HN2512651-001		
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Analyte	Results	Flag	MDL	MRL	Units	Method
% Gravel	8.08			0	%	ASTM D422-63 (07)
% Sand	75.3			0	%	ASTM D422-63 (07)
% Silt, Clay, Colloids	16.6			0	%	ASTM D422-63 (07)
0.0015 mm (Hydrometer)	3.00			0	%	ASTM D422-63 (07)
0.005 mm (Hydrometer)	4.00			0	%	ASTM D422-63 (07)
0.030 mm (Hydrometer)	5.00			0	%	ASTM D422-63 (07)
0.375 Inch Sieve	100			0	%	ASTM D422-63 (07)
0.75 Inch Sieve	100			0	%	ASTM D422-63 (07)
1.5 Inch Sieve	100			0	%	ASTM D422-63 (07)
3 Inch Sieve	100			0	%	ASTM D422-63 (07)
No. 10 Sieve (2.00 mm)	88.4			0	%	ASTM D422-63 (07)
No. 100 Sieve (0.15 mm)	18.7			0	%	ASTM D422-63 (07)
No. 16 Sieve (1.18 mm)	86.5			0	%	ASTM D422-63 (07)
No. 200 Sieve (0.075 mm)	16.6			0	%	ASTM D422-63 (07)
No. 30 Sieve (0.60 mm)	75.8			0	%	ASTM D422-63 (07)
No. 4 Sieve (4.75 mm)	91.9			0	%	ASTM D422-63 (07)
No. 50 Sieve (0.30 mm)	34.3			0	%	ASTM D422-63 (07)
No. 60 Sieve (0.25 mm)	26.4			0	%	ASTM D422-63 (07)
Percent Moisture	28.4		0.1	0.1	%	EPA 3550C
Perfluorobutanoic acid (PFBA)	0.0566	J	0.0481	0.501	µg/kg	EPA 1633

CLIENT ID: 3432966-002				Lab ID: HN2512651-002		
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Analyte	Results	Flag	MDL	MRL	Units	Method
% Gravel	29.1			0	%	ASTM D422-63 (07)
% Sand	61.1			0	%	ASTM D422-63 (07)
% Silt, Clay, Colloids	9.75			0	%	ASTM D422-63 (07)
0.0015 mm (Hydrometer)	8.00			0	%	ASTM D422-63 (07)
0.005 mm (Hydrometer)	8.00			0	%	ASTM D422-63 (07)
0.030 mm (Hydrometer)	8.00			0	%	ASTM D422-63 (07)
0.375 Inch Sieve	100			0	%	ASTM D422-63 (07)
0.75 Inch Sieve	100			0	%	ASTM D422-63 (07)
1.5 Inch Sieve	100			0	%	ASTM D422-63 (07)
3 Inch Sieve	100			0	%	ASTM D422-63 (07)
No. 10 Sieve (2.00 mm)	61.0			0	%	ASTM D422-63 (07)
No. 100 Sieve (0.15 mm)	10.5			0	%	ASTM D422-63 (07)
No. 16 Sieve (1.18 mm)	57.5			0	%	ASTM D422-63 (07)
No. 200 Sieve (0.075 mm)	9.75			0	%	ASTM D422-63 (07)
No. 30 Sieve (0.60 mm)	41.0			0	%	ASTM D422-63 (07)
No. 4 Sieve (4.75 mm)	70.8			0	%	ASTM D422-63 (07)
No. 50 Sieve (0.30 mm)	14.6			0	%	ASTM D422-63 (07)
No. 60 Sieve (0.25 mm)	12.7			0	%	ASTM D422-63 (07)

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: 3432966-002	Lab ID: HN2512651-002
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Analyte	Results	Flag	MDL	MRL	Units	Method
Percent Moisture	42.2		0.1	0.1	%	EPA 3550C
Perfluorobutanoic acid (PFBA)	0.0946	J	0.0484	0.504	µg/kg	EPA 1633

CLIENT ID: 3432966-003	Lab ID: HN2512651-003
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Analyte	Results	Flag	MDL	MRL	Units	Method
% Gravel	3.22			0	%	ASTM D422-63 (07)
% Sand	92.9			0	%	ASTM D422-63 (07)
% Silt, Clay, Colloids	3.85			0	%	ASTM D422-63 (07)
0.0015 mm (Hydrometer)	4.00			0	%	ASTM D422-63 (07)
0.005 mm (Hydrometer)	4.00			0	%	ASTM D422-63 (07)
0.030 mm (Hydrometer)	6.00			0	%	ASTM D422-63 (07)
0.375 Inch Sieve	100			0	%	ASTM D422-63 (07)
0.75 Inch Sieve	100			0	%	ASTM D422-63 (07)
1.5 Inch Sieve	100			0	%	ASTM D422-63 (07)
3 Inch Sieve	100			0	%	ASTM D422-63 (07)
No. 10 Sieve (2.00 mm)	96.6			0	%	ASTM D422-63 (07)
No. 100 Sieve (0.15 mm)	4.06			0	%	ASTM D422-63 (07)
No. 16 Sieve (1.18 mm)	96.1			0	%	ASTM D422-63 (07)
No. 200 Sieve (0.075 mm)	3.85			0	%	ASTM D422-63 (07)
No. 30 Sieve (0.60 mm)	79.1			0	%	ASTM D422-63 (07)
No. 4 Sieve (4.75 mm)	96.8			0	%	ASTM D422-63 (07)
No. 50 Sieve (0.30 mm)	11.5			0	%	ASTM D422-63 (07)
No. 60 Sieve (0.25 mm)	6.58			0	%	ASTM D422-63 (07)
Percent Moisture	23.6		0.1	0.1	%	EPA 3550C

CLIENT ID: 3432966-004	Lab ID: HN2512651-004
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Analyte	Results	Flag	MDL	MRL	Units	Method
% Gravel	15.7			0	%	ASTM D422-63 (07)
% Sand	81.1			0	%	ASTM D422-63 (07)
% Silt, Clay, Colloids	3.21			0	%	ASTM D422-63 (07)
0.0015 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.005 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.030 mm (Hydrometer)	4.00			0	%	ASTM D422-63 (07)
0.375 Inch Sieve	100			0	%	ASTM D422-63 (07)
0.75 Inch Sieve	100			0	%	ASTM D422-63 (07)
1.5 Inch Sieve	100			0	%	ASTM D422-63 (07)
3 Inch Sieve	100			0	%	ASTM D422-63 (07)
No. 10 Sieve (2.00 mm)	81.9			0	%	ASTM D422-63 (07)
No. 100 Sieve (0.15 mm)	3.36			0	%	ASTM D422-63 (07)
No. 16 Sieve (1.18 mm)	80.3			0	%	ASTM D422-63 (07)
No. 200 Sieve (0.075 mm)	3.21			0	%	ASTM D422-63 (07)

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: 3432966-004	Lab ID: HN2512651-004
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Analyte	Results	Flag	MDL	MRL	Units	Method
No. 30 Sieve (0.60 mm)	61.3			0	%	ASTM D422-63 (07)
No. 4 Sieve (4.75 mm)	84.3			0	%	ASTM D422-63 (07)
No. 50 Sieve (0.30 mm)	7.05			0	%	ASTM D422-63 (07)
No. 60 Sieve (0.25 mm)	4.44			0	%	ASTM D422-63 (07)
Percent Moisture	25.8		0.1	0.1	%	EPA 3550C
Perfluorobutanoic acid (PFBA)	0.114	J	0.0484	0.504	µg/kg	EPA 1633

CLIENT ID: 3432966-005	Lab ID: HN2512651-005
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Analyte	Results	Flag	MDL	MRL	Units	Method
% Gravel	2.44			0	%	ASTM D422-63 (07)
% Sand	88.4			0	%	ASTM D422-63 (07)
% Silt, Clay, Colloids	9.20			0	%	ASTM D422-63 (07)
0.0015 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.005 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.030 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.375 Inch Sieve	100			0	%	ASTM D422-63 (07)
0.75 Inch Sieve	100			0	%	ASTM D422-63 (07)
1.5 Inch Sieve	100			0	%	ASTM D422-63 (07)
3 Inch Sieve	100			0	%	ASTM D422-63 (07)
No. 10 Sieve (2.00 mm)	96.6			0	%	ASTM D422-63 (07)
No. 100 Sieve (0.15 mm)	9.50			0	%	ASTM D422-63 (07)
No. 16 Sieve (1.18 mm)	95.8			0	%	ASTM D422-63 (07)
No. 200 Sieve (0.075 mm)	9.20			0	%	ASTM D422-63 (07)
No. 30 Sieve (0.60 mm)	84.1			0	%	ASTM D422-63 (07)
No. 4 Sieve (4.75 mm)	97.6			0	%	ASTM D422-63 (07)
No. 50 Sieve (0.30 mm)	18.4			0	%	ASTM D422-63 (07)
No. 60 Sieve (0.25 mm)	12.4			0	%	ASTM D422-63 (07)
Percent Moisture	25.4		0.1	0.1	%	EPA 3550C
Perfluorobutanoic acid (PFBA)	0.0554	J	0.0482	0.502	µg/kg	EPA 1633

CLIENT ID: 3432966-006	Lab ID: HN2512651-006
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Analyte	Results	Flag	MDL	MRL	Units	Method
% Gravel	0.425			0	%	ASTM D422-63 (07)
% Sand	96.4			0	%	ASTM D422-63 (07)
% Silt, Clay, Colloids	3.16			0	%	ASTM D422-63 (07)
0.0015 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.005 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.030 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.375 Inch Sieve	100			0	%	ASTM D422-63 (07)
0.75 Inch Sieve	100			0	%	ASTM D422-63 (07)
1.5 Inch Sieve	100			0	%	ASTM D422-63 (07)

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: 3432966-006				Lab ID: HN2512651-006		
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Analyte	Results	Flag	MDL	MRL	Units	Method
3 Inch Sieve	100			0	%	ASTM D422-63 (07)
No. 10 Sieve (2.00 mm)	99.3			0	%	ASTM D422-63 (07)
No. 100 Sieve (0.15 mm)	3.30			0	%	ASTM D422-63 (07)
No. 16 Sieve (1.18 mm)	98.5			0	%	ASTM D422-63 (07)
No. 200 Sieve (0.075 mm)	3.16			0	%	ASTM D422-63 (07)
No. 30 Sieve (0.60 mm)	84.3			0	%	ASTM D422-63 (07)
No. 4 Sieve (4.75 mm)	99.6			0	%	ASTM D422-63 (07)
No. 50 Sieve (0.30 mm)	10.6			0	%	ASTM D422-63 (07)
No. 60 Sieve (0.25 mm)	5.33			0	%	ASTM D422-63 (07)
Percent Moisture	26.2		0.1	0.1	%	EPA 3550C

CLIENT ID: 3432966-007				Lab ID: HN2512651-007		
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Analyte	Results	Flag	MDL	MRL	Units	Method
% Gravel	0.115			0	%	ASTM D422-63 (07)
% Sand	94.8			0	%	ASTM D422-63 (07)
% Silt, Clay, Colloids	5.04			0	%	ASTM D422-63 (07)
0.0015 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.005 mm (Hydrometer)	3.00			0	%	ASTM D422-63 (07)
0.030 mm (Hydrometer)	4.00			0	%	ASTM D422-63 (07)
0.375 Inch Sieve	100			0	%	ASTM D422-63 (07)
0.75 Inch Sieve	100			0	%	ASTM D422-63 (07)
1.5 Inch Sieve	100			0	%	ASTM D422-63 (07)
3 Inch Sieve	100			0	%	ASTM D422-63 (07)
No. 10 Sieve (2.00 mm)	98.9			0	%	ASTM D422-63 (07)
No. 100 Sieve (0.15 mm)	5.38			0	%	ASTM D422-63 (07)
No. 16 Sieve (1.18 mm)	97.6			0	%	ASTM D422-63 (07)
No. 200 Sieve (0.075 mm)	5.04			0	%	ASTM D422-63 (07)
No. 30 Sieve (0.60 mm)	83.0			0	%	ASTM D422-63 (07)
No. 4 Sieve (4.75 mm)	99.9			0	%	ASTM D422-63 (07)
No. 50 Sieve (0.30 mm)	16.6			0	%	ASTM D422-63 (07)
No. 60 Sieve (0.25 mm)	9.41			0	%	ASTM D422-63 (07)
Percent Moisture	26.4		0.1	0.1	%	EPA 3550C

CLIENT ID: 3432966-008				Lab ID: HN2512651-008		
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Analyte	Results	Flag	MDL	MRL	Units	Method
% Gravel	0.0			0	%	ASTM D422-63 (07)
% Sand	91.4			0	%	ASTM D422-63 (07)
% Silt, Clay, Colloids	8.59			0	%	ASTM D422-63 (07)
0.0015 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.005 mm (Hydrometer)	3.00			0	%	ASTM D422-63 (07)
0.030 mm (Hydrometer)	4.00			0	%	ASTM D422-63 (07)

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: 3432966-008	Lab ID: HN2512651-008
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Analyte	Results	Flag	MDL	MRL	Units	Method
0.375 Inch Sieve	100			0	%	ASTM D422-63 (07)
0.75 Inch Sieve	100			0	%	ASTM D422-63 (07)
1.5 Inch Sieve	100			0	%	ASTM D422-63 (07)
3 Inch Sieve	100			0	%	ASTM D422-63 (07)
No. 10 Sieve (2.00 mm)	99.9			0	%	ASTM D422-63 (07)
No. 100 Sieve (0.15 mm)	9.79			0	%	ASTM D422-63 (07)
No. 16 Sieve (1.18 mm)	99.6			0	%	ASTM D422-63 (07)
No. 200 Sieve (0.075 mm)	8.59			0	%	ASTM D422-63 (07)
No. 30 Sieve (0.60 mm)	91.7			0	%	ASTM D422-63 (07)
No. 4 Sieve (4.75 mm)	100			0	%	ASTM D422-63 (07)
No. 50 Sieve (0.30 mm)	33.9			0	%	ASTM D422-63 (07)
No. 60 Sieve (0.25 mm)	20.5			0	%	ASTM D422-63 (07)
Percent Moisture	30.3		0.1	0.1	%	EPA 3550C
Perfluorobutanoic acid (PFBA)	0.111	J	0.0481	0.501	µg/kg	EPA 1633

CLIENT ID: 3432966-009	Lab ID: HN2512651-009
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Analyte	Results	Flag	MDL	MRL	Units	Method
% Gravel	14.3			0	%	ASTM D422-63 (07)
% Sand	81.0			0	%	ASTM D422-63 (07)
% Silt, Clay, Colloids	4.70			0	%	ASTM D422-63 (07)
0.0015 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.005 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.030 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.375 Inch Sieve	100			0	%	ASTM D422-63 (07)
0.75 Inch Sieve	100			0	%	ASTM D422-63 (07)
1.5 Inch Sieve	100			0	%	ASTM D422-63 (07)
3 Inch Sieve	100			0	%	ASTM D422-63 (07)
No. 10 Sieve (2.00 mm)	82.4			0	%	ASTM D422-63 (07)
No. 100 Sieve (0.15 mm)	4.99			0	%	ASTM D422-63 (07)
No. 16 Sieve (1.18 mm)	79.6			0	%	ASTM D422-63 (07)
No. 200 Sieve (0.075 mm)	4.70			0	%	ASTM D422-63 (07)
No. 30 Sieve (0.60 mm)	56.5			0	%	ASTM D422-63 (07)
No. 4 Sieve (4.75 mm)	85.7			0	%	ASTM D422-63 (07)
No. 50 Sieve (0.30 mm)	9.46			0	%	ASTM D422-63 (07)
No. 60 Sieve (0.25 mm)	7.11			0	%	ASTM D422-63 (07)
Percent Moisture	26.0		0.1	0.1	%	EPA 3550C
Perfluorobutanoic acid (PFBA)	0.126	J	0.0479	0.499	µg/kg	EPA 1633

CLIENT ID: 3432966-010	Lab ID: HN2512651-010
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Analyte	Results	Flag	MDL	MRL	Units	Method
% Gravel	1.13			0	%	ASTM D422-63 (07)

SAMPLE DETECTION SUMMARY

This form includes only detections above the limits as presented.

For a full listing of sample results, continue to the Sample Results section of this Report.



CLIENT ID: 3432966-010

Lab ID: HN2512651-010

Analyte	Results	Flag	MDL	MRL	Units	Method
% Sand	93.9			0	%	ASTM D422-63 (07)
% Silt, Clay, Colloids	4.99			0	%	ASTM D422-63 (07)
0.0015 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.005 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.030 mm (Hydrometer)	2.00			0	%	ASTM D422-63 (07)
0.375 Inch Sieve	100			0	%	ASTM D422-63 (07)
0.75 Inch Sieve	100			0	%	ASTM D422-63 (07)
1.5 Inch Sieve	100			0	%	ASTM D422-63 (07)
3 Inch Sieve	100			0	%	ASTM D422-63 (07)
No. 10 Sieve (2.00 mm)	95.8			0	%	ASTM D422-63 (07)
No. 100 Sieve (0.15 mm)	5.25			0	%	ASTM D422-63 (07)
No. 16 Sieve (1.18 mm)	93.3			0	%	ASTM D422-63 (07)
No. 200 Sieve (0.075 mm)	4.99			0	%	ASTM D422-63 (07)
No. 30 Sieve (0.60 mm)	73.6			0	%	ASTM D422-63 (07)
No. 4 Sieve (4.75 mm)	98.9			0	%	ASTM D422-63 (07)
No. 50 Sieve (0.30 mm)	11.4			0	%	ASTM D422-63 (07)
No. 60 Sieve (0.25 mm)	7.67			0	%	ASTM D422-63 (07)
Percent Moisture	28.8		0.1	0.1	%	EPA 3550C

CLIENT ID: 3432966-011

Lab ID: HN2512651-011

Analyte	Results	Flag	MDL	MRL	Units	Method
Percent Moisture	28.9		0.1	0.1	%	EPA 3550C
Perfluorobutanoic acid (PFBA)	0.0560	J	0.0483	0.503	µg/kg	EPA 1633

SAMPLE SUMMARY



Client: ALS Environmental
Project: 40-3432966
Workorder: HN2512651

Laboratory Sample ID	Client Sample ID	Sample Matrix	Collection Date	Date Received
HN2512651-001	3432966-001	SOIL/SOLID	08/26/25 10:20	09/03/25 09:30
HN2512651-002	3432966-002	SOIL/SOLID	08/26/25 11:00	09/03/25 09:30
HN2512651-003	3432966-003	SOIL/SOLID	08/26/25 11:40	09/03/25 09:30
HN2512651-004	3432966-004	SOIL/SOLID	08/26/25 12:00	09/03/25 09:30
HN2512651-005	3432966-005	SOIL/SOLID	08/26/25 12:40	09/03/25 09:30
HN2512651-006	3432966-006	SOIL/SOLID	08/26/25 13:00	09/03/25 09:30
HN2512651-007	3432966-007	SOIL/SOLID	08/27/25 09:10	09/03/25 09:30
HN2512651-008	3432966-008	SOIL/SOLID	08/27/25 10:10	09/03/25 09:30
HN2512651-009	3432966-009	SOIL/SOLID	08/27/25 12:10	09/03/25 09:30
HN2512651-010	3432966-010	SOIL/SOLID	08/27/25 12:40	09/03/25 09:30
HN2512651-011	3432966-011	SOIL/SOLID	08/27/25 09:30	09/03/25 09:30
HN2512651-012	EB-01	WATER	08/27/25 13:20	09/03/25 09:30



301 Filling Mill Rd
Middletown, PA 17057
P: 717-944-5541
F: 717-944-1430

Environmental

CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS
ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT /
SAMPLER. INSTRUCTIONS ON THE BACK.

COC #:	of
ALS Quote #:	

Client Name: ALS Middletown	Container Type	PN	C
Address: 301 Filling Mill Rd	Container Size	250	8oz
Middletown, PA 17057	Preservative	None	None

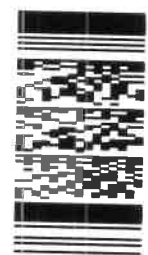
Contact: Cheyenne Petersen	ANALYSES/METHOD REQUESTED		
Phone#: 717-944-5541			
Project Name#: 40-3432966			
Bill To:			

TAT	☒ Normal-Standard TAT is 10-12 business days.
	☐ Rush-Subject to ALS approval and surcharges.

Date Required:	Approved By:
Email? ☒ Y NAMDT Subcontract@ALSGlobal.com	
Fax? ☐ Y No.	

Sample Description/Location	Sample Date	Time	*G or C	**Matrix
(as it will appear on the lab report)				

Environmental Division
Holland
Work Order Reference
HN2512651



Telephone : + 1 616 399 6070

Receipt Information (completed by Receiving Lab)	
Cooler Temp: _____	Therm ID: _____
No. of Coolers: _____	Y N Initial
Custody Seals Present?	☐
(if present) Seals Intact?	☐
Received on Ice?	☐
COC Labels Complete/Accurate?	☐
Cont. in Good Cond.?	☐
Correct Containers?	☐
Correct Sample Volumes?	☐
Correct Preservation?	☐
Headspace/Volatiles?	☐
Courier/Tracking #:	
Sample/COC Comments	

Sample Description/Location	Sample Date	Time	*G or C	**Matrix	1633 PFAs	Grain Size
SD-01	8/26/2025	10:20	C	S	2	1
SD-02	8/26/2025	11:00	C	S	2	1
SD-03	8/26/2025	11:40	C	S	2	1
SD-04	8/26/2025	12:00	C	S	2	1
SD-05	8/26/2025	12:40	C	S	2	1
SD-06	8/26/2025	13:00	C	S	2	1
SD-07	8/27/2025	9:10	C	S	2	1
SD-08	8/27/2025	10:10	C	S	2	1
SD-09	8/27/2025	12:10	C	S	2	1
SD-10	8/27/2025	12:40	C	S	2	1

LOGGED BY (signature):	DATE:	TIME:
REVIEWED BY (signature):	DATE:	TIME:

Data Deliverables	Standard	Special Processing	State Samples
☒ CLP-like	☐ USACE	☐ USACE	☐ Collected In
☐ USACE	☐ Navy	☐ Navy	☐ NY
☐ USACE	☐ Navy	☐ Navy	☐ NJ

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
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Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Sample Disposal	Lab ☐	Special ☐	MD ☐
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Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
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EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
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EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
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Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
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Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
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Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
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Reportable to PADEP?	Yes ☐	No ☐
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Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
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Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
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EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		

Reportable to PADEP?	Yes ☐	No ☐
PWSID #		
EDDS: Format type		



**CHAIN OF CUSTODY/
REQUEST FOR ANALYSIS**

COC #:		of
ALS Quote #:		

[illegible]



ALS Holland Sample Receiving Checklist

Received by: Brittany Hargood

Date/Time: 9/3/25 0930

Carrier Name: Fedex

Shipping container/cooler in good condition? (Yes) No / Not Present

Custody seals intact on shipping container/cooler? Yes / No (Not Present)

Custody seals intact on sample bottles? Yes / No (Not Present)

Chain of Custody present? (Yes) No

COC signed when relinquished and received? (Yes) / No

COC agrees with sample labels? (Yes) / No

Samples in proper container/bottle? (Yes) / No

Sample containers intact? (Yes) / No

Sufficient sample volume for indicated test? (Yes) / No

All samples received within holding time? (Yes) / No

Container/Temp Blank temperature in compliance? (Yes) / No

Temperature(s) (°C): 3.6/3.6c

Thermometer(s): 1R7

Sample(s) received on ice? (Yes) No

Matrix/Matrices: Soil/s/water

Cooler(s)/Kit(s): 2

Date/Time sample(s) sent to storage: 9/3/25 1357

Water – VOA vials have zero headspace? Yes / No / No Vials

Water – pH acceptable upon receipt? Yes / No / N/A

pH strip lot #: _____ < 2 _____ > 12 _____ Other _____

pH adjusted (note adjustments below)? Yes / No / N/A

pH adjusted by: _____

Login Notes:

REPORT QUALIFIERS AND DEFINITIONS

*	Value exceeds Regulatory Limit (if MCL displayed)
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
NC	Not Calculated
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
V	The Continuing Calibration Verification was outside of control criteria
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Holland Laboratory Certifications¹

Agency	Type	ID	Issued	Expires
Alabama	Drinking Water (Secondary)	42500	12/17/2024	12/31/2025
Colorado	UST		07/01/2025	06/30/2026
Connecticut	Drinking Water (Secondary)	PH-0155	12/10/2024	12/31/2026
Florida	NELAP (Primary)	E871106	07/01/2025	06/30/2026
Illinois	NELAP (Secondary)	200076	11/14/2024	12/31/2025
Indiana	Drinking Water (Secondary)	C-MI-08	12/31/2024	09/04/2026
Iowa	State Specific	403	09/18/2023	09/01/2025
Kansas	NELAP (Secondary)	E-10411	07/09/2024	07/31/2025
Kentucky	Waste Water	KY98004	12/20/2024	12/31/2025
Kentucky	UST	120474	06/24/2024	06/30/2025
Michigan	Drinking Water (Primary)	0022	12/19/2023	09/04/2026
Minnesota	NELAP (Secondary)	026-999-449	12/17/2024	12/31/2025
Missouri	Drinking Water (Secondary)	01262	11/14/2024	12/30/2027
New Jersey	NELAP (Secondary)	MI015	07/01/2024	6/30/2025
New York	NELAP (Secondary)	12128	04/01/2025	04/01/2026
North Dakota	State Specific	R-192	11/18/2024	06/30/2025
Ohio	Drinking Water (Secondary)	87783	06/26/2025	6/30/2026
Pennsylvania	NELAP (Secondary)	68-03827	06/14/2024	07/31/2025
Texas	NELAP (Secondary)	T104704494	02/12/2025	01/31/2026
USDA	Domestic CA	Soil-MI-007	02/06/2025	08/07/2026
USDA	Soil Import	525-23-62-77572	03/03/2023	03/03/2026
West Virginia	State Specific	355	06/07/2025	08/31/2026
Wisconsin	State Specific	399084510	08/15/2024	08/31/2025

¹ - Scope available upon request

ANALYST SUMMARY



Client: ALS Environmental
Project: 40-3432966

Work Order: HN2512651

Sample Name: 3432966-001
Laboratory Code: HN2512651-001
Sample Matrix: SOIL/SOLID

Date Collected: 08/26/25
Date Received: 09/03/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D422-63 (07)	Method	001-AC	2205875	Amber Luke	3518629	Amber Luke
EPA 1633	EPA 1633	001-AA	2215579	Clayton Rzepka	3495004	Michelle McClendon
EPA 3550C		001-AB	2197543		3460387	Nicole Maleski

Sample Name: 3432966-002
Laboratory Code: HN2512651-002
Sample Matrix: SOIL/SOLID

Date Collected: 08/26/25
Date Received: 09/03/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D422-63 (07)	Method	002-AC	2205875	Amber Luke	3518629	Amber Luke
EPA 1633	EPA 1633	002-AA	2215579	Clayton Rzepka	3495004	Michelle McClendon
EPA 1633	EPA 1633	002-AA	2215579	Clayton Rzepka	3499887	Michelle McClendon
EPA 3550C		002-AB	2197543		3460387	Nicole Maleski

Sample Name: 3432966-003
Laboratory Code: HN2512651-003
Sample Matrix: SOIL/SOLID

Date Collected: 08/26/25
Date Received: 09/03/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D422-63 (07)	Method	003-AC	2205875	Amber Luke	3518629	Amber Luke
EPA 1633	EPA 1633	003-AA	2215579	Clayton Rzepka	3495004	Michelle McClendon
EPA 1633	EPA 1633	003-AA	2215579	Clayton Rzepka	3499887	Michelle McClendon
EPA 3550C		003-AB	2197543		3460387	Nicole Maleski

ANALYST SUMMARY



Client: ALS Environmental
Project: 40-3432966

Work Order: HN2512651

Sample Name: 3432966-004 **Date Collected:** 08/26/25
Laboratory Code: HN2512651-004 **Date Received:** 09/03/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D422-63 (07)	Method	004-AC	2205875	Amber Luke	3518629	Amber Luke
EPA 1633	EPA 1633	004-AA	2220769	Gabe	3518527	Morgan Morehouse
EPA 3550C		004-AB	2197543		3460387	Nicole Maleski

Sample Name: 3432966-005 **Date Collected:** 08/26/25
Laboratory Code: HN2512651-005 **Date Received:** 09/03/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D422-63 (07)	Method	005-AC	2205875	Amber Luke	3518629	Amber Luke
EPA 1633	EPA 1633	005-AA	2220769	Gabe	3518527	Morgan Morehouse
EPA 3550C		005-AB	2197543		3460387	Nicole Maleski

Sample Name: 3432966-006 **Date Collected:** 08/26/25
Laboratory Code: HN2512651-006 **Date Received:** 09/03/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D422-63 (07)	Method	006-AC	2205875	Amber Luke	3518629	Amber Luke
EPA 1633	EPA 1633	006-AA	2220769	Gabe	3518527	Morgan Morehouse
EPA 3550C		006-AB	2197543		3460387	Nicole Maleski

Sample Name: 3432966-007 **Date Collected:** 08/27/25
Laboratory Code: HN2512651-007 **Date Received:** 09/03/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D422-63 (07)	Method	007-AC	2205875	Amber Luke	3518629	Amber Luke
EPA 1633	EPA 1633	007-AA	2220769	Gabe	3518527	Morgan Morehouse

ANALYST SUMMARY



Client: ALS Environmental
Project: 40-3432966

Work Order: HN2512651

Sample Name: 3432966-007 **Date Collected:** 08/27/25
Laboratory Code: HN2512651-007 **Date Received:** 09/03/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 3550C		007-AB	2197543		3460387	Nicole Maleski

Sample Name: 3432966-008 **Date Collected:** 08/27/25
Laboratory Code: HN2512651-008 **Date Received:** 09/03/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D422-63 (07)	Method	008-AC	2205875	Amber Luke	3518629	Amber Luke
EPA 1633	EPA 1633	008-AA	2220769	Gabe	3518527	Morgan Morehouse
EPA 3550C		008-AB	2197543		3460387	Nicole Maleski

Sample Name: 3432966-009 **Date Collected:** 08/27/25
Laboratory Code: HN2512651-009 **Date Received:** 09/03/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D422-63 (07)	Method	009-AC	2205875	Amber Luke	3518629	Amber Luke
EPA 1633	EPA 1633	009-AA	2220769	Gabe	3518527	Morgan Morehouse
EPA 3550C		009-AB	2197543		3460387	Nicole Maleski

Sample Name: 3432966-010 **Date Collected:** 08/27/25
Laboratory Code: HN2512651-010 **Date Received:** 09/03/25
Sample Matrix: SOIL/SOLID

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
ASTM D422-63 (07)	Method	010-AC	2205875	Amber Luke	3518629	Amber Luke
EPA 1633	EPA 1633	010-AA	2220769	Gabe	3518527	Morgan Morehouse
EPA 3550C		010-AB	2197543		3460387	Nicole Maleski

ANALYST SUMMARY



Client: ALS Environmental
Project: 40-3432966

Work Order: HN2512651

Sample Name: 3432966-011
Laboratory Code: HN2512651-011
Sample Matrix: SOIL/SOLID

Date Collected: 08/27/25
Date Received: 09/03/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 1633	EPA 1633	011-AA	2220769	Gabe	3518527	Morgan Morehouse
EPA 3550C		011-AB	2197543		3460387	Nicole Maleski

Sample Name: EB-01
Laboratory Code: HN2512651-012
Sample Matrix: WATER

Date Collected: 08/27/25
Date Received: 09/03/25

Analysis Method	Preparation Method	Container ID	Preparation Lot	Prepared By	Analysis Lot	Analyzed By
EPA 1633	EPA 1633	012-AA	2206879	Gabe	3484334	Emily Smith

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 10:20
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-001	Lab ID: HN2512651-001
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
% Gravel	ASTM D422-63 (07)	8.08		%		0	1	09/22/25 14:31	09/18/25 15:22
% Sand	ASTM D422-63 (07)	75.3		%		0	1	09/22/25 14:31	09/18/25 15:22
% Silt, Clay, Colloids	ASTM D422-63 (07)	16.6		%		0	1	09/22/25 14:31	09/18/25 15:22
0.0015 mm (Hydrometer)	ASTM D422-63 (07)	3.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.005 mm (Hydrometer)	ASTM D422-63 (07)	4.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.030 mm (Hydrometer)	ASTM D422-63 (07)	5.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.375 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
0.75 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
1.5 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
3 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 10 Sieve (2.00 mm)	ASTM D422-63 (07)	88.4		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 100 Sieve (0.15 mm)	ASTM D422-63 (07)	18.7		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 16 Sieve (1.18 mm)	ASTM D422-63 (07)	86.5		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 200 Sieve (0.075 mm)	ASTM D422-63 (07)	16.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 30 Sieve (0.60 mm)	ASTM D422-63 (07)	75.8		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 4 Sieve (4.75 mm)	ASTM D422-63 (07)	91.9		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 50 Sieve (0.30 mm)	ASTM D422-63 (07)	34.3		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 60 Sieve (0.25 mm)	ASTM D422-63 (07)	26.4		%		0	1	09/22/25 14:31	09/18/25 15:22
Percent Moisture	EPA 3550C	28.4		%	0.1	0.1	1	09/03/25 19:33	NA

Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.206	U	µg/kg	0.206	0.473	1	09/12/25 17:50	09/10/25 13:00
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.136	U	µg/kg	0.136	0.481	1	09/12/25 17:50	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 10:20
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-001

Lab ID: HN2512651-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.114	U	µg/kg	0.114	0.483	1	09/12/25 17:50	09/10/25 13:00
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.101	U	µg/kg	0.101	0.470	1	09/12/25 17:50	09/10/25 13:00
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.173	U	µg/kg	0.173	0.477	1	09/12/25 17:50	09/10/25 13:00
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.17	U	µg/kg	2.17	15.0	1	09/12/25 17:50	09/10/25 13:00
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.40	U	µg/kg	4.40	15.0	1	09/12/25 17:50	09/10/25 13:00
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.17	U	µg/kg	2.17	15.0	1	09/12/25 17:50	09/10/25 13:00
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.129	U	µg/kg	0.129	0.474	1	09/12/25 17:50	09/10/25 13:00
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.166	U	µg/kg	0.166	0.468	1	09/12/25 17:50	09/10/25 13:00
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.220	U	µg/kg	0.220	0.501	1	09/12/25 17:50	09/10/25 13:00
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.158	U	µg/kg	0.158	0.501	1	09/12/25 17:50	09/10/25 13:00
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.404	U	µg/kg	0.404	0.501	1	09/12/25 17:50	09/10/25 13:00
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.170	U	µg/kg	0.170	0.501	1	09/12/25 17:50	09/10/25 13:00
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.148	U	µg/kg	0.148	0.501	1	09/12/25 17:50	09/10/25 13:00
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.184	U	µg/kg	0.184	0.501	1	09/12/25 17:50	09/10/25 13:00
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.200	U	µg/kg	0.200	0.501	1	09/12/25 17:50	09/10/25 13:00
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.182	U	µg/kg	0.182	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.152	U	µg/kg	0.152	0.446	1	09/12/25 17:50	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 10:20
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-001

Lab ID: HN2512651-001

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.206	U	µg/kg	0.206	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.167	U	µg/kg	0.167	0.468	1	09/12/25 17:50	09/10/25 13:00
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.200	U	µg/kg	0.200	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0962	U	µg/kg	0.0962	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorobutanoic acid (PFBA)	EPA 1633	0.0566	J	µg/kg	0.0481	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.110	U	µg/kg	0.110	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.117	U	µg/kg	0.117	0.484	1	09/12/25 17:50	09/10/25 13:00
Perfluorodecanoic acid (PFDA)	EPA 1633	0.163	U	µg/kg	0.163	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.156	U	µg/kg	0.156	0.486	1	09/12/25 17:50	09/10/25 13:00
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0662	U	µg/kg	0.0662	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.121	U	µg/kg	0.121	0.478	1	09/12/25 17:50	09/10/25 13:00
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.177	U	µg/kg	0.177	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.130	U	µg/kg	0.130	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0672	U	µg/kg	0.0672	0.458	1	09/12/25 17:50	09/10/25 13:00
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.112	U	µg/kg	0.112	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.133	U	µg/kg	0.133	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.149	U	µg/kg	0.149	0.482	1	09/12/25 17:50	09/10/25 13:00
Perfluorononanoic acid (PFNA)	EPA 1633	0.0922	U	µg/kg	0.0922	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.233	U	µg/kg	0.233	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.150	U	µg/kg	0.150	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.183	U	µg/kg	0.183	0.465	1	09/12/25 17:50	09/10/25 13:00
Perfluorooctanoic acid (PFOA)	EPA 1633	0.101	U	µg/kg	0.101	0.501	1	09/12/25 17:50	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 10:20
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-001	Lab ID: HN2512651-001
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.110	U	µg/kg	0.110	0.472	1	09/12/25 17:50	09/10/25 13:00
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0942	U	µg/kg	0.0942	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.127	U	µg/kg	0.127	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0832	U	µg/kg	0.0832	0.501	1	09/12/25 17:50	09/10/25 13:00
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.134	U	µg/kg	0.134	0.501	1	09/12/25 17:50	09/10/25 13:00
<i>Surr: 13C2-FtS 10:2</i>	<i>EPA 1633</i>	295	<i>S</i>	<i>%REC</i>		<i>10-200</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C2-FtS 4:2</i>	<i>EPA 1633</i>	199	<i>S</i>	<i>%REC</i>		<i>40-165</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C2-FtS 6:2</i>	<i>EPA 1633</i>	185		<i>%REC</i>		<i>40-215</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C2-FtS 8:2</i>	<i>EPA 1633</i>	263		<i>%REC</i>		<i>40-275</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C2-PFDoA</i>	<i>EPA 1633</i>	108		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C2-PFHxDA</i>	<i>EPA 1633</i>	67.1		<i>%REC</i>		<i>10-200</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C2-PFTeDA</i>	<i>EPA 1633</i>	84.6		<i>%REC</i>		<i>20-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C3-HFPO-DA</i>	<i>EPA 1633</i>	91.6		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C3-PFBS</i>	<i>EPA 1633</i>	92.3		<i>%REC</i>		<i>40-135</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C3-PFHxS</i>	<i>EPA 1633</i>	96.9		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C4-PFBA</i>	<i>EPA 1633</i>	95.5		<i>%REC</i>		<i>8-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C4-PFHpA</i>	<i>EPA 1633</i>	98.6		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C5-PFHxA</i>	<i>EPA 1633</i>	94.3		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C5-PFPeA</i>	<i>EPA 1633</i>	98.9		<i>%REC</i>		<i>35-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C6-PFDA</i>	<i>EPA 1633</i>	100		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C7-PFUnDA</i>	<i>EPA 1633</i>	105		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C8-FOSA</i>	<i>EPA 1633</i>	102		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C8-PFOA</i>	<i>EPA 1633</i>	95.8		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C8-PFOS</i>	<i>EPA 1633</i>	92.0		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: 13C9-PFNA</i>	<i>EPA 1633</i>	103		<i>%REC</i>		<i>40-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: d3-N-MeFOSA</i>	<i>EPA 1633</i>	60.1		<i>%REC</i>		<i>10-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: d3-N-MeFOSAA</i>	<i>EPA 1633</i>	130		<i>%REC</i>		<i>40-135</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: d5-N-EtFOSA</i>	<i>EPA 1633</i>	43.4		<i>%REC</i>		<i>10-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: d5-N-EtFOSAA</i>	<i>EPA 1633</i>	137		<i>%REC</i>		<i>40-150</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: d7-N-MeFOSE</i>	<i>EPA 1633</i>	79.1		<i>%REC</i>		<i>20-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>
<i>Surr: d9-N-EtFOSE</i>	<i>EPA 1633</i>	70.8		<i>%REC</i>		<i>15-130</i>	<i>1</i>	<i>09/12/25 17:50</i>	<i>09/10/25 13:00</i>

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 11:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-002	Lab ID: HN2512651-002
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
% Gravel	ASTM D422-63 (07)	29.1		%		0	1	09/22/25 14:31	09/18/25 15:22
% Sand	ASTM D422-63 (07)	61.1		%		0	1	09/22/25 14:31	09/18/25 15:22
% Silt, Clay, Colloids	ASTM D422-63 (07)	9.75		%		0	1	09/22/25 14:31	09/18/25 15:22
0.0015 mm (Hydrometer)	ASTM D422-63 (07)	8.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.005 mm (Hydrometer)	ASTM D422-63 (07)	8.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.030 mm (Hydrometer)	ASTM D422-63 (07)	8.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.375 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
0.75 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
1.5 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
3 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 10 Sieve (2.00 mm)	ASTM D422-63 (07)	61.0		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 100 Sieve (0.15 mm)	ASTM D422-63 (07)	10.5		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 16 Sieve (1.18 mm)	ASTM D422-63 (07)	57.5		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 200 Sieve (0.075 mm)	ASTM D422-63 (07)	9.75		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 30 Sieve (0.60 mm)	ASTM D422-63 (07)	41.0		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 4 Sieve (4.75 mm)	ASTM D422-63 (07)	70.8		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 50 Sieve (0.30 mm)	ASTM D422-63 (07)	14.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 60 Sieve (0.25 mm)	ASTM D422-63 (07)	12.7		%		0	1	09/22/25 14:31	09/18/25 15:22
Percent Moisture	EPA 3550C	42.2		%	0.1	0.1	1	09/03/25 19:33	NA

Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.208	U	µg/kg	0.208	0.476	1	09/12/25 18:50	09/10/25 13:00
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.137	U	µg/kg	0.137	0.484	1	09/12/25 18:50	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 11:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-002

Lab ID: HN2512651-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.115	U	µg/kg	0.115	0.486	1	09/12/25 18:50	09/10/25 13:00
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.102	U	µg/kg	0.102	0.473	1	09/12/25 18:50	09/10/25 13:00
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.174	U	µg/kg	0.174	0.480	1	09/12/25 18:50	09/10/25 13:00
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.19	U	µg/kg	2.19	15.1	1	09/12/25 18:50	09/10/25 13:00
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.43	U	µg/kg	4.43	15.1	1	09/12/25 18:50	09/10/25 13:00
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.19	U	µg/kg	2.19	15.1	1	09/12/25 18:50	09/10/25 13:00
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.130	U	µg/kg	0.130	0.477	1	09/12/25 18:50	09/10/25 13:00
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.167	U	µg/kg	0.167	0.471	1	09/12/25 18:50	09/10/25 13:00
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.222	U	µg/kg	0.222	0.504	1	09/12/25 18:50	09/10/25 13:00
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.159	U	µg/kg	0.159	0.504	1	09/12/25 18:50	09/10/25 13:00
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.406	U	µg/kg	0.406	0.504	1	09/12/25 18:50	09/10/25 13:00
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.172	U	µg/kg	0.172	0.504	1	09/12/25 18:50	09/10/25 13:00
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.149	U	µg/kg	0.149	0.504	1	09/12/25 18:50	09/10/25 13:00
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.186	U	µg/kg	0.186	0.504	1	09/12/25 18:50	09/10/25 13:00
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.201	U	µg/kg	0.201	0.504	1	09/12/25 18:50	09/10/25 13:00
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.184	U	µg/kg	0.184	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.153	U	µg/kg	0.153	0.449	1	09/12/25 18:50	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 11:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-002

Lab ID: HN2512651-002

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.208	U	µg/kg	0.208	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.168	U	µg/kg	0.168	0.471	1	09/12/25 18:50	09/10/25 13:00
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.202	U	µg/kg	0.202	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0968	U	µg/kg	0.0968	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorobutanoic acid (PFBA)	EPA 1633	0.0946	J	µg/kg	0.0484	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.111	U	µg/kg	0.111	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.118	U	µg/kg	0.118	0.487	1	09/12/25 18:50	09/10/25 13:00
Perfluorodecanoic acid (PFDA)	EPA 1633	0.164	U	µg/kg	0.164	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.157	U	µg/kg	0.157	0.489	1	09/12/25 18:50	09/10/25 13:00
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0666	U	µg/kg	0.0666	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.122	U	µg/kg	0.122	0.481	1	09/12/25 18:50	09/10/25 13:00
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.178	U	µg/kg	0.178	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.131	U	µg/kg	0.131	0.504	1	09/15/25 23:25	09/10/25 13:00
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0676	U	µg/kg	0.0676	0.461	1	09/12/25 18:50	09/10/25 13:00
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.113	U	µg/kg	0.113	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.134	U	µg/kg	0.134	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.150	U	µg/kg	0.150	0.485	1	09/12/25 18:50	09/10/25 13:00
Perfluorononanoic acid (PFNA)	EPA 1633	0.0928	U	µg/kg	0.0928	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.234	U	µg/kg	0.234	0.504	1	09/15/25 23:25	09/10/25 13:00
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.151	U	µg/kg	0.151	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.185	U	µg/kg	0.185	0.468	1	09/12/25 18:50	09/10/25 13:00
Perfluorooctanoic acid (PFOA)	EPA 1633	0.102	U	µg/kg	0.102	0.504	1	09/12/25 18:50	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 11:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-002 **Lab ID: HN2512651-002**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.111	U	µg/kg	0.111	0.475	1	09/12/25 18:50	09/10/25 13:00
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0948	U	µg/kg	0.0948	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.128	U	µg/kg	0.128	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0837	U	µg/kg	0.0837	0.504	1	09/12/25 18:50	09/10/25 13:00
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.135	U	µg/kg	0.135	0.504	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C2-FtS 10:2	EPA 1633	327	S	%REC		10-200	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C2-FtS 4:2	EPA 1633	133		%REC		40-165	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C2-FtS 6:2	EPA 1633	167		%REC		40-215	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C2-FtS 8:2	EPA 1633	250		%REC		40-275	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C2-PFDoA	EPA 1633	112		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C2-PFHxDA	EPA 1633	38.4		%REC		10-200	1	09/15/25 23:25	09/10/25 13:00
Surr: 13C2-PFTeDA	EPA 1633	82.5		%REC		20-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C3-HFPO-DA	EPA 1633	102		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C3-PFBS	EPA 1633	94.7		%REC		40-135	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C3-PFHxS	EPA 1633	100		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C4-PFBA	EPA 1633	99.6		%REC		8-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C4-PFHpA	EPA 1633	112		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C5-PFHxA	EPA 1633	99.2		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C5-PFPeA	EPA 1633	106		%REC		35-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C6-PFDA	EPA 1633	103		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C7-PFUnDA	EPA 1633	109		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C8-FOSA	EPA 1633	105		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C8-PFOA	EPA 1633	101		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C8-PFOS	EPA 1633	98.3		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: 13C9-PFNA	EPA 1633	106		%REC		40-130	1	09/12/25 18:50	09/10/25 13:00
Surr: d3-N-MeFOSA	EPA 1633	68.7		%REC		10-130	1	09/12/25 18:50	09/10/25 13:00
Surr: d3-N-MeFOSAA	EPA 1633	135		%REC		40-135	1	09/12/25 18:50	09/10/25 13:00
Surr: d5-N-EtFOSA	EPA 1633	55.3		%REC		10-130	1	09/12/25 18:50	09/10/25 13:00
Surr: d5-N-EtFOSAA	EPA 1633	152	S	%REC		40-150	1	09/12/25 18:50	09/10/25 13:00
Surr: d7-N-MeFOSE	EPA 1633	84.0		%REC		20-130	1	09/12/25 18:50	09/10/25 13:00
Surr: d9-N-EtFOSE	EPA 1633	74.6		%REC		15-130	1	09/12/25 18:50	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 11:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-003

Lab ID: HN2512651-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
% Gravel	ASTM D422-63 (07)	3.22		%		0	1	09/22/25 14:31	09/18/25 15:22
% Sand	ASTM D422-63 (07)	92.9		%		0	1	09/22/25 14:31	09/18/25 15:22
% Silt, Clay, Colloids	ASTM D422-63 (07)	3.85		%		0	1	09/22/25 14:31	09/18/25 15:22
0.0015 mm (Hydrometer)	ASTM D422-63 (07)	4.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.005 mm (Hydrometer)	ASTM D422-63 (07)	4.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.030 mm (Hydrometer)	ASTM D422-63 (07)	6.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.375 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
0.75 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
1.5 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
3 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 10 Sieve (2.00 mm)	ASTM D422-63 (07)	96.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 100 Sieve (0.15 mm)	ASTM D422-63 (07)	4.06		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 16 Sieve (1.18 mm)	ASTM D422-63 (07)	96.1		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 200 Sieve (0.075 mm)	ASTM D422-63 (07)	3.85		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 30 Sieve (0.60 mm)	ASTM D422-63 (07)	79.1		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 4 Sieve (4.75 mm)	ASTM D422-63 (07)	96.8		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 50 Sieve (0.30 mm)	ASTM D422-63 (07)	11.5		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 60 Sieve (0.25 mm)	ASTM D422-63 (07)	6.58		%		0	1	09/22/25 14:31	09/18/25 15:22
Percent Moisture	EPA 3550C	23.6		%	0.1	0.1	1	09/03/25 19:33	NA

Per- and Polyfluorinated Alkyl Substances by LC-MS

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.207	U	µg/kg	0.207	0.474	1	09/12/25 19:10	09/10/25 13:00
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.137	U	µg/kg	0.137	0.482	1	09/12/25 19:10	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 11:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-003

Lab ID: HN2512651-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.114	U	µg/kg	0.114	0.484	1	09/12/25 19:10	09/10/25 13:00
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.101	U	µg/kg	0.101	0.471	1	09/12/25 19:10	09/10/25 13:00
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.174	U	µg/kg	0.174	0.478	1	09/12/25 19:10	09/10/25 13:00
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.1	1	09/12/25 19:10	09/10/25 13:00
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.41	U	µg/kg	4.41	15.1	1	09/12/25 19:10	09/10/25 13:00
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.1	1	09/12/25 19:10	09/10/25 13:00
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.130	U	µg/kg	0.130	0.475	1	09/12/25 19:10	09/10/25 13:00
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.167	U	µg/kg	0.167	0.469	1	09/12/25 19:10	09/10/25 13:00
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.221	U	µg/kg	0.221	0.502	1	09/12/25 19:10	09/10/25 13:00
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.159	U	µg/kg	0.159	0.502	1	09/12/25 19:10	09/10/25 13:00
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.405	U	µg/kg	0.405	0.502	1	09/12/25 19:10	09/10/25 13:00
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.171	U	µg/kg	0.171	0.502	1	09/12/25 19:10	09/10/25 13:00
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.149	U	µg/kg	0.149	0.502	1	09/12/25 19:10	09/10/25 13:00
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.185	U	µg/kg	0.185	0.502	1	09/12/25 19:10	09/10/25 13:00
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.200	U	µg/kg	0.200	0.502	1	09/12/25 19:10	09/10/25 13:00
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.183	U	µg/kg	0.183	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.153	U	µg/kg	0.153	0.447	1	09/12/25 19:10	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 11:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-003

Lab ID: HN2512651-003

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.207	U	µg/kg	0.207	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.168	U	µg/kg	0.168	0.469	1	09/12/25 19:10	09/10/25 13:00
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.201	U	µg/kg	0.201	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0964	U	µg/kg	0.0964	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorobutanoic acid (PFBA)	EPA 1633	0.0482	U	µg/kg	0.0482	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.110	U	µg/kg	0.110	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.118	U	µg/kg	0.118	0.485	1	09/12/25 19:10	09/10/25 13:00
Perfluorodecanoic acid (PFDA)	EPA 1633	0.164	U	µg/kg	0.164	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.157	U	µg/kg	0.157	0.487	1	09/12/25 19:10	09/10/25 13:00
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0663	U	µg/kg	0.0663	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.122	U	µg/kg	0.122	0.479	1	09/12/25 19:10	09/10/25 13:00
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.178	U	µg/kg	0.178	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.131	U	µg/kg	0.131	0.502	1	09/15/25 23:45	09/10/25 13:00
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0673	U	µg/kg	0.0673	0.459	1	09/12/25 19:10	09/10/25 13:00
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.112	U	µg/kg	0.112	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.134	U	µg/kg	0.134	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.150	U	µg/kg	0.150	0.483	1	09/12/25 19:10	09/10/25 13:00
Perfluorononanoic acid (PFNA)	EPA 1633	0.0924	U	µg/kg	0.0924	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.233	U	µg/kg	0.233	0.502	1	09/15/25 23:45	09/10/25 13:00
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.151	U	µg/kg	0.151	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.184	U	µg/kg	0.184	0.466	1	09/12/25 19:10	09/10/25 13:00
Perfluorooctanoic acid (PFOA)	EPA 1633	0.101	U	µg/kg	0.101	0.502	1	09/12/25 19:10	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 11:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-003	Lab ID: HN2512651-003
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.110	U	µg/kg	0.110	0.473	1	09/12/25 19:10	09/10/25 13:00
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0944	U	µg/kg	0.0944	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.128	U	µg/kg	0.128	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0834	U	µg/kg	0.0834	0.502	1	09/12/25 19:10	09/10/25 13:00
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.135	U	µg/kg	0.135	0.502	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C2-FtS 10:2</i>	<i>EPA 1633</i>	134		%REC		10-200	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C2-FtS 4:2</i>	<i>EPA 1633</i>	87.3		%REC		40-165	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C2-FtS 6:2</i>	<i>EPA 1633</i>	92.9		%REC		40-215	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C2-FtS 8:2</i>	<i>EPA 1633</i>	139		%REC		40-275	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C2-PFDoA</i>	<i>EPA 1633</i>	98.2		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C2-PFHxDA</i>	<i>EPA 1633</i>	71.8		%REC		10-200	1	09/15/25 23:45	09/10/25 13:00
<i>Surr: 13C2-PFTeDA</i>	<i>EPA 1633</i>	84.5		%REC		20-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C3-HFPO-DA</i>	<i>EPA 1633</i>	90.5		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C3-PFBS</i>	<i>EPA 1633</i>	82.6		%REC		40-135	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C3-PFHxS</i>	<i>EPA 1633</i>	88.6		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C4-PFBA</i>	<i>EPA 1633</i>	86.9		%REC		8-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C4-PFHpA</i>	<i>EPA 1633</i>	94.0		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C5-PFHxA</i>	<i>EPA 1633</i>	87.7		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C5-PFPeA</i>	<i>EPA 1633</i>	88.1		%REC		35-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C6-PFDA</i>	<i>EPA 1633</i>	88.4		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C7-PFUnDA</i>	<i>EPA 1633</i>	92.4		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C8-FOSA</i>	<i>EPA 1633</i>	75.0		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C8-PFOA</i>	<i>EPA 1633</i>	88.0		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C8-PFOS</i>	<i>EPA 1633</i>	85.7		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: 13C9-PFNA</i>	<i>EPA 1633</i>	90.6		%REC		40-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: d3-N-MeFOSA</i>	<i>EPA 1633</i>	45.8		%REC		10-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: d3-N-MeFOSAA</i>	<i>EPA 1633</i>	80.2		%REC		40-135	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: d5-N-EtFOSA</i>	<i>EPA 1633</i>	31.7		%REC		10-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: d5-N-EtFOSAA</i>	<i>EPA 1633</i>	82.2		%REC		40-150	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: d7-N-MeFOSE</i>	<i>EPA 1633</i>	80.0		%REC		20-130	1	09/12/25 19:10	09/10/25 13:00
<i>Surr: d9-N-EtFOSE</i>	<i>EPA 1633</i>	72.6		%REC		15-130	1	09/12/25 19:10	09/10/25 13:00

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 12:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-004	Lab ID: HN2512651-004
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
% Gravel	ASTM D422-63 (07)	15.7		%		0	1	09/22/25 14:31	09/18/25 15:22
% Sand	ASTM D422-63 (07)	81.1		%		0	1	09/22/25 14:31	09/18/25 15:22
% Silt, Clay, Colloids	ASTM D422-63 (07)	3.21		%		0	1	09/22/25 14:31	09/18/25 15:22
0.0015 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.005 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.030 mm (Hydrometer)	ASTM D422-63 (07)	4.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.375 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
0.75 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
1.5 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
3 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 10 Sieve (2.00 mm)	ASTM D422-63 (07)	81.9		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 100 Sieve (0.15 mm)	ASTM D422-63 (07)	3.36		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 16 Sieve (1.18 mm)	ASTM D422-63 (07)	80.3		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 200 Sieve (0.075 mm)	ASTM D422-63 (07)	3.21		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 30 Sieve (0.60 mm)	ASTM D422-63 (07)	61.3		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 4 Sieve (4.75 mm)	ASTM D422-63 (07)	84.3		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 50 Sieve (0.30 mm)	ASTM D422-63 (07)	7.05		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 60 Sieve (0.25 mm)	ASTM D422-63 (07)	4.44		%		0	1	09/22/25 14:31	09/18/25 15:22
Percent Moisture	EPA 3550C	25.8		%	0.1	0.1	1	09/03/25 19:33	NA

Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.208	U	µg/kg	0.208	0.475	1	09/20/25 01:59	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.137	U	µg/kg	0.137	0.484	1	09/20/25 01:59	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 12:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-004 **Lab ID: HN2512651-004**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.115	U	µg/kg	0.115	0.486	1	09/20/25 01:59	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.102	U	µg/kg	0.102	0.472	1	09/20/25 01:59	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.174	U	µg/kg	0.174	0.480	1	09/20/25 01:59	09/17/25 17:27
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.1	1	09/20/25 01:59	09/17/25 17:27
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.42	U	µg/kg	4.42	15.1	1	09/20/25 01:59	09/17/25 17:27
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.1	1	09/20/25 01:59	09/17/25 17:27
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.130	U	µg/kg	0.130	0.476	1	09/20/25 01:59	09/17/25 17:27
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.167	U	µg/kg	0.167	0.470	1	09/20/25 01:59	09/17/25 17:27
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.222	U	µg/kg	0.222	0.504	1	09/20/25 01:59	09/17/25 17:27
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.159	U	µg/kg	0.159	0.504	1	09/20/25 01:59	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.406	U	µg/kg	0.406	0.504	1	09/20/25 01:59	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.171	U	µg/kg	0.171	0.504	1	09/20/25 01:59	09/17/25 17:27
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.149	U	µg/kg	0.149	0.504	1	09/20/25 01:59	09/17/25 17:27
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.185	U	µg/kg	0.185	0.504	1	09/20/25 01:59	09/17/25 17:27
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.200	U	µg/kg	0.200	0.504	1	09/20/25 01:59	09/17/25 17:27
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.183	U	µg/kg	0.183	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.153	U	µg/kg	0.153	0.448	1	09/20/25 01:59	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 12:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-004 **Lab ID: HN2512651-004**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.208	U	µg/kg	0.208	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.168	U	µg/kg	0.168	0.470	1	09/20/25 01:59	09/17/25 17:27
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.201	U	µg/kg	0.201	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0967	U	µg/kg	0.0967	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorobutanoic acid (PFBA)	EPA 1633	0.114	J	µg/kg	0.0484	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.111	U	µg/kg	0.111	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.118	U	µg/kg	0.118	0.486	1	09/20/25 01:59	09/17/25 17:27
Perfluorodecanoic acid (PFDA)	EPA 1633	0.164	U	µg/kg	0.164	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.157	U	µg/kg	0.157	0.488	1	09/20/25 01:59	09/17/25 17:27
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0665	U	µg/kg	0.0665	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.122	U	µg/kg	0.122	0.480	1	09/20/25 01:59	09/17/25 17:27
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.178	U	µg/kg	0.178	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.131	U	µg/kg	0.131	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0675	U	µg/kg	0.0675	0.460	1	09/20/25 01:59	09/17/25 17:27
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.113	U	µg/kg	0.113	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.134	U	µg/kg	0.134	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.150	U	µg/kg	0.150	0.484	1	09/20/25 01:59	09/17/25 17:27
Perfluorononanoic acid (PFNA)	EPA 1633	0.0927	U	µg/kg	0.0927	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.234	U	µg/kg	0.234	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.151	U	µg/kg	0.151	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.184	U	µg/kg	0.184	0.467	1	09/20/25 01:59	09/17/25 17:27
Perfluorooctanoic acid (PFOA)	EPA 1633	0.102	U	µg/kg	0.102	0.504	1	09/20/25 01:59	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 12:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-004 **Lab ID: HN2512651-004**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.111	U	µg/kg	0.111	0.474	1	09/20/25 01:59	09/17/25 17:27
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0947	U	µg/kg	0.0947	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.128	U	µg/kg	0.128	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0836	U	µg/kg	0.0836	0.504	1	09/20/25 01:59	09/17/25 17:27
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.135	U	µg/kg	0.135	0.504	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C2-FtS 10:2	EPA 1633	93.9		%REC		10-200	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C2-FtS 4:2	EPA 1633	80.8		%REC		40-165	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C2-FtS 6:2	EPA 1633	84.1		%REC		40-215	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C2-FtS 8:2	EPA 1633	88.2		%REC		40-275	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C2-PFDoA	EPA 1633	84.4		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C2-PFHxDA	EPA 1633	124		%REC		10-200	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C2-PFTeDA	EPA 1633	90.6		%REC		20-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C3-HFPO-DA	EPA 1633	81.9		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C3-PFBS	EPA 1633	78.6		%REC		40-135	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C3-PFHxS	EPA 1633	79.4		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C4-PFBA	EPA 1633	85.1		%REC		8-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C4-PFHpA	EPA 1633	82.3		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C5-PFHxA	EPA 1633	83.5		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C5-PFPeA	EPA 1633	83.6		%REC		35-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C6-PFDA	EPA 1633	82.8		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C7-PFUnDA	EPA 1633	87.0		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C8-FOSA	EPA 1633	60.2		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C8-PFOA	EPA 1633	80.3		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C8-PFOS	EPA 1633	77.7		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: 13C9-PFNA	EPA 1633	81.5		%REC		40-130	1	09/20/25 01:59	09/17/25 17:27
Surr: d3-N-MeFOSA	EPA 1633	48.7		%REC		10-130	1	09/20/25 01:59	09/17/25 17:27
Surr: d3-N-MeFOSAA	EPA 1633	69.4		%REC		40-135	1	09/20/25 01:59	09/17/25 17:27
Surr: d5-N-EtFOSA	EPA 1633	43.7		%REC		10-130	1	09/20/25 01:59	09/17/25 17:27
Surr: d5-N-EtFOSAA	EPA 1633	67.6		%REC		40-150	1	09/20/25 01:59	09/17/25 17:27
Surr: d7-N-MeFOSE	EPA 1633	75.1		%REC		20-130	1	09/20/25 01:59	09/17/25 17:27
Surr: d9-N-EtFOSE	EPA 1633	73.8		%REC		15-130	1	09/20/25 01:59	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 12:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-005 **Lab ID: HN2512651-005**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
% Gravel	ASTM D422-63 (07)	2.44		%		0	1	09/22/25 14:31	09/18/25 15:22
% Sand	ASTM D422-63 (07)	88.4		%		0	1	09/22/25 14:31	09/18/25 15:22
% Silt, Clay, Colloids	ASTM D422-63 (07)	9.20		%		0	1	09/22/25 14:31	09/18/25 15:22
0.0015 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.005 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.030 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.375 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
0.75 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
1.5 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
3 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 10 Sieve (2.00 mm)	ASTM D422-63 (07)	96.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 100 Sieve (0.15 mm)	ASTM D422-63 (07)	9.50		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 16 Sieve (1.18 mm)	ASTM D422-63 (07)	95.8		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 200 Sieve (0.075 mm)	ASTM D422-63 (07)	9.20		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 30 Sieve (0.60 mm)	ASTM D422-63 (07)	84.1		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 4 Sieve (4.75 mm)	ASTM D422-63 (07)	97.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 50 Sieve (0.30 mm)	ASTM D422-63 (07)	18.4		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 60 Sieve (0.25 mm)	ASTM D422-63 (07)	12.4		%		0	1	09/22/25 14:31	09/18/25 15:22
Percent Moisture	EPA 3550C	25.4		%	0.1	0.1	1	09/03/25 19:33	NA

Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.207	U	µg/kg	0.207	0.474	1	09/20/25 02:19	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.136	U	µg/kg	0.136	0.482	1	09/20/25 02:19	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 12:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-005

Lab ID: HN2512651-005

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.114	U	µg/kg	0.114	0.484	1	09/20/25 02:19	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.101	U	µg/kg	0.101	0.471	1	09/20/25 02:19	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.174	U	µg/kg	0.174	0.478	1	09/20/25 02:19	09/17/25 17:27
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.1	1	09/20/25 02:19	09/17/25 17:27
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.41	U	µg/kg	4.41	15.1	1	09/20/25 02:19	09/17/25 17:27
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.1	1	09/20/25 02:19	09/17/25 17:27
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.130	U	µg/kg	0.130	0.475	1	09/20/25 02:19	09/17/25 17:27
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.167	U	µg/kg	0.167	0.469	1	09/20/25 02:19	09/17/25 17:27
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.221	U	µg/kg	0.221	0.502	1	09/20/25 02:19	09/17/25 17:27
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.159	U	µg/kg	0.159	0.502	1	09/20/25 02:19	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.405	U	µg/kg	0.405	0.502	1	09/20/25 02:19	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.171	U	µg/kg	0.171	0.502	1	09/20/25 02:19	09/17/25 17:27
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.149	U	µg/kg	0.149	0.502	1	09/20/25 02:19	09/17/25 17:27
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.185	U	µg/kg	0.185	0.502	1	09/20/25 02:19	09/17/25 17:27
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.200	U	µg/kg	0.200	0.502	1	09/20/25 02:19	09/17/25 17:27
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.183	U	µg/kg	0.183	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.153	U	µg/kg	0.153	0.447	1	09/20/25 02:19	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 12:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-005

Lab ID: HN2512651-005

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.207	U	µg/kg	0.207	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.168	U	µg/kg	0.168	0.469	1	09/20/25 02:19	09/17/25 17:27
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.201	U	µg/kg	0.201	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0964	U	µg/kg	0.0964	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorobutanoic acid (PFBA)	EPA 1633	0.0554	J	µg/kg	0.0482	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.110	U	µg/kg	0.110	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.117	U	µg/kg	0.117	0.485	1	09/20/25 02:19	09/17/25 17:27
Perfluorodecanoic acid (PFDA)	EPA 1633	0.164	U	µg/kg	0.164	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.157	U	µg/kg	0.157	0.487	1	09/20/25 02:19	09/17/25 17:27
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0663	U	µg/kg	0.0663	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.122	U	µg/kg	0.122	0.479	1	09/20/25 02:19	09/17/25 17:27
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.178	U	µg/kg	0.178	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.130	U	µg/kg	0.130	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0673	U	µg/kg	0.0673	0.459	1	09/20/25 02:19	09/17/25 17:27
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.112	U	µg/kg	0.112	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.134	U	µg/kg	0.134	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.150	U	µg/kg	0.150	0.483	1	09/20/25 02:19	09/17/25 17:27
Perfluorononanoic acid (PFNA)	EPA 1633	0.0924	U	µg/kg	0.0924	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.233	U	µg/kg	0.233	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.151	U	µg/kg	0.151	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.184	U	µg/kg	0.184	0.466	1	09/20/25 02:19	09/17/25 17:27
Perfluorooctanoic acid (PFOA)	EPA 1633	0.101	U	µg/kg	0.101	0.502	1	09/20/25 02:19	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 12:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-005 **Lab ID: HN2512651-005**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.110	U	µg/kg	0.110	0.473	1	09/20/25 02:19	09/17/25 17:27
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0944	U	µg/kg	0.0944	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.128	U	µg/kg	0.128	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0833	U	µg/kg	0.0833	0.502	1	09/20/25 02:19	09/17/25 17:27
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.134	U	µg/kg	0.134	0.502	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C2-FtS 10:2	EPA 1633	96.8		%REC		10-200	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C2-FtS 4:2	EPA 1633	76.9		%REC		40-165	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C2-FtS 6:2	EPA 1633	82.0		%REC		40-215	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C2-FtS 8:2	EPA 1633	91.4		%REC		40-275	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C2-PFDoA	EPA 1633	85.6		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C2-PFHxDA	EPA 1633	124		%REC		10-200	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C2-PFTeDA	EPA 1633	88.8		%REC		20-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C3-HFPO-DA	EPA 1633	83.2		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C3-PFBS	EPA 1633	77.3		%REC		40-135	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C3-PFHxS	EPA 1633	79.5		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C4-PFBA	EPA 1633	85.0		%REC		8-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C4-PFHpA	EPA 1633	81.4		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C5-PFHxA	EPA 1633	81.7		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C5-PFPeA	EPA 1633	80.9		%REC		35-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C6-PFDA	EPA 1633	82.4		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C7-PFUnDA	EPA 1633	90.6		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C8-FOSA	EPA 1633	59.8		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C8-PFOA	EPA 1633	81.2		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C8-PFOS	EPA 1633	77.8		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: 13C9-PFNA	EPA 1633	80.5		%REC		40-130	1	09/20/25 02:19	09/17/25 17:27
Surr: d3-N-MeFOSA	EPA 1633	48.7		%REC		10-130	1	09/20/25 02:19	09/17/25 17:27
Surr: d3-N-MeFOSAA	EPA 1633	67.4		%REC		40-135	1	09/20/25 02:19	09/17/25 17:27
Surr: d5-N-EtFOSA	EPA 1633	43.4		%REC		10-130	1	09/20/25 02:19	09/17/25 17:27
Surr: d5-N-EtFOSAA	EPA 1633	67.0		%REC		40-150	1	09/20/25 02:19	09/17/25 17:27
Surr: d7-N-MeFOSE	EPA 1633	74.3		%REC		20-130	1	09/20/25 02:19	09/17/25 17:27
Surr: d9-N-EtFOSE	EPA 1633	75.7		%REC		15-130	1	09/20/25 02:19	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 13:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-006	Lab ID: HN2512651-006
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
% Gravel	ASTM D422-63 (07)	0.425		%		0	1	09/22/25 14:31	09/18/25 15:22
% Sand	ASTM D422-63 (07)	96.4		%		0	1	09/22/25 14:31	09/18/25 15:22
% Silt, Clay, Colloids	ASTM D422-63 (07)	3.16		%		0	1	09/22/25 14:31	09/18/25 15:22
0.0015 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.005 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.030 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.375 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
0.75 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
1.5 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
3 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 10 Sieve (2.00 mm)	ASTM D422-63 (07)	99.3		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 100 Sieve (0.15 mm)	ASTM D422-63 (07)	3.30		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 16 Sieve (1.18 mm)	ASTM D422-63 (07)	98.5		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 200 Sieve (0.075 mm)	ASTM D422-63 (07)	3.16		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 30 Sieve (0.60 mm)	ASTM D422-63 (07)	84.3		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 4 Sieve (4.75 mm)	ASTM D422-63 (07)	99.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 50 Sieve (0.30 mm)	ASTM D422-63 (07)	10.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 60 Sieve (0.25 mm)	ASTM D422-63 (07)	5.33		%		0	1	09/22/25 14:31	09/18/25 15:22
Percent Moisture	EPA 3550C	26.2		%	0.1	0.1	1	09/03/25 19:33	NA

Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.207	U	µg/kg	0.207	0.474	1	09/20/25 02:40	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.136	U	µg/kg	0.136	0.482	1	09/20/25 02:40	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 13:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-006

Lab ID: HN2512651-006

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.114	U	µg/kg	0.114	0.484	1	09/20/25 02:40	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.101	U	µg/kg	0.101	0.471	1	09/20/25 02:40	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.174	U	µg/kg	0.174	0.478	1	09/20/25 02:40	09/17/25 17:27
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.0	1	09/20/25 02:40	09/17/25 17:27
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.41	U	µg/kg	4.41	15.0	1	09/20/25 02:40	09/17/25 17:27
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.0	1	09/20/25 02:40	09/17/25 17:27
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.129	U	µg/kg	0.129	0.475	1	09/20/25 02:40	09/17/25 17:27
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.166	U	µg/kg	0.166	0.469	1	09/20/25 02:40	09/17/25 17:27
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.221	U	µg/kg	0.221	0.502	1	09/20/25 02:40	09/17/25 17:27
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.158	U	µg/kg	0.158	0.502	1	09/20/25 02:40	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.404	U	µg/kg	0.404	0.502	1	09/20/25 02:40	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.170	U	µg/kg	0.170	0.502	1	09/20/25 02:40	09/17/25 17:27
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.148	U	µg/kg	0.148	0.502	1	09/20/25 02:40	09/17/25 17:27
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.185	U	µg/kg	0.185	0.502	1	09/20/25 02:40	09/17/25 17:27
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.200	U	µg/kg	0.200	0.502	1	09/20/25 02:40	09/17/25 17:27
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.183	U	µg/kg	0.183	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.152	U	µg/kg	0.152	0.446	1	09/20/25 02:40	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 13:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-006

Lab ID: HN2512651-006

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.207	U	µg/kg	0.207	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.168	U	µg/kg	0.168	0.469	1	09/20/25 02:40	09/17/25 17:27
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.201	U	µg/kg	0.201	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0963	U	µg/kg	0.0963	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorobutanoic acid (PFBA)	EPA 1633	0.0482	U	µg/kg	0.0482	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.110	U	µg/kg	0.110	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.117	U	µg/kg	0.117	0.485	1	09/20/25 02:40	09/17/25 17:27
Perfluorodecanoic acid (PFDA)	EPA 1633	0.164	U	µg/kg	0.164	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.156	U	µg/kg	0.156	0.487	1	09/20/25 02:40	09/17/25 17:27
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0662	U	µg/kg	0.0662	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.121	U	µg/kg	0.121	0.479	1	09/20/25 02:40	09/17/25 17:27
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.178	U	µg/kg	0.178	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.130	U	µg/kg	0.130	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0672	U	µg/kg	0.0672	0.458	1	09/20/25 02:40	09/17/25 17:27
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.112	U	µg/kg	0.112	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.133	U	µg/kg	0.133	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.150	U	µg/kg	0.150	0.483	1	09/20/25 02:40	09/17/25 17:27
Perfluorononanoic acid (PFNA)	EPA 1633	0.0923	U	µg/kg	0.0923	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.233	U	µg/kg	0.233	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.150	U	µg/kg	0.150	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.184	U	µg/kg	0.184	0.466	1	09/20/25 02:40	09/17/25 17:27
Perfluorooctanoic acid (PFOA)	EPA 1633	0.101	U	µg/kg	0.101	0.502	1	09/20/25 02:40	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/26/25 13:00
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-006 **Lab ID: HN2512651-006**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.110	U	µg/kg	0.110	0.473	1	09/20/25 02:40	09/17/25 17:27
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0943	U	µg/kg	0.0943	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.127	U	µg/kg	0.127	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0833	U	µg/kg	0.0833	0.502	1	09/20/25 02:40	09/17/25 17:27
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.134	U	µg/kg	0.134	0.502	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C2-FtS 10:2	EPA 1633	88.7		%REC		10-200	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C2-FtS 4:2	EPA 1633	75.7		%REC		40-165	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C2-FtS 6:2	EPA 1633	85.4		%REC		40-215	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C2-FtS 8:2	EPA 1633	93.7		%REC		40-275	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C2-PFDoA	EPA 1633	82.0		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C2-PFHxDA	EPA 1633	125		%REC		10-200	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C2-PFTeDA	EPA 1633	84.0		%REC		20-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C3-HFPO-DA	EPA 1633	85.6		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C3-PFBS	EPA 1633	80.8		%REC		40-135	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C3-PFHxS	EPA 1633	82.5		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C4-PFBA	EPA 1633	85.3		%REC		8-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C4-PFHpA	EPA 1633	81.3		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C5-PFHxA	EPA 1633	82.0		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C5-PFPeA	EPA 1633	84.2		%REC		35-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C6-PFDA	EPA 1633	83.3		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C7-PFUnDA	EPA 1633	86.4		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C8-FOSA	EPA 1633	68.1		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C8-PFOA	EPA 1633	83.6		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C8-PFOS	EPA 1633	78.7		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: 13C9-PFNA	EPA 1633	83.9		%REC		40-130	1	09/20/25 02:40	09/17/25 17:27
Surr: d3-N-MeFOSA	EPA 1633	55.9		%REC		10-130	1	09/20/25 02:40	09/17/25 17:27
Surr: d3-N-MeFOSAA	EPA 1633	75.6		%REC		40-135	1	09/20/25 02:40	09/17/25 17:27
Surr: d5-N-EtFOSA	EPA 1633	51.5		%REC		10-130	1	09/20/25 02:40	09/17/25 17:27
Surr: d5-N-EtFOSAA	EPA 1633	72.6		%REC		40-150	1	09/20/25 02:40	09/17/25 17:27
Surr: d7-N-MeFOSE	EPA 1633	82.6		%REC		20-130	1	09/20/25 02:40	09/17/25 17:27
Surr: d9-N-EtFOSE	EPA 1633	83.5		%REC		15-130	1	09/20/25 02:40	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 09:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-007 **Lab ID: HN2512651-007**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
% Gravel	ASTM D422-63 (07)	0.115		%		0	1	09/22/25 14:31	09/18/25 15:22
% Sand	ASTM D422-63 (07)	94.8		%		0	1	09/22/25 14:31	09/18/25 15:22
% Silt, Clay, Colloids	ASTM D422-63 (07)	5.04		%		0	1	09/22/25 14:31	09/18/25 15:22
0.0015 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.005 mm (Hydrometer)	ASTM D422-63 (07)	3.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.030 mm (Hydrometer)	ASTM D422-63 (07)	4.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.375 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
0.75 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
1.5 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
3 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 10 Sieve (2.00 mm)	ASTM D422-63 (07)	98.9		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 100 Sieve (0.15 mm)	ASTM D422-63 (07)	5.38		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 16 Sieve (1.18 mm)	ASTM D422-63 (07)	97.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 200 Sieve (0.075 mm)	ASTM D422-63 (07)	5.04		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 30 Sieve (0.60 mm)	ASTM D422-63 (07)	83.0		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 4 Sieve (4.75 mm)	ASTM D422-63 (07)	99.9		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 50 Sieve (0.30 mm)	ASTM D422-63 (07)	16.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 60 Sieve (0.25 mm)	ASTM D422-63 (07)	9.41		%		0	1	09/22/25 14:31	09/18/25 15:22
Percent Moisture	EPA 3550C	26.4		%	0.1	0.1	1	09/03/25 19:33	NA

Per- and Polyfluorinated Alkyl Substances by LC-MS

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.206	U	µg/kg	0.206	0.471	1	09/20/25 03:00	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.136	U	µg/kg	0.136	0.479	1	09/20/25 03:00	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 09:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-007

Lab ID: HN2512651-007

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.114	U	µg/kg	0.114	0.481	1	09/20/25 03:00	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.101	U	µg/kg	0.101	0.468	1	09/20/25 03:00	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.173	U	µg/kg	0.173	0.475	1	09/20/25 03:00	09/17/25 17:27
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.17	U	µg/kg	2.17	15.0	1	09/20/25 03:00	09/17/25 17:27
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.38	U	µg/kg	4.38	15.0	1	09/20/25 03:00	09/17/25 17:27
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.17	U	µg/kg	2.17	15.0	1	09/20/25 03:00	09/17/25 17:27
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.129	U	µg/kg	0.129	0.472	1	09/20/25 03:00	09/17/25 17:27
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.166	U	µg/kg	0.166	0.466	1	09/20/25 03:00	09/17/25 17:27
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.220	U	µg/kg	0.220	0.499	1	09/20/25 03:00	09/17/25 17:27
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.158	U	µg/kg	0.158	0.499	1	09/20/25 03:00	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.402	U	µg/kg	0.402	0.499	1	09/20/25 03:00	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.170	U	µg/kg	0.170	0.499	1	09/20/25 03:00	09/17/25 17:27
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.148	U	µg/kg	0.148	0.499	1	09/20/25 03:00	09/17/25 17:27
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.184	U	µg/kg	0.184	0.499	1	09/20/25 03:00	09/17/25 17:27
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.199	U	µg/kg	0.199	0.499	1	09/20/25 03:00	09/17/25 17:27
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.182	U	µg/kg	0.182	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.152	U	µg/kg	0.152	0.444	1	09/20/25 03:00	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 09:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-007

Lab ID: HN2512651-007

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.206	U	µg/kg	0.206	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.167	U	µg/kg	0.167	0.466	1	09/20/25 03:00	09/17/25 17:27
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.200	U	µg/kg	0.200	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0959	U	µg/kg	0.0959	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorobutanoic acid (PFBA)	EPA 1633	0.0479	U	µg/kg	0.0479	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.110	U	µg/kg	0.110	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.117	U	µg/kg	0.117	0.482	1	09/20/25 03:00	09/17/25 17:27
Perfluorodecanoic acid (PFDA)	EPA 1633	0.163	U	µg/kg	0.163	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.156	U	µg/kg	0.156	0.484	1	09/20/25 03:00	09/17/25 17:27
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0659	U	µg/kg	0.0659	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.121	U	µg/kg	0.121	0.476	1	09/20/25 03:00	09/17/25 17:27
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.177	U	µg/kg	0.177	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.130	U	µg/kg	0.130	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0669	U	µg/kg	0.0669	0.456	1	09/20/25 03:00	09/17/25 17:27
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.112	U	µg/kg	0.112	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.133	U	µg/kg	0.133	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.149	U	µg/kg	0.149	0.480	1	09/20/25 03:00	09/17/25 17:27
Perfluorononanoic acid (PFNA)	EPA 1633	0.0919	U	µg/kg	0.0919	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.232	U	µg/kg	0.232	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.150	U	µg/kg	0.150	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.183	U	µg/kg	0.183	0.463	1	09/20/25 03:00	09/17/25 17:27
Perfluorooctanoic acid (PFOA)	EPA 1633	0.101	U	µg/kg	0.101	0.499	1	09/20/25 03:00	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 09:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-007 **Lab ID: HN2512651-007**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.110	U	µg/kg	0.110	0.470	1	09/20/25 03:00	09/17/25 17:27
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0939	U	µg/kg	0.0939	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.127	U	µg/kg	0.127	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0829	U	µg/kg	0.0829	0.499	1	09/20/25 03:00	09/17/25 17:27
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.134	U	µg/kg	0.134	0.499	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C2-FtS 10:2	EPA 1633	105		%REC		10-200	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C2-FtS 4:2	EPA 1633	80.6		%REC		40-165	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C2-FtS 6:2	EPA 1633	88.7		%REC		40-215	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C2-FtS 8:2	EPA 1633	94.5		%REC		40-275	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C2-PFDoA	EPA 1633	89.6		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C2-PFHxDA	EPA 1633	125		%REC		10-200	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C2-PFTeDA	EPA 1633	94.7		%REC		20-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C3-HFPO-DA	EPA 1633	88.4		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C3-PFBS	EPA 1633	83.0		%REC		40-135	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C3-PFHxS	EPA 1633	84.6		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C4-PFBA	EPA 1633	88.8		%REC		8-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C4-PFHpA	EPA 1633	84.0		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C5-PFHxA	EPA 1633	86.6		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C5-PFPeA	EPA 1633	83.9		%REC		35-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C6-PFDA	EPA 1633	87.6		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C7-PFUnDA	EPA 1633	98.3		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C8-FOSA	EPA 1633	66.0		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C8-PFOA	EPA 1633	86.6		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C8-PFOS	EPA 1633	82.7		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: 13C9-PFNA	EPA 1633	85.6		%REC		40-130	1	09/20/25 03:00	09/17/25 17:27
Surr: d3-N-MeFOSA	EPA 1633	53.1		%REC		10-130	1	09/20/25 03:00	09/17/25 17:27
Surr: d3-N-MeFOSAA	EPA 1633	75.3		%REC		40-135	1	09/20/25 03:00	09/17/25 17:27
Surr: d5-N-EtFOSA	EPA 1633	49.6		%REC		10-130	1	09/20/25 03:00	09/17/25 17:27
Surr: d5-N-EtFOSAA	EPA 1633	75.3		%REC		40-150	1	09/20/25 03:00	09/17/25 17:27
Surr: d7-N-MeFOSE	EPA 1633	79.4		%REC		20-130	1	09/20/25 03:00	09/17/25 17:27
Surr: d9-N-EtFOSE	EPA 1633	80.7		%REC		15-130	1	09/20/25 03:00	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 10:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-008

Lab ID: HN2512651-008

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
% Gravel	ASTM D422-63 (07)	0.0		%		0	1	09/22/25 14:31	09/18/25 15:22
% Sand	ASTM D422-63 (07)	91.4		%		0	1	09/22/25 14:31	09/18/25 15:22
% Silt, Clay, Colloids	ASTM D422-63 (07)	8.59		%		0	1	09/22/25 14:31	09/18/25 15:22
0.0015 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.005 mm (Hydrometer)	ASTM D422-63 (07)	3.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.030 mm (Hydrometer)	ASTM D422-63 (07)	4.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.375 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
0.75 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
1.5 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
3 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 10 Sieve (2.00 mm)	ASTM D422-63 (07)	99.9		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 100 Sieve (0.15 mm)	ASTM D422-63 (07)	9.79		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 16 Sieve (1.18 mm)	ASTM D422-63 (07)	99.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 200 Sieve (0.075 mm)	ASTM D422-63 (07)	8.59		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 30 Sieve (0.60 mm)	ASTM D422-63 (07)	91.7		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 4 Sieve (4.75 mm)	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 50 Sieve (0.30 mm)	ASTM D422-63 (07)	33.9		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 60 Sieve (0.25 mm)	ASTM D422-63 (07)	20.5		%		0	1	09/22/25 14:31	09/18/25 15:22
Percent Moisture	EPA 3550C	30.3		%	0.1	0.1	1	09/03/25 19:33	NA
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.206	U	µg/kg	0.206	0.473	1	09/20/25 03:20	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.136	U	µg/kg	0.136	0.481	1	09/20/25 03:20	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 10:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-008 **Lab ID: HN2512651-008**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.114	U	µg/kg	0.114	0.483	1	09/20/25 03:20	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.101	U	µg/kg	0.101	0.470	1	09/20/25 03:20	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.173	U	µg/kg	0.173	0.477	1	09/20/25 03:20	09/17/25 17:27
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.17	U	µg/kg	2.17	15.0	1	09/20/25 03:20	09/17/25 17:27
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.40	U	µg/kg	4.40	15.0	1	09/20/25 03:20	09/17/25 17:27
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.17	U	µg/kg	2.17	15.0	1	09/20/25 03:20	09/17/25 17:27
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.129	U	µg/kg	0.129	0.474	1	09/20/25 03:20	09/17/25 17:27
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.166	U	µg/kg	0.166	0.468	1	09/20/25 03:20	09/17/25 17:27
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.220	U	µg/kg	0.220	0.501	1	09/20/25 03:20	09/17/25 17:27
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.158	U	µg/kg	0.158	0.501	1	09/20/25 03:20	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.404	U	µg/kg	0.404	0.501	1	09/20/25 03:20	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.170	U	µg/kg	0.170	0.501	1	09/20/25 03:20	09/17/25 17:27
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.148	U	µg/kg	0.148	0.501	1	09/20/25 03:20	09/17/25 17:27
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.184	U	µg/kg	0.184	0.501	1	09/20/25 03:20	09/17/25 17:27
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.199	U	µg/kg	0.199	0.501	1	09/20/25 03:20	09/17/25 17:27
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.182	U	µg/kg	0.182	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.152	U	µg/kg	0.152	0.446	1	09/20/25 03:20	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 10:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-008

Lab ID: HN2512651-008

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.206	U	µg/kg	0.206	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.167	U	µg/kg	0.167	0.468	1	09/20/25 03:20	09/17/25 17:27
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.200	U	µg/kg	0.200	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0961	U	µg/kg	0.0961	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorobutanoic acid (PFBA)	EPA 1633	0.111	J	µg/kg	0.0481	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.110	U	µg/kg	0.110	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.117	U	µg/kg	0.117	0.484	1	09/20/25 03:20	09/17/25 17:27
Perfluorodecanoic acid (PFDA)	EPA 1633	0.163	U	µg/kg	0.163	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.156	U	µg/kg	0.156	0.486	1	09/20/25 03:20	09/17/25 17:27
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0661	U	µg/kg	0.0661	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.121	U	µg/kg	0.121	0.478	1	09/20/25 03:20	09/17/25 17:27
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.177	U	µg/kg	0.177	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.130	U	µg/kg	0.130	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0671	U	µg/kg	0.0671	0.458	1	09/20/25 03:20	09/17/25 17:27
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.112	U	µg/kg	0.112	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.133	U	µg/kg	0.133	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.149	U	µg/kg	0.149	0.482	1	09/20/25 03:20	09/17/25 17:27
Perfluorononanoic acid (PFNA)	EPA 1633	0.0921	U	µg/kg	0.0921	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.232	U	µg/kg	0.232	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.150	U	µg/kg	0.150	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.183	U	µg/kg	0.183	0.465	1	09/20/25 03:20	09/17/25 17:27
Perfluorooctanoic acid (PFOA)	EPA 1633	0.101	U	µg/kg	0.101	0.501	1	09/20/25 03:20	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 10:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-008 **Lab ID: HN2512651-008**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.110	U	µg/kg	0.110	0.472	1	09/20/25 03:20	09/17/25 17:27
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0941	U	µg/kg	0.0941	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.127	U	µg/kg	0.127	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0831	U	µg/kg	0.0831	0.501	1	09/20/25 03:20	09/17/25 17:27
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.134	U	µg/kg	0.134	0.501	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C2-FtS 10:2	EPA 1633	108		%REC		10-200	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C2-FtS 4:2	EPA 1633	75.9		%REC		40-165	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C2-FtS 6:2	EPA 1633	85.5		%REC		40-215	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C2-FtS 8:2	EPA 1633	89.8		%REC		40-275	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C2-PFDoA	EPA 1633	90.3		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C2-PFHxDA	EPA 1633	102		%REC		10-200	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C2-PFTeDA	EPA 1633	94.2		%REC		20-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C3-HFPO-DA	EPA 1633	77.8		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C3-PFBS	EPA 1633	79.6		%REC		40-135	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C3-PFHxS	EPA 1633	80.7		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C4-PFBA	EPA 1633	84.2		%REC		8-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C4-PFHpA	EPA 1633	78.5		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C5-PFHxA	EPA 1633	78.9		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C5-PFPeA	EPA 1633	76.4		%REC		35-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C6-PFDA	EPA 1633	83.4		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C7-PFUnDA	EPA 1633	91.1		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C8-FOSA	EPA 1633	63.8		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C8-PFOA	EPA 1633	83.7		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C8-PFOS	EPA 1633	78.7		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: 13C9-PFNA	EPA 1633	80.5		%REC		40-130	1	09/20/25 03:20	09/17/25 17:27
Surr: d3-N-MeFOSA	EPA 1633	53.9		%REC		10-130	1	09/20/25 03:20	09/17/25 17:27
Surr: d3-N-MeFOSAA	EPA 1633	71.8		%REC		40-135	1	09/20/25 03:20	09/17/25 17:27
Surr: d5-N-EtFOSA	EPA 1633	49.6		%REC		10-130	1	09/20/25 03:20	09/17/25 17:27
Surr: d5-N-EtFOSAA	EPA 1633	73.2		%REC		40-150	1	09/20/25 03:20	09/17/25 17:27
Surr: d7-N-MeFOSE	EPA 1633	80.5		%REC		20-130	1	09/20/25 03:20	09/17/25 17:27
Surr: d9-N-EtFOSE	EPA 1633	78.7		%REC		15-130	1	09/20/25 03:20	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 12:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-009

Lab ID: HN2512651-009

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
% Gravel	ASTM D422-63 (07)	14.3		%		0	1	09/22/25 14:31	09/18/25 15:22
% Sand	ASTM D422-63 (07)	81.0		%		0	1	09/22/25 14:31	09/18/25 15:22
% Silt, Clay, Colloids	ASTM D422-63 (07)	4.70		%		0	1	09/22/25 14:31	09/18/25 15:22
0.0015 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.005 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.030 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.375 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
0.75 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
1.5 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
3 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 10 Sieve (2.00 mm)	ASTM D422-63 (07)	82.4		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 100 Sieve (0.15 mm)	ASTM D422-63 (07)	4.99		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 16 Sieve (1.18 mm)	ASTM D422-63 (07)	79.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 200 Sieve (0.075 mm)	ASTM D422-63 (07)	4.70		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 30 Sieve (0.60 mm)	ASTM D422-63 (07)	56.5		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 4 Sieve (4.75 mm)	ASTM D422-63 (07)	85.7		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 50 Sieve (0.30 mm)	ASTM D422-63 (07)	9.46		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 60 Sieve (0.25 mm)	ASTM D422-63 (07)	7.11		%		0	1	09/22/25 14:31	09/18/25 15:22
Percent Moisture	EPA 3550C	26.0		%	0.1	0.1	1	09/03/25 19:33	NA

Per- and Polyfluorinated Alkyl Substances by LC-MS

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.205	U	µg/kg	0.205	0.471	1	09/20/25 03:40	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.136	U	µg/kg	0.136	0.479	1	09/20/25 03:40	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 12:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-009 **Lab ID: HN2512651-009**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.114	U	µg/kg	0.114	0.481	1	09/20/25 03:40	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.101	U	µg/kg	0.101	0.468	1	09/20/25 03:40	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.172	U	µg/kg	0.172	0.475	1	09/20/25 03:40	09/17/25 17:27
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.16	U	µg/kg	2.16	15.0	1	09/20/25 03:40	09/17/25 17:27
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.38	U	µg/kg	4.38	15.0	1	09/20/25 03:40	09/17/25 17:27
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.16	U	µg/kg	2.16	15.0	1	09/20/25 03:40	09/17/25 17:27
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.129	U	µg/kg	0.129	0.472	1	09/20/25 03:40	09/17/25 17:27
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.166	U	µg/kg	0.166	0.466	1	09/20/25 03:40	09/17/25 17:27
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.219	U	µg/kg	0.219	0.499	1	09/20/25 03:40	09/17/25 17:27
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.158	U	µg/kg	0.158	0.499	1	09/20/25 03:40	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.402	U	µg/kg	0.402	0.499	1	09/20/25 03:40	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.170	U	µg/kg	0.170	0.499	1	09/20/25 03:40	09/17/25 17:27
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.148	U	µg/kg	0.148	0.499	1	09/20/25 03:40	09/17/25 17:27
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.184	U	µg/kg	0.184	0.499	1	09/20/25 03:40	09/17/25 17:27
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.198	U	µg/kg	0.198	0.499	1	09/20/25 03:40	09/17/25 17:27
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.182	U	µg/kg	0.182	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.152	U	µg/kg	0.152	0.444	1	09/20/25 03:40	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 12:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-009 **Lab ID: HN2512651-009**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.205	U	µg/kg	0.205	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.166	U	µg/kg	0.166	0.466	1	09/20/25 03:40	09/17/25 17:27
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.199	U	µg/kg	0.199	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0957	U	µg/kg	0.0957	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorobutanoic acid (PFBA)	EPA 1633	0.126	J	µg/kg	0.0479	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.110	U	µg/kg	0.110	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.117	U	µg/kg	0.117	0.482	1	09/20/25 03:40	09/17/25 17:27
Perfluorodecanoic acid (PFDA)	EPA 1633	0.162	U	µg/kg	0.162	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.156	U	µg/kg	0.156	0.484	1	09/20/25 03:40	09/17/25 17:27
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0658	U	µg/kg	0.0658	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.121	U	µg/kg	0.121	0.476	1	09/20/25 03:40	09/17/25 17:27
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.176	U	µg/kg	0.176	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.130	U	µg/kg	0.130	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0668	U	µg/kg	0.0668	0.456	1	09/20/25 03:40	09/17/25 17:27
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.112	U	µg/kg	0.112	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.133	U	µg/kg	0.133	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.149	U	µg/kg	0.149	0.480	1	09/20/25 03:40	09/17/25 17:27
Perfluorononanoic acid (PFNA)	EPA 1633	0.0918	U	µg/kg	0.0918	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.231	U	µg/kg	0.231	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.150	U	µg/kg	0.150	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.182	U	µg/kg	0.182	0.463	1	09/20/25 03:40	09/17/25 17:27
Perfluorooctanoic acid (PFOA)	EPA 1633	0.101	U	µg/kg	0.101	0.499	1	09/20/25 03:40	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 12:10
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-009 **Lab ID: HN2512651-009**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.110	U	µg/kg	0.110	0.470	1	09/20/25 03:40	09/17/25 17:27
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0938	U	µg/kg	0.0938	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.127	U	µg/kg	0.127	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0828	U	µg/kg	0.0828	0.499	1	09/20/25 03:40	09/17/25 17:27
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.134	U	µg/kg	0.134	0.499	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C2-FtS 10:2	EPA 1633	95.6		%REC		10-200	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C2-FtS 4:2	EPA 1633	79.2		%REC		40-165	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C2-FtS 6:2	EPA 1633	86.0		%REC		40-215	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C2-FtS 8:2	EPA 1633	93.6		%REC		40-275	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C2-PFDoA	EPA 1633	84.7		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C2-PFHxDA	EPA 1633	126		%REC		10-200	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C2-PFTeDA	EPA 1633	86.2		%REC		20-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C3-HFPO-DA	EPA 1633	88.1		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C3-PFBS	EPA 1633	80.9		%REC		40-135	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C3-PFHxS	EPA 1633	83.0		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C4-PFBA	EPA 1633	86.8		%REC		8-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C4-PFHpA	EPA 1633	86.0		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C5-PFHxA	EPA 1633	85.0		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C5-PFPeA	EPA 1633	88.3		%REC		35-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C6-PFDA	EPA 1633	86.0		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C7-PFUnDA	EPA 1633	89.3		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C8-FOSA	EPA 1633	65.9		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C8-PFOA	EPA 1633	84.8		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C8-PFOS	EPA 1633	81.2		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: 13C9-PFNA	EPA 1633	85.4		%REC		40-130	1	09/20/25 03:40	09/17/25 17:27
Surr: d3-N-MeFOSA	EPA 1633	50.9		%REC		10-130	1	09/20/25 03:40	09/17/25 17:27
Surr: d3-N-MeFOSAA	EPA 1633	75.2		%REC		40-135	1	09/20/25 03:40	09/17/25 17:27
Surr: d5-N-EtFOSA	EPA 1633	47.4		%REC		10-130	1	09/20/25 03:40	09/17/25 17:27
Surr: d5-N-EtFOSAA	EPA 1633	74.0		%REC		40-150	1	09/20/25 03:40	09/17/25 17:27
Surr: d7-N-MeFOSE	EPA 1633	77.6		%REC		20-130	1	09/20/25 03:40	09/17/25 17:27
Surr: d9-N-EtFOSE	EPA 1633	80.8		%REC		15-130	1	09/20/25 03:40	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 12:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-010 **Lab ID: HN2512651-010**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
% Gravel	ASTM D422-63 (07)	1.13		%		0	1	09/22/25 14:31	09/18/25 15:22
% Sand	ASTM D422-63 (07)	93.9		%		0	1	09/22/25 14:31	09/18/25 15:22
% Silt, Clay, Colloids	ASTM D422-63 (07)	4.99		%		0	1	09/22/25 14:31	09/18/25 15:22
0.0015 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.005 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.030 mm (Hydrometer)	ASTM D422-63 (07)	2.00		%		0	1	09/22/25 14:31	09/18/25 15:22
0.375 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
0.75 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
1.5 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
3 Inch Sieve	ASTM D422-63 (07)	100		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 10 Sieve (2.00 mm)	ASTM D422-63 (07)	95.8		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 100 Sieve (0.15 mm)	ASTM D422-63 (07)	5.25		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 16 Sieve (1.18 mm)	ASTM D422-63 (07)	93.3		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 200 Sieve (0.075 mm)	ASTM D422-63 (07)	4.99		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 30 Sieve (0.60 mm)	ASTM D422-63 (07)	73.6		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 4 Sieve (4.75 mm)	ASTM D422-63 (07)	98.9		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 50 Sieve (0.30 mm)	ASTM D422-63 (07)	11.4		%		0	1	09/22/25 14:31	09/18/25 15:22
No. 60 Sieve (0.25 mm)	ASTM D422-63 (07)	7.67		%		0	1	09/22/25 14:31	09/18/25 15:22
Percent Moisture	EPA 3550C	28.8		%	0.1	0.1	1	09/03/25 19:33	NA

Per- and Polyfluorinated Alkyl Substances by LC-MS

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.207	U	µg/kg	0.207	0.474	1	09/20/25 04:00	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.136	U	µg/kg	0.136	0.482	1	09/20/25 04:00	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 12:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-010

Lab ID: HN2512651-010

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.114	U	µg/kg	0.114	0.484	1	09/20/25 04:00	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.101	U	µg/kg	0.101	0.471	1	09/20/25 04:00	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.174	U	µg/kg	0.174	0.478	1	09/20/25 04:00	09/17/25 17:27
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.1	1	09/20/25 04:00	09/17/25 17:27
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.41	U	µg/kg	4.41	15.1	1	09/20/25 04:00	09/17/25 17:27
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.1	1	09/20/25 04:00	09/17/25 17:27
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.130	U	µg/kg	0.130	0.475	1	09/20/25 04:00	09/17/25 17:27
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.167	U	µg/kg	0.167	0.469	1	09/20/25 04:00	09/17/25 17:27
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.221	U	µg/kg	0.221	0.502	1	09/20/25 04:00	09/17/25 17:27
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.159	U	µg/kg	0.159	0.502	1	09/20/25 04:00	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.405	U	µg/kg	0.405	0.502	1	09/20/25 04:00	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.171	U	µg/kg	0.171	0.502	1	09/20/25 04:00	09/17/25 17:27
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.149	U	µg/kg	0.149	0.502	1	09/20/25 04:00	09/17/25 17:27
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.185	U	µg/kg	0.185	0.502	1	09/20/25 04:00	09/17/25 17:27
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.200	U	µg/kg	0.200	0.502	1	09/20/25 04:00	09/17/25 17:27
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.183	U	µg/kg	0.183	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.153	U	µg/kg	0.153	0.447	1	09/20/25 04:00	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 12:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-010

Lab ID: HN2512651-010

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.207	U	µg/kg	0.207	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.168	U	µg/kg	0.168	0.469	1	09/20/25 04:00	09/17/25 17:27
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.201	U	µg/kg	0.201	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0964	U	µg/kg	0.0964	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorobutanoic acid (PFBA)	EPA 1633	0.0482	U	µg/kg	0.0482	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.110	U	µg/kg	0.110	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.117	U	µg/kg	0.117	0.485	1	09/20/25 04:00	09/17/25 17:27
Perfluorodecanoic acid (PFDA)	EPA 1633	0.164	U	µg/kg	0.164	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.157	U	µg/kg	0.157	0.487	1	09/20/25 04:00	09/17/25 17:27
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0663	U	µg/kg	0.0663	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.121	U	µg/kg	0.121	0.479	1	09/20/25 04:00	09/17/25 17:27
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.178	U	µg/kg	0.178	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.130	U	µg/kg	0.130	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0673	U	µg/kg	0.0673	0.459	1	09/20/25 04:00	09/17/25 17:27
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.112	U	µg/kg	0.112	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.134	U	µg/kg	0.134	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.150	U	µg/kg	0.150	0.483	1	09/20/25 04:00	09/17/25 17:27
Perfluorononanoic acid (PFNA)	EPA 1633	0.0924	U	µg/kg	0.0924	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.233	U	µg/kg	0.233	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.151	U	µg/kg	0.151	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.184	U	µg/kg	0.184	0.466	1	09/20/25 04:00	09/17/25 17:27
Perfluorooctanoic acid (PFOA)	EPA 1633	0.101	U	µg/kg	0.101	0.502	1	09/20/25 04:00	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 12:40
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-010 **Lab ID: HN2512651-010**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.110	U	µg/kg	0.110	0.473	1	09/20/25 04:00	09/17/25 17:27
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0944	U	µg/kg	0.0944	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.128	U	µg/kg	0.128	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0833	U	µg/kg	0.0833	0.502	1	09/20/25 04:00	09/17/25 17:27
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.134	U	µg/kg	0.134	0.502	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C2-FtS 10:2	EPA 1633	105		%REC		10-200	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C2-FtS 4:2	EPA 1633	79.6		%REC		40-165	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C2-FtS 6:2	EPA 1633	83.7		%REC		40-215	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C2-FtS 8:2	EPA 1633	87.8		%REC		40-275	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C2-PFDoA	EPA 1633	84.3		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C2-PFHxDA	EPA 1633	122		%REC		10-200	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C2-PFTeDA	EPA 1633	89.2		%REC		20-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C3-HFPO-DA	EPA 1633	84.9		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C3-PFBS	EPA 1633	83.9		%REC		40-135	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C3-PFHxS	EPA 1633	82.4		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C4-PFBA	EPA 1633	86.9		%REC		8-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C4-PFHpA	EPA 1633	84.2		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C5-PFHxA	EPA 1633	83.3		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C5-PFPeA	EPA 1633	83.7		%REC		35-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C6-PFDA	EPA 1633	84.9		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C7-PFUnDA	EPA 1633	91.8		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C8-FOSA	EPA 1633	63.9		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C8-PFOA	EPA 1633	85.4		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C8-PFOS	EPA 1633	80.7		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: 13C9-PFNA	EPA 1633	85.8		%REC		40-130	1	09/20/25 04:00	09/17/25 17:27
Surr: d3-N-MeFOSA	EPA 1633	50.0		%REC		10-130	1	09/20/25 04:00	09/17/25 17:27
Surr: d3-N-MeFOSAA	EPA 1633	71.8		%REC		40-135	1	09/20/25 04:00	09/17/25 17:27
Surr: d5-N-EtFOSA	EPA 1633	47.2		%REC		10-130	1	09/20/25 04:00	09/17/25 17:27
Surr: d5-N-EtFOSAA	EPA 1633	71.6		%REC		40-150	1	09/20/25 04:00	09/17/25 17:27
Surr: d7-N-MeFOSE	EPA 1633	73.6		%REC		20-130	1	09/20/25 04:00	09/17/25 17:27
Surr: d9-N-EtFOSE	EPA 1633	77.7		%REC		15-130	1	09/20/25 04:00	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 09:30
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-011 **Lab ID: HN2512651-011**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
General Chemistry Parameters									
Percent Moisture	EPA 3550C	28.9		%	0.1	0.1	1	09/03/25 19:33	NA
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.207	U	µg/kg	0.207	0.475	1	09/20/25 04:20	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.137	U	µg/kg	0.137	0.483	1	09/20/25 04:20	09/17/25 17:27
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.115	U	µg/kg	0.115	0.485	1	09/20/25 04:20	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.102	U	µg/kg	0.102	0.472	1	09/20/25 04:20	09/17/25 17:27
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.174	U	µg/kg	0.174	0.479	1	09/20/25 04:20	09/17/25 17:27
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.1	1	09/20/25 04:20	09/17/25 17:27
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	4.42	U	µg/kg	4.42	15.1	1	09/20/25 04:20	09/17/25 17:27
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	2.18	U	µg/kg	2.18	15.1	1	09/20/25 04:20	09/17/25 17:27
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.130	U	µg/kg	0.130	0.476	1	09/20/25 04:20	09/17/25 17:27
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	0.167	U	µg/kg	0.167	0.470	1	09/20/25 04:20	09/17/25 17:27
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.221	U	µg/kg	0.221	0.503	1	09/20/25 04:20	09/17/25 17:27
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.159	U	µg/kg	0.159	0.503	1	09/20/25 04:20	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.405	U	µg/kg	0.405	0.503	1	09/20/25 04:20	09/17/25 17:27
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	0.171	U	µg/kg	0.171	0.503	1	09/20/25 04:20	09/17/25 17:27
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.149	U	µg/kg	0.149	0.503	1	09/20/25 04:20	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 09:30
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-011 **Lab ID: HN2512651-011**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.185	U	µg/kg	0.185	0.503	1	09/20/25 04:20	09/17/25 17:27
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.200	U	µg/kg	0.200	0.503	1	09/20/25 04:20	09/17/25 17:27
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.183	U	µg/kg	0.183	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESEA)	EPA 1633	0.153	U	µg/kg	0.153	0.448	1	09/20/25 04:20	09/17/25 17:27
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.207	U	µg/kg	0.207	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.168	U	µg/kg	0.168	0.470	1	09/20/25 04:20	09/17/25 17:27
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.201	U	µg/kg	0.201	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.0965	U	µg/kg	0.0965	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorobutanoic acid (PFBA)	EPA 1633	0.0560	J	µg/kg	0.0483	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.111	U	µg/kg	0.111	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.118	U	µg/kg	0.118	0.486	1	09/20/25 04:20	09/17/25 17:27
Perfluorodecanoic acid (PFDA)	EPA 1633	0.164	U	µg/kg	0.164	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.157	U	µg/kg	0.157	0.488	1	09/20/25 04:20	09/17/25 17:27
Perfluorododecanoic acid (PFDOA)	EPA 1633	0.0664	U	µg/kg	0.0664	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.122	U	µg/kg	0.122	0.480	1	09/20/25 04:20	09/17/25 17:27
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.178	U	µg/kg	0.178	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	0.131	U	µg/kg	0.131	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.0674	U	µg/kg	0.0674	0.460	1	09/20/25 04:20	09/17/25 17:27
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.113	U	µg/kg	0.113	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.134	U	µg/kg	0.134	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.150	U	µg/kg	0.150	0.484	1	09/20/25 04:20	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 09:30
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-011 **Lab ID: HN2512651-011**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorononanoic acid (PFNA)	EPA 1633	0.0925	U	µg/kg	0.0925	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorooctadecanoic acid (PFODA)	EPA 1633	0.233	U	µg/kg	0.233	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.151	U	µg/kg	0.151	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	0.184	U	µg/kg	0.184	0.467	1	09/20/25 04:20	09/17/25 17:27
Perfluorooctanoic acid (PFOA)	EPA 1633	0.102	U	µg/kg	0.102	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.111	U	µg/kg	0.111	0.474	1	09/20/25 04:20	09/17/25 17:27
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.0945	U	µg/kg	0.0945	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.128	U	µg/kg	0.128	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.0835	U	µg/kg	0.0835	0.503	1	09/20/25 04:20	09/17/25 17:27
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.135	U	µg/kg	0.135	0.503	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C2-FtS 10:2	EPA 1633	98.8		%REC		10-200	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C2-FtS 4:2	EPA 1633	79.8		%REC		40-165	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C2-FtS 6:2	EPA 1633	85.3		%REC		40-215	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C2-FtS 8:2	EPA 1633	89.0		%REC		40-275	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C2-PFDoA	EPA 1633	87.2		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C2-PFHxDA	EPA 1633	123		%REC		10-200	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C2-PFTeDA	EPA 1633	89.2		%REC		20-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C3-HFPO-DA	EPA 1633	82.9		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C3-PFBS	EPA 1633	82.5		%REC		40-135	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C3-PFHxS	EPA 1633	85.8		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C4-PFBA	EPA 1633	87.0		%REC		8-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C4-PFHpA	EPA 1633	83.4		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C5-PFHxA	EPA 1633	84.9		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C5-PFPeA	EPA 1633	86.0		%REC		35-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C6-PFDA	EPA 1633	86.7		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C7-PFUnDA	EPA 1633	92.0		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C8-FOSA	EPA 1633	66.1		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C8-PFOA	EPA 1633	84.6		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27
Surr: 13C8-PFOS	EPA 1633	83.6		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID

Work Order: HN2512651
Date Collected: 08/27/25 09:30
Date Received: 09/03/25 09:30

CLIENT ID: 3432966-011	Lab ID: HN2512651-011
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: 13C9-PFNA	EPA 1633	84.8		%REC		40-130	1	09/20/25 04:20	09/17/25 17:27
Surr: d3-N-MeFOSA	EPA 1633	49.9		%REC		10-130	1	09/20/25 04:20	09/17/25 17:27
Surr: d3-N-MeFOSAA	EPA 1633	74.3		%REC		40-135	1	09/20/25 04:20	09/17/25 17:27
Surr: d5-N-EtFOSA	EPA 1633	44.5		%REC		10-130	1	09/20/25 04:20	09/17/25 17:27
Surr: d5-N-EtFOSAA	EPA 1633	72.2		%REC		40-150	1	09/20/25 04:20	09/17/25 17:27
Surr: d7-N-MeFOSE	EPA 1633	79.2		%REC		20-130	1	09/20/25 04:20	09/17/25 17:27
Surr: d9-N-EtFOSE	EPA 1633	80.9		%REC		15-130	1	09/20/25 04:20	09/17/25 17:27

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER

Work Order: HN2512651
Date Collected: 08/27/25 13:20
Date Received: 09/03/25 09:30

CLIENT ID: EB-01

Lab ID: HN2512651-012

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Per- and Polyfluorinated Alkyl Substances by LC-MS									
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	EPA 1633	0.509	U	ng/L	0.509	1.79	1	09/11/25 03:26	09/09/25 17:09
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	EPA 1633	0.378	U	ng/L	0.378	1.79	1	09/11/25 03:26	09/09/25 17:09
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	EPA 1633	0.916	U	ng/L	0.916	1.79	1	09/11/25 03:26	09/09/25 17:09
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	EPA 1633	0.192	U	ng/L	0.192	1.79	1	09/11/25 03:26	09/09/25 17:09
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	EPA 1633	0.535	U	ng/L	0.535	1.79	1	09/11/25 03:26	09/09/25 17:09
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	EPA 1633	31.3	U	ng/L	31.3	89.4	1	09/11/25 03:26	09/09/25 17:09
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	EPA 1633	3.19	U	ng/L	3.19	89.4	1	09/11/25 03:26	09/09/25 17:09
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	EPA 1633	3.19	U	ng/L	3.19	89.4	1	09/11/25 03:26	09/09/25 17:09
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	EPA 1633	0.235	U	ng/L	0.235	1.79	1	09/11/25 03:26	09/09/25 17:09
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	EPA 1633	1.50	U	ng/L	1.50	1.79	1	09/11/25 03:26	09/09/25 17:09
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	EPA 1633	0.486	U	ng/L	0.486	1.79	1	09/11/25 03:26	09/09/25 17:09
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	EPA 1633	0.177	U	ng/L	0.177	1.79	1	09/11/25 03:26	09/09/25 17:09
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	EPA 1633	0.705	U	ng/L	0.705	1.79	1	09/11/25 03:26	09/09/25 17:09
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	EPA 1633	1.05	U	ng/L	1.05	1.79	1	09/11/25 03:26	09/09/25 17:09
N-Methylperfluorooctane sulfonamide (MeFOSA)	EPA 1633	0.807	U	ng/L	0.807	1.79	1	09/11/25 03:26	09/09/25 17:09
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	EPA 1633	0.643	U	ng/L	0.643	1.79	1	09/11/25 03:26	09/09/25 17:09

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER

Work Order: HN2512651
Date Collected: 08/27/25 13:20
Date Received: 09/03/25 09:30

CLIENT ID: EB-01 **Lab ID: HN2512651-012**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	EPA 1633	0.471	U	ng/L	0.471	1.79	1	09/11/25 03:26	09/09/25 17:09
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	EPA 1633	0.809	U	ng/L	0.809	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	EPA 1633	0.986	U	ng/L	0.986	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluoro-3-methoxypropanoic acid (PFMPA)	EPA 1633	0.330	U	ng/L	0.330	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	EPA 1633	0.451	U	ng/L	0.451	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluoro-4-methoxybutanoic acid (PFMBA)	EPA 1633	0.535	U	ng/L	0.535	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorobutane sulfonic acid (PFBS)	EPA 1633	0.250	U	ng/L	0.250	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorobutanoic acid (PFBA)	EPA 1633	1.70	U	ng/L	1.70	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorobutylsulfonamide (PFBSA)	EPA 1633	0.444	U	ng/L	0.444	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorodecane sulfonic acid (PFDS)	EPA 1633	0.515	U	ng/L	0.515	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorodecanoic acid (PFDA)	EPA 1633	0.512	U	ng/L	0.512	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorododecane sulfonic acid (PFDoS)	EPA 1633	0.708	U	ng/L	0.708	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorododecanoic acid (PFDOA)	EPA 1633	1.10	U	ng/L	1.10	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluoroheptane sulfonic acid (PFHpS)	EPA 1633	0.494	U	ng/L	0.494	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluoroheptanoic acid (PFHpA)	EPA 1633	0.435	U	ng/L	0.435	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorohexadecanoic acid (PFHxDA)	EPA 1633	1.01	U	ng/L	1.01	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorohexane sulfonic acid (PFHxS)	EPA 1633	0.496	U	ng/L	0.496	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorohexanesulfonamide (PFHxSA)	EPA 1633	0.924	U	ng/L	0.924	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorohexanoic acid (PFHxA)	EPA 1633	0.946	U	ng/L	0.946	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorononane sulfonic acid (PFNS)	EPA 1633	0.458	U	ng/L	0.458	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorononanoic acid (PFNA)	EPA 1633	0.386	U	ng/L	0.386	1.79	1	09/11/25 03:26	09/09/25 17:09

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER

Work Order: HN2512651
Date Collected: 08/27/25 13:20
Date Received: 09/03/25 09:30

CLIENT ID: EB-01 **Lab ID: HN2512651-012**

Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Perfluorooctadecanoic acid (PFODA)	EPA 1633	1.10	U	ng/L	1.10	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorooctane sulfonamide (PFOSAm)	EPA 1633	0.422	U	ng/L	0.422	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorooctane sulfonic acid (PFOS)	EPA 1633	1.06	U	ng/L	1.06	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorooctanoic acid (PFOA)	EPA 1633	0.358	U	ng/L	0.358	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluoropentane sulfonic acid (PFPeS)	EPA 1633	0.389	U	ng/L	0.389	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluoropentanoic acid (PFPeA)	EPA 1633	0.622	U	ng/L	0.622	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorotetradecanoic acid (PFTDA)	EPA 1633	0.912	U	ng/L	0.912	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluorotridecanoic acid (PFTrDA)	EPA 1633	0.774	U	ng/L	0.774	1.79	1	09/11/25 03:26	09/09/25 17:09
Perfluoroundecanoic acid (PFUnDA)	EPA 1633	0.705	U	ng/L	0.705	1.79	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C2-FtS 10:2	EPA 1633	226	S	%REC		10-200	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C2-FtS 4:2	EPA 1633	81.9		%REC		40-200	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C2-FtS 6:2	EPA 1633	91.5		%REC		40-200	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C2-FtS 8:2	EPA 1633	182		%REC		40-300	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C2-PFDoA	EPA 1633	130		%REC		10-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C2-PFHxDA	EPA 1633	105		%REC		10-300	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C2-PFTeDA	EPA 1633	97.2		%REC		10-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C3-HFPO-DA	EPA 1633	88.6		%REC		40-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C3-PFBS	EPA 1633	85.2		%REC		40-135	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C3-PFHxS	EPA 1633	86.6		%REC		40-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C4-PFBA	EPA 1633	87.0		%REC		5-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C4-PFHpA	EPA 1633	91.2		%REC		40-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C5-PFHxA	EPA 1633	86.9		%REC		40-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C5-PFPeA	EPA 1633	89.1		%REC		40-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C6-PFDA	EPA 1633	89.2		%REC		40-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C7-PFUnDA	EPA 1633	102		%REC		30-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C8-FOSA	EPA 1633	64.0		%REC		40-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C8-PFOA	EPA 1633	87.8		%REC		40-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C8-PFOS	EPA 1633	75.8		%REC		40-130	1	09/11/25 03:26	09/09/25 17:09
Surr: 13C9-PFNA	EPA 1633	88.1		%REC		40-130	1	09/11/25 03:26	09/09/25 17:09
Surr: d3-N-MeFOSA	EPA 1633	72.1		%REC		10-130	1	09/11/25 03:26	09/09/25 17:09

Analytical Report



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER

Work Order: HN2512651
Date Collected: 08/27/25 13:20
Date Received: 09/03/25 09:30

CLIENT ID: EB-01	Lab ID: HN2512651-012
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Analyte	Method	Results	Qual	Units	MDL	MRL	Dilution Factor	Date Analyzed	Date Extracted
Surr: d3-N-MeFOSAA	EPA 1633	58.1		%REC		40-170	1	09/11/25 03:26	09/09/25 17:09
Surr: d5-N-EtFOSA	EPA 1633	77.6		%REC		10-130	1	09/11/25 03:26	09/09/25 17:09
Surr: d5-N-EtFOSAA	EPA 1633	84.7		%REC		25-135	1	09/11/25 03:26	09/09/25 17:09
Surr: d7-N-MeFOSE	EPA 1633	86.8		%REC		10-130	1	09/11/25 03:26	09/09/25 17:09
Surr: d9-N-EtFOSE	EPA 1633	79.2		%REC		10-130	1	09/11/25 03:26	09/09/25 17:09



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2197543

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3460387

General Chemistry Parameters

MB	CLIENT ID: Method Blank	Lab ID: QC-2197543-001
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 09/03/25 19:33
Prep Date: NA

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	0.1	%	0.1	0.1		0.1					U

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2197543-002
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 09/03/25 19:33
Prep Date: NA

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	100	%	0.1	0.1	100		100	98-102			

DUP	CLIENT ID: Batch QC	Lab ID: QC-2197543-004
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 09/03/25 19:33
Prep Date: NA

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	9.7	%	0.1	0.1		10.5			8.52	10	

DUP	CLIENT ID: 3432966-006	Lab ID: QC-2197543-015
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Method: EPA 3550C **Dilution:** 1 **Analysis Date:** 09/03/25 19:33
Prep Date: NA

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Percent Moisture	25.6	%	0.1	0.1		26.2			2.12	10	

The following samples were analyzed in this batch: HN2512651-001, HN2512651-002, HN2512651-003, HN2512651-004,
 HN2512651-005, HN2512651-006, HN2512651-007, HN2512651-008,
 HN2512651-009, HN2512651-010, HN2512651-011



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER
QC Lot: 2206879

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3484334

Per- and Polyfluorinated Alkyl Substances by LC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2206879-001
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/10/25 20:45

Prep Date: 09/09/25 17:10

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.569	ng/L	0.569	2.00		0.569					U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.423	ng/L	0.423	2.00		0.423					U
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	1.02	ng/L	1.02	2.00		1.02					U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.215	ng/L	0.215	2.00		0.215					U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.598	ng/L	0.598	2.00		0.598					U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	35.0	ng/L	35.0	100		35.0					U
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	3.56	ng/L	3.56	100		3.56					U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	3.56	ng/L	3.56	100		3.56					U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.263	ng/L	0.263	2.00		0.263					U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	1.68	ng/L	1.68	2.00		1.68					U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.543	ng/L	0.543	2.00		0.543					U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0.198	ng/L	0.198	2.00		0.198					U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0.788	ng/L	0.788	2.00		0.788					U
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.17	ng/L	1.17	2.00		1.17					U
N-Methylperfluorooctane sulfonamide (MeFOSA)	0.902	ng/L	0.902	2.00		0.902					U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0.719	ng/L	0.719	2.00		0.719					U
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0.527	ng/L	0.527	2.00		0.527					U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.905	ng/L	0.905	2.00		0.905					U
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEA)	1.10	ng/L	1.10	2.00		1.10					U
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.369	ng/L	0.369	2.00		0.369					U
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	0.504	ng/L	0.504	2.00		0.504					U
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.598	ng/L	0.598	2.00		0.598					U
Perfluorobutane sulfonic acid (PFBS)	0.279	ng/L	0.279	2.00		0.279					U
Perfluorobutanoic acid (PFBA)	1.90	ng/L	1.90	2.00		1.90					U



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER
QC Lot: 2206879

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3484334

MB	CLIENT ID: Method Blank	Lab ID: QC-2206879-001
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/10/25 20:45

Prep Date: 09/09/25 17:10

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorobutylsulfonamide (PFBSA)	0.496	ng/L	0.496	2.00		0.496					U
Perfluorodecane sulfonic acid (PFDS)	0.576	ng/L	0.576	2.00		0.576					U
Perfluorodecanoic acid (PFDA)	0.572	ng/L	0.572	2.00		0.572					U
Perfluorododecane sulfonic acid (PFDoS)	0.791	ng/L	0.791	2.00		0.791					U
Perfluorododecanoic acid (PFDOA)	1.24	ng/L	1.24	2.00		1.24					U
Perfluoroheptane sulfonic acid (PFHpS)	0.552	ng/L	0.552	2.00		0.552					U
Perfluoroheptanoic acid (PFHpA)	0.486	ng/L	0.486	2.00		0.486					U
Perfluorohexadecanoic acid (PFHxDA)	1.13	ng/L	1.13	2.00		1.13					U
Perfluorohexane sulfonic acid (PFHxS)	0.554	ng/L	0.554	2.00		0.554					U
Perfluorohexanesulfonamide (PFHxSA)	1.03	ng/L	1.03	2.00		1.03					U
Perfluorohexanoic acid (PFHxA)	1.06	ng/L	1.06	2.00		1.06					U
Perfluorononane sulfonic acid (PFNS)	0.512	ng/L	0.512	2.00		0.512					U
Perfluorononanoic acid (PFNA)	0.432	ng/L	0.432	2.00		0.432					U
Perfluorooctadecanoic acid (PFODA)	1.24	ng/L	1.24	2.00		1.24					U
Perfluorooctane sulfonamide (PFOSAm)	0.472	ng/L	0.472	2.00		0.472					U
Perfluorooctane sulfonic acid (PFOS)	1.18	ng/L	1.18	2.00		1.18					U
Perfluorooctanoic acid (PFOA)	0.400	ng/L	0.400	2.00		0.400					U
Perfluoropentane sulfonic acid (PFPeS)	0.435	ng/L	0.435	2.00		0.435					U
Perfluoropentanoic acid (PFPeA)	0.696	ng/L	0.696	2.00		0.696					U
Perfluorotetradecanoic acid (PFTDA)	1.02	ng/L	1.02	2.00		1.02					U
Perfluorotridecanoic acid (PFTrDA)	0.866	ng/L	0.866	2.00		0.866					U
Perfluoroundecanoic acid (PFUnDA)	0.788	ng/L	0.788	2.00		0.788					U
Surr: 13C2-FtS 10:2	50.0	ng/L			50		100.0	10-200			
Surr: 13C2-FtS 4:2	99.7	ng/L			100		99.7	40-200			
Surr: 13C2-FtS 6:2	93.9	ng/L			100		93.9	40-200			
Surr: 13C2-FtS 8:2	94.1	ng/L			100		94.1	40-300			
Surr: 13C2-PFDoA	24.9	ng/L			25		99.6	10-130			
Surr: 13C2-PFHxDA	55.4	ng/L			50		111	10-200			
Surr: 13C2-PFTeDA	23.0	ng/L			25		92.2	10-130			
Surr: 13C3-HFPO-DA	202	ng/L			200		101	40-130			
Surr: 13C3-PFBS	49.9	ng/L			50		99.7	40-135			
Surr: 13C3-PFHxS	48.4	ng/L			50		96.8	40-130			
Surr: 13C4-PFBA	196	ng/L			200		98.1	5-130			
Surr: 13C4-PFHpA	49.2	ng/L			50		98.5	40-130			
Surr: 13C5-PFHxA	49.5	ng/L			50		99.0	40-130			
Surr: 13C5-PFPeA	97.5	ng/L			100		97.5	40-130			
Surr: 13C6-PFDA	25.3	ng/L			25		101	40-130			
Surr: 13C7-PFUnDA	25.2	ng/L			25		101	30-130			
Surr: 13C8-FOSA	42.9	ng/L			50		85.8	40-130			
Surr: 13C8-PFOA	48.8	ng/L			50		97.7	40-130			

QA/QC Report



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER
QC Lot: 2206879

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3484334

MB	CLIENT ID: Method Blank	Lab ID: QC-2206879-001
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/10/25 20:45

Prep Date: 09/09/25 17:10

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C8-PFOS	45.0	ng/L			50		90.0	40-130			
Surr: 13C9-PFNA	24.6	ng/L			25		98.5	40-130			
Surr: d3-N-MeFOSA	32.7	ng/L			50		65.4	10-130			
Surr: d3-N-MeFOSAA	94.2	ng/L			100		94.2	40-170			
Surr: d5-N-EtFOSA	32.0	ng/L			50		64.0	10-130			
Surr: d5-N-EtFOSAA	92.8	ng/L			100		92.8	25-135			
Surr: d7-N-MeFOSE	426	ng/L			500		85.1	10-130			
Surr: d9-N-EtFOSE	420	ng/L			500		84.0	10-130			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2206879-002
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/10/25 21:05

Prep Date: 09/09/25 17:10

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	3.79	ng/L	0.569	2.00	3.78		100	55-160			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.19	ng/L	0.423	2.00	3.84		109	60-150			
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	4.46	ng/L	1.02	2.00	3.86		116	50-150			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	3.92	ng/L	0.215	2.00	3.75		104	70-145			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.07	ng/L	0.598	2.00	3.81		107	65-155			
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	207	ng/L	35.0	100	200		104	50-145			
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	207	ng/L	3.56	100	200		104	65-130			
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	214	ng/L	3.56	100	200		107	70-135			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	3.94	ng/L	0.263	2.00	3.78		104	65-145			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	3.75	ng/L	1.68	2.00	3.74		100	70-155			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	3.87	ng/L	0.543	2.00	4		96.8	70-140			
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4.37	ng/L	0.198	2.00	4		109	65-145			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	4.19	ng/L	0.788	2.00	4		105	70-145			
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	4.22	ng/L	1.17	2.00	4		105	70-135			
N-Methylperfluorooctane sulfonamide (MeFOSA)	4.63	ng/L	0.902	2.00	4		116	60-150			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	4.19	ng/L	0.719	2.00	4		105	50-140			



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER
QC Lot: 2206879

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3484334

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2206879-002
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/10/25 21:05

Prep Date: 09/09/25 17:10

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	4.43	ng/L	0.527	2.00	4		111	70-145			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.02	ng/L	0.905	2.00	4		100	50-150			
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	3.81	ng/L	1.10	2.00	3.56		107	70-140			
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.16	ng/L	0.369	2.00	4		104	55-140			
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFechS)	4.21	ng/L	0.504	2.00	3.74		112	50-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.04	ng/L	0.598	2.00	4		101	60-150			
Perfluorobutane sulfonic acid (PFBS)	3.83	ng/L	0.279	2.00	3.55		108	60-145			
Perfluorobutanoic acid (PFBA)	4.28	ng/L	1.90	2.00	4		107	70-140			
Perfluorobutylsulfonamide (PFBSA)	4.77	ng/L	0.496	2.00	4		119	50-150			
Perfluorodecane sulfonic acid (PFDS)	4.47	ng/L	0.576	2.00	3.86		116	60-145			
Perfluorodecanoic acid (PFDA)	4.19	ng/L	0.572	2.00	4		105	70-149			
Perfluorododecane sulfonic acid (PFDoS)	4.41	ng/L	0.791	2.00	3.88		114	50-145			
Perfluorododecanoic acid (PFDOA)	4.49	ng/L	1.24	2.00	4		112	70-140			
Perfluoroheptane sulfonic acid (PFHpS)	4.54	ng/L	0.552	2.00	3.82		119	70-150			
Perfluoroheptanoic acid (PFHpA)	4.04	ng/L	0.486	2.00	4		101	70-150			
Perfluorohexadecanoic acid (PFHxDA)	4.21	ng/L	1.13	2.00	4		105	50-150			
Perfluorohexane sulfonic acid (PFHxS)	4.37	ng/L	0.554	2.00	3.66		119	65-145			
Perfluorohexanesulfonamide (PFHxSA)	4.15	ng/L	1.03	2.00	4		104	50-150			
Perfluorohexanoic acid (PFHxA)	4.26	ng/L	1.06	2.00	4		106	70-145			
Perfluorononane sulfonic acid (PFNS)	4.59	ng/L	0.512	2.00	3.85		119	65-145			
Perfluorononanoic acid (PFNA)	4.14	ng/L	0.432	2.00	4		103	70-150			
Perfluorooctadecanoic acid (PFODA)	3.79	ng/L	1.24	2.00	4		94.8	50-150			
Perfluorooctane sulfonamide (PFOSAm)	4.27	ng/L	0.472	2.00	4		107	70-145			
Perfluorooctane sulfonic acid (PFOS)	4.45	ng/L	1.18	2.00	3.71		120	55-150			
Perfluorooctanoic acid (PFOA)	4.16	ng/L	0.400	2.00	4		104	70-150			
Perfluoropentane sulfonic acid (PFPeS)	3.94	ng/L	0.435	2.00	3.77		104	65-140			
Perfluoropentanoic acid (PFPeA)	4.30	ng/L	0.696	2.00	4		108	65-135			
Perfluorotetradecanoic acid (PFTDA)	4.36	ng/L	1.02	2.00	4		109	60-140			
Perfluorotridecanoic acid (PFTrDA)	4.34	ng/L	0.866	2.00	4		108	65-140			
Perfluoroundecanoic acid (PFUnDA)	4.11	ng/L	0.788	2.00	4		103	70-145			
Surr: 13C2-FtS 10:2	46.4	ng/L			50		92.7	10-200			
Surr: 13C2-FtS 4:2	90.1	ng/L			100		90.1	40-200			
Surr: 13C2-FtS 6:2	86.8	ng/L			100		86.8	40-200			
Surr: 13C2-FtS 8:2	88.0	ng/L			100		88.0	40-300			
Surr: 13C2-PFDoA	23.5	ng/L			25		94.2	10-130			



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER
QC Lot: 2206879

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3484334

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2206879-002
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/10/25 21:05

Prep Date: 09/09/25 17:10

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C2-PFHxDA	51.7	ng/L			50		103	10-200			
Surr: 13C2-PFTeDA	22.0	ng/L			25		88.0	10-130			
Surr: 13C3-HFPO-DA	185	ng/L			200		92.5	40-130			
Surr: 13C3-PFBS	46.3	ng/L			50		92.6	40-135			
Surr: 13C3-PFHxS	45.3	ng/L			50		90.6	40-130			
Surr: 13C4-PFBA	183	ng/L			200		91.4	5-130			
Surr: 13C4-PFHpA	46.9	ng/L			50		93.7	40-130			
Surr: 13C5-PFHxA	46.1	ng/L			50		92.2	40-130			
Surr: 13C5-PFPeA	93.0	ng/L			100		93.0	40-130			
Surr: 13C6-PFDA	23.9	ng/L			25		95.5	40-130			
Surr: 13C7-PFUnDA	23.5	ng/L			25		94.1	30-130			
Surr: 13C8-FOSA	41.3	ng/L			50		82.6	40-130			
Surr: 13C8-PFOA	46.1	ng/L			50		92.2	40-130			
Surr: 13C8-PFOS	42.9	ng/L			50		85.9	40-130			
Surr: 13C9-PFNA	23.1	ng/L			25		92.6	40-130			
Surr: d3-N-MeFOSA	34.1	ng/L			50		68.2	10-130			
Surr: d3-N-MeFOSAA	88.2	ng/L			100		88.2	40-170			
Surr: d5-N-EtFOSA	35.7	ng/L			50		71.4	10-130			
Surr: d5-N-EtFOSAA	87.1	ng/L			100		87.1	25-135			
Surr: d7-N-MeFOSE	454	ng/L			500		90.8	10-130			
Surr: d9-N-EtFOSE	450	ng/L			500		90.1	10-130			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2206879-003
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/10/25 21:25

Prep Date: 09/09/25 17:10

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafuoro-3-oxaundecane -1-sulfonic acid (11-Cl-PF3OUdS)	19.2	ng/L	0.569	2.00	18.8		102	55-160			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	20.6	ng/L	0.423	2.00	19.2		108	60-150			
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	19.2	ng/L	1.02	2.00	19.2		100	50-150			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	18.5	ng/L	0.215	2.00	18.8		98.5	70-145			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	19.3	ng/L	0.598	2.00	19		102	65-155			
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	423	ng/L	35.0	100	400		106	50-145			
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	424	ng/L	3.56	100	400		106	65-130			
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	446	ng/L	3.56	100	400		111	70-135			



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER
QC Lot: 2206879

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3484334

LCS		CLIENT ID: Laboratory Control Sample				Lab ID: QC-2206879-003					
Method: EPA 1633		Dilution: 1				Analysis Date: 09/10/25 21:25					
						Prep Date: 09/09/25 17:10					
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	18.9	ng/L	0.263	2.00	19		99.3	65-145			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	18.6	ng/L	1.68	2.00	18.6		100	70-155			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	19.4	ng/L	0.543	2.00	20		97.1	70-140			
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	18.3	ng/L	0.198	2.00	20		91.4	60-150			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	20.0	ng/L	0.788	2.00	20		99.8	70-145			
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	21.5	ng/L	1.17	2.00	20		108	70-135			
N-Methylperfluorooctane sulfonamide (MeFOSA)	20.4	ng/L	0.902	2.00	20		102	60-150			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	21.2	ng/L	0.719	2.00	20		106	50-140			
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	20.7	ng/L	0.527	2.00	20		103	70-145			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	20.6	ng/L	0.905	2.00	20		103	50-150			
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEA)	18.8	ng/L	1.10	2.00	17.8		106	70-140			
Perfluoro-3-methoxypropanoic acid (PFMPA)	21.2	ng/L	0.369	2.00	20		106	55-140			
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	20.8	ng/L	0.504	2.00	18.6		112	50-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	19.8	ng/L	0.598	2.00	20		98.9	60-150			
Perfluorobutane sulfonic acid (PFBS)	18.2	ng/L	0.279	2.00	17.8		102	60-145			
Perfluorobutanoic acid (PFBA)	20.4	ng/L	1.90	2.00	20		102	70-140			
Perfluorobutylsulfonamide (PFBSA)	22.6	ng/L	0.496	2.00	20		113	50-150			
Perfluorodecane sulfonic acid (PFDS)	22.2	ng/L	0.576	2.00	19.4		114	60-145			
Perfluorodecanoic acid (PFDA)	19.7	ng/L	0.572	2.00	20		98.6	70-140			
Perfluorododecane sulfonic acid (PFDoS)	20.2	ng/L	0.791	2.00	19.4		104	50-145			
Perfluorododecanoic acid (PFDOA)	20.9	ng/L	1.24	2.00	20		104	70-140			
Perfluoroheptane sulfonic acid (PFHpS)	22.0	ng/L	0.552	2.00	19		116	70-150			
Perfluoroheptanoic acid (PFHpA)	19.4	ng/L	0.486	2.00	20		96.9	70-150			
Perfluorohexadecanoic acid (PFHxDA)	19.9	ng/L		2.00	20		99.5	50-150			
Perfluorohexane sulfonic acid (PFHxS)	18.2	ng/L	0.554	2.00	18.2		100.0	65-145			
Perfluorohexanesulfonamide (PFHxSA)	19.6	ng/L	1.03	2.00	20		98.0	50-150			
Perfluorohexanoic acid (PFHxA)	20.0	ng/L	1.06	2.00	20		100	70-145			
Perfluorononane sulfonic acid (PFNS)	23.5	ng/L	0.512	2.00	19.2		123	65-145			
Perfluorononanoic acid (PFNA)	20.6	ng/L	0.432	2.00	20		103	70-150			
Perfluorooctadecanoic acid (PFODA)	18.1	ng/L		2.00	20		90.4	50-150			

QA/QC Report



Client: ALS Environmental
Project: 40-3432966
Matrix: WATER
QC Lot: 2206879

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3484334

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2206879-003
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/10/25 21:25

Prep Date: 09/09/25 17:10

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorooctane sulfonamide (PFOSAm)	21.0	ng/L	0.472	2.00	20		105	70-145			
Perfluorooctane sulfonic acid (PFOS)	20.2	ng/L	1.18	2.00	18.6		109	55-150			
Perfluorooctanoic acid (PFOA)	19.7	ng/L	0.400	2.00	20		98.4	70-150			
Perfluoropentane sulfonic acid (PFPeS)	20.3	ng/L	0.435	2.00	18.8		108	65-140			
Perfluoropentanoic acid (PFPeA)	21.2	ng/L	0.696	2.00	20		106	65-135			
Perfluorotetradecanoic acid (PFTDA)	20.7	ng/L	1.02	2.00	20		104	60-140			
Perfluorotridecanoic acid (PFTrDA)	21.5	ng/L	0.866	2.00	20		108	65-140			
Perfluoroundecanoic acid (PFUnDA)	20.1	ng/L	0.788	2.00	20		101	70-145			
Surr: 13C2-FtS 10:2	46.9	ng/L			50		93.8	10-200			
Surr: 13C2-FtS 4:2	85.9	ng/L			100		85.9	40-200			
Surr: 13C2-FtS 6:2	85.8	ng/L			100		85.8	40-200			
Surr: 13C2-FtS 8:2	82.4	ng/L			100		82.4	40-300			
Surr: 13C2-PFDoA	22.6	ng/L			25		90.5	10-130			
Surr: 13C2-PFHxDA	47.5	ng/L			50		95.0	10-299			
Surr: 13C2-PFTeDA	20.7	ng/L			25		82.9	10-130			
Surr: 13C3-HFPO-DA	183	ng/L			200		91.6	40-130			
Surr: 13C3-PFBS	42.7	ng/L			50		85.4	40-135			
Surr: 13C3-PFHxS	43.6	ng/L			50		87.3	40-130			
Surr: 13C4-PFBA	181	ng/L			200		90.6	5-130			
Surr: 13C4-PFHpA	46.1	ng/L			50		92.2	40-130			
Surr: 13C5-PFHxA	44.6	ng/L			50		89.3	40-130			
Surr: 13C5-PFPeA	89.6	ng/L			100		89.6	40-130			
Surr: 13C6-PFDA	22.7	ng/L			25		90.7	40-130			
Surr: 13C7-PFUnDA	22.6	ng/L			25		90.5	30-130			
Surr: 13C8-FOSA	38.4	ng/L			50		76.8	40-130			
Surr: 13C8-PFOA	44.7	ng/L			50		89.4	40-130			
Surr: 13C8-PFOS	40.5	ng/L			50		80.9	40-130			
Surr: 13C9-PFNA	22.5	ng/L			25		90.1	40-130			
Surr: d3-N-MeFOSA	33.9	ng/L			50		67.8	10-130			
Surr: d3-N-MeFOSAA	81.9	ng/L			100		81.9	40-170			
Surr: d5-N-EtFOSA	34.8	ng/L			50		69.6	10-130			
Surr: d5-N-EtFOSAA	81.6	ng/L			100		81.6	25-135			
Surr: d7-N-MeFOSE	440	ng/L			500		87.9	10-130			
Surr: d9-N-EtFOSE	435	ng/L			500		86.9	10-130			

The following samples were analyzed in this batch: HN2512651-012



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2215579

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3490285

Per- and Polyfluorinated Alkyl Substances by LC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2215579-001
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Method: EPA 1633**Dilution:** 1**Analysis Date:** 09/12/25 10:03**Prep Date:** 09/10/25 13:01

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.206	µg/kg	0.206	0.472		0.206					U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.136	µg/kg	0.136	0.480		0.136					U
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	0.114	µg/kg	0.114	0.482		0.114					U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.101	µg/kg	0.101	0.469		0.101					U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.173	µg/kg	0.173	0.476		0.173					U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	2.17	µg/kg	2.17	15.0		2.17					U
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	4.39	µg/kg	4.39	15.0		4.39					U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	2.17	µg/kg	2.17	15.0		2.17					U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.129	µg/kg	0.129	0.473		0.129					U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.166	µg/kg	0.166	0.467		0.166					U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.220	µg/kg	0.220	0.500		0.220					U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0.158	µg/kg	0.158	0.500		0.158					U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0.403	µg/kg	0.403	0.500		0.403					U
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0.170	µg/kg	0.170	0.500		0.170					U
N-Methylperfluorooctane sulfonamide (MeFOSA)	0.148	µg/kg	0.148	0.500		0.148					U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0.184	µg/kg	0.184	0.500		0.184					U
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0.199	µg/kg	0.199	0.500		0.199					U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.182	µg/kg	0.182	0.500		0.182					U
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	0.152	µg/kg	0.152	0.445		0.152					U
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.206	µg/kg	0.206	0.500		0.206					U
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	0.167	µg/kg	0.167	0.467		0.167					U
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.200	µg/kg	0.200	0.500		0.200					U
Perfluorobutane sulfonic acid (PFBS)	0.0960	µg/kg	0.0960	0.500		0.0960					U
Perfluorobutanoic acid (PFBA)	0.0480	µg/kg	0.0480	0.500		0.0480					U



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2215579

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3490285

MB	CLIENT ID: Method Blank	Lab ID: QC-2215579-001
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/12/25 10:03

Prep Date: 09/10/25 13:01

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorobutylsulfonamide (PFBSA)	0.110	µg/kg	0.110	0.500		0.110					U
Perfluorodecane sulfonic acid (PFDS)	0.117	µg/kg	0.117	0.483		0.117					U
Perfluorodecanoic acid (PFDA)	0.163	µg/kg	0.163	0.500		0.163					U
Perfluorododecane sulfonic acid (PFDoS)	0.156	µg/kg	0.156	0.485		0.156					U
Perfluorododecanoic acid (PFDOA)	0.0660	µg/kg	0.0660	0.500		0.0660					U
Perfluoroheptane sulfonic acid (PFHpS)	0.121	µg/kg	0.121	0.477		0.121					U
Perfluoroheptanoic acid (PFHpA)	0.177	µg/kg	0.177	0.500		0.177					U
Perfluorohexadecanoic acid (PFHxDA)	0.130	µg/kg	0.130	0.500		0.130					U
Perfluorohexane sulfonic acid (PFHxS)	0.0670	µg/kg	0.0670	0.457		0.0670					U
Perfluorohexanesulfonamide (PFHxSA)	0.112	µg/kg	0.112	0.500		0.112					U
Perfluorohexanoic acid (PFHxA)	0.133	µg/kg	0.133	0.500		0.133					U
Perfluorononane sulfonic acid (PFNS)	0.149	µg/kg	0.149	0.481		0.149					U
Perfluorononanoic acid (PFNA)	0.0920	µg/kg	0.0920	0.500		0.0920					U
Perfluorooctadecanoic acid (PFODA)	0.232	µg/kg	0.232	0.500		0.232					U
Perfluorooctane sulfonamide (PFOSAm)	0.150	µg/kg	0.150	0.500		0.150					U
Perfluorooctane sulfonic acid (PFOS)	0.183	µg/kg	0.183	0.464		0.183					U
Perfluorooctanoic acid (PFOA)	0.101	µg/kg	0.101	0.500		0.101					U
Perfluoropentane sulfonic acid (PFPeS)	0.110	µg/kg	0.110	0.471		0.110					U
Perfluoropentanoic acid (PFPeA)	0.0940	µg/kg	0.0940	0.500		0.0940					U
Perfluorotetradecanoic acid (PFTDA)	0.127	µg/kg	0.127	0.500		0.127					U
Perfluorotridecanoic acid (PFTrDA)	0.0830	µg/kg	0.0830	0.500		0.0830					U
Perfluoroundecanoic acid (PFUnDA)	0.134	µg/kg	0.134	0.500		0.134					U
Surr: 13C2-FtS 10:2	2.02	µg/kg			2.5		81.0	10-200			
Surr: 13C2-FtS 4:2	4.44	µg/kg			5		88.8	40-165			
Surr: 13C2-FtS 6:2	4.44	µg/kg			5		88.8	40-215			
Surr: 13C2-FtS 8:2	4.81	µg/kg			5		96.2	40-275			
Surr: 13C2-PFDoA	1.04	µg/kg			1.25		83.3	40-130			
Surr: 13C2-PFHxDA	2.22	µg/kg			2.5		88.7	10-200			
Surr: 13C2-PFTeDA	0.888	µg/kg			1.25		71.0	20-130			
Surr: 13C3-HFPO-DA	9.04	µg/kg			10		90.4	40-130			
Surr: 13C3-PFBS	2.30	µg/kg			2.5		92.1	40-135			
Surr: 13C3-PFHxS	2.25	µg/kg			2.5		90.0	40-130			
Surr: 13C4-PFBA	8.57	µg/kg			10		85.7	8-130			
Surr: 13C4-PFHpA	2.33	µg/kg			2.5		93.1	40-130			
Surr: 13C5-PFHxA	2.26	µg/kg			2.5		90.2	40-130			
Surr: 13C5-PFPeA	4.41	µg/kg			5		88.3	35-130			
Surr: 13C6-PFDA	1.20	µg/kg			1.25		95.7	40-130			
Surr: 13C7-PFUnDA	1.09	µg/kg			1.25		87.4	40-130			
Surr: 13C8-FOSA	1.88	µg/kg			2.5		75.0	40-130			
Surr: 13C8-PFOA	2.22	µg/kg			2.5		88.7	40-130			

QA/QC Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2215579

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3490285

MB	CLIENT ID: Method Blank	Lab ID: QC-2215579-001
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/12/25 10:03

Prep Date: 09/10/25 13:01

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C8-PFOS	2.08	µg/kg			2.5		83.4	40-130			
Surr: 13C9-PFNA	1.14	µg/kg			1.25		91.4	40-130			
Surr: d3-N-MeFOSA	1.65	µg/kg			2.5		65.9	10-130			
Surr: d3-N-MeFOSAA	3.71	µg/kg			5		74.1	40-135			
Surr: d5-N-EtFOSA	1.44	µg/kg			2.5		57.6	10-130			
Surr: d5-N-EtFOSAA	3.61	µg/kg			5		72.1	40-150			
Surr: d7-N-MeFOSE	17.4	µg/kg			25		69.7	20-130			
Surr: d9-N-EtFOSE	16.8	µg/kg			25		67.1	15-130			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2215579-002
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/12/25 10:23

Prep Date: 09/10/25 13:01

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.782	µg/kg	0.206	0.472	0.94		83.2	45-160			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.908	µg/kg	0.136	0.480	0.96		94.6	70-150			
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	0.979	µg/kg	0.114	0.482	0.96		102	40-150			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.903	µg/kg	0.101	0.469	0.94		96.1	60-150			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.933	µg/kg	0.173	0.476	0.95		98.2	55-200			
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	19.9	µg/kg	2.17	15.0	20		99.7	60-150			
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	22.1	µg/kg	4.39	15.0	20		111	45-130			
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	20.9	µg/kg	2.17	15.0	20		105	60-130			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.876	µg/kg	0.129	0.473	0.95		92.2	70-160			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.865	µg/kg	0.166	0.467	0.93		93.0	70-150			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.922	µg/kg	0.220	0.500	1		92.2	70-145			
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0.928	µg/kg	0.158	0.500	1		92.8	70-140			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0.969	µg/kg	0.403	0.500	1		96.9	65-165			
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.00	µg/kg	0.170	0.500	1		100	70-135			
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.05	µg/kg	0.148	0.500	1		105	70-155			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.00	µg/kg	0.184	0.500	1		100	65-155			

QA/QC Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2215579

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3490285

LCS		CLIENT ID: Laboratory Control Sample				Lab ID: QC-2215579-002					
Method: EPA 1633		Dilution: 1				Analysis Date: 09/12/25 10:23					
						Prep Date: 09/10/25 13:01					
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.02	µg/kg	0.199	0.500	1		102	70-140			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.13	µg/kg	0.182	0.500	1		113	60-155			
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESEA)	0.871	µg/kg	0.152	0.445	0.89		97.9	70-140			
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.942	µg/kg	0.206	0.500	1		94.2	30-140			
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	0.823	µg/kg	0.167	0.467	0.93		88.5	40-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.922	µg/kg	0.200	0.500	1		92.2	60-150			
Perfluorobutane sulfonic acid (PFBS)	0.905	µg/kg	0.0960	0.500	0.89		102	65-145			
Perfluorobutanoic acid (PFBA)	1.00	µg/kg	0.0480	0.500	1		100	70-140			
Perfluorobutylsulfonamide (PFBSA)	1.01	µg/kg	0.110	0.500	1		101	40-150			
Perfluorodecane sulfonic acid (PFDS)	0.826	µg/kg	0.117	0.483	0.97		85.1	40-150			
Perfluorodecanoic acid (PFDA)	0.950	µg/kg	0.163	0.500	1		95.0	70-155			
Perfluorododecane sulfonic acid (PFDoS)	0.713	µg/kg	0.156	0.485	0.97		73.5	25-160			
Perfluorododecanoic acid (PFDOA)	1.02	µg/kg	0.0660	0.500	1		102	70-150			
Perfluoroheptane sulfonic acid (PFHpS)	0.976	µg/kg	0.121	0.477	0.95		103	65-155			
Perfluoroheptanoic acid (PFHpA)	0.922	µg/kg	0.177	0.500	1		92.2	65-145			
Perfluorohexadecanoic acid (PFHxDA)	0.966	µg/kg	0.130	0.500	1		96.6	40-150			
Perfluorohexane sulfonic acid (PFHxS)	0.887	µg/kg	0.0670	0.457	0.91		97.5	60-150			
Perfluorohexanesulfonamide (PFHxSA)	0.963	µg/kg	0.112	0.500	1		96.3	40-150			
Perfluorohexanoic acid (PFHxA)	0.967	µg/kg	0.133	0.500	1		96.7	65-145			
Perfluorononane sulfonic acid (PFNS)	0.896	µg/kg	0.149	0.481	0.96		93.4	55-145			
Perfluorononanoic acid (PFNA)	1.01	µg/kg	0.0920	0.500	1		101	70-155			
Perfluorooctadecanoic acid (PFODA)	0.766	µg/kg	0.232	0.500	1		76.6	40-150			
Perfluorooctane sulfonamide (PFOSAm)	1.05	µg/kg	0.150	0.500	1		105	70-140			
Perfluorooctane sulfonic acid (PFOS)	0.943	µg/kg	0.183	0.464	0.93		101	65-160			
Perfluorooctanoic acid (PFOA)	0.970	µg/kg	0.101	0.500	1		97.0	70-150			
Perfluoropentane sulfonic acid (PFPeS)	0.927	µg/kg	0.110	0.471	0.94		98.6	55-160			
Perfluoropentanoic acid (PFPeA)	0.980	µg/kg	0.0940	0.500	1		98.0	60-150			
Perfluorotetradecanoic acid (PFTDA)	0.998	µg/kg	0.127	0.500	1		99.8	65-150			
Perfluorotridecanoic acid (PFTrDA)	1.04	µg/kg	0.0830	0.500	1		104	65-150			
Perfluoroundecanoic acid (PFUnDA)	0.944	µg/kg	0.134	0.500	1		94.4	70-150			
Surr: 13C2-FtS 10:2	2.24	µg/kg			2.5		89.7	10-200			
Surr: 13C2-FtS 4:2	4.70	µg/kg			5		94.0	40-165			
Surr: 13C2-FtS 6:2	4.66	µg/kg			5		93.3	40-215			
Surr: 13C2-FtS 8:2	5.24	µg/kg			5		105	40-275			
Surr: 13C2-PFDoA	1.19	µg/kg			1.25		95.2	40-130			



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2215579

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3490285

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2215579-002
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/12/25 10:23

Prep Date: 09/10/25 13:01

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C2-PFHxDA	2.50	µg/kg			2.5		100	10-200			
Surr: 13C2-PFTeDA	0.985	µg/kg			1.25		78.8	20-130			
Surr: 13C3-HFPO-DA	9.87	µg/kg			10		98.7	40-130			
Surr: 13C3-PFBS	2.43	µg/kg			2.5		97.3	40-135			
Surr: 13C3-PFHxS	2.49	µg/kg			2.5		99.6	40-130			
Surr: 13C4-PFBA	9.33	µg/kg			10		93.3	8-130			
Surr: 13C4-PFHpA	2.44	µg/kg			2.5		97.8	40-130			
Surr: 13C5-PFHxA	2.38	µg/kg			2.5		95.2	40-130			
Surr: 13C5-PFPeA	4.74	µg/kg			5		94.9	35-130			
Surr: 13C6-PFDA	1.26	µg/kg			1.25		101	40-130			
Surr: 13C7-PFUnDA	1.18	µg/kg			1.25		94.5	40-130			
Surr: 13C8-FOSA	2.03	µg/kg			2.5		81.2	40-130			
Surr: 13C8-PFOA	2.40	µg/kg			2.5		95.9	40-130			
Surr: 13C8-PFOS	2.29	µg/kg			2.5		91.5	40-130			
Surr: 13C9-PFNA	1.22	µg/kg			1.25		97.5	40-130			
Surr: d3-N-MeFOSA	1.81	µg/kg			2.5		72.4	10-130			
Surr: d3-N-MeFOSAA	4.01	µg/kg			5		80.2	40-135			
Surr: d5-N-EtFOSA	1.67	µg/kg			2.5		67.0	10-130			
Surr: d5-N-EtFOSAA	3.93	µg/kg			5		78.6	40-150			
Surr: d7-N-MeFOSE	21.0	µg/kg			25		84.0	20-130			
Surr: d9-N-EtFOSE	20.7	µg/kg			25		82.6	15-130			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2215579-003
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/12/25 10:43

Prep Date: 09/10/25 13:01

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	4.09	µg/kg	0.206	0.472	4.7		87.0	45-160			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.73	µg/kg	0.136	0.480	4.8		98.5	70-150			
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	4.66	µg/kg	0.114	0.482	4.8		97.0	40-150			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	4.44	µg/kg	0.101	0.469	4.7		94.5	60-150			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	4.94	µg/kg	0.173	0.476	4.8		103	55-200			
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	53.5	µg/kg	2.17	15.0	50		107	60-150			
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	53.5	µg/kg	4.39	15.0	50		107	45-130			
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	52.9	µg/kg	2.17	15.0	50		106	60-130			



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2215579

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3490285

LCS		CLIENT ID: Laboratory Control Sample				Lab ID: QC-2215579-003					
Method: EPA 1633		Dilution: 1				Analysis Date: 09/12/25 10:43					
						Prep Date: 09/10/25 13:01					
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	4.63	µg/kg	0.129	0.473	4.7		98.6	70-160			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	4.49	µg/kg	0.166	0.467	4.7		95.4	70-150			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	4.84	µg/kg	0.220	0.500	5		96.7	70-145			
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4.61	µg/kg	0.158	0.500	5		92.2	70-140			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	5.06	µg/kg	0.403	0.500	5		101	65-145			
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	4.99	µg/kg	0.170	0.500	5		99.8	70-135			
N-Methylperfluorooctane sulfonamide (MeFOSA)	5.00	µg/kg	0.148	0.500	5		100	70-155			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	5.25	µg/kg	0.184	0.500	5		105	65-155			
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	5.11	µg/kg	0.199	0.500	5		102	70-140			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.10	µg/kg	0.182	0.500	5		102	60-155			
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	4.43	µg/kg	0.152	0.445	4.5		98.4	70-140			
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.72	µg/kg	0.206	0.500	5		94.4	30-140			
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	4.40	µg/kg	0.167	0.467	4.7		93.7	40-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.62	µg/kg	0.200	0.500	5		92.3	60-150			
Perfluorobutane sulfonic acid (PFBS)	4.48	µg/kg	0.0960	0.500	4.4		102	65-145			
Perfluorobutanoic acid (PFBA)	4.95	µg/kg	0.0480	0.500	5		99.0	70-140			
Perfluorobutylsulfonamide (PFBSA)	4.83	µg/kg	0.110	0.500	5		96.6	40-150			
Perfluorodecane sulfonic acid (PFDS)	4.17	µg/kg	0.117	0.483	4.8		86.9	40-155			
Perfluorodecanoic acid (PFDA)	4.76	µg/kg	0.163	0.500	5		95.1	70-155			
Perfluorododecane sulfonic acid (PFDoS)	3.72	µg/kg	0.156	0.485	4.9		76.0	25-160			
Perfluorododecanoic acid (PFDOA)	5.06	µg/kg	0.0660	0.500	5		101	70-150			
Perfluoroheptane sulfonic acid (PFHpS)	5.05	µg/kg	0.121	0.477	4.8		105	65-155			
Perfluoroheptanoic acid (PFHpA)	4.74	µg/kg	0.177	0.500	5		94.9	65-145			
Perfluorohexadecanoic acid (PFHxDA)	4.79	µg/kg	0.130	0.500	5		95.8	40-150			
Perfluorohexane sulfonic acid (PFHxS)	4.48	µg/kg	0.0670	0.457	4.6		97.3	60-150			
Perfluorohexanesulfonamide (PFHxSA)	4.94	µg/kg	0.112	0.500	5		98.7	40-150			
Perfluorohexanoic acid (PFHxA)	4.98	µg/kg	0.133	0.500	5		99.6	65-140			
Perfluorononane sulfonic acid (PFNS)	4.32	µg/kg	0.149	0.481	4.8		90.1	55-140			
Perfluorononanoic acid (PFNA)	5.03	µg/kg	0.0920	0.500	5		100	70-155			
Perfluorooctadecanoic acid (PFODA)	3.96	µg/kg	0.232	0.500	5		79.2	40-150			

QA/QC Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2215579

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3490285

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2215579-003
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/12/25 10:43

Prep Date: 09/10/25 13:01

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorooctane sulfonamide (PFOSAm)	5.24	µg/kg	0.150	0.500	5		105	70-140			
Perfluorooctane sulfonic acid (PFOS)	4.66	µg/kg	0.183	0.464	4.6		101	65-160			
Perfluorooctanoic acid (PFOA)	4.81	µg/kg	0.101	0.500	5		96.2	70-150			
Perfluoropentane sulfonic acid (PFPeS)	4.70	µg/kg	0.110	0.471	4.7		100.0	55-160			
Perfluoropentanoic acid (PFPeA)	4.91	µg/kg	0.0940	0.500	5		98.2	60-150			
Perfluorotetradecanoic acid (PFTDA)	5.06	µg/kg	0.127	0.500	5		101	65-150			
Perfluorotridecanoic acid (PFTrDA)	5.11	µg/kg	0.0830	0.500	5		102	65-150			
Perfluoroundecanoic acid (PFUnDA)	4.75	µg/kg	0.134	0.500	5		94.9	70-155			
Surr: 13C2-FtS 10:2	2.25	µg/kg			2.5		90.1	10-200			
Surr: 13C2-FtS 4:2	4.85	µg/kg			5		97.0	40-165			
Surr: 13C2-FtS 6:2	4.43	µg/kg			5		88.7	40-215			
Surr: 13C2-FtS 8:2	5.20	µg/kg			5		104	40-275			
Surr: 13C2-PFDoA	1.14	µg/kg			1.25		91.0	40-130			
Surr: 13C2-PFHxDA	2.54	µg/kg			2.5		102	10-200			
Surr: 13C2-PFTeDA	1.02	µg/kg			1.25		81.6	20-130			
Surr: 13C3-HFPO-DA	9.70	µg/kg			10		97.0	40-130			
Surr: 13C3-PFBS	2.35	µg/kg			2.5		94.1	40-135			
Surr: 13C3-PFHxS	2.34	µg/kg			2.5		93.8	40-130			
Surr: 13C4-PFBA	9.48	µg/kg			10		94.8	8-130			
Surr: 13C4-PFHpA	2.45	µg/kg			2.5		97.9	40-130			
Surr: 13C5-PFHxA	2.35	µg/kg			2.5		93.9	40-130			
Surr: 13C5-PFPeA	4.75	µg/kg			5		95.0	35-130			
Surr: 13C6-PFDA	1.22	µg/kg			1.25		97.8	40-130			
Surr: 13C7-PFUnDA	1.14	µg/kg			1.25		91.2	40-130			
Surr: 13C8-FOSA	2.02	µg/kg			2.5		81.0	40-130			
Surr: 13C8-PFOA	2.34	µg/kg			2.5		93.7	40-130			
Surr: 13C8-PFOS	2.25	µg/kg			2.5		90.0	40-130			
Surr: 13C9-PFNA	1.20	µg/kg			1.25		96.1	40-130			
Surr: d3-N-MeFOSA	1.91	µg/kg			2.5		76.5	10-130			
Surr: d3-N-MeFOSAA	3.78	µg/kg			5		75.7	40-135			
Surr: d5-N-EtFOSA	1.73	µg/kg			2.5		69.1	10-130			
Surr: d5-N-EtFOSAA	3.81	µg/kg			5		76.2	40-150			
Surr: d7-N-MeFOSE	21.6	µg/kg			25		86.5	20-130			
Surr: d9-N-EtFOSE	20.9	µg/kg			25		83.7	15-130			

The following samples were analyzed in this batch: HN2512651-001, HN2512651-002, HN2512651-003



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2220769

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3518527

Per- and Polyfluorinated Alkyl Substances by LC-MS

MB	CLIENT ID: Method Blank	Lab ID: QC-2220769-001
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/19/25 23:19

Prep Date: 09/17/25 17:28

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.206	µg/kg	0.206	0.472		0.206					U
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	0.136	µg/kg	0.136	0.480		0.136					U
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	0.114	µg/kg	0.114	0.482		0.114					U
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	0.101	µg/kg	0.101	0.469		0.101					U
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	0.173	µg/kg	0.173	0.476		0.173					U
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	2.17	µg/kg	2.17	15.0		2.17					U
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	4.39	µg/kg	4.39	15.0		4.39					U
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	2.17	µg/kg	2.17	15.0		2.17					U
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.129	µg/kg	0.129	0.473		0.129					U
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.166	µg/kg	0.166	0.467		0.166					U
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	0.220	µg/kg	0.220	0.500		0.220					U
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0.158	µg/kg	0.158	0.500		0.158					U
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	0.403	µg/kg	0.403	0.500		0.403					U
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	0.170	µg/kg	0.170	0.500		0.170					U
N-Methylperfluorooctane sulfonamide (MeFOSA)	0.148	µg/kg	0.148	0.500		0.148					U
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	0.184	µg/kg	0.184	0.500		0.184					U
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	0.199	µg/kg	0.199	0.500		0.199					U
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.182	µg/kg	0.182	0.500		0.182					U
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESEA)	0.152	µg/kg	0.152	0.445		0.152					U
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.206	µg/kg	0.206	0.500		0.206					U
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	0.167	µg/kg	0.167	0.467		0.167					U
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.200	µg/kg	0.200	0.500		0.200					U
Perfluorobutane sulfonic acid (PFBS)	0.0960	µg/kg	0.0960	0.500		0.0960					U
Perfluorobutanoic acid (PFBA)	0.0480	µg/kg	0.0480	0.500		0.0480					U



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2220769

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3518527

MB	CLIENT ID: Method Blank	Lab ID: QC-2220769-001
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/19/25 23:19

Prep Date: 09/17/25 17:28

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorobutylsulfonamide (PFBSA)	0.110	µg/kg	0.110	0.500		0.110					U
Perfluorodecane sulfonic acid (PFDS)	0.117	µg/kg	0.117	0.483		0.117					U
Perfluorodecanoic acid (PFDA)	0.163	µg/kg	0.163	0.500		0.163					U
Perfluorododecane sulfonic acid (PFDoS)	0.156	µg/kg	0.156	0.485		0.156					U
Perfluorododecanoic acid (PFDOA)	0.0660	µg/kg	0.0660	0.500		0.0660					U
Perfluoroheptane sulfonic acid (PFHpS)	0.121	µg/kg	0.121	0.477		0.121					U
Perfluoroheptanoic acid (PFHpA)	0.177	µg/kg	0.177	0.500		0.177					U
Perfluorohexadecanoic acid (PFHxDA)	0.130	µg/kg	0.130	0.500		0.130					U
Perfluorohexane sulfonic acid (PFHxS)	0.0670	µg/kg	0.0670	0.457		0.0670					U
Perfluorohexanesulfonamide (PFHxSA)	0.112	µg/kg	0.112	0.500		0.112					U
Perfluorohexanoic acid (PFHxA)	0.133	µg/kg	0.133	0.500		0.133					U
Perfluorononane sulfonic acid (PFNS)	0.149	µg/kg	0.149	0.481		0.149					U
Perfluorononanoic acid (PFNA)	0.0920	µg/kg	0.0920	0.500		0.0920					U
Perfluorooctadecanoic acid (PFODA)	0.232	µg/kg	0.232	0.500		0.232					U
Perfluorooctane sulfonamide (PFOSAm)	0.150	µg/kg	0.150	0.500		0.150					U
Perfluorooctane sulfonic acid (PFOS)	0.183	µg/kg	0.183	0.464		0.183					U
Perfluorooctanoic acid (PFOA)	0.101	µg/kg	0.101	0.500		0.101					U
Perfluoropentane sulfonic acid (PFPeS)	0.110	µg/kg	0.110	0.471		0.110					U
Perfluoropentanoic acid (PFPeA)	0.0940	µg/kg	0.0940	0.500		0.0940					U
Perfluorotetradecanoic acid (PFTDA)	0.127	µg/kg	0.127	0.500		0.127					U
Perfluorotridecanoic acid (PFTrDA)	0.0830	µg/kg	0.0830	0.500		0.0830					U
Perfluoroundecanoic acid (PFUnDA)	0.134	µg/kg	0.134	0.500		0.134					U
Surr: 13C2-FtS 10:2	2.03	µg/kg			2.5		81.2	10-200			
Surr: 13C2-FtS 4:2	4.10	µg/kg			5		82.0	40-165			
Surr: 13C2-FtS 6:2	4.31	µg/kg			5		86.1	40-215			
Surr: 13C2-FtS 8:2	4.91	µg/kg			5		98.1	40-275			
Surr: 13C2-PFDoA	0.957	µg/kg			1.25		76.5	40-130			
Surr: 13C2-PFHxDA	2.40	µg/kg			2.5		95.8	10-200			
Surr: 13C2-PFTrDA	0.993	µg/kg			1.25		79.5	20-130			
Surr: 13C3-HFPO-DA	8.98	µg/kg			10		89.8	40-130			
Surr: 13C3-PFBS	2.17	µg/kg			2.5		86.9	40-135			
Surr: 13C3-PFHxS	2.18	µg/kg			2.5		87.3	40-130			
Surr: 13C4-PFBA	9.16	µg/kg			10		91.6	8-130			
Surr: 13C4-PFHpA	2.22	µg/kg			2.5		88.9	40-130			
Surr: 13C5-PFHxA	2.19	µg/kg			2.5		87.7	40-130			
Surr: 13C5-PFPeA	4.72	µg/kg			5		94.5	35-130			
Surr: 13C6-PFDA	1.11	µg/kg			1.25		88.7	40-130			
Surr: 13C7-PFUnDA	0.999	µg/kg			1.25		79.9	40-130			
Surr: 13C8-FOSA	2.08	µg/kg			2.5		83.3	40-130			
Surr: 13C8-PFOA	2.17	µg/kg			2.5		86.7	40-130			

QA/QC Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2220769

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3518527

MB	CLIENT ID: Method Blank	Lab ID: QC-2220769-001
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/19/25 23:19

Prep Date: 09/17/25 17:28

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C8-PFOS	2.16	µg/kg			2.5		86.5	40-130			
Surr: 13C9-PFNA	1.10	µg/kg			1.25		87.6	40-130			
Surr: d3-N-MeFOSA	1.91	µg/kg			2.5		76.5	10-130			
Surr: d3-N-MeFOSAA	4.10	µg/kg			5		82.0	40-135			
Surr: d5-N-EtFOSA	1.77	µg/kg			2.5		70.9	10-130			
Surr: d5-N-EtFOSAA	3.92	µg/kg			5		78.3	40-150			
Surr: d7-N-MeFOSE	21.9	µg/kg			25		87.4	20-130			
Surr: d9-N-EtFOSE	22.8	µg/kg			25		91.2	15-130			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2220769-002
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/19/25 23:39

Prep Date: 09/17/25 17:28

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	0.867	µg/kg	0.206	0.472	0.94		92.2	45-160			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	1.20	µg/kg	0.136	0.480	0.96		125	70-150			
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	0.937	µg/kg	0.114	0.482	0.96		97.6	40-150			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	1.06	µg/kg	0.101	0.469	0.94		113	60-150			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	1.08	µg/kg	0.173	0.476	0.95		114	55-200			
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	23.5	µg/kg	2.17	15.0	20		118	60-150			
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	23.1	µg/kg	4.39	15.0	20		116	45-130			
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	22.3	µg/kg	2.17	15.0	20		112	60-130			
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	0.930	µg/kg	0.129	0.473	0.95		97.9	70-160			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	0.959	µg/kg	0.166	0.467	0.93		103	70-150			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	1.05	µg/kg	0.220	0.500	1		105	70-145			
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	0.981	µg/kg	0.158	0.500	1		98.1	70-140			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	1.08	µg/kg	0.403	0.500	1		108	65-165			
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	1.02	µg/kg	0.170	0.500	1		102	70-135			
N-Methylperfluorooctane sulfonamide (MeFOSA)	1.02	µg/kg	0.148	0.500	1		102	70-155			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	1.07	µg/kg	0.184	0.500	1		107	65-155			



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2220769

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3518527

LCS		CLIENT ID: Laboratory Control Sample				Lab ID: QC-2220769-002					
Method: EPA 1633		Dilution: 1				Analysis Date: 09/19/25 23:39					
						Prep Date: 09/17/25 17:28					
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	1.06	µg/kg	0.199	0.500	1		106	70-140			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	1.13	µg/kg	0.182	0.500	1		113	60-155			
Perfluoro(2-ethoxyethane) sulfonic acid (PFEESA)	0.929	µg/kg	0.152	0.445	0.89		104	70-140			
Perfluoro-3-methoxypropanoic acid (PFMPA)	1.06	µg/kg	0.206	0.500	1		106	30-140			
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	0.918	µg/kg	0.167	0.467	0.93		98.8	40-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	1.04	µg/kg	0.200	0.500	1		104	60-150			
Perfluorobutane sulfonic acid (PFBS)	0.898	µg/kg	0.0960	0.500	0.89		101	65-145			
Perfluorobutanoic acid (PFBA)	1.07	µg/kg	0.0480	0.500	1		107	70-140			
Perfluorobutylsulfonamide (PFBSA)	0.971	µg/kg	0.110	0.500	1		97.1	40-150			
Perfluorodecane sulfonic acid (PFDS)	0.945	µg/kg	0.117	0.483	0.97		97.4	40-150			
Perfluorodecanoic acid (PFDA)	1.10	µg/kg	0.163	0.500	1		110	70-155			
Perfluorododecane sulfonic acid (PFDoS)	0.953	µg/kg	0.156	0.485	0.97		98.3	25-160			
Perfluorododecanoic acid (PFDOA)	1.08	µg/kg	0.0660	0.500	1		108	70-150			
Perfluoroheptane sulfonic acid (PFHpS)	0.990	µg/kg	0.121	0.477	0.95		104	65-155			
Perfluoroheptanoic acid (PFHpA)	1.08	µg/kg	0.177	0.500	1		108	65-145			
Perfluorohexadecanoic acid (PFHxDA)	0.979	µg/kg	0.130	0.500	1		97.9	40-150			
Perfluorohexane sulfonic acid (PFHxS)	0.976	µg/kg	0.0670	0.457	0.91		107	60-150			
Perfluorohexanesulfonamide (PFHxSA)	0.973	µg/kg	0.112	0.500	1		97.3	40-150			
Perfluorohexanoic acid (PFHxA)	1.06	µg/kg	0.133	0.500	1		106	65-145			
Perfluorononane sulfonic acid (PFNS)	0.956	µg/kg	0.149	0.481	0.96		99.6	55-145			
Perfluorononanoic acid (PFNA)	1.01	µg/kg	0.0920	0.500	1		101	70-155			
Perfluorooctadecanoic acid (PFODA)	1.05	µg/kg	0.232	0.500	1		105	40-150			
Perfluorooctane sulfonamide (PFOSAm)	1.18	µg/kg	0.150	0.500	1		118	70-140			
Perfluorooctane sulfonic acid (PFOS)	1.03	µg/kg	0.183	0.464	0.93		110	65-160			
Perfluorooctanoic acid (PFOA)	1.06	µg/kg	0.101	0.500	1		106	70-150			
Perfluoropentane sulfonic acid (PFPeS)	1.00	µg/kg	0.110	0.471	0.94		107	55-160			
Perfluoropentanoic acid (PFPeA)	1.12	µg/kg	0.0940	0.500	1		112	60-150			
Perfluorotetradecanoic acid (PFTDA)	1.09	µg/kg	0.127	0.500	1		109	65-150			
Perfluorotridecanoic acid (PFTrDA)	1.04	µg/kg	0.0830	0.500	1		104	65-150			
Perfluoroundecanoic acid (PFUnDA)	1.10	µg/kg	0.134	0.500	1		110	70-150			
Surr: 13C2-FtS 10:2	1.99	µg/kg			2.5		79.6	10-200			
Surr: 13C2-FtS 4:2	3.89	µg/kg			5		77.9	40-165			
Surr: 13C2-FtS 6:2	4.03	µg/kg			5		80.5	40-215			
Surr: 13C2-FtS 8:2	4.18	µg/kg			5		83.5	40-275			
Surr: 13C2-PFDoA	0.894	µg/kg			1.25		71.5	40-130			



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2220769

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3518527

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2220769-002
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/19/25 23:39

Prep Date: 09/17/25 17:28

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Surr: 13C2-PFHxDA	2.38	µg/kg			2.5		95.2	10-200			
Surr: 13C2-PFTeDA	0.880	µg/kg			1.25		70.4	20-130			
Surr: 13C3-HFPO-DA	9.32	µg/kg			10		93.2	40-130			
Surr: 13C3-PFBS	2.14	µg/kg			2.5		85.6	40-135			
Surr: 13C3-PFHxS	2.08	µg/kg			2.5		83.4	40-130			
Surr: 13C4-PFBA	8.84	µg/kg			10		88.4	8-130			
Surr: 13C4-PFHpA	2.17	µg/kg			2.5		87.0	40-130			
Surr: 13C5-PFHxA	2.18	µg/kg			2.5		87.2	40-130			
Surr: 13C5-PFPeA	4.55	µg/kg			5		91.0	35-130			
Surr: 13C6-PFDA	1.06	µg/kg			1.25		84.6	40-130			
Surr: 13C7-PFUnDA	0.968	µg/kg			1.25		77.4	40-130			
Surr: 13C8-FOSA	2.03	µg/kg			2.5		81.1	40-130			
Surr: 13C8-PFOA	2.20	µg/kg			2.5		87.9	40-130			
Surr: 13C8-PFOS	2.17	µg/kg			2.5		87.0	40-130			
Surr: 13C9-PFNA	1.08	µg/kg			1.25		86.4	40-130			
Surr: d3-N-MeFOSA	1.96	µg/kg			2.5		78.5	10-130			
Surr: d3-N-MeFOSAA	4.11	µg/kg			5		82.3	40-135			
Surr: d5-N-EtFOSA	1.86	µg/kg			2.5		74.5	10-130			
Surr: d5-N-EtFOSAA	4.01	µg/kg			5		80.2	40-150			
Surr: d7-N-MeFOSE	25.2	µg/kg			25		101	20-130			
Surr: d9-N-EtFOSE	25.8	µg/kg			25		103	15-130			

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2220769-003
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/19/25 23:59

Prep Date: 09/17/25 17:28

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	4.70	µg/kg	0.206	0.472	4.7		100.0	45-160			
1H, 1H, 2H, 2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.19	µg/kg	0.136	0.480	4.8		108	70-150			
1H, 1H, 2H, 2H-perfluorododecane sulfonic acid (10:2 FTS)	4.44	µg/kg	0.114	0.482	4.8		92.6	40-150			
1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid (4:2 FTS)	5.14	µg/kg	0.101	0.469	4.7		109	60-150			
1H, 1H, 2H, 2H-Perfluorooctanesulfonic acid (6:2 FTS)	5.01	µg/kg	0.173	0.476	4.8		104	55-200			
2H,2H,3H,3H-Perfluorodecanoic acid (7:3 FTCA)	56.8	µg/kg	2.17	15.0	50		114	60-150			
2H,2H,3H,3H-Perfluorohexanoic acid (3:3 FTCA)	55.2	µg/kg	4.39	15.0	50		110	45-130			
2H,2H,3H,3H-Perfluorooctanoic acid (5:3 FTCA)	53.6	µg/kg	2.17	15.0	50		107	60-130			



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2220769

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3518527

LCS		CLIENT ID: Laboratory Control Sample				Lab ID: QC-2220769-003					
Method: EPA 1633		Dilution: 1				Analysis Date: 09/19/25 23:59					
						Prep Date: 09/17/25 17:28					
Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	5.00	µg/kg	0.129	0.473	4.7		106	70-160			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9-Cl-PF3ONS)	5.00	µg/kg	0.166	0.467	4.7		106	70-150			
Hexafluoropropyleneoxide dimer acid (HFPO-DA) (GenX)	5.52	µg/kg	0.220	0.500	5		110	70-145			
N-Ethylperfluorooctane sulfonamide (EtFOSAm)	4.76	µg/kg	0.158	0.500	5		95.3	70-140			
N-Ethylperfluorooctane sulfonamido acetic acid (NEtFOSAA)	5.43	µg/kg	0.403	0.500	5		109	65-145			
N-Ethylperfluorooctane sulfonamido ethanol (EtFOSE)	5.04	µg/kg	0.170	0.500	5		101	70-135			
N-Methylperfluorooctane sulfonamide (MeFOSA)	4.95	µg/kg	0.148	0.500	5		99.0	70-155			
N-Methylperfluorooctane sulfonamido acetic acid (NMeFOSAA)	5.38	µg/kg	0.184	0.500	5		108	65-155			
N-Methylperfluorooctane sulfonamido ethanol (MeFOSE)	5.32	µg/kg	0.199	0.500	5		106	70-140			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.15	µg/kg	0.182	0.500	5		103	60-155			
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEA)	4.55	µg/kg	0.152	0.445	4.5		101	70-140			
Perfluoro-3-methoxypropanoic acid (PFMPA)	5.16	µg/kg	0.206	0.500	5		103	30-140			
Perfluoro-4-ethylcyclohexanesulfonic Acid (PFecHS)	4.59	µg/kg	0.167	0.467	4.7		97.6	40-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	5.05	µg/kg	0.200	0.500	5		101	60-150			
Perfluorobutane sulfonic acid (PFBS)	4.70	µg/kg	0.0960	0.500	4.4		107	65-145			
Perfluorobutanoic acid (PFBA)	5.17	µg/kg	0.0480	0.500	5		103	70-140			
Perfluorobutylsulfonamide (PFBSA)	4.90	µg/kg	0.110	0.500	5		97.9	40-150			
Perfluorodecane sulfonic acid (PFDS)	4.88	µg/kg	0.117	0.483	4.8		102	40-155			
Perfluorodecanoic acid (PFDA)	5.31	µg/kg	0.163	0.500	5		106	70-155			
Perfluorododecane sulfonic acid (PFDoS)	5.09	µg/kg	0.156	0.485	4.9		104	25-160			
Perfluorododecanoic acid (PFDOA)	5.31	µg/kg	0.0660	0.500	5		106	70-150			
Perfluoroheptane sulfonic acid (PFHpS)	4.82	µg/kg	0.121	0.477	4.8		100	65-155			
Perfluoroheptanoic acid (PFHpA)	5.30	µg/kg	0.177	0.500	5		106	65-145			
Perfluorohexadecanoic acid (PFHxDA)	4.98	µg/kg	0.130	0.500	5		99.6	40-150			
Perfluorohexane sulfonic acid (PFHxS)	4.72	µg/kg	0.0670	0.457	4.6		103	60-150			
Perfluorohexanesulfonamide (PFHxSA)	4.94	µg/kg	0.112	0.500	5		98.7	40-150			
Perfluorohexanoic acid (PFHxA)	5.18	µg/kg	0.133	0.500	5		104	65-140			
Perfluorononane sulfonic acid (PFNS)	4.83	µg/kg	0.149	0.481	4.8		101	55-140			
Perfluorononanoic acid (PFNA)	5.15	µg/kg	0.0920	0.500	5		103	70-155			
Perfluorooctadecanoic acid (PFODA)	4.48	µg/kg	0.232	0.500	5		89.7	40-150			

QA/QC Report



Client: ALS Environmental
Project: 40-3432966
Matrix: SOIL/SOLID
QC Lot: 2220769

Work Order: HN2512651
Date Collected: NA
Date Received: NA
Run ID: 3518527

LCS	CLIENT ID: Laboratory Control Sample	Lab ID: QC-2220769-003
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Method: EPA 1633

Dilution: 1

Analysis Date: 09/19/25 23:59

Prep Date: 09/17/25 17:28

Analyte	Result	Units	MDL	MRL	Spike Amount	Spike Ref. Amount	% Rec	% Rec Limits	RPD	RPD Limit	Qual
Perfluorooctane sulfonamide (PFOSAm)	5.62	µg/kg	0.150	0.500	5		112	70-140			
Perfluorooctane sulfonic acid (PFOS)	4.82	µg/kg	0.183	0.464	4.6		105	65-160			
Perfluorooctanoic acid (PFOA)	5.18	µg/kg	0.101	0.500	5		104	70-150			
Perfluoropentane sulfonic acid (PFPeS)	5.12	µg/kg	0.110	0.471	4.7		109	55-160			
Perfluoropentanoic acid (PFPeA)	5.28	µg/kg	0.0940	0.500	5		106	60-150			
Perfluorotetradecanoic acid (PFTDA)	5.20	µg/kg	0.127	0.500	5		104	65-150			
Perfluorotridecanoic acid (PFTrDA)	4.85	µg/kg	0.0830	0.500	5		97.0	65-150			
Perfluoroundecanoic acid (PFUnDA)	5.29	µg/kg	0.134	0.500	5		106	70-155			
Surr: 13C2-FtS 10:2	2.07	µg/kg			2.5		82.9	10-200			
Surr: 13C2-FtS 4:2	3.77	µg/kg			5		75.4	40-165			
Surr: 13C2-FtS 6:2	3.94	µg/kg			5		78.9	40-215			
Surr: 13C2-FtS 8:2	4.12	µg/kg			5		82.4	40-275			
Surr: 13C2-PFDoA	0.907	µg/kg			1.25		72.6	40-130			
Surr: 13C2-PFHxDA	2.74	µg/kg			2.5		110	10-200			
Surr: 13C2-PFTeDA	0.978	µg/kg			1.25		78.2	20-130			
Surr: 13C3-HFPO-DA	8.22	µg/kg			10		82.2	40-130			
Surr: 13C3-PFBS	2.02	µg/kg			2.5		80.9	40-135			
Surr: 13C3-PFHxS	1.96	µg/kg			2.5		78.3	40-130			
Surr: 13C4-PFBA	8.37	µg/kg			10		83.7	8-130			
Surr: 13C4-PFHpA	2.06	µg/kg			2.5		82.4	40-130			
Surr: 13C5-PFHxA	2.04	µg/kg			2.5		81.8	40-130			
Surr: 13C5-PFPeA	4.38	µg/kg			5		87.6	35-130			
Surr: 13C6-PFDA	1.03	µg/kg			1.25		82.4	40-130			
Surr: 13C7-PFUnDA	0.939	µg/kg			1.25		75.1	40-130			
Surr: 13C8-FOSA	1.87	µg/kg			2.5		74.8	40-130			
Surr: 13C8-PFOA	2.11	µg/kg			2.5		84.6	40-130			
Surr: 13C8-PFOS	1.99	µg/kg			2.5		79.6	40-130			
Surr: 13C9-PFNA	1.02	µg/kg			1.25		82.1	40-130			
Surr: d3-N-MeFOSA	1.82	µg/kg			2.5		73.0	10-130			
Surr: d3-N-MeFOSAA	3.74	µg/kg			5		74.8	40-135			
Surr: d5-N-EtFOSA	1.70	µg/kg			2.5		68.2	10-130			
Surr: d5-N-EtFOSAA	3.82	µg/kg			5		76.5	40-150			
Surr: d7-N-MeFOSE	24.1	µg/kg			25		96.3	20-130			
Surr: d9-N-EtFOSE	25.1	µg/kg			25		100	15-130			

The following samples were analyzed in this batch: HN2512651-004, HN2512651-005, HN2512651-006, HN2512651-007, HN2512651-008, HN2512651-009, HN2512651-010, HN2512651-011