



Sent via email to jess.laclair@dec.ny.gov

September 30, 2021

iPARK0118.48

Jessica LaClair  
Environmental Engineer  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-7013

Re: iPark 84, Former IBM East Fishkill Facility  
Route 52 Corridor Boundary Modification  
Field Investigation Summary Report

Dear Ms. LaClair:

Walden Environmental Engineering, PLLC (Walden) has revised the July 2021 *Route 52 Corridor Boundary Modification Field Investigation Summary Report* on behalf of iPark East Fishkill, LLC (iPark), the owner of the iPark 84 Facility (former IBM East Fishkill Facility) located in Hopewell Junction, New York. The report was revised in accordance with the comments provided in NYSDEC's letter dated September 2, 2021. The revised report is attached with the revisions listed below.

- The column headings in Tables 1 through 5 have been corrected to indicate that the sampling interval for location SB-11C was 10 – 12 ft.
- The Data Usability Summary Report has been inserted into Appendix E.
- The Category B laboratory data packages have been inserted into Appendix D.

If you have any questions or require any additional information, please call (516) 624-7200.

Very truly yours,  
Walden Environmental Engineering, PLLC

  
Nora M. Brew, P.E.  
VP/Senior Project Manager

cc: J. Kenney, NYSDOH  
C. Monheit, iPark East Fishkill, LLC

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9.30.2021.doc

# **ROUTE 52 CORRIDOR BOUNDARY MODIFICATION FIELD INVESTIGATION SAMPLING SUMMARY**

**AT**

**IPARK 84  
FORMER IBM EAST FISHKILL FACILITY**

**JULY 2021 (REVISED SEPTEMBER 2021)**

**PREPARED FOR:**

**JESSICA LACLAIR  
NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION  
DEPT. OF ENVIRONMENTAL REMEDIATION  
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**WALDEN ENVIRONMENTAL ENGINEERING, PLLC  
Industry Leader in Environmental Engineering Consulting**

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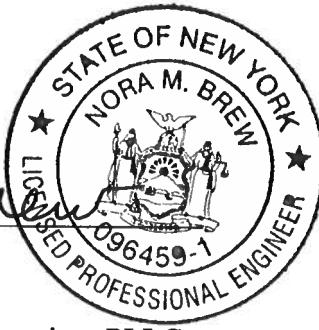
ATTACHMENT A	Route 52 Corridor Boundary Modification Field Investigation Work Plan
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### Professional Engineer Certification

I certify that I am a professional engineer licensed to practice in New York State in accordance with New York State Education Law, Article 145, Section 7200 et seq. I have completed accredited university courses and degrees in engineering and have sufficient training and experience in remediation, groundwater hydrology, and related fields that enable me to make sound professional judgments with regards to engineering design.

I further certify that this submittal, *Route 52 Corridor Boundary Modification Field Investigation Summary Report (Revised)*, dated September 30, 2021, was prepared under my direction.

  
Nora M. Brew, P.E.  
Walden Environmental Engineering, PLLC



9/30/2021

Date

## **1 INTRODUCTION**

Walden Environmental Engineering, PLLC (Walden) has prepared this report on behalf of iPark East Fishkill, LLC (iPark), the owner, to summarize the results of the May 2021 subsurface investigation conducted at the Route 52 Corridor Site located at iPark 84 Facility (former IBM East Fishkill Facility the [Facility]) located in Hopewell Junction, New York. The Facility is being remediated in accordance with the site's 6 NYCRR Part 373 Permit, EPA ID NYD000707901 (RCRA Permit). The Interim Site Management Plan (ISMP, December 2015) sets forth the procedures that govern the operation/implementation of remedial engineering and institutional controls and manage future redevelopment activities at the Facility.

This investigation was conducted to collect data to characterize existing soil conditions in the Route 52 corridor area in support of iPark's planned petition for a boundary modification that would be reflected in subsequent modifications to the RCRA Permit and the Site Management Plan for the iPark 84 Facility. The investigation included the advancement of twenty (20) soil borings and subsequent collection of numerous soil samples throughout the Site. The work was performed in accordance with the NYSDEC-approved *Route 52 Corridor Boundary Modification Field Investigation Work Plan* ("Work Plan", Walden, April 2021). A copy of the Work Plan and NYSDEC's May 4, 2021 approval letter are presented in **Attachment A**. The site location map showing the Route 52 corridor area along the northern property line of the Facility is presented as **Figure 1**.

After the State determines the sampling results are sufficient to characterize environmental conditions in the proposed boundary modification area, NYSDEC will begin the remaining steps in the process, which include public notice of the proposed boundary modification, modification to the RCRA permit, issuing an environmental easement, and submitting a change of use notification. When formally approved by NYSDEC, the boundary modification would define the Route 52 corridor area of the site that would be separated from the rest of the Facility, thereby removing the constraints imposed by RCRA permit and the deed restrictions that currently apply to this area. Areas outside the permitted facility boundary, as modified, would not be subject to Part 373 permit conditions and the boundary modification would not affect the deed restriction. NYSDEC and NYSDOH will require (i) an Environmental Easement to ensure certain controls on the Route 52 corridor area, including commercial or industrial use, (ii) an excavation work plan, and (iii) a passive vapor system for any new construction that includes follow up indoor air sampling to determine if additional actions are necessary.

A brief Site description of the investigation and the objectives of this investigation are presented below. Section 2 describes the investigation fieldwork conducted at the Site. Section 3 summarizes the soil sampling results, Section 4 discusses groundwater monitoring data collected by IBM, and Section 5 presents conclusions based on the findings of the investigation.

## **1.1 Site History and Previous Investigations**

The former IBM Fishkill Facility encompasses approximately 464 acres; the limits of the Facility are Roethal Drive to the south, Route 52 to the north, John Jay Senior High School and wooded areas to the west, and Lime Kiln Road and wooded areas to the east. **Figure 1** illustrates the layout of the site. The approximate boundaries of the Route 52 corridor area are shown on **Figure 2**; this area is located south of Route 52 and north of buildings B320A/B210, B310/B220 and B303, is bounded by West Drive on the western side, and extends approximately 250 feet beyond East Drive on the eastern side.

As shown on **Figure 2**, most of the Route 52 corridor area is located in the Perimeter Area of the Facility while two (2) smaller areas to the north of B310/B220 and along East Drive are located in Area A (Operable Unit 5, OU5) as defined in the ISMP. The Perimeter Area consists of the portions of the site that are primarily outside the central portion of the Facility and are not associated with manufacturing activities. Area A (OU5) is located in the vicinity of buildings B308, B309 and B310/B220 and IBM continues to operate groundwater extraction systems to remediate VOC plumes attributable to former solvent storage and distribution systems in this area. Site use and construction activities in Area A are subject to the restrictions set forth in IBM's June 17, 2015 Declaration of Restrictions, Easements and Covenants. The sampling proposed within Area A was performed in accordance with the ISMP and Intrusive Activities Work Plan.

Currently, the surface of the Route 52 corridor area is covered by asphalt pavement (parking lot and interior Facility access roads) and adjacent landscaped areas. The surface elevation in this area varies from approximately 260 to 270 feet, and the bedrock surface elevation varies from approximately 210 to 250 feet based on ISMP Figure 1-7 (Bedrock Surface Elevation Contour Map) and boring/monitoring well logs presented in ISMP Appendix D (Groundwater Monitoring Plan). The depth to bedrock is approximately 10 to 60 feet below grade (bg), with the shallowest bedrock occurring in the northeastern portion of the Route 52 corridor area. There are no NYSDEC regulated wetlands in this area.

A review of available historical records indicates that there was no development within the Route 52 corridor area. The *Site Investigation Work Plan – Route 52 Corridor* (GZA, April 18, 2019) identified a spill which occurred in December 2010 northwest of Building 303 involving a tanker truck containing 200 gallons of No. 2 fuel oil. According to the NYSDEC Spill Incidents Database, the spill (#1009937) was closed in August 2011. The ISMP describes the cover system at the site, which consists of a minimum of three (3) feet of surface soil that meets the NYSDEC 6 NYCRR Part 375 Soil Cleanup Objectives (SCOs) for industrial use, asphalt pavement, and concrete sidewalks and building slabs.

According to the ISMP, the initial Facility investigations in the late 1970s and early 1980s found PCE, TCE and cis-1,2-dichloroethene contamination in groundwater in the vicinity of Buildings 308, 309 and 310, located in Area A (Operable Unit OU5), south of the Route 52 corridor. The production well 2 (PW-2) bedrock groundwater remediation system and Building 316 carbon treatment system were installed and continue operating to capture and treat this groundwater. The solvent storage and distribution systems associated with the Area A (OU5) VOC contaminant plume are primarily located between building B310/B220 and buildings B308 and B309, outside the Route 52 corridor area shown on **Figure 2**.

As mentioned above, groundwater sampling results from IBM's on-going site-wide monitoring program will be used to support the Route 52 corridor boundary modification petition. Refer to Section 4 for a discussion of groundwater monitoring results.

## **2 SUBSURFACE INVESTIGATION FIELDWORK**

The subsurface investigation was performed on May 10 and 11, 2021. Lakewood Environmental Services Corp. (Lakewood) of Smithtown, NY was retained to perform the drilling activities. Walden performed field oversight and CAMP air monitoring during drilling and collected soil samples in accordance with the NYSDEC-approved Work Plan. Field work and sampling activities are described in further detail below. Photographs taken to document the work are presented in **Appendix A**.

### **2.1 Soil Investigation**

Soil samples were collected at twenty (20) locations (SB-01 through SB-20) throughout the Route 52 corridor area as depicted on **Figure 2**. NYSDEC approved the sampling locations, which were chosen randomly to achieve representative coverage of the area, with certain locations chosen based on available information which suggested the potential for contamination may exist. Borings are also located near stormwater outfalls within the Route 52 corridor area.

Soil sampling was conducted in general accordance with the NYSDEC Division of Environmental Resources (DER) *Technical Guidance for Site Investigation and Remediation (DER-10)*; NYSDEC's *Sampling, Analysis and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs* (January 2021); Appendix C [Intrusive Activities Work Plan (IAWP)] of the ISMP; and 29 CFR 1910.120. All sampling locations were cleared by ground-penetrating radar before drilling commenced.

Soil samples were collected utilizing a direct-push (e.g., Geoprobe<sup>®</sup>) drill rig with four (4)-foot long Macro-Cores<sup>®</sup>, beginning at grade and continuing to a maximum depth of sixteen (16) feet below grade (bg). No groundwater or bedrock was encountered during drilling activities.

Each soil core was visually inspected and field screened for the presence of organic vapors within the 0-16 ft bg core depth using a photoionization detector (PID) that had been properly calibrated according to manufacturer's instructions each day prior to sampling. Observations and screening readings were recorded on the boring logs by field personnel, provided in **Appendix B**. No evidence of gross contamination was observed in any of the samples. Excess soils removed from each sampling location were placed back into their respective holes.

A total of three (3) soil samples were collected for laboratory analysis from each of the 20 proposed sampling locations as follows:

- “A” Sample from the 0-1 ft bg interval
  - For analysis of semi-volatile organic compounds (SVOCs) [including the full list of Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-dioxane], target analyte list (TAL) metals, pesticides, herbicides and polychlorinated biphenyls (PCBs).
- “B” Sample from the 1-2 ft bg interval
  - For analysis of volatile organic compounds (VOCs) only.
- “C” Sample from the two (2)-foot soil depth interval (from 2 ft bg to the bottom of the core) exhibiting the greatest visual or olfactory evidence of contamination (odors/staining) and/or the highest PID reading. Where screening and observations showed no evidence of contamination from within interval from 2 ft bg to the bottom of the core, the sample from the deepest unsaturated 2-foot soil interval was collected.
  - For analysis of VOCs, SVOCs (including PFAS and 1,4-dioxane), TAL metals, pesticides, herbicides and PCBs.

Discrete samples from each boring were collected for VOC analysis from the “B” and “C” intervals described above. Composite samples were collected from the “A” and “C” intervals for laboratory analysis of SVOCs (including PFAS and 1,4-dioxane), TAL metals, pesticides, herbicides and PCBs. A total of 60 soil samples were secured for laboratory analysis and 40 soil samples were analyzed for each parameter. Several borings installed throughout the parking area consisted of primarily asphalt in the 0'-1' interval. Therefore, the shallow soil samples were collected from the 1'-2' and 2'-3' intervals.

Sample bottles, provided by the laboratory and appropriate for the analysis being performed (VOCs, SVOCs, metals, pesticides, herbicides and PCBs), were labeled in the field, placed into a sampling cooler and kept on ice for subsequent delivery to the laboratory. Each of the samples were sent under chain-of-custody protocol to Phoenix Environmental Laboratories, Inc. of Manchester, CT (NYSDOH ELAP #11301), a laboratory certified by the New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) for analysis. Field duplicates were collected at a rate of five percent (5%) (one field duplicate for every 20 samples) and one (1) equipment blank was collected per day throughout the soil sampling event. A total of two (2) field blanks for each parameter and two (2) equipment blanks were collected.

## **2.2 Decontamination Procedures and Waste Handling**

Non-disposable sampling equipment was decontaminated between sampling intervals and locations using the following procedures:

- Removed any large debris, such as clumps of soil, from the equipment by hand;
- Washed and scrubbed the equipment with a detergent solution (Alconox); and
- Rinsed the equipment with potable water.

Disposable sampling supplies were bagged/containerized and properly disposed of as solid waste. No decontamination fluids were generated during the investigation.

### **2.3 Community Air Monitoring**

Walden performed air monitoring during all ground intrusive activities as part of the Route 52 corridor investigation in accordance with the Community Air Monitoring Plan (CAMP) included in the NYSDEC-approved Work Plan. A general discussion of the CAMP activities is presented below and a detailed summary with the data sheets is presented in **Appendix C**.

Two (2) CAMP air monitoring stations (CAMP Station 1 [upwind] and CAMP Station 2 [downwind]) were set up to monitor VOC and particulate concentrations in the work zone. VOC concentrations were monitored using Mini Rae 3000 Photo-ionization detectors (PID) and DataRams were used to monitor particulate concentrations throughout the duration of the intrusive activities. The instruments were calibrated daily to ensure accurate readings. Each CAMP Station contained a PID and a dust meter connected to a data logger to continuously record the VOC and dust concentrations. Background conditions were also collected prior to the start of work each day to record baseline conditions. In addition to the automated data logging, Walden recorded the VOC and dust concentrations at each monitoring station every fifteen minutes to ensure compliance with the NYSDEC and NYSDOH action levels. CAMP Stations were relocated once during each work day as the drilling activities moved away from the original locations. Figures containing the CAMP Station locations can be found in **Appendix C**. The air monitoring data collected indicated no air quality impacts or exceedances of the CAMP action levels.

### **3 EVALUATION OF SOIL INVESTIGATION SAMPLING RESULTS**

The soil samples were analyzed by Phoenix Laboratories for 6 NYCRR Part 375-6.8 VOCs, SVOCs, pesticides, herbicides, PCBs and TAL metals, via USEPA Methods 8260, 8270, 8081B, 8151A, 8082A and 6010, respectively. The soil samples were also analyzed for the full list of PFAS and 1,4-dioxane in accordance with NYSDEC's *Sampling, Analysis and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs* (January 2021). Note that Phoenix Laboratories contracted an outside laboratory with the required PFAS certification (York Analytical Laboratories of Stratford, CT, NYSDOH ELAP #10854 and #12058) to perform the PFAS analyses.

The laboratory analytical results are tabulated as follows:

- Table 1 – Volatile Organic Compounds (VOCs)
- Table 2 – Semi-Volatile Organic Compounds (SVOCs)
- Table 3 – Metals
- Table 4 – Pesticides, Herbicides and PCBs
- Table 5 – PFAS and 1,4 Dioxane

Tables 1 through 5 compare the laboratory analytical data for the soil samples to the NYCRR Part 375-6.8(b) restricted use Soil Cleanup Objectives (SCOs) for various categories ranging from Unrestricted Residential Use to Commercial Use.

- Low concentrations of several VOCs were detected in the soil samples. All of the reported VOC concentrations were less than the respective Unrestricted Residential Use SCOS.
- Several SVOCs were detected in shallow soil samples collected from borings throughout the paved parking lot areas and adjacent grass areas. The detected SVOCs are characteristic of asphalt and fill material, consistent with the study area conditions. The majority of the detected SVOC concentrations were less than the respective Unrestricted Use SCOs as shown in Table 2. All SVOC concentrations were less than the respective Commercial Use SCOs, except for the benzo(a)pyrene concentrations which were at or slightly above the Commercial Use SCO for the shallow soil samples collected from the 0 to 1 ft depth interval at three (3) locations immediately adjacent to the paved parking lot areas (SB-01, SB-11 and SB-19). These shallow soil benzo(a)pyrene concentrations are characteristic of conditions commonly observed in and near paved areas.

- All of the metal concentrations were less than the Unrestricted Use SCOs except for the manganese concentration in SB-03 (0'-1') and SB-20 (0'-1'), the lead concentration in SB-12 (1-2') and nickel concentration in the duplicate sample (SB-DUP C51121) collected at SB-16C (13-15'), which were less than the respective Residential Use SCOs.
- No PCBs or herbicides were detected in any of the samples.
- Several pesticides including 4,4'-DDD, 4,4'-DDE, and 4,4'-DDT were detected at concentrations above the respective Unrestricted SCOs in several samples at varying depths, but well below the respective Residential Use SCOs.
- 1,4-dioxane was not detected in any of the soil samples.
- Low concentrations of several PFAS compounds were detected in the soil samples. Although NYSDEC has not established Soil Cleanup Objectives for PFAS to date, guidance values for select PFAS compounds are recommended in the State's January 2021 *Sampling, Analysis and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs* document. These guidance values are listed in Table 5. PFOS concentrations in the shallow soil samples from SB-01, SB-02, SB-03, SB-11, SB-19, and SB-20 and PFOA concentrations in the shallow samples from SB-18 and SB-19 exceeded their respective unrestricted use guidance values but were below residential use guidance values.

## 4 SUMMARY OF GROUNDWATER MONITORING DATA

Groundwater monitoring data is presented in the *2020 Annual Corrective Action Status Report* (IBM, May 2021 [The Annual Report]). IBM is responsible for managing the remedial efforts for the groundwater contamination on Site from the Former IBM East Fishkill Facility. The Annual Report presents data and figures that define the boundaries of the groundwater contaminant plumes.

The Route 52 groundwater monitoring well locations are primarily located in or near Area A (OU5) as shown on Figure 3. Bedrock monitoring wells 779, 777, and 716 and soil monitoring wells 581, 763, 010, 714, and 761 are located in or around the proposed boundary modification area. These wells were previously installed to track the effectiveness of the groundwater remediation efforts based on reductions in contaminant concentrations. The bedrock groundwater is managed and treated by bedrock extraction well PW-2. The data from the well network in the project area supports the Route 52 area boundary modification petition. Data tables and plots corresponding to the monitoring wells sampled in the Route 52 corridor area have been extracted from the *2020 Annual Corrective Action Status Report* and are provided in **Appendix F** for reference. In addition, **Appendix F** includes figures clipped from the Annual Report that show the extent of the VOC contaminant plumes and the proposed Route 52 corridor boundary modification area.

IBM reported the following statistical trends and analytical data in the most recent Annual Report.

- The concentrations of PCE-series VOCs and Freon® TF in groundwater samples collected from Well 716 have decreased significantly since the groundwater monitoring began in the 1990's.
- Well 010 exceeds the respective New York State Class GA groundwater standards or guidance values for Freon® TF, PCE, and TCE.
- Well 714 exceed the respective New York State Class GA groundwater standards or guidance values for Freon® TF, 1,2-Dichloro-1,2,2-Trifluoroethane, cis-1,2-DCE, PCE, and TCE.
- Well 716 exceeds the respective New York State Class GA groundwater standards or guidance values for Freon® TF, cis-1,2-DCE, PCE, and TCE.
- None of the concentrations of contaminants of concern in groundwater samples collected from Wells 581, 761, 763, 777 and 779 exceeded the respective New York State Class GA groundwater standards or guidance values.

The Annual Report demonstrates that the Route 52 corridor area that is proposed for the boundary modification is not located within the PCE, TCE, cis-1,2-DCE, VC, or Freon® TF plumes in the soil groundwater unit. A small portion of the central-southern perimeter of the Route 52 corridor is situated in the PCE, TCE, and Freon® TF plumes in the bedrock groundwater unit. However, these plumes are all being managed by bedrock extraction well PW-2.

## **5 CONCLUSION**

The May 2021 subsurface investigation at the Site included the advancement of twenty (20) soil borings (SB-01 through SB-20) and the subsequent collection of numerous soil samples. The investigation was performed to characterize existing soil conditions in the Route 52 corridor area in support of iPark's planned petition for a boundary modification that would be reflected in subsequent modifications to the RCRA Permit and the Site Management Plan for the iPark 84 Facility.

On-site soils consist mainly of medium brown, fine to medium sand and silty sand with trace amounts of gravel and pebbles. Some soil borings were mainly silty sand/clay or clay with trace gravel. No odor was detected at any of the soil boring locations.

The laboratory analytical data revealed the following:

- All of the reported VOC concentrations were less than the respective Unrestricted Residential Use SCOs.
- No 1,4-dioxane, PCBs, or herbicides were detected in any of the samples.
- Several SVOCs characteristic of fill material and asphalt were detected in shallow soil samples. The majority of the detected SVOC concentrations were less than the respective Unrestricted Use SCOs and all were less than the respective Commercial Use SCOs, except for the benzo (a) pyrene concentrations reported for the shallow soil samples collected from the 0 to 1 ft depth interval at SB-01, SB-11 and SB-19.
- Several metals and pesticides were detected at concentrations above the respective Unrestricted SCOs, but well below the respective Residential Use SCOs.
- None of the PFAS concentrations detected in the soil samples exceeded the guidance values established by NYSDEC in the January 2021 *Sampling, Analysis and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs* document.

The soil sampling results support a boundary modification for the Route 52 corridor area and its removal from the RCRA Part 373 permit. Air monitoring in accordance with a State-approved Community Air Monitoring Plan (CAMP) would be performed during excavation activities in the Route 52 Corridor area. Based on the soil sampling results, any soils excavated from the Route 52 Corridor area are suitable for on-site reuse as fill material.

Based on the groundwater data provided in the 2020 Annual Corrective Action Status Report (IBM, May 2021 [The Annual Report]), a small portion of the central-southern perimeter of the Route 52 corridor is situated in the PCE, TCE, and Freon® TF plumes in the bedrock groundwater unit. However, these plumes are being effectively managed by the PW-2 system. The data from the well network in the project area supports the Route 52 area boundary modification petition.

## **TABLES**

## iPARK 84 CAMPUS

## Route 52 Boundary Modification

**TABLE 1**  
**Summary of Soil Sampling Results - Volatile Organic Compounds(VOCs)**

	Collection Date	Sample ID	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021				
			SB-01B (1-2)	SB-01C (13-15)	SB-02B (1-2)	SB-02C (13-15)	SB-03B (1-2')	SB-03C (12-14')	SB-04B (2-3')	SB-04C (12-14')	SB-05B (2-3')	SB-05C (12-14')	SB-06B (2-3')	SB-06C (10-12')	SB-07B (1-2')	SB-07C (4-6')	SB-08B (2-3')	SB-08C (13-15')	SB-DUP B	SB-DUP C	SB-09B (2-3')	SB-09C (8-10')						
	Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
6 NYCR Part 375 SCOs																												
CAS	Commercial Use Soil Cleanup Objective	Residential Use Soil Cleanup Objective	Unrestricted Use Soil Cleanup Objective	Result ug/kg Q																								
<b>Volatiles By SW8260C</b>	ug/kg	ug/kg	ug/kg																									
1,1,2-Tetrachloroethane	630-20-6	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.4	U	<4.9	U	<4.0	U	
1,1,1-Trichloroethane	71-55-6	500,000	100,000	680	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.4	U	<4.9	U	<4.0	U
1,1,2,2-Tetrachloroethane	79-34-5	NA	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.4	U	<4.9	U	<4.0	U
1,1,2-Trichloroethane	79-00-5	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.4	U	<4.9	U	<4.0	U	
1,1-Dichloroethane	75-34-3	240,000	19,000	270	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.4	U	<4.9	U	<4.0	U
1,1-Dichloroethene	75-35-4	500,000	100,000	330	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.4	U	<4.9	U	<4.0	U
1,1-Dichloropropene	563-58-6	NA	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.4	U	<4.9	U	<4.0	U
1,2,3-Trichlorobenzene	87-61-6	NA	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.70	U	<5.3	U	<4.9	U	<4.0	U	<4.6	U
1,2,3-Trichloropropane	96-18-4	NA	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.4	U	<4.9	U	<4.0	U
1,2,4-Trichlorobenzene	120-82-1	NA	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U
1,2,4-Trimethylbenzene	95-63-6	190,000	47,000	3,600	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U
1,2-Dibromo-3-chloropropane	96-12-8	NA	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U
1,2-Dibromoethane	106-93-4	NA	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U
1,2-Dichlorobenzene	95-50-1	500,000	100,000	1,100	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U
1,2-Dichloroethane	107-06-2	30,000	2,300	20	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U
1,2-Dichloropropane	78-87-5	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U	
1,3,5-Trimethylbenzene	108-67-8	190,000	47,000	8,400	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U
1,3-Dichlorobenzene	541-73-1	280,000	17,000	2,400	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U
1,3-Dichloropropane	142-28-9	NA	NA	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U	
1,4-Dichlorobenzene	106-46-7	130,000	9,800	1,800	<4.0	U	<4.5	U	<2.9	U	<3.4	U	<4.1	U	<3.1	U	<3.2	U	<4.9	U	<5.6	U	<5.3	U	<4.9	U	<4.0	U
2,2-Dichloropropane	594-20-7	NA	NA	<4.0	U	<4.5	U	<2.9																				

## iPARK 84 CAMPUS

## Route 52 Boundary Modification

TABLE 1

Summary of Soil Sampling Results - Volatile Organic Compounds(VOCs)

	Collection Date	5/11/2021		5/11/2021		5/11/2021		5/11/2021		5/11/2021		5/11/2021		5/11/2021		5/11/2021		5/11/2021		5/11/2021		5/11/2021		5/11/2021		5/11/2021					
		SB-10B (1-2')	SB-10C (13-15')	SB-11B (1-2')	SB-11C (10-12')	SB-12B (2-3')	SB-12C (13-15')	SB-13B (2-3')	SB-13C (10-12')	SB-14B (2-3')	SB-14C (6-8')	SB-15B (1-2')	SB-15C (10-12')	SB-16B (1-2')	SB-16C (13-15')	SB-DUP B 51121	SB-DUP C 51121	SB-17B (1-2')	SB-17C (9-11')	SB-18B (1-2')	SB-18C (13-15')	SB-19B (1-2')	SB-19C (10-12')	SB-20B (1-2')	SB-20C (13-15')						
	Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
<b>6 NYCRR Part 375 SCOs</b>																															
CAS	Commercial Use Soil Cleanup Objective	Residential Use Soil Cleanup Objective	Unrestricted Use Soil Cleanup Objective	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q			
<b>Volatiles By SW8260C</b>																															
1,1,1,2-Tetrachloroethane	630/20-6	NA	NA	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U		
1,1,1-Trichloroethane	71-55-6	500,000	100,000	680	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U		
1,1,2,2-Tetrachloroethane	79-34-5	NA	NA	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U			
1,1,2-Trichloroethane	79-00-5	NA	NA	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U			
1,1-Dichloroethane	75-34-3	240,000	19,000	270	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U			
1,1-Dichloroethene	75-35-4	500,000	100,000	330	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U			
1,1-Dichloropropane	563-58-6	NA	NA	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U				
1,2,2,2-Tetrachloropropane	87-61-6	NA	NA	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U				
1,2,3-Trichloropropane	96-18-4	NA	NA	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U				
1,2,4-Trichlorobenzene	120-82-1	NA	NA	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U				
1,2,4-Trimethylbenzene	95-63-6	190,000	47,000	3,600	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U			
1,2-Dibromo-3-chloropropane	96-12-8	NA	NA	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U				
1,2-Dibromomethane	106-93-4	NA	NA	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U				
1,2-Dichlorobenzene	95-50-1	500,000	100,000	1,100	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	<6.9 U	<3.5 U	<4.8 U	<4.5 U	<4.6 U	<4.6 U	<4.6 U	<4.6 U			
1,2-Dichloroethane	107-06-2	30,000	2,300	20	<5.9 U	<6.2 U	<5.1 U	<5.5 U	<4.4 U	<5.2 U	<4.7 U	<4.8 U	<4.3 U	<5.7 U	<4.0 U	<6.5 U	<3.8 U	<4.3 U	<6.2 U	<5.8 U	&lt										

**iPARK 84 CAMPUS**  
**Route 52 Boundary Modification**

**TABLE 2**  
**Summary of Soil Sampling Results - Semi-Volatile Organic Compounds (SVOCs)**

	Collection Date	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021				
		Sample ID		SB-01A (0-1')	SB-01C (13-15')	SB-02A (0-1')	SB-02C (13-15')	SB-03A (0-1')	SB-03C (12-14')	SB-04A (1-2')	SB-04C (12-14')	SB-05A (1-2')	SB-05C (12-14')	SB-06A (1-2')	SB-06C (10-12')	SB-07A (1-2')	SB-07C (4-6')	SB-08A (1-2')	SB-08C (13-15')	SB-DUP A	SB-DUP C	SB-09A (1-2')	SB-09C (8-10')			
	Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
<b>6 NYCRR Part 375 SCOs</b>																										
CAS	Commercial Use Soil Cleanup Objective	Residential Use Soil Cleanup Objective	Unrestricted Use Soil Cleanup Objective	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q												
<b>Semivolatiles By SW8270D</b>																										
1,2,4,5-Tetrachlorobenzene	95-94-3	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
1,2,4-Trichlorobenzene	120-82-1	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<1,100	U	<240	U	<290	U	<240	U	<260	U
1,2-Dichlorobenzene	95-50-1	500,000	100,000	1,100	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
1,2-Diphenylhydrazine	122-66-7	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
1,3-Dichlorobenzene	541-73-1	280,000	17,000	2,400	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,400	U	<240	U	<290	U	<240	U	<260	U
1,4-Dichlorobenzene	106-46-7	130,000	9,800	1,800	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<1,800	U	<240	U	<290	U	<240	U	<260	U
2,4,5-Trichlorophenol	95-95-4	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
2,4,6-Trichlorophenol	88-06-2	NA	NA	NA	<200	U	<170	U	<190	U	<280	U	<200	U	<280	U	<1,800	U	<170	U	<180	U	<170	U	<190	U
2,4-Dichlorophenol	120-83-2	NA	NA	NA	<200	U	<170	U	<190	U	<280	U	<200	U	<280	U	<1,800	U	<170	U	<190	U	<180	U	<190	U
2,4-Diethylphenol	105-67-9	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
2,4-Dinitrophenol	51-28-5	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
2,4-Dinitrotoluene	121-14-2	NA	NA	NA	<200	U	<170	U	<190	U	<280	U	<200	U	<280	U	<1,800	U	<170	U	<180	U	<170	U	<190	U
2,6-Dinitrotoluene	606-20-2	NA	NA	NA	<200	U	<170	U	<190	U	<280	U	<200	U	<280	U	<1,800	U	<170	U	<180	U	<180	U	<180	U
2-Chloronaphthalene	91-58-7	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
2-Chlorophenol	95-57-8	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
2-Methylnaphthalene	91-57-6	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
2-Methylphenol (o-cresol)	95-48-7	500,000	100,000	330	<270	U	<240	U	<260	U	<390	U	<280	U	<330	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
2-Nitroaniline	88-74-4	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
2-Nitrophenol	88-75-5	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
3&4-Methylphenol (m&p-cresol)	n/a	NA	NA	NA	<270	U	<240	U	<260	U	<390	U	<280	U	<400	U	<2,500	U	<240	U	<290	U	<240	U	<260	U
3,3'-Dichlorobenzidine	91-94-1	NA	NA	NA	<200	U	<170	U	<190	U	<280	U	<200	U	<280	U	<1,800	U	<170	U	<180	U	<170	U	<190	U
3-Nitroaniline	99-09-2	NA	NA	NA	<390	U	<340	U	<380	U	<560	U	<400	U	<570	U	<3,600	U	<350	U	<420	U	<340	U	<360	U
4,6-Dinitro-2-methylphenol	534-52-1	NA	NA	NA	<230	U	<210	U	<230	U	<340	U	<240	U	<340	U										

## iPARK 84 CAMPUS

## Route 52 Boundary Modification

TABLE 2

Summary of Soil Sampling Results - Semi-Volatile Organic Compounds(SVOCs)

	Collection Date	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021							
		SB-10A	SB-10C	SB-11A	SB-11C	SB-12A	SB-12C	SB-13A	SB-13C	SB-14A	SB-14C	SB-15A	SB-15C	SB-16A	SB-16C	SB-DUP A	SB-DUP C	SB-17A	SB-17C	SB-18A	SB-18C	SB-19A	SB-19C	SB-20A	SB-20C						
	Sample ID/Depth	(0'-1')	(13-15')	(0'-1')	(10-12')	(1-2')	(13-15')	(1-2')	(10-12')	(1-2')	(6-8')	(0'-1')	(10-12')	(0'-1')	(13-15')	51121	51121	(0'-1')	(9-11')	(0'-1')	(13-15')	(0'-1')	(10-12')	(0'-1')	(13-15')						
<b>6 NYCRR Part 375 SCOs</b>																															
CAS	Commercial Use Soil Cleanup Objective	Residential Use Soil Cleanup Objective	Unrestricted Use Soil Cleanup Objective	Result ug/kg	Q	Result ug/kg	Q	Result ug/kg	Q	Result ug/kg	Q																				
<b>Semivolatiles By SW8270D</b>				ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg			
1,2,4,5-Tetrachlorobenzene	95-94-3	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
1,2,4-Trichlorobenzene	120-82-1	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
1,2-Dichlorobenzene	95-50-1	500,000	100,000	1,100		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
1,2-Diphenylhydrazine	122-66-7	NA	NA	NA		< 350	U	< 390	U	< 410	U	< 350	U	< 600	U	< 370	U	< 390	U	< 380	U	< 350	U	< 370	U	< 350	U	< 370	U	< 370	U
1,3-Dichlorobenzene	541-73-1	280,000	17,000	2,400		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
1,4-Dichlorobenzene	106-46-7	130,000	9,800	1,800		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
2,4,5-Trichlorophenol	95-95-4	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
2,4,6-Trichlorophenol	88-06-2	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
2,4-Dichlorophenol	120-83-2	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
2,4-Dimethylphenol	105-67-9	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
2,4-Dinitrophenol	51-28-5	NA	NA	NA		< 350	U	< 390	U	< 410	U	< 350	U	< 600	U	< 370	U	< 390	U	< 380	U	< 370	U	< 300	U	< 350	U	< 370	U	< 370	U
2,4-Dinitroozone	121-14-2	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 200	U	< 260	U	< 250	U	< 260	U
2,6-Dinitrotoluene	606-20-2	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 200	U	< 260	U	< 250	U	< 260	U
2-Chloronaphthalene	91-58-7	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
2-Chlorophenol	95-57-8	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
2-Methylnaphthalene	91-57-6	NA	NA	NA		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
2-Methylphenol (o-cresol)	95-48-7	500,000	100,000	330		< 240	U	< 270	U	< 280	U	< 240	U	< 260	U	< 270	U	< 280	U	< 260	U	< 270	U	< 300	U	< 260	U	< 250	U	< 260	U
2-Nitroaniline	88-74-4	NA	NA	NA		< 350	U	< 390	U	< 410	U	< 350	U	< 600	U	< 370	U	< 390	U	< 380	U	< 370	U	< 350	U	< 390	U	< 350	U	< 370	U
2-Nitrophenol	88-75-5	NA	NA	NA		< 240	U	&																							

## iPARK 84 CAMPUS

## Route 52 Boundary Modification

TABLE 3

## Summary of Soil Sampling Results - Metals

		Collection Date		5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021					
		Sample ID		SB-01A (0-1')	SB-01C (13-15')	SB-02A (0-1')	SB-02C (13-15')	SB-03A (0-1')	SB-03C (12-14')	SB-04A (1-2')	SB-04C (12-14')	SB-05A (1-2')	SB-05C (12-14')	SB-06A (1-2')	SB-06C (10-12')	SB-07A (1-2')	SB-07C (4-6')	SB-08A (1-2')	SB-08C (13-15')	SB-DUP A	SB-DUP C	SB-09A (1-2')	SB-09C (8-10')						
		Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil														
<i>6 NYCR Part 375 SCOs</i>																													
CAS	Commercial Use Soil Cleanup Objective	Residential Use Soil Cleanup Objective	Unrestricted Use Soil Cleanup Objective	Result mg/kg	Q	Result mg/kg	Q	Result mg/kg	Q	Result mg/kg	Q	Result mg/kg	Q	Result mg/kg	Q	Result mg/kg	Q												
<b>Metals, Total</b>																													
Aluminum	7429-90-5	NA	NA	NA		16,300		12,400		17,000		11,200		13,500		10,800		12,200		11,900		15,100		11,700		13,600		11,000	
Antimony	7440-36-0	NA	NA	NA		< 3.7	U	< 3.8	U	< 3.4	U	< 4.0	U	< 3.8	U	< 4.4	U	< 3.0	U	< 3.7	U	< 3.9	U	< 3.6	U	< 3.7	U		
Arsenic	7440-38-2	16	16	13		5.02		4.92		4.67		3.8		5.17		4.44		5.65		4.78		4.78		4.86		6.42		4.22	
Barium	7440-39-3	400	350	350		36.7		33.6		48.5		25		57.7		28		33.9		44.2		44.2		33.1		38.6		29.8	
Beryllium	7440-41-7	590	14	7.2		0.47		0.34		0.5		0.25	J	0.45		0.27	J	0.41		0.46	J	0.46		0.44		0.38		0.33	
Cadmium	7440-43-9	9.3	2.5	2.5		1.60		1.46		1.51		1.15		1.75		1.26		1.29		1.47		1.47		1.5		1.51		1.32	
Calcium	7440-70-2	NA	NA	NA		8,260		2,080		2,030		2,870		9,090		5,490		24,700		1,580		1,580		48,100		26,700		1,330	
Chromium	7440-47-3	NA	NA	30		16.9		14.3		17.2		11.5		23.7		12.5		11.5		17.1		17.1		16.3		14.7		12.1	
Cobalt	7440-48-4	NA	NA	NA		10.3		12.3		9.70		8		14.4		9		9.87		10.4		10.4		9.82		10.7		8.2	
Copper	7440-50-8	270	270	50		26.8		29.1		23.2		21.7		30.1		24.2		29.5		22.9		22.9		28.7		35.5		27.1	
Iron	7439-89-6	NA	NA	NA		32,000		32,200		31,400		27,200		33,000		27,800		26,600		27,500		30,500		30,900		28,100		5,530	
Lead	7439-92-1	1,000	400	63		23.5		18.4		22.7		9.7		34.7		10.9		12.6		11.6		11.6		16.4		11.1		5	
Magnesium	7439-95-4	NA	NA	NA		9,820		7,940		7,090		8,380		9,930		8,770		18,100		6,230		6,230		30,600		19,900		6,280	
Manganese	7439-96-5	10,000	2,000	1,600		851		983		756		848		1,990		685		888		489		489		721		1,260		799	
Mercury	7439-97-6	2.8	0.81	0.18		< 0.03	U	< 0.03	U	< 0.03	U	< 0.03	U	< 0.03	U	< 0.03	U	< 0.03	U										
Nickel	7440-02-0	310	140	30		22.6		22.9		21.9		18.6		25.1		20.2		20.1		22.3		22.3		22.5		22.7		20.9	
Potassium	977440	NA	NA	NA		980		918		980		923		1,550		1,050		1,220		1,100		1,100		1,600		1,240		1,070	
Selenium	7782-49-2	1,500	36	3.9		< 1.5	U	< 1.5	U	< 1.4	U	< 1.6	U	< 1.7	U	< 1.6	U	< 1.5	U	< 1.5	U	< 1.5	U	< 1.5	U	10			
Silver	7440-22-4	1,500	36	2		< 0.37	U	1.37		< 0.34	U	< 0.40	U	< 0.44	U	< 0.40	U	< 0.38	U	< 0.37	U	< 0.39	U	< 0.36	U	< 0.37	U		
Sodium	7440-23-5	NA	NA	NA		332		304		664		209		294		366		71		152		152		384		657		465	
Thallium	7440-28-0	NA	NA	NA		< 1.5	U	< 1.5	U	< 1.4	U	< 1.6	U	< 1.7	U	< 1.6	U	< 1.5	U	< 1.5	U	< 1.5	U	< 1.5	U	149			
Vanadium	7440-62-2	NA	NA	NA		21.3		13.8		19.8		12		22.3		12.4		20.2		20.9		20.9		19.3		25		13.1	
Zinc	7440-66-6	10,000	2,200	109		72.4		66.3		65.6		52.7		83.5		58.6		55.4		57.2		57.2		68.4		71.7		62.5	

Notes:

Concentrations are provided in milligrams per kilogram (mg/kg).

U - The compound was analyzed for but not detected at or above the Method Detection Limit (MDL). The number immediately preceding the "U" represents the Practical Quantitation Level (PQL) corrected for percent solids, weight and/or volume calculations, and dilution factors.

**iPARK 84 CAMPUS**  
**Route 52 Boundary Modification**  
**TABLE 3**  
**Summary of Soil Sampling Results - Metals**

	Collection Date	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021	5/11/2021										
		SB-10A (0'-1')	SB-10C (13-15')	SB-11A (0'-1')	SB-11C (10-12')	SB-12A (1-2')	SB-12C (13-15')	SB-13A (1-2')	SB-13C (10-12')	SB-14A (1-2')	SB-14C (6-8')	SB-15A (0-1')	SB-16A (10-12')	SB-16C (13-15')	SB-DUP A 51121	SB-DUP C 51121	SB-17A (0-1')	SB-17C (9-11')	SB-18A (0-1')	SB-18C (13-15')	SB-19A (0-1')	SB-19C (10-12')	SB-20A (0-1')	SB-20C (13-15')														
	Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil									
		<i>6 NYCR Part 375 SCOS</i>																																				
	CAS	Commercial Use Soil Cleanup Objective	Residential Use Soil Cleanup Objective	Unrestricted Use Soil Cleanup Objective	Result mg/kg Q																																	
<b>Metals, Total</b>		mg/kg	mg/kg	mg/kg																																		
Aluminum	7429-90-5	NA	NA	NA	12,100	19,400	15,700	7,510	10,200	10,700	11,600	7,070	9,280	11,400	17,200	4,030	19,100	11,700	16,200	23,700	8,340	9,000	18,000	13,100	13,100	9,580	14,900	13,700										
Antimony	7440-36-0	NA	NA	NA	<3.5	U	<3.9	U	<3.8	U	<3.4	U	<3.9	U	<4.1	U	<3.4	U	<3.6	U	<3.4	U	<3.5	U	<3.9	U	<4.3	U	<3.7	U	<4.0	U	<3.3	U	<3.6	U	<3.8	U
Arsenic	7440-38-2	16	16	13	4,92	6,94	6,08	3,97	4,32	4,71	6,13	4,56	4,96	7,92	5,12	4,75	5,63	6,52	5,5	8,13	5,68	4,73	7,06	5,44	5,23	4,94	6,7	5,21										
Barium	7440-39-3	400	350	35	71.9	52.6	26.3	29.6	38.5	31.9	22.8	26.8	33.6	86.8	10.2	73.1	46.9	74.1	91.1	28.4	26.6	81.5	57.9	41.8	25.7	62.4	42.1											
Beryllium	7440-41-7	590	14	7.2	0.35	0.62	0.47	<0.30	U	0.27	0.47	0.74	<0.27	U	<0.29	U	0.6	0.62	<0.27	U	0.43	0.49	0.75	0.33	<0.27	U	0.63	0.37	0.35	0.29	0.46	0.37						
Cadmium	7440-43-9	9.3	2.5	2.5	0.86	1.26	1.13	0.62	0.9	0.81	0.96	0.63	0.84	1.07	1.14	0.43	1.13	1.17	1.76	0.7	0.72	1.28	1.09	1.13	0.87	1.33	1.14											
Calcium	7440-70-2	NA	NA	NA	23,900	22,400	4,290	23,700	29,400	10,000	16,500	85,800	51,600	1,210	990	135,000	918	9,780	1,190	2,190	81,300	72,800	1,770	18,400	25,300	63,100	2,630	21,600										
Chromium	7440-47-3	NA	NA	30	11.8	17.6	18.7	9.45	14.1	9.71	12.4	10.8	10.1	13.9	17.1	6.18	15.8	13.3	14.4	22.9	12.7	9.9	17.4	17.7	18.2	10.6	13.8	14.6										
Cobalt	7440-48-4	NA	NA	NA	9.33	14.3	11.40	6.42	7.88	9.01	9.11	6.19	8.07	12	10.5	5.43	10.1	11.9	8.84	15.5	6.49	7.24	11.4	11.1	7.48	6.54	10.3	9.45										
Copper	7440-50-8	270	270	50	25.8	34.9	29	15.4	25.9	21.2	25.2	16.7	22	28.8	18.4	18.3	21.9	24	21.2	40.2	17.5	18	25.4	30.6	24.3	20.2	31	29.6										
Iron	7439-89-6	NA	NA	NA	26,400	36,300	31,100	17,600	21,800	24,900	29,900	15,700	21,800	29,800	24,100	12,600	28,000	24,900	28,700	47,700	15,500	20,100	26,900	29,100	20,000	22,000	29,600	27,200										
Lead	7439-92-1	1,000	400	63	15.1	15.6	35	8.12	173	11.1	14.1	9.71	11.8	19.3	20.4	14.1	18.7	14.5	18.7	14.5	16.6	46.1	9.38	29.8	15.6	38.1	9.7	21.6	12.1									
Magnesium	7439-95-4	NA	NA	NA	17,100	19,000	8,500	13,000	21,100	10,700	13,800	41,100	30,700	5,840	4,910	77,000	5,200	10,000	4,770	10,700	50,200	36,800	5,600	12,900	16,100	38,800	7,430	16,200										
Manganese	7439-96-5	10,000	2,000	1,600	881	1,200	1,140	515	826	890	774	608	1,070	863	875	316	931	1,190	980	1,050	448	582	1,080	1,390	1,030	750	1,930	1,080										
Mercury	7439-07-6	2.8	0.81	0.18	<0.03	U	<0.03	U	<0.02	U	<0.03	J	0.03	J	<0.03	U	<0.03	U	<0.03	U	<0.03	U	<0.03															

## iPARK 84 CAMPUS

## Route 52 Boundary Modification

**TABLE 4**  
**Summary of Soil Sampling Results - Pesticides, Herbicides, PCBs**

		Collection Date		5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	
		Sample ID		SB-01A (0-1')	SB-01C (13-15')	SB-02A (0-1')	SB-02C (13-15')	SB-03A (0-1')	SB-03C (12-14')	SB-04A (1-2')	SB-04C (12-14')	SB-05A (1-2')	SB-05C (12-14')	SB-06A (1-2')	SB-06C (10-12')	SB-07A (1-2')	SB-07C (4-6')	SB-08A (1-2')	SB-08C (13-15')	SB-DUP A	SB-DUP C	SB-09A (1-2')	SB-09C (8-10')				
		Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	
		6 NYCR Part 375 SCOs																									
	CAS	Commercial Use Soil Cleanup Objective	Residential Use Soil Cleanup Objective	Unrestricted Use Soil Cleanup Objective	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q	Result ug/kg Q											
PCBs		ug/kg	ug/kg	ug/kg																							
PCB-106	12674-11-2	1,000	1,000	100	< 78 U	< 70 U	< 76 U	< 76 U	< 80 U	< 76 U	< 74 U	< 69 U	< 74 U	< 81 U	< 71 U	< 82 U	< 68 U	< 75 U	< 71 U	< 71 U	< 71 U	< 73 U	< 73 U	< 75 U	< 75 U		
PCB-1221	11104-28-2	1,000	1,000	100	< 78 U	< 70 U	< 76 U	< 76 U	< 80 U	< 76 U	< 74 U	< 69 U	< 74 U	< 81 U	< 71 U	< 82 U	< 68 U	< 75 U	< 71 U	< 71 U	< 71 U	< 73 U	< 73 U	< 75 U	< 75 U		
PCB-1232	11141-16-5	1,000	1,000	100	< 78 U	< 70 U	< 76 U	< 76 U	< 80 U	< 76 U	< 74 U	< 69 U	< 74 U	< 81 U	< 71 U	< 82 U	< 68 U	< 75 U	< 71 U	< 71 U	< 71 U	< 73 U	< 73 U	< 75 U	< 75 U		
PCB-1242	53469-21-9	1,000	1,000	100	< 78 U	< 70 U	< 76 U	< 76 U	< 80 U	< 76 U	< 74 U	< 69 U	< 74 U	< 81 U	< 71 U	< 82 U	< 68 U	< 75 U	< 71 U	< 71 U	< 71 U	< 73 U	< 73 U	< 75 U	< 75 U		
PCB-1248	12672-29-6	1,000	1,000	100	< 78 U	< 70 U	< 76 U	< 76 U	< 80 U	< 76 U	< 74 U	< 69 U	< 74 U	< 81 U	< 71 U	< 82 U	< 68 U	< 75 U	< 71 U	< 71 U	< 71 U	< 73 U	< 73 U	< 75 U	< 75 U		
PCB-1254	11097-69-1	1,000	1,000	100	< 78 U	< 70 U	< 76 U	< 76 U	< 80 U	< 76 U	< 74 U	< 69 U	< 74 U	< 81 U	< 71 U	< 82 U	< 68 U	< 75 U	< 71 U	< 71 U	< 71 U	< 73 U	< 73 U	< 75 U	< 75 U		
PCB-1260	11096-82-5	1,000	1,000	100	< 78 U	< 70 U	< 76 U	< 76 U	< 80 U	< 76 U	< 74 U	< 69 U	< 74 U	< 81 U	< 71 U	< 82 U	< 68 U	< 75 U	< 71 U	< 71 U	< 71 U	< 73 U	< 73 U	< 75 U	< 75 U		
PCB-1262	37324-23-5	NA	NA	100	< 78 U	< 70 U	< 76 U	< 76 U	< 80 U	< 76 U	< 74 U	< 69 U	< 74 U	< 81 U	< 71 U	< 82 U	< 68 U	< 75 U	< 71 U	< 71 U	< 71 U	< 73 U	< 73 U	< 75 U	< 75 U		
PCB-1268	11100-14-4	NA	NA	100	< 78 U	< 70 U	< 76 U	< 80 U	< 76 U	< 74 U	< 69 U	< 74 U	< 81 U	< 71 U	< 82 U	< 68 U	< 75 U	< 71 U	< 71 U	< 71 U	< 73 U	< 73 U	< 75 U	< 75 U			
Pesticides		ug/kg	ug/kg	ug/kg																							
4,4'-DDD	72-54-8	92,000	2,600	3.3	< 2.4 U	< 2.1 U	< 2.3 U	< 2.3 U	< 2.4 U	< 2.3 U	< 2.2 U	< 2.1 U	< 2.2 U	< 2.1 U	< 2.5 U	< 2.1 U	< 2.3 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.2 U	< 2.2 U	< 2.3 U	< 2.3 U			
4,4'-DDE	72-55-9	62,000	1,800	3.3	< 2.4 U	< 2.1 U	<b>12</b>	< 2.3 U	< 3.1 U	< 2.3 U	< 2.2 U	< 2.1 U	< 2.2 U	< 2.4 U	< 2.1 U	< 2.5 U	< 3.1 U	<b>7.8</b>	<b>7.7</b>	< 2.1 U	< 2.2 U	< 2.2 U	< 2.3 U	< 2.3 U			
4,4'-DDT	50-29-3	47,000	1,700	3.3	< 2.4 U	< 2.1 U	<b>4.4</b>	< 2.3 U	< 2.4 U	< 2.3 U	< 2.2 U	< 2.1 U	< 2.2 U	< 2.4 U	< 2.1 U	< 2.5 U	< 2.1 U	<b>7.4</b>	< 2.1	< 2.1 U	< 2.2 U	< 2.2 U	< 2.5 U	< 2.5 U			
a-BHC	319-84-6	3,400	97	20	< 7.8 U	< 7.0 U	< 7.6 U	< 7.6 U	< 8.0 U	< 7.6 U	< 7.5 U	< 6.9 U	< 7.4 U	< 8.1 U	< 7.1 U	< 8.2 U	< 6.8 U	< 7.5 U	< 7.1 U	< 7.1 U	< 7.1 U	< 7.3 U	< 7.3 U	< 3.8 U	< 3.8 U		
a-Chlordane	5103-71-9	24,000	910	94	< 3.9 U	< 3.5 U	< 3.8 U	< 3.8 U	< 4.0 U	< 3.8 U	< 3.7 U	< 3.5 U	< 3.7 U	< 4.1 U	< 3.5 U	< 4.1 U	< 3.4 U	< 3.8 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.7 U	< 3.7 U	< 3.6 U	< 3.6 U		
Aldrin	309-00-2	680	19	5	< 3.9 U	< 3.5 U	< 3.8 U	< 3.8 U	< 4.0 U	< 3.8 U	< 3.7 U	< 3.5 U	< 3.7 U	< 4.1 U	< 3.5 U	< 4.1 U	< 3.4 U	< 3.8 U	< 3.6 U	< 3.6 U	< 3.5 U	< 3.6 U	< 3.7 U	< 3.7 U	< 7.5 U		
b-BHC	319-85-7	3,000	72	36	< 7.8 U	< 7.0 U	< 7.6 U	< 7.6 U	< 8.0 U	< 7.6 U	< 7.4 U	< 6.9 U	< 7.4 U	< 8.1 U	< 7.1 U	< 8.2 U	< 6.8 U	< 7.5 U	< 7.1 U	< 7.1 U	< 7.1 U	< 7.3 U	< 7.3 U	< 38 U	< 38 U		
Chlordane	57-74-9	NA	NA	NA	< 39 U	< 35 U	< 38 U	< 40 U	< 38 U	< 37 U	< 35 U	< 37 U	< 41 U	< 35 U	< 34 U	< 38 U	< 36 U	< 36 U	< 37 U	< 36 U	< 37 U						
d-BHC	319-86-8	500,000																									

**iPARK 84 CAMPUS**  
**Route 52 Boundary Modification**  
**TABLE 4**

### Notes:

Concentrations are provided in micrograms per kilogram (ug/kg).

U - The compound was analyzed for but not detected at or above the Method Detection Limit (MDL). The number immediately preceding

the "U" represents the Practical Quantitation Level (PQL).

factors.

**Bold** results indicate those de-

**Bold and Highlighted:** Results indicate those detected above Unrestricted Use SCoS  
NA: No applicable standard

NA-NO applicable standard

Result Exceeds Respective Unrestricted Use Part 375 Soil Cleanup Objective(s)

## iPARK 84 CAMPUS

## Route 52 Boundary Modification

**TABLE 5**  
**Summary of Soil Sampling Results - PFAS and 1,4 Dioxane**

			Collection Date		5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021	5/10/2021		
			Sample ID		SB-01A (0-1')	SB-01C (13-15')	SB-02A (0-1')	SB-02C (13-15')	SB-03A (0-1')	SB-03C (12-14')	SB-04A (1-2')	SB-04C (12-14')	SB-05A (1-2')	SB-05C (12-14')	SB-06A (1-2')	SB-06C (10-12')	SB-07A (1-2')	SB-07C (4-6')	SB-08A (1-2')	SB-08C (13-15')	SB-DUP A	SB-DUP C	SB-09A (1-2')	SB-09C (8-10')	
			Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil												
<b>6 NYCRR Part 375 SCOs</b>																									
CAS	Commercial Use Soil Cleanup Objective	Residential Use Soil Cleanup Objective	Unrestricted Use Soil Cleanup Objective	Result ng/g	Q	Result ng/g	Q	Result ng/g	Q	Result ng/g	Q	Result ng/g	Q	Result ng/g	Q	Result ng/g	Q	Result ng/g	Q	Result ng/g	Q	Result ng/g	Q	Result ng/g	Q
<b>PFAS By EPA 537m</b>				ng/g		ng/g		ng/g																	
1H,1H,2H,2H-Perfluorodecanesulfonic acid	39108-34-4	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
1H,1H,2H,2H-Perfluoroctanesulfonic acid	27619-97-2	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
NEtFOSAA	2991-50-6	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
NMeFOSAA	2355-31-9	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluoro-1-octanesulfonamide (FOSA)	754-91-6	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluorobutanesulfonic acid (PFBS)	375-73-5	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluorodecanoic acid (PFDA)	335-76-2	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluorododecanoic acid (PFDoA)	307-55-1	NA	NA	NA		<0.320	U	<0.265	U	<b>0.321</b>	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluoroheptanoic acid (PFHpA)	375-85-9	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluorohexanesulfonic Acid (PFHxS)	355-46-4	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluorohexanoic acid (PFHxA)	307-24-4	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluoro-n-butanoic acid (PFBA)	375-22-4	NA	NA	NA		<b>2.13</b>		<0.265	U	<b>1.27</b>		<0.285	U	<b>0.67</b>		<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluorononanoic acid (PFNA)	375-95-1	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluoroctanesulfonic Acid (PFOS)	1763-23-1	440*	8.8*	0.88*		<b>1.70</b>		<0.265	U	<b>4.97</b>		<0.285	U	<b>1.17</b>		<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluoroctanoic acid (PFOA)	335-67-1	500*	6.6*	0.66*		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluoropentanoic acid (PPPeA)	2706-90-3	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluorotetradecanoic acid (PFTA)	376-06-7	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
Perfluoroundecanoic acid (PFUnA)	2058-94-8	NA	NA	NA		<0.320	U	<0.265	U	<0.300	U	<0.285	U	<0.273	U	<0.303	U	<0.253	U	<0.254	U	<0.255	U	<0.287	U
<b>1,4-Dioxane By SW8270D (SIM)</b>				ug/kg		ug/kg		ug/kg																	
1,4-dioxane	123-91-1	130.000	9.800	100		<77	U	<																	

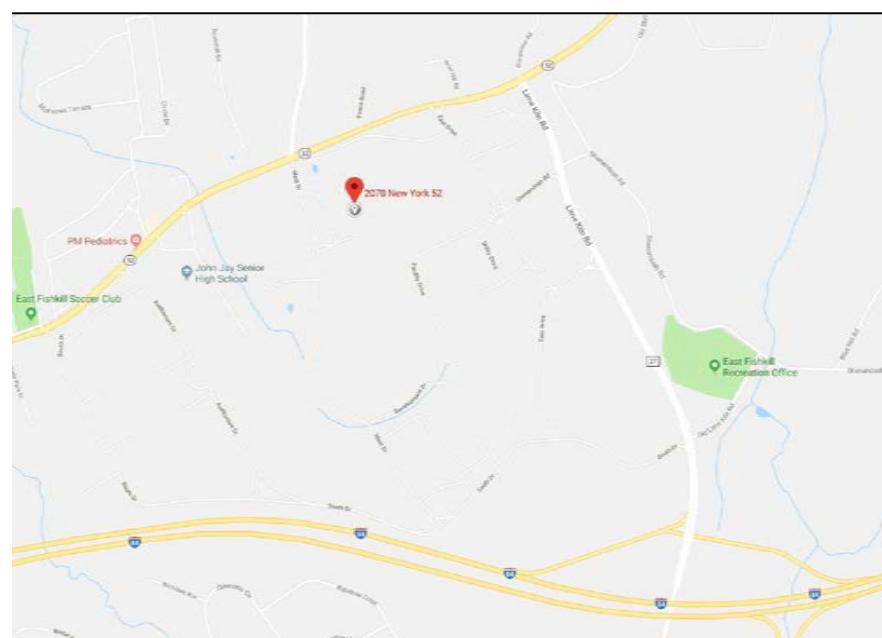


## **FIGURES**



# **PROPERTY MAP**

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## **LOCATION MAP**

A horizontal scale bar with tick marks at 0, 500, 1000, 2000, and 3000. The text "SCALE: 1\" data-bbox="298 825 486 845" is centered below the bar.

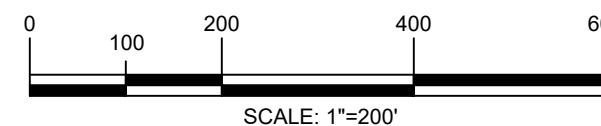
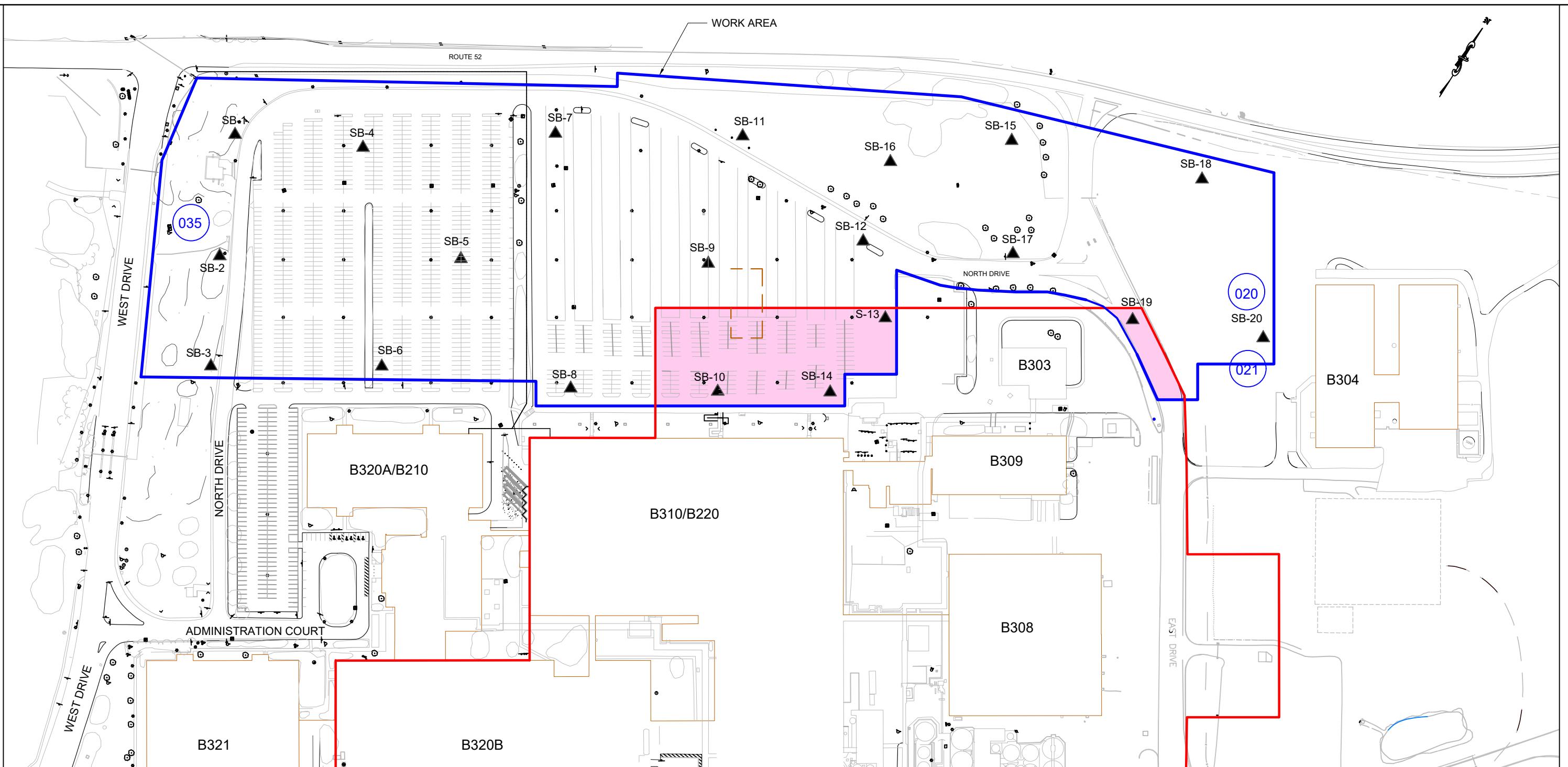
SITE PLAN  
SCALE: 1" =1000'-0"

1

WALDEN ENVIRONMENTAL ENGINEERING, PLLC  
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REVISION			FOR:	DRAWING TITLE:	DRAWING NO:	ISSUED		
No.	Date	Comments						
			ROUTE 52 CORRIDOR iPARK CAMPUS 2070 ROUTE 52 HOPEWELL JUNCTION, NEW YORK	<u>SITE PLAN</u> ROUTE 52 CORRIDOR SAMPLING PLAN	1	REVISION NO: 0		
AL								
			DESIGNED BY:NB/BET	DRAWN BY: BET	CHECKED BY: EJK	JOB NO: iPark118.48	DATE: 8/26/20	11x17
			APPROVED BY: NB	SCALE: AS NOTED	CAD FILE NAME: Z:\iPark\118\iPark0118.48 - Rte 52 Corridor\acad\Route 52 Corridor Boundary Modification (8-25-20).deg			

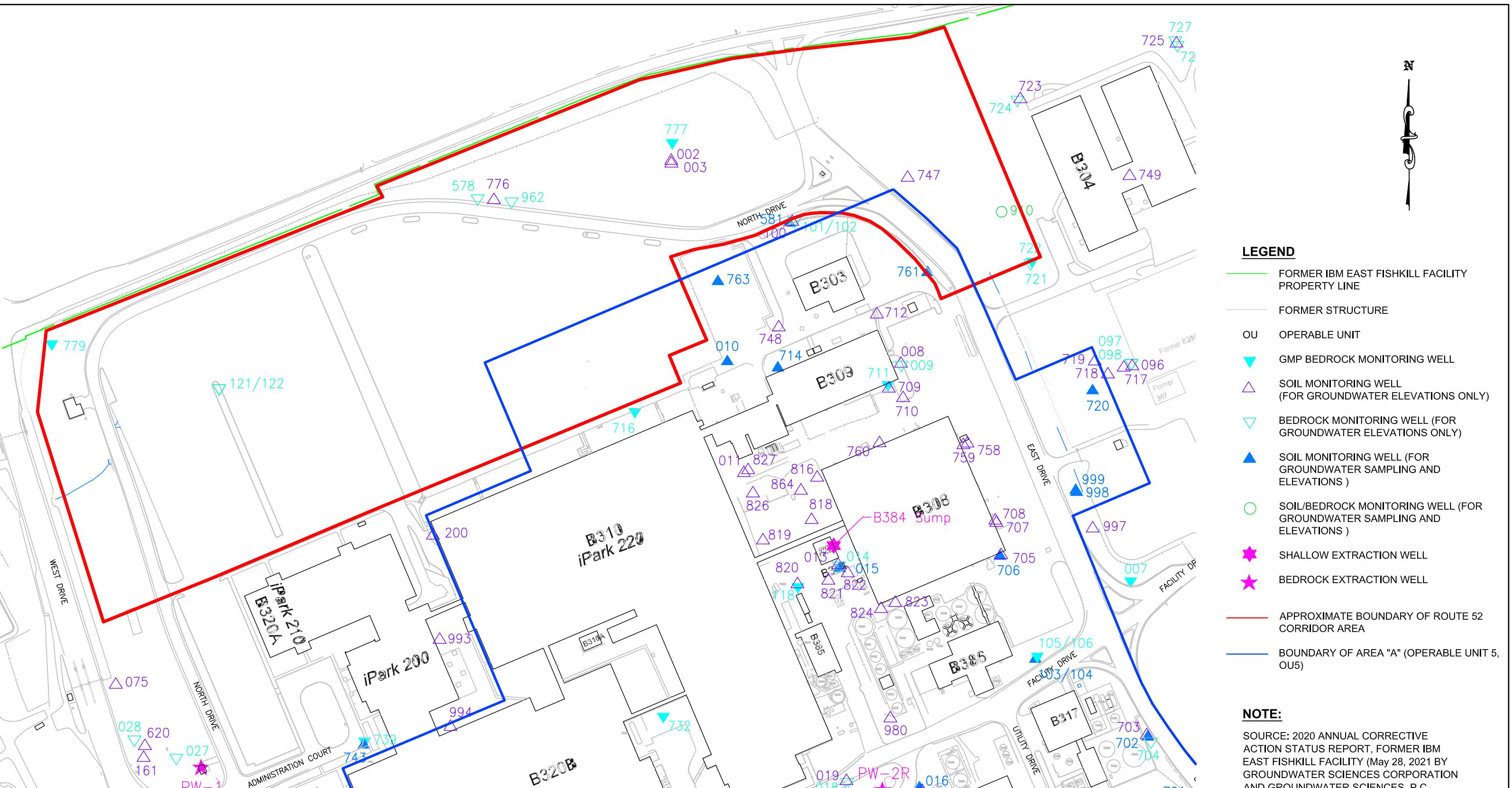


### ROUTE 52 CORRIDOR AREA SAMPLING LOCATIONS

SCALE: 1" =200'-0"

#### LEGEND

- ▲ SOIL SAMPLING LOCATIONS (SB-#)
- APPROXIMATE BOUNDARY OF ROUTE 52 CORRIDOR AREA
- BOUNDARY OF AREA "A" (OPERABLE UNIT 5, OU5)
- PORTION OF ROUTE 52 CORRIDOR AREA IN AREA "A" (OU5)
- STORMWATER OUTFALL



**GROUNDWATER MONITORING PLAN  
WELL LOCATION MAP (2020)**

SCALE: 1" = 200'

0 100 200 400 600  
SCALE: 1"=200'

**APPENDIX A**

**SITE PHOTOGRAPHS**

**Site Photographs**

**Route 52 Boundary Modification Soil Sampling, May 10 – May 11, 2021**



**Photograph #1**  
**GPR mark out**



**Photograph #2**  
**Lakewood Drilling**



**Photograph #3**  
Soil samples (Day 1)



**Photograph #4**  
Soil samples (Day 2)



**Photograph #5**  
Walden sampling



**Photograph #6**  
PID reading soil sample

**APPENDIX B**

**SOIL BORING LOGS**

# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 1 OF 20			
BORING/WELL I.D.: SB-01			CLIENT: iPark						
DATE(S) DRILLED: 5/10/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling						
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48						
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY						
SAMPLING METHOD/INTERVAL: Direct Push			DRILLING CONTR.: Lakewood Environmental						
LOGGED BY: EMJ									
REMARKS:									
<b>DESCRIPTIVE LOG</b>									
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL			
0'-4'	60	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-1': Moist brown medium grained sand with pebbles. No odor. 1'-2': Moist brown sand. No odor or staining. 2'-4': Moist brown-orange medium grain compacted sand mixed with gravel. No odor or staining.			
4'-8'	45	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-6': Moist brown-orange medium to coarse sand with pebbles. No odor. 6'-8': Medium brown coarse sand with pebbles.			
8'-12'	40	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-10': Medium brown coarse grain sand with pebbles, cobble. No odor. 10'-12': Medium brown coarse sand with pebbles.			
12'-16'	40	NA	12-14: 0.0 14-16: 0.0		- -13- - -14- - -15- - -16-	12'-14': Medium brown coarse grain sand with pebbles and cobble. No odor. 14'-16': Medium brown coarse sand with pebbles.			
						- End of boring 16'.			



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 2 OF 20				
BORING/WELL I.D.: SB-02			CLIENT: iPark							
DATE(S) DRILLED: 5/10/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling							
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48							
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY							
SAMPLING METHOD/INTERVAL: Direct Push			DRILLING CONTR.: Lakewood Environmental							
LOGGED BY: EMJ			REMARKS:							
<hr/> <hr/> <hr/> <hr/>										
DESCRIPTIVE LOG										
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL				
0'-4'	45	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-1': Grey brown fine grained silty sand with traces of vegetation. No odor. 1'-2': Tan-brown fine grained sand with traces of pebbles. 2'-4': Mosit tan-brown fine grained sand mixed with pebbles.				
4'-8'	45	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-5': Grey-brown fine grained sand with traces of vegetation. No odor. 5'-6": Grey -brown fine grained sand. No stains or odor. 6'-8": Tan-brown fine grained sand with pebbles.				
8'-12'	100	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-11": Moist grey-brown fine grained sand with pebbles. 11'-12": Grey-brown compacted clay. No staining.				
12'-16'	60	NA	12-14: 0.0 14-16: 0.0		- -13- - -14- - -15- - -16-	12'-15": Grey-brown fine grained sand with pebbles. No odor. 15'-16": Brown clay.				
						- End of boring 16'.				



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 3 OF 20
BORING/WELL I.D.: SB-03			CLIENT: iPark			
DATE(S) DRILLED: 5/10/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling			
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48			
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY			
SAMPLING METHOD/INTERVAL: Direct Push						
LOGGED BY: EMJ			DRILLING CONTR.: Lakewood Environmental			
REMARKS:						
					-	End of boring 16'.



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 4 OF 20	
BORING/WELL I.D.: SB-04			CLIENT: iPark				
DATE(S) DRILLED: 5/10/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling				
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48				
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY				
SAMPLING METHOD/INTERVAL: Direct Push							
LOGGED BY: EMJ			DRILLING CONTR.: Lakewood Environmental				
REMARKS:							
DESCRIPTIVE LOG							
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL	
0'-4'	60	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-8": Asphalt.  0.8"-3": Dry tan-brown fine grained silt with pebbles. No odor.  3"-4": Dry brown medium grained sand with pebbles. No odor.	
4'-8'	40	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-8": Dry tan-brown medium grained sand with pebbles. No odor.	
8'-12'	65	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-12": Dry tan-brown medium grained sand with pebbles. No odor.	
12'-16'		NA	12-14: 0.0 14-16: 0.0		- -13- - -14- - -15- - -16-	12'-14": Dry tan-brown medium grained sand with pebbles. No odor.  14'-16": Wet (starting at 14.5') tan-brown compacted silt.	
						-	End of boring 16'.



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 5 OF 20				
BORING/WELL I.D.: SB-05			CLIENT: iPark							
DATE(S) DRILLED: 5/10/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling							
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48							
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY							
SAMPLING METHOD/INTERVAL: Direct Push										
LOGGED BY: EMJ			DRILLING CONTR.: Lakewood Environmental							
REMARKS:										
<b>DESCRIPTIVE LOG</b>										
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL				
0'-4'	65	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-10": Asphalt.  10"-4': Dry medium brown fine grained silt mixed pebbles. No odor.				
4'-8'		NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-6': Fine grained sand with mixed pebbles and traces of silt.  6'-8': Moist tan fine grained silt.				
8'-12'		NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-12': Tan compacted silt/clay. No odor.				
12'-16'		NA	12-14.5: 0.0		- -13- - -14- - -15- - -16- -	12'-14.5': Tan compacted silt/clay with presence of cobbles. No odor. Refusal at 14.5'.  Refusal at 14.5'.				



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 6 OF 20				
BORING/WELL I.D.: SB-06			CLIENT: iPark							
DATE(S) DRILLED: 5/10/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling							
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48							
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY							
SAMPLING METHOD/INTERVAL: Direct Push										
LOGGED BY: EMJ			DRILLING CONTR.: Lakewood Environmental							
REMARKS:										
<b>DESCRIPTIVE LOG</b>										
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL				
0'-4'	65	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-1': Asphalt.  1'-4': Dry tan-brown fine grained silty sand with mixed gravel and pebbles. No odor.				
4'-8'	50	NA	4-6: 0.0 6-8: 0.0		-5- -6- -7- -8-	4'-8': Dry and compacted fine grained silty sand with traces of cobbles, mixed gravel, pebbles. No odor.				
8'-12'	60	NA	8-10: 0.0 10-12: 0.0		-9- -10- -11- -12-	8-10': Moist fine grained sand with mixed pebbles. No odor.  10'-12': Wet tan compacted clayey silt. No odor.				
12'-16'	55	NA	12-14: 0.0 14-16: 0.0		-13- -14- -15- -16-	12'-16': Saturated tan-brown and then grey (at 16') clayey silt with trace pebbles. No odor.				
						- End of boring 16'.				



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 7 OF 20			
BORING/WELL I.D.: SB-07			CLIENT: iPark						
DATE(S) DRILLED: 5/10/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling						
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48						
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY						
SAMPLING METHOD/INTERVAL: Direct Push			DRILLING CONTR.: Lakewood Environmental						
LOGGED BY: EMJ									
REMARKS:									
<b>DESCRIPTIVE LOG</b>									
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL			
0'-4'	65	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-10": Asphalt.  10"-4': Dry tan-brown compacted silt with traces clay and pebbles. No odor.			
4'-8'	50	NA	4-6: 0.1 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-8': Dry tan-brown compacted silt with traces clay and cobbles and pebbles. No odor.			
8'-12'	30	NA	8-10: 0.1 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-12': Light tan compacted silty clay with gravel and cobbles.			
12'-16'	35	NA	12-14: 0.0 14-16: 0.0		- -13- - -14- - -15- - -16-	12'-16': Moist tan compacted silty with trace clay and a presence of pebbles and gravel. No odor.			
						- End of boring 16'.			



## BORING/WELL LOG



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 9 OF 20
BORING/WELL I.D.: SB-09				CLIENT: iPark		
DATE(S) DRILLED: 5/10/2021				PROJECT NAME: Route 52 Corridor Boundary Modification Sampling		
DRILL METHOD: Geoprobe				PROJECT NO.: iPark0118.48		
BORING DIAMETER: 2"				PROJECT LOCATION: East Fishkill, NY		
SAMPLING METHOD/INTERVAL: Direct Push						
LOGGED BY: EMJ				DRILLING CONTR.: Lakewood Environmental		
REMARKS:						
<b>DESCRIPTIVE LOG</b>						
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL
0'-4'		NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-8": Asphalt.  8"-4': Compacted tan-brown fine grained silty sand with gravel and cobbles. No odor.
4'-8'		NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-8': Wet and compacted tan-brown silty sand with trace clay plus gravel. No odor.
8'-12'		NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-12': Wet and compacted tan-brown silty sand with trace clay plus gravel. No odor. Refusal at 12'. Suspected due to highly compacted silty sand.
12'-16'		NA			- -13- - -14- - -15- - -16-	Refusal at 12'.
					-	



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 10 OF 20			
BORING/WELL I.D.: SB-10			CLIENT: iPark						
DATE(S) DRILLED: 5/11/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling						
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48						
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY						
SAMPLING METHOD/INTERVAL: Direct Push			DRILLING CONTR.: Lakewood Environmental						
LOGGED BY: EMJ									
REMARKS:									
<b>DESCRIPTIVE LOG</b>									
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL			
0'-4'	60	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-4": Asphalt.  4"-4": Dry tan-brown fine grained sand with cobble and gravel. No odor.			
4'-8'	75	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-8": Dry and compacted tan-brown fine grained sand with cobble and gravel. No odor.			
8'-12'	45	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-12": Dry and compacted tan-brown fine grained sand with cobble and gravel. No odor.			
12'-16'	90	NA	12-14: 0.0 14-16: 0.0		- -13- - -14- - -15- - -16-	12'-16": Dry and compacted tan-brown fine grained sand with cobble and gravel. No odor.			
						- End of boring 16".			



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 11 OF 20				
BORING/WELL I.D.: SB-11			CLIENT: iPark							
DATE(S) DRILLED: 5/11/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling							
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48							
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY							
SAMPLING METHOD/INTERVAL: Direct Push			DRILLING CONTR.: Lakewood Environmental							
LOGGED BY: EMJ										
REMARKS:										
<b>DESCRIPTIVE LOG</b>										
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL				
0'-4'	56	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-8": Moist dark brown fine grained sand with trace vegetation.  8"-4": Dry brown medium grained sand with a predominant mix of gravel and cobbles.				
4'-8'	58	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-8": Dry brown medium grained sand with a predominant mix of gravel and cobbles.				
8'-12'	65	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-10': Dry brown medium grained sand.				
12'-16'					- -13- - -14- - -15- - -16-	Refusal at 12'.				
					-					



## **BORING/WELL LOG**

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 12 OF 20																																																																																
BORING/WELL I.D.: SB-12			CLIENT: iPark																																																																																			
DATE(S) DRILLED: 5/11/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling																																																																																			
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48																																																																																			
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY																																																																																			
SAMPLING METHOD/INTERVAL: Direct Push																																																																																						
LOGGED BY: EMJ			DRILLING CONTR.: Lakewood Environmental																																																																																			
REMARKS:																																																																																						
<b>DESCRIPTIVE LOG</b> <table border="1"> <thead> <tr> <th>SAMPLE INTERVAL</th> <th>SAMPLE REC. (%)</th> <th>BLOWS PER 6"</th> <th>PID (ppm)</th> <th>GRAPHIC COLUMN</th> <th>DEPTH (FT)</th> <th>DESCRIPTION OF MATERIAL</th> </tr> </thead> <tbody> <tr> <td rowspan="4">0'-4'</td> <td rowspan="4">55</td> <td rowspan="4">NA</td> <td>0-1: 0.0</td> <td rowspan="4"></td> <td>-0-</td> <td>0'-16": Asphalt.</td> </tr> <tr> <td>1-2: 0.0</td> <td>-</td> <td></td> </tr> <tr> <td>2-4: 0.0</td> <td>-1-</td> <td></td> </tr> <tr> <td></td> <td>-2-</td> <td>16"-4': Moist brown fine grained sand with pebbles and cobbles.</td> </tr> <tr> <td rowspan="4">4'-8'</td> <td rowspan="4">45</td> <td rowspan="4">NA</td> <td>4-6: 0.0</td> <td rowspan="4"></td> <td>-3-</td> <td></td> </tr> <tr> <td>6-8: 0.0</td> <td>-</td> <td></td> </tr> <tr> <td></td> <td>-5-</td> <td>4'-6': Moist brown fine grained sand with pebbles and cobbles.</td> </tr> <tr> <td></td> <td>-6-</td> <td></td> </tr> <tr> <td rowspan="4">8'-12'</td> <td rowspan="4">40</td> <td rowspan="4">NA</td> <td>8-10: 0.0</td> <td rowspan="4"></td> <td>-7-</td> <td>6'-8': Dry brown fine grained sand.</td> </tr> <tr> <td>10-12: 0.0</td> <td>-</td> <td></td> </tr> <tr> <td></td> <td>-9-</td> <td>8'-10': Wet brown fine grained sand with gravel and cobbles.</td> </tr> <tr> <td></td> <td>-10-</td> <td></td> </tr> <tr> <td rowspan="4">12'-16'</td> <td rowspan="4">50</td> <td rowspan="4">NA</td> <td>12-14: 0.0</td> <td rowspan="4"></td> <td>-11-</td> <td>10'-12': Dry brown fine grained sand with gravel and cobbles.</td> </tr> <tr> <td>14-16: 0.0</td> <td>-</td> <td></td> </tr> <tr> <td></td> <td>-13-</td> <td></td> </tr> <tr> <td></td> <td>-14-</td> <td>12'-16': Dry brown fine grained sand with gravel and cobbles. Becomes moist around 13'-16'.</td> </tr> <tr> <td></td> <td>-15-</td> <td></td> </tr> <tr> <td></td> <td>-16-</td> <td></td> </tr> <tr> <td></td> <td>-</td> <td>End of boring 16'.</td> </tr> </tbody> </table>							SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL	0'-4'	55	NA	0-1: 0.0		-0-	0'-16": Asphalt.	1-2: 0.0	-		2-4: 0.0	-1-			-2-	16"-4': Moist brown fine grained sand with pebbles and cobbles.	4'-8'	45	NA	4-6: 0.0		-3-		6-8: 0.0	-			-5-	4'-6': Moist brown fine grained sand with pebbles and cobbles.		-6-		8'-12'	40	NA	8-10: 0.0		-7-	6'-8': Dry brown fine grained sand.	10-12: 0.0	-			-9-	8'-10': Wet brown fine grained sand with gravel and cobbles.		-10-		12'-16'	50	NA	12-14: 0.0		-11-	10'-12': Dry brown fine grained sand with gravel and cobbles.	14-16: 0.0	-			-13-			-14-	12'-16': Dry brown fine grained sand with gravel and cobbles. Becomes moist around 13'-16'.		-15-			-16-			-	End of boring 16'.
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL																																																																																
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8'-12'	40	NA	8-10: 0.0		-7-	6'-8': Dry brown fine grained sand.																																																																																
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	-	End of boring 16'.																																																																																				



## **BORING/WELL LOG**



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 14 OF 20				
BORING/WELL I.D.: SB-14			CLIENT: iPark							
DATE(S) DRILLED: 5/11/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling							
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48							
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY							
SAMPLING METHOD/INTERVAL: Direct Push			DRILLING CONTR.: Lakewood Environmental							
LOGGED BY: EMJ			REMARKS:							
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DESCRIPTIVE LOG										
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL				
0'-4'	70	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-8": Asphalt.  8"-4": Dry and slightly compacted tan-brown sand with pebbles. No odor.				
4'-8'	50	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-6": Dry and lightly compacted brown fine grained soil. No odor.  6'-8": Dry brown-tan fine grained sand with pebbles and cobbles. No odor.				
8'-12'	55	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	  8'-12': Dry brown-tan fine grained sand with pebbles and cobbles. No odor.				
12'-16'	35	NA	12-14: 0.0 14-16: 0.0		- -13- - -14- - -15- - -16-	  12'-16': Dry brown-tan fine grained sand with pebbles and cobbles. No odor.				
						- End of boring 16'.				



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 15 OF 20				
BORING/WELL I.D.: SB-15			CLIENT: iPark							
DATE(S) DRILLED: 5/11/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling							
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48							
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY							
SAMPLING METHOD/INTERVAL: Direct Push										
LOGGED BY: EMJ			DRILLING CONTR.: Lakewood Environmental							
REMARKS:										
<b>DESCRIPTIVE LOG</b>										
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL				
0'-4'	70	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-4': Compacted medium brown fine grained sand with mixed pebbles.				
4'-8'	85	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-8': Compacted medium brown fine grained sand with mixed pebbles.				
8'-12'	50	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-12': Tan fine grained sand with gravel.				
12'-16'		NA	12-13: 0.0		- -13- - -14- - -15- - -16- -	12'-13': Dry sand with cobbles. Refusal at 13'.				



## **BORING/WELL LOG**

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 16 OF 20
BORING/WELL I.D.: SB-16			CLIENT: iPark			
DATE(S) DRILLED: 5/11/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling			
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48			
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY			
SAMPLING METHOD/INTERVAL: Direct Push						
LOGGED BY: EMJ			DRILLING CONTR.: Lakewood Environmental			
REMARKS:						
DESCRIPTIVE LOG						
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL
0'-4'	80	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-4': Dry brown fine grained sand with trace gravel. No odor.
4'-8'	90	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-8': Dry compacted medium brown with mixed gravel. Moist beginning at 6.5'. No odor.
8'-12'	75	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-12': Moist and compacted brown silty sand.
12'-16'	40	NA	12-14: 0.0 14-16: 0.0		- -13- - -14- - -15- - -16-	12'-16': Moist and compacted brown silty sand with trace gravel.
					-	End of boring 16'.



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 17 OF 20				
BORING/WELL I.D.: SB-17			CLIENT: iPark							
DATE(S) DRILLED: 5/11/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling							
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48							
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY							
SAMPLING METHOD/INTERVAL: Direct Push			DRILLING CONTR.: Lakewood Environmental							
LOGGED BY: EMJ			REMARKS:							
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DESCRIPTIVE LOG										
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL				
0'-4'	58	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-1.5": Dry medium brown sand with trace vegetation and cobbles. No odor. 1.5"-4": Compacted tan-brown fine sand. No odor.				
4'-8'	52	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-8": Compacted tan-brown fine sand with mixed cobbles and pebbles. No odor.				
8'-12'	31	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-11": Dry grey fine grained sand. No odor. Refusal at 11".				
12'-16'					- -13- - -14- - -15- - -16-					
<hr/>										



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 18 OF 20				
BORING/WELL I.D.: SB-18			CLIENT: iPark							
DATE(S) DRILLED: 5/11/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling							
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48							
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY							
SAMPLING METHOD/INTERVAL: Direct Push			DRILLING CONTR.: Lakewood Environmental							
LOGGED BY: EMJ			REMARKS:							
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DESCRIPTIVE LOG										
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL				
0'-4'	70	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-3': Dry and loosely compacted brown fine grained sand. No odor.  3'-4': Dry and loosely compacted brown fine grained sand with pebbles. No odor.				
4'-8'	65	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-8': Dry and loosely compacted brown fine grained sand with pebbles and cobbles. No odor.				
8'-12'	25	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-12': Dry and loosely compacted brown fine grained sand with pebbles and cobbles. No odor.				
12'-16'	30	NA	12-14: 0.0 14-16: 0.0		- -13- - -14- - -15- - -16-	12'-16': Dry and loosely compacted brown fine grained sand with pebbles and cobbles. No odor.				
						- End of boring 16'.				



## **BORING/WELL LOG**

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 19 OF 20
BORING/WELL I.D.: SB-19			CLIENT: iPark			
DATE(S) DRILLED: 5/11/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling			
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48			
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY			
SAMPLING METHOD/INTERVAL: Direct Push						
LOGGED BY: EMJ			DRILLING CONTR.: Lakewood Environmental			
REMARKS:						
DESCRIPTIVE LOG						
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL
0'-4'	60	NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-1': Dry dark brown fine grained sand with trace vegetation.  1'-4': Brown-orange fine grained sand mixed with pebbles and cobbles.
4'-8'	70	NA	4-6: 0.0 6-8: 0.0		- -5- - -6- -7- - -8-	4'-5': Cobbles.  5-8': Brown fine to medium grained sand mixed with gravel.
8'-12'	40	NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-12': Brown fine to medium grained sand mixed with gravel.
12'-16'					- -13- - -14- - -15- - -16-	Refusal at 12'.
					-	



# BORING/WELL LOG

WALDEN ENVIRONMENTAL ENGINEERING						SHEET: 20 OF 20				
BORING/WELL I.D.: SB-20			CLIENT: iPark							
DATE(S) DRILLED: 5/11/2021			PROJECT NAME: Route 52 Corridor Boundary Modification Sampling							
DRILL METHOD: Geoprobe			PROJECT NO.: iPark0118.48							
BORING DIAMETER: 2"			PROJECT LOCATION: East Fishkill, NY							
SAMPLING METHOD/INTERVAL: Direct Push			DRILLING CONTR.: Lakewood Environmental							
LOGGED BY: EMJ			REMARKS:							
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DESCRIPTIVE LOG										
SAMPLE INTERVAL	SAMPLE REC. (%)	BLOWS PER 6"	PID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF MATERIAL				
0'-4'		NA	0-1: 0.0 1-2: 0.0 2-4: 0.0		-0- - -1- - -2- - -3- - -4-	0'-6": Dry brown fine grained brown sand with trace vegetation. No odor. 6"-4": Dry and compacted brown-tan fine grained sand with pebbles. No odor.				
4'-8'		NA	4-6: 0.0 6-8: 0.0		- -5- - -6- - -7- - -8-	4'-8": Moist and compacted brown-grey silty-sand with trace gravel. No odor.				
8'-12'		NA	8-10: 0.0 10-12: 0.0		- -9- - -10- - -11- - -12-	8'-12": Moist and compacted brown-grey silty-sand with trace gravel. No odor.				
12'-16'		NA	12-14: 0.0 14-16: 0.0		- -13- - -14- - -15- - -16-	12'-16": Moist and compacted brown-grey silty-sand with trace gravel. No odor.				
						- End of boring 16".				



**APPENDIX C**

**COMMUNITY AIR MONITORING PLAN SUMMARY**



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  - PID - VOCs
- APPENDIX C - CAMP STATION #2 AIR MONITORING DATA
  - DUST TRAK – PARTICULATES
  - PID – VOCs
- APPENDIX D – PHOTO LOG



## **SUMMARY OF CAMP AIR MONITORING ACTIVITIES**

Walden Environmental Engineering, PLLC (Walden) has prepared this report on behalf of iPark East Fishkill, LLC (iPark/Owner), to summarize the results of the Community Air Monitoring Program (CAMP) during the May 2021 subsurface investigation conducted at the Route 52 Corridor Site located at iPark 84 Facility (former IBM East Fishkill Facility the [Facility]) located in Hopewell Junction, New York. The Facility is being remediated in accordance with the site's 6 NYCRR Part 373 Permit, EPA ID NYD000707901 (RCRA Permit).

The CAMP was in accordance with the Special Requirements included in the “Route 52 Corridor Boundary Modification Field Investigation Work Plan” (Walden, November 2020). This workplan was approved by the New York State Department of Environmental Conservation (NYSDEC) and is required during all intrusive work at the Site.

Background air quality measurements within the work zone at upwind and downwind locations were recorded before excavation work began each work day. Two (2) CAMP air monitoring stations (CAMP Station #1 [Upwind] and CAMP Station #2 [Downwind]) were set up at the locations shown on **Figure 1**. Intrusive activities at the Route 52 Corridor space began on May 10, 2021 and concluded on May 11, 2021. Lakewood Environmental Services Corp. (Lakewood) of Smithtown, NY was retained to perform drilling activities.

VOC concentrations are monitored using Mini Rae 3000 Photo-ionization detectors (PID) and DataRams are used to monitor particulate concentrations. The instruments are calibrated daily. Each CAMP air monitoring station has a PID and a dust meter connected to a data logger to continuously record the breathing zone VOC and dust concentrations during the work day. VOC and particulate concentrations were also collected prior to the start of work each day to record baseline conditions in the work space in and surrounding tenant spaces for that workday.

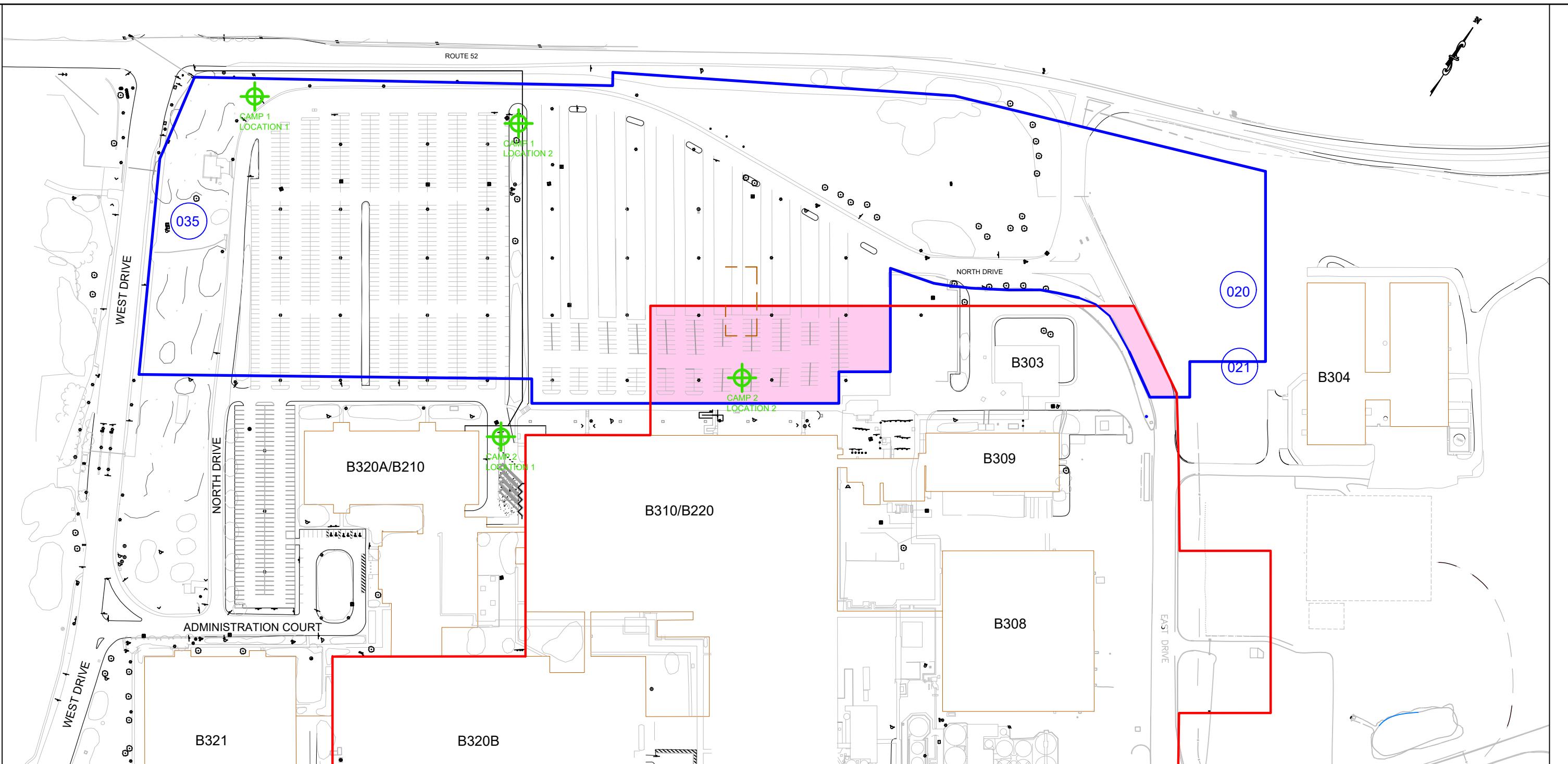
Walden recorded the VOC and dust concentrations at each monitoring station every fifteen minutes during the work day to ensure that appropriate actions are implemented as needed based on the action levels presented in the CAMP. In addition, Walden used a third PID to monitor breathing zone VOC concentrations in the immediate vicinity of the work activities to ensure the workers were protected in accordance with the HASP.

The dust action level established in the CAMP approved by the NYSDEC and NYSDOH is 0.150 mg/ m<sup>3</sup> and the VOC action level is 5.0 ppm. No exceedances of these levels were recorded. The daily CAMP air monitoring records for May 10-11, 2021 are included in **Appendix A**. Please note that Page 2 from May 11 is not included in the records, as it was misplaced due to harsh winds during sampling. The PID and DataRam data files are included in



**Appendix B** (for Station CAMP-1) and **Appendix C** (for Station CAMP-2). Photographs are presented in **Appendix D**. All recorded VOC concentrations were below the 5 ppm CAMP action level throughout ground intrusive activities.

The CAMP air monitoring results show no visible dust or unpleasant odors during the excavation activities. No air quality impacts were observed throughout the CAMP activities.



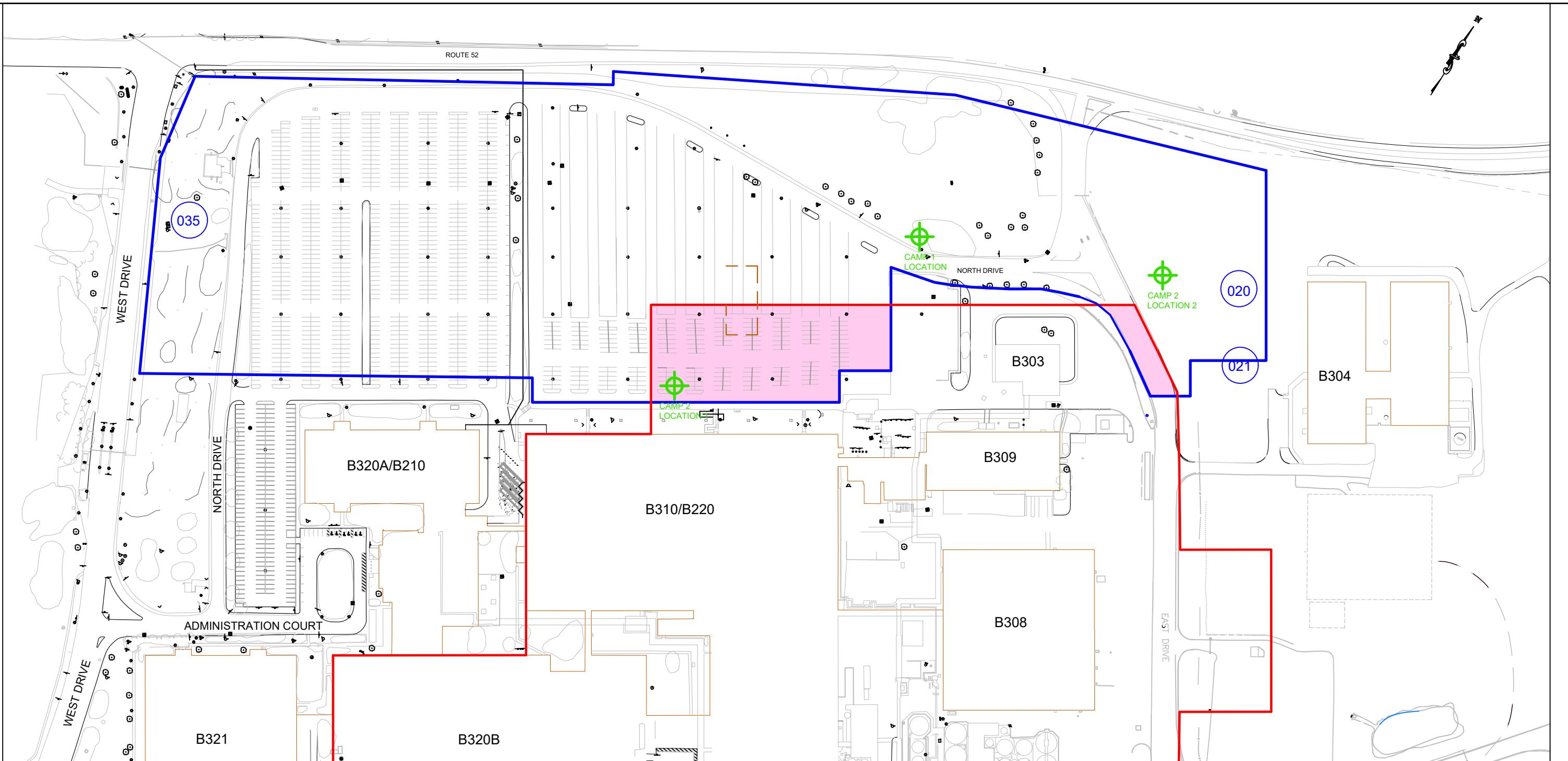
0  
100 200 400 600  
SCALE: 1"=200'

## ROUTE 52 CORRIDOR AREA CAMP LOCATIONS MAY 10, 2021 AND PROPOSED SAMPLING LOCATIONS

SCALE: 1"=200'-0"

### LEGEND

- CAMP STATION LOCATION
- APPROXIMATE BOUNDARY OF ROUTE 52 CORRIDOR AREA
- BOUNDARY OF AREA "A" (OPERABLE UNIT 5, OU5)
- PORTION OF ROUTE 52 CORRIDOR AREA IN AREA "A" (OU5)
- STORMWATER OUTFALL



0  
100 200 400 600  
SCALE: 1"=200'

### ROUTE 52 CORRIDOR AREA CAMP LOCATIONS MAY 11, 2021 AND PROPOSED SAMPLING LOCATIONS

SCALE: 1"=200'-0"

#### LEGEND

- CAMP STATION LOCATION
- APPROXIMATE BOUNDARY OF ROUTE 52 CORRIDOR AREA
- BOUNDARY OF AREA "A" (OPERABLE UNIT 5, OU5)
- PORTION OF ROUTE 52 CORRIDOR AREA IN AREA "A" (OU5)
- STORMWATER OUTFALL



**APPENDIX A**  
**AIR MONITORING DAILY REPORTS**



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### AIR MONITORING DAILY REPORT

PROJECT: 0118.48	DATE: 5/10/2021	DAY OF WEEK: MONDAY
AGENCY: iPARK EAST FISHKILL	WEATHER: Cloudy	TEMPERATURE: 48°
CONTRACTOR: LAKWOOD DRILLING	CONTACT: SHAWN M.	WIND: NNW 6 mph
SITE ADDRESS: ROUTE 52 CORRIDOR BOUNDARY MODIFICATION	AIR MONITOR'S NAME: Allison Brundage SIGNATURE: <i>Allison Brundage</i>	

#### DESCRIPTION OF WORK IN DETAIL

TIME/LOCATION	EQUIPMENT & READING	NOTES
CAMP 1 8 <sup>15</sup>	DUST: 0.004 APM PID: 0.0	CAMP 1 located near Rt 52 traffic. Other contractor drilling near CAMP 2
CAMP 2 8 <sup>15</sup>	DUST: 0.006 APM PID: 0.0	
CAMP 1 8 <sup>30</sup>	DUST: 0.000 PID: 0.0	8 <sup>25</sup> Lakewood begin drilling at first location SB-01
CAMP 2 8 <sup>30</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 8 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 8 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 9 <sup>00</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 9 <sup>00</sup>	DUST: 0.000 PID: 0.0	9 <sup>10</sup> Lakewood begin drilling at SB-02
CAMP 1 9 <sup>15</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 9 <sup>15</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 9 <sup>30</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 9 <sup>30</sup>	DUST: 0.001 PID: 0.0	
CAMP 1 9 <sup>45</sup>	DUST: 0.062 PID: 0.0	
CAMP 2 9 <sup>45</sup>	DUST: 0.000 PID: 0.0	9 <sup>50</sup> Lakewood begin drilling at SB-03
CAMP 1 10 <sup>00</sup>	DUST: 0.020 PID: 0.0	
CAMP 2 10 <sup>00</sup>	DUST: 0.000 PID: 0.0	



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### AIR MONITORING DAILY REPORT

PROJECT: 0118.48	DATE: 5/10/2021	DAY OF WEEK: MONDAY
AGENCY: iPARK EAST FISHKILL	WEATHER: Cloudy	TEMPERARTURE: <del>52</del> 52°
CONTRACTOR: LAKWOOD DRILLING	CONTACT: SHAWN M.	WIND: NW 5 mph
SITE ADDRESS: ROUTE 52 CORRIDOR BOUNDARY MODIFICATION	AIR MONITOR'S NAME: Allison Brundage SIGNATURE: <i>Allison Brundage</i>	

#### DESCRIPTION OF WORK IN DETAIL

TIME/LOCATION	EQUIPMENT & READING	NOTES
CAMP 1 /0 <sup>15</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 /0 <sup>15</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 /0 <sup>30</sup>	DUST: 0.000 PID: 0.0	Lakewood begin drilling at SB-04
CAMP 2 /0 <sup>30</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 /0 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 /0 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 /1 <sup>00</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 /1 <sup>00</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 /1 <sup>15</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 /1 <sup>15</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 /1 <sup>30</sup>	DUST: 0.000 PID: 0.0	11 <sup>20</sup> Lakewood begin drilling at SB05
CAMP 2 /1 <sup>30</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 /1 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 /1 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 /2 <sup>00</sup>	DUST: 0.000 PID: 0.0	11 <sup>55</sup> Lakewood begin drilling at SB-06
CAMP 2 /2 <sup>00</sup>	DUST: 0.000 PID: 0.0	



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## AIR MONITORING DAILY REPORT

PROJECT: 0118.48	DATE: 5/10/2021	DAY OF WEEK: MONDAY
AGENCY: iPARK EAST FISHKILL	WEATHER: Cloudy	TEMPERARTURE: 55°
CONTRACTOR: LAKWOOD DRILLING	CONTACT: SHAWN M.	WIND: NNW 5mph
SITE ADDRESS: ROUTE 52 CORRIDOR BOUNDARY MODIFICATION	AIR MONITOR'S NAME: Allison Brundage SIGNATURE: <i>Allison Brundage</i>	

## DESCRIPTION OF WORK IN DETAIL

TIME/LOCATION	EQUIPMENT & READING	NOTES
CAMP 1 12 <sup>15</sup>	DUST: 0.002 PID: 0.0	Lawnmower nearby
CAMP 2 12 <sup>15</sup>	DUST: 0.001 PID: 0.0	
CAMP 1 12 <sup>30</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 12 <sup>30</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 12 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 12 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 13 <sup>00</sup>	DUST: PID:	
CAMP 2 13 <sup>00</sup>	DUST: PID:	13 <sup>10</sup> Lakewood drilling at SB-07
CAMP 1 13 <sup>15</sup>	DUST: PID:	ALB move CAMP stations CAMP 1 to left of SB-07
CAMP 2 13 <sup>15</sup>	DUST: PID:	CAMP 2 to right of SB-10
CAMP 1 13 <sup>30</sup>	DUST: 0.001 PID: 0.0	
CAMP 2 13 <sup>30</sup>	DUST: 0.001 PID: 0.0	
CAMP 1 13 <sup>45</sup>	DUST: PID:	
CAMP 2 13 <sup>45</sup>	DUST: PID:	
CAMP 1 14 <sup>00</sup>	DUST: 0.000 PID: 0.0	Lakewood drilling at SB-08
CAMP 2 14 <sup>00</sup>	DUST: 0.000 0.001 PWS PID: 0.0	



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## AIR MONITORING DAILY REPORT

PROJECT: 0118.48	DATE: 5/10/2021	DAY OF WEEK: MONDAY
AGENCY: iPARK EAST FISHKILL	WEATHER: Partially Sunny	TEMPERATURE: 57°
CONTRACTOR: LAKWOOD DRILLING	CONTACT: SHAWN M.	WIND: NNW 7 mph
SITE ADDRESS: ROUTE 52 CORRIDOR BOUNDARY MODIFICATION	AIR MONITOR'S NAME: Allison Brundage SIGNATURE: <i>Allison Brundage</i>	

## DESCRIPTION OF WORK IN DETAIL

TIME/LOCATION	EQUIPMENT & READING	NOTES
CAMP 1   4 <sup>15</sup>	DUST: 14 <sup>00</sup> -14 <sup>20</sup> PID:	ALB, EMJ, KAW preparing field blanks
CAMP 2   4 <sup>15</sup>	DUST: PID:	
CAMP 1   4 <sup>30</sup>	DUST: 0.001 PID: 0.0	
CAMP 2   4 <sup>30</sup>	DUST: 0.001 PID:	PID at CAMP 2 died, third PID for soil will be brought to do PID test at the 75 min intervals
CAMP 1   4 <sup>45</sup>	DUST: 0.003 PID: 0.0	
CAMP 2   4 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 1   5 <sup>00</sup>	DUST: 0.001 PID: 0.0	
CAMP 2   5 <sup>00</sup>	DUST: 0.001 PID: 0.0	
CAMP 1   5 <sup>15</sup>	DUST: PID:	
CAMP 2   5 <sup>15</sup>	DUST: PID:	
CAMP 1   5 <sup>30</sup>	DUST: 0.001 PID: 0.0	15 <sup>20</sup> Lakewood drilling at SB-09
CAMP 2   5 <sup>30</sup>	DUST: 0.001 PID: 0.0	
CAMP 1   5 <sup>45</sup>	DUST: 0.004 PID: 0.0	Lawn maintenance next to CAMP 1 causing spikes
CAMP 2   5 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 1   6 <sup>00</sup>	DUST: 0.000 PID: 0.0	Lakewood pack up geoprobe
CAMP 2   6 <sup>00</sup>	DUST: 0.000 PID: 0.0	ALB off site 16 <sup>10</sup>



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## AIR MONITORING DAILY REPORT

PROJECT: 0118.48	DATE: 5/11/2021	DAY OF WEEK: TUESDAY
AGENCY: IPARK EAST FISHKILL	WEATHER: Sunny	TEMPERATURE: 45°
CONTRACTOR: LAKWOOD DRILLING	CONTACT: SHAWN M.	WIND: W 3 mph
SITE ADDRESS: ROUTE 52 CORRIDOR BOUNDARY MODIFICATION	AIR MONITOR'S NAME: Allison Brundage SIGNATURE: <i>Allison Brundage</i>	

## DESCRIPTION OF WORK IN DETAIL

TIME/LOCATION	EQUIPMENT & READING	NOTES
CAMP 1 7 <sup>30</sup>	DUST: 0.001 PID: 0.0	CAMP1 set up by lamp post R48 CAMP 2 set up west of SB-10
CAMP 2 7 <sup>30</sup>	DUST: 0.001 PID: 0.0	7 <sup>30</sup> Lakewood start drilling SB-10
CAMP 1 7 <sup>45</sup>	DUST: 0.001 PID: 0.0	Craig Geotechnical drilling set up next to CAMP1 (W) and
CAMP 2 7 <sup>45</sup>	DUST: 0.000 PID: <del>0.002</del> 0.0	east of CAMP2
CAMP 1 8 <sup>00</sup>	DUST: 0.002 PID: <del>0.000</del> 0.0	
CAMP 2 8 <sup>00</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 8 <sup>15</sup>	DUST: 0.001 PID: 0.0	Lakewood start drilling SB-14
CAMP 2 8 <sup>15</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 8 <sup>30</sup>	DUST: 0.002 PID: 0.0	
CAMP 2 8 <sup>30</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 8 <sup>45</sup>	DUST: 0.002 PID: 0.0	
CAMP 2 8 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 9 <sup>00</sup>	DUST: 0.000 PID: 0.0	9 <sup>05</sup> Lakewood start drilling SB-13
CAMP 2 9 <sup>00</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 9 <sup>15</sup>	DUST: 0.001 PID: 0.0	
CAMP 2 9 <sup>15</sup>	DUST: 0.000 PID: 0.0	



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## AIR MONITORING DAILY REPORT

PROJECT: 0118.48	DATE: 5/11/2021	DAY OF WEEK: TUESDAY
AGENCY: IPARK EAST FISHKILL	WEATHER: SUNNY	TEMPERATURE: 59°
CONTRACTOR: LAKWOOD DRILLING	CONTACT: SHAWN M.	WIND: WNW 13mph
SITE ADDRESS: ROUTE 52 CORRIDOR BOUNDARY MODIFICATION	AIR MONITOR'S NAME: Allison Brundage SIGNATURE: <i>Allison Brundage</i>	

## DESCRIPTION OF WORK IN DETAIL

TIME/LOCATION	EQUIPMENT & READING	NOTES
CAMP 1 11 <sup>30</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 11 <sup>30</sup>	DUST: 0.001 PID: 0.0	
CAMP 1 11 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 11 <sup>45</sup>	DUST: 0.000 PID: 0.0	ALB move CAMP2 to upwind location at edge of IPark property, Lakewood start drilling SB-10
CAMP 1 12 <sup>00</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 12 <sup>00</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 12 <sup>15</sup>	DUST: 0.000 PID: 0.0	
CAMP 2 12 <sup>15</sup>	DUST: 0.004 PID: 0.0	
CAMP 1 12 <sup>30</sup>	DUST: 0.001 PID: 0.0	
CAMP 2 12 <sup>30</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 12 <sup>45</sup>	DUST: -0.000 PID: 0.0	Negative reading so ALB recalibrated CAMP1 Dust
CAMP 2 12 <sup>45</sup>	DUST: 0.000 PID: 0.0	
CAMP 1 13 <sup>00</sup>	DUST: 0.002 PID: 0.0	
CAMP 2 13 <sup>00</sup>	DUST: 0.000 PID: 0.0	13 <sup>00</sup> Lakewood drilling SB-17
CAMP 1 13 <sup>15</sup>	DUST: 0.001 PID: 0.0	
CAMP 2 13 <sup>15</sup>	DUST: 0.001 PID: 0.0	



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## AIR MONITORING DAILY REPORT

PROJECT: 0118.48	DATE: 5/11/2021	DAY OF WEEK: TUESDAY
AGENCY: iPARK EAST FISHKILL	WEATHER: Sunny	TEMPERATURE: 63°
CONTRACTOR: LAKWOOD DRILLING	CONTACT: SHAWN M.	WIND: WNW 14 mph
SITE ADDRESS: ROUTE 52 CORRIDOR BOUNDARY MODIFICATION	AIR MONITOR'S NAME: Alison Brundage SIGNATURE: <i>Alison Brundage</i>	

## DESCRIPTION OF WORK IN DETAIL

TIME/LOCATION	EQUIPMENT & READING	NOTES
CAMP 1 13 <sup>30</sup>	DUST: 0.008 PID: 0.0	CAMP1 fell over. EMJ rezeroed PID and checked Dust.
CAMP 2 13 <sup>30</sup>	DUST: 0.002 PID: 0.0	
CAMP 1 13 <sup>45</sup>	DUST: PID:	
CAMP 2 13 <sup>45</sup>	DUST: PID:	13 <sup>50</sup> Lakewood start drilling SB-18
CAMP 1 14 <sup>00</sup>	DUST: PID:	
CAMP 2 14 <sup>00</sup>	DUST: PID:	
CAMP 1 14 <sup>15</sup>	DUST: 0.001 PID: 0.0	
CAMP 2 14 <sup>15</sup>	DUST: 0.001 PID: 0.0	14 <sup>20</sup> Lakewood move to drill SB-20. PID at CAMP2
CAMP 1 14 <sup>30</sup>	DUST: 0.002 PID: 0.0	died. will turn on for each reading
CAMP 2 14 <sup>30</sup>	DUST: 0.001 PID: 0.0	
CAMP 1 14 <sup>45</sup>	DUST: 0.003 PID: 0.0	
CAMP 2 14 <sup>45</sup>	DUST: 0.001 PID: 0.0	14 <sup>50</sup> Lakewood drilling SB-19
CAMP 1 15 <sup>00</sup>	DUST: PID:	
CAMP 2 15 <sup>00</sup>	DUST: PID:	
CAMP 1 15 <sup>15</sup>	DUST: PID:	Lakewood done drilling 15 <sup>10</sup>
CAMP 2 15 <sup>15</sup>	DUST: 0.002 PID: 0.0	15 <sup>30</sup> ALB off site



## **APPENDIX B**

### **CAMP-1 AIR MONITORING DATA**

- **DATA RAM – PARTICULATES**
- **PID - VOCs**

# Test 036

Instrument		Data Properties	
Model	DustTrak II	Start Date	05/10/2021
Instrument S/N	8530163109	Start Time	08:14:18
		Stop Date	05/10/2021
		Stop Time	15:52:18
		Total Time	0:07:38:00
		Logging Interval	60 seconds

Statistics		AEROSOL
Avg		0.002 mg/m <sup>3</sup>
Max		0.155 mg/m <sup>3</sup>
Max Date		05/10/2021
Max Time		15:45:18
Min		0.000 mg/m <sup>3</sup>
Min Date		05/10/2021
Min Time		08:19:18
TWA (8 hr)		0.002
TWA Start Date		05/10/2021
TWA Start Time		08:14:18
TWA End Time		15:52:18

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
1	05/10/2021	08:15:18	0.005
2	05/10/2021	08:16:18	0.001
3	05/10/2021	08:17:18	0.001
4	05/10/2021	08:18:18	0.001
5	05/10/2021	08:19:18	0.000
6	05/10/2021	08:20:18	0.000
7	05/10/2021	08:21:18	0.001
8	05/10/2021	08:22:18	0.012
9	05/10/2021	08:23:18	0.017
10	05/10/2021	08:24:18	0.002
11	05/10/2021	08:25:18	0.001
12	05/10/2021	08:26:18	0.001
13	05/10/2021	08:27:18	0.000
14	05/10/2021	08:28:18	0.001
15	05/10/2021	08:29:18	0.002
16	05/10/2021	08:30:18	0.000
17	05/10/2021	08:31:18	0.001
18	05/10/2021	08:32:18	0.001
19	05/10/2021	08:33:18	0.000
20	05/10/2021	08:34:18	0.000
21	05/10/2021	08:35:18	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
22	05/10/2021	08:36:18	0.000
23	05/10/2021	08:37:18	0.001
24	05/10/2021	08:38:18	0.000
25	05/10/2021	08:39:18	0.000
26	05/10/2021	08:40:18	0.001
27	05/10/2021	08:41:18	0.000
28	05/10/2021	08:42:18	0.000
29	05/10/2021	08:43:18	0.000
30	05/10/2021	08:44:18	0.000
31	05/10/2021	08:45:18	0.000
32	05/10/2021	08:46:18	0.000
33	05/10/2021	08:47:18	0.001
34	05/10/2021	08:48:18	0.002
35	05/10/2021	08:49:18	0.000
36	05/10/2021	08:50:18	0.000
37	05/10/2021	08:51:18	0.000
38	05/10/2021	08:52:18	0.001
39	05/10/2021	08:53:18	0.002
40	05/10/2021	08:54:18	0.000
41	05/10/2021	08:55:18	0.000
42	05/10/2021	08:56:18	0.001
43	05/10/2021	08:57:18	0.001
44	05/10/2021	08:58:18	0.001
45	05/10/2021	08:59:18	0.000
46	05/10/2021	09:00:18	0.000
47	05/10/2021	09:01:18	0.000
48	05/10/2021	09:02:18	0.000
49	05/10/2021	09:03:18	0.000
50	05/10/2021	09:04:18	0.000
51	05/10/2021	09:05:18	0.000
52	05/10/2021	09:06:18	0.000
53	05/10/2021	09:07:18	0.000
54	05/10/2021	09:08:18	0.000
55	05/10/2021	09:09:18	0.000
56	05/10/2021	09:10:18	0.000
57	05/10/2021	09:11:18	0.000
58	05/10/2021	09:12:18	0.000
59	05/10/2021	09:13:18	0.000
60	05/10/2021	09:14:18	0.000
61	05/10/2021	09:15:18	0.000
62	05/10/2021	09:16:18	0.000
63	05/10/2021	09:17:18	0.007
64	05/10/2021	09:18:18	0.006
65	05/10/2021	09:19:18	0.000
66	05/10/2021	09:20:18	0.000
67	05/10/2021	09:21:18	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
68	05/10/2021	09:22:18	0.000
69	05/10/2021	09:23:18	0.000
70	05/10/2021	09:24:18	0.001
71	05/10/2021	09:25:18	0.000
72	05/10/2021	09:26:18	0.000
73	05/10/2021	09:27:18	0.000
74	05/10/2021	09:28:18	0.000
75	05/10/2021	09:29:18	0.000
76	05/10/2021	09:30:18	0.000
77	05/10/2021	09:31:18	0.000
78	05/10/2021	09:32:18	0.000
79	05/10/2021	09:33:18	0.001
80	05/10/2021	09:34:18	0.000
81	05/10/2021	09:35:18	0.000
82	05/10/2021	09:36:18	0.000
83	05/10/2021	09:37:18	0.000
84	05/10/2021	09:38:18	0.001
85	05/10/2021	09:39:18	0.000
86	05/10/2021	09:40:18	0.000
87	05/10/2021	09:41:18	0.000
88	05/10/2021	09:42:18	0.000
89	05/10/2021	09:43:18	0.000
90	05/10/2021	09:44:18	0.001
91	05/10/2021	09:45:18	0.000
92	05/10/2021	09:46:18	0.000
93	05/10/2021	09:47:18	0.000
94	05/10/2021	09:48:18	0.000
95	05/10/2021	09:49:18	0.000
96	05/10/2021	09:50:18	0.000
97	05/10/2021	09:51:18	0.000
98	05/10/2021	09:52:18	0.000
99	05/10/2021	09:53:18	0.000
100	05/10/2021	09:54:18	0.000
101	05/10/2021	09:55:18	0.000
102	05/10/2021	09:56:18	0.000
103	05/10/2021	09:57:18	0.000
104	05/10/2021	09:58:18	0.002
105	05/10/2021	09:59:18	0.002
106	05/10/2021	10:00:18	0.001
107	05/10/2021	10:01:18	0.000
108	05/10/2021	10:02:18	0.000
109	05/10/2021	10:03:18	0.000
110	05/10/2021	10:04:18	0.000
111	05/10/2021	10:05:18	0.000
112	05/10/2021	10:06:18	0.000
113	05/10/2021	10:07:18	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
114	05/10/2021	10:08:18	0.001
115	05/10/2021	10:09:18	0.000
116	05/10/2021	10:10:18	0.000
117	05/10/2021	10:11:18	0.000
118	05/10/2021	10:12:18	0.000
119	05/10/2021	10:13:18	0.000
120	05/10/2021	10:14:18	0.000
121	05/10/2021	10:15:18	0.000
122	05/10/2021	10:16:18	0.000
123	05/10/2021	10:17:18	0.000
124	05/10/2021	10:18:18	0.000
125	05/10/2021	10:19:18	0.000
126	05/10/2021	10:20:18	0.000
127	05/10/2021	10:21:18	0.001
128	05/10/2021	10:22:18	0.003
129	05/10/2021	10:23:18	0.001
130	05/10/2021	10:24:18	0.001
131	05/10/2021	10:25:18	0.000
132	05/10/2021	10:26:18	0.000
133	05/10/2021	10:27:18	0.002
134	05/10/2021	10:28:18	0.001
135	05/10/2021	10:29:18	0.000
136	05/10/2021	10:30:18	0.000
137	05/10/2021	10:31:18	0.000
138	05/10/2021	10:32:18	0.000
139	05/10/2021	10:33:18	0.000
140	05/10/2021	10:34:18	0.001
141	05/10/2021	10:35:18	0.000
142	05/10/2021	10:36:18	0.000
143	05/10/2021	10:37:18	0.000
144	05/10/2021	10:38:18	0.000
145	05/10/2021	10:39:18	0.000
146	05/10/2021	10:40:18	0.000
147	05/10/2021	10:41:18	0.000
148	05/10/2021	10:42:18	0.000
149	05/10/2021	10:43:18	0.001
150	05/10/2021	10:44:18	0.000
151	05/10/2021	10:45:18	0.000
152	05/10/2021	10:46:18	0.000
153	05/10/2021	10:47:18	0.000
154	05/10/2021	10:48:18	0.000
155	05/10/2021	10:49:18	0.005
156	05/10/2021	10:50:18	0.000
157	05/10/2021	10:51:18	0.000
158	05/10/2021	10:52:18	0.000
159	05/10/2021	10:53:18	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
160	05/10/2021	10:54:18	0.001
161	05/10/2021	10:55:18	0.002
162	05/10/2021	10:56:18	0.000
163	05/10/2021	10:57:18	0.000
164	05/10/2021	10:58:18	0.002
165	05/10/2021	10:59:18	0.001
166	05/10/2021	11:00:18	0.000
167	05/10/2021	11:01:18	0.000
168	05/10/2021	11:02:18	0.000
169	05/10/2021	11:03:18	0.001
170	05/10/2021	11:04:18	0.000
171	05/10/2021	11:05:18	0.001
172	05/10/2021	11:06:18	0.000
173	05/10/2021	11:07:18	0.000
174	05/10/2021	11:08:18	0.000
175	05/10/2021	11:09:18	0.000
176	05/10/2021	11:10:18	0.000
177	05/10/2021	11:11:18	0.000
178	05/10/2021	11:12:18	0.001
179	05/10/2021	11:13:18	0.000
180	05/10/2021	11:14:18	0.000
181	05/10/2021	11:15:18	0.000
182	05/10/2021	11:16:18	0.000
183	05/10/2021	11:17:18	0.000
184	05/10/2021	11:18:18	0.000
185	05/10/2021	11:19:18	0.000
186	05/10/2021	11:20:18	0.001
187	05/10/2021	11:21:18	0.001
188	05/10/2021	11:22:18	0.000
189	05/10/2021	11:23:18	0.000
190	05/10/2021	11:24:18	0.000
191	05/10/2021	11:25:18	0.001
192	05/10/2021	11:26:18	0.000
193	05/10/2021	11:27:18	0.000
194	05/10/2021	11:28:18	0.000
195	05/10/2021	11:29:18	0.000
196	05/10/2021	11:30:18	0.000
197	05/10/2021	11:31:18	0.000
198	05/10/2021	11:32:18	0.000
199	05/10/2021	11:33:18	0.000
200	05/10/2021	11:34:18	0.087
201	05/10/2021	11:35:18	0.002
202	05/10/2021	11:36:18	0.000
203	05/10/2021	11:37:18	0.000
204	05/10/2021	11:38:18	0.000
205	05/10/2021	11:39:18	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
206	05/10/2021	11:40:18	0.001
207	05/10/2021	11:41:18	0.000
208	05/10/2021	11:42:18	0.000
209	05/10/2021	11:43:18	0.000
210	05/10/2021	11:44:18	0.000
211	05/10/2021	11:45:18	0.000
212	05/10/2021	11:46:18	0.000
213	05/10/2021	11:47:18	0.001
214	05/10/2021	11:48:18	0.000
215	05/10/2021	11:49:18	0.000
216	05/10/2021	11:50:18	0.001
217	05/10/2021	11:51:18	0.000
218	05/10/2021	11:52:18	0.000
219	05/10/2021	11:53:18	0.000
220	05/10/2021	11:54:18	0.000
221	05/10/2021	11:55:18	0.001
222	05/10/2021	11:56:18	0.001
223	05/10/2021	11:57:18	0.000
224	05/10/2021	11:58:18	0.005
225	05/10/2021	11:59:18	0.052
226	05/10/2021	12:00:18	0.010
227	05/10/2021	12:01:18	0.015
228	05/10/2021	12:02:18	0.006
229	05/10/2021	12:03:18	0.022
230	05/10/2021	12:04:18	0.023
231	05/10/2021	12:05:18	0.015
232	05/10/2021	12:06:18	0.011
233	05/10/2021	12:07:18	0.002
234	05/10/2021	12:08:18	0.026
235	05/10/2021	12:09:18	0.030
236	05/10/2021	12:10:18	0.004
237	05/10/2021	12:11:18	0.008
238	05/10/2021	12:12:18	0.020
239	05/10/2021	12:13:18	0.004
240	05/10/2021	12:14:18	0.011
241	05/10/2021	12:15:18	0.003
242	05/10/2021	12:16:18	0.007
243	05/10/2021	12:17:18	0.000
244	05/10/2021	12:18:18	0.000
245	05/10/2021	12:19:18	0.000
246	05/10/2021	12:20:18	0.000
247	05/10/2021	12:21:18	0.000
248	05/10/2021	12:22:18	0.000
249	05/10/2021	12:23:18	0.000
250	05/10/2021	12:24:18	0.000
251	05/10/2021	12:25:18	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
252	05/10/2021	12:26:18	0.000
253	05/10/2021	12:27:18	0.000
254	05/10/2021	12:28:18	0.000
255	05/10/2021	12:29:18	0.000
256	05/10/2021	12:30:18	0.001
257	05/10/2021	12:31:18	0.000
258	05/10/2021	12:32:18	0.000
259	05/10/2021	12:33:18	0.000
260	05/10/2021	12:34:18	0.000
261	05/10/2021	12:35:18	0.000
262	05/10/2021	12:36:18	0.000
263	05/10/2021	12:37:18	0.001
264	05/10/2021	12:38:18	0.017
265	05/10/2021	12:39:18	0.009
266	05/10/2021	12:40:18	0.001
267	05/10/2021	12:41:18	0.000
268	05/10/2021	12:42:18	0.000
269	05/10/2021	12:43:18	0.000
270	05/10/2021	12:44:18	0.000
271	05/10/2021	12:45:18	0.000
272	05/10/2021	12:46:18	0.000
273	05/10/2021	12:47:18	0.000
274	05/10/2021	12:48:18	0.000
275	05/10/2021	12:49:18	0.000
276	05/10/2021	12:50:18	0.000
277	05/10/2021	12:51:18	0.000
278	05/10/2021	12:52:18	0.000
279	05/10/2021	12:53:18	0.000
280	05/10/2021	12:54:18	0.000
281	05/10/2021	12:55:18	0.000
282	05/10/2021	12:56:18	0.000
283	05/10/2021	12:57:18	0.000
284	05/10/2021	12:58:18	0.000
285	05/10/2021	12:59:18	0.002
286	05/10/2021	13:00:18	0.001
287	05/10/2021	13:01:18	0.000
288	05/10/2021	13:02:18	0.000
289	05/10/2021	13:03:18	0.000
290	05/10/2021	13:04:18	0.000
291	05/10/2021	13:05:18	0.000
292	05/10/2021	13:06:18	0.000
293	05/10/2021	13:07:18	0.000
294	05/10/2021	13:14:06	0.000
295	05/10/2021	13:14:18	0.006
296	05/10/2021	13:15:18	0.001
297	05/10/2021	13:16:18	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
298	05/10/2021	13:17:18	0.001
299	05/10/2021	13:18:18	0.000
300	05/10/2021	13:19:18	0.000
301	05/10/2021	13:20:18	0.001
302	05/10/2021	13:21:18	0.001
303	05/10/2021	13:22:18	0.001
304	05/10/2021	13:23:18	0.001
305	05/10/2021	13:24:18	0.001
306	05/10/2021	13:25:18	0.001
307	05/10/2021	13:26:18	0.001
308	05/10/2021	13:27:18	0.001
309	05/10/2021	13:28:18	0.001
310	05/10/2021	13:29:18	0.001
311	05/10/2021	13:30:18	0.001
312	05/10/2021	13:31:18	0.001
313	05/10/2021	13:32:18	0.001
314	05/10/2021	13:33:18	0.001
315	05/10/2021	13:34:18	0.001
316	05/10/2021	13:35:18	0.001
317	05/10/2021	13:36:18	0.002
318	05/10/2021	13:37:18	0.001
319	05/10/2021	13:38:18	0.001
320	05/10/2021	13:39:18	0.001
321	05/10/2021	13:40:18	0.002
322	05/10/2021	13:41:18	0.002
323	05/10/2021	13:42:18	0.002
324	05/10/2021	13:43:18	0.004
325	05/10/2021	13:44:18	0.001
326	05/10/2021	13:45:18	0.002
327	05/10/2021	13:46:18	0.001
328	05/10/2021	13:47:18	0.001
329	05/10/2021	13:48:18	0.001
330	05/10/2021	13:49:18	0.002
331	05/10/2021	13:50:18	0.001
332	05/10/2021	13:51:18	0.005
333	05/10/2021	13:52:18	0.000
334	05/10/2021	13:53:18	0.000
335	05/10/2021	13:54:18	0.000
336	05/10/2021	13:55:18	0.000
337	05/10/2021	13:56:18	0.000
338	05/10/2021	13:57:18	0.000
339	05/10/2021	13:58:18	0.002
340	05/10/2021	13:59:18	0.001
341	05/10/2021	14:00:18	0.000
342	05/10/2021	14:01:18	0.000
343	05/10/2021	14:02:18	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
344	05/10/2021	14:03:18	0.000
345	05/10/2021	14:04:18	0.000
346	05/10/2021	14:05:18	0.000
347	05/10/2021	14:06:18	0.001
348	05/10/2021	14:07:18	0.000
349	05/10/2021	14:08:18	0.000
350	05/10/2021	14:09:18	0.000
351	05/10/2021	14:10:18	0.001
352	05/10/2021	14:11:18	0.000
353	05/10/2021	14:12:18	0.000
354	05/10/2021	14:13:18	0.000
355	05/10/2021	14:14:18	0.001
356	05/10/2021	14:15:18	0.001
357	05/10/2021	14:16:18	0.000
358	05/10/2021	14:17:18	0.000
359	05/10/2021	14:18:18	0.001
360	05/10/2021	14:19:18	0.001
361	05/10/2021	14:20:18	0.001
362	05/10/2021	14:21:18	0.001
363	05/10/2021	14:22:18	0.001
364	05/10/2021	14:23:18	0.001
365	05/10/2021	14:24:18	0.001
366	05/10/2021	14:25:18	0.001
367	05/10/2021	14:26:18	0.001
368	05/10/2021	14:27:18	0.001
369	05/10/2021	14:28:18	0.001
370	05/10/2021	14:29:18	0.001
371	05/10/2021	14:30:18	0.001
372	05/10/2021	14:31:18	0.001
373	05/10/2021	14:32:18	0.001
374	05/10/2021	14:33:18	0.001
375	05/10/2021	14:34:18	0.000
376	05/10/2021	14:35:18	0.001
377	05/10/2021	14:36:18	0.001
378	05/10/2021	14:37:18	0.000
379	05/10/2021	14:38:18	0.000
380	05/10/2021	14:39:18	0.000
381	05/10/2021	14:40:18	0.000
382	05/10/2021	14:41:18	0.001
383	05/10/2021	14:42:18	0.001
384	05/10/2021	14:43:18	0.000
385	05/10/2021	14:44:18	0.000
386	05/10/2021	14:45:18	0.000
387	05/10/2021	14:46:18	0.000
388	05/10/2021	14:47:18	0.000
389	05/10/2021	14:48:18	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
390	05/10/2021	14:49:18	0.000
391	05/10/2021	14:50:18	0.001
392	05/10/2021	14:51:18	0.000
393	05/10/2021	14:52:18	0.000
394	05/10/2021	14:53:18	0.000
395	05/10/2021	14:54:18	0.000
396	05/10/2021	14:55:18	0.000
397	05/10/2021	14:56:18	0.001
398	05/10/2021	14:57:18	0.001
399	05/10/2021	14:58:18	0.001
400	05/10/2021	14:59:18	0.001
401	05/10/2021	15:00:18	0.001
402	05/10/2021	15:01:18	0.001
403	05/10/2021	15:02:18	0.001
404	05/10/2021	15:03:18	0.000
405	05/10/2021	15:04:18	0.000
406	05/10/2021	15:05:18	0.000
407	05/10/2021	15:06:18	0.000
408	05/10/2021	15:07:18	0.000
409	05/10/2021	15:08:18	0.000
410	05/10/2021	15:09:18	0.000
411	05/10/2021	15:10:18	0.000
412	05/10/2021	15:11:18	0.000
413	05/10/2021	15:12:18	0.000
414	05/10/2021	15:13:18	0.000
415	05/10/2021	15:14:18	0.001
416	05/10/2021	15:15:18	0.000
417	05/10/2021	15:16:18	0.001
418	05/10/2021	15:17:18	0.000
419	05/10/2021	15:18:18	0.001
420	05/10/2021	15:19:18	0.000
421	05/10/2021	15:20:18	0.000
422	05/10/2021	15:21:18	0.001
423	05/10/2021	15:22:18	0.001
424	05/10/2021	15:23:18	0.001
425	05/10/2021	15:24:18	0.000
426	05/10/2021	15:25:18	0.001
427	05/10/2021	15:26:18	0.001
428	05/10/2021	15:27:18	0.001
429	05/10/2021	15:28:18	0.001
430	05/10/2021	15:29:18	0.001
431	05/10/2021	15:30:18	0.001
432	05/10/2021	15:31:18	0.004
433	05/10/2021	15:32:18	0.000
434	05/10/2021	15:33:18	0.001
435	05/10/2021	15:34:18	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m^3
436	05/10/2021	15:35:18	0.001
437	05/10/2021	15:36:18	0.003
438	05/10/2021	15:37:18	0.005
439	05/10/2021	15:38:18	0.001
440	05/10/2021	15:39:18	0.000
441	05/10/2021	15:40:18	0.003
442	05/10/2021	15:41:18	0.002
443	05/10/2021	15:42:18	0.010
444	05/10/2021	15:43:18	0.051
445	05/10/2021	15:44:18	0.032
446	05/10/2021	15:45:18	0.155
447	05/10/2021	15:46:18	0.007
448	05/10/2021	15:47:18	0.010
449	05/10/2021	15:48:18	0.006
450	05/10/2021	15:49:18	0.012
451	05/10/2021	15:50:18	0.000
452	05/10/2021	15:51:18	0.000
453	05/10/2021	15:52:18	0.001

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21/05/10 07:38

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## Summary

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Unit Name MiniRAE 3000 +(PGM-7320)

Unit SN 592-928160

Unit Firmware Vε V2.20A

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Running Mode Hygiene Mode

Datalog Mode Auto

Diagnostic Mode No

Stop Reason Power Down

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Site ID 12345678

User ID 12345678

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Begin 5/10/2021 7:38

End 5/10/2021 12:34

Sample Period(s) 60

Number of Recor 295

---

Sensor PID(ppm)

Sensor SN S023030092W6

Measure Type Avg; Max; Real

Span 100

Span 2 1000

Low Alarm 50

High Alarm 100

Over Alarm 15000

STEL Alarm 25

TWA Alarm 10

Measurement Gε Isobutylene

Calibration Time 5/10/2021 6:35

Peak 0.3

Min 0

Average 0

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## Datalog

Index	Date/Time	PID(ppm)	PID(ppm)	PID(ppm)
		(Avg)	(Max)	(Real)
1	5/10/2021 7:39	0	0	0
2	5/10/2021 7:40	0	0	0
3	5/10/2021 7:41	0	0	0
4	5/10/2021 7:42	0	0	0
5	5/10/2021 7:43	0	0	0

6	5/10/2021 7:44	0	0	0
7	5/10/2021 7:45	0	0	0
8	5/10/2021 7:46	0	0	0
9	5/10/2021 7:47	0	0	0
10	5/10/2021 7:48	0	0	0
11	5/10/2021 7:49	0	0	0
12	5/10/2021 7:50	0	0	0
13	5/10/2021 7:51	0	0	0
14	5/10/2021 7:52	0	0	0
15	5/10/2021 7:53	0	0	0
16	5/10/2021 7:54	0	0	0
17	5/10/2021 7:55	0	0	0
18	5/10/2021 7:56	0	0	0
19	5/10/2021 7:57	0	0	0
20	5/10/2021 7:58	0	0	0
21	5/10/2021 7:59	0	0	0
22	5/10/2021 8:00	0	0	0
23	5/10/2021 8:01	0	0	0
24	5/10/2021 8:02	0	0	0
25	5/10/2021 8:03	0	0	0
26	5/10/2021 8:04	0	0	0
27	5/10/2021 8:05	0	0	0
28	5/10/2021 8:06	0	0	0
29	5/10/2021 8:07	0	0	0
30	5/10/2021 8:08	0	0	0
31	5/10/2021 8:09	0	0	0
32	5/10/2021 8:10	0	0	0
33	5/10/2021 8:11	0	0	0
34	5/10/2021 8:12	0	0	0
35	5/10/2021 8:13	0	0	0
36	5/10/2021 8:14	0	0	0
37	5/10/2021 8:15	0	0	0
38	5/10/2021 8:16	0	0	0
39	5/10/2021 8:17	0	0	0
40	5/10/2021 8:18	0	0	0
41	5/10/2021 8:19	0	0	0
42	5/10/2021 8:20	0	0	0
43	5/10/2021 8:21	0	0	0
44	5/10/2021 8:22	0	0	0
45	5/10/2021 8:23	0	0	0
46	5/10/2021 8:24	0	0	0
47	5/10/2021 8:25	0	0	0
48	5/10/2021 8:26	0	0	0
49	5/10/2021 8:27	0	0	0
50	5/10/2021 8:28	0	0	0
51	5/10/2021 8:29	0	0	0
52	5/10/2021 8:30	0	0	0

53	5/10/2021 8:31	0	0	0
54	5/10/2021 8:32	0	0	0
55	5/10/2021 8:33	0	0	0
56	5/10/2021 8:34	0	0	0
57	5/10/2021 8:35	0	0	0
58	5/10/2021 8:36	0	0	0
59	5/10/2021 8:37	0	0	0
60	5/10/2021 8:38	0	0	0
61	5/10/2021 8:39	0	0	0
62	5/10/2021 8:40	0	0	0
63	5/10/2021 8:41	0	0	0
64	5/10/2021 8:42	0	0	0
65	5/10/2021 8:43	0	0	0
66	5/10/2021 8:44	0	0	0
67	5/10/2021 8:45	0	0	0
68	5/10/2021 8:46	0	0	0
69	5/10/2021 8:47	0	0	0
70	5/10/2021 8:48	0	0	0
71	5/10/2021 8:49	0	0	0
72	5/10/2021 8:50	0	0	0
73	5/10/2021 8:51	0	0	0
74	5/10/2021 8:52	0	0	0
75	5/10/2021 8:53	0	0	0
76	5/10/2021 8:54	0	0	0
77	5/10/2021 8:55	0	0	0
78	5/10/2021 8:56	0	0	0
79	5/10/2021 8:57	0	0	0
80	5/10/2021 8:58	0	0	0
81	5/10/2021 8:59	0	0	0
82	5/10/2021 9:00	0	0	0
83	5/10/2021 9:01	0	0	0
84	5/10/2021 9:02	0	0	0
85	5/10/2021 9:03	0	0	0
86	5/10/2021 9:04	0	0	0
87	5/10/2021 9:05	0	0	0
88	5/10/2021 9:06	0	0	0
89	5/10/2021 9:07	0	0	0
90	5/10/2021 9:08	0	0	0
91	5/10/2021 9:09	0	0	0
92	5/10/2021 9:10	0	0	0
93	5/10/2021 9:11	0	0	0
94	5/10/2021 9:12	0	0	0
95	5/10/2021 9:13	0	0	0
96	5/10/2021 9:14	0	0	0
97	5/10/2021 9:15	0	0	0
98	5/10/2021 9:16	0	0	0
99	5/10/2021 9:17	0	0	0

100	5/10/2021 9:18	0	0	0
101	5/10/2021 9:19	0	0	0
102	5/10/2021 9:20	0	0	0
103	5/10/2021 9:21	0	0	0
104	5/10/2021 9:22	0	0	0
105	5/10/2021 9:23	0	0	0
106	5/10/2021 9:24	0	0	0
107	5/10/2021 9:25	0	0	0
108	5/10/2021 9:26	0	0	0
109	5/10/2021 9:27	0	0	0
110	5/10/2021 9:28	0	0	0
111	5/10/2021 9:29	0	0	0
112	5/10/2021 9:30	0	0	0
113	5/10/2021 9:31	0	0	0
114	5/10/2021 9:32	0	0	0
115	5/10/2021 9:33	0	0	0
116	5/10/2021 9:34	0	0	0
117	5/10/2021 9:35	0	0	0
118	5/10/2021 9:36	0	0	0
119	5/10/2021 9:37	0	0	0
120	5/10/2021 9:38	0	0	0
121	5/10/2021 9:39	0	0	0
122	5/10/2021 9:40	0	0	0
123	5/10/2021 9:41	0	0	0
124	5/10/2021 9:42	0	0	0
125	5/10/2021 9:43	0	0	0
126	5/10/2021 9:44	0	0	0
127	5/10/2021 9:45	0	0	0
128	5/10/2021 9:46	0	0	0
129	5/10/2021 9:47	0	0	0
130	5/10/2021 9:48	0	0	0
131	5/10/2021 9:49	0	0	0
132	5/10/2021 9:50	0	0	0
133	5/10/2021 9:51	0	0	0
134	5/10/2021 9:52	0	0	0
135	5/10/2021 9:53	0	0	0
136	5/10/2021 9:54	0	0	0
137	5/10/2021 9:55	0	0	0
138	5/10/2021 9:56	0	0	0
139	5/10/2021 9:57	0	0	0
140	5/10/2021 9:58	0	0	0
141	5/10/2021 9:59	0	0	0
142	5/10/2021 10:00	0	0	0
143	5/10/2021 10:01	0	0	0
144	5/10/2021 10:02	0	0	0
145	5/10/2021 10:03	0	0	0
146	5/10/2021 10:04	0	0	0

147	5/10/2021 10:05	0	0	0
148	5/10/2021 10:06	0	0	0
149	5/10/2021 10:07	0	0	0
150	5/10/2021 10:08	0	0	0
151	5/10/2021 10:09	0	0	0
152	5/10/2021 10:10	0	0	0
153	5/10/2021 10:11	0	0	0
154	5/10/2021 10:12	0	0	0
155	5/10/2021 10:13	0	0	0
156	5/10/2021 10:14	0	0	0
157	5/10/2021 10:15	0	0	0
158	5/10/2021 10:16	0	0	0
159	5/10/2021 10:17	0	0	0
160	5/10/2021 10:18	0	0	0
161	5/10/2021 10:19	0	0	0
162	5/10/2021 10:20	0	0	0
163	5/10/2021 10:21	0	0	0
164	5/10/2021 10:22	0	0	0
165	5/10/2021 10:23	0	0	0
166	5/10/2021 10:24	0	0	0
167	5/10/2021 10:25	0	0	0
168	5/10/2021 10:26	0	0	0
169	5/10/2021 10:27	0	0	0
170	5/10/2021 10:28	0	0	0
171	5/10/2021 10:29	0	0	0
172	5/10/2021 10:30	0	0	0
173	5/10/2021 10:31	0	0	0
174	5/10/2021 10:32	0	0	0
175	5/10/2021 10:33	0	0	0
176	5/10/2021 10:34	0	0	0
177	5/10/2021 10:35	0	0	0
178	5/10/2021 10:36	0	0	0
179	5/10/2021 10:37	0	0	0
180	5/10/2021 10:38	0	0	0
181	5/10/2021 10:39	0	0	0
182	5/10/2021 10:40	0	0	0
183	5/10/2021 10:41	0	0	0
184	5/10/2021 10:42	0	0	0
185	5/10/2021 10:43	0	0	0
186	5/10/2021 10:44	0	0	0
187	5/10/2021 10:45	0	0	0
188	5/10/2021 10:46	0	0	0
189	5/10/2021 10:47	0	0	0
190	5/10/2021 10:48	0	0	0
191	5/10/2021 10:49	0	0	0
192	5/10/2021 10:50	0	0	0
193	5/10/2021 10:51	0	0	0

194	5/10/2021 10:52	0	0	0
195	5/10/2021 10:53	0	0	0
196	5/10/2021 10:54	0	0	0
197	5/10/2021 10:55	0	0	0
198	5/10/2021 10:56	0	0	0
199	5/10/2021 10:57	0	0	0
200	5/10/2021 10:58	0	0	0
201	5/10/2021 10:59	0	0	0
202	5/10/2021 11:00	0.1	0.4	0
203	5/10/2021 11:01	0	0	0
204	5/10/2021 11:02	0	0	0
205	5/10/2021 11:03	0	0	0
206	5/10/2021 11:04	0	0	0
207	5/10/2021 11:05	0	0	0
208	5/10/2021 11:06	0	0	0
209	5/10/2021 11:07	0	0	0
210	5/10/2021 11:08	0	0	0
211	5/10/2021 11:09	0	0	0
212	5/10/2021 11:10	0	0	0
213	5/10/2021 11:11	0	0	0
214	5/10/2021 11:12	0	0	0
215	5/10/2021 11:13	0	0	0
216	5/10/2021 11:14	0	0	0
217	5/10/2021 11:15	0	0	0
218	5/10/2021 11:16	0	0	0
219	5/10/2021 11:17	0	0	0
220	5/10/2021 11:18	0	0	0
221	5/10/2021 11:19	0	0	0
222	5/10/2021 11:20	0	0	0
223	5/10/2021 11:21	0	0	0
224	5/10/2021 11:22	0	0	0
225	5/10/2021 11:23	0	0	0
226	5/10/2021 11:24	0	0	0
227	5/10/2021 11:25	0.2	0.9	0
228	5/10/2021 11:26	0	0.2	0
229	5/10/2021 11:27	0	0	0
230	5/10/2021 11:28	0	0	0
231	5/10/2021 11:29	0.1	0.3	0.3
232	5/10/2021 11:30	0.1	0.4	0.3
233	5/10/2021 11:31	0.1	0.3	0
234	5/10/2021 11:32	0	0.2	0
235	5/10/2021 11:33	0	0	0
236	5/10/2021 11:34	0	0.1	0
237	5/10/2021 11:35	0	0.1	0
238	5/10/2021 11:36	0	0	0
239	5/10/2021 11:37	0	0.2	0
240	5/10/2021 11:38	0.3	2.5	0

241	5/10/2021 11:39	0	0	0
242	5/10/2021 11:40	0.2	0.7	0.2
243	5/10/2021 11:41	0.1	0.4	0
244	5/10/2021 11:42	0	0.1	0
245	5/10/2021 11:43	0	0	0
246	5/10/2021 11:44	0	0	0
247	5/10/2021 11:45	0	0	0
248	5/10/2021 11:46	0	0	0
249	5/10/2021 11:47	0	0	0
250	5/10/2021 11:48	0	0	0
251	5/10/2021 11:49	0	0	0
252	5/10/2021 11:50	0	0	0
253	5/10/2021 11:51	0	0	0
254	5/10/2021 11:52	0	0	0
255	5/10/2021 11:53	0	0	0
256	5/10/2021 11:54	0	0	0
257	5/10/2021 11:55	0	0	0
258	5/10/2021 11:56	0	0	0
259	5/10/2021 11:57	0	0	0
260	5/10/2021 11:58	0	0	0
261	5/10/2021 11:59	0	0	0
262	5/10/2021 12:00	0	0	0
263	5/10/2021 12:01	0	0	0
264	5/10/2021 12:02	0	0	0
265	5/10/2021 12:03	0	0	0
266	5/10/2021 12:04	0	0	0
267	5/10/2021 12:05	0	0	0
268	5/10/2021 12:06	0	0	0
269	5/10/2021 12:07	0	0	0
270	5/10/2021 12:08	0	0	0
271	5/10/2021 12:09	0	0	0
272	5/10/2021 12:10	0	0	0
273	5/10/2021 12:11	0	0	0
274	5/10/2021 12:12	0	0	0
275	5/10/2021 12:13	0	0	0
276	5/10/2021 12:14	0	0	0
277	5/10/2021 12:15	0	0	0
278	5/10/2021 12:16	0	0	0
279	5/10/2021 12:17	0	0	0
280	5/10/2021 12:18	0	0	0
281	5/10/2021 12:19	0	0	0
282	5/10/2021 12:20	0	0	0
283	5/10/2021 12:21	0	0	0
284	5/10/2021 12:22	0	0	0
285	5/10/2021 12:23	0	0	0
286	5/10/2021 12:24	0	0	0
287	5/10/2021 12:25	0	0	0

288	5/10/2021 12:26	0	0	0
289	5/10/2021 12:27	0	0	0
290	5/10/2021 12:28	0	0	0
291	5/10/2021 12:29	0	0	0
292	5/10/2021 12:30	0	0	0
293	5/10/2021 12:31	0	0	0
294	5/10/2021 12:32	0	0	0
295	5/10/2021 12:33	0	0	0
Peak		0.3	2.5	0.3
Min		0	0	0
Average		0	0	0

\*\*\*\*\*

#### TWA/STEL

Index	Date/Time	PID(ppm)	PID(ppm)
		(TWA)	(STEL)
1	5/10/2021 7:39	0 ---	
2	5/10/2021 7:40	0 ---	
3	5/10/2021 7:41	0 ---	
4	5/10/2021 7:42	0 ---	
5	5/10/2021 7:43	0 ---	
6	5/10/2021 7:44	0 ---	
7	5/10/2021 7:45	0 ---	
8	5/10/2021 7:46	0 ---	
9	5/10/2021 7:47	0 ---	
10	5/10/2021 7:48	0 ---	
11	5/10/2021 7:49	0 ---	
12	5/10/2021 7:50	0 ---	
13	5/10/2021 7:51	0 ---	
14	5/10/2021 7:52	0 ---	
15	5/10/2021 7:53	0	0
16	5/10/2021 7:54	0	0
17	5/10/2021 7:55	0	0
18	5/10/2021 7:56	0	0
19	5/10/2021 7:57	0	0
20	5/10/2021 7:58	0	0
21	5/10/2021 7:59	0	0
22	5/10/2021 8:00	0	0
23	5/10/2021 8:01	0	0
24	5/10/2021 8:02	0	0
25	5/10/2021 8:03	0	0
26	5/10/2021 8:04	0	0
27	5/10/2021 8:05	0	0
28	5/10/2021 8:06	0	0
29	5/10/2021 8:07	0	0
30	5/10/2021 8:08	0	0
31	5/10/2021 8:09	0	0

32	5/10/2021 8:10	0	0
33	5/10/2021 8:11	0	0
34	5/10/2021 8:12	0	0
35	5/10/2021 8:13	0	0
36	5/10/2021 8:14	0	0
37	5/10/2021 8:15	0	0
38	5/10/2021 8:16	0	0
39	5/10/2021 8:17	0	0
40	5/10/2021 8:18	0	0
41	5/10/2021 8:19	0	0
42	5/10/2021 8:20	0	0
43	5/10/2021 8:21	0	0
44	5/10/2021 8:22	0	0
45	5/10/2021 8:23	0	0
46	5/10/2021 8:24	0	0
47	5/10/2021 8:25	0	0
48	5/10/2021 8:26	0	0
49	5/10/2021 8:27	0	0
50	5/10/2021 8:28	0	0
51	5/10/2021 8:29	0	0
52	5/10/2021 8:30	0	0
53	5/10/2021 8:31	0	0
54	5/10/2021 8:32	0	0
55	5/10/2021 8:33	0	0
56	5/10/2021 8:34	0	0
57	5/10/2021 8:35	0	0
58	5/10/2021 8:36	0	0
59	5/10/2021 8:37	0	0
60	5/10/2021 8:38	0	0
61	5/10/2021 8:39	0	0
62	5/10/2021 8:40	0	0
63	5/10/2021 8:41	0	0
64	5/10/2021 8:42	0	0
65	5/10/2021 8:43	0	0
66	5/10/2021 8:44	0	0
67	5/10/2021 8:45	0	0
68	5/10/2021 8:46	0	0
69	5/10/2021 8:47	0	0
70	5/10/2021 8:48	0	0
71	5/10/2021 8:49	0	0
72	5/10/2021 8:50	0	0
73	5/10/2021 8:51	0	0
74	5/10/2021 8:52	0	0
75	5/10/2021 8:53	0	0
76	5/10/2021 8:54	0	0
77	5/10/2021 8:55	0	0
78	5/10/2021 8:56	0	0

79	5/10/2021 8:57	0	0
80	5/10/2021 8:58	0	0
81	5/10/2021 8:59	0	0
82	5/10/2021 9:00	0	0
83	5/10/2021 9:01	0	0
84	5/10/2021 9:02	0	0
85	5/10/2021 9:03	0	0
86	5/10/2021 9:04	0	0
87	5/10/2021 9:05	0	0
88	5/10/2021 9:06	0	0
89	5/10/2021 9:07	0	0
90	5/10/2021 9:08	0	0
91	5/10/2021 9:09	0	0
92	5/10/2021 9:10	0	0
93	5/10/2021 9:11	0	0
94	5/10/2021 9:12	0	0
95	5/10/2021 9:13	0	0
96	5/10/2021 9:14	0	0
97	5/10/2021 9:15	0	0
98	5/10/2021 9:16	0	0
99	5/10/2021 9:17	0	0
100	5/10/2021 9:18	0	0
101	5/10/2021 9:19	0	0
102	5/10/2021 9:20	0	0
103	5/10/2021 9:21	0	0
104	5/10/2021 9:22	0	0
105	5/10/2021 9:23	0	0
106	5/10/2021 9:24	0	0
107	5/10/2021 9:25	0	0
108	5/10/2021 9:26	0	0
109	5/10/2021 9:27	0	0
110	5/10/2021 9:28	0	0
111	5/10/2021 9:29	0	0
112	5/10/2021 9:30	0	0
113	5/10/2021 9:31	0	0
114	5/10/2021 9:32	0	0
115	5/10/2021 9:33	0	0
116	5/10/2021 9:34	0	0
117	5/10/2021 9:35	0	0
118	5/10/2021 9:36	0	0
119	5/10/2021 9:37	0	0
120	5/10/2021 9:38	0	0
121	5/10/2021 9:39	0	0
122	5/10/2021 9:40	0	0
123	5/10/2021 9:41	0	0
124	5/10/2021 9:42	0	0
125	5/10/2021 9:43	0	0

126	5/10/2021 9:44	0	0
127	5/10/2021 9:45	0	0
128	5/10/2021 9:46	0	0
129	5/10/2021 9:47	0	0
130	5/10/2021 9:48	0	0
131	5/10/2021 9:49	0	0
132	5/10/2021 9:50	0	0
133	5/10/2021 9:51	0	0
134	5/10/2021 9:52	0	0
135	5/10/2021 9:53	0	0
136	5/10/2021 9:54	0	0
137	5/10/2021 9:55	0	0
138	5/10/2021 9:56	0	0
139	5/10/2021 9:57	0	0
140	5/10/2021 9:58	0	0
141	5/10/2021 9:59	0	0
142	5/10/2021 10:00	0	0
143	5/10/2021 10:01	0	0
144	5/10/2021 10:02	0	0
145	5/10/2021 10:03	0	0
146	5/10/2021 10:04	0	0
147	5/10/2021 10:05	0	0
148	5/10/2021 10:06	0	0
149	5/10/2021 10:07	0	0
150	5/10/2021 10:08	0	0
151	5/10/2021 10:09	0	0
152	5/10/2021 10:10	0	0
153	5/10/2021 10:11	0	0
154	5/10/2021 10:12	0	0
155	5/10/2021 10:13	0	0
156	5/10/2021 10:14	0	0
157	5/10/2021 10:15	0	0
158	5/10/2021 10:16	0	0
159	5/10/2021 10:17	0	0
160	5/10/2021 10:18	0	0
161	5/10/2021 10:19	0	0
162	5/10/2021 10:20	0	0
163	5/10/2021 10:21	0	0
164	5/10/2021 10:22	0	0
165	5/10/2021 10:23	0	0
166	5/10/2021 10:24	0	0
167	5/10/2021 10:25	0	0
168	5/10/2021 10:26	0	0
169	5/10/2021 10:27	0	0
170	5/10/2021 10:28	0	0
171	5/10/2021 10:29	0	0
172	5/10/2021 10:30	0	0

173	5/10/2021 10:31	0	0
174	5/10/2021 10:32	0	0
175	5/10/2021 10:33	0	0
176	5/10/2021 10:34	0	0
177	5/10/2021 10:35	0	0
178	5/10/2021 10:36	0	0
179	5/10/2021 10:37	0	0
180	5/10/2021 10:38	0	0
181	5/10/2021 10:39	0	0
182	5/10/2021 10:40	0	0
183	5/10/2021 10:41	0	0
184	5/10/2021 10:42	0	0
185	5/10/2021 10:43	0	0
186	5/10/2021 10:44	0	0
187	5/10/2021 10:45	0	0
188	5/10/2021 10:46	0	0
189	5/10/2021 10:47	0	0
190	5/10/2021 10:48	0	0
191	5/10/2021 10:49	0	0
192	5/10/2021 10:50	0	0
193	5/10/2021 10:51	0	0
194	5/10/2021 10:52	0	0
195	5/10/2021 10:53	0	0
196	5/10/2021 10:54	0	0
197	5/10/2021 10:55	0	0
198	5/10/2021 10:56	0	0
199	5/10/2021 10:57	0	0
200	5/10/2021 10:58	0	0
201	5/10/2021 10:59	0	0
202	5/10/2021 11:00	0	0
203	5/10/2021 11:01	0	0
204	5/10/2021 11:02	0	0
205	5/10/2021 11:03	0	0
206	5/10/2021 11:04	0	0
207	5/10/2021 11:05	0	0
208	5/10/2021 11:06	0	0
209	5/10/2021 11:07	0	0
210	5/10/2021 11:08	0	0
211	5/10/2021 11:09	0	0
212	5/10/2021 11:10	0	0
213	5/10/2021 11:11	0	0
214	5/10/2021 11:12	0	0
215	5/10/2021 11:13	0	0
216	5/10/2021 11:14	0	0
217	5/10/2021 11:15	0	0
218	5/10/2021 11:16	0	0
219	5/10/2021 11:17	0	0

220	5/10/2021 11:18	0	0
221	5/10/2021 11:19	0	0
222	5/10/2021 11:20	0	0
223	5/10/2021 11:21	0	0
224	5/10/2021 11:22	0	0
225	5/10/2021 11:23	0	0
226	5/10/2021 11:24	0	0
227	5/10/2021 11:25	0	0
228	5/10/2021 11:26	0	0
229	5/10/2021 11:27	0	0
230	5/10/2021 11:28	0	0
231	5/10/2021 11:29	0	0
232	5/10/2021 11:30	0	0
233	5/10/2021 11:31	0	0
234	5/10/2021 11:32	0	0
235	5/10/2021 11:33	0	0
236	5/10/2021 11:34	0	0
237	5/10/2021 11:35	0	0
238	5/10/2021 11:36	0	0
239	5/10/2021 11:37	0	0
240	5/10/2021 11:38	0	0
241	5/10/2021 11:39	0	0
242	5/10/2021 11:40	0	0.1
243	5/10/2021 11:41	0	0.1
244	5/10/2021 11:42	0	0.1
245	5/10/2021 11:43	0	0.1
246	5/10/2021 11:44	0	0
247	5/10/2021 11:45	0	0
248	5/10/2021 11:46	0	0
249	5/10/2021 11:47	0	0
250	5/10/2021 11:48	0	0
251	5/10/2021 11:49	0	0
252	5/10/2021 11:50	0	0
253	5/10/2021 11:51	0	0
254	5/10/2021 11:52	0	0
255	5/10/2021 11:53	0	0
256	5/10/2021 11:54	0	0
257	5/10/2021 11:55	0	0
258	5/10/2021 11:56	0	0
259	5/10/2021 11:57	0	0
260	5/10/2021 11:58	0	0
261	5/10/2021 11:59	0	0
262	5/10/2021 12:00	0	0
263	5/10/2021 12:01	0	0
264	5/10/2021 12:02	0	0
265	5/10/2021 12:03	0	0
266	5/10/2021 12:04	0	0

267	5/10/2021 12:05	0	0
268	5/10/2021 12:06	0	0
269	5/10/2021 12:07	0	0
270	5/10/2021 12:08	0	0
271	5/10/2021 12:09	0	0
272	5/10/2021 12:10	0	0
273	5/10/2021 12:11	0	0
274	5/10/2021 12:12	0	0
275	5/10/2021 12:13	0	0
276	5/10/2021 12:14	0	0
277	5/10/2021 12:15	0	0
278	5/10/2021 12:16	0	0
279	5/10/2021 12:17	0	0
280	5/10/2021 12:18	0	0
281	5/10/2021 12:19	0	0
282	5/10/2021 12:20	0	0
283	5/10/2021 12:21	0	0
284	5/10/2021 12:22	0	0
285	5/10/2021 12:23	0	0
286	5/10/2021 12:24	0	0
287	5/10/2021 12:25	0	0
288	5/10/2021 12:26	0	0
289	5/10/2021 12:27	0	0
290	5/10/2021 12:28	0	0
291	5/10/2021 12:29	0	0
292	5/10/2021 12:30	0	0
293	5/10/2021 12:31	0	0
294	5/10/2021 12:32	0	0
295	5/10/2021 12:33	0	0

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21/05/10 12:39

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## Summary

Unit Name MiniRAE 3000 +(PGM-7320)

Unit SN 592-928160

Unit Firmware Ver V2.20A

Running Mode Hygiene Mode

Datalog Mode Auto

Diagnostic Mode No

Stop Reason Battery Low

Site ID 12345678

User ID 12345678

Begin 5/10/2021 12:39

End 5/10/2021 15:15

Sample Period(s) 60

Number of Records 155

Sensor PID(ppm)

Sensor SN S023030092W6

Measure Type Avg; Max; Real

Span 100

Span 2 1000

Low Alarm 50

High Alarm 100

Over Alarm 15000

STEL Alarm 25

TWA Alarm 10

Measurement Gas Isobutylene

Calibration Time 5/10/2021 6:35

Peak 1.5

Min 0

Average 0

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## Datalog

Index	Date/Time	PID(ppm)	PID(ppm)	PID(ppm)
		(Avg)	(Max)	(Real)
1	5/10/2021 12:40	0	0	0
2	5/10/2021 12:41	0	0	0
3	5/10/2021 12:42	0	0	0
4	5/10/2021 12:43	0	0	0
5	5/10/2021 12:44	0	0	0

6	5/10/2021 12:45	0	0	0
7	5/10/2021 12:46	0	0	0
8	5/10/2021 12:47	0	0	0
9	5/10/2021 12:48	0	0	0
10	5/10/2021 12:49	0	0	0
11	5/10/2021 12:50	0	0	0
12	5/10/2021 12:51	0	0	0
13	5/10/2021 12:52	0	0	0
14	5/10/2021 12:53	0	0	0
15	5/10/2021 12:54	0	0	0
16	5/10/2021 12:55	0	0	0
17	5/10/2021 12:56	0	0	0
18	5/10/2021 12:57	0	0	0
19	5/10/2021 12:58	0	0	0
20	5/10/2021 12:59	0	0	0
21	5/10/2021 13:00	0	0	0
22	5/10/2021 13:01	0	0	0
23	5/10/2021 13:02	0	0	0
24	5/10/2021 13:03	0	0	0
25	5/10/2021 13:04	0	0	0
26	5/10/2021 13:05	0	0	0
27	5/10/2021 13:06	0	0	0
28	5/10/2021 13:07	0	0	0
29	5/10/2021 13:08	0	0	0
30	5/10/2021 13:09	0	0	0
31	5/10/2021 13:10	0	0	0
32	5/10/2021 13:11	0	0	0
33	5/10/2021 13:12	0	0	0
34	5/10/2021 13:13	0	0	0
35	5/10/2021 13:14	0	0	0
36	5/10/2021 13:15	0	0	0
37	5/10/2021 13:16	0	0	0
38	5/10/2021 13:17	0	0	0
39	5/10/2021 13:18	0	0	0
40	5/10/2021 13:19	0	0	0
41	5/10/2021 13:20	0	0	0
42	5/10/2021 13:21	0	0	0
43	5/10/2021 13:22	0	0	0
44	5/10/2021 13:23	0	0	0
45	5/10/2021 13:24	0	0	0
46	5/10/2021 13:25	0	0	0
47	5/10/2021 13:26	0	0	0
48	5/10/2021 13:27	0	0	0
49	5/10/2021 13:28	0	0	0
50	5/10/2021 13:29	0	0	0
51	5/10/2021 13:30	0	0	0
52	5/10/2021 13:31	0	0	0

53	5/10/2021 13:32	0	0	0
54	5/10/2021 13:33	0	0	0
55	5/10/2021 13:34	0	0	0
56	5/10/2021 13:35	0	0	0
57	5/10/2021 13:36	0	0	0
58	5/10/2021 13:37	0	0	0
59	5/10/2021 13:38	0	0	0
60	5/10/2021 13:39	0	0	0
61	5/10/2021 13:40	0	0	0
62	5/10/2021 13:41	0	0	0
63	5/10/2021 13:42	0	0	0
64	5/10/2021 13:43	0	0	0
65	5/10/2021 13:44	0	0	0
66	5/10/2021 13:45	0	0	0
67	5/10/2021 13:46	0	0	0
68	5/10/2021 13:47	0	0	0
69	5/10/2021 13:48	0	0	0
70	5/10/2021 13:49	0	0	0
71	5/10/2021 13:50	0	0	0
72	5/10/2021 13:51	0	0	0
73	5/10/2021 13:52	0	0	0
74	5/10/2021 13:53	0	0	0
75	5/10/2021 13:54	0	0	0
76	5/10/2021 13:55	0	0	0
77	5/10/2021 13:56	0	0	0
78	5/10/2021 13:57	0	0	0
79	5/10/2021 13:58	0	0	0
80	5/10/2021 13:59	0	0	0
81	5/10/2021 14:00	0	0	0
82	5/10/2021 14:01	0	0	0
83	5/10/2021 14:02	0	0	0
84	5/10/2021 14:03	0	0	0
85	5/10/2021 14:04	0	0	0
86	5/10/2021 14:05	0	0	0
87	5/10/2021 14:06	0	0	0
88	5/10/2021 14:07	0	0	0
89	5/10/2021 14:08	0	0	0
90	5/10/2021 14:09	0	0	0
91	5/10/2021 14:10	0	0	0
92	5/10/2021 14:11	0	0	0
93	5/10/2021 14:12	0	0	0
94	5/10/2021 14:13	0	0	0
95	5/10/2021 14:14	0	0	0
96	5/10/2021 14:15	0	0	0
97	5/10/2021 14:16	0	0	0
98	5/10/2021 14:17	0	0	0
99	5/10/2021 14:18	0	0	0

100	5/10/2021 14:19	0	0	0
101	5/10/2021 14:20	0	0	0
102	5/10/2021 14:21	0	0	0
103	5/10/2021 14:22	0	0	0
104	5/10/2021 14:23	0	0	0
105	5/10/2021 14:24	0	0	0
106	5/10/2021 14:25	0	0	0
107	5/10/2021 14:26	0	0	0
108	5/10/2021 14:27	0	0	0
109	5/10/2021 14:28	0	0	0
110	5/10/2021 14:29	0	0	0
111	5/10/2021 14:30	0	0	0
112	5/10/2021 14:31	0	0	0
113	5/10/2021 14:32	0	0	0
114	5/10/2021 14:33	0	0	0
115	5/10/2021 14:34	0	0	0
116	5/10/2021 14:35	0	0	0
117	5/10/2021 14:36	0	0	0
118	5/10/2021 14:37	0	0	0
119	5/10/2021 14:38	0	0	0
120	5/10/2021 14:39	0	0	0
121	5/10/2021 14:40	0	0	0
122	5/10/2021 14:41	0	0	0
123	5/10/2021 14:42	0	0	0
124	5/10/2021 14:43	0	0	0
125	5/10/2021 14:44	0	0	0
126	5/10/2021 14:45	0	0	0
127	5/10/2021 14:46	0	0	0
128	5/10/2021 14:47	0	0	0
129	5/10/2021 14:48	0	0	0
130	5/10/2021 14:49	0	0	0
131	5/10/2021 14:50	0	0	0
132	5/10/2021 14:51	0	0	0
133	5/10/2021 14:52	0	0	0
134	5/10/2021 14:53	0	0	0
135	5/10/2021 14:54	0	0	0
136	5/10/2021 14:55	0	0	0
137	5/10/2021 14:56	0	0	0
138	5/10/2021 14:57	0	0	0
139	5/10/2021 14:58	0	0	0
140	5/10/2021 14:59	0	0	0
141	5/10/2021 15:00	0	0	0
142	5/10/2021 15:01	0	0	0
143	5/10/2021 15:02	0	0	0
144	5/10/2021 15:03	0	0	0
145	5/10/2021 15:04	0	0	0
146	5/10/2021 15:05	0	0	0

147	5/10/2021 15:06	0	0	0
148	5/10/2021 15:07	0	0.1	0
149	5/10/2021 15:08	0.1	0.5	0
150	5/10/2021 15:09	0	0.1	0
151	5/10/2021 15:10	0.2	2	1
152	5/10/2021 15:11	0.3	2.1	1.5
153	5/10/2021 15:12	0.2	1.4	0
154	5/10/2021 15:13	0	0	0
155	5/10/2021 15:14	0	0.3	0
Peak		0.3	2.1	1.5
Min		0	0	0
Average		0	0	0

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#### TWA/STEL

Index	Date/Time	PID(ppm)	PID(ppm)
		(TWA)	(STEL)
1	5/10/2021 12:40	0 ---	
2	5/10/2021 12:41	0 ---	
3	5/10/2021 12:42	0 ---	
4	5/10/2021 12:43	0 ---	
5	5/10/2021 12:44	0 ---	
6	5/10/2021 12:45	0 ---	
7	5/10/2021 12:46	0 ---	
8	5/10/2021 12:47	0 ---	
9	5/10/2021 12:48	0 ---	
10	5/10/2021 12:49	0 ---	
11	5/10/2021 12:50	0 ---	
12	5/10/2021 12:51	0 ---	
13	5/10/2021 12:52	0 ---	
14	5/10/2021 12:53	0 ---	
15	5/10/2021 12:54	0	0
16	5/10/2021 12:55	0	0
17	5/10/2021 12:56	0	0
18	5/10/2021 12:57	0	0
19	5/10/2021 12:58	0	0
20	5/10/2021 12:59	0	0
21	5/10/2021 13:00	0	0
22	5/10/2021 13:01	0	0
23	5/10/2021 13:02	0	0
24	5/10/2021 13:03	0	0
25	5/10/2021 13:04	0	0
26	5/10/2021 13:05	0	0
27	5/10/2021 13:06	0	0
28	5/10/2021 13:07	0	0
29	5/10/2021 13:08	0	0
30	5/10/2021 13:09	0	0

31	5/10/2021 13:10	0	0
32	5/10/2021 13:11	0	0
33	5/10/2021 13:12	0	0
34	5/10/2021 13:13	0	0
35	5/10/2021 13:14	0	0
36	5/10/2021 13:15	0	0
37	5/10/2021 13:16	0	0
38	5/10/2021 13:17	0	0
39	5/10/2021 13:18	0	0
40	5/10/2021 13:19	0	0
41	5/10/2021 13:20	0	0
42	5/10/2021 13:21	0	0
43	5/10/2021 13:22	0	0
44	5/10/2021 13:23	0	0
45	5/10/2021 13:24	0	0
46	5/10/2021 13:25	0	0
47	5/10/2021 13:26	0	0
48	5/10/2021 13:27	0	0
49	5/10/2021 13:28	0	0
50	5/10/2021 13:29	0	0
51	5/10/2021 13:30	0	0
52	5/10/2021 13:31	0	0
53	5/10/2021 13:32	0	0
54	5/10/2021 13:33	0	0
55	5/10/2021 13:34	0	0
56	5/10/2021 13:35	0	0
57	5/10/2021 13:36	0	0
58	5/10/2021 13:37	0	0
59	5/10/2021 13:38	0	0
60	5/10/2021 13:39	0	0
61	5/10/2021 13:40	0	0
62	5/10/2021 13:41	0	0
63	5/10/2021 13:42	0	0
64	5/10/2021 13:43	0	0
65	5/10/2021 13:44	0	0
66	5/10/2021 13:45	0	0
67	5/10/2021 13:46	0	0
68	5/10/2021 13:47	0	0
69	5/10/2021 13:48	0	0
70	5/10/2021 13:49	0	0
71	5/10/2021 13:50	0	0
72	5/10/2021 13:51	0	0
73	5/10/2021 13:52	0	0
74	5/10/2021 13:53	0	0
75	5/10/2021 13:54	0	0
76	5/10/2021 13:55	0	0
77	5/10/2021 13:56	0	0

78	5/10/2021 13:57	0	0
79	5/10/2021 13:58	0	0
80	5/10/2021 13:59	0	0
81	5/10/2021 14:00	0	0
82	5/10/2021 14:01	0	0
83	5/10/2021 14:02	0	0
84	5/10/2021 14:03	0	0
85	5/10/2021 14:04	0	0
86	5/10/2021 14:05	0	0
87	5/10/2021 14:06	0	0
88	5/10/2021 14:07	0	0
89	5/10/2021 14:08	0	0
90	5/10/2021 14:09	0	0
91	5/10/2021 14:10	0	0
92	5/10/2021 14:11	0	0
93	5/10/2021 14:12	0	0
94	5/10/2021 14:13	0	0
95	5/10/2021 14:14	0	0
96	5/10/2021 14:15	0	0
97	5/10/2021 14:16	0	0
98	5/10/2021 14:17	0	0
99	5/10/2021 14:18	0	0
100	5/10/2021 14:19	0	0
101	5/10/2021 14:20	0	0
102	5/10/2021 14:21	0	0
103	5/10/2021 14:22	0	0
104	5/10/2021 14:23	0	0
105	5/10/2021 14:24	0	0
106	5/10/2021 14:25	0	0
107	5/10/2021 14:26	0	0
108	5/10/2021 14:27	0	0
109	5/10/2021 14:28	0	0
110	5/10/2021 14:29	0	0
111	5/10/2021 14:30	0	0
112	5/10/2021 14:31	0	0
113	5/10/2021 14:32	0	0
114	5/10/2021 14:33	0	0
115	5/10/2021 14:34	0	0
116	5/10/2021 14:35	0	0
117	5/10/2021 14:36	0	0
118	5/10/2021 14:37	0	0
119	5/10/2021 14:38	0	0
120	5/10/2021 14:39	0	0
121	5/10/2021 14:40	0	0
122	5/10/2021 14:41	0	0
123	5/10/2021 14:42	0	0
124	5/10/2021 14:43	0	0

125	5/10/2021 14:44	0	0
126	5/10/2021 14:45	0	0
127	5/10/2021 14:46	0	0
128	5/10/2021 14:47	0	0
129	5/10/2021 14:48	0	0
130	5/10/2021 14:49	0	0
131	5/10/2021 14:50	0	0
132	5/10/2021 14:51	0	0
133	5/10/2021 14:52	0	0
134	5/10/2021 14:53	0	0
135	5/10/2021 14:54	0	0
136	5/10/2021 14:55	0	0
137	5/10/2021 14:56	0	0
138	5/10/2021 14:57	0	0
139	5/10/2021 14:58	0	0
140	5/10/2021 14:59	0	0
141	5/10/2021 15:00	0	0
142	5/10/2021 15:01	0	0
143	5/10/2021 15:02	0	0
144	5/10/2021 15:03	0	0
145	5/10/2021 15:04	0	0
146	5/10/2021 15:05	0	0
147	5/10/2021 15:06	0	0
148	5/10/2021 15:07	0	0
149	5/10/2021 15:08	0	0
150	5/10/2021 15:09	0	0
151	5/10/2021 15:10	0	0.1
152	5/10/2021 15:11	0	0.2
153	5/10/2021 15:12	0	0.2
154	5/10/2021 15:13	0	0.2
155	5/10/2021 15:14	0	0.2

# Test 037

Instrument		Data Properties	
Model	DustTrak II	Start Date	05/11/2021
Instrument S/N	8530163109	Start Time	07:32:44
		Stop Date	05/11/2021
		Stop Time	12:42:44
		Total Time	0:05:10:00
		Logging Interval	60 seconds

Statistics		AEROSOL
Avg		0.002 mg/m <sup>3</sup>
Max		0.032 mg/m <sup>3</sup>
Max Date		05/11/2021
Max Time		08:42:44
Min		0.000 mg/m <sup>3</sup>
Min Date		05/11/2021
Min Time		07:38:44
TWA (8 hr)		0.001
TWA Start Date		05/11/2021
TWA Start Time		07:32:44
TWA End Time		12:42:44

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
1	05/11/2021	07:33:44	0.002
2	05/11/2021	07:34:44	0.001
3	05/11/2021	07:35:44	0.001
4	05/11/2021	07:36:44	0.001
5	05/11/2021	07:37:44	0.001
6	05/11/2021	07:38:44	0.000
7	05/11/2021	07:39:44	0.005
8	05/11/2021	07:40:44	0.006
9	05/11/2021	07:41:44	0.001
10	05/11/2021	07:42:44	0.001
11	05/11/2021	07:43:44	0.001
12	05/11/2021	07:44:44	0.001
13	05/11/2021	07:45:44	0.009
14	05/11/2021	07:46:44	0.001
15	05/11/2021	07:47:44	0.002
16	05/11/2021	07:48:44	0.002
17	05/11/2021	07:49:44	0.001
18	05/11/2021	07:50:44	0.001
19	05/11/2021	07:51:44	0.002
20	05/11/2021	07:52:44	0.001
21	05/11/2021	07:53:44	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
22	05/11/2021	07:54:44	0.007
23	05/11/2021	07:55:44	0.001
24	05/11/2021	07:56:44	0.001
25	05/11/2021	07:57:44	0.001
26	05/11/2021	07:58:44	0.001
27	05/11/2021	07:59:44	0.001
28	05/11/2021	08:00:44	0.001
29	05/11/2021	08:01:44	0.001
30	05/11/2021	08:02:44	0.001
31	05/11/2021	08:03:44	0.001
32	05/11/2021	08:04:44	0.001
33	05/11/2021	08:05:44	0.001
34	05/11/2021	08:06:44	0.002
35	05/11/2021	08:07:44	0.002
36	05/11/2021	08:08:44	0.001
37	05/11/2021	08:09:44	0.001
38	05/11/2021	08:10:44	0.002
39	05/11/2021	08:11:44	0.001
40	05/11/2021	08:12:44	0.002
41	05/11/2021	08:13:44	0.001
42	05/11/2021	08:14:44	0.002
43	05/11/2021	08:15:44	0.002
44	05/11/2021	08:16:44	0.002
45	05/11/2021	08:17:44	0.001
46	05/11/2021	08:18:44	0.002
47	05/11/2021	08:19:44	0.002
48	05/11/2021	08:20:44	0.001
49	05/11/2021	08:21:44	0.002
50	05/11/2021	08:22:44	0.002
51	05/11/2021	08:23:44	0.002
52	05/11/2021	08:24:44	0.001
53	05/11/2021	08:25:44	0.001
54	05/11/2021	08:26:44	0.001
55	05/11/2021	08:27:44	0.001
56	05/11/2021	08:28:44	0.001
57	05/11/2021	08:29:44	0.001
58	05/11/2021	08:30:44	0.002
59	05/11/2021	08:31:44	0.002
60	05/11/2021	08:32:44	0.001
61	05/11/2021	08:33:44	0.003
62	05/11/2021	08:34:44	0.001
63	05/11/2021	08:35:44	0.001
64	05/11/2021	08:36:44	0.004
65	05/11/2021	08:37:44	0.001
66	05/11/2021	08:38:44	0.001
67	05/11/2021	08:39:44	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
68	05/11/2021	08:40:44	0.002
69	05/11/2021	08:41:44	0.001
70	05/11/2021	08:42:44	0.032
71	05/11/2021	08:43:44	0.003
72	05/11/2021	08:44:44	0.004
73	05/11/2021	08:45:44	0.002
74	05/11/2021	08:46:44	0.002
75	05/11/2021	08:47:44	0.003
76	05/11/2021	08:48:44	0.003
77	05/11/2021	08:49:44	0.001
78	05/11/2021	08:50:44	0.001
79	05/11/2021	08:51:44	0.001
80	05/11/2021	08:52:44	0.001
81	05/11/2021	08:53:44	0.001
82	05/11/2021	08:54:44	0.001
83	05/11/2021	08:55:44	0.003
84	05/11/2021	08:56:44	0.001
85	05/11/2021	08:57:44	0.002
86	05/11/2021	08:58:44	0.001
87	05/11/2021	08:59:44	0.000
88	05/11/2021	09:00:44	0.001
89	05/11/2021	09:01:44	0.001
90	05/11/2021	09:02:44	0.002
91	05/11/2021	09:03:44	0.003
92	05/11/2021	09:04:44	0.001
93	05/11/2021	09:05:44	0.001
94	05/11/2021	09:06:44	0.001
95	05/11/2021	09:07:44	0.001
96	05/11/2021	09:08:44	0.003
97	05/11/2021	09:09:44	0.001
98	05/11/2021	09:10:44	0.001
99	05/11/2021	09:11:44	0.001
100	05/11/2021	09:12:44	0.006
101	05/11/2021	09:13:44	0.002
102	05/11/2021	09:14:44	0.001
103	05/11/2021	09:15:44	0.000
104	05/11/2021	09:16:44	0.000
105	05/11/2021	09:17:44	0.000
106	05/11/2021	09:18:44	0.000
107	05/11/2021	09:19:44	0.001
108	05/11/2021	09:20:44	0.001
109	05/11/2021	09:21:44	0.001
110	05/11/2021	09:22:44	0.003
111	05/11/2021	09:23:44	0.000
112	05/11/2021	09:24:44	0.001
113	05/11/2021	09:25:44	0.003

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
114	05/11/2021	09:26:44	0.011
115	05/11/2021	09:27:44	0.001
116	05/11/2021	09:28:44	0.001
117	05/11/2021	09:29:44	0.001
118	05/11/2021	09:30:44	0.002
119	05/11/2021	09:31:44	0.001
120	05/11/2021	09:32:44	0.000
121	05/11/2021	09:33:44	0.001
122	05/11/2021	09:34:44	0.003
123	05/11/2021	09:35:44	0.001
124	05/11/2021	09:36:44	0.002
125	05/11/2021	09:37:44	0.002
126	05/11/2021	09:38:44	0.001
127	05/11/2021	09:39:44	0.001
128	05/11/2021	09:40:44	0.009
129	05/11/2021	09:41:44	0.001
130	05/11/2021	09:42:44	0.001
131	05/11/2021	09:43:44	0.001
132	05/11/2021	09:44:44	0.002
133	05/11/2021	09:45:44	0.002
134	05/11/2021	09:46:44	0.003
135	05/11/2021	09:47:44	0.000
136	05/11/2021	09:48:44	0.000
137	05/11/2021	09:49:44	0.000
138	05/11/2021	09:50:44	0.000
139	05/11/2021	09:51:44	0.000
140	05/11/2021	09:52:44	0.001
141	05/11/2021	09:53:44	0.003
142	05/11/2021	09:54:44	0.001
143	05/11/2021	09:55:44	0.001
144	05/11/2021	09:56:44	0.000
145	05/11/2021	09:57:44	0.002
146	05/11/2021	09:58:44	0.002
147	05/11/2021	09:59:44	0.002
148	05/11/2021	10:00:44	0.002
149	05/11/2021	10:01:44	0.001
150	05/11/2021	10:02:44	0.013
151	05/11/2021	10:03:44	0.008
152	05/11/2021	10:04:44	0.001
153	05/11/2021	10:05:44	0.003
154	05/11/2021	10:06:44	0.002
155	05/11/2021	10:07:44	0.001
156	05/11/2021	10:08:44	0.005
157	05/11/2021	10:09:44	0.001
158	05/11/2021	10:10:44	0.005
159	05/11/2021	10:11:44	0.002

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
160	05/11/2021	10:12:44	0.006
161	05/11/2021	10:13:44	0.002
162	05/11/2021	10:14:44	0.003
163	05/11/2021	10:15:44	0.001
164	05/11/2021	10:16:44	0.010
165	05/11/2021	10:17:44	0.005
166	05/11/2021	10:18:44	0.000
167	05/11/2021	10:19:44	0.001
168	05/11/2021	10:20:44	0.000
169	05/11/2021	10:21:44	0.000
170	05/11/2021	10:22:44	0.000
171	05/11/2021	10:23:44	0.004
172	05/11/2021	10:24:44	0.001
173	05/11/2021	10:25:44	0.001
174	05/11/2021	10:26:44	0.001
175	05/11/2021	10:27:44	0.001
176	05/11/2021	10:28:44	0.000
177	05/11/2021	10:29:44	0.000
178	05/11/2021	10:30:44	0.000
179	05/11/2021	10:31:44	0.000
180	05/11/2021	10:32:44	0.001
181	05/11/2021	10:33:44	0.001
182	05/11/2021	10:34:44	0.025
183	05/11/2021	10:35:44	0.003
184	05/11/2021	10:36:44	0.000
185	05/11/2021	10:37:44	0.000
186	05/11/2021	10:38:44	0.006
187	05/11/2021	10:39:44	0.003
188	05/11/2021	10:40:44	0.001
189	05/11/2021	10:41:44	0.001
190	05/11/2021	10:42:44	0.002
191	05/11/2021	10:43:44	0.002
192	05/11/2021	10:44:44	0.002
193	05/11/2021	10:45:44	0.000
194	05/11/2021	10:46:44	0.002
195	05/11/2021	10:47:44	0.004
196	05/11/2021	10:48:44	0.023
197	05/11/2021	10:49:44	0.004
198	05/11/2021	10:50:44	0.003
199	05/11/2021	10:51:44	0.000
200	05/11/2021	10:52:44	0.007
201	05/11/2021	10:53:44	0.001
202	05/11/2021	10:54:44	0.003
203	05/11/2021	10:55:44	0.001
204	05/11/2021	10:56:44	0.001
205	05/11/2021	10:57:44	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
206	05/11/2021	10:58:44	0.000
207	05/11/2021	10:59:44	0.000
208	05/11/2021	11:00:44	0.000
209	05/11/2021	11:01:44	0.001
210	05/11/2021	11:02:44	0.000
211	05/11/2021	11:03:44	0.000
212	05/11/2021	11:04:44	0.001
213	05/11/2021	11:05:44	0.001
214	05/11/2021	11:06:44	0.000
215	05/11/2021	11:07:44	0.001
216	05/11/2021	11:08:44	0.001
217	05/11/2021	11:09:44	0.000
218	05/11/2021	11:10:44	0.000
219	05/11/2021	11:11:44	0.000
220	05/11/2021	11:12:44	0.000
221	05/11/2021	11:13:44	0.000
222	05/11/2021	11:14:44	0.000
223	05/11/2021	11:15:44	0.000
224	05/11/2021	11:16:44	0.001
225	05/11/2021	11:17:44	0.000
226	05/11/2021	11:18:44	0.001
227	05/11/2021	11:19:44	0.001
228	05/11/2021	11:20:44	0.000
229	05/11/2021	11:21:44	0.001
230	05/11/2021	11:22:44	0.001
231	05/11/2021	11:23:44	0.000
232	05/11/2021	11:24:44	0.001
233	05/11/2021	11:25:44	0.000
234	05/11/2021	11:26:44	0.001
235	05/11/2021	11:27:44	0.010
236	05/11/2021	11:28:44	0.007
237	05/11/2021	11:29:44	0.003
238	05/11/2021	11:30:44	0.003
239	05/11/2021	11:31:44	0.003
240	05/11/2021	11:32:44	0.000
241	05/11/2021	11:33:44	0.004
242	05/11/2021	11:34:44	0.001
243	05/11/2021	11:35:44	0.000
244	05/11/2021	11:36:44	0.002
245	05/11/2021	11:37:44	0.001
246	05/11/2021	11:38:44	0.002
247	05/11/2021	11:39:44	0.001
248	05/11/2021	11:40:44	0.002
249	05/11/2021	11:41:44	0.000
250	05/11/2021	11:42:44	0.000
251	05/11/2021	11:43:44	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
252	05/11/2021	11:44:44	0.001
253	05/11/2021	11:45:44	0.000
254	05/11/2021	11:46:44	0.001
255	05/11/2021	11:47:44	0.000
256	05/11/2021	11:48:44	0.000
257	05/11/2021	11:49:44	0.002
258	05/11/2021	11:50:44	0.001
259	05/11/2021	11:51:44	0.000
260	05/11/2021	11:52:44	0.001
261	05/11/2021	11:53:44	0.002
262	05/11/2021	11:54:44	0.000
263	05/11/2021	11:55:44	0.000
264	05/11/2021	11:56:44	0.001
265	05/11/2021	11:57:44	0.001
266	05/11/2021	11:58:44	0.000
267	05/11/2021	11:59:44	0.001
268	05/11/2021	12:00:44	0.000
269	05/11/2021	12:01:44	0.000
270	05/11/2021	12:02:44	0.000
271	05/11/2021	12:03:44	0.001
272	05/11/2021	12:04:44	0.006
273	05/11/2021	12:05:44	0.001
274	05/11/2021	12:06:44	0.002
275	05/11/2021	12:07:44	0.002
276	05/11/2021	12:08:44	0.000
277	05/11/2021	12:09:44	0.000
278	05/11/2021	12:10:44	0.002
279	05/11/2021	12:11:44	0.002
280	05/11/2021	12:12:44	0.000
281	05/11/2021	12:13:44	0.001
282	05/11/2021	12:14:44	0.001
283	05/11/2021	12:15:44	0.002
284	05/11/2021	12:16:44	0.000
285	05/11/2021	12:17:44	0.000
286	05/11/2021	12:18:44	0.000
287	05/11/2021	12:19:44	0.000
288	05/11/2021	12:20:44	0.000
289	05/11/2021	12:21:44	0.000
290	05/11/2021	12:22:44	0.002
291	05/11/2021	12:23:44	0.001
292	05/11/2021	12:24:44	0.007
293	05/11/2021	12:25:44	0.000
294	05/11/2021	12:26:44	0.001
295	05/11/2021	12:27:44	0.001
296	05/11/2021	12:28:44	0.000
297	05/11/2021	12:29:44	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
298	05/11/2021	12:30:44	0.000
299	05/11/2021	12:31:44	0.002
300	05/11/2021	12:32:44	0.001
301	05/11/2021	12:33:44	0.000
302	05/11/2021	12:34:44	0.000
303	05/11/2021	12:35:44	0.015
304	05/11/2021	12:36:44	0.001
305	05/11/2021	12:37:44	0.001
306	05/11/2021	12:38:44	0.000
307	05/11/2021	12:39:44	0.000
308	05/11/2021	12:40:44	0.000
309	05/11/2021	12:41:44	0.001
310	05/11/2021	12:42:44	0.000

# Test 038

ERROR: FLOW,

Instrument		Data Properties	
Model	DustTrak II	Start Date	05/11/2021
Instrument S/N	8530163109	Start Time	12:44:56
		Stop Date	05/11/2021
		Stop Time	15:20:56
		Total Time	0:02:36:00
		Logging Interval	60 seconds

Statistics		AEROSOL
Avg		0.021 mg/m <sup>3</sup>
Max		1.390 mg/m <sup>3</sup>
Max Date		05/11/2021
Max Time		13:18:56
Min		0.000 mg/m <sup>3</sup>
Min Date		05/11/2021
Min Time		12:47:56
TWA (8 hr)		0.007
TWA Start Date		05/11/2021
TWA Start Time		12:44:56
TWA End Time		15:20:56

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
1	05/11/2021	12:45:56	0.001
2	05/11/2021	12:46:56	0.002
3	05/11/2021	12:47:56	0.000
4	05/11/2021	12:48:56	0.000
5	05/11/2021	12:49:56	0.001
6	05/11/2021	12:50:56	0.001
7	05/11/2021	12:51:56	0.002
8	05/11/2021	12:52:56	0.002
9	05/11/2021	12:53:56	0.004
10	05/11/2021	12:54:56	0.008
11	05/11/2021	12:55:56	0.001
12	05/11/2021	12:56:56	0.003
13	05/11/2021	12:57:56	0.001
14	05/11/2021	12:58:56	0.001
15	05/11/2021	12:59:56	0.002
16	05/11/2021	13:00:56	0.002
17	05/11/2021	13:01:56	0.002
18	05/11/2021	13:02:56	0.001
19	05/11/2021	13:03:56	0.004
20	05/11/2021	13:04:56	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
21	05/11/2021	13:05:56	0.001
22	05/11/2021	13:06:56	0.002
23	05/11/2021	13:07:56	0.000
24	05/11/2021	13:08:56	0.001
25	05/11/2021	13:09:56	0.002
26	05/11/2021	13:10:56	0.001
27	05/11/2021	13:11:56	0.002
28	05/11/2021	13:12:56	0.001
29	05/11/2021	13:13:56	0.001
30	05/11/2021	13:14:56	0.001
31	05/11/2021	13:15:56	0.003
32	05/11/2021	13:16:56	0.001
33	05/11/2021	13:17:56	0.087
34	05/11/2021	13:18:56	1.390
35	05/11/2021	13:19:56	1.200
36	05/11/2021	13:20:56	0.014
37	05/11/2021	13:21:56	0.001
38	05/11/2021	13:22:56	0.012
39	05/11/2021	13:23:56	0.133
40	05/11/2021	13:24:56	0.000
41	05/11/2021	13:25:56	0.000
42	05/11/2021	13:26:56	0.000
43	05/11/2021	13:27:56	0.000
44	05/11/2021	13:28:56	0.000
45	05/11/2021	13:29:56	0.002
46	05/11/2021	13:30:56	0.010
47	05/11/2021	13:31:56	0.002
48	05/11/2021	13:32:56	0.001
49	05/11/2021	13:33:56	0.003
50	05/11/2021	13:34:56	0.003
51	05/11/2021	13:35:56	0.001
52	05/11/2021	13:36:56	0.006
53	05/11/2021	13:37:56	0.003
54	05/11/2021	13:38:56	0.002
55	05/11/2021	13:39:56	0.001
56	05/11/2021	13:40:56	0.002
57	05/11/2021	13:41:56	0.004
58	05/11/2021	13:42:56	0.001
59	05/11/2021	13:43:56	0.001
60	05/11/2021	13:44:56	0.004
61	05/11/2021	13:45:56	0.006
62	05/11/2021	13:46:56	0.003
63	05/11/2021	13:47:56	0.006
64	05/11/2021	13:48:56	0.001
65	05/11/2021	13:49:56	0.001
66	05/11/2021	13:50:56	0.009

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
67	05/11/2021	13:51:56	0.002
68	05/11/2021	13:52:56	0.005
69	05/11/2021	13:53:56	0.001
70	05/11/2021	13:54:56	0.002
71	05/11/2021	13:55:56	0.004
72	05/11/2021	13:56:56	0.002
73	05/11/2021	13:57:56	0.003
74	05/11/2021	13:58:56	0.018
75	05/11/2021	13:59:56	0.001
76	05/11/2021	14:00:56	0.001
77	05/11/2021	14:01:56	0.001
78	05/11/2021	14:02:56	0.001
79	05/11/2021	14:03:56	0.004
80	05/11/2021	14:04:56	0.002
81	05/11/2021	14:05:56	0.002
82	05/11/2021	14:06:56	0.001
83	05/11/2021	14:07:56	0.001
84	05/11/2021	14:08:56	0.001
85	05/11/2021	14:09:56	0.007
86	05/11/2021	14:10:56	0.001
87	05/11/2021	14:11:56	0.001
88	05/11/2021	14:12:56	0.001
89	05/11/2021	14:13:56	0.002
90	05/11/2021	14:14:56	0.001
91	05/11/2021	14:15:56	0.001
92	05/11/2021	14:16:56	0.001
93	05/11/2021	14:17:56	0.012
94	05/11/2021	14:18:56	0.003
95	05/11/2021	14:19:56	0.001
96	05/11/2021	14:20:56	0.002
97	05/11/2021	14:21:56	0.002
98	05/11/2021	14:22:56	0.002
99	05/11/2021	14:23:56	0.001
100	05/11/2021	14:24:56	0.001
101	05/11/2021	14:25:56	0.001
102	05/11/2021	14:26:56	0.001
103	05/11/2021	14:27:56	0.002
104	05/11/2021	14:28:56	0.003
105	05/11/2021	14:29:56	0.005
106	05/11/2021	14:30:56	0.002
107	05/11/2021	14:31:56	0.002
108	05/11/2021	14:32:56	0.001
109	05/11/2021	14:33:56	0.002
110	05/11/2021	14:34:56	0.002
111	05/11/2021	14:35:56	0.004
112	05/11/2021	14:36:56	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
113	05/11/2021	14:37:56	0.001
114	05/11/2021	14:38:56	0.003
115	05/11/2021	14:39:56	0.001
116	05/11/2021	14:40:56	0.002
117	05/11/2021	14:41:56	0.002
118	05/11/2021	14:42:56	0.002
119	05/11/2021	14:43:56	0.003
120	05/11/2021	14:44:56	0.003
121	05/11/2021	14:45:56	0.003
122	05/11/2021	14:46:56	0.003
123	05/11/2021	14:47:56	0.002
124	05/11/2021	14:48:56	0.003
125	05/11/2021	14:49:56	0.002
126	05/11/2021	14:50:56	0.002
127	05/11/2021	14:51:56	0.002
128	05/11/2021	14:52:56	0.002
129	05/11/2021	14:53:56	0.005
130	05/11/2021	14:54:56	0.002
131	05/11/2021	14:55:56	0.002
132	05/11/2021	14:56:56	0.003
133	05/11/2021	14:57:56	0.002
134	05/11/2021	14:58:56	0.002
135	05/11/2021	14:59:56	0.003
136	05/11/2021	15:00:56	0.002
137	05/11/2021	15:01:56	0.003
138	05/11/2021	15:02:56	0.002
139	05/11/2021	15:03:56	0.004
140	05/11/2021	15:04:56	0.004
141	05/11/2021	15:05:56	0.002
142	05/11/2021	15:06:56	0.002
143	05/11/2021	15:07:56	0.002
144	05/11/2021	15:08:56	0.006
145	05/11/2021	15:09:56	0.004
146	05/11/2021	15:10:56	0.003
147	05/11/2021	15:11:56	0.002
148	05/11/2021	15:12:56	0.002
149	05/11/2021	15:13:56	0.003
150	05/11/2021	15:14:56	0.008
151	05/11/2021	15:15:56	0.002
152	05/11/2021	15:16:56	0.002
153	05/11/2021	15:17:56	0.003
154	05/11/2021	15:18:56	0.003
155	05/11/2021	15:19:56	0.002
156	05/11/2021	15:20:56	0.003

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21/05/11 12:53

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## Summary

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Unit Name MiniRAE 3000 +(PGM-7320)

Unit SN 592-928160

Unit Firmware V2.20A

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Running Mode Hygiene Mode

Datalog Mode Auto

Diagnostic Mode No

Stop Reason Power Down

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Site ID 12345678

User ID 12345678

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Begin 5/11/2021 12:53

End 5/11/2021 14:48

Sample Period 60

Number of Rec 114

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Sensor PID(ppm)

Sensor SN S023030092W6

Measure Type Avg; Max; Real

Span 100

Span 2 1000

Low Alarm 50

High Alarm 100

Over Alarm 15000

STEL Alarm 25

TWA Alarm 10

Measurement Isobutylene

Calibration Titr 5/11/2021 6:20

Peak 0

Min 0

Average 0

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## Datalog

Index	Date/Time	PID(ppm)	PID(ppm)	PID(ppm)
		(Avg)	(Max)	(Real)
1	5/11/2021 12:54	0	0	0
2	5/11/2021 12:55	0	0	0
3	5/11/2021 12:56	0	0	0
4	5/11/2021 12:57	0	0	0
5	5/11/2021 12:58	0	0	0

6	5/11/2021 12:59	0	0	0
7	5/11/2021 13:00	0	0	0
8	5/11/2021 13:01	0	0	0
9	5/11/2021 13:02	0	0	0
10	5/11/2021 13:03	0	0	0
11	5/11/2021 13:04	0	0	0
12	5/11/2021 13:05	0	0	0
13	5/11/2021 13:06	0	0	0
14	5/11/2021 13:07	0	0	0
15	5/11/2021 13:08	0	0	0
16	5/11/2021 13:09	0	0	0
17	5/11/2021 13:10	0	0	0
18	5/11/2021 13:11	0	0	0
19	5/11/2021 13:12	0	0	0
20	5/11/2021 13:13	0	0	0
21	5/11/2021 13:14	0	0	0
22	5/11/2021 13:15	0	0	0
23	5/11/2021 13:16	0	0	0
24	5/11/2021 13:17	0	0	0
25	5/11/2021 13:18	0	0	0
26	5/11/2021 13:19	0	0	0
27	5/11/2021 13:20	0	0	0
28	5/11/2021 13:21	0	0	0
29	5/11/2021 13:22	0	0	0
30	5/11/2021 13:23	0	0	0
31	5/11/2021 13:24	0	0	0
32	5/11/2021 13:25	0	0	0
33	5/11/2021 13:26	0	0	0
34	5/11/2021 13:27	0	0	0
35	5/11/2021 13:28	0	0	0
36	5/11/2021 13:29	0	0	0
37	5/11/2021 13:30	0	0	0
38	5/11/2021 13:31	0	0	0
39	5/11/2021 13:32	0	0	0
40	5/11/2021 13:33	0	0	0
41	5/11/2021 13:34	0	0	0
42	5/11/2021 13:35	0	0	0
43	5/11/2021 13:36	0	0	0
44	5/11/2021 13:37	0	0	0
45	5/11/2021 13:38	0	0	0
46	5/11/2021 13:39	0	0	0
47	5/11/2021 13:40	0	0	0
48	5/11/2021 13:41	0	0	0
49	5/11/2021 13:42	0	0	0
50	5/11/2021 13:43	0	0	0
51	5/11/2021 13:44	0	0	0
52	5/11/2021 13:45	0	0	0

53	5/11/2021 13:46	0	0	0
54	5/11/2021 13:47	0	0	0
55	5/11/2021 13:48	0	0	0
56	5/11/2021 13:49	0	0	0
57	5/11/2021 13:50	0	0	0
58	5/11/2021 13:51	0	0	0
59	5/11/2021 13:52	0	0	0
60	5/11/2021 13:53	0	0	0
61	5/11/2021 13:54	0	0	0
62	5/11/2021 13:55	0	0	0
63	5/11/2021 13:56	0	0	0
64	5/11/2021 13:57	0	0	0
65	5/11/2021 13:58	0	0	0
66	5/11/2021 13:59	0	0	0
67	5/11/2021 14:00	0	0	0
68	5/11/2021 14:01	0	0	0
69	5/11/2021 14:02	0	0	0
70	5/11/2021 14:03	0	0	0
71	5/11/2021 14:04	0	0	0
72	5/11/2021 14:05	0	0	0
73	5/11/2021 14:06	0	0	0
74	5/11/2021 14:07	0	0	0
75	5/11/2021 14:08	0	0	0
76	5/11/2021 14:09	0	0	0
77	5/11/2021 14:10	0	0	0
78	5/11/2021 14:11	0	0	0
79	5/11/2021 14:12	0	0	0
80	5/11/2021 14:13	0	0	0
81	5/11/2021 14:14	0	0	0
82	5/11/2021 14:15	0	0	0
83	5/11/2021 14:16	0	0	0
84	5/11/2021 14:17	0	0	0
85	5/11/2021 14:18	0	0	0
86	5/11/2021 14:19	0	0	0
87	5/11/2021 14:20	0	0	0
88	5/11/2021 14:21	0	0	0
89	5/11/2021 14:22	0	0	0
90	5/11/2021 14:23	0	0	0
91	5/11/2021 14:24	0	0	0
92	5/11/2021 14:25	0	0	0
93	5/11/2021 14:26	0	0	0
94	5/11/2021 14:27	0	0	0
95	5/11/2021 14:28	0	0	0
96	5/11/2021 14:29	0	0	0
97	5/11/2021 14:30	0	0	0
98	5/11/2021 14:31	0	0	0
99	5/11/2021 14:32	0	0	0

100	5/11/2021 14:33	0	0	0
101	5/11/2021 14:34	0	0	0
102	5/11/2021 14:35	0	0	0
103	5/11/2021 14:36	0	0	0
104	5/11/2021 14:37	0	0	0
105	5/11/2021 14:38	0	0	0
106	5/11/2021 14:39	0	0	0
107	5/11/2021 14:40	0	0	0
108	5/11/2021 14:41	0	0	0
109	5/11/2021 14:42	0	0	0
110	5/11/2021 14:43	0	0.1	0
111	5/11/2021 14:44	0	0	0
112	5/11/2021 14:45	0	0	0
113	5/11/2021 14:46	0	0	0
114	5/11/2021 14:47	0	0	0
Peak		0	0.1	0
Min		0	0	0
Average		0	0	0

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#### TWA/STEL

Index	Date/Time	PID(ppm)	PID(ppm)
		(TWA)	(STEL)
1	5/11/2021 12:54	0 ---	
2	5/11/2021 12:55	0 ---	
3	5/11/2021 12:56	0 ---	
4	5/11/2021 12:57	0 ---	
5	5/11/2021 12:58	0 ---	
6	5/11/2021 12:59	0 ---	
7	5/11/2021 13:00	0 ---	
8	5/11/2021 13:01	0 ---	
9	5/11/2021 13:02	0 ---	
10	5/11/2021 13:03	0 ---	
11	5/11/2021 13:04	0 ---	
12	5/11/2021 13:05	0 ---	
13	5/11/2021 13:06	0 ---	
14	5/11/2021 13:07	0 ---	
15	5/11/2021 13:08	0	0
16	5/11/2021 13:09	0	0
17	5/11/2021 13:10	0	0
18	5/11/2021 13:11	0	0
19	5/11/2021 13:12	0	0
20	5/11/2021 13:13	0	0
21	5/11/2021 13:14	0	0
22	5/11/2021 13:15	0	0
23	5/11/2021 13:16	0	0
24	5/11/2021 13:17	0	0

25	5/11/2021 13:18	0	0
26	5/11/2021 13:19	0	0
27	5/11/2021 13:20	0	0
28	5/11/2021 13:21	0	0
29	5/11/2021 13:22	0	0
30	5/11/2021 13:23	0	0
31	5/11/2021 13:24	0	0
32	5/11/2021 13:25	0	0
33	5/11/2021 13:26	0	0
34	5/11/2021 13:27	0	0
35	5/11/2021 13:28	0	0
36	5/11/2021 13:29	0	0
37	5/11/2021 13:30	0	0
38	5/11/2021 13:31	0	0
39	5/11/2021 13:32	0	0
40	5/11/2021 13:33	0	0
41	5/11/2021 13:34	0	0
42	5/11/2021 13:35	0	0
43	5/11/2021 13:36	0	0
44	5/11/2021 13:37	0	0
45	5/11/2021 13:38	0	0
46	5/11/2021 13:39	0	0
47	5/11/2021 13:40	0	0
48	5/11/2021 13:41	0	0
49	5/11/2021 13:42	0	0
50	5/11/2021 13:43	0	0
51	5/11/2021 13:44	0	0
52	5/11/2021 13:45	0	0
53	5/11/2021 13:46	0	0
54	5/11/2021 13:47	0	0
55	5/11/2021 13:48	0	0
56	5/11/2021 13:49	0	0
57	5/11/2021 13:50	0	0
58	5/11/2021 13:51	0	0
59	5/11/2021 13:52	0	0
60	5/11/2021 13:53	0	0
61	5/11/2021 13:54	0	0
62	5/11/2021 13:55	0	0
63	5/11/2021 13:56	0	0
64	5/11/2021 13:57	0	0
65	5/11/2021 13:58	0	0
66	5/11/2021 13:59	0	0
67	5/11/2021 14:00	0	0
68	5/11/2021 14:01	0	0
69	5/11/2021 14:02	0	0
70	5/11/2021 14:03	0	0
71	5/11/2021 14:04	0	0

72	5/11/2021 14:05	0	0
73	5/11/2021 14:06	0	0
74	5/11/2021 14:07	0	0
75	5/11/2021 14:08	0	0
76	5/11/2021 14:09	0	0
77	5/11/2021 14:10	0	0
78	5/11/2021 14:11	0	0
79	5/11/2021 14:12	0	0
80	5/11/2021 14:13	0	0
81	5/11/2021 14:14	0	0
82	5/11/2021 14:15	0	0
83	5/11/2021 14:16	0	0
84	5/11/2021 14:17	0	0
85	5/11/2021 14:18	0	0
86	5/11/2021 14:19	0	0
87	5/11/2021 14:20	0	0
88	5/11/2021 14:21	0	0
89	5/11/2021 14:22	0	0
90	5/11/2021 14:23	0	0
91	5/11/2021 14:24	0	0
92	5/11/2021 14:25	0	0
93	5/11/2021 14:26	0	0
94	5/11/2021 14:27	0	0
95	5/11/2021 14:28	0	0
96	5/11/2021 14:29	0	0
97	5/11/2021 14:30	0	0
98	5/11/2021 14:31	0	0
99	5/11/2021 14:32	0	0
100	5/11/2021 14:33	0	0
101	5/11/2021 14:34	0	0
102	5/11/2021 14:35	0	0
103	5/11/2021 14:36	0	0
104	5/11/2021 14:37	0	0
105	5/11/2021 14:38	0	0
106	5/11/2021 14:39	0	0
107	5/11/2021 14:40	0	0
108	5/11/2021 14:41	0	0
109	5/11/2021 14:42	0	0
110	5/11/2021 14:43	0	0
111	5/11/2021 14:44	0	0
112	5/11/2021 14:45	0	0
113	5/11/2021 14:46	0	0
114	5/11/2021 14:47	0	0

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21/05/11 12:53

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## Summary

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Unit Name MiniRAE 3000 +(PGM-7320)

Unit SN 592-928160

Unit Firmw V2.20A

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Running M Hygiene Mode

Datalog Mc Auto

Diagnostic No

Stop Reaso Power Down

---

Site ID 12345678

User ID 12345678

---

Begin 5/11/2021 12:53

End 5/11/2021 14:48

Sample Per 60

Number of 114

---

Sensor PID(ppm)

Sensor SN S023030092W6

Measure T\Avg; Max; Real

Span 100

Span 2 1000

Low Alarm 50

High Alarm 100

Over Alarm 15000

STEL Alarm 25

TWA Alarm 10

Measurem Isobutylene

Calibration 5/11/2021 6:20

Peak 0

Min 0

Average 0

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## Datalog

Index	Date/Time	PID(ppm)	PID(ppm)	PID(ppm)
		(Avg)	(Max)	(Real)
1	5/11/2021 12:54	0	0	0
2	5/11/2021 12:55	0	0	0
3	5/11/2021 12:56	0	0	0
4	5/11/2021 12:57	0	0	0
5	5/11/2021 12:58	0	0	0

6	5/11/2021 12:59	0	0	0
7	5/11/2021 13:00	0	0	0
8	5/11/2021 13:01	0	0	0
9	5/11/2021 13:02	0	0	0
10	5/11/2021 13:03	0	0	0
11	5/11/2021 13:04	0	0	0
12	5/11/2021 13:05	0	0	0
13	5/11/2021 13:06	0	0	0
14	5/11/2021 13:07	0	0	0
15	5/11/2021 13:08	0	0	0
16	5/11/2021 13:09	0	0	0
17	5/11/2021 13:10	0	0	0
18	5/11/2021 13:11	0	0	0
19	5/11/2021 13:12	0	0	0
20	5/11/2021 13:13	0	0	0
21	5/11/2021 13:14	0	0	0
22	5/11/2021 13:15	0	0	0
23	5/11/2021 13:16	0	0	0
24	5/11/2021 13:17	0	0	0
25	5/11/2021 13:18	0	0	0
26	5/11/2021 13:19	0	0	0
27	5/11/2021 13:20	0	0	0
28	5/11/2021 13:21	0	0	0
29	5/11/2021 13:22	0	0	0
30	5/11/2021 13:23	0	0	0
31	5/11/2021 13:24	0	0	0
32	5/11/2021 13:25	0	0	0
33	5/11/2021 13:26	0	0	0
34	5/11/2021 13:27	0	0	0
35	5/11/2021 13:28	0	0	0
36	5/11/2021 13:29	0	0	0
37	5/11/2021 13:30	0	0	0
38	5/11/2021 13:31	0	0	0
39	5/11/2021 13:32	0	0	0
40	5/11/2021 13:33	0	0	0
41	5/11/2021 13:34	0	0	0
42	5/11/2021 13:35	0	0	0
43	5/11/2021 13:36	0	0	0
44	5/11/2021 13:37	0	0	0
45	5/11/2021 13:38	0	0	0
46	5/11/2021 13:39	0	0	0
47	5/11/2021 13:40	0	0	0
48	5/11/2021 13:41	0	0	0
49	5/11/2021 13:42	0	0	0
50	5/11/2021 13:43	0	0	0
51	5/11/2021 13:44	0	0	0
52	5/11/2021 13:45	0	0	0

53	5/11/2021 13:46	0	0	0
54	5/11/2021 13:47	0	0	0
55	5/11/2021 13:48	0	0	0
56	5/11/2021 13:49	0	0	0
57	5/11/2021 13:50	0	0	0
58	5/11/2021 13:51	0	0	0
59	5/11/2021 13:52	0	0	0
60	5/11/2021 13:53	0	0	0
61	5/11/2021 13:54	0	0	0
62	5/11/2021 13:55	0	0	0
63	5/11/2021 13:56	0	0	0
64	5/11/2021 13:57	0	0	0
65	5/11/2021 13:58	0	0	0
66	5/11/2021 13:59	0	0	0
67	5/11/2021 14:00	0	0	0
68	5/11/2021 14:01	0	0	0
69	5/11/2021 14:02	0	0	0
70	5/11/2021 14:03	0	0	0
71	5/11/2021 14:04	0	0	0
72	5/11/2021 14:05	0	0	0
73	5/11/2021 14:06	0	0	0
74	5/11/2021 14:07	0	0	0
75	5/11/2021 14:08	0	0	0
76	5/11/2021 14:09	0	0	0
77	5/11/2021 14:10	0	0	0
78	5/11/2021 14:11	0	0	0
79	5/11/2021 14:12	0	0	0
80	5/11/2021 14:13	0	0	0
81	5/11/2021 14:14	0	0	0
82	5/11/2021 14:15	0	0	0
83	5/11/2021 14:16	0	0	0
84	5/11/2021 14:17	0	0	0
85	5/11/2021 14:18	0	0	0
86	5/11/2021 14:19	0	0	0
87	5/11/2021 14:20	0	0	0
88	5/11/2021 14:21	0	0	0
89	5/11/2021 14:22	0	0	0
90	5/11/2021 14:23	0	0	0
91	5/11/2021 14:24	0	0	0
92	5/11/2021 14:25	0	0	0
93	5/11/2021 14:26	0	0	0
94	5/11/2021 14:27	0	0	0
95	5/11/2021 14:28	0	0	0
96	5/11/2021 14:29	0	0	0
97	5/11/2021 14:30	0	0	0
98	5/11/2021 14:31	0	0	0
99	5/11/2021 14:32	0	0	0

100	5/11/2021 14:33	0	0	0
101	5/11/2021 14:34	0	0	0
102	5/11/2021 14:35	0	0	0
103	5/11/2021 14:36	0	0	0
104	5/11/2021 14:37	0	0	0
105	5/11/2021 14:38	0	0	0
106	5/11/2021 14:39	0	0	0
107	5/11/2021 14:40	0	0	0
108	5/11/2021 14:41	0	0	0
109	5/11/2021 14:42	0	0	0
110	5/11/2021 14:43	0	0.1	0
111	5/11/2021 14:44	0	0	0
112	5/11/2021 14:45	0	0	0
113	5/11/2021 14:46	0	0	0
114	5/11/2021 14:47	0	0	0
Peak		0	0.1	0
Min		0	0	0
Average		0	0	0

\*\*\*\*\*

#### TWA/STEL

Index	Date/Time	PID(ppm)	
		(TWA)	(STEL)
1	5/11/2021 12:54	0	---
2	5/11/2021 12:55	0	---
3	5/11/2021 12:56	0	---
4	5/11/2021 12:57	0	---
5	5/11/2021 12:58	0	---
6	5/11/2021 12:59	0	---
7	5/11/2021 13:00	0	---
8	5/11/2021 13:01	0	---
9	5/11/2021 13:02	0	---
10	5/11/2021 13:03	0	---
11	5/11/2021 13:04	0	---
12	5/11/2021 13:05	0	---
13	5/11/2021 13:06	0	---
14	5/11/2021 13:07	0	---
15	5/11/2021 13:08	0	0
16	5/11/2021 13:09	0	0
17	5/11/2021 13:10	0	0
18	5/11/2021 13:11	0	0
19	5/11/2021 13:12	0	0
20	5/11/2021 13:13	0	0
21	5/11/2021 13:14	0	0
22	5/11/2021 13:15	0	0
23	5/11/2021 13:16	0	0
24	5/11/2021 13:17	0	0

25	5/11/2021 13:18	0	0
26	5/11/2021 13:19	0	0
27	5/11/2021 13:20	0	0
28	5/11/2021 13:21	0	0
29	5/11/2021 13:22	0	0
30	5/11/2021 13:23	0	0
31	5/11/2021 13:24	0	0
32	5/11/2021 13:25	0	0
33	5/11/2021 13:26	0	0
34	5/11/2021 13:27	0	0
35	5/11/2021 13:28	0	0
36	5/11/2021 13:29	0	0
37	5/11/2021 13:30	0	0
38	5/11/2021 13:31	0	0
39	5/11/2021 13:32	0	0
40	5/11/2021 13:33	0	0
41	5/11/2021 13:34	0	0
42	5/11/2021 13:35	0	0
43	5/11/2021 13:36	0	0
44	5/11/2021 13:37	0	0
45	5/11/2021 13:38	0	0
46	5/11/2021 13:39	0	0
47	5/11/2021 13:40	0	0
48	5/11/2021 13:41	0	0
49	5/11/2021 13:42	0	0
50	5/11/2021 13:43	0	0
51	5/11/2021 13:44	0	0
52	5/11/2021 13:45	0	0
53	5/11/2021 13:46	0	0
54	5/11/2021 13:47	0	0
55	5/11/2021 13:48	0	0
56	5/11/2021 13:49	0	0
57	5/11/2021 13:50	0	0
58	5/11/2021 13:51	0	0
59	5/11/2021 13:52	0	0
60	5/11/2021 13:53	0	0
61	5/11/2021 13:54	0	0
62	5/11/2021 13:55	0	0
63	5/11/2021 13:56	0	0
64	5/11/2021 13:57	0	0
65	5/11/2021 13:58	0	0
66	5/11/2021 13:59	0	0
67	5/11/2021 14:00	0	0
68	5/11/2021 14:01	0	0
69	5/11/2021 14:02	0	0
70	5/11/2021 14:03	0	0
71	5/11/2021 14:04	0	0

72	5/11/2021 14:05	0	0
73	5/11/2021 14:06	0	0
74	5/11/2021 14:07	0	0
75	5/11/2021 14:08	0	0
76	5/11/2021 14:09	0	0
77	5/11/2021 14:10	0	0
78	5/11/2021 14:11	0	0
79	5/11/2021 14:12	0	0
80	5/11/2021 14:13	0	0
81	5/11/2021 14:14	0	0
82	5/11/2021 14:15	0	0
83	5/11/2021 14:16	0	0
84	5/11/2021 14:17	0	0
85	5/11/2021 14:18	0	0
86	5/11/2021 14:19	0	0
87	5/11/2021 14:20	0	0
88	5/11/2021 14:21	0	0
89	5/11/2021 14:22	0	0
90	5/11/2021 14:23	0	0
91	5/11/2021 14:24	0	0
92	5/11/2021 14:25	0	0
93	5/11/2021 14:26	0	0
94	5/11/2021 14:27	0	0
95	5/11/2021 14:28	0	0
96	5/11/2021 14:29	0	0
97	5/11/2021 14:30	0	0
98	5/11/2021 14:31	0	0
99	5/11/2021 14:32	0	0
100	5/11/2021 14:33	0	0
101	5/11/2021 14:34	0	0
102	5/11/2021 14:35	0	0
103	5/11/2021 14:36	0	0
104	5/11/2021 14:37	0	0
105	5/11/2021 14:38	0	0
106	5/11/2021 14:39	0	0
107	5/11/2021 14:40	0	0
108	5/11/2021 14:41	0	0
109	5/11/2021 14:42	0	0
110	5/11/2021 14:43	0	0
111	5/11/2021 14:44	0	0
112	5/11/2021 14:45	0	0
113	5/11/2021 14:46	0	0
114	5/11/2021 14:47	0	0



## **APPENDIX C**

### **CAMP-2 AIR MONITORING DATA**

- **DATA RAM – PARTICULATES**
- **PID - VOCs**

# Test 043

Instrument		Data Properties	
Model	DustTrak II	Start Date	05/10/2021
Instrument S/N	8530154515	Start Time	08:09:26
		Stop Date	05/10/2021
		Stop Time	13:15:26
		Total Time	0:05:06:00
		Logging Interval	60 seconds

Statistics		AEROSOL
Avg		0.000 mg/m <sup>3</sup>
Max		0.013 mg/m <sup>3</sup>
Max Date		05/10/2021
Max Time		09:11:26
Min		0.000 mg/m <sup>3</sup>
Min Date		05/10/2021
Min Time		08:11:26
TWA (8 hr)		0.000
TWA Start Date		05/10/2021
TWA Start Time		08:09:26
TWA End Time		13:15:26

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
1	05/10/2021	08:10:26	0.001
2	05/10/2021	08:11:26	0.000
3	05/10/2021	08:12:26	0.001
4	05/10/2021	08:13:26	0.000
5	05/10/2021	08:14:26	0.000
6	05/10/2021	08:15:26	0.001
7	05/10/2021	08:16:26	0.001
8	05/10/2021	08:17:26	0.001
9	05/10/2021	08:18:26	0.001
10	05/10/2021	08:19:26	0.001
11	05/10/2021	08:20:26	0.000
12	05/10/2021	08:21:26	0.001
13	05/10/2021	08:22:26	0.000
14	05/10/2021	08:23:26	0.000
15	05/10/2021	08:24:26	0.000
16	05/10/2021	08:25:26	0.000
17	05/10/2021	08:26:26	0.000
18	05/10/2021	08:27:26	0.000
19	05/10/2021	08:28:26	0.000
20	05/10/2021	08:29:26	0.000
21	05/10/2021	08:30:26	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
22	05/10/2021	08:31:26	0.000
23	05/10/2021	08:32:26	0.000
24	05/10/2021	08:33:26	0.000
25	05/10/2021	08:34:26	0.000
26	05/10/2021	08:35:26	0.000
27	05/10/2021	08:36:26	0.000
28	05/10/2021	08:37:26	0.000
29	05/10/2021	08:38:26	0.000
30	05/10/2021	08:39:26	0.000
31	05/10/2021	08:40:26	0.000
32	05/10/2021	08:41:26	0.000
33	05/10/2021	08:42:26	0.000
34	05/10/2021	08:43:26	0.000
35	05/10/2021	08:44:26	0.002
36	05/10/2021	08:45:26	0.000
37	05/10/2021	08:46:26	0.000
38	05/10/2021	08:47:26	0.000
39	05/10/2021	08:48:26	0.000
40	05/10/2021	08:49:26	0.000
41	05/10/2021	08:50:26	0.000
42	05/10/2021	08:51:26	0.000
43	05/10/2021	08:52:26	0.000
44	05/10/2021	08:53:26	0.001
45	05/10/2021	08:54:26	0.000
46	05/10/2021	08:55:26	0.000
47	05/10/2021	08:56:26	0.000
48	05/10/2021	08:57:26	0.000
49	05/10/2021	08:58:26	0.000
50	05/10/2021	08:59:26	0.000
51	05/10/2021	09:00:26	0.000
52	05/10/2021	09:01:26	0.000
53	05/10/2021	09:02:26	0.000
54	05/10/2021	09:03:26	0.000
55	05/10/2021	09:04:26	0.000
56	05/10/2021	09:05:26	0.000
57	05/10/2021	09:06:26	0.001
58	05/10/2021	09:07:26	0.000
59	05/10/2021	09:08:26	0.000
60	05/10/2021	09:09:26	0.003
61	05/10/2021	09:10:26	0.002
62	05/10/2021	09:11:26	0.013
63	05/10/2021	09:12:26	0.007
64	05/10/2021	09:13:26	0.001
65	05/10/2021	09:14:26	0.009
66	05/10/2021	09:15:26	0.013
67	05/10/2021	09:16:26	0.008

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
68	05/10/2021	09:17:26	0.007
69	05/10/2021	09:18:26	0.011
70	05/10/2021	09:19:26	0.006
71	05/10/2021	09:20:26	0.002
72	05/10/2021	09:21:26	0.002
73	05/10/2021	09:22:26	0.001
74	05/10/2021	09:23:26	0.000
75	05/10/2021	09:24:26	0.000
76	05/10/2021	09:25:26	0.000
77	05/10/2021	09:26:26	0.000
78	05/10/2021	09:27:26	0.000
79	05/10/2021	09:28:26	0.000
80	05/10/2021	09:29:26	0.000
81	05/10/2021	09:30:26	0.000
82	05/10/2021	09:31:26	0.000
83	05/10/2021	09:32:26	0.001
84	05/10/2021	09:33:26	0.000
85	05/10/2021	09:34:26	0.000
86	05/10/2021	09:35:26	0.000
87	05/10/2021	09:36:26	0.000
88	05/10/2021	09:37:26	0.000
89	05/10/2021	09:38:26	0.000
90	05/10/2021	09:39:26	0.000
91	05/10/2021	09:40:26	0.000
92	05/10/2021	09:41:26	0.000
93	05/10/2021	09:42:26	0.000
94	05/10/2021	09:43:26	0.000
95	05/10/2021	09:44:26	0.000
96	05/10/2021	09:45:26	0.000
97	05/10/2021	09:46:26	0.000
98	05/10/2021	09:47:26	0.000
99	05/10/2021	09:48:26	0.000
100	05/10/2021	09:49:26	0.000
101	05/10/2021	09:50:26	0.000
102	05/10/2021	09:51:26	0.000
103	05/10/2021	09:52:26	0.000
104	05/10/2021	09:53:26	0.000
105	05/10/2021	09:54:26	0.000
106	05/10/2021	09:55:26	0.000
107	05/10/2021	09:56:26	0.001
108	05/10/2021	09:57:26	0.000
109	05/10/2021	09:58:26	0.000
110	05/10/2021	09:59:26	0.000
111	05/10/2021	10:00:26	0.000
112	05/10/2021	10:01:26	0.000
113	05/10/2021	10:02:26	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
114	05/10/2021	10:03:26	0.000
115	05/10/2021	10:04:26	0.000
116	05/10/2021	10:05:26	0.000
117	05/10/2021	10:06:26	0.000
118	05/10/2021	10:07:26	0.000
119	05/10/2021	10:08:26	0.000
120	05/10/2021	10:09:26	0.000
121	05/10/2021	10:10:26	0.000
122	05/10/2021	10:11:26	0.000
123	05/10/2021	10:12:26	0.000
124	05/10/2021	10:13:26	0.000
125	05/10/2021	10:14:26	0.000
126	05/10/2021	10:15:26	0.000
127	05/10/2021	10:16:26	0.000
128	05/10/2021	10:17:26	0.000
129	05/10/2021	10:18:26	0.000
130	05/10/2021	10:19:26	0.000
131	05/10/2021	10:20:26	0.000
132	05/10/2021	10:21:26	0.000
133	05/10/2021	10:22:26	0.000
134	05/10/2021	10:23:26	0.000
135	05/10/2021	10:24:26	0.000
136	05/10/2021	10:25:26	0.000
137	05/10/2021	10:26:26	0.000
138	05/10/2021	10:27:26	0.000
139	05/10/2021	10:28:26	0.000
140	05/10/2021	10:29:26	0.000
141	05/10/2021	10:30:26	0.000
142	05/10/2021	10:31:26	0.000
143	05/10/2021	10:32:26	0.000
144	05/10/2021	10:33:26	0.001
145	05/10/2021	10:34:26	0.000
146	05/10/2021	10:35:26	0.000
147	05/10/2021	10:36:26	0.000
148	05/10/2021	10:37:26	0.000
149	05/10/2021	10:38:26	0.000
150	05/10/2021	10:39:26	0.000
151	05/10/2021	10:40:26	0.000
152	05/10/2021	10:41:26	0.000
153	05/10/2021	10:42:26	0.000
154	05/10/2021	10:43:26	0.000
155	05/10/2021	10:44:26	0.000
156	05/10/2021	10:45:26	0.000
157	05/10/2021	10:46:26	0.000
158	05/10/2021	10:47:26	0.000
159	05/10/2021	10:48:26	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
160	05/10/2021	10:49:26	0.000
161	05/10/2021	10:50:26	0.000
162	05/10/2021	10:51:26	0.000
163	05/10/2021	10:52:26	0.000
164	05/10/2021	10:53:26	0.000
165	05/10/2021	10:54:26	0.000
166	05/10/2021	10:55:26	0.000
167	05/10/2021	10:56:26	0.000
168	05/10/2021	10:57:26	0.000
169	05/10/2021	10:58:26	0.000
170	05/10/2021	10:59:26	0.000
171	05/10/2021	11:00:26	0.000
172	05/10/2021	11:01:26	0.000
173	05/10/2021	11:02:26	0.000
174	05/10/2021	11:03:26	0.000
175	05/10/2021	11:04:26	0.000
176	05/10/2021	11:05:26	0.000
177	05/10/2021	11:06:26	0.000
178	05/10/2021	11:07:26	0.000
179	05/10/2021	11:08:26	0.000
180	05/10/2021	11:09:26	0.000
181	05/10/2021	11:10:26	0.001
182	05/10/2021	11:11:26	0.000
183	05/10/2021	11:12:26	0.000
184	05/10/2021	11:13:26	0.000
185	05/10/2021	11:14:26	0.000
186	05/10/2021	11:15:26	0.000
187	05/10/2021	11:16:26	0.000
188	05/10/2021	11:17:26	0.010
189	05/10/2021	11:18:26	0.000
190	05/10/2021	11:19:26	0.000
191	05/10/2021	11:20:26	0.001
192	05/10/2021	11:21:26	0.000
193	05/10/2021	11:22:26	0.000
194	05/10/2021	11:23:26	0.000
195	05/10/2021	11:24:26	0.000
196	05/10/2021	11:25:26	0.000
197	05/10/2021	11:26:26	0.000
198	05/10/2021	11:27:26	0.000
199	05/10/2021	11:28:26	0.000
200	05/10/2021	11:29:26	0.000
201	05/10/2021	11:30:26	0.000
202	05/10/2021	11:31:26	0.001
203	05/10/2021	11:32:26	0.000
204	05/10/2021	11:33:26	0.000
205	05/10/2021	11:34:26	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
206	05/10/2021	11:35:26	0.000
207	05/10/2021	11:36:26	0.000
208	05/10/2021	11:37:26	0.000
209	05/10/2021	11:38:26	0.000
210	05/10/2021	11:39:26	0.000
211	05/10/2021	11:40:26	0.000
212	05/10/2021	11:41:26	0.000
213	05/10/2021	11:42:26	0.000
214	05/10/2021	11:43:26	0.000
215	05/10/2021	11:44:26	0.001
216	05/10/2021	11:45:26	0.000
217	05/10/2021	11:46:26	0.000
218	05/10/2021	11:47:26	0.000
219	05/10/2021	11:48:26	0.000
220	05/10/2021	11:49:26	0.000
221	05/10/2021	11:50:26	0.000
222	05/10/2021	11:51:26	0.000
223	05/10/2021	11:52:26	0.000
224	05/10/2021	11:53:26	0.000
225	05/10/2021	11:54:26	0.000
226	05/10/2021	11:55:26	0.000
227	05/10/2021	11:56:26	0.000
228	05/10/2021	11:57:26	0.000
229	05/10/2021	11:58:26	0.000
230	05/10/2021	11:59:26	0.000
231	05/10/2021	12:00:26	0.000
232	05/10/2021	12:01:26	0.000
233	05/10/2021	12:02:26	0.000
234	05/10/2021	12:03:26	0.000
235	05/10/2021	12:04:26	0.000
236	05/10/2021	12:05:26	0.000
237	05/10/2021	12:06:26	0.000
238	05/10/2021	12:07:26	0.000
239	05/10/2021	12:08:26	0.000
240	05/10/2021	12:09:26	0.000
241	05/10/2021	12:10:26	0.000
242	05/10/2021	12:11:26	0.000
243	05/10/2021	12:12:26	0.000
244	05/10/2021	12:13:26	0.000
245	05/10/2021	12:14:26	0.000
246	05/10/2021	12:15:26	0.000
247	05/10/2021	12:16:26	0.000
248	05/10/2021	12:17:26	0.000
249	05/10/2021	12:18:26	0.000
250	05/10/2021	12:19:26	0.000
251	05/10/2021	12:20:26	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
252	05/10/2021	12:21:26	0.000
253	05/10/2021	12:22:26	0.000
254	05/10/2021	12:23:26	0.000
255	05/10/2021	12:24:26	0.000
256	05/10/2021	12:25:26	0.000
257	05/10/2021	12:26:26	0.000
258	05/10/2021	12:27:26	0.000
259	05/10/2021	12:28:26	0.000
260	05/10/2021	12:29:26	0.000
261	05/10/2021	12:30:26	0.000
262	05/10/2021	12:31:26	0.000
263	05/10/2021	12:32:26	0.000
264	05/10/2021	12:33:26	0.000
265	05/10/2021	12:34:26	0.000
266	05/10/2021	12:35:26	0.000
267	05/10/2021	12:36:26	0.000
268	05/10/2021	12:37:26	0.001
269	05/10/2021	12:38:26	0.000
270	05/10/2021	12:39:26	0.000
271	05/10/2021	12:40:26	0.000
272	05/10/2021	12:41:26	0.000
273	05/10/2021	12:42:26	0.000
274	05/10/2021	12:43:26	0.000
275	05/10/2021	12:44:26	0.000
276	05/10/2021	12:45:26	0.000
277	05/10/2021	12:46:26	0.000
278	05/10/2021	12:47:26	0.000
279	05/10/2021	12:48:26	0.000
280	05/10/2021	12:49:26	0.000
281	05/10/2021	12:50:26	0.000
282	05/10/2021	12:51:26	0.000
283	05/10/2021	12:52:26	0.000
284	05/10/2021	12:53:26	0.000
285	05/10/2021	12:54:26	0.000
286	05/10/2021	12:55:26	0.000
287	05/10/2021	12:56:26	0.000
288	05/10/2021	12:57:26	0.000
289	05/10/2021	12:58:26	0.000
290	05/10/2021	12:59:26	0.000
291	05/10/2021	13:00:26	0.000
292	05/10/2021	13:01:26	0.000
293	05/10/2021	13:02:26	0.002
294	05/10/2021	13:03:26	0.000
295	05/10/2021	13:04:26	0.000
296	05/10/2021	13:05:26	0.000
297	05/10/2021	13:06:26	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
298	05/10/2021	13:07:26	0.000
299	05/10/2021	13:08:26	0.000
300	05/10/2021	13:09:26	0.000
301	05/10/2021	13:10:26	0.000
302	05/10/2021	13:11:26	0.000
303	05/10/2021	13:12:26	0.000
304	05/10/2021	13:13:26	0.000
305	05/10/2021	13:14:26	0.000
306	05/10/2021	13:15:26	0.000

# Test 044

Instrument		Data Properties	
Model	DustTrak II	Start Date	05/10/2021
Instrument S/N	8530154515	Start Time	13:28:10
		Stop Date	05/10/2021
		Stop Time	15:57:10
		Total Time	0:02:29:00
		Logging Interval	60 seconds

Statistics		AEROSOL
Avg		0.000 mg/m <sup>3</sup>
Max		0.003 mg/m <sup>3</sup>
Max Date		05/10/2021
Max Time		15:15:10
Min		0.000 mg/m <sup>3</sup>
Min Date		05/10/2021
Min Time		13:30:10
TWA (8 hr)		0.000
TWA Start Date		05/10/2021
TWA Start Time		13:28:10
TWA End Time		15:57:10

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
1	05/10/2021	13:29:10	0.001
2	05/10/2021	13:30:10	0.000
3	05/10/2021	13:31:10	0.000
4	05/10/2021	13:32:10	0.000
5	05/10/2021	13:33:10	0.001
6	05/10/2021	13:34:10	0.000
7	05/10/2021	13:35:10	0.000
8	05/10/2021	13:36:10	0.000
9	05/10/2021	13:37:10	0.000
10	05/10/2021	13:38:10	0.000
11	05/10/2021	13:39:10	0.000
12	05/10/2021	13:40:10	0.000
13	05/10/2021	13:41:10	0.000
14	05/10/2021	13:42:10	0.001
15	05/10/2021	13:43:10	0.000
16	05/10/2021	13:44:10	0.000
17	05/10/2021	13:45:10	0.000
18	05/10/2021	13:46:10	0.000
19	05/10/2021	13:47:10	0.000
20	05/10/2021	13:48:10	0.000
21	05/10/2021	13:49:10	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
22	05/10/2021	13:50:10	0.000
23	05/10/2021	13:51:10	0.001
24	05/10/2021	13:52:10	0.000
25	05/10/2021	13:53:10	0.000
26	05/10/2021	13:54:10	0.000
27	05/10/2021	13:55:10	0.000
28	05/10/2021	13:56:10	0.001
29	05/10/2021	13:57:10	0.001
30	05/10/2021	13:58:10	0.000
31	05/10/2021	13:59:10	0.001
32	05/10/2021	14:00:10	0.000
33	05/10/2021	14:01:10	0.001
34	05/10/2021	14:02:10	0.000
35	05/10/2021	14:03:10	0.000
36	05/10/2021	14:04:10	0.001
37	05/10/2021	14:05:10	0.000
38	05/10/2021	14:06:10	0.000
39	05/10/2021	14:07:10	0.000
40	05/10/2021	14:08:10	0.000
41	05/10/2021	14:09:10	0.001
42	05/10/2021	14:10:10	0.002
43	05/10/2021	14:11:10	0.001
44	05/10/2021	14:12:10	0.000
45	05/10/2021	14:13:10	0.001
46	05/10/2021	14:14:10	0.000
47	05/10/2021	14:15:10	0.001
48	05/10/2021	14:16:10	0.000
49	05/10/2021	14:17:10	0.001
50	05/10/2021	14:18:10	0.001
51	05/10/2021	14:19:10	0.000
52	05/10/2021	14:20:10	0.000
53	05/10/2021	14:21:10	0.001
54	05/10/2021	14:22:10	0.000
55	05/10/2021	14:23:10	0.001
56	05/10/2021	14:24:10	0.001
57	05/10/2021	14:25:10	0.001
58	05/10/2021	14:26:10	0.001
59	05/10/2021	14:27:10	0.000
60	05/10/2021	14:28:10	0.001
61	05/10/2021	14:29:10	0.001
62	05/10/2021	14:30:10	0.000
63	05/10/2021	14:31:10	0.000
64	05/10/2021	14:32:10	0.000
65	05/10/2021	14:33:10	0.000
66	05/10/2021	14:34:10	0.000
67	05/10/2021	14:35:10	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
68	05/10/2021	14:36:10	0.001
69	05/10/2021	14:37:10	0.001
70	05/10/2021	14:38:10	0.000
71	05/10/2021	14:39:10	0.000
72	05/10/2021	14:40:10	0.000
73	05/10/2021	14:41:10	0.000
74	05/10/2021	14:42:10	0.001
75	05/10/2021	14:43:10	0.000
76	05/10/2021	14:44:10	0.002
77	05/10/2021	14:45:10	0.000
78	05/10/2021	14:46:10	0.001
79	05/10/2021	14:47:10	0.001
80	05/10/2021	14:48:10	0.000
81	05/10/2021	14:49:10	0.000
82	05/10/2021	14:50:10	0.000
83	05/10/2021	14:51:10	0.000
84	05/10/2021	14:52:10	0.000
85	05/10/2021	14:53:10	0.000
86	05/10/2021	14:54:10	0.000
87	05/10/2021	14:55:10	0.000
88	05/10/2021	14:56:10	0.000
89	05/10/2021	14:57:10	0.000
90	05/10/2021	14:58:10	0.000
91	05/10/2021	14:59:10	0.000
92	05/10/2021	15:00:10	0.000
93	05/10/2021	15:01:10	0.000
94	05/10/2021	15:02:10	0.000
95	05/10/2021	15:03:10	0.000
96	05/10/2021	15:04:10	0.000
97	05/10/2021	15:05:10	0.000
98	05/10/2021	15:06:10	0.000
99	05/10/2021	15:07:10	0.000
100	05/10/2021	15:08:10	0.000
101	05/10/2021	15:09:10	0.000
102	05/10/2021	15:10:10	0.000
103	05/10/2021	15:11:10	0.000
104	05/10/2021	15:12:10	0.000
105	05/10/2021	15:13:10	0.000
106	05/10/2021	15:14:10	0.001
107	05/10/2021	15:15:10	0.003
108	05/10/2021	15:16:10	0.002
109	05/10/2021	15:17:10	0.000
110	05/10/2021	15:18:10	0.001
111	05/10/2021	15:19:10	0.001
112	05/10/2021	15:20:10	0.001
113	05/10/2021	15:21:10	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
114	05/10/2021	15:22:10	0.001
115	05/10/2021	15:23:10	0.000
116	05/10/2021	15:24:10	0.001
117	05/10/2021	15:25:10	0.001
118	05/10/2021	15:26:10	0.001
119	05/10/2021	15:27:10	0.001
120	05/10/2021	15:28:10	0.001
121	05/10/2021	15:29:10	0.000
122	05/10/2021	15:30:10	0.000
123	05/10/2021	15:31:10	0.001
124	05/10/2021	15:32:10	0.001
125	05/10/2021	15:33:10	0.000
126	05/10/2021	15:34:10	0.001
127	05/10/2021	15:35:10	0.000
128	05/10/2021	15:36:10	0.001
129	05/10/2021	15:37:10	0.000
130	05/10/2021	15:38:10	0.000
131	05/10/2021	15:39:10	0.000
132	05/10/2021	15:40:10	0.000
133	05/10/2021	15:41:10	0.000
134	05/10/2021	15:42:10	0.000
135	05/10/2021	15:43:10	0.000
136	05/10/2021	15:44:10	0.001
137	05/10/2021	15:45:10	0.000
138	05/10/2021	15:46:10	0.001
139	05/10/2021	15:47:10	0.001
140	05/10/2021	15:48:10	0.000
141	05/10/2021	15:49:10	0.000
142	05/10/2021	15:50:10	0.001
143	05/10/2021	15:51:10	0.000
144	05/10/2021	15:52:10	0.001
145	05/10/2021	15:53:10	0.001
146	05/10/2021	15:54:10	0.001
147	05/10/2021	15:55:10	0.000
148	05/10/2021	15:56:10	0.000
149	05/10/2021	15:57:10	0.003

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21/05/10 07:19

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## Summary

Unit Name MiniRAE 3000(PGM-7320)

Unit SN 592-917718

Unit Firmware Ver V2.20A

Running Mode Hygiene Mode

Datalog Mode Auto

Diagnostic Mode No

Stop Reason Power Down

Site ID 12345678

User ID 12345678

Begin 5/10/2021 7:19

End 5/10/2021 12:29

Sample Period(s) 60

Number of Records 309

Sensor PID(ppm)

Sensor SN S023030301T7

Measure Type Avg; Max; Real

Span 100

Span 2 1000

Low Alarm 50

High Alarm 100

Over Alarm 15000

STEL Alarm 25

TWA Alarm 10

Measurement Gas Isobutylene

Calibration Time 5/10/2021 6:21

Peak 0

Min 0

Average 0

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## Datalog

Index	Date/Time	PID(ppm)	PID(ppm)	PID(ppm)
		(Avg)	(Max)	(Real)
1	5/10/2021 7:20	0	0	0
2	5/10/2021 7:21	0	0	0
3	5/10/2021 7:22	0	0	0
4	5/10/2021 7:23	0	0	0
5	5/10/2021 7:24	0	0	0

6	5/10/2021 7:25	0	0	0
7	5/10/2021 7:26	0	0	0
8	5/10/2021 7:27	0	0	0
9	5/10/2021 7:28	0	0	0
10	5/10/2021 7:29	0	0	0
11	5/10/2021 7:30	0	0	0
12	5/10/2021 7:31	0	0	0
13	5/10/2021 7:32	0	0	0
14	5/10/2021 7:33	0	0	0
15	5/10/2021 7:34	0	0	0
16	5/10/2021 7:35	0	0	0
17	5/10/2021 7:36	0	0	0
18	5/10/2021 7:37	0	0	0
19	5/10/2021 7:38	0	0	0
20	5/10/2021 7:39	0	0	0
21	5/10/2021 7:40	0	0	0
22	5/10/2021 7:41	0	0	0
23	5/10/2021 7:42	0	0	0
24	5/10/2021 7:43	0	0	0
25	5/10/2021 7:44	0	0	0
26	5/10/2021 7:45	0	0	0
27	5/10/2021 7:46	0	0	0
28	5/10/2021 7:47	0	0	0
29	5/10/2021 7:48	0	0	0
30	5/10/2021 7:49	0	0	0
31	5/10/2021 7:50	0	0	0
32	5/10/2021 7:51	0	0	0
33	5/10/2021 7:52	0	0	0
34	5/10/2021 7:53	0	0	0
35	5/10/2021 7:54	0	0	0
36	5/10/2021 7:55	0	0	0
37	5/10/2021 7:56	0	0	0
38	5/10/2021 7:57	0	0	0
39	5/10/2021 7:58	0	0	0
40	5/10/2021 7:59	0	0	0
41	5/10/2021 8:00	0	0	0
42	5/10/2021 8:01	0	0	0
43	5/10/2021 8:02	0	0	0
44	5/10/2021 8:03	0	0	0
45	5/10/2021 8:04	0	0	0
46	5/10/2021 8:05	0	0	0
47	5/10/2021 8:06	0	0	0
48	5/10/2021 8:07	0	0	0
49	5/10/2021 8:08	0	0	0
50	5/10/2021 8:09	0	0	0
51	5/10/2021 8:10	0	0	0
52	5/10/2021 8:11	0	0	0

53	5/10/2021 8:12	0	0	0
54	5/10/2021 8:13	0	0	0
55	5/10/2021 8:14	0	0	0
56	5/10/2021 8:15	0	0	0
57	5/10/2021 8:16	0	0	0
58	5/10/2021 8:17	0	0	0
59	5/10/2021 8:18	0	0	0
60	5/10/2021 8:19	0	0	0
61	5/10/2021 8:20	0	0	0
62	5/10/2021 8:21	0	0	0
63	5/10/2021 8:22	0	0	0
64	5/10/2021 8:23	0	0	0
65	5/10/2021 8:24	0	0	0
66	5/10/2021 8:25	0	0	0
67	5/10/2021 8:26	0	0	0
68	5/10/2021 8:27	0	0	0
69	5/10/2021 8:28	0	0	0
70	5/10/2021 8:29	0	0	0
71	5/10/2021 8:30	0	0	0
72	5/10/2021 8:31	0	0	0
73	5/10/2021 8:32	0	0	0
74	5/10/2021 8:33	0	0	0
75	5/10/2021 8:34	0	0	0
76	5/10/2021 8:35	0	0	0
77	5/10/2021 8:36	0	0	0
78	5/10/2021 8:37	0	0	0
79	5/10/2021 8:38	0	0	0
80	5/10/2021 8:39	0	0	0
81	5/10/2021 8:40	0	0	0
82	5/10/2021 8:41	0	0	0
83	5/10/2021 8:42	0	0	0
84	5/10/2021 8:43	0	0	0
85	5/10/2021 8:44	0	0	0
86	5/10/2021 8:45	0	0	0
87	5/10/2021 8:46	0	0	0
88	5/10/2021 8:47	0	0	0
89	5/10/2021 8:48	0	0	0
90	5/10/2021 8:49	0	0	0
91	5/10/2021 8:50	0	0	0
92	5/10/2021 8:51	0	0	0
93	5/10/2021 8:52	0	0	0
94	5/10/2021 8:53	0	0	0
95	5/10/2021 8:54	0	0	0
96	5/10/2021 8:55	0	0	0
97	5/10/2021 8:56	0	0	0
98	5/10/2021 8:57	0	0	0
99	5/10/2021 8:58	0	0	0

100	5/10/2021 8:59	0	0	0
101	5/10/2021 9:00	0	0	0
102	5/10/2021 9:01	0	0	0
103	5/10/2021 9:02	0	0	0
104	5/10/2021 9:03	0	0	0
105	5/10/2021 9:04	0	0	0
106	5/10/2021 9:05	0	0	0
107	5/10/2021 9:06	0	0	0
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308	5/10/2021 12:27	0	0	0
309	5/10/2021 12:28	0	0	0
Peak		0	0	0
Min		0	0	0
Average		0	0	0

\*\*\*\*\*

#### TWA/STEL

Index	Date/Time	PID(ppm)	PID(ppm)
		(TWA)	(STEL)
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3	5/10/2021 7:22	0 ---	
4	5/10/2021 7:23	0 ---	
5	5/10/2021 7:24	0 ---	
6	5/10/2021 7:25	0 ---	
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13	5/10/2021 7:32	0 ---	
14	5/10/2021 7:33	0 ---	
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248	5/10/2021 11:27	0	0
249	5/10/2021 11:28	0	0
250	5/10/2021 11:29	0	0
251	5/10/2021 11:30	0	0
252	5/10/2021 11:31	0	0

253	5/10/2021 11:32	0	0
254	5/10/2021 11:33	0	0
255	5/10/2021 11:34	0	0
256	5/10/2021 11:35	0	0
257	5/10/2021 11:36	0	0
258	5/10/2021 11:37	0	0
259	5/10/2021 11:38	0	0
260	5/10/2021 11:39	0	0
261	5/10/2021 11:40	0	0
262	5/10/2021 11:41	0	0
263	5/10/2021 11:42	0	0
264	5/10/2021 11:43	0	0
265	5/10/2021 11:44	0	0
266	5/10/2021 11:45	0	0
267	5/10/2021 11:46	0	0
268	5/10/2021 11:47	0	0
269	5/10/2021 11:48	0	0
270	5/10/2021 11:49	0	0
271	5/10/2021 11:50	0	0
272	5/10/2021 11:51	0	0
273	5/10/2021 11:52	0	0
274	5/10/2021 11:53	0	0
275	5/10/2021 11:54	0	0
276	5/10/2021 11:55	0	0
277	5/10/2021 11:56	0	0
278	5/10/2021 11:57	0	0
279	5/10/2021 11:58	0	0
280	5/10/2021 11:59	0	0
281	5/10/2021 12:00	0	0
282	5/10/2021 12:01	0	0
283	5/10/2021 12:02	0	0
284	5/10/2021 12:03	0	0
285	5/10/2021 12:04	0	0
286	5/10/2021 12:05	0	0
287	5/10/2021 12:06	0	0
288	5/10/2021 12:07	0	0
289	5/10/2021 12:08	0	0
290	5/10/2021 12:09	0	0
291	5/10/2021 12:10	0	0
292	5/10/2021 12:11	0	0
293	5/10/2021 12:12	0	0
294	5/10/2021 12:13	0	0
295	5/10/2021 12:14	0	0
296	5/10/2021 12:15	0	0
297	5/10/2021 12:16	0	0
298	5/10/2021 12:17	0	0
299	5/10/2021 12:18	0	0

300	5/10/2021 12:19	0	0
301	5/10/2021 12:20	0	0
302	5/10/2021 12:21	0	0
303	5/10/2021 12:22	0	0
304	5/10/2021 12:23	0	0
305	5/10/2021 12:24	0	0
306	5/10/2021 12:25	0	0
307	5/10/2021 12:26	0	0
308	5/10/2021 12:27	0	0
309	5/10/2021 12:28	0	0

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21/05/10 12:40

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## Summary

Unit Name MiniRAE 3000(PGM-7320)

Unit SN 592-917718

Unit Firmware Ver V2.20A

Running Mode Hygiene Mode

Datalog Mode Auto

Diagnostic Mode No

Stop Reason Battery Low

Site ID 12345678

User ID 12345678

Begin 5/10/2021 12:40

End 5/10/2021 12:58

Sample Period(s) 60

Number of Records 17

Sensor PID(ppm)

Sensor SN S023030301T7

Measure Type Avg; Max; Real

Span 100

Span 2 1000

Low Alarm 50

High Alarm 100

Over Alarm 15000

STEL Alarm 25

TWA Alarm 10

Measurement Gas Isobutylene

Calibration Time 5/10/2021 6:21

Peak 0

Min 0

Average 0

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## Datalog

Index	Date/Time	PID(ppm)	PID(ppm)	PID(ppm)
		(Avg)	(Max)	(Real)
1	5/10/2021 12:41	0	0	0
2	5/10/2021 12:42	0	0	0
3	5/10/2021 12:43	0	0	0
4	5/10/2021 12:44	0	0	0
5	5/10/2021 12:45	0	0	0

6	5/10/2021 12:46	0	0	0
7	5/10/2021 12:47	0	0	0
8	5/10/2021 12:48	0	0	0
9	5/10/2021 12:49	0	0	0
10	5/10/2021 12:50	0	0	0
11	5/10/2021 12:51	0	0	0
12	5/10/2021 12:52	0	0	0
13	5/10/2021 12:53	0	0	0
14	5/10/2021 12:54	0	0	0
15	5/10/2021 12:55	0	0	0
16	5/10/2021 12:56	0	0	0
17	5/10/2021 12:57	0	0	0
Peak		0	0	0
Min		0	0	0
Average		0	0	0

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#### TWA/STEL

Index	Date/Time	PID(ppm)	PID(ppm)
		(TWA)	(STEL)
1	5/10/2021 12:41	0 ---	
2	5/10/2021 12:42	0 ---	
3	5/10/2021 12:43	0 ---	
4	5/10/2021 12:44	0 ---	
5	5/10/2021 12:45	0 ---	
6	5/10/2021 12:46	0 ---	
7	5/10/2021 12:47	0 ---	
8	5/10/2021 12:48	0 ---	
9	5/10/2021 12:49	0 ---	
10	5/10/2021 12:50	0 ---	
11	5/10/2021 12:51	0 ---	
12	5/10/2021 12:52	0 ---	
13	5/10/2021 12:53	0 ---	
14	5/10/2021 12:54	0 ---	
15	5/10/2021 12:55	0	0
16	5/10/2021 12:56	0	0
17	5/10/2021 12:57	0	0

# Test 045

Instrument		Data Properties	
Model	DustTrak II	Start Date	05/11/2021
Instrument S/N	8530154515	Start Time	07:25:13
		Stop Date	05/11/2021
		Stop Time	11:39:13
		Total Time	0:04:14:00
		Logging Interval	60 seconds

Statistics		AEROSOL
Avg		0.001 mg/m <sup>3</sup>
Max		0.018 mg/m <sup>3</sup>
Max Date		05/11/2021
Max Time		07:46:13
Min		0.000 mg/m <sup>3</sup>
Min Date		05/11/2021
Min Time		07:37:13
TWA (8 hr)		0.000
TWA Start Date		05/11/2021
TWA Start Time		07:25:13
TWA End Time		11:39:13

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
1	05/11/2021	07:26:13	0.006
2	05/11/2021	07:27:13	0.001
3	05/11/2021	07:28:13	0.002
4	05/11/2021	07:29:13	0.002
5	05/11/2021	07:30:13	0.001
6	05/11/2021	07:31:13	0.002
7	05/11/2021	07:32:13	0.002
8	05/11/2021	07:33:13	0.001
9	05/11/2021	07:34:13	0.004
10	05/11/2021	07:35:13	0.001
11	05/11/2021	07:36:13	0.001
12	05/11/2021	07:37:13	0.000
13	05/11/2021	07:38:13	0.000
14	05/11/2021	07:39:13	0.000
15	05/11/2021	07:40:13	0.000
16	05/11/2021	07:41:13	0.000
17	05/11/2021	07:42:13	0.001
18	05/11/2021	07:43:13	0.000
19	05/11/2021	07:44:13	0.000
20	05/11/2021	07:45:13	0.000
21	05/11/2021	07:46:13	0.018

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
22	05/11/2021	07:47:13	0.000
23	05/11/2021	07:48:13	0.000
24	05/11/2021	07:49:13	0.000
25	05/11/2021	07:50:13	0.000
26	05/11/2021	07:51:13	0.002
27	05/11/2021	07:52:13	0.000
28	05/11/2021	07:53:13	0.000
29	05/11/2021	07:54:13	0.000
30	05/11/2021	07:55:13	0.000
31	05/11/2021	07:56:13	0.000
32	05/11/2021	07:57:13	0.000
33	05/11/2021	07:58:13	0.000
34	05/11/2021	07:59:13	0.000
35	05/11/2021	08:00:13	0.000
36	05/11/2021	08:01:13	0.000
37	05/11/2021	08:02:13	0.001
38	05/11/2021	08:03:13	0.000
39	05/11/2021	08:04:13	0.000
40	05/11/2021	08:05:13	0.000
41	05/11/2021	08:06:13	0.000
42	05/11/2021	08:07:13	0.000
43	05/11/2021	08:08:13	0.000
44	05/11/2021	08:09:13	0.000
45	05/11/2021	08:10:13	0.000
46	05/11/2021	08:11:13	0.001
47	05/11/2021	08:12:13	0.000
48	05/11/2021	08:13:13	0.000
49	05/11/2021	08:14:13	0.000
50	05/11/2021	08:15:13	0.001
51	05/11/2021	08:16:13	0.001
52	05/11/2021	08:17:13	0.001
53	05/11/2021	08:18:13	0.001
54	05/11/2021	08:19:13	0.001
55	05/11/2021	08:20:13	0.001
56	05/11/2021	08:21:13	0.001
57	05/11/2021	08:22:13	0.001
58	05/11/2021	08:23:13	0.001
59	05/11/2021	08:24:13	0.001
60	05/11/2021	08:25:13	0.001
61	05/11/2021	08:26:13	0.001
62	05/11/2021	08:27:13	0.000
63	05/11/2021	08:28:13	0.001
64	05/11/2021	08:29:13	0.000
65	05/11/2021	08:30:13	0.001
66	05/11/2021	08:31:13	0.002
67	05/11/2021	08:32:13	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
68	05/11/2021	08:33:13	0.000
69	05/11/2021	08:34:13	0.001
70	05/11/2021	08:35:13	0.000
71	05/11/2021	08:36:13	0.000
72	05/11/2021	08:37:13	0.000
73	05/11/2021	08:38:13	0.000
74	05/11/2021	08:39:13	0.001
75	05/11/2021	08:40:13	0.000
76	05/11/2021	08:41:13	0.000
77	05/11/2021	08:42:13	0.000
78	05/11/2021	08:43:13	0.000
79	05/11/2021	08:44:13	0.000
80	05/11/2021	08:45:13	0.001
81	05/11/2021	08:46:13	0.001
82	05/11/2021	08:47:13	0.000
83	05/11/2021	08:48:13	0.001
84	05/11/2021	08:49:13	0.002
85	05/11/2021	08:50:13	0.000
86	05/11/2021	08:51:13	0.000
87	05/11/2021	08:52:13	0.000
88	05/11/2021	08:53:13	0.000
89	05/11/2021	08:54:13	0.000
90	05/11/2021	08:55:13	0.000
91	05/11/2021	08:56:13	0.000
92	05/11/2021	08:57:13	0.000
93	05/11/2021	08:58:13	0.000
94	05/11/2021	08:59:13	0.000
95	05/11/2021	09:00:13	0.000
96	05/11/2021	09:01:13	0.000
97	05/11/2021	09:02:13	0.000
98	05/11/2021	09:03:13	0.001
99	05/11/2021	09:04:13	0.001
100	05/11/2021	09:05:13	0.001
101	05/11/2021	09:06:13	0.000
102	05/11/2021	09:07:13	0.000
103	05/11/2021	09:08:13	0.000
104	05/11/2021	09:09:13	0.000
105	05/11/2021	09:10:13	0.000
106	05/11/2021	09:11:13	0.000
107	05/11/2021	09:12:13	0.000
108	05/11/2021	09:13:13	0.000
109	05/11/2021	09:14:13	0.001
110	05/11/2021	09:15:13	0.000
111	05/11/2021	09:16:13	0.000
112	05/11/2021	09:17:13	0.000
113	05/11/2021	09:18:13	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
114	05/11/2021	09:19:13	0.000
115	05/11/2021	09:20:13	0.001
116	05/11/2021	09:21:13	0.000
117	05/11/2021	09:22:13	0.000
118	05/11/2021	09:23:13	0.000
119	05/11/2021	09:24:13	0.000
120	05/11/2021	09:25:13	0.001
121	05/11/2021	09:26:13	0.000
122	05/11/2021	09:27:13	0.000
123	05/11/2021	09:28:13	0.000
124	05/11/2021	09:29:13	0.001
125	05/11/2021	09:30:13	0.002
126	05/11/2021	09:31:13	0.000
127	05/11/2021	09:32:13	0.000
128	05/11/2021	09:33:13	0.000
129	05/11/2021	09:34:13	0.001
130	05/11/2021	09:35:13	0.000
131	05/11/2021	09:36:13	0.000
132	05/11/2021	09:37:13	0.001
133	05/11/2021	09:38:13	0.000
134	05/11/2021	09:39:13	0.000
135	05/11/2021	09:40:13	0.000
136	05/11/2021	09:41:13	0.000
137	05/11/2021	09:42:13	0.001
138	05/11/2021	09:43:13	0.000
139	05/11/2021	09:44:13	0.000
140	05/11/2021	09:45:13	0.000
141	05/11/2021	09:46:13	0.000
142	05/11/2021	09:47:13	0.000
143	05/11/2021	09:48:13	0.001
144	05/11/2021	09:49:13	0.000
145	05/11/2021	09:50:13	0.000
146	05/11/2021	09:51:13	0.000
147	05/11/2021	09:52:13	0.001
148	05/11/2021	09:53:13	0.000
149	05/11/2021	09:54:13	0.000
150	05/11/2021	09:55:13	0.001
151	05/11/2021	09:56:13	0.000
152	05/11/2021	09:57:13	0.004
153	05/11/2021	09:58:13	0.001
154	05/11/2021	09:59:13	0.000
155	05/11/2021	10:00:13	0.000
156	05/11/2021	10:01:13	0.001
157	05/11/2021	10:02:13	0.000
158	05/11/2021	10:03:13	0.000
159	05/11/2021	10:04:13	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
160	05/11/2021	10:05:13	0.006
161	05/11/2021	10:06:13	0.001
162	05/11/2021	10:07:13	0.000
163	05/11/2021	10:08:13	0.001
164	05/11/2021	10:09:13	0.003
165	05/11/2021	10:10:13	0.000
166	05/11/2021	10:11:13	0.001
167	05/11/2021	10:12:13	0.000
168	05/11/2021	10:13:13	0.000
169	05/11/2021	10:14:13	0.000
170	05/11/2021	10:15:13	0.000
171	05/11/2021	10:16:13	0.000
172	05/11/2021	10:17:13	0.000
173	05/11/2021	10:18:13	0.000
174	05/11/2021	10:19:13	0.000
175	05/11/2021	10:20:13	0.001
176	05/11/2021	10:21:13	0.001
177	05/11/2021	10:22:13	0.001
178	05/11/2021	10:23:13	0.000
179	05/11/2021	10:24:13	0.000
180	05/11/2021	10:25:13	0.000
181	05/11/2021	10:26:13	0.000
182	05/11/2021	10:27:13	0.001
183	05/11/2021	10:28:13	0.000
184	05/11/2021	10:29:13	0.000
185	05/11/2021	10:30:13	0.000
186	05/11/2021	10:31:13	0.000
187	05/11/2021	10:32:13	0.000
188	05/11/2021	10:33:13	0.000
189	05/11/2021	10:34:13	0.000
190	05/11/2021	10:35:13	0.000
191	05/11/2021	10:36:13	0.000
192	05/11/2021	10:37:13	0.000
193	05/11/2021	10:38:13	0.000
194	05/11/2021	10:39:13	0.001
195	05/11/2021	10:40:13	0.000
196	05/11/2021	10:41:13	0.000
197	05/11/2021	10:42:13	0.003
198	05/11/2021	10:43:13	0.001
199	05/11/2021	10:44:13	0.000
200	05/11/2021	10:45:13	0.000
201	05/11/2021	10:46:13	0.001
202	05/11/2021	10:47:13	0.000
203	05/11/2021	10:48:13	0.008
204	05/11/2021	10:49:13	0.000
205	05/11/2021	10:50:13	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
206	05/11/2021	10:51:13	0.000
207	05/11/2021	10:52:13	0.000
208	05/11/2021	10:53:13	0.000
209	05/11/2021	10:54:13	0.000
210	05/11/2021	10:55:13	0.000
211	05/11/2021	10:56:13	0.001
212	05/11/2021	10:57:13	0.000
213	05/11/2021	10:58:13	0.000
214	05/11/2021	10:59:13	0.000
215	05/11/2021	11:00:13	0.000
216	05/11/2021	11:01:13	0.000
217	05/11/2021	11:02:13	0.002
218	05/11/2021	11:03:13	0.000
219	05/11/2021	11:04:13	0.000
220	05/11/2021	11:05:13	0.000
221	05/11/2021	11:06:13	0.000
222	05/11/2021	11:07:13	0.000
223	05/11/2021	11:08:13	0.000
224	05/11/2021	11:09:13	0.016
225	05/11/2021	11:10:13	0.000
226	05/11/2021	11:11:13	0.001
227	05/11/2021	11:12:13	0.003
228	05/11/2021	11:13:13	0.000
229	05/11/2021	11:14:13	0.000
230	05/11/2021	11:15:13	0.000
231	05/11/2021	11:16:13	0.000
232	05/11/2021	11:17:13	0.000
233	05/11/2021	11:18:13	0.000
234	05/11/2021	11:19:13	0.000
235	05/11/2021	11:20:13	0.000
236	05/11/2021	11:21:13	0.001
237	05/11/2021	11:22:13	0.000
238	05/11/2021	11:23:13	0.001
239	05/11/2021	11:24:13	0.000
240	05/11/2021	11:25:13	0.002
241	05/11/2021	11:26:13	0.001
242	05/11/2021	11:27:13	0.000
243	05/11/2021	11:28:13	0.000
244	05/11/2021	11:29:13	0.001
245	05/11/2021	11:30:13	0.002
246	05/11/2021	11:31:13	0.000
247	05/11/2021	11:32:13	0.014
248	05/11/2021	11:33:13	0.002
249	05/11/2021	11:34:13	0.013
250	05/11/2021	11:35:13	0.002
251	05/11/2021	11:36:13	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
252	05/11/2021	11:37:13	0.000
253	05/11/2021	11:38:13	0.000
254	05/11/2021	11:39:13	0.000

# Test 046

Instrument		Data Properties	
Model	DustTrak II	Start Date	05/11/2021
Instrument S/N	8530154515	Start Time	11:49:45
		Stop Date	05/11/2021
		Stop Time	15:16:45
		Total Time	0:03:27:00
		Logging Interval	60 seconds

Statistics		AEROSOL
Avg		0.001 mg/m <sup>3</sup>
Max		0.011 mg/m <sup>3</sup>
Max Date		05/11/2021
Max Time		13:46:45
Min		0.000 mg/m <sup>3</sup>
Min Date		05/11/2021
Min Time		11:54:45
TWA (8 hr)		0.001
TWA Start Date		05/11/2021
TWA Start Time		11:49:45
TWA End Time		15:16:45

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
1	05/11/2021	11:50:45	0.003
2	05/11/2021	11:51:45	0.003
3	05/11/2021	11:52:45	0.006
4	05/11/2021	11:53:45	0.009
5	05/11/2021	11:54:45	0.000
6	05/11/2021	11:55:45	0.001
7	05/11/2021	11:56:45	0.000
8	05/11/2021	11:57:45	0.003
9	05/11/2021	11:58:45	0.000
10	05/11/2021	11:59:45	0.001
11	05/11/2021	12:00:45	0.000
12	05/11/2021	12:01:45	0.002
13	05/11/2021	12:02:45	0.000
14	05/11/2021	12:03:45	0.001
15	05/11/2021	12:04:45	0.002
16	05/11/2021	12:05:45	0.001
17	05/11/2021	12:06:45	0.001
18	05/11/2021	12:07:45	0.001
19	05/11/2021	12:08:45	0.000
20	05/11/2021	12:09:45	0.000
21	05/11/2021	12:10:45	0.000

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
22	05/11/2021	12:11:45	0.002
23	05/11/2021	12:12:45	0.000
24	05/11/2021	12:13:45	0.004
25	05/11/2021	12:14:45	0.001
26	05/11/2021	12:15:45	0.000
27	05/11/2021	12:16:45	0.001
28	05/11/2021	12:17:45	0.000
29	05/11/2021	12:18:45	0.000
30	05/11/2021	12:19:45	0.000
31	05/11/2021	12:20:45	0.001
32	05/11/2021	12:21:45	0.003
33	05/11/2021	12:22:45	0.000
34	05/11/2021	12:23:45	0.000
35	05/11/2021	12:24:45	0.000
36	05/11/2021	12:25:45	0.000
37	05/11/2021	12:26:45	0.001
38	05/11/2021	12:27:45	0.001
39	05/11/2021	12:28:45	0.000
40	05/11/2021	12:29:45	0.000
41	05/11/2021	12:30:45	0.002
42	05/11/2021	12:31:45	0.001
43	05/11/2021	12:32:45	0.002
44	05/11/2021	12:33:45	0.001
45	05/11/2021	12:34:45	0.003
46	05/11/2021	12:35:45	0.000
47	05/11/2021	12:36:45	0.001
48	05/11/2021	12:37:45	0.002
49	05/11/2021	12:38:45	0.001
50	05/11/2021	12:39:45	0.002
51	05/11/2021	12:40:45	0.001
52	05/11/2021	12:41:45	0.000
53	05/11/2021	12:42:45	0.002
54	05/11/2021	12:43:45	0.003
55	05/11/2021	12:44:45	0.000
56	05/11/2021	12:45:45	0.001
57	05/11/2021	12:46:45	0.001
58	05/11/2021	12:47:45	0.000
59	05/11/2021	12:48:45	0.000
60	05/11/2021	12:49:45	0.001
61	05/11/2021	12:50:45	0.001
62	05/11/2021	12:51:45	0.002
63	05/11/2021	12:52:45	0.001
64	05/11/2021	12:53:45	0.001
65	05/11/2021	12:54:45	0.001
66	05/11/2021	12:55:45	0.000
67	05/11/2021	12:56:45	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
68	05/11/2021	12:57:45	0.001
69	05/11/2021	12:58:45	0.002
70	05/11/2021	12:59:45	0.001
71	05/11/2021	13:00:45	0.000
72	05/11/2021	13:01:45	0.001
73	05/11/2021	13:02:45	0.001
74	05/11/2021	13:03:45	0.000
75	05/11/2021	13:04:45	0.001
76	05/11/2021	13:05:45	0.001
77	05/11/2021	13:06:45	0.003
78	05/11/2021	13:07:45	0.001
79	05/11/2021	13:08:45	0.000
80	05/11/2021	13:09:45	0.002
81	05/11/2021	13:10:45	0.000
82	05/11/2021	13:11:45	0.001
83	05/11/2021	13:12:45	0.001
84	05/11/2021	13:13:45	0.001
85	05/11/2021	13:14:45	0.001
86	05/11/2021	13:15:45	0.002
87	05/11/2021	13:16:45	0.004
88	05/11/2021	13:17:45	0.000
89	05/11/2021	13:18:45	0.001
90	05/11/2021	13:19:45	0.002
91	05/11/2021	13:20:45	0.001
92	05/11/2021	13:21:45	0.002
93	05/11/2021	13:22:45	0.003
94	05/11/2021	13:23:45	0.002
95	05/11/2021	13:24:45	0.000
96	05/11/2021	13:25:45	0.001
97	05/11/2021	13:26:45	0.002
98	05/11/2021	13:27:45	0.001
99	05/11/2021	13:28:45	0.001
100	05/11/2021	13:29:45	0.001
101	05/11/2021	13:30:45	0.000
102	05/11/2021	13:31:45	0.000
103	05/11/2021	13:32:45	0.000
104	05/11/2021	13:33:45	0.002
105	05/11/2021	13:34:45	0.000
106	05/11/2021	13:35:45	0.000
107	05/11/2021	13:36:45	0.002
108	05/11/2021	13:37:45	0.000
109	05/11/2021	13:38:45	0.000
110	05/11/2021	13:39:45	0.000
111	05/11/2021	13:40:45	0.001
112	05/11/2021	13:41:45	0.002
113	05/11/2021	13:42:45	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
114	05/11/2021	13:43:45	0.000
115	05/11/2021	13:44:45	0.002
116	05/11/2021	13:45:45	0.001
117	05/11/2021	13:46:45	0.011
118	05/11/2021	13:47:45	0.001
119	05/11/2021	13:48:45	0.001
120	05/11/2021	13:49:45	0.001
121	05/11/2021	13:50:45	0.000
122	05/11/2021	13:51:45	0.002
123	05/11/2021	13:52:45	0.001
124	05/11/2021	13:53:45	0.000
125	05/11/2021	13:54:45	0.000
126	05/11/2021	13:55:45	0.000
127	05/11/2021	13:56:45	0.000
128	05/11/2021	13:57:45	0.000
129	05/11/2021	13:58:45	0.010
130	05/11/2021	13:59:45	0.003
131	05/11/2021	14:00:45	0.001
132	05/11/2021	14:01:45	0.000
133	05/11/2021	14:02:45	0.000
134	05/11/2021	14:03:45	0.000
135	05/11/2021	14:04:45	0.001
136	05/11/2021	14:05:45	0.001
137	05/11/2021	14:06:45	0.001
138	05/11/2021	14:07:45	0.001
139	05/11/2021	14:08:45	0.001
140	05/11/2021	14:09:45	0.001
141	05/11/2021	14:10:45	0.001
142	05/11/2021	14:11:45	0.001
143	05/11/2021	14:12:45	0.001
144	05/11/2021	14:13:45	0.002
145	05/11/2021	14:14:45	0.001
146	05/11/2021	14:15:45	0.002
147	05/11/2021	14:16:45	0.001
148	05/11/2021	14:17:45	0.000
149	05/11/2021	14:18:45	0.002
150	05/11/2021	14:19:45	0.000
151	05/11/2021	14:20:45	0.001
152	05/11/2021	14:21:45	0.000
153	05/11/2021	14:22:45	0.001
154	05/11/2021	14:23:45	0.000
155	05/11/2021	14:24:45	0.000
156	05/11/2021	14:25:45	0.001
157	05/11/2021	14:26:45	0.001
158	05/11/2021	14:27:45	0.001
159	05/11/2021	14:28:45	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
160	05/11/2021	14:29:45	0.003
161	05/11/2021	14:30:45	0.001
162	05/11/2021	14:31:45	0.003
163	05/11/2021	14:32:45	0.002
164	05/11/2021	14:33:45	0.009
165	05/11/2021	14:34:45	0.002
166	05/11/2021	14:35:45	0.002
167	05/11/2021	14:36:45	0.004
168	05/11/2021	14:37:45	0.004
169	05/11/2021	14:38:45	0.001
170	05/11/2021	14:39:45	0.001
171	05/11/2021	14:40:45	0.003
172	05/11/2021	14:41:45	0.002
173	05/11/2021	14:42:45	0.002
174	05/11/2021	14:43:45	0.002
175	05/11/2021	14:44:45	0.002
176	05/11/2021	14:45:45	0.001
177	05/11/2021	14:46:45	0.001
178	05/11/2021	14:47:45	0.001
179	05/11/2021	14:48:45	0.002
180	05/11/2021	14:49:45	0.001
181	05/11/2021	14:50:45	0.002
182	05/11/2021	14:51:45	0.001
183	05/11/2021	14:52:45	0.001
184	05/11/2021	14:53:45	0.001
185	05/11/2021	14:54:45	0.001
186	05/11/2021	14:55:45	0.002
187	05/11/2021	14:56:45	0.001
188	05/11/2021	14:57:45	0.001
189	05/11/2021	14:58:45	0.001
190	05/11/2021	14:59:45	0.001
191	05/11/2021	15:00:45	0.002
192	05/11/2021	15:01:45	0.001
193	05/11/2021	15:02:45	0.005
194	05/11/2021	15:03:45	0.001
195	05/11/2021	15:04:45	0.004
196	05/11/2021	15:05:45	0.002
197	05/11/2021	15:06:45	0.002
198	05/11/2021	15:07:45	0.001
199	05/11/2021	15:08:45	0.001
200	05/11/2021	15:09:45	0.001
201	05/11/2021	15:10:45	0.003
202	05/11/2021	15:11:45	0.002
203	05/11/2021	15:12:45	0.001
204	05/11/2021	15:13:45	0.002
205	05/11/2021	15:14:45	0.001

Test Data			
Data Point	Date	Time	AEROSOL mg/m <sup>3</sup>
206	05/11/2021	15:15:45	0.003
207	05/11/2021	15:16:45	0.001

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21/05/11 06:38

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## Summary

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Unit Name MiniRAE 3000(PGM-7320)

Unit SN 592-917718

Unit Firmw V2.20A

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Running M Hygiene Mode

Datalog Mc Auto

Diagnostic No

Stop Reaso Power Down

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Site ID 12345678

User ID 12345678

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Begin 5/11/2021 6:38

End 5/11/2021 10:53

Sample Per 60

Number of 255

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Sensor PID(ppm)

Sensor SN S023030301T7

Measure T\Avg; Max; Real

Span 100

Span 2 1000

Low Alarm 50

High Alarm 100

Over Alarm 15000

STEL Alarm 25

TWA Alarm 10

Measurem Isobutylene

Calibration 5/11/2021 6:08

Peak 0

Min 0

Average 0

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## Datalog

Index	Date/Time	PID(ppm)	PID(ppm)	PID(ppm)
		(Avg)	(Max)	(Real)
1	5/11/2021 6:39	0	0	0
2	5/11/2021 6:40	0	0	0
3	5/11/2021 6:41	0	0	0
4	5/11/2021 6:42	0	0	0
5	5/11/2021 6:43	0	0	0

6	5/11/2021 6:44	0	0	0
7	5/11/2021 6:45	0	0	0
8	5/11/2021 6:46	0	0	0
9	5/11/2021 6:47	0	0	0
10	5/11/2021 6:48	0	0	0
11	5/11/2021 6:49	0	0	0
12	5/11/2021 6:50	0	0	0
13	5/11/2021 6:51	0	0	0
14	5/11/2021 6:52	0	0	0
15	5/11/2021 6:53	0	0	0
16	5/11/2021 6:54	0	0	0
17	5/11/2021 6:55	0	0	0
18	5/11/2021 6:56	0	0	0
19	5/11/2021 6:57	0	0	0
20	5/11/2021 6:58	0	0	0
21	5/11/2021 6:59	0	0	0
22	5/11/2021 7:00	0	0	0
23	5/11/2021 7:01	0	0	0
24	5/11/2021 7:02	0	0	0
25	5/11/2021 7:03	0	0	0
26	5/11/2021 7:04	0	0	0
27	5/11/2021 7:05	0	0	0
28	5/11/2021 7:06	0	0	0
29	5/11/2021 7:07	0	0	0
30	5/11/2021 7:08	0	0	0
31	5/11/2021 7:09	0	0	0
32	5/11/2021 7:10	0	0	0
33	5/11/2021 7:11	0	0	0
34	5/11/2021 7:12	0	0	0
35	5/11/2021 7:13	0	0	0
36	5/11/2021 7:14	0	0	0
37	5/11/2021 7:15	0	0	0
38	5/11/2021 7:16	0	0	0
39	5/11/2021 7:17	0	0	0
40	5/11/2021 7:18	0	0	0
41	5/11/2021 7:19	0	0	0
42	5/11/2021 7:20	0	0	0
43	5/11/2021 7:21	0	0	0
44	5/11/2021 7:22	0	0	0
45	5/11/2021 7:23	0	0	0
46	5/11/2021 7:24	0	0	0
47	5/11/2021 7:25	0	0	0
48	5/11/2021 7:26	0	0	0
49	5/11/2021 7:27	0	0	0
50	5/11/2021 7:28	0	0	0
51	5/11/2021 7:29	0	0	0
52	5/11/2021 7:30	0	0	0

53	5/11/2021 7:31	0	0	0
54	5/11/2021 7:32	0	0	0
55	5/11/2021 7:33	0	0	0
56	5/11/2021 7:34	0	0	0
57	5/11/2021 7:35	0	0	0
58	5/11/2021 7:36	0	0	0
59	5/11/2021 7:37	0	0	0
60	5/11/2021 7:38	0	0	0
61	5/11/2021 7:39	0	0	0
62	5/11/2021 7:40	0	0	0
63	5/11/2021 7:41	0	0	0
64	5/11/2021 7:42	0	0	0
65	5/11/2021 7:43	0	0	0
66	5/11/2021 7:44	0	0	0
67	5/11/2021 7:45	0	0	0
68	5/11/2021 7:46	0	0	0
69	5/11/2021 7:47	0	0	0
70	5/11/2021 7:48	0	0	0
71	5/11/2021 7:49	0	0	0
72	5/11/2021 7:50	0	0	0
73	5/11/2021 7:51	0	0	0
74	5/11/2021 7:52	0	0	0
75	5/11/2021 7:53	0	0	0
76	5/11/2021 7:54	0	0	0
77	5/11/2021 7:55	0	0	0
78	5/11/2021 7:56	0	0	0
79	5/11/2021 7:57	0	0	0
80	5/11/2021 7:58	0	0	0
81	5/11/2021 7:59	0	0	0
82	5/11/2021 8:00	0	0	0
83	5/11/2021 8:01	0	0	0
84	5/11/2021 8:02	0	0	0
85	5/11/2021 8:03	0	0	0
86	5/11/2021 8:04	0	0	0
87	5/11/2021 8:05	0	0	0
88	5/11/2021 8:06	0	0	0
89	5/11/2021 8:07	0	0	0
90	5/11/2021 8:08	0	0	0
91	5/11/2021 8:09	0	0	0
92	5/11/2021 8:10	0	0	0
93	5/11/2021 8:11	0	0	0
94	5/11/2021 8:12	0	0	0
95	5/11/2021 8:13	0	0	0
96	5/11/2021 8:14	0	0	0
97	5/11/2021 8:15	0	0	0
98	5/11/2021 8:16	0	0	0
99	5/11/2021 8:17	0	0	0

100	5/11/2021 8:18	0	0	0
101	5/11/2021 8:19	0	0	0
102	5/11/2021 8:20	0	0	0
103	5/11/2021 8:21	0	0	0
104	5/11/2021 8:22	0	0	0
105	5/11/2021 8:23	0	0	0
106	5/11/2021 8:24	0	0	0
107	5/11/2021 8:25	0	0	0
108	5/11/2021 8:26	0	0	0
109	5/11/2021 8:27	0	0	0
110	5/11/2021 8:28	0	0	0
111	5/11/2021 8:29	0	0	0
112	5/11/2021 8:30	0	0	0
113	5/11/2021 8:31	0	0	0
114	5/11/2021 8:32	0	0	0
115	5/11/2021 8:33	0	0	0
116	5/11/2021 8:34	0	0	0
117	5/11/2021 8:35	0	0	0
118	5/11/2021 8:36	0	0	0
119	5/11/2021 8:37	0	0	0
120	5/11/2021 8:38	0	0	0
121	5/11/2021 8:39	0	0	0
122	5/11/2021 8:40	0	0	0
123	5/11/2021 8:41	0	0	0
124	5/11/2021 8:42	0	0	0
125	5/11/2021 8:43	0	0	0
126	5/11/2021 8:44	0	0	0
127	5/11/2021 8:45	0	0	0
128	5/11/2021 8:46	0	0	0
129	5/11/2021 8:47	0	0	0
130	5/11/2021 8:48	0	0	0
131	5/11/2021 8:49	0	0	0
132	5/11/2021 8:50	0	0	0
133	5/11/2021 8:51	0	0	0
134	5/11/2021 8:52	0	0	0
135	5/11/2021 8:53	0	0	0
136	5/11/2021 8:54	0	0	0
137	5/11/2021 8:55	0	0	0
138	5/11/2021 8:56	0	0	0
139	5/11/2021 8:57	0	0	0
140	5/11/2021 8:58	0	0	0
141	5/11/2021 8:59	0	0	0
142	5/11/2021 9:00	0	0	0
143	5/11/2021 9:01	0	0	0
144	5/11/2021 9:02	0	0	0
145	5/11/2021 9:03	0	0	0
146	5/11/2021 9:04	0	0	0

147	5/11/2021 9:05	0	0	0
148	5/11/2021 9:06	0	0	0
149	5/11/2021 9:07	0	0	0
150	5/11/2021 9:08	0	0	0
151	5/11/2021 9:09	0	0	0
152	5/11/2021 9:10	0	0	0
153	5/11/2021 9:11	0	0	0
154	5/11/2021 9:12	0	0	0
155	5/11/2021 9:13	0	0	0
156	5/11/2021 9:14	0	0	0
157	5/11/2021 9:15	0	0	0
158	5/11/2021 9:16	0	0	0
159	5/11/2021 9:17	0	0	0
160	5/11/2021 9:18	0	0	0
161	5/11/2021 9:19	0	0	0
162	5/11/2021 9:20	0	0	0
163	5/11/2021 9:21	0	0	0
164	5/11/2021 9:22	0	0	0
165	5/11/2021 9:23	0	0	0
166	5/11/2021 9:24	0	0	0
167	5/11/2021 9:25	0	0	0
168	5/11/2021 9:26	0	0	0
169	5/11/2021 9:27	0	0	0
170	5/11/2021 9:28	0	0	0
171	5/11/2021 9:29	0	0	0
172	5/11/2021 9:30	0	0	0
173	5/11/2021 9:31	0	0	0
174	5/11/2021 9:32	0	0	0
175	5/11/2021 9:33	0	0	0
176	5/11/2021 9:34	0	0	0
177	5/11/2021 9:35	0	0	0
178	5/11/2021 9:36	0	0	0
179	5/11/2021 9:37	0	0	0
180	5/11/2021 9:38	0	0	0
181	5/11/2021 9:39	0	0	0
182	5/11/2021 9:40	0	0	0
183	5/11/2021 9:41	0	0	0
184	5/11/2021 9:42	0	0	0
185	5/11/2021 9:43	0	0	0
186	5/11/2021 9:44	0	0	0
187	5/11/2021 9:45	0	0	0
188	5/11/2021 9:46	0	0	0
189	5/11/2021 9:47	0	0	0
190	5/11/2021 9:48	0	0	0
191	5/11/2021 9:49	0	0	0
192	5/11/2021 9:50	0	0	0
193	5/11/2021 9:51	0	0	0

194	5/11/2021 9:52	0	0	0
195	5/11/2021 9:53	0	0	0
196	5/11/2021 9:54	0	0	0
197	5/11/2021 9:55	0	0	0
198	5/11/2021 9:56	0	0	0
199	5/11/2021 9:57	0	0	0
200	5/11/2021 9:58	0	0	0
201	5/11/2021 9:59	0	0	0
202	5/11/2021 10:00	0	0	0
203	5/11/2021 10:01	0	0	0
204	5/11/2021 10:02	0	0	0
205	5/11/2021 10:03	0	0	0
206	5/11/2021 10:04	0	0	0
207	5/11/2021 10:05	0	0	0
208	5/11/2021 10:06	0	0	0
209	5/11/2021 10:07	0	0	0
210	5/11/2021 10:08	0	0	0
211	5/11/2021 10:09	0	0	0
212	5/11/2021 10:10	0	0	0
213	5/11/2021 10:11	0	0	0
214	5/11/2021 10:12	0	0	0
215	5/11/2021 10:13	0	0	0
216	5/11/2021 10:14	0	0	0
217	5/11/2021 10:15	0	0	0
218	5/11/2021 10:16	0	0	0
219	5/11/2021 10:17	0	0	0
220	5/11/2021 10:18	0	0	0
221	5/11/2021 10:19	0	0	0
222	5/11/2021 10:20	0	0	0
223	5/11/2021 10:21	0	0	0
224	5/11/2021 10:22	0	0	0
225	5/11/2021 10:23	0	0	0
226	5/11/2021 10:24	0	0	0
227	5/11/2021 10:25	0	0	0
228	5/11/2021 10:26	0	0	0
229	5/11/2021 10:27	0	0	0
230	5/11/2021 10:28	0	0	0
231	5/11/2021 10:29	0	0	0
232	5/11/2021 10:30	0	0	0
233	5/11/2021 10:31	0	0	0
234	5/11/2021 10:32	0	0	0
235	5/11/2021 10:33	0	0	0
236	5/11/2021 10:34	0	0	0
237	5/11/2021 10:35	0	0	0
238	5/11/2021 10:36	0	0	0
239	5/11/2021 10:37	0	0	0
240	5/11/2021 10:38	0	0	0

241	5/11/2021 10:39	0	0	0
242	5/11/2021 10:40	0	0	0
243	5/11/2021 10:41	0	0	0
244	5/11/2021 10:42	0	0	0
245	5/11/2021 10:43	0	0	0
246	5/11/2021 10:44	0	0	0
247	5/11/2021 10:45	0	0	0
248	5/11/2021 10:46	0	0	0
249	5/11/2021 10:47	0	0	0
250	5/11/2021 10:48	0	0	0
251	5/11/2021 10:49	0	0	0
252	5/11/2021 10:50	0	0	0
253	5/11/2021 10:51	0	0	0
254	5/11/2021 10:52	0	0	0
255	5/11/2021 10:53	0	0	0
Peak		0	0	0
Min		0	0	0
Average		0	0	0

\*\*\*\*\*

#### TWA/STEL

Index	Date/Time	PID(ppm)	PID(ppm)
		(TWA)	(STEL)
1	5/11/2021 6:39	0 ---	
2	5/11/2021 6:40	0 ---	
3	5/11/2021 6:41	0 ---	
4	5/11/2021 6:42	0 ---	
5	5/11/2021 6:43	0 ---	
6	5/11/2021 6:44	0 ---	
7	5/11/2021 6:45	0 ---	
8	5/11/2021 6:46	0 ---	
9	5/11/2021 6:47	0 ---	
10	5/11/2021 6:48	0 ---	
11	5/11/2021 6:49	0 ---	
12	5/11/2021 6:50	0 ---	
13	5/11/2021 6:51	0 ---	
14	5/11/2021 6:52	0 ---	
15	5/11/2021 6:53	0	0
16	5/11/2021 6:54	0	0
17	5/11/2021 6:55	0	0
18	5/11/2021 6:56	0	0
19	5/11/2021 6:57	0	0
20	5/11/2021 6:58	0	0
21	5/11/2021 6:59	0	0
22	5/11/2021 7:00	0	0
23	5/11/2021 7:01	0	0
24	5/11/2021 7:02	0	0

25	5/11/2021 7:03	0	0
26	5/11/2021 7:04	0	0
27	5/11/2021 7:05	0	0
28	5/11/2021 7:06	0	0
29	5/11/2021 7:07	0	0
30	5/11/2021 7:08	0	0
31	5/11/2021 7:09	0	0
32	5/11/2021 7:10	0	0
33	5/11/2021 7:11	0	0
34	5/11/2021 7:12	0	0
35	5/11/2021 7:13	0	0
36	5/11/2021 7:14	0	0
37	5/11/2021 7:15	0	0
38	5/11/2021 7:16	0	0
39	5/11/2021 7:17	0	0
40	5/11/2021 7:18	0	0
41	5/11/2021 7:19	0	0
42	5/11/2021 7:20	0	0
43	5/11/2021 7:21	0	0
44	5/11/2021 7:22	0	0
45	5/11/2021 7:23	0	0
46	5/11/2021 7:24	0	0
47	5/11/2021 7:25	0	0
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53	5/11/2021 7:31	0	0
54	5/11/2021 7:32	0	0
55	5/11/2021 7:33	0	0
56	5/11/2021 7:34	0	0
57	5/11/2021 7:35	0	0
58	5/11/2021 7:36	0	0
59	5/11/2021 7:37	0	0
60	5/11/2021 7:38	0	0
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62	5/11/2021 7:40	0	0
63	5/11/2021 7:41	0	0
64	5/11/2021 7:42	0	0
65	5/11/2021 7:43	0	0
66	5/11/2021 7:44	0	0
67	5/11/2021 7:45	0	0
68	5/11/2021 7:46	0	0
69	5/11/2021 7:47	0	0
70	5/11/2021 7:48	0	0
71	5/11/2021 7:49	0	0

72	5/11/2021 7:50	0	0
73	5/11/2021 7:51	0	0
74	5/11/2021 7:52	0	0
75	5/11/2021 7:53	0	0
76	5/11/2021 7:54	0	0
77	5/11/2021 7:55	0	0
78	5/11/2021 7:56	0	0
79	5/11/2021 7:57	0	0
80	5/11/2021 7:58	0	0
81	5/11/2021 7:59	0	0
82	5/11/2021 8:00	0	0
83	5/11/2021 8:01	0	0
84	5/11/2021 8:02	0	0
85	5/11/2021 8:03	0	0
86	5/11/2021 8:04	0	0
87	5/11/2021 8:05	0	0
88	5/11/2021 8:06	0	0
89	5/11/2021 8:07	0	0
90	5/11/2021 8:08	0	0
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114	5/11/2021 8:32	0	0
115	5/11/2021 8:33	0	0
116	5/11/2021 8:34	0	0
117	5/11/2021 8:35	0	0
118	5/11/2021 8:36	0	0

119	5/11/2021 8:37	0	0
120	5/11/2021 8:38	0	0
121	5/11/2021 8:39	0	0
122	5/11/2021 8:40	0	0
123	5/11/2021 8:41	0	0
124	5/11/2021 8:42	0	0
125	5/11/2021 8:43	0	0
126	5/11/2021 8:44	0	0
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141	5/11/2021 8:59	0	0
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143	5/11/2021 9:01	0	0
144	5/11/2021 9:02	0	0
145	5/11/2021 9:03	0	0
146	5/11/2021 9:04	0	0
147	5/11/2021 9:05	0	0
148	5/11/2021 9:06	0	0
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155	5/11/2021 9:13	0	0
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158	5/11/2021 9:16	0	0
159	5/11/2021 9:17	0	0
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161	5/11/2021 9:19	0	0
162	5/11/2021 9:20	0	0
163	5/11/2021 9:21	0	0
164	5/11/2021 9:22	0	0
165	5/11/2021 9:23	0	0

166	5/11/2021 9:24	0	0
167	5/11/2021 9:25	0	0
168	5/11/2021 9:26	0	0
169	5/11/2021 9:27	0	0
170	5/11/2021 9:28	0	0
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172	5/11/2021 9:30	0	0
173	5/11/2021 9:31	0	0
174	5/11/2021 9:32	0	0
175	5/11/2021 9:33	0	0
176	5/11/2021 9:34	0	0
177	5/11/2021 9:35	0	0
178	5/11/2021 9:36	0	0
179	5/11/2021 9:37	0	0
180	5/11/2021 9:38	0	0
181	5/11/2021 9:39	0	0
182	5/11/2021 9:40	0	0
183	5/11/2021 9:41	0	0
184	5/11/2021 9:42	0	0
185	5/11/2021 9:43	0	0
186	5/11/2021 9:44	0	0
187	5/11/2021 9:45	0	0
188	5/11/2021 9:46	0	0
189	5/11/2021 9:47	0	0
190	5/11/2021 9:48	0	0
191	5/11/2021 9:49	0	0
192	5/11/2021 9:50	0	0
193	5/11/2021 9:51	0	0
194	5/11/2021 9:52	0	0
195	5/11/2021 9:53	0	0
196	5/11/2021 9:54	0	0
197	5/11/2021 9:55	0	0
198	5/11/2021 9:56	0	0
199	5/11/2021 9:57	0	0
200	5/11/2021 9:58	0	0
201	5/11/2021 9:59	0	0
202	5/11/2021 10:00	0	0
203	5/11/2021 10:01	0	0
204	5/11/2021 10:02	0	0
205	5/11/2021 10:03	0	0
206	5/11/2021 10:04	0	0
207	5/11/2021 10:05	0	0
208	5/11/2021 10:06	0	0
209	5/11/2021 10:07	0	0
210	5/11/2021 10:08	0	0
211	5/11/2021 10:09	0	0
212	5/11/2021 10:10	0	0

213	5/11/2021 10:11	0	0
214	5/11/2021 10:12	0	0
215	5/11/2021 10:13	0	0
216	5/11/2021 10:14	0	0
217	5/11/2021 10:15	0	0
218	5/11/2021 10:16	0	0
219	5/11/2021 10:17	0	0
220	5/11/2021 10:18	0	0
221	5/11/2021 10:19	0	0
222	5/11/2021 10:20	0	0
223	5/11/2021 10:21	0	0
224	5/11/2021 10:22	0	0
225	5/11/2021 10:23	0	0
226	5/11/2021 10:24	0	0
227	5/11/2021 10:25	0	0
228	5/11/2021 10:26	0	0
229	5/11/2021 10:27	0	0
230	5/11/2021 10:28	0	0
231	5/11/2021 10:29	0	0
232	5/11/2021 10:30	0	0
233	5/11/2021 10:31	0	0
234	5/11/2021 10:32	0	0
235	5/11/2021 10:33	0	0
236	5/11/2021 10:34	0	0
237	5/11/2021 10:35	0	0
238	5/11/2021 10:36	0	0
239	5/11/2021 10:37	0	0
240	5/11/2021 10:38	0	0
241	5/11/2021 10:39	0	0
242	5/11/2021 10:40	0	0
243	5/11/2021 10:41	0	0
244	5/11/2021 10:42	0	0
245	5/11/2021 10:43	0	0
246	5/11/2021 10:44	0	0
247	5/11/2021 10:45	0	0
248	5/11/2021 10:46	0	0
249	5/11/2021 10:47	0	0
250	5/11/2021 10:48	0	0
251	5/11/2021 10:49	0	0
252	5/11/2021 10:50	0	0
253	5/11/2021 10:51	0	0
254	5/11/2021 10:52	0	0
255	5/11/2021 10:53	0	0

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21/05/11 11:00

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## Summary

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Unit Name MiniRAE 3000(PGM-7320)

Unit SN 592-917718

Unit Firmw V2.20A

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Running M Hygiene Mode

Datalog Mc Auto

Diagnostic No

Stop Reaso Battery Low

---

Site ID 12345678

User ID 12345678

---

Begin 5/11/2021 11:00

End 5/11/2021 13:22

Sample Per 60

Number of 141

---

Sensor PID(ppm)

Sensor SN S023030301T7

Measure T\Avg; Max; Real

Span 100

Span 2 1000

Low Alarm 50

High Alarm 100

Over Alarm 15000

STEL Alarm 25

TWA Alarm 10

Measurem Isobutylene

Calibration 5/11/2021 6:08

Peak 0

Min 0

Average 0

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## Datalog

Index	Date/Time	PID(ppm)	PID(ppm)	PID(ppm)
		(Avg)	(Max)	(Real)
1	5/11/2021 11:01	0	0	0
2	5/11/2021 11:02	0	0	0
3	5/11/2021 11:03	0	0	0
4	5/11/2021 11:04	0	0	0
5	5/11/2021 11:05	0	0	0

6	5/11/2021 11:06	0	0	0
7	5/11/2021 11:07	0	0	0
8	5/11/2021 11:08	0	0	0
9	5/11/2021 11:09	0	0	0
10	5/11/2021 11:10	0	0	0
11	5/11/2021 11:11	0	0	0
12	5/11/2021 11:12	0	0	0
13	5/11/2021 11:13	0	0	0
14	5/11/2021 11:14	0	0	0
15	5/11/2021 11:15	0	0	0
16	5/11/2021 11:16	0	0	0
17	5/11/2021 11:17	0	0	0
18	5/11/2021 11:18	0	0	0
19	5/11/2021 11:19	0	0	0
20	5/11/2021 11:20	0	0	0
21	5/11/2021 11:21	0	0	0
22	5/11/2021 11:22	0	0	0
23	5/11/2021 11:23	0	0	0
24	5/11/2021 11:24	0	0	0
25	5/11/2021 11:25	0	0	0
26	5/11/2021 11:26	0	0	0
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47	5/11/2021 11:47	0	0	0
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49	5/11/2021 11:49	0	0	0
50	5/11/2021 11:50	0	0	0
51	5/11/2021 11:51	0	0	0
52	5/11/2021 11:52	0	0	0

53	5/11/2021 11:53	0	0	0
54	5/11/2021 11:54	0	0	0
55	5/11/2021 11:55	0	0	0
56	5/11/2021 11:56	0	0	0
57	5/11/2021 11:57	0	0	0
58	5/11/2021 11:58	0	0	0
59	5/11/2021 11:59	0	0	0
60	5/11/2021 12:00	0	0	0
61	5/11/2021 12:01	0	0	0
62	5/11/2021 12:02	0	0	0
63	5/11/2021 12:03	0	0	0
64	5/11/2021 12:04	0	0	0
65	5/11/2021 12:05	0	0	0
66	5/11/2021 12:06	0	0	0
67	5/11/2021 12:07	0	0	0
68	5/11/2021 12:08	0	0	0
69	5/11/2021 12:09	0	0	0
70	5/11/2021 12:10	0	0	0
71	5/11/2021 12:11	0	0	0
72	5/11/2021 12:12	0	0	0
73	5/11/2021 12:13	0	0	0
74	5/11/2021 12:14	0	0	0
75	5/11/2021 12:15	0	0	0
76	5/11/2021 12:16	0	0	0
77	5/11/2021 12:17	0	0	0
78	5/11/2021 12:18	0	0	0
79	5/11/2021 12:19	0	0	0
80	5/11/2021 12:20	0	0	0
81	5/11/2021 12:21	0	0	0
82	5/11/2021 12:22	0	0	0
83	5/11/2021 12:23	0	0	0
84	5/11/2021 12:24	0	0	0
85	5/11/2021 12:25	0	0	0
86	5/11/2021 12:26	0	0	0
87	5/11/2021 12:27	0	0	0
88	5/11/2021 12:28	0	0	0
89	5/11/2021 12:29	0	0	0
90	5/11/2021 12:30	0	0	0
91	5/11/2021 12:31	0	0	0
92	5/11/2021 12:32	0	0	0
93	5/11/2021 12:33	0	0	0
94	5/11/2021 12:34	0	0	0
95	5/11/2021 12:35	0	0	0
96	5/11/2021 12:36	0	0	0
97	5/11/2021 12:37	0	0	0
98	5/11/2021 12:38	0	0	0
99	5/11/2021 12:39	0	0	0

100	5/11/2021 12:40	0	0	0
101	5/11/2021 12:41	0	0	0
102	5/11/2021 12:42	0	0	0
103	5/11/2021 12:43	0	0	0
104	5/11/2021 12:44	0	0	0
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118	5/11/2021 12:58	0	0	0
119	5/11/2021 12:59	0	0	0
120	5/11/2021 13:00	0	0	0
121	5/11/2021 13:01	0	0	0
122	5/11/2021 13:02	0	0	0
123	5/11/2021 13:03	0	0	0
124	5/11/2021 13:04	0	0	0
125	5/11/2021 13:05	0	0	0
126	5/11/2021 13:06	0	0	0
127	5/11/2021 13:07	0	0	0
128	5/11/2021 13:08	0	0	0
129	5/11/2021 13:09	0	0	0
130	5/11/2021 13:10	0	0	0
131	5/11/2021 13:11	0	0	0
132	5/11/2021 13:12	0	0	0
133	5/11/2021 13:13	0	0	0
134	5/11/2021 13:14	0	0	0
135	5/11/2021 13:15	0	0	0
136	5/11/2021 13:16	0	0	0
137	5/11/2021 13:17	0	0	0
138	5/11/2021 13:18	0	0	0
139	5/11/2021 13:19	0	0	0
140	5/11/2021 13:20	0	0	0
141	5/11/2021 13:21	0	0	0
Peak		0	0	0
Min		0	0	0
Average		0	0	0

\*\*\*\*\*

## TWA/STEL

Index	Date/Time	PID(ppm)	PID(ppm)
		(TWA)	(STEL)
1	5/11/2021 11:01	0	---
2	5/11/2021 11:02	0	---
3	5/11/2021 11:03	0	---
4	5/11/2021 11:04	0	---
5	5/11/2021 11:05	0	---
6	5/11/2021 11:06	0	---
7	5/11/2021 11:07	0	---
8	5/11/2021 11:08	0	---
9	5/11/2021 11:09	0	---
10	5/11/2021 11:10	0	---
11	5/11/2021 11:11	0	---
12	5/11/2021 11:12	0	---
13	5/11/2021 11:13	0	---
14	5/11/2021 11:14	0	---
15	5/11/2021 11:15	0	0
16	5/11/2021 11:16	0	0
17	5/11/2021 11:17	0	0
18	5/11/2021 11:18	0	0
19	5/11/2021 11:19	0	0
20	5/11/2021 11:20	0	0
21	5/11/2021 11:21	0	0
22	5/11/2021 11:22	0	0
23	5/11/2021 11:23	0	0
24	5/11/2021 11:24	0	0
25	5/11/2021 11:25	0	0
26	5/11/2021 11:26	0	0
27	5/11/2021 11:27	0	0
28	5/11/2021 11:28	0	0
29	5/11/2021 11:29	0	0
30	5/11/2021 11:30	0	0
31	5/11/2021 11:31	0	0
32	5/11/2021 11:32	0	0
33	5/11/2021 11:33	0	0
34	5/11/2021 11:34	0	0
35	5/11/2021 11:35	0	0
36	5/11/2021 11:36	0	0
37	5/11/2021 11:37	0	0
38	5/11/2021 11:38	0	0
39	5/11/2021 11:39	0	0
40	5/11/2021 11:40	0	0
41	5/11/2021 11:41	0	0
42	5/11/2021 11:42	0	0
43	5/11/2021 11:43	0	0
44	5/11/2021 11:44	0	0

45	5/11/2021 11:45	0	0
46	5/11/2021 11:46	0	0
47	5/11/2021 11:47	0	0
48	5/11/2021 11:48	0	0
49	5/11/2021 11:49	0	0
50	5/11/2021 11:50	0	0
51	5/11/2021 11:51	0	0
52	5/11/2021 11:52	0	0
53	5/11/2021 11:53	0	0
54	5/11/2021 11:54	0	0
55	5/11/2021 11:55	0	0
56	5/11/2021 11:56	0	0
57	5/11/2021 11:57	0	0
58	5/11/2021 11:58	0	0
59	5/11/2021 11:59	0	0
60	5/11/2021 12:00	0	0
61	5/11/2021 12:01	0	0
62	5/11/2021 12:02	0	0
63	5/11/2021 12:03	0	0
64	5/11/2021 12:04	0	0
65	5/11/2021 12:05	0	0
66	5/11/2021 12:06	0	0
67	5/11/2021 12:07	0	0
68	5/11/2021 12:08	0	0
69	5/11/2021 12:09	0	0
70	5/11/2021 12:10	0	0
71	5/11/2021 12:11	0	0
72	5/11/2021 12:12	0	0
73	5/11/2021 12:13	0	0
74	5/11/2021 12:14	0	0
75	5/11/2021 12:15	0	0
76	5/11/2021 12:16	0	0
77	5/11/2021 12:17	0	0
78	5/11/2021 12:18	0	0
79	5/11/2021 12:19	0	0
80	5/11/2021 12:20	0	0
81	5/11/2021 12:21	0	0
82	5/11/2021 12:22	0	0
83	5/11/2021 12:23	0	0
84	5/11/2021 12:24	0	0
85	5/11/2021 12:25	0	0
86	5/11/2021 12:26	0	0
87	5/11/2021 12:27	0	0
88	5/11/2021 12:28	0	0
89	5/11/2021 12:29	0	0
90	5/11/2021 12:30	0	0
91	5/11/2021 12:31	0	0

92	5/11/2021 12:32	0	0
93	5/11/2021 12:33	0	0
94	5/11/2021 12:34	0	0
95	5/11/2021 12:35	0	0
96	5/11/2021 12:36	0	0
97	5/11/2021 12:37	0	0
98	5/11/2021 12:38	0	0
99	5/11/2021 12:39	0	0
100	5/11/2021 12:40	0	0
101	5/11/2021 12:41	0	0
102	5/11/2021 12:42	0	0
103	5/11/2021 12:43	0	0
104	5/11/2021 12:44	0	0
105	5/11/2021 12:45	0	0
106	5/11/2021 12:46	0	0
107	5/11/2021 12:47	0	0
108	5/11/2021 12:48	0	0
109	5/11/2021 12:49	0	0
110	5/11/2021 12:50	0	0
111	5/11/2021 12:51	0	0
112	5/11/2021 12:52	0	0
113	5/11/2021 12:53	0	0
114	5/11/2021 12:54	0	0
115	5/11/2021 12:55	0	0
116	5/11/2021 12:56	0	0
117	5/11/2021 12:57	0	0
118	5/11/2021 12:58	0	0
119	5/11/2021 12:59	0	0
120	5/11/2021 13:00	0	0
121	5/11/2021 13:01	0	0
122	5/11/2021 13:02	0	0
123	5/11/2021 13:03	0	0
124	5/11/2021 13:04	0	0
125	5/11/2021 13:05	0	0
126	5/11/2021 13:06	0	0
127	5/11/2021 13:07	0	0
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129	5/11/2021 13:09	0	0
130	5/11/2021 13:10	0	0
131	5/11/2021 13:11	0	0
132	5/11/2021 13:12	0	0
133	5/11/2021 13:13	0	0
134	5/11/2021 13:14	0	0
135	5/11/2021 13:15	0	0
136	5/11/2021 13:16	0	0
137	5/11/2021 13:17	0	0
138	5/11/2021 13:18	0	0

139	5/11/2021 13:19	0	0
140	5/11/2021 13:20	0	0
141	5/11/2021 13:21	0	0



## **APPENDIX D**

### **PHOTO LOG**

**Site Photographs**

**Route 52 Boundary Modification Soil Sampling CAMP Locations, May 10 – May 11, 2021**

**Photograph 1**

CAMP-2 Station – May 10



**Photograph 2**

CAMP-1 Station – May 10



**Photograph 3**  
CAMP-2 Station Morning Location – May 11



**Photograph 4**  
CAMP-1 Station – May 11



**APPENDIX D**

**LABORATORY ANALYTICAL REPORTS**



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587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
Telephone: 860.645.1102 • Fax: 860.645.0823

## NY ANALYTICAL SERVICES PROTOCOL DATA PACKAGE

Walden Environmental Engineering PLLC  
IPARK 0118 48

GCI28500

Ver 1

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Spike Recovery (Form 3)	1728
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CI28506 / SB-03A (0-1` ) 2X	1773
CI28508 / SB-03C (12-14` ) 2X	1777
CI28509 / SB-04A (1-2` ) 2X	1781
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CI28509 / SB-04A (1-2` 2X	2384
CI28511 / SB-04C (12-14` 2X	2388
CI28512 / SB-05A (1-2` 2X	2392
CI28514 / SB-05C (12-14` 2X	2396
CI28515 / SB-06A (1-2` 2X	2400
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ECD35 - 05/13/21 - 512053	2634
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CI28505 / SB-02C (13-15`)	3141
CI28506 / SB-03A (0-1`)	3144
CI28508 / SB-03C (12-14`)	3147
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CI28511 / SB-04C (12-14`)	3153
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CI28521 / SB-08A (1-2`)	3174
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Tuesday, June 15, 2021

Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

Project ID: IPARK 0118 48

SDG ID: GCI28500

Sample ID#s: CI28500 - CI28531

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301

CT Lab Registration #PH-0618

MA Lab Registration #M-CT007

ME Lab Registration #CT-007

NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003

NY Lab Registration #11301

PA Lab Registration #68-03530

RI Lab Registration #63

UT Lab Registration #CT00007

VT Lab Registration #VT11301



**Environmental Laboratories, Inc.**  
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Tel. (860) 645-1102      Fax (860) 645-0823



**NY ANALYTICAL SERVICES PROTOCOL  
DATA PACKAGE**

**Client: Walden Environmental Engineering PLLC**  
**Project: IPARK 0118 48**  
**Laboratory Project: GCI28500**



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# NY Analytical Services Protocol Format

June 15, 2021

SDG I.D.: GCI28500

Walden Environmental Engineering PLLC IPARK 0118 48

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## Methodology Summary

### **1,4 Dioxane in Water**

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update III,  
Method 8270-MOD (SIM)

EPA method 522 Ver 1 Sept 2008

Massachusetts Compendium of Analytical Procedures (CAM) Method 8270 Appendix IIB

### **537**

DETERMINATION OF SELECTED PERFLUORINATED ALKYL ACIDS IN DRINKING WATER BY SOLID PHASE EXTRACTION AND LIQUID CHROMATOGRAPHY/TANDEM MASS SPECTROMETRY (LC/MS/MS)

Version 1.1 September 2009

### **Accelerated Solvent Extraction (ASE)**

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update III, Method 3545A.

### **Chlorinated Herbicides:**

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update III, Method 8151A.

### **Mercury**

Methods for Chemical Analyses of Water and Wastes, EPA, Environmental Monitoring Systems Laboratory Cincinnati (EMSL-CL), EPA-600/4-79-020, method 245.1  
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, 7470A.

### **Mercury Prep**

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 7471B.

### **Metals**

ICP :  
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 6010D.

Mercury:  
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, 7471B



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# NY Analytical Services Protocol Format

June 15, 2021

SDG I.D.: GCI28500

**Walden Environmental Engineering PLLC IPARK 0118 48**

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## Pesticides:

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8081B.

## Polychlorinated Biphenyls (PCBs):

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8082A.

## Semivolatile Organic Compounds

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8270D.

## Semi-volatiles analysis

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8270D (SIM - selective ion monitoring mode).

## Volatile Organic Compounds:

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update III, Method 8260C and Environmental Protection Agency, EPA-600/4-79-020, Revised March 1983 (Methods 624) as printed in 40CFR part 136.



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## NY Analytical Services Protocol Format

June 15, 2021

SDG I.D.: GCI28500

Walden Environmental Engineering PLLC IPARK 0118 48

### Laboratory Chronicle

The samples in this delivery group were received at 1.6°C.

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CI28500	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28500	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Chlorinated Herbicides	05/10/21	05/11/21	05/12/21	PL	Y
CI28500	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28500	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28500	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28500	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28500	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28500	Polychlorinated Biphenyls	05/10/21	05/11/21	05/12/21	AW	Y
CI28500	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28500	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28500	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28501	Field Extraction	05/10/21	05/10/21	05/10/21		Y



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CI28501	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28502	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28502	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Chlorinated Herbicides	05/10/21	05/11/21	05/12/21	PL	Y
CI28502	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28502	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28502	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28502	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28502	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28502	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28502	Polychlorinated Biphenyls	05/10/21	05/11/21	05/13/21	AW	Y
CI28502	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28502	Silver	05/10/21	05/11/21	05/12/21	EK	Y
CI28502	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28502	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28502	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28503	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y

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CI28503	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Chlorinated Herbicides	05/10/21	05/11/21	05/12/21	PL	Y
CI28503	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28503	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28503	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28503	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28503	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28503	Polychlorinated Biphenyls	05/10/21	05/11/21	05/12/21	AW	Y
CI28503	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28503	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28503	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28504	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28504	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28505	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28505	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y

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CI28505	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Chlorinated Herbicides	05/10/21	05/11/21	05/12/21	PL	Y
CI28505	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28505	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28505	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28505	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28505	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28505	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28505	Polychlorinated Biphenyls	05/10/21	05/11/21	05/12/21	AW	Y
CI28505	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28505	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28505	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28505	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28506	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Chlorinated Herbicides	05/10/21	05/11/21	05/12/21	PL	Y
CI28506	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y



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CI28506	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Manganese	05/10/21	05/11/21	05/13/21	TH	Y
CI28506	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28506	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28506	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28506	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28506	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28506	Polychlorinated Biphenyls	05/10/21	05/11/21	05/12/21	AW	Y
CI28506	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28506	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28506	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28507	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28507	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28508	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28508	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Chlorinated Herbicides	05/10/21	05/11/21	05/12/21	PL	Y
CI28508	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28508	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Lead	05/10/21	05/11/21	05/12/21	CPP	Y

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CI28508	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28508	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28508	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28508	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28508	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28508	Polychlorinated Biphenyls	05/10/21	05/11/21	05/13/21	AW	Y
CI28508	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28508	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28508	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28508	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28509	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Chlorinated Herbicides	05/10/21	05/11/21	05/13/21	PL	Y
CI28509	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28509	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y

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CI28509	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28509	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28509	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28509	Polychlorinated Biphenyls	05/10/21	05/11/21	05/12/21	AW	Y
CI28509	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Semivolatiles	05/10/21	05/11/21	05/12/21	PS	Y
CI28509	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28509	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28510	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28510	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28511	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28511	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Chlorinated Herbicides	05/10/21	05/12/21	05/13/21	PL	Y
CI28511	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28511	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28511	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28511	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28511	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28511	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y

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CI28511	Polychlorinated Biphenyls	05/10/21	05/11/21	05/13/21	AW	Y
CI28511	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28511	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28511	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28511	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28512	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Chlorinated Herbicides	05/10/21	05/12/21	05/13/21	PL	Y
CI28512	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28512	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28512	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28512	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28512	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28512	Polychlorinated Biphenyls	05/10/21	05/11/21	05/12/21	AW	Y
CI28512	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28512	Silver	05/10/21	05/11/21	05/12/21	CPP	Y



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CI28512	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28512	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28513	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28513	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28514	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28514	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Chlorinated Herbicides	05/10/21	05/12/21	05/13/21	PL	Y
CI28514	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28514	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28514	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28514	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28514	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28514	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28514	Polychlorinated Biphenyls	05/10/21	05/11/21	05/12/21	AW	Y
CI28514	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28514	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28514	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y

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CI28514	Volatiles	05/10/21	05/14/21	05/14/21	JLI	Y
CI28514	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28515	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Chlorinated Herbicides	05/10/21	05/12/21	05/13/21	PL	Y
CI28515	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28515	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28515	Pesticides - Soil	05/10/21	05/11/21	05/13/21	CG	Y
CI28515	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28515	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28515	Polychlorinated Biphenyls	05/10/21	05/11/21	05/13/21	AW	Y
CI28515	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Semivolatiles	05/10/21	05/11/21	05/12/21	PS	Y
CI28515	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28515	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28516	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28516	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28517	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28517	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y

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CI28517	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Chlorinated Herbicides	05/10/21	05/12/21	05/13/21	PL	Y
CI28517	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28517	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28517	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28517	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28517	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28517	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28517	Polychlorinated Biphenyls	05/10/21	05/11/21	05/13/21	AW	Y
CI28517	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28517	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28517	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28517	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28518	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y



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CI28518	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Calcium	05/10/21	05/11/21	05/13/21	TH	Y
CI28518	Chlorinated Herbicides	05/10/21	05/12/21	05/13/21	PL	Y
CI28518	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Magnesium	05/10/21	05/11/21	05/13/21	TH	Y
CI28518	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28518	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28518	Pesticides - Soil	05/10/21	05/11/21	05/13/21	CG	Y
CI28518	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28518	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28518	Polychlorinated Biphenyls	05/10/21	05/11/21	05/17/21	SC	Y
CI28518	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28518	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28518	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28519	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28519	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28520	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28520	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Chlorinated Herbicides	05/10/21	05/12/21	05/14/21	PL	Y
CI28520	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y



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CI28520	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28520	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28520	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28520	Pesticides - Soil	05/10/21	05/11/21	05/13/21	CG	Y
CI28520	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28520	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28520	Polychlorinated Biphenyls	05/10/21	05/11/21	05/17/21	SC	Y
CI28520	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28520	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28520	Volatiles	05/10/21	05/12/21	05/12/21	JLI	Y
CI28520	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28521	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Chlorinated Herbicides	05/10/21	05/12/21	05/14/21	PL	Y
CI28521	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Lead	05/10/21	05/11/21	05/12/21	CPP	Y



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CI28521	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28521	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28521	Pesticides - Soil	05/10/21	05/11/21	05/13/21	CG	Y
CI28521	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28521	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28521	Polychlorinated Biphenyls	05/10/21	05/11/21	05/13/21	AW	Y
CI28521	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Semivolatiles	05/10/21	05/11/21	05/12/21	WB	Y
CI28521	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28521	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28522	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28522	Volatiles	05/10/21	05/13/21	05/13/21	JLI	Y
CI28523	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28523	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Chlorinated Herbicides	05/10/21	05/12/21	05/14/21	PL	Y
CI28523	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28523	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Magnesium	05/10/21	05/11/21	05/13/21	TH	Y
CI28523	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y



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CI28523	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28523	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28523	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28523	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28523	Polychlorinated Biphenyls	05/10/21	05/11/21	05/13/21	AW	Y
CI28523	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Semivolatiles	05/10/21	05/12/21	05/12/21	WB	Y
CI28523	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28523	Volatiles	05/10/21	05/13/21	05/13/21	JLI	Y
CI28523	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28524	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Chlorinated Herbicides	05/10/21	05/12/21	05/14/21	PL	Y
CI28524	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28524	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28524	Pesticides - Soil	05/10/21	05/11/21	05/13/21	CG	Y
CI28524	PFAS	05/10/21	05/19/21	05/19/21	***	Y
CI28524	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y

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CI28524	Polychlorinated Biphenyls	05/10/21	05/11/21	05/17/21	SC	Y
CI28524	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Semivolatiles	05/10/21	05/12/21	05/12/21	WB	Y
CI28524	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28524	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28525	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28525	Volatiles	05/10/21	05/13/21	05/13/21	JLI	Y
CI28526	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28526	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Chlorinated Herbicides	05/10/21	05/12/21	05/14/21	JRB	Y
CI28526	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28526	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28526	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28526	Pesticides - Soil	05/10/21	05/11/21	05/13/21	CG	Y
CI28526	PFAS	05/10/21	05/20/21	05/20/21	***	Y
CI28526	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28526	Polychlorinated Biphenyls	05/10/21	05/11/21	05/17/21	SC	Y
CI28526	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y

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CI28526	Semivolatiles	05/10/21	05/12/21	05/12/21	WB	Y
CI28526	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28526	Volatiles	05/10/21	05/13/21	05/13/21	JLI	Y
CI28526	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28527	1,4-dioxane	05/10/21	05/14/21	05/17/21	AW	Y
CI28527	Aluminum	05/10/21	05/12/21	05/13/21	PS	Y
CI28527	Antimony	05/10/21	05/12/21	05/16/21	TH	Y
CI28527	Arsenic - LDL	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Barium	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Beryllium	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Cadmium	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Calcium	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Chlorinated Herbicides	05/10/21	05/14/21	05/17/21	JRB	Y
CI28527	Chromium	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Cobalt	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Copper	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Iron	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Lead	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Magnesium	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Manganese	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28527	Nickel	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Pesticides	05/10/21	05/11/21	05/13/21	CG	Y
CI28527	PFAS	05/10/21	05/20/21	05/20/21	***	Y
CI28527	PFOA/PFOS - Water Extraction	05/10/21	05/18/21	05/18/21	***	Y
CI28527	Polychlorinated Biphenyls	05/10/21	05/11/21	05/12/21	AW	Y
CI28527	Potassium	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Selenium	05/10/21	05/12/21	05/14/21	TH	Y
CI28527	Semivolatiles	05/10/21	05/11/21	05/13/21	WB	Y
CI28527	Silver	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Sodium	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Thallium - LDL	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Vanadium	05/10/21	05/12/21	05/13/21	TH	Y
CI28527	Volatiles	05/10/21	05/12/21	05/12/21	MH	Y



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CI28527	Zinc	05/10/21	05/12/21	05/13/21	TH	Y
CI28528	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28528	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Chlorinated Herbicides	05/10/21	05/12/21	05/14/21	JRB	Y
CI28528	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Magnesium	05/10/21	05/11/21	05/13/21	TH	Y
CI28528	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28528	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28528	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28528	PFAS	05/10/21	05/20/21	05/20/21	***	Y
CI28528	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28528	Polychlorinated Biphenyls	05/10/21	05/11/21	05/13/21	AW	Y
CI28528	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Semivolatiles	05/10/21	05/12/21	05/13/21	WB	Y
CI28528	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28528	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28529	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28529	Volatiles	05/10/21	05/13/21	05/13/21	JLI	Y
CI28530	1,4-Dioxane	05/10/21	05/12/21	05/13/21	WB	Y
CI28530	Aluminum	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Antimony	05/10/21	05/11/21	05/12/21	CPP	Y

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CI28530	Arsenic	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Barium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Beryllium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Cadmium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Calcium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Chlorinated Herbicides	05/10/21	05/12/21	05/14/21	JRB	Y
CI28530	Chromium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Cobalt	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Copper	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Field Extraction	05/10/21	05/10/21	05/10/21		Y
CI28530	Iron	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Lead	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Magnesium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Manganese	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Mercury	05/10/21	05/12/21	05/12/21	MGH	Y
CI28530	Nickel	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Percent Solid	05/10/21	05/11/21	05/11/21	AN	Y
CI28530	Pesticides - Soil	05/10/21	05/11/21	05/12/21	CG	Y
CI28530	PFAS	05/10/21	05/20/21	05/20/21	***	Y
CI28530	PFOA/PFOS - Soil Extraction	05/10/21	05/14/21	05/14/21	***	Y
CI28530	Polychlorinated Biphenyls	05/10/21	05/11/21	05/12/21	AW	Y
CI28530	Potassium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Selenium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Semivolatiles	05/10/21	05/12/21	05/13/21	WB	Y
CI28530	Silver	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Sodium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Thallium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Vanadium	05/10/21	05/11/21	05/12/21	CPP	Y
CI28530	Volatiles	05/10/21	05/13/21	05/13/21	JLI	Y
CI28530	Zinc	05/10/21	05/11/21	05/12/21	CPP	Y
CI28531	1,4-dioxane	05/11/21	05/14/21	05/17/21	AW	Y
CI28531	Aluminum	05/11/21	05/12/21	05/13/21	PS	Y
CI28531	Antimony	05/11/21	05/12/21	05/16/21	TH	Y
CI28531	Arsenic - LDL	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Barium	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Beryllium	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Cadmium	05/11/21	05/12/21	05/13/21	TH	Y



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CI28531	Calcium	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Chlorinated Herbicides	05/11/21	05/14/21	05/17/21	JRB	Y
CI28531	Chromium	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Cobalt	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Copper	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Iron	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Lead	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Magnesium	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Manganese	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Mercury	05/11/21	05/12/21	05/12/21	MGH	Y
CI28531	Nickel	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Pesticides	05/11/21	05/11/21	05/13/21	CG	Y
CI28531	PFAS	05/11/21	05/20/21	05/20/21	***	Y
CI28531	PFOA/PFOS - Water Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI28531	Polychlorinated Biphenyls	05/11/21	05/11/21	05/12/21	AW	Y
CI28531	Potassium	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Selenium	05/11/21	05/12/21	05/14/21	TH	Y
CI28531	Semivolatiles	05/11/21	05/11/21	05/13/21	WB	Y
CI28531	Silver	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Sodium	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Thallium - LDL	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Vanadium	05/11/21	05/12/21	05/13/21	TH	Y
CI28531	Volatiles	05/11/21	05/12/21	05/12/21	MH	Y
CI28531	Zinc	05/11/21	05/12/21	05/13/21	TH	Y



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## SDG Comments

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### 8260 Volatile Organics:

1,2-Dibromoethane, 1,2,3 Trichloropropane, and 1,2-Dibromo-3-chloropropane do not meet NY TOGS GA criteria, these compounds are analyzed by GC/FID method 504 or 8011 to achieve this criteria.

### SIM Analysis:

The lowest possible reporting limit under SIM conditions is 0.02 ug/L. The NY TOGS GA criteria for some PAHs is 0.002 ug/L. This level can not be achieved.

Toxaphene is reported to the lowest possible reporting level. The NY TOGS criteria for this compound can not be achieved.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 1: Analysis results minus raw data.

Version 2: Complete report with raw data.



Environmental Laboratories, Inc.  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## Sample Id Cross Reference

June 15, 2021

SDG I.D.: GCI28500

Project ID: IPARK 0118 48

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Client Id	Lab Id	Matrix
SB-01A (0-1`)	CI28500	SOIL
SB-01B (1-2`)	CI28501	SOIL
SB-01C (13-15`)	CI28502	SOIL
SB-02A (0-1`)	CI28503	SOIL
SB-02B (1-2`)	CI28504	SOIL
SB-02C (13-15`)	CI28505	SOIL
SB-03A (0-1`)	CI28506	SOIL
SB-03B (1-2`)	CI28507	SOIL
SB-03C (12-14`)	CI28508	SOIL
SB-04A (1-2`)	CI28509	SOIL
SB-04B (2-3`)	CI28510	SOIL
SB-04C (12-14`)	CI28511	SOIL
SB-05A (1-2`)	CI28512	SOIL
SB-05B (2-3`)	CI28513	SOIL
SB-05C (12-14`)	CI28514	SOIL
SB-06A (1-2`)	CI28515	SOIL
SB-06B (2-3`)	CI28516	SOIL
SB-06C (10-12`)	CI28517	SOIL
SB-07A (1-2`)	CI28518	SOIL
SB-07B (2-3`)	CI28519	SOIL
SB-07C (4-6`)	CI28520	SOIL
SB-08A (1-2`)	CI28521	SOIL
SB-08B (2-3`)	CI28522	SOIL
SB-08C (13-15`)	CI28523	SOIL
SB-09A (1-2`)	CI28524	SOIL
SB-09B (2-3`)	CI28525	SOIL
SB-09C (8-10`)	CI28526	SOIL
FIELD BLANK	CI28527	LIQUID
SB-DUP A	CI28528	SOIL
SB-DUP B	CI28529	SOIL



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## Sample Id Cross Reference

June 15, 2021

SDG I.D.: GCI28500

Project ID: IPARK 0118 48

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Client Id	Lab Id	Matrix
SB-DUP C	CI28530	SOIL
FIELD BLANK 2	CI28531	LIQUID



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      9:30  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28500

Project ID: IPARK 0118 48  
Client ID: SB-01A (0-1')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	16300	37	7.3	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.7	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	5.02	0.73	0.73	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	36.7	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.47	0.29	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	8260	*	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Cadmium	1.60	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	16.9	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	10.3	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	26.8	0.7	0.37	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	32000	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	23.5	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	9820	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	851	3.7	3.7	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	*	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B
Nickel	22.6	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	980	N	7	2.9	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	332	7	3.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	21.3	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	72.4	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	84			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/11/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.320	0.0328	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.320	0.0845	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.320	0.133	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.320	0.134	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.320	0.0656	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.320	0.0631	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.320	0.0598	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.320	0.448	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.320	0.0656	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.320	0.0960	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.320	0.0583	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.320	0.0397	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.320	0.0844	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	2.13	0.320	0.234	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.320	0.0766	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	1.70	0.320	0.0561	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.320	0.0988	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.320	0.118	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.320	0.0956	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.320	0.0557	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.320	0.149	ng/g		05/19/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	47.2			%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	62.3			%		05/19/21	***	EPA 537m
% M2-6:2FTS	315			%		05/19/21	***	EPA 537m
% M2-8:2FTS	282			%		05/19/21	***	EPA 537m
% M2PFTeDA	39.0			%		05/19/21	***	EPA 537m
% M3PFBS	87.9			%		05/19/21	***	EPA 537m
% M3PFHxS	74.7			%		05/19/21	***	EPA 537m
% M4PFHpA	46.8			%		05/19/21	***	EPA 537m
% M5PFHxA	70.1			%		05/19/21	***	EPA 537m
% M5PFPeA	78.2			%		05/19/21	***	EPA 537m
% M6PFDA	68.2			%		05/19/21	***	EPA 537m
% M7PFUdA	58.9			%		05/19/21	***	EPA 537m
% M8FOSA	30.9			%		05/19/21	***	EPA 537m
% M8PFOA	78.5			%		05/19/21	***	EPA 537m
% M8PFOS	65.7			%		05/19/21	***	EPA 537m
% M9PFNA	60.3			%		05/19/21	***	EPA 537m
% MPFBA	80.2			%		05/19/21	***	EPA 537m
% MPFDoA	35.0			%		05/19/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
2,4-D	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
2,4-DB	ND	2900	2900	ug/Kg	10	05/12/21	PL	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
Dichloroprop	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
Dinoseb	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	50			%	10	05/12/21	PL	30 - 150 %
% DCAA (Confirmation)	51			%	10	05/12/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	78	78	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1221	ND	78	78	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1232	ND	78	78	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1242	ND	78	78	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1248	ND	78	78	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1254	ND	78	78	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1260	ND	78	78	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1262	ND	78	78	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1268	ND	78	78	ug/Kg	2	05/12/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	77			%	2	05/12/21	AW	30 - 150 %
% DCBP (Confirmation)	74			%	2	05/12/21	AW	30 - 150 %
% TCMX	78			%	2	05/12/21	AW	30 - 150 %
% TCMX (Confirmation)	77			%	2	05/12/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.4	2.4	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.4	2.4	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.4	2.4	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.9	3.9	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.9	3.9	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	39	39	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.9	3.9	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.9	3.9	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor epoxide	ND	7.8	7.8	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	39	39	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
<b><u>QA/QC Surrogates</u></b>									
% DCBP	67			%	2	05/12/21	CG	30 - 150 %	
% DCBP (Confirmation)	62			%	2	05/12/21	CG	30 - 150 %	
% TCMX	67			%	2	05/12/21	CG	30 - 150 %	
% TCMX (Confirmation)	64			%	2	05/12/21	CG	30 - 150 %	
<b><u>Semivolatiles</u></b>									
1,2,4,5-Tetrachlorobenzene	ND	270	140	ug/Kg	1	05/12/21	WB	SW8270D	
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	05/12/21	WB	SW8270D	
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D	
1,2-Diphenylhydrazine	ND	270	130	ug/Kg	1	05/12/21	WB	SW8270D	
1,3-Dichlorobenzene	ND	270	120	ug/Kg	1	05/12/21	WB	SW8270D	
1,4-Dichlorobenzene	ND	270	120	ug/Kg	1	05/12/21	WB	SW8270D	
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	05/12/21	WB	SW8270D	
2,4,6-Trichlorophenol	ND	200	130	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dichlorophenol	ND	200	140	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dimethylphenol	ND	270	97	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dinitrotoluene	ND	200	150	ug/Kg	1	05/12/21	WB	SW8270D	
2,6-Dinitrotoluene	ND	200	120	ug/Kg	1	05/12/21	WB	SW8270D	
2-Chloronaphthalene	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D	
2-Chlorophenol	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D	
2-Methylnaphthalene	ND	270	120	ug/Kg	1	05/12/21	WB	SW8270D	
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	05/12/21	WB	SW8270D	
2-Nitroaniline	ND	270	270	ug/Kg	1	05/12/21	WB	SW8270D	
2-Nitrophenol	ND	270	250	ug/Kg	1	05/12/21	WB	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	05/12/21	WB	SW8270D	
3,3'-Dichlorobenzidine	ND	200	180	ug/Kg	1	05/12/21	WB	SW8270D	
3-Nitroaniline	ND	390	780	ug/Kg	1	05/12/21	WB	SW8270D	
4,6-Dinitro-2-methylphenol	ND	230	78	ug/Kg	1	05/12/21	WB	SW8270D	
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D	
4-Chloro-3-methylphenol	ND	270	140	ug/Kg	1	05/12/21	WB	SW8270D	
4-Chloroaniline	ND	310	180	ug/Kg	1	05/12/21	WB	SW8270D	
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	05/12/21	WB	SW8270D	
4-Nitroaniline	ND	390	130	ug/Kg	1	05/12/21	WB	SW8270D	
4-Nitrophenol	ND	390	180	ug/Kg	1	05/12/21	WB	SW8270D	
Acenaphthene	ND	270	120	ug/Kg	1	05/12/21	WB	SW8270D	
Acenaphthylene	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D	
Acetophenone	ND	270	120	ug/Kg	1	05/12/21	WB	SW8270D	
Aniline	ND	310	310	ug/Kg	1	05/12/21	WB	SW8270D	
Anthracene	130	J	270	130	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	900		270	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	390	230	ug/Kg	1	05/12/21	WB	SW8270D	
Benzo(a)pyrene	1000		200	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	1100		270	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	640		270	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	780		270	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	2000	780	ug/Kg	1	05/12/21	WB	SW8270D	
Benzyl butyl phthalate	ND	270	100	ug/Kg	1	05/12/21	WB	SW8270D	
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	200	110	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	200	160	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	1000	270	130	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	140	J 200	130	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	270	100	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	2100	270	130	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	200	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	200	120	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	690	270	130	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	200	110	ug/Kg	1	05/12/21	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	200	140	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	200	130	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	270	150	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	270	150	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	230	150	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthrene	720	270	110	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	270	130	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	1700	270	130	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	270	96	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	117			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	80			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	67			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	83			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	84			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	93			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	77	77	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	63			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	95			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	97			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: SW  
 Analyzed by: see "By" below

05/10/21

9:25

05/11/21

16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28501

Project ID: IPARK 0118 48  
 Client ID: SB-01B (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction

Completed

05/10/21

SW5035A

1

### Volatiles

1,1,1,2-Tetrachloroethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
2-Chlorotoluene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
2-Hexanone	ND	20	4.0	ug/Kg	1	05/12/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	20	4.0	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	20	4.0	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	7.9	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	4.0	1.6	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	24	4.0	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	7.9	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	4.0	4.0	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	7.9	2.0	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	7.9	2.0	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	98			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	05/12/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	100			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	100			%	1	05/12/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

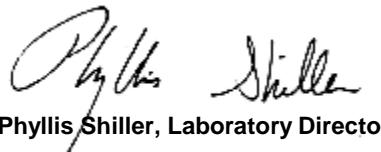
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      9:30  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28502

Project ID: IPARK 0118 48  
Client ID: SB-01C (13-15`)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	12400	38	7.6	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.8	3.8	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	4.92	0.76	0.76	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	33.6	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.34	0.30	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	2080	*	3.8	mg/Kg	1	05/12/21	CPP	SW6010D	
Cadmium	1.46	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	14.3	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	12.3	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	29.1	0.8	0.38	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	32200	38	38	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	18.4	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	7940	38	38	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	983	3.8	3.8	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	*	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B
Nickel	22.9	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	918	N	8	3.0	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	1.37	0.38	0.38	mg/Kg	1	05/12/21	EK	SW6010D	
Sodium	304	8	3.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	13.8	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	66.3	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	94			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/10/21		SW5035A
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/11/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.265	0.0271	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.265	0.0700	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.265	0.110	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.265	0.111	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.265	0.0543	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.265	0.0523	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.265	0.0495	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.265	0.371	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.265	0.0543	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.265	0.0795	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.265	0.0482	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.265	0.0329	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.265	0.0699	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.265	0.194	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.265	0.0634	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.265	0.0464	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.265	0.0819	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.265	0.0974	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.265	0.0792	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.265	0.0461	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.265	0.123	ng/g		05/19/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	52.0		%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	75.2		%		05/19/21	***	EPA 537m
% M2-6:2FTS	110		%		05/19/21	***	EPA 537m
% M2-8:2FTS	124		%		05/19/21	***	EPA 537m
% M2PFTeDA	56.4		%		05/19/21	***	EPA 537m
% M3PFBS	88.5		%		05/19/21	***	EPA 537m
% M3PFHxS	82.8		%		05/19/21	***	EPA 537m
% M4PFHpa	82.3		%		05/19/21	***	EPA 537m
% M5PFHxA	86.1		%		05/19/21	***	EPA 537m
% M5PFPeA	98.4		%		05/19/21	***	EPA 537m
% M6PFDA	72.0		%		05/19/21	***	EPA 537m
% M7PFUdA	59.9		%		05/19/21	***	EPA 537m
% M8FOSA	49.5		%		05/19/21	***	EPA 537m
% M8PFOA	88.9		%		05/19/21	***	EPA 537m
% M8PFOS	67.6		%		05/19/21	***	EPA 537m
% M9PFNA	79.7		%		05/19/21	***	EPA 537m
% MPFBA	108		%		05/19/21	***	EPA 537m
% MPFDoA	74.3		%		05/19/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/12/21	PL	SW8151A
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/12/21	PL	SW8151A
2,4-D	ND	260	260	ug/Kg	10	05/12/21	PL	SW8151A
2,4-DB	ND	2600	2600	ug/Kg	10	05/12/21	PL	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/12/21	PL	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/12/21	PL	SW8151A
Dichloroprop	ND	260	260	ug/Kg	10	05/12/21	PL	SW8151A
Dinoseb	ND	260	260	ug/Kg	10	05/12/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	43			%	10	05/12/21	PL	30 - 150 %
% DCAA (Confirmation)	48			%	10	05/12/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	81			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	70			%	2	05/13/21	AW	30 - 150 %
% TCMX	70			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	68			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	35	35	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.0	7.0	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/12/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	61			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	52			%	2	05/12/21	CG	30 - 150 %
% TCMX	58			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	56			%	2	05/12/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
2-Chlorotoluene	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
2-Hexanone	ND	23	4.5	ug/Kg	1	05/12/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
4-Chlorotoluene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	4.5	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	23	4.5	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	9.0	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
Bromochloromethane	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
Bromodichloromethane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	4.5	1.8	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
cis-1,2-Dichloroethene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
cis-1,3-Dichloropropene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
Dibromochloromethane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C	
Dibromomethane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C	
Dichlorodifluoromethane	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
Ethylbenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
Hexachlorobutadiene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
Isopropylbenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
m&p-Xylene	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C	
Methyl Ethyl Ketone	ND	27	4.5	ug/Kg	1	05/12/21	JLI	SW8260C	
Methyl t-butyl ether (MTBE)	ND	9.0	0.90	ug/Kg	1	05/12/21	JLI	SW8260C	
Methylene chloride	ND	4.5	4.5	ug/Kg	1	05/12/21	JLI	SW8260C	
Naphthalene	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C	
n-Butylbenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
n-Propylbenzene	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C	
o-Xylene	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C	
p-Isopropyltoluene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
sec-Butylbenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
Styrene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
tert-Butylbenzene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
Tetrachloroethene	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C	
Tetrahydrofuran (THF)	ND	9.0	2.3	ug/Kg	1	05/12/21	JLI	SW8260C	
Toluene	0.69	J	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
trans-1,3-Dichloropropene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
trans-1,4-dichloro-2-butene	ND	9.0	2.3	ug/Kg	1	05/12/21	JLI	SW8260C	
Trichloroethene	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
Trichlorofluoromethane	ND	4.5	0.90	ug/Kg	1	05/12/21	JLI	SW8260C	
Trichlorotrifluoroethane	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
Vinyl chloride	ND	4.5	0.45	ug/Kg	1	05/12/21	JLI	SW8260C	
<b><u>QA/QC Surrogates</u></b>									
% 1,2-dichlorobenzene-d4	100			%	1	05/12/21	JLI	70 - 130 %	
% Bromofluorobenzene	96			%	1	05/12/21	JLI	70 - 130 %	
% Dibromofluoromethane	95			%	1	05/12/21	JLI	70 - 130 %	
% Toluene-d8	101			%	1	05/12/21	JLI	70 - 130 %	
<b><u>Semivolatiles</u></b>									
1,2,4,5-Tetrachlorobenzene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D	
1,2,4-Trichlorobenzene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D	
1,2-Dichlorobenzene	ND	240	97	ug/Kg	1	05/12/21	WB	SW8270D	
1,2-Diphenylhydrazine	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D	
1,3-Dichlorobenzene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D	
1,4-Dichlorobenzene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D	
2,4,5-Trichlorophenol	ND	240	190	ug/Kg	1	05/12/21	WB	SW8270D	
2,4,6-Trichlorophenol	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dichlorophenol	ND	170	120	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dimethylphenol	ND	240	85	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dinitrophenol	ND	240	240	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dinitrotoluene	ND	170	140	ug/Kg	1	05/12/21	WB	SW8270D	
2,6-Dinitrotoluene	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	240	98	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	240	98	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	240	160	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	240	240	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	240	220	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	240	140	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	170	160	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	340	690	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	69	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	280	160	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	340	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	340	160	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	240	97	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	280	280	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	340	200	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	1700	690	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	240	89	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	240	95	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	170	93	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	96	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	99	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	170	140	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	240	92	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	240	89	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	170	100	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	170	100	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	170	97	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	240	99	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	170	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	240	97	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	240	130	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	240	130	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthrene	160	J 240	99	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	140	J 240	120	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	240	85	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	128			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	85			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	75			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	91			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	89			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	97			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	69	69	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	47			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	65			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	94			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

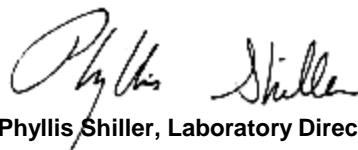
Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      10:20  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28503

Project ID: IPARK 0118 48  
Client ID: SB-02A (0-1')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	17000	34	6.8	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.4	3.4	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	4.67	0.68	0.68	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	48.5	0.7	0.34	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.50	0.27	0.14	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	2030	*	3.4	mg/Kg	1	05/12/21	CPP	SW6010D	
Cadmium	1.51	0.34	0.34	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	17.2	0.34	0.34	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	9.70	0.34	0.34	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	23.2	0.7	0.34	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	31400	34	34	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	22.7	0.7	0.34	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	7090	34	34	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	756	3.4	3.4	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	*	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B
Nickel	21.9	0.34	0.34	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	980	N	7	2.7	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.34	0.34	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	664	7	2.9	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.4	1.4	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	19.8	0.34	0.34	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	65.6	0.7	0.34	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	86			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/11/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.300	0.0307	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.300	0.0792	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.300	0.125	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.300	0.125	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.300	0.0615	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.300	0.0592	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.300	0.0561	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.300	0.420	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.300	0.0615	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	0.321	0.300	0.0900	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.300	0.0546	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.300	0.0372	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.300	0.0791	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	1.27	0.300	0.219	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.300	0.0718	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	4.97	0.300	0.0526	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.300	0.0927	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.300	0.110	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.300	0.0897	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.300	0.0522	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.300	0.140	ng/g		05/19/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	53.7			%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	58.0			%		05/19/21	***	EPA 537m
% M2-6:2FTS	272			%		05/19/21	***	EPA 537m
% M2-8:2FTS	277			%		05/19/21	***	EPA 537m
% M2PFTeDA	37.5			%		05/19/21	***	EPA 537m
% M3PFBS	83.6			%		05/19/21	***	EPA 537m
% M3PFHxS	75.5			%		05/19/21	***	EPA 537m
% M4PFHpA	46.1			%		05/19/21	***	EPA 537m
% M5PFHxA	77.0			%		05/19/21	***	EPA 537m
% M5PFPeA	81.7			%		05/19/21	***	EPA 537m
% M6PFDA	71.6			%		05/19/21	***	EPA 537m
% M7PFUdA	61.5			%		05/19/21	***	EPA 537m
% M8FOSA	32.1			%		05/19/21	***	EPA 537m
% M8PFOA	79.1			%		05/19/21	***	EPA 537m
% M8PFOS	67.9			%		05/19/21	***	EPA 537m
% M9PFNA	64.5			%		05/19/21	***	EPA 537m
% MPFBA	88.5			%		05/19/21	***	EPA 537m
% MPFDoA	46.0			%		05/19/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/12/21	PL	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/12/21	PL	SW8151A
2,4-D	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
2,4-DB	ND	2900	2900	ug/Kg	10	05/12/21	PL	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/12/21	PL	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/12/21	PL	SW8151A
Dichloroprop	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
Dinoseb	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	54			%	10	05/12/21	PL	30 - 150 %
% DCAA (Confirmation)	45			%	10	05/12/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1221	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1232	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1242	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1248	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1254	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1260	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1262	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1268	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	83			%	2	05/12/21	AW	30 - 150 %
% DCBP (Confirmation)	75			%	2	05/12/21	AW	30 - 150 %
% TCMX	84			%	2	05/12/21	AW	30 - 150 %
% TCMX (Confirmation)	83			%	2	05/12/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3	2.3	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	12	2.3	2.3	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	4.4	2.3	2.3	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor epoxide	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
<b><u>QA/QC Surrogates</u></b>									
% DCBP	84			%	2	05/12/21	CG	30 - 150 %	
% DCBP (Confirmation)	75			%	2	05/12/21	CG	30 - 150 %	
% TCMX	72			%	2	05/12/21	CG	30 - 150 %	
% TCMX (Confirmation)	68			%	2	05/12/21	CG	30 - 150 %	
<b><u>Semivolatiles</u></b>									
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D	
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
1,2-Dichlorobenzene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D	
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
2,4,5-Trichlorophenol	ND	260	210	ug/Kg	1	05/12/21	WB	SW8270D	
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dimethylphenol	ND	260	93	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	05/12/21	WB	SW8270D	
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	05/12/21	WB	SW8270D	
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D	
2-Chloronaphthalene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
2-Chlorophenol	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
2-Methylnaphthalene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
2-Methylphenol (o-cresol)	ND	260	180	ug/Kg	1	05/12/21	WB	SW8270D	
2-Nitroaniline	ND	260	260	ug/Kg	1	05/12/21	WB	SW8270D	
2-Nitrophenol	ND	260	240	ug/Kg	1	05/12/21	WB	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	05/12/21	WB	SW8270D	
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	05/12/21	WB	SW8270D	
3-Nitroaniline	ND	380	750	ug/Kg	1	05/12/21	WB	SW8270D	
4,6-Dinitro-2-methylphenol	ND	230	75	ug/Kg	1	05/12/21	WB	SW8270D	
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D	
4-Chloroaniline	ND	300	180	ug/Kg	1	05/12/21	WB	SW8270D	
4-Chlorophenyl phenyl ether	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D	
4-Nitroaniline	ND	380	130	ug/Kg	1	05/12/21	WB	SW8270D	
4-Nitrophenol	ND	380	170	ug/Kg	1	05/12/21	WB	SW8270D	
Acenaphthene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
Acenaphthylene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
Acetophenone	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D	
Aniline	ND	300	300	ug/Kg	1	05/12/21	WB	SW8270D	
Anthracene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D	
Benz(a)anthracene	320	260	130	ug/Kg	1	05/12/21	WB	SW8270D	
Benzidine	ND	380	220	ug/Kg	1	05/12/21	WB	SW8270D	
Benzo(a)pyrene	410	190	120	ug/Kg	1	05/12/21	WB	SW8270D	
Benzo(b)fluoranthene	400	260	130	ug/Kg	1	05/12/21	WB	SW8270D	
Benzo(ghi)perylene	250	J	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	330	260	130	ug/Kg	1	05/12/21	WB	SW8270D	
Benzoic acid	ND	1900	750	ug/Kg	1	05/12/21	WB	SW8270D	
Benzyl butyl phthalate	ND	260	97	ug/Kg	1	05/12/21	WB	SW8270D	
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	05/12/21	WB	SW8270D	
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
Carbazole	ND	190	150	ug/Kg	1	05/12/21	WB	SW8270D	
Chrysene	410	260	130	ug/Kg	1	05/12/21	WB	SW8270D	
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D	
Dibenzofuran	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
Diethyl phthalate	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D	
Dimethylphthalate	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D	
Di-n-butylphthalate	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D	
Di-n-octylphthalate	ND	260	97	ug/Kg	1	05/12/21	WB	SW8270D	
Fluoranthene	690	260	120	ug/Kg	1	05/12/21	WB	SW8270D	
Fluorene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D	
Hexachlorobenzene	ND	190	110	ug/Kg	1	05/12/21	WB	SW8270D	
Hexachlorobutadiene	ND	260	140	ug/Kg	1	05/12/21	WB	SW8270D	
Hexachlorocyclopentadiene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D	
Hexachloroethane	ND	190	110	ug/Kg	1	05/12/21	WB	SW8270D	
Indeno(1,2,3-cd)pyrene	270	260	130	ug/Kg	1	05/12/21	WB	SW8270D	
Isophorone	ND	190	110	ug/Kg	1	05/12/21	WB	SW8270D	
Naphthalene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
Nitrobenzene	ND	190	130	ug/Kg	1	05/12/21	WB	SW8270D	
N-Nitrosodimethylamine	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D	
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D	
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	05/12/21	WB	SW8270D	
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	05/12/21	WB	SW8270D	
Pentachlorophenol	ND	230	140	ug/Kg	1	05/12/21	WB	SW8270D	
Phenanthrene	180	J	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D	
Pyrene	590	260	130	ug/Kg	1	05/12/21	WB	SW8270D	
Pyridine	ND	260	93	ug/Kg	1	05/12/21	WB	SW8270D	
<b><u>QA/QC Surrogates</u></b>									
% 2,4,6-Tribromophenol	117			%	1	05/12/21	WB	30 - 130 %	
% 2-Fluorobiphenyl	80			%	1	05/12/21	WB	30 - 130 %	
% 2-Fluorophenol	68			%	1	05/12/21	WB	30 - 130 %	
% Nitrobenzene-d5	89			%	1	05/12/21	WB	30 - 130 %	
% Phenol-d5	83			%	1	05/12/21	WB	30 - 130 %	
% Terphenyl-d14	94			%	1	05/12/21	WB	30 - 130 %	
<b><u>1,4-Dioxane</u></b>									
1,4-dioxane	ND	77	77	ug/Kg	1	05/13/21	WB	SW8270D (SIM)	
<b><u>QA/QC Surrogates</u></b>									
% 2-Fluorobiphenyl	66			%	1	05/13/21	WB	30 - 130 %	
% Nitrobenzene-d5	98			%	1	05/13/21	WB	30 - 130 %	
% Terphenyl-d14	92			%	1	05/13/21	WB	30 - 130 %	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: SW  
 Analyzed by: see "By" below

05/10/21

10:20

05/11/21

16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28504

Project ID: IPARK 0118 48  
 Client ID: SB-02B (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/10/21		SW5035A
<b>Volatiles</b>								
1,1,1,2-Tetrachloroethane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloropropene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromoethane	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloroethane	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloropropane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichloropropane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
2,2-Dichloropropane	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
2-Chlorotoluene	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
2-Hexanone	ND	15	2.9	ug/Kg	1	05/12/21	JLI	SW8260C
2-Isopropyltoluene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	15	2.9	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	15	2.9	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	5.8	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	2.9	1.2	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	17	2.9	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	5.8	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	2.9	2.9	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	5.8	1.5	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	5.8	1.5	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	2.9	0.58	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	2.9	0.29	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	05/12/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	96			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	101			%	1	05/12/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

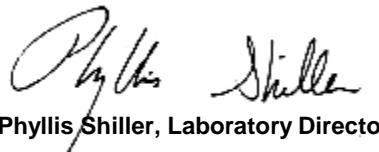
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21    10:20  
05/11/21    16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28505

Project ID: IPARK 0118 48  
Client ID: SB-02C (13-15`)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	11200	40	7.9	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	4.0	4.0	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	3.80	0.79	0.79	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	25.0	0.8	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.25	J	0.32	0.16	mg/Kg	1	05/12/21	CPP	SW6010D
Calcium	2870	*	4.0	3.7	mg/Kg	1	05/12/21	CPP	SW6010D
Cadmium	1.15	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	11.5	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	8.31	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	21.7	0.8	0.40	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	27200	40	40	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	9.7	0.8	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	8380	40	40	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	848	4.0	4.0	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	*	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B
Nickel	18.6	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	923	N	8	3.1	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.6	1.4	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	209	8	3.4	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.6	1.6	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	12.0	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	52.7	0.8	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	85			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/10/21		SW5035A
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/11/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.285	0.0291	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.285	0.0751	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.285	0.119	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.285	0.119	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.285	0.0583	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.285	0.0561	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.285	0.0532	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.285	0.398	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.285	0.0583	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.285	0.0854	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.285	0.0518	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.285	0.0353	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.285	0.0750	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.285	0.208	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.285	0.0681	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.285	0.0499	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.285	0.0879	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.285	0.105	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.285	0.0850	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.285	0.0495	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.285	0.132	ng/g		05/19/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	65.9		%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	82.6		%		05/19/21	***	EPA 537m
% M2-6:2FTS	109		%		05/19/21	***	EPA 537m
% M2-8:2FTS	120		%		05/19/21	***	EPA 537m
% M2PFTeDA	59.4		%		05/19/21	***	EPA 537m
% M3PFBS	85.7		%		05/19/21	***	EPA 537m
% M3PFHxS	80.2		%		05/19/21	***	EPA 537m
% M4PFHpa	83.8		%		05/19/21	***	EPA 537m
% M5PFHxA	82.6		%		05/19/21	***	EPA 537m
% M5PFPeA	93.4		%		05/19/21	***	EPA 537m
% M6PFDA	80.0		%		05/19/21	***	EPA 537m
% M7PFUda	73.5		%		05/19/21	***	EPA 537m
% M8FOSA	59.7		%		05/19/21	***	EPA 537m
% M8PFOA	87.5		%		05/19/21	***	EPA 537m
% M8PFOS	74.6		%		05/19/21	***	EPA 537m
% M9PFNA	94.0		%		05/19/21	***	EPA 537m
% MPFBA	99.7		%		05/19/21	***	EPA 537m
% MPFDoA	73.5		%		05/19/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
2,4-D	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
2,4-DB	ND	2900	2900	ug/Kg	10	05/12/21	PL	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
Dichloroprop	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
Dinoseb	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	52			%	10	05/12/21	PL	30 - 150 %
% DCAA (Confirmation)	51			%	10	05/12/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1221	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1232	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1242	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1248	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1254	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1260	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1262	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1268	ND	76	76	ug/Kg	2	05/12/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	75			%	2	05/12/21	AW	30 - 150 %
% DCBP (Confirmation)	77			%	2	05/12/21	AW	30 - 150 %
% TCMX	77			%	2	05/12/21	AW	30 - 150 %
% TCMX (Confirmation)	77			%	2	05/12/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3	2.3	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.3	2.3	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.3	2.3	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/12/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	66			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	70			%	2	05/12/21	CG	30 - 150 %
% TCMX	69			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	68			%	2	05/12/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloropropene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromoethane	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloroethane	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloropropane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichloropropane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
2,2-Dichloropropane	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
2-Chlorotoluene	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
2-Hexanone	ND	17	3.4	ug/Kg	1	05/12/21	JLI	SW8260C
2-Isopropyltoluene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
4-Chlorotoluene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	17	3.4	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	17	3.4	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	6.7	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Bromochloromethane	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Bromodichloromethane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	3.4	1.3	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	20	3.4	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	6.7	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	3.4	3.4	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	6.7	1.7	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	6.7	1.7	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	3.4	0.67	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	3.4	0.34	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	05/12/21	JLI	70 - 130 %
% Dibromofluoromethane	96			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	102			%	1	05/12/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	390	200	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	390	170	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	390	180	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	390	170	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	390	170	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	390	310	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	280	180	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	280	200	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	390	140	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	390	390	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	280	220	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	280	180	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	390	170	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	330	260	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	390	390	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	390	360	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	390	220	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	280	270	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	560	1100	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	340	110	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	390	170	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	390	200	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	450	260	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	390	190	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	560	190	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	560	250	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	390	170	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	390	180	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	450	450	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	390	180	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	390	190	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	560	330	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	280	180	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	390	190	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	390	180	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	390	190	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	2800	1100	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	390	150	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	280	150	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	280	230	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	390	190	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	280	180	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	390	180	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	390	170	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	390	150	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	390	150	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	390	180	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	390	190	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	280	160	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	390	200	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	390	170	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	280	170	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	390	190	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	280	160	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	280	200	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	280	180	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	390	220	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	390	210	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	340	210	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthenrene	ND	390	160	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	330	180	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	390	190	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	390	140	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	118			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	86			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	69			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	83			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	82			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	94			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	76	76	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	45			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	67			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	94			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

#### Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      11:00  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28506

Project ID: IPARK 0118 48  
Client ID: SB-03A (0-1')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	13500	44	8.7	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	4.4	4.4	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	5.17	0.87	0.87	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	57.7	0.9	0.44	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.45	0.35	0.17	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	9090	*	4.4	4.0	mg/Kg	1	05/12/21	CPP	SW6010D
Cadmium	1.75	0.44	0.44	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	23.7	0.44	0.44	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	14.4	0.44	0.44	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	30.1	0.9	0.44	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	33000	44	44	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	34.7	0.9	0.44	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	9930	44	44	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	1990	44	44	mg/Kg	100	05/13/21	TH	SW6010D	
Mercury	ND	*	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B
Nickel	25.1	0.44	0.44	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1550	N	9	3.4	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.7	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.44	0.44	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	294	9	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.7	1.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	22.3	0.44	0.44	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	83.5	0.9	0.44	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	82			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/11/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.273	0.0280	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic acid	ND	0.273	0.0721	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.273	0.114	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.273	0.114	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.273	0.0559	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.273	0.0538	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.273	0.0510	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.273	0.382	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.273	0.0559	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.273	0.0819	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.273	0.0497	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.273	0.0339	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.273	0.0720	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	0.670	0.273	0.200	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.273	0.0653	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	1.17	0.273	0.0478	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.273	0.0843	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.273	0.100	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.273	0.0816	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.273	0.0475	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.273	0.127	ng/g		05/19/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	64.9			%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	70.1			%		05/19/21	***	EPA 537m
% M2-6:2FTS	262			%		05/19/21	***	EPA 537m
% M2-8:2FTS	293			%		05/19/21	***	EPA 537m
% M2PFTeDA	41.9			%		05/19/21	***	EPA 537m
% M3PFBS	77.5			%		05/19/21	***	EPA 537m
% M3PFHxS	73.8			%		05/19/21	***	EPA 537m
% M4PFHpA	53.8			%		05/19/21	***	EPA 537m
% M5PFHxA	81.4			%		05/19/21	***	EPA 537m
% M5PFPeA	84.0			%		05/19/21	***	EPA 537m
% M6PFDA	77.2			%		05/19/21	***	EPA 537m
% M7PFUdA	63.3			%		05/19/21	***	EPA 537m
% M8FOSA	47.8			%		05/19/21	***	EPA 537m
% M8PFOA	82.6			%		05/19/21	***	EPA 537m
% M8PFOS	68.6			%		05/19/21	***	EPA 537m
% M9PFNA	76.3			%		05/19/21	***	EPA 537m
% MPFBA	92.7			%		05/19/21	***	EPA 537m
% MPFDoA	56.3			%		05/19/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
2,4-D	ND	300	300	ug/Kg	10	05/12/21	PL	SW8151A
2,4-DB	ND	3000	3000	ug/Kg	10	05/12/21	PL	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
Dichloroprop	ND	300	300	ug/Kg	10	05/12/21	PL	SW8151A
Dinoseb	ND	300	300	ug/Kg	10	05/12/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	48			%	10	05/12/21	PL	30 - 150 %
% DCAA (Confirmation)	49			%	10	05/12/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	80	80	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1221	ND	80	80	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1232	ND	80	80	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1242	ND	80	80	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1248	ND	80	80	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1254	ND	80	80	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1260	ND	80	80	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1262	ND	80	80	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1268	ND	80	80	ug/Kg	2	05/12/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	83			%	2	05/12/21	AW	30 - 150 %
% DCBP (Confirmation)	76			%	2	05/12/21	AW	30 - 150 %
% TCMX	70			%	2	05/12/21	AW	30 - 150 %
% TCMX (Confirmation)	69			%	2	05/12/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.4	2.4	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	3.1	3.1	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.4	2.4	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	4.0	4.0	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	4.0	4.0	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	40	40	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	4.0	4.0	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	4.0	4.0	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor epoxide	ND	8.0	8.0	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	40	40	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	62			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	63			%	2	05/12/21	CG	30 - 150 %
% TCMX	63			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	57			%	2	05/12/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	280	140	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	280	120	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	280	110	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	280	130	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	280	120	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	280	120	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	280	220	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	200	130	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	200	140	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	280	99	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	280	280	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	200	160	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	200	130	ug/Kg	1	05/12/21	WB	SW8270D
2-Chloronaphthalene	ND	280	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	280	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	280	120	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	280	190	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	280	280	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	280	250	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	280	160	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	200	190	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	400	800	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	240	80	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	280	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	280	140	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	320	190	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	280	130	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	400	130	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	400	180	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	280	120	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	280	110	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	280	120	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	320	320	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	280	130	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	350	280	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	400	230	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	450	200	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	500	280	140	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	350	280	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	350	280	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	2000	800	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	280	100	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	280	110	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	200	110	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	280	110	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	280	110	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	200	160	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	450	280	130	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	200	130	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	280	120	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	280	130	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	280	120	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	280	110	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	280	100	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	790	280	130	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	280	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	200	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	280	140	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	280	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	200	120	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	340	280	130	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	200	110	ug/Kg	1	05/12/21	WB	SW8270D
Naphthalene	ND	280	110	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	200	140	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	280	110	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	200	130	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	280	150	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	280	150	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	240	150	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthrene	260	J 280	110	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	280	130	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	660	280	140	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	280	98	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	118			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	78			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	66			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	84			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	79			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	90			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	79	79	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	61			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	78			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	91			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: SW  
 Analyzed by: see "By" below

05/10/21

11:00

05/11/21

16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28507

Project ID: IPARK 0118 48  
 Client ID: SB-03B (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/10/21		SW5035A	1
<b>Volatiles</b>									
1,1,1,2-Tetrachloroethane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloroethane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloroethene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloropropene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dibromoethane	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichloroethane	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichloropropane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
1,3-Dichloropropane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
2,2-Dichloropropane	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Chlorotoluene	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Hexanone	ND	20	4.1	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Isopropyltoluene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C	1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	20	4.1	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	20	4.1	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	8.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Bromochloromethane	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Bromodichloromethane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	4.1	1.6	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	24	4.1	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	4.1	4.1	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.1	2.0	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.1	2.0	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.1	0.81	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	4.1	0.41	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	05/12/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	98			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	101			%	1	05/12/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

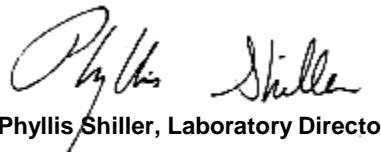
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      11:00  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28508

Project ID: IPARK 0118 48  
Client ID: SB-03C (12-14`)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	10800	40	8.1	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	4.0	4.0	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	4.44	0.81	0.81	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	28.0	0.8	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.27	J	0.32	0.16	mg/Kg	1	05/12/21	CPP	SW6010D
Calcium	5490	*	4.0	3.7	mg/Kg	1	05/12/21	CPP	SW6010D
Cadmium	1.26	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	12.5	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	9.16	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	24.2	0.8	0.40	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	27800	40	40	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	10.9	0.8	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	8770	40	40	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	685	4.0	4.0	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	20.2	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1050	N	8	3.1	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.6	1.4	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	366	8	3.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.6	1.6	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	12.4	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	58.6	0.8	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	85			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/10/21		SW5035A
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/11/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.303	0.0310	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.303	0.0799	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.303	0.126	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.303	0.126	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.303	0.0620	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.303	0.0597	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.303	0.0565	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.303	0.424	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.303	0.0620	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.303	0.0908	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.303	0.0551	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.303	0.0375	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.303	0.0798	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.303	0.221	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.303	0.0724	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.303	0.0530	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.303	0.0934	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.303	0.111	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.303	0.0904	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.303	0.0526	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.303	0.141	ng/g		05/19/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	58.5		%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	86.6		%		05/19/21	***	EPA 537m
% M2-6:2FTS	105		%		05/19/21	***	EPA 537m
% M2-8:2FTS	134		%		05/19/21	***	EPA 537m
% M2PFTeDA	57.7		%		05/19/21	***	EPA 537m
% M3PFBS	83.6		%		05/19/21	***	EPA 537m
% M3PFHxS	75.0		%		05/19/21	***	EPA 537m
% M4PFHpa	79.7		%		05/19/21	***	EPA 537m
% M5PFHxA	81.9		%		05/19/21	***	EPA 537m
% M5PFPeA	90.0		%		05/19/21	***	EPA 537m
% M6PFDA	82.5		%		05/19/21	***	EPA 537m
% M7PFUdA	74.0		%		05/19/21	***	EPA 537m
% M8FOSA	63.3		%		05/19/21	***	EPA 537m
% M8PFOA	85.0		%		05/19/21	***	EPA 537m
% M8PFOS	77.3		%		05/19/21	***	EPA 537m
% M9PFNA	81.6		%		05/19/21	***	EPA 537m
% MPFBA	96.1		%		05/19/21	***	EPA 537m
% MPFDoA	75.3		%		05/19/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
2,4-D	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
2,4-DB	ND	2900	2900	ug/Kg	10	05/12/21	PL	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/12/21	PL	SW8151A
Dichloroprop	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
Dinoseb	ND	290	290	ug/Kg	10	05/12/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	49			%	10	05/12/21	PL	30 - 150 %
% DCAA (Confirmation)	47			%	10	05/12/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	88			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	80			%	2	05/13/21	AW	30 - 150 %
% TCMX	77			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	74			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3	2.3	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.3	2.3	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.3	2.3	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.6	7.6	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/12/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	62			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	65			%	2	05/12/21	CG	30 - 150 %
% TCMX	62			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	59			%	2	05/12/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloropropene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromoethane	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloroethane	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloropropane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichloropropane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
2,2-Dichloropropane	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
2-Chlorotoluene	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
2-Hexanone	ND	15	3.1	ug/Kg	1	05/12/21	JLI	SW8260C
2-Isopropyltoluene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
4-Chlorotoluene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	15	3.1	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	15	3.1	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	6.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Bromochloromethane	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Bromodichloromethane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	3.1	1.2	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	18	3.1	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	6.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	3.1	3.1	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	6.1	1.5	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	6.1	1.5	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	3.1	0.61	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	3.1	0.31	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	05/12/21	JLI	70 - 130 %
% Dibromofluoromethane	97			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	101			%	1	05/12/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	400	200	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	400	170	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	400	160	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	400	180	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	400	170	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	400	170	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	400	310	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	280	180	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	280	200	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	400	140	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	400	400	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	280	220	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	280	180	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	400	160	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	400	160	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	400	170	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	330	270	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	400	400	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	400	360	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	400	220	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	280	270	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	570	1100	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	340	110	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	400	170	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	400	200	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	450	260	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	400	190	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	570	190	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	570	260	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	400	170	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	400	160	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	400	180	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	450	450	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	400	190	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	400	190	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	570	330	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	280	180	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	400	190	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	400	180	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	400	190	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	2800	1100	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	400	150	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	400	160	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	280	150	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	400	160	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	400	160	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	280	230	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	400	190	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	280	180	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	400	170	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	400	180	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	400	180	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	400	150	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	400	150	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	400	180	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	400	190	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	280	170	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	400	210	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	400	170	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	280	170	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	400	190	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	280	160	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	400	160	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	280	200	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	400	160	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	280	180	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	400	220	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	400	210	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	340	210	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthrene	ND	400	160	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	330	180	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	400	200	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	400	140	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	117			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	78			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	58			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	70			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	70			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	95			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	77	77	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	52			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	79			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	94			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

#### Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      11:30  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28509

Project ID: IPARK 0118 48  
Client ID: SB-04A (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	12200	38	7.6	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.8	3.8	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	5.65	0.76	0.76	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	33.9	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.41	0.30	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	24700	*	38	35	mg/Kg	10	05/12/21	CPP	SW6010D
Cadmium	1.29	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	11.5	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	9.87	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	29.5	0.8	0.38	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	26600	38	38	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	12.6	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	18100	38	38	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	888	3.8	3.8	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	20.1	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1220	N	8	3.0	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	71	8	3.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	20.2	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	55.4	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	89			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/11/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.253	0.0260	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.253	0.0669	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.253	0.106	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.253	0.106	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.253	0.0519	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.253	0.0500	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.253	0.0474	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.253	0.355	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.253	0.0519	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.253	0.0760	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.253	0.0461	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.253	0.0314	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.253	0.0668	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.253	0.185	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.253	0.0606	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.253	0.0444	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.253	0.0783	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.253	0.0932	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.253	0.0757	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.253	0.0441	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.253	0.118	ng/g		05/19/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	61.9			%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	62.1			%		05/19/21	***	EPA 537m
% M2-6:2FTS	205			%		05/19/21	***	EPA 537m
% M2-8:2FTS	205			%		05/19/21	***	EPA 537m
% M2PFTeDA	44.3			%		05/19/21	***	EPA 537m
% M3PFBS	76.2			%		05/19/21	***	EPA 537m
% M3PFHxS	72.0			%		05/19/21	***	EPA 537m
% M4PFHpA	72.1			%		05/19/21	***	EPA 537m
% M5PFHxA	77.8			%		05/19/21	***	EPA 537m
% M5PFPeA	84.8			%		05/19/21	***	EPA 537m
% M6PFDA	71.0			%		05/19/21	***	EPA 537m
% M7PFUdA	56.7			%		05/19/21	***	EPA 537m
% M8FOSA	47.3			%		05/19/21	***	EPA 537m
% M8PFOA	85.3			%		05/19/21	***	EPA 537m
% M8PFOS	58.4			%		05/19/21	***	EPA 537m
% M9PFNA	75.7			%		05/19/21	***	EPA 537m
% MPFBA	91.0			%		05/19/21	***	EPA 537m
% MPFDoA	59.4			%		05/19/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/13/21	PL	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/13/21	PL	SW8151A
2,4-D	ND	280	280	ug/Kg	10	05/13/21	PL	SW8151A
2,4-DB	ND	2800	2800	ug/Kg	10	05/13/21	PL	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/13/21	PL	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/13/21	PL	SW8151A
Dichloroprop	ND	280	280	ug/Kg	10	05/13/21	PL	SW8151A
Dinoseb	ND	280	280	ug/Kg	10	05/13/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	34			%	10	05/13/21	PL	30 - 150 %
% DCAA (Confirmation)	33			%	10	05/13/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1221	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1232	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1242	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1248	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1254	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1260	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1262	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1268	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	70			%	2	05/12/21	AW	30 - 150 %
% DCBP (Confirmation)	67			%	2	05/12/21	AW	30 - 150 %
% TCMX	77			%	2	05/12/21	AW	30 - 150 %
% TCMX (Confirmation)	76			%	2	05/12/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2	2.2	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor epoxide	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	69			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	67			%	2	05/12/21	CG	30 - 150 %
% TCMX	70			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	67			%	2	05/12/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	2500	1300	ug/Kg	10	05/12/21	PS	SW8270D
1,2,4-Trichlorobenzene	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
1,2-Dichlorobenzene	ND	1100	1000	ug/Kg	10	05/12/21	PS	SW8270D
1,2-Diphenylhydrazine	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
1,3-Dichlorobenzene	ND	2400	1100	ug/Kg	10	05/12/21	PS	SW8270D
1,4-Dichlorobenzene	ND	1800	1100	ug/Kg	10	05/12/21	PS	SW8270D
2,4,5-Trichlorophenol	ND	2500	2000	ug/Kg	10	05/12/21	PS	SW8270D
2,4,6-Trichlorophenol	ND	1800	1200	ug/Kg	10	05/12/21	PS	SW8270D
2,4-Dichlorophenol	ND	1800	1300	ug/Kg	10	05/12/21	PS	SW8270D
2,4-Dimethylphenol	ND	2500	900	ug/Kg	10	05/12/21	PS	SW8270D
2,4-Dinitrophenol	ND	2500	2500	ug/Kg	10	05/12/21	PS	SW8270D
2,4-Dinitrotoluene	ND	1800	1400	ug/Kg	10	05/12/21	PS	SW8270D
2,6-Dinitrotoluene	ND	1800	1100	ug/Kg	10	05/12/21	PS	SW8270D
2-Chloronaphthalene	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
2-Chlorophenol	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
2-Methylnaphthalene	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
2-Methylphenol (o-cresol)	ND	330	290	ug/Kg	10	05/12/21	PS	SW8270D
2-Nitroaniline	ND	2500	2500	ug/Kg	10	05/12/21	PS	SW8270D
2-Nitrophenol	ND	2500	2300	ug/Kg	10	05/12/21	PS	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	2500	1400	ug/Kg	10	05/12/21	PS	SW8270D
3,3'-Dichlorobenzidine	ND	1800	1700	ug/Kg	10	05/12/21	PS	SW8270D
3-Nitroaniline	ND	3600	7300	ug/Kg	10	05/12/21	PS	SW8270D
4,6-Dinitro-2-methylphenol	ND	2200	730	ug/Kg	10	05/12/21	PS	SW8270D
4-Bromophenyl phenyl ether	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
4-Chloro-3-methylphenol	ND	2500	1300	ug/Kg	10	05/12/21	PS	SW8270D
4-Chloroaniline	ND	2900	1700	ug/Kg	10	05/12/21	PS	SW8270D
4-Chlorophenyl phenyl ether	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
4-Nitroaniline	ND	3600	1200	ug/Kg	10	05/12/21	PS	SW8270D
4-Nitrophenol	ND	3600	1600	ug/Kg	10	05/12/21	PS	SW8270D
Acenaphthene	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Acenaphthylene	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
Acetophenone	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Aniline	ND	2900	2900	ug/Kg	10	05/12/21	PS	SW8270D
Anthracene	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
Benz(a)anthracene	ND	1000	1000	ug/Kg	10	05/12/21	PS	SW8270D
Benzidine	ND	3600	2100	ug/Kg	10	05/12/21	PS	SW8270D
Benzo(a)pyrene	ND	1000	1000	ug/Kg	10	05/12/21	PS	SW8270D
Benzo(b)fluoranthene	ND	1000	1000	ug/Kg	10	05/12/21	PS	SW8270D
Benzo(ghi)perylene	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
Benzo(k)fluoranthene	ND	800	800	ug/Kg	10	05/12/21	PS	SW8270D
Benzoic acid	ND	18000	7300	ug/Kg	10	05/12/21	PS	SW8270D
Benzyl butyl phthalate	ND	2500	940	ug/Kg	10	05/12/21	PS	SW8270D
Bis(2-chloroethoxy)methane	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	1800	980	ug/Kg	10	05/12/21	PS	SW8270D
Bis(2-chloroisopropyl)ether	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
Bis(2-ethylhexyl)phthalate	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
Carbazole	ND	1800	1500	ug/Kg	10	05/12/21	PS	SW8270D
Chrysene	ND	1000	1000	ug/Kg	10	05/12/21	PS	SW8270D
Dibenz(a,h)anthracene	ND	330	290	ug/Kg	10	05/12/21	PS	SW8270D
Dibenzofuran	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Diethyl phthalate	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Dimethylphthalate	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Di-n-butylphthalate	ND	2500	970	ug/Kg	10	05/12/21	PS	SW8270D
Di-n-octylphthalate	ND	2500	940	ug/Kg	10	05/12/21	PS	SW8270D
Fluoranthene	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
Fluorene	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
Hexachlorobenzene	ND	330	290	ug/Kg	10	05/12/21	PS	SW8270D
Hexachlorobutadiene	ND	2500	1300	ug/Kg	10	05/12/21	PS	SW8270D
Hexachlorocyclopentadiene	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Hexachloroethane	ND	1800	1100	ug/Kg	10	05/12/21	PS	SW8270D
Indeno(1,2,3-cd)pyrene	ND	500	290	ug/Kg	10	05/12/21	PS	SW8270D
Isophorone	ND	1800	1000	ug/Kg	10	05/12/21	PS	SW8270D
Naphthalene	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
Nitrobenzene	ND	1800	1300	ug/Kg	10	05/12/21	PS	SW8270D
N-Nitrosodimethylamine	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
N-Nitrosodi-n-propylamine	ND	1800	1200	ug/Kg	10	05/12/21	PS	SW8270D
N-Nitrosodiphenylamine	ND	2500	1400	ug/Kg	10	05/12/21	PS	SW8270D
Pentachloronitrobenzene	ND	2500	1400	ug/Kg	10	05/12/21	PS	SW8270D
Pentachlorophenol	ND	800	800	ug/Kg	10	05/12/21	PS	SW8270D
Phenanthrene	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
Phenol	ND	330	290	ug/Kg	10	05/12/21	PS	SW8270D
Pyrene	ND	2500	1300	ug/Kg	10	05/12/21	PS	SW8270D
Pyridine	ND	2500	900	ug/Kg	10	05/12/21	PS	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol (10x)	79			%	10	05/12/21	PS	30 - 130 %
% 2-Fluorobiphenyl (10x)	63			%	10	05/12/21	PS	30 - 130 %
% 2-Fluorophenol (10x)	51			%	10	05/12/21	PS	30 - 130 %
% Nitrobenzene-d5 (10x)	72			%	10	05/12/21	PS	30 - 130 %
% Phenol-d5 (10x)	61			%	10	05/12/21	PS	30 - 130 %
% Terphenyl-d14 (10x)	66			%	10	05/12/21	PS	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	75	75	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	63			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	95			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	101			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

#### Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

#### Semi-Volatile Comment:

Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: SW  
 Analyzed by: see "By" below

05/10/21

11:30

05/11/21

16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28510

Project ID: IPARK 0118 48  
 Client ID: SB-04B (2-3')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/10/21		SW5035A	1
<b>Volatiles</b>									
1,1,1,2-Tetrachloroethane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloroethane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloroethene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloropropene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dibromoethane	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichloroethane	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichloropropane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
1,3-Dichloropropane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
2,2-Dichloropropane	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Chlorotoluene	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Hexanone	ND	16	3.2	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Isopropyltoluene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C	1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	16	3.2	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	16	3.2	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	6.3	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	3.2	1.3	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	19	3.2	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	6.3	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	3.2	3.2	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	6.3	1.6	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	6.3	1.6	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	3.2	0.63	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	3.2	0.32	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	101			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	05/12/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	96			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	102			%	1	05/12/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

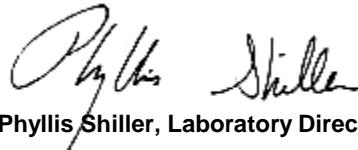
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      11:30  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28511

Project ID: IPARK 0118 48  
Client ID: SB-04C (12-14`)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	11900	35	6.9	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.5	3.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	3.81	0.69	0.69	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	34.5	0.7	0.35	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.27	J	0.28	0.14	mg/Kg	1	05/12/21	CPP	SW6010D
Calcium	10000	*	3.5	3.2	mg/Kg	1	05/12/21	CPP	SW6010D
Cadmium	1.40	0.35	0.35	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	12.7	0.35	0.35	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	9.23	0.35	0.35	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	26.5	0.7	0.35	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	30600	35	35	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	12.9	0.7	0.35	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	11900	35	35	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	1060	3.5	3.5	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	21.5	0.35	0.35	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	849	N	7	2.7	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.35	0.35	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	213	7	3.0	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.4	1.4	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	14.0	0.35	0.35	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	66.5	0.7	0.35	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	95			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/M	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/M	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/10/21		SW5035A
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.254	0.0260	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.254	0.0669	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.254	0.106	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.254	0.106	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.254	0.0519	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.254	0.0500	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.254	0.0474	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.254	0.355	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.254	0.0519	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.254	0.0761	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.254	0.0462	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.254	0.0314	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.254	0.0668	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.254	0.185	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.254	0.0607	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.254	0.0444	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.254	0.0783	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.254	0.0932	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.254	0.0758	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.254	0.0441	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.254	0.118	ng/g		05/19/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	55.8		%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	75.3		%		05/19/21	***	EPA 537m
% M2-6:2FTS	92.3		%		05/19/21	***	EPA 537m
% M2-8:2FTS	101		%		05/19/21	***	EPA 537m
% M2PFTeDA	65.7		%		05/19/21	***	EPA 537m
% M3PFBS	82.8		%		05/19/21	***	EPA 537m
% M3PFHxS	72.5		%		05/19/21	***	EPA 537m
% M4PFHpa	81.6		%		05/19/21	***	EPA 537m
% M5PFHxA	80.4		%		05/19/21	***	EPA 537m
% M5PFPeA	90.2		%		05/19/21	***	EPA 537m
% M6PFDA	70.6		%		05/19/21	***	EPA 537m
% M7PFUda	75.6		%		05/19/21	***	EPA 537m
% M8FOSA	54.5		%		05/19/21	***	EPA 537m
% M8PFOA	81.5		%		05/19/21	***	EPA 537m
% M8PFOS	74.1		%		05/19/21	***	EPA 537m
% M9PFNA	81.7		%		05/19/21	***	EPA 537m
% MPFBA	94.0		%		05/19/21	***	EPA 537m
% MPFDoA	73.8		%		05/19/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	86	86	ug/Kg	10	05/13/21	PL	SW8151A
2,4,5-TP (Silvex)	ND	86	86	ug/Kg	10	05/13/21	PL	SW8151A
2,4-D	ND	170	170	ug/Kg	10	05/13/21	PL	SW8151A
2,4-DB	ND	1700	1700	ug/Kg	10	05/13/21	PL	SW8151A
Dalapon	ND	86	86	ug/Kg	10	05/13/21	PL	SW8151A
Dicamba	ND	86	86	ug/Kg	10	05/13/21	PL	SW8151A
Dichloroprop	ND	170	170	ug/Kg	10	05/13/21	PL	SW8151A
Dinoseb	ND	170	170	ug/Kg	10	05/13/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	65			%	10	05/13/21	PL	30 - 150 %
% DCAA (Confirmation)	64			%	10	05/13/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	91			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	88			%	2	05/13/21	AW	30 - 150 %
% TCMX	80			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	80			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	35	35	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	6.9	6.9	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/12/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	67			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	66			%	2	05/12/21	CG	30 - 150 %
% TCMX	61			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	59			%	2	05/12/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
2-Chlorotoluene	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
2-Hexanone	ND	25	4.9	ug/Kg	1	05/12/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
4-Chlorotoluene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	4.9	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	25	4.9	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	9.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Bromochloromethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Bromodichloromethane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	4.9	2.0	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	30	4.9	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	4.9	4.9	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.9	2.5	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.9	2.5	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.9	0.99	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	05/12/21	JLI	70 - 130 %
% Dibromofluoromethane	97			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	101			%	1	05/12/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	240	98	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	240	190	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	170	120	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	240	86	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	240	240	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	170	140	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	240	98	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	240	98	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	240	160	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	240	240	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	240	220	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	240	140	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	170	160	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	350	690	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	69	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	280	160	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	350	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	350	160	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	240	97	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	280	280	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	350	200	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	1700	690	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	240	89	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	240	96	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	170	94	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	96	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	170	140	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	240	92	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	240	89	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	170	100	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	240	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	170	100	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	170	97	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	170	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	240	98	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	240	130	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	240	130	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthenrene	ND	240	99	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	240	85	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	124			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	89			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	76			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	93			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	88			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	97			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	70	70	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	54			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	82			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	82			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI28500  
Phoenix ID: CI28512

Project ID: IPARK 0118 48  
Client ID: SB-05A (1-2')

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	15100	37	7.4	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.7	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	4.78	0.74	0.74	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	44.2	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.46	0.30	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	1580	*	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Cadmium	1.47	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	17.1	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	10.4	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	22.9	0.7	0.37	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	27500	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	11.6	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	6230	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	489	3.7	3.7	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	22.3	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1100	N	7	2.9	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	152	7	3.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	20.9	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	57.2	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	90			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.255	0.0261	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.255	0.0672	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.255	0.106	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.255	0.106	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.255	0.0521	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.255	0.0502	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.255	0.0476	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.255	0.356	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.255	0.0521	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.255	0.0764	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.255	0.0463	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.255	0.0316	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.255	0.0671	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.255	0.186	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.255	0.0609	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.255	0.0446	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.255	0.0786	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.255	0.0936	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.255	0.0761	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.255	0.0443	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.255	0.118	ng/g		05/19/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	42.1			%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	65.7			%		05/19/21	***	EPA 537m
% M2-6:2FTS	58.9			%		05/19/21	***	EPA 537m
% M2-8:2FTS	66.2			%		05/19/21	***	EPA 537m
% M2PFTeDA	42.9			%		05/19/21	***	EPA 537m
% M3PFBS	77.0			%		05/19/21	***	EPA 537m
% M3PFHxS	65.9			%		05/19/21	***	EPA 537m
% M4PFHpA	74.9			%		05/19/21	***	EPA 537m
% M5PFHxA	81.0			%		05/19/21	***	EPA 537m
% M5PFPeA	92.3			%		05/19/21	***	EPA 537m
% M6PFDA	62.3			%		05/19/21	***	EPA 537m
% M7PFUdA	63.9			%		05/19/21	***	EPA 537m
% M8FOSA	53.7			%		05/19/21	***	EPA 537m
% M8PFOA	77.2			%		05/19/21	***	EPA 537m
% M8PFOS	63.3			%		05/19/21	***	EPA 537m
% M9PFNA	76.4			%		05/19/21	***	EPA 537m
% MPFBA	101			%		05/19/21	***	EPA 537m
% MPFDoA	60.1			%		05/19/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	91	91	ug/Kg	10	05/13/21	PL	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	91	91	ug/Kg	10	05/13/21	PL	SW8151A
2,4-D	ND	180	180	ug/Kg	10	05/13/21	PL	SW8151A
2,4-DB	ND	1800	1800	ug/Kg	10	05/13/21	PL	SW8151A
Dalapon	ND	91	91	ug/Kg	10	05/13/21	PL	SW8151A
Dicamba	ND	91	91	ug/Kg	10	05/13/21	PL	SW8151A
Dichloroprop	ND	180	180	ug/Kg	10	05/13/21	PL	SW8151A
Dinoseb	ND	180	180	ug/Kg	10	05/13/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	56			%	10	05/13/21	PL	30 - 150 %
% DCAA (Confirmation)	56			%	10	05/13/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1221	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1232	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1242	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1248	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1254	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1260	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1262	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1268	ND	74	74	ug/Kg	2	05/12/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	73			%	2	05/12/21	AW	30 - 150 %
% DCBP (Confirmation)	76			%	2	05/12/21	AW	30 - 150 %
% TCMX	80			%	2	05/12/21	AW	30 - 150 %
% TCMX (Confirmation)	79			%	2	05/12/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2	2.2	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor epoxide	ND	7.4	7.4	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	75			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	75			%	2	05/12/21	CG	30 - 150 %
% TCMX	69			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	66			%	2	05/12/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	250	90	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	360	730	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	73	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	1800	730	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	250	94	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	180	98	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	250	97	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	250	94	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	05/12/21	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	250	89	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	78			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	50			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	41			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	53			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	49			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	56			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	73	73	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	62			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	90			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	94			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

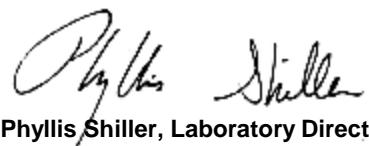
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      12:05  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28513

Project ID: IPARK 0118 48  
Client ID: SB-05B (2-3')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/10/21	SW5035A	1
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### Volatiles

1,1,1,2-Tetrachloroethane	ND	5.6	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.6	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.6	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethane	ND	5.6	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloropropene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.6	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.6	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.6	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromoethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloroethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloropropane	ND	5.6	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichloropropane	ND	5.6	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
2,2-Dichloropropane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
2-Chlorotoluene	ND	5.6	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
2-Hexanone	ND	28	5.6	ug/Kg	1	05/12/21	JLI	SW8260C
2-Isopropyltoluene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	28	5.6	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	28	5.6	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	33	5.6	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.8	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.8	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	5.6	0.56	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	05/12/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	98			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	102			%	1	05/12/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

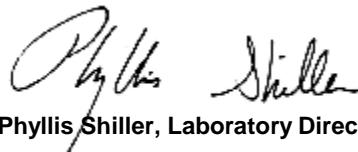
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI28500  
Phoenix ID: CI28514

Project ID: IPARK 0118 48  
Client ID: SB-05C (12-14`)

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	11700	39	7.7	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.9	3.9	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	4.86	0.77	0.77	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	33.1	0.8	0.39	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.44	0.31	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	48100	*	39	35	mg/Kg	10	05/12/21	CPP	SW6010D
Cadmium	1.50	0.39	0.39	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	16.3	0.39	0.39	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	9.82	0.39	0.39	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	28.7	0.8	0.39	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	30500	39	39	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	11.5	0.8	0.39	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	30600	39	39	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	721	3.9	3.9	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	22.5	0.39	0.39	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1600	N	8	3.0	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.39	0.39	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	384	8	3.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	19.3	0.39	0.39	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	68.4	0.8	0.39	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	80			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/10/21		SW5035A
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.287	0.0294	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.287	0.0757	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.287	0.120	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.287	0.120	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.287	0.0588	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.287	0.0566	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.287	0.0536	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.287	0.402	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.287	0.0588	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.287	0.0861	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.287	0.0522	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.287	0.0356	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.287	0.0756	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.287	0.210	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.287	0.0686	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.287	0.0503	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.287	0.0886	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.287	0.105	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.287	0.0857	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.287	0.0499	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.287	0.133	ng/g		05/19/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	52.2		%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	81.6		%		05/19/21	***	EPA 537m
% M2-6:2FTS	70.0		%		05/19/21	***	EPA 537m
% M2-8:2FTS	68.7		%		05/19/21	***	EPA 537m
% M2PFTeDA	48.0		%		05/19/21	***	EPA 537m
% M3PFBS	77.3		%		05/19/21	***	EPA 537m
% M3PFHxS	73.5		%		05/19/21	***	EPA 537m
% M4PFHpa	82.2		%		05/19/21	***	EPA 537m
% M5PFHxA	84.1		%		05/19/21	***	EPA 537m
% M5PFPeA	104		%		05/19/21	***	EPA 537m
% M6PFDA	79.2		%		05/19/21	***	EPA 537m
% M7PFUda	75.5		%		05/19/21	***	EPA 537m
% M8FOSA	53.3		%		05/19/21	***	EPA 537m
% M8PFOA	88.0		%		05/19/21	***	EPA 537m
% M8PFOS	74.9		%		05/19/21	***	EPA 537m
% M9PFNA	94.6		%		05/19/21	***	EPA 537m
% MPFBA	112		%		05/19/21	***	EPA 537m
% MPFDoA	65.6		%		05/19/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	100	100	ug/Kg	10	05/13/21	PL	SW8151A
2,4,5-TP (Silvex)	ND	100	100	ug/Kg	10	05/13/21	PL	SW8151A
2,4-D	ND	210	210	ug/Kg	10	05/13/21	PL	SW8151A
2,4-DB	ND	2100	2100	ug/Kg	10	05/13/21	PL	SW8151A
Dalapon	ND	100	100	ug/Kg	10	05/13/21	PL	SW8151A
Dicamba	ND	100	100	ug/Kg	10	05/13/21	PL	SW8151A
Dichloroprop	ND	210	210	ug/Kg	10	05/13/21	PL	SW8151A
Dinoseb	ND	210	210	ug/Kg	10	05/13/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	54			%	10	05/13/21	PL	30 - 150 %
% DCAA (Confirmation)	54			%	10	05/13/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	81	81	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1221	ND	81	81	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1232	ND	81	81	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1242	ND	81	81	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1248	ND	81	81	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1254	ND	81	81	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1260	ND	81	81	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1262	ND	81	81	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1268	ND	81	81	ug/Kg	2	05/12/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	68			%	2	05/12/21	AW	30 - 150 %
% DCBP (Confirmation)	65			%	2	05/12/21	AW	30 - 150 %
% TCMX	74			%	2	05/12/21	AW	30 - 150 %
% TCMX (Confirmation)	73			%	2	05/12/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.4	2.4	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.4	2.4	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.4	2.4	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	4.1	4.1	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	4.1	4.1	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	41	41	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	4.1	4.1	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	4.1	4.1	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Heptachlor epoxide	ND	8.1	8.1	ug/Kg	2	05/12/21	CG	SW8081B	
Methoxychlor	ND	41	41	ug/Kg	2	05/12/21	CG	SW8081B	
Toxaphene	ND	160	160	ug/Kg	2	05/12/21	CG	SW8081B	
<b><u>QA/QC Surrogates</u></b>									
% DCBP	61			%	2	05/12/21	CG	30 - 150 %	
% DCBP (Confirmation)	62			%	2	05/12/21	CG	30 - 150 %	
% TCMX	63			%	2	05/12/21	CG	30 - 150 %	
% TCMX (Confirmation)	60			%	2	05/12/21	CG	30 - 150 %	
<b><u>Volatiles</u></b>									
1,1,1,2-Tetrachloroethane	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	470	94	ug/Kg	50	05/14/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloroethane	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloroethene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloropropene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	470	94	ug/Kg	50	05/14/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	470	94	ug/Kg	50	05/14/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	470	94	ug/Kg	50	05/14/21	JLI	SW8260C	
1,2-Dibromoethane	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C	
1,2-Dichloroethane	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichloropropane	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C	
1,3-Dichloropropane	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C	
2,2-Dichloropropane	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Chlorotoluene	ND	470	94	ug/Kg	50	05/14/21	JLI	SW8260C	
2-Hexanone	ND	27	5.4	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Isopropyltoluene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C	
4-Chlorotoluene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C	
4-Methyl-2-pentanone	ND	27	5.4	ug/Kg	1	05/12/21	JLI	SW8260C	
Acetone	13	JS	27	5.4	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
Benzene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
Bromobenzene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C	
Bromochloromethane	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
Bromodichloromethane	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
Bromoform	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
Bromomethane	ND	5.4	2.2	ug/Kg	1	05/12/21	JLI	SW8260C	
Carbon Disulfide	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
Carbon tetrachloride	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
Chlorobenzene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
Chloroethane	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
Chloroform	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C	
Chloromethane	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C
Isopropylbenzene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C
m&p-Xylene	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	33	5.4	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	5.4	5.4	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	470	94	ug/Kg	50	05/14/21	JLI	SW8260C
n-Butylbenzene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C
n-Propylbenzene	ND	470	94	ug/Kg	50	05/14/21	JLI	SW8260C
o-Xylene	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C
sec-Butylbenzene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C
Styrene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	470	47	ug/Kg	50	05/14/21	JLI	SW8260C
Tetrachloroethene	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.7	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	940	230	ug/Kg	50	05/14/21	JLI	SW8260C
Trichloroethene	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.4	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	5.4	0.54	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	99			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	85			%	1	05/12/21	JLI	70 - 130 %
% Dibromofluoromethane	109			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	91			%	1	05/12/21	JLI	70 - 130 %
% 1,2-dichlorobenzene-d4 (50x)	97			%	50	05/14/21	JLI	70 - 130 %
% Bromofluorobenzene (50x)	99			%	50	05/14/21	JLI	70 - 130 %
% Dibromofluoromethane (50x)	96			%	50	05/14/21	JLI	70 - 130 %
% Toluene-d8 (50x)	96			%	50	05/14/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	290	150	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	290	230	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	210	150	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dimethylphenol	ND	290	100	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	290	290	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	210	160	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D
2-Chloronaphthalene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	290	200	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	290	290	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	290	260	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	290	160	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	210	200	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	420	830	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	250	83	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	290	150	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	330	190	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	420	140	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	420	190	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	330	330	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	420	240	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	210	140	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	2100	830	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	290	110	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	290	110	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	210	110	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	210	170	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	290	110	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	290	110	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	210	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	290	150	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Hexachlorocyclopentadiene	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	210	120	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	210	120	ug/Kg	1	05/12/21	WB	SW8270D
Naphthalene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	210	150	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	290	160	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	290	150	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	250	160	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthrene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	290	100	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	107			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	76			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	67			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	82			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	79			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	89			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	81	81	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	66			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	94			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	95			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

#### Volatile Comment:

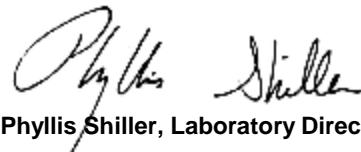
There was a suppression of the last internal standard in the low level analysis, all affected compounds are reported from the methanol preserved high level analysis which did not exhibit this interference.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI28500  
Phoenix ID: CI28515

Project ID: IPARK 0118 48  
Client ID: SB-06A (1-2')

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	13600	36	7.3	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.6	3.6	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	6.42	0.73	0.73	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	38.6	0.7	0.36	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.38	0.29	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	26700	*	36	34	mg/Kg	10	05/12/21	CPP	SW6010D
Cadmium	1.51	0.36	0.36	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	14.7	0.36	0.36	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	10.7	0.36	0.36	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	35.5	0.7	0.36	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	30900	36	36	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	16.4	0.7	0.36	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	19900	36	36	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	1260	3.6	3.6	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	22.7	0.36	0.36	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1240	N	7	2.8	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.36	0.36	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	657	7	3.1	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	25.0	0.36	0.36	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	71.7	0.7	0.36	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	94			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.259	0.0265	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic acid	ND	0.259	0.0684	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.259	0.108	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.259	0.108	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.259	0.0530	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.259	0.0511	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.259	0.0484	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.259	0.363	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.259	0.0530	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.259	0.0777	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.259	0.0471	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.259	0.0321	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.259	0.0683	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.259	0.189	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.259	0.0620	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.259	0.0454	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.259	0.0800	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.259	0.0952	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.259	0.0774	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.259	0.0451	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.259	0.120	ng/g		05/19/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	46.4			%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	68.5			%		05/19/21	***	EPA 537m
% M2-6:2FTS	75.8			%		05/19/21	***	EPA 537m
% M2-8:2FTS	95.1			%		05/19/21	***	EPA 537m
% M2PFTeDA	47.7			%		05/19/21	***	EPA 537m
% M3PFBS	78.5			%		05/19/21	***	EPA 537m
% M3PFHxS	70.9			%		05/19/21	***	EPA 537m
% M4PFHpA	78.6			%		05/19/21	***	EPA 537m
% M5PFHxA	82.7			%		05/19/21	***	EPA 537m
% M5PFPeA	88.5			%		05/19/21	***	EPA 537m
% M6PFDA	65.0			%		05/19/21	***	EPA 537m
% M7PFUdA	60.8			%		05/19/21	***	EPA 537m
% M8FOSA	39.0			%		05/19/21	***	EPA 537m
% M8PFOA	81.5			%		05/19/21	***	EPA 537m
% M8PFOS	65.8			%		05/19/21	***	EPA 537m
% M9PFNA	74.3			%		05/19/21	***	EPA 537m
% MPFBA	96.9			%		05/19/21	***	EPA 537m
% MPFDoA	64.4			%		05/19/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	88	88	ug/Kg	10	05/13/21	PL	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	88	88	ug/Kg	10	05/13/21	PL	SW8151A
2,4-D	ND	180	180	ug/Kg	10	05/13/21	PL	SW8151A
2,4-DB	ND	1800	1800	ug/Kg	10	05/13/21	PL	SW8151A
Dalapon	ND	88	88	ug/Kg	10	05/13/21	PL	SW8151A
Dicamba	ND	88	88	ug/Kg	10	05/13/21	PL	SW8151A
Dichloroprop	ND	180	180	ug/Kg	10	05/13/21	PL	SW8151A
Dinoseb	ND	180	180	ug/Kg	10	05/13/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	44			%	10	05/13/21	PL	30 - 150 %
% DCAA (Confirmation)	43			%	10	05/13/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	84			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	75			%	2	05/13/21	AW	30 - 150 %
% TCMX	81			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	79			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	75			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	68			%	2	05/13/21	CG	30 - 150 %
% TCMX	69			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	64			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
1,2,4-Trichlorobenzene	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
1,2-Dichlorobenzene	ND	1100	1000	ug/Kg	10	05/12/21	PS	SW8270D
1,2-Diphenylhydrazine	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
1,3-Dichlorobenzene	ND	2400	1000	ug/Kg	10	05/12/21	PS	SW8270D
1,4-Dichlorobenzene	ND	1800	1000	ug/Kg	10	05/12/21	PS	SW8270D
2,4,5-Trichlorophenol	ND	2500	1900	ug/Kg	10	05/12/21	PS	SW8270D
2,4,6-Trichlorophenol	ND	1800	1100	ug/Kg	10	05/12/21	PS	SW8270D
2,4-Dichlorophenol	ND	1800	1200	ug/Kg	10	05/12/21	PS	SW8270D
2,4-Dimethylphenol	ND	2500	880	ug/Kg	10	05/12/21	PS	SW8270D
2,4-Dinitrophenol	ND	2500	2500	ug/Kg	10	05/12/21	PS	SW8270D
2,4-Dinitrotoluene	ND	1800	1400	ug/Kg	10	05/12/21	PS	SW8270D
2,6-Dinitrotoluene	ND	1800	1100	ug/Kg	10	05/12/21	PS	SW8270D
2-Chloronaphthalene	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
2-Chlorophenol	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
2-Methylnaphthalene	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
2-Methylphenol (o-cresol)	ND	330	280	ug/Kg	10	05/12/21	PS	SW8270D
2-Nitroaniline	ND	2500	2500	ug/Kg	10	05/12/21	PS	SW8270D
2-Nitrophenol	ND	2500	2200	ug/Kg	10	05/12/21	PS	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	2500	1400	ug/Kg	10	05/12/21	PS	SW8270D
3,3'-Dichlorobenzidine	ND	1800	1700	ug/Kg	10	05/12/21	PS	SW8270D
3-Nitroaniline	ND	3500	7100	ug/Kg	10	05/12/21	PS	SW8270D
4,6-Dinitro-2-methylphenol	ND	2100	710	ug/Kg	10	05/12/21	PS	SW8270D
4-Bromophenyl phenyl ether	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
4-Chloro-3-methylphenol	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
4-Chloroaniline	ND	2800	1600	ug/Kg	10	05/12/21	PS	SW8270D
4-Chlorophenyl phenyl ether	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
4-Nitroaniline	ND	3500	1200	ug/Kg	10	05/12/21	PS	SW8270D
4-Nitrophenol	ND	3500	1600	ug/Kg	10	05/12/21	PS	SW8270D
Acenaphthene	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Acenaphthylene	ND	2500	990	ug/Kg	10	05/12/21	PS	SW8270D
Acetophenone	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Aniline	ND	2800	2800	ug/Kg	10	05/12/21	PS	SW8270D
Anthracene	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
Benz(a)anthracene	ND	1000	1000	ug/Kg	10	05/12/21	PS	SW8270D
Benzidine	ND	3500	2100	ug/Kg	10	05/12/21	PS	SW8270D
Benzo(a)pyrene	ND	1000	1000	ug/Kg	10	05/12/21	PS	SW8270D
Benzo(b)fluoranthene	ND	1000	1000	ug/Kg	10	05/12/21	PS	SW8270D
Benzo(ghi)perylene	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Benzo(k)fluoranthene	ND	800	800	ug/Kg	10	05/12/21	PS	SW8270D
Benzoic acid	ND	18000	7100	ug/Kg	10	05/12/21	PS	SW8270D
Benzyl butyl phthalate	ND	2500	910	ug/Kg	10	05/12/21	PS	SW8270D
Bis(2-chloroethoxy)methane	ND	2500	970	ug/Kg	10	05/12/21	PS	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	1800	950	ug/Kg	10	05/12/21	PS	SW8270D
Bis(2-chloroisopropyl)ether	ND	2500	980	ug/Kg	10	05/12/21	PS	SW8270D
Bis(2-ethylhexyl)phthalate	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
Carbazole	ND	1800	1400	ug/Kg	10	05/12/21	PS	SW8270D
Chrysene	ND	1000	1000	ug/Kg	10	05/12/21	PS	SW8270D
Dibenz(a,h)anthracene	ND	330	280	ug/Kg	10	05/12/21	PS	SW8270D
Dibenzofuran	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
Diethyl phthalate	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Dimethylphthalate	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Di-n-butylphthalate	ND	2500	940	ug/Kg	10	05/12/21	PS	SW8270D
Di-n-octylphthalate	ND	2500	910	ug/Kg	10	05/12/21	PS	SW8270D
Fluoranthene	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Fluorene	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
Hexachlorobenzene	ND	330	280	ug/Kg	10	05/12/21	PS	SW8270D
Hexachlorobutadiene	ND	2500	1300	ug/Kg	10	05/12/21	PS	SW8270D
Hexachlorocyclopentadiene	ND	2500	1100	ug/Kg	10	05/12/21	PS	SW8270D
Hexachloroethane	ND	1800	1100	ug/Kg	10	05/12/21	PS	SW8270D
Indeno(1,2,3-cd)pyrene	ND	500	280	ug/Kg	10	05/12/21	PS	SW8270D
Isophorone	ND	1800	990	ug/Kg	10	05/12/21	PS	SW8270D
Naphthalene	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
Nitrobenzene	ND	1800	1200	ug/Kg	10	05/12/21	PS	SW8270D
N-Nitrosodimethylamine	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
N-Nitrosodi-n-propylamine	ND	1800	1100	ug/Kg	10	05/12/21	PS	SW8270D
N-Nitrosodiphenylamine	ND	2500	1400	ug/Kg	10	05/12/21	PS	SW8270D
Pentachloronitrobenzene	ND	2500	1300	ug/Kg	10	05/12/21	PS	SW8270D
Pentachlorophenol	ND	800	800	ug/Kg	10	05/12/21	PS	SW8270D
Phenanthrene	ND	2500	1000	ug/Kg	10	05/12/21	PS	SW8270D
Phenol	ND	330	280	ug/Kg	10	05/12/21	PS	SW8270D
Pyrene	ND	2500	1200	ug/Kg	10	05/12/21	PS	SW8270D
Pyridine	ND	2500	870	ug/Kg	10	05/12/21	PS	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol (10x)	94			%	10	05/12/21	PS	30 - 130 %
% 2-Fluorobiphenyl (10x)	65			%	10	05/12/21	PS	30 - 130 %
% 2-Fluorophenol (10x)	58			%	10	05/12/21	PS	30 - 130 %
% Nitrobenzene-d5 (10x)	84			%	10	05/12/21	PS	30 - 130 %
% Phenol-d5 (10x)	66			%	10	05/12/21	PS	30 - 130 %
% Terphenyl-d14 (10x)	69			%	10	05/12/21	PS	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	69	69	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	59			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	84			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	89			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

#### Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

#### Semi-Volatile Comment:

Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: SW  
 Analyzed by: see "By" below

05/10/21

12:30

05/11/21

16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28516

Project ID: IPARK 0118 48  
 Client ID: SB-06B (2-3')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/10/21	SW5035A	1
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### Volatiles

1,1,1,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloropropene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromoethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloroethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloropropane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichloropropane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
2,2-Dichloropropane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
2-Chlorotoluene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
2-Hexanone	ND	26	5.3	ug/Kg	1	05/12/21	JLI	SW8260C
2-Isopropyltoluene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.3	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	26	5.3	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	32	5.3	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	5.3	5.3	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.6	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.6	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	05/12/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	97			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	98			%	1	05/12/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

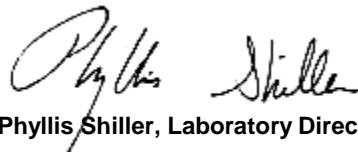
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI28500  
Phoenix ID: CI28517

Project ID: IPARK 0118 48  
Client ID: SB-06C (10-12')

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	11000	37	7.4	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.7	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	4.22	0.74	0.74	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	29.8	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.33	0.29	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	1330	*	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Cadmium	1.32	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	12.1	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	9.89	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	27.1	0.7	0.37	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	28100	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	11.1	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	6280	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	799	3.7	3.7	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	20.9	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1070	N	7	2.9	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	465	7	3.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	13.1	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	62.5	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	80			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/10/21		SW5035A
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.301	0.0308	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.301	0.0794	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.301	0.125	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.301	0.126	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.301	0.0616	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.301	0.0593	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.301	0.0561	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.301	0.421	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.301	0.0616	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.301	0.0902	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.301	0.0547	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.301	0.0373	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.301	0.0792	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.301	0.220	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.301	0.0719	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.301	0.0527	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.301	0.0928	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.301	0.110	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.301	0.0898	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.301	0.0523	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.301	0.140	ng/g		05/19/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	50.9		%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	89.1		%		05/19/21	***	EPA 537m
% M2-6:2FTS	65.7		%		05/19/21	***	EPA 537m
% M2-8:2FTS	69.3		%		05/19/21	***	EPA 537m
% M2PFTeDA	66.4		%		05/19/21	***	EPA 537m
% M3PFBS	92.5		%		05/19/21	***	EPA 537m
% M3PFHxS	76.8		%		05/19/21	***	EPA 537m
% M4PFHpa	90.2		%		05/19/21	***	EPA 537m
% M5PFHxA	93.9		%		05/19/21	***	EPA 537m
% M5PFPeA	107		%		05/19/21	***	EPA 537m
% M6PFDA	81.3		%		05/19/21	***	EPA 537m
% M7PFUdA	82.1		%		05/19/21	***	EPA 537m
% M8FOSA	56.2		%		05/19/21	***	EPA 537m
% M8PFOA	87.5		%		05/19/21	***	EPA 537m
% M8PFOS	79.9		%		05/19/21	***	EPA 537m
% M9PFNA	95.0		%		05/19/21	***	EPA 537m
% MPFBA	112		%		05/19/21	***	EPA 537m
% MPFDoA	79.9		%		05/19/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	100	100	ug/Kg	10	05/13/21	PL	SW8151A
2,4,5-TP (Silvex)	ND	100	100	ug/Kg	10	05/13/21	PL	SW8151A
2,4-D	ND	210	210	ug/Kg	10	05/13/21	PL	SW8151A
2,4-DB	ND	2100	2100	ug/Kg	10	05/13/21	PL	SW8151A
Dalapon	ND	100	100	ug/Kg	10	05/13/21	PL	SW8151A
Dicamba	ND	100	100	ug/Kg	10	05/13/21	PL	SW8151A
Dichloroprop	ND	210	210	ug/Kg	10	05/13/21	PL	SW8151A
Dinoseb	ND	210	210	ug/Kg	10	05/13/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	44			%	10	05/13/21	PL	30 - 150 %
% DCAA (Confirmation)	44			%	10	05/13/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	81			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	72			%	2	05/13/21	AW	30 - 150 %
% TCMX	75			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	72			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.5	2.5	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.5	2.5	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.5	2.5	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	4.1	4.1	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	4.1	4.1	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	41	41	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	4.1	4.1	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	4.1	4.1	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	8.2	8.2	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	41	41	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	05/12/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	63			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	62			%	2	05/12/21	CG	30 - 150 %
% TCMX	61			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	59			%	2	05/12/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
2-Chlorotoluene	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
2-Hexanone	ND	24	4.9	ug/Kg	1	05/12/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
4-Chlorotoluene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	4.9	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	24	4.9	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	9.8	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Bromochloromethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Bromodichloromethane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	4.9	2.0	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	29	4.9	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.8	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	4.9	4.9	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.8	2.4	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.8	2.4	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.9	0.98	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	4.9	0.49	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	98			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	102			%	1	05/12/21	JLI	70 - 130 %
% Dibromofluoromethane	100			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	100			%	1	05/12/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	290	150	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	290	230	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	210	150	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	290	100	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	290	290	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	210	160	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	290	190	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	290	290	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	290	260	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	290	160	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	210	200	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	410	830	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	250	83	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	290	150	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	330	190	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	410	140	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	410	190	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	330	330	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	410	240	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	210	140	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	2100	830	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	290	110	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	290	110	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	210	110	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	210	170	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	290	110	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	290	110	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	210	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	290	150	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	210	120	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	210	120	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	210	150	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	290	160	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	290	150	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	250	160	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthenrene	ND	290	120	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	290	130	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	290	140	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	290	100	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	127			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	82			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	70			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	92			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	86			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	94			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	81	81	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	54			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	74			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	93			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

\*See attached

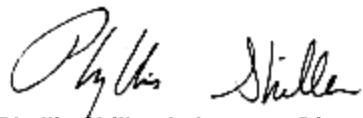
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      13:50  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28518

Project ID: IPARK 0118 48  
Client ID: SB-07A (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	1730	3.7	0.73	mg/Kg	1	05/12/21	CPP	SW6010D	
Antimony	ND	3.7	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	4.59	0.73	0.73	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	5.2	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	ND	0.29	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	214000	*	370	340	mg/Kg	100	05/13/21	TH	SW6010D
Cadmium	ND	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	4.85	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	2.82	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	6.7	0.7	0.37	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	5530	3.7	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Lead	5.0	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	115000	370	370	mg/Kg	100	05/13/21	TH	SW6010D	
Manganese	166	3.7	3.7	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	5.55	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	703	N	7	2.9	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	149	7	3.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	7.57	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	7.0	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	96			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.252	0.0258	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic acid	ND	0.252	0.0665	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.252	0.105	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.252	0.105	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.252	0.0516	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.252	0.0497	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.252	0.0471	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.252	0.353	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.252	0.0516	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.252	0.0756	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.252	0.0459	ng/g		05/19/21	***	EPA 537m
Perfluorohexamersulfonic Acid (PFHxS)	ND	0.252	0.0313	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.252	0.0664	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.252	0.184	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.252	0.0603	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.252	0.0442	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.252	0.0778	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.252	0.0927	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.252	0.0753	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.252	0.0439	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.252	0.117	ng/g		05/19/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	41.1			%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	64.7			%		05/19/21	***	EPA 537m
% M2-6:2FTS	61.6			%		05/19/21	***	EPA 537m
% M2-8:2FTS	60.4			%		05/19/21	***	EPA 537m
% M2PFTeDA	55.1			%		05/19/21	***	EPA 537m
% M3PFBS	77.7			%		05/19/21	***	EPA 537m
% M3PFHxS	68.3			%		05/19/21	***	EPA 537m
% M4PFHpA	78.3			%		05/19/21	***	EPA 537m
% M5PFHxA	80.3			%		05/19/21	***	EPA 537m
% M5PFPeA	96.1			%		05/19/21	***	EPA 537m
% M6PFDA	62.8			%		05/19/21	***	EPA 537m
% M7PFUdA	67.3			%		05/19/21	***	EPA 537m
% M8FOSA	53.3			%		05/19/21	***	EPA 537m
% M8PFOA	81.3			%		05/19/21	***	EPA 537m
% M8PFOS	62.0			%		05/19/21	***	EPA 537m
% M9PFNA	80.2			%		05/19/21	***	EPA 537m
% MPFBA	101			%		05/19/21	***	EPA 537m
% MPFDoA	66.1			%		05/19/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	86	86	ug/Kg	10	05/13/21	PL	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	86	86	ug/Kg	10	05/13/21	PL	SW8151A
2,4-D	ND	170	170	ug/Kg	10	05/13/21	PL	SW8151A
2,4-DB	ND	1700	1700	ug/Kg	10	05/13/21	PL	SW8151A
Dalapon	ND	86	86	ug/Kg	10	05/13/21	PL	SW8151A
Dicamba	ND	86	86	ug/Kg	10	05/13/21	PL	SW8151A
Dichloroprop	ND	170	170	ug/Kg	10	05/13/21	PL	SW8151A
Dinoseb	ND	170	170	ug/Kg	10	05/13/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	52			%	10	05/13/21	PL	30 - 150 %
% DCAA (Confirmation)	53			%	10	05/13/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	68	68	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1221	ND	68	68	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1232	ND	68	68	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1242	ND	68	68	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1248	ND	68	68	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1254	ND	68	68	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1260	ND	68	68	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1262	ND	68	68	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1268	ND	68	68	ug/Kg	2	05/17/21	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	68			%	2	05/17/21	SC	30 - 150 %
% DCBP (Confirmation)	76			%	2	05/17/21	SC	30 - 150 %
% TCMX	68			%	2	05/17/21	SC	30 - 150 %
% TCMX (Confirmation)	68			%	2	05/17/21	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	3.1	3.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	34	34	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	6.8	6.8	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	34	34	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	84			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	62			%	2	05/13/21	CG	30 - 150 %
% TCMX	71			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	66			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	240	95	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	240	180	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	170	120	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	240	83	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	240	240	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	170	130	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Chloronaphthalene	ND	240	96	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	240	96	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	240	160	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	240	240	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	240	210	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	240	130	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	170	160	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	340	670	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	200	67	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	240	99	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	270	160	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	340	110	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	340	150	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	240	94	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	270	270	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	340	200	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	1700	670	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	240	87	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	240	93	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	170	91	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	94	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	97	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	170	130	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	240	98	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	240	89	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	240	87	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	170	98	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	240	100	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	170	100	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	170	94	ug/Kg	1	05/12/21	WB	SW8270D
Naphthalene	ND	240	97	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	170	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	240	95	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	170	110	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	240	130	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	240	130	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	200	130	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthrene	ND	240	96	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	240	110	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	240	120	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	240	83	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	116			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	80			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	66			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	86			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	80			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	86			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	68	68	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	63			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	89			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	99			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

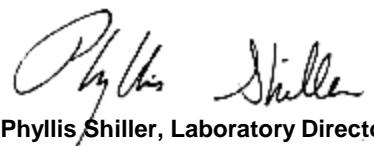
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      13:50  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28519

Project ID: IPARK 0118 48  
Client ID: SB-07B (2-3')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/10/21	SW5035A	1
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### Volatiles

1,1,1,2-Tetrachloroethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
2-Chlorotoluene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
2-Hexanone	ND	20	4.0	ug/Kg	1	05/12/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	20	4.0	ug/Kg	1	05/12/21	JLI	SW8260C
Acetone	ND	20	4.0	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	7.9	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Benzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Bromobenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Bromoform	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Bromomethane	ND	4.0	1.6	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon Disulfide	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Chlorobenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Chloroform	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Chloromethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	24	4.0	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	7.9	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	4.0	4.0	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	7.9	2.0	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	7.9	2.0	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.0	0.79	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	4.0	0.40	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	101			%	1	05/12/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	102			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	99			%	1	05/12/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

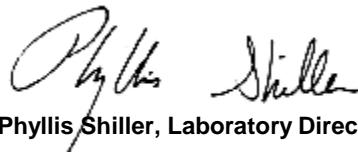
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      13:50  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28520

Project ID: IPARK 0118 48  
Client ID: SB-07C (4-6')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	11000	40	8.0	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	4.0	4.0	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	5.71	0.80	0.80	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	27.6	0.8	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.33	0.32	0.16	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	57500	*	40	37	mg/Kg	10	05/12/21	CPP	SW6010D
Cadmium	1.16	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	14.5	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	8.00	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	18.8	0.8	0.40	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	24700	40	40	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	10.0	0.8	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	37300	40	40	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	637	4.0	4.0	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	26.3	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1240	N	8	3.1	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.6	1.4	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	239	8	3.4	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.6	1.6	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	16.9	0.40	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	44.9	0.8	0.40	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	88			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/10/21		SW5035A
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m

**PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.269	0.0276	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.269	0.0711	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.269	0.112	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.269	0.113	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.269	0.0552	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.269	0.0531	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.269	0.0503	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.269	0.377	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.269	0.0552	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.269	0.0808	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.269	0.0490	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.269	0.0334	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.269	0.0710	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.269	0.197	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.269	0.0644	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.269	0.0472	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.269	0.0832	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.269	0.0990	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.269	0.0805	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.269	0.0469	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.269	0.125	ng/g		05/19/21	***	EPA 537m

**QA/QC Surrogates**

% d3-N-MeFOSAA	57.2		%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	81.9		%		05/19/21	***	EPA 537m
% M2-6:2FTS	97.1		%		05/19/21	***	EPA 537m
% M2-8:2FTS	119		%		05/19/21	***	EPA 537m
% M2PFTeDA	60.7		%		05/19/21	***	EPA 537m
% M3PFBS	82.2		%		05/19/21	***	EPA 537m
% M3PFHxS	75.4		%		05/19/21	***	EPA 537m
% M4PFHpa	80.2		%		05/19/21	***	EPA 537m
% M5PFHxA	83.5		%		05/19/21	***	EPA 537m
% M5PFPeA	98.1		%		05/19/21	***	EPA 537m
% M6PFDA	77.9		%		05/19/21	***	EPA 537m
% M7PFUda	74.2		%		05/19/21	***	EPA 537m
% M8FOSA	55.5		%		05/19/21	***	EPA 537m
% M8PFOA	86.2		%		05/19/21	***	EPA 537m
% M8PFOS	73.7		%		05/19/21	***	EPA 537m
% M9PFNA	90.8		%		05/19/21	***	EPA 537m
% MPFBA	105		%		05/19/21	***	EPA 537m
% MPFDoA	78.0		%		05/19/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	93	93	ug/Kg	10	05/14/21	PL	SW8151A
2,4,5-TP (Silvex)	ND	93	93	ug/Kg	10	05/14/21	PL	SW8151A
2,4-D	ND	190	190	ug/Kg	10	05/14/21	PL	SW8151A
2,4-DB	ND	1900	1900	ug/Kg	10	05/14/21	PL	SW8151A
Dalapon	ND	93	93	ug/Kg	10	05/14/21	PL	SW8151A
Dicamba	ND	93	93	ug/Kg	10	05/14/21	PL	SW8151A
Dichloroprop	ND	190	190	ug/Kg	10	05/14/21	PL	SW8151A
Dinoseb	ND	190	190	ug/Kg	10	05/14/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	61			%	10	05/14/21	PL	30 - 150 %
% DCAA (Confirmation)	61			%	10	05/14/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1221	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1232	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1242	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1248	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1254	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1260	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1262	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1268	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	63			%	2	05/17/21	SC	30 - 150 %
% DCBP (Confirmation)	69			%	2	05/17/21	SC	30 - 150 %
% TCMX	62			%	2	05/17/21	SC	30 - 150 %
% TCMX (Confirmation)	63			%	2	05/17/21	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	11	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	7.4	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Heptachlor epoxide	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B	
Methoxychlor	ND	38	38	ug/Kg	2	05/13/21	CG	SW8081B	
Toxaphene	ND	150	150	ug/Kg	2	05/13/21	CG	SW8081B	
<b><u>QA/QC Surrogates</u></b>									
% DCBP	73			%	2	05/13/21	CG	30 - 150 %	
% DCBP (Confirmation)	60			%	2	05/13/21	CG	30 - 150 %	
% TCMX	62			%	2	05/13/21	CG	30 - 150 %	
% TCMX (Confirmation)	65			%	2	05/13/21	CG	30 - 150 %	
<b><u>Volatiles</u></b>									
1,1,1,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloroethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloroethene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
1,1-Dichloropropene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dibromoethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichloroethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
1,2-Dichloropropane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
1,3-Dichloropropane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
2,2-Dichloropropane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Chlorotoluene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Hexanone	ND	27	5.3	ug/Kg	1	05/12/21	JLI	SW8260C	
2-Isopropyltoluene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
4-Chlorotoluene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
4-Methyl-2-pentanone	ND	27	5.3	ug/Kg	1	05/12/21	JLI	SW8260C	
Acetone	21	JS	27	5.3	ug/Kg	1	05/12/21	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
Benzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
Bromobenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
Bromochloromethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
Bromodichloromethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
Bromoform	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
Bromomethane	ND	5.3	2.1	ug/Kg	1	05/12/21	JLI	SW8260C	
Carbon Disulfide	1.3	J	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Carbon tetrachloride	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	
Chlorobenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
Chloroethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
Chloroform	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C	
Chloromethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromochloromethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Dibromomethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Ethylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Isopropylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
m&p-Xylene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	32	5.3	ug/Kg	1	05/12/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Methylene chloride	ND	5.3	5.3	ug/Kg	1	05/12/21	JLI	SW8260C
Naphthalene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
n-Butylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
n-Propylbenzene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
o-Xylene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
sec-Butylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Styrene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
tert-Butylbenzene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrachloroethene	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.7	ug/Kg	1	05/12/21	JLI	SW8260C
Toluene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.7	ug/Kg	1	05/12/21	JLI	SW8260C
Trichloroethene	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.3	1.1	ug/Kg	1	05/12/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
Vinyl chloride	ND	5.3	0.53	ug/Kg	1	05/12/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	100			%	1	05/12/21	JLI	70 - 130 %
% Bromofluorobenzene	102			%	1	05/12/21	JLI	70 - 130 %
% Dibromofluoromethane	98			%	1	05/12/21	JLI	70 - 130 %
% Toluene-d8	101			%	1	05/12/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	260	92	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	260	230	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	170	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	370	740	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	74	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	300	170	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	300	300	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	370	220	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	1900	740	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	260	98	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	190	110	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	190	100	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthenrene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	260	91	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	113			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	82			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	70			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	87			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	83			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	94			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	75	75	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	55			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	72			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	99			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

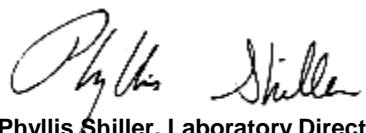
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date

Time

Project ID: IPARK 0118 48  
Client ID: SB-08A (1-2')

SDG ID: GCI28500

Phoenix ID: CI28521

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	12900	37	7.4	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.7	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	5.55	0.74	0.74	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	38.4	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.38	0.30	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	28400	*	37	34	mg/Kg	10	05/12/21	CPP	SW6010D
Cadmium	1.36	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	13.3	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	9.13	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	25.3	0.7	0.37	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	28600	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	14.7	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	20000	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	1050	3.7	3.7	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	19.5	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1160	N	7	2.9	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	709	7	3.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	18.0	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	58.8	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	92			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/11/21	R/K	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.264	0.0270	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.264	0.0696	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.264	0.110	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.264	0.110	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.264	0.0540	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.264	0.0520	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.264	0.0492	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.264	0.369	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.264	0.0540	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.264	0.0791	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.264	0.0480	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.264	0.0327	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.264	0.0695	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.264	0.193	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.264	0.0630	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.264	0.0462	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.264	0.0814	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.264	0.0969	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.264	0.0788	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.264	0.0459	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.264	0.123	ng/g		05/19/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	55.6			%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	73.9			%		05/19/21	***	EPA 537m
% M2-6:2FTS	114			%		05/19/21	***	EPA 537m
% M2-8:2FTS	142			%		05/19/21	***	EPA 537m
% M2PFTeDA	60.9			%		05/19/21	***	EPA 537m
% M3PFBS	81.6			%		05/19/21	***	EPA 537m
% M3PFHxS	77.6			%		05/19/21	***	EPA 537m
% M4PFHpA	77.9			%		05/19/21	***	EPA 537m
% M5PFHxA	81.5			%		05/19/21	***	EPA 537m
% M5PFPeA	95.4			%		05/19/21	***	EPA 537m
% M6PFDA	73.3			%		05/19/21	***	EPA 537m
% M7PFUdA	67.3			%		05/19/21	***	EPA 537m
% M8FOSA	48.3			%		05/19/21	***	EPA 537m
% M8PFOA	85.4			%		05/19/21	***	EPA 537m
% M8PFOS	65.3			%		05/19/21	***	EPA 537m
% M9PFNA	83.1			%		05/19/21	***	EPA 537m
% MPFBA	103			%		05/19/21	***	EPA 537m
% MPFDoA	71.5			%		05/19/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/14/21	PL	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/14/21	PL	SW8151A
2,4-D	ND	270	270	ug/Kg	10	05/14/21	PL	SW8151A
2,4-DB	ND	2700	2700	ug/Kg	10	05/14/21	PL	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/14/21	PL	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/14/21	PL	SW8151A
Dichloroprop	ND	270	270	ug/Kg	10	05/14/21	PL	SW8151A
Dinoseb	ND	270	270	ug/Kg	10	05/14/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	56			%	10	05/14/21	PL	30 - 150 %
% DCAA (Confirmation)	51			%	10	05/14/21	PL	30 - 150 %

**Polychlorinated Biphenyls**

PCB-1016	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A

**QA/QC Surrogates**

% DCBP	80			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	68			%	2	05/13/21	AW	30 - 150 %
% TCMX	73			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	71			%	2	05/13/21	AW	30 - 150 %

**Pesticides - Soil**

4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	7.8	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	36	36	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	36	36	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	66			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	65			%	2	05/13/21	CG	30 - 150 %
% TCMX	60			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	57			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	190	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	250	88	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	360	710	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	71	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	280	170	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	280	280	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	1800	710	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	250	92	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	98	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	180	96	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	99	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	180	140	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	250	95	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	250	92	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	180	100	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	05/12/21	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	210	130	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	250	88	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	110			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	85			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	66			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	94			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	84			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	97			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	72	72	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	54			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	71			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	89			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

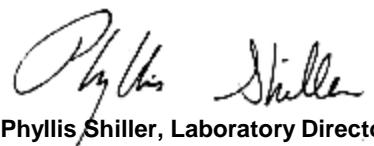
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      15:05  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28522

Project ID: IPARK 0118 48  
Client ID: SB-08B (2-3')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/10/21	SW5035A	1
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### Volatiles

1,1,1,2-Tetrachloroethane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	22	4.4	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	22	4.4	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	22	4.4	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	8.7	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.4	1.7	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	26	4.4	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.7	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	4.4	4.4	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.7	2.2	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.7	2.2	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.4	0.87	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.4	0.44	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	104			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	98			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	101			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

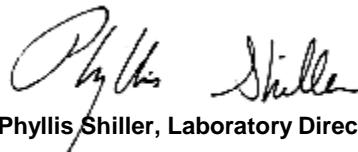
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      15:05  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28523

Project ID: IPARK 0118 48  
Client ID: SB-08C (13-15`)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	6860	38	7.5	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.8	3.8	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	4.75	0.75	0.75	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	19.3	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.28	J	0.30	0.15	mg/Kg	1	05/12/21	CPP	SW6010D
Calcium	101000	*	38	35	mg/Kg	10	05/12/21	CPP	SW6010D
Cadmium	0.83	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	8.44	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	5.59	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	14.2	0.8	0.38	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	17500	38	38	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	10.1	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	71100	380	380	mg/Kg	100	05/13/21	TH	SW6010D	
Manganese	516	3.8	3.8	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	11.5	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1250	N	8	2.9	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	520	8	3.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	10.6	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	30.4	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	92			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/10/21		SW5035A
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.258	0.0264	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.258	0.0682	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.258	0.108	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.258	0.108	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.258	0.0529	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.258	0.0509	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.258	0.0482	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.258	0.362	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.258	0.0529	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.258	0.0775	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.258	0.0470	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.258	0.0320	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.258	0.0681	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.258	0.189	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.258	0.0618	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.258	0.0452	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.258	0.0797	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.258	0.0949	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.258	0.0772	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.258	0.0449	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.258	0.120	ng/g		05/19/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	40.7		%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	79.3		%		05/19/21	***	EPA 537m
% M2-6:2FTS	51.4		%		05/19/21	***	EPA 537m
% M2-8:2FTS	51.0		%		05/19/21	***	EPA 537m
% M2PFTeDA	72.1		%		05/19/21	***	EPA 537m
% M3PFBS	73.1		%		05/19/21	***	EPA 537m
% M3PFHxS	64.0		%		05/19/21	***	EPA 537m
% M4PFHpa	76.1		%		05/19/21	***	EPA 537m
% M5PFHxA	85.0		%		05/19/21	***	EPA 537m
% M5PFPeA	102		%		05/19/21	***	EPA 537m
% M6PFDA	68.2		%		05/19/21	***	EPA 537m
% M7PFUda	75.5		%		05/19/21	***	EPA 537m
% M8FOSA	56.2		%		05/19/21	***	EPA 537m
% M8PFOA	75.7		%		05/19/21	***	EPA 537m
% M8PFOS	71.0		%		05/19/21	***	EPA 537m
% M9PFNA	86.8		%		05/19/21	***	EPA 537m
% MPFBA	117		%		05/19/21	***	EPA 537m
% MPFDoA	77.5		%		05/19/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/14/21	PL	SW8151A
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/14/21	PL	SW8151A
2,4-D	ND	270	270	ug/Kg	10	05/14/21	PL	SW8151A
2,4-DB	ND	2700	2700	ug/Kg	10	05/14/21	PL	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/14/21	PL	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/14/21	PL	SW8151A
Dichloroprop	ND	270	270	ug/Kg	10	05/14/21	PL	SW8151A
Dinoseb	ND	270	270	ug/Kg	10	05/14/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	54			%	10	05/14/21	PL	30 - 150 %
% DCAA (Confirmation)	50			%	10	05/14/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	86			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	80			%	2	05/13/21	AW	30 - 150 %
% TCMX	81			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	79			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	7.7	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	35	35	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.5	3.5	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/12/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	71			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	71			%	2	05/12/21	CG	30 - 150 %
% TCMX	72			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	69			%	2	05/12/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	23	4.6	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	4.6	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	23	4.6	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	9.2	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.6	1.8	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	4.6	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.2	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	4.6	4.6	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.2	2.3	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.2	2.3	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.6	0.92	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.6	0.46	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	105			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	99			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	102			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	250	89	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	360	720	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	72	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	1800	720	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	250	92	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	99	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	97	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	99	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	180	140	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	250	95	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	250	92	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	180	100	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	210	140	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthenrene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	250	88	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	84			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	63			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	53			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	58			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	59			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	79			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	72	72	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	59			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	77			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	92			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      16:00  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28524

Project ID: IPARK 0118 48  
Client ID: SB-09A (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	13100	37	7.3	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.7	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	5.33	0.73	0.73	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	37.9	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.40	0.29	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	21100	*	37	34	mg/Kg	10	05/12/21	CPP	SW6010D
Cadmium	1.38	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	12.9	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	10.1	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	24.6	0.7	0.37	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	29800	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	16.8	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	16900	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	949	3.7	3.7	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	21.0	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1170	N	7	2.9	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	60	7	3.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	15.6	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	57.9	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	91			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.264	0.0270	ng/g		05/19/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.264	0.0696	ng/g		05/19/21	***	EPA 537m
NEtFOSAA	ND	0.264	0.110	ng/g		05/19/21	***	EPA 537m
NMeFOSAA	ND	0.264	0.110	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.264	0.0540	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.264	0.0520	ng/g		05/19/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.264	0.0493	ng/g		05/19/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.264	0.369	ng/g		05/19/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.264	0.0540	ng/g		05/19/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.264	0.0791	ng/g		05/19/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.264	0.0480	ng/g		05/19/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.264	0.0327	ng/g		05/19/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.264	0.0695	ng/g		05/19/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.264	0.193	ng/g		05/19/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.264	0.0631	ng/g		05/19/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.264	0.0462	ng/g		05/19/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.264	0.0814	ng/g		05/19/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.264	0.0970	ng/g		05/19/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.264	0.0788	ng/g		05/19/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.264	0.0459	ng/g		05/19/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.264	0.123	ng/g		05/19/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	53.8			%		05/19/21	***	EPA 537m
% d5-N-EtFOSAA	78.5			%		05/19/21	***	EPA 537m
% M2-6:2FTS	64.2			%		05/19/21	***	EPA 537m
% M2-8:2FTS	63.3			%		05/19/21	***	EPA 537m
% M2PFTeDA	62.0			%		05/19/21	***	EPA 537m
% M3PFBS	80.7			%		05/19/21	***	EPA 537m
% M3PFHxS	68.5			%		05/19/21	***	EPA 537m
% M4PFHpA	78.3			%		05/19/21	***	EPA 537m
% M5PFHxA	88.7			%		05/19/21	***	EPA 537m
% M5PFPeA	104			%		05/19/21	***	EPA 537m
% M6PFDA	71.0			%		05/19/21	***	EPA 537m
% M7PFUdA	83.0			%		05/19/21	***	EPA 537m
% M8FOSA	58.1			%		05/19/21	***	EPA 537m
% M8PFOA	86.4			%		05/19/21	***	EPA 537m
% M8PFOS	71.9			%		05/19/21	***	EPA 537m
% M9PFNA	95.4			%		05/19/21	***	EPA 537m
% MPFBA	114			%		05/19/21	***	EPA 537m
% MPFDoA	74.5			%		05/19/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/14/21	PL	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/14/21	PL	SW8151A
2,4-D	ND	270	270	ug/Kg	10	05/14/21	PL	SW8151A
2,4-DB	ND	2700	2700	ug/Kg	10	05/14/21	PL	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/14/21	PL	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/14/21	PL	SW8151A
Dichloroprop	ND	270	270	ug/Kg	10	05/14/21	PL	SW8151A
Dinoseb	ND	270	270	ug/Kg	10	05/14/21	PL	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	53			%	10	05/14/21	PL	30 - 150 %
% DCAA (Confirmation)	51			%	10	05/14/21	PL	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	73	73	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	05/17/21	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	60			%	2	05/17/21	SC	30 - 150 %
% DCBP (Confirmation)	64			%	2	05/17/21	SC	30 - 150 %
% TCMX	57			%	2	05/17/21	SC	30 - 150 %
% TCMX (Confirmation)	56			%	2	05/17/21	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	36	36	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	36	36	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	72			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	60			%	2	05/13/21	CG	30 - 150 %
% TCMX	59			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	59			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	250	89	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	360	720	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	72	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	1800	720	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	250	92	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	99	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	180	97	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	180	140	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	250	95	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	250	92	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	180	100	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	05/12/21	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	210	140	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	250	110	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	250	88	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	80			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	68			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	61			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	68			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	69			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	81			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	71	71	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	60			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	71			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	100			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

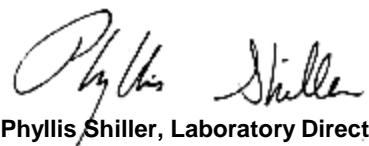
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: SW  
 Analyzed by: see "By" below

05/10/21

16:00

05/11/21

16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28525

Project ID: IPARK 0118 48  
 Client ID: SB-09B (2-3')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/10/21		SW5035A	1
<b>Volatiles</b>									
1,1,1,2-Tetrachloroethane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloroethane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloroethene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloropropene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dibromoethane	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichloroethane	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichloropropane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3-Dichloropropane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
2,2-Dichloropropane	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Chlorotoluene	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Hexanone	ND	22	4.5	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Isopropyltoluene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C	1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	22	4.5	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	22	4.5	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	8.9	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.5	1.8	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	27	4.5	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.9	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	4.5	4.5	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.9	2.2	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.9	2.2	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.5	0.89	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.5	0.45	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	105			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	97			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	102			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

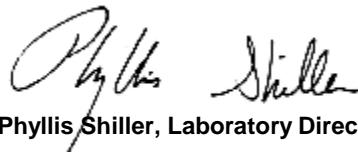
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      16:00  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28526

Project ID: IPARK 0118 48  
Client ID: SB-09C (8-10')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	10200	38	7.6	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.8	3.8	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	5.11	0.76	0.76	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	30.5	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.41	0.30	0.15	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	46100	*	38	35	mg/Kg	10	05/12/21	CPP	SW6010D
Cadmium	1.22	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	16.6	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	8.22	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	20.9	0.8	0.38	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	25700	38	38	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	12.0	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	28800	38	38	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	845	3.8	3.8	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	17.2	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1210	N	8	3.0	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	108	8	3.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	13.9	0.38	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	48.0	0.8	0.38	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	88			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/10/21		SW5035A
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m

**PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.259	0.0265	ng/g		05/20/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.259	0.0684	ng/g		05/20/21	***	EPA 537m
NEtFOSAA	ND	0.259	0.108	ng/g		05/20/21	***	EPA 537m
NMeFOSAA	ND	0.259	0.108	ng/g		05/20/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.259	0.0531	ng/g		05/20/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.259	0.0511	ng/g		05/20/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.259	0.0484	ng/g		05/20/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.259	0.363	ng/g		05/20/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.259	0.0531	ng/g		05/20/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.259	0.0777	ng/g		05/20/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.259	0.0472	ng/g		05/20/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.259	0.0321	ng/g		05/20/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.259	0.0683	ng/g		05/20/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.259	0.189	ng/g		05/20/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.259	0.0620	ng/g		05/20/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.259	0.0454	ng/g		05/20/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.259	0.0800	ng/g		05/20/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.259	0.0953	ng/g		05/20/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.259	0.0774	ng/g		05/20/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.259	0.0451	ng/g		05/20/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.259	0.121	ng/g		05/20/21	***	EPA 537m

**QA/QC Surrogates**

% d3-N-MeFOSAA	53.6		%		05/20/21	***	EPA 537m
% d5-N-EtFOSAA	86.1		%		05/20/21	***	EPA 537m
% M2-6:2FTS	85.7		%		05/20/21	***	EPA 537m
% M2-8:2FTS	97.2		%		05/20/21	***	EPA 537m
% M2PFTeDA	67.0		%		05/20/21	***	EPA 537m
% M3PFBS	82.8		%		05/20/21	***	EPA 537m
% M3PFHxS	69.5		%		05/20/21	***	EPA 537m
% M4PFHpa	83.9		%		05/20/21	***	EPA 537m
% M5PFHxA	90.8		%		05/20/21	***	EPA 537m
% M5PFPeA	104		%		05/20/21	***	EPA 537m
% M6PFDA	79.9		%		05/20/21	***	EPA 537m
% M7PFUda	85.1		%		05/20/21	***	EPA 537m
% M8FOSA	60.6		%		05/20/21	***	EPA 537m
% M8PFOA	78.6		%		05/20/21	***	EPA 537m
% M8PFOS	76.1		%		05/20/21	***	EPA 537m
% M9PFNA	95.2		%		05/20/21	***	EPA 537m
% MPFBA	114		%		05/20/21	***	EPA 537m
% MPFDoA	87.0		%		05/20/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2800	2800	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	48			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	43			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1221	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1232	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1242	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1248	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1254	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1260	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1262	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
PCB-1268	ND	75	75	ug/Kg	2	05/17/21	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	69			%	2	05/17/21	SC	30 - 150 %
% DCBP (Confirmation)	75			%	2	05/17/21	SC	30 - 150 %
% TCMX	67			%	2	05/17/21	SC	30 - 150 %
% TCMX (Confirmation)	67			%	2	05/17/21	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	82			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	68			%	2	05/13/21	CG	30 - 150 %
% TCMX	68			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	69			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	26	5.2	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.2	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	26	5.2	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	10	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	5.2	2.1	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	31	5.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	5.2	5.2	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	2.6	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	2.6	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.2	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	5.2	0.52	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	105			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	100			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	102			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	200	ug/Kg	1	05/12/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dichlorophenol	ND	190	130	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dimethylphenol	ND	260	92	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrophenol	ND	260	260	ug/Kg	1	05/12/21	WB	SW8270D
2,4-Dinitrotoluene	ND	190	150	ug/Kg	1	05/12/21	WB	SW8270D
2,6-Dinitrotoluene	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	170	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitroaniline	ND	260	260	ug/Kg	1	05/12/21	WB	SW8270D
2-Nitrophenol	ND	260	240	ug/Kg	1	05/12/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	260	150	ug/Kg	1	05/12/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	190	180	ug/Kg	1	05/12/21	WB	SW8270D
3-Nitroaniline	ND	370	740	ug/Kg	1	05/12/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	74	ug/Kg	1	05/12/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D
4-Chloroaniline	ND	300	170	ug/Kg	1	05/12/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitroaniline	ND	370	120	ug/Kg	1	05/12/21	WB	SW8270D
4-Nitrophenol	ND	370	170	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Aniline	ND	300	300	ug/Kg	1	05/12/21	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Benz(a)anthracene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzidine	ND	370	220	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(a)pyrene	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Benzoic acid	ND	1900	740	ug/Kg	1	05/12/21	WB	SW8270D
Benzyl butyl phthalate	ND	260	96	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	190	100	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Carbazole	ND	190	150	ug/Kg	1	05/12/21	WB	SW8270D
Chrysene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Dimethylphthalate	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-butylphthalate	ND	260	99	ug/Kg	1	05/12/21	WB	SW8270D
Di-n-octylphthalate	ND	260	96	ug/Kg	1	05/12/21	WB	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobenzene	ND	190	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Hexachloroethane	ND	190	110	ug/Kg	1	05/12/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Isophorone	ND	190	100	ug/Kg	1	05/12/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Nitrobenzene	ND	190	130	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodimethylamine	ND	260	100	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	190	120	ug/Kg	1	05/12/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	260	140	ug/Kg	1	05/12/21	WB	SW8270D
Pentachloronitrobenzene	ND	260	140	ug/Kg	1	05/12/21	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	05/12/21	WB	SW8270D
Phenanthrene	ND	260	110	ug/Kg	1	05/12/21	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	05/12/21	WB	SW8270D
Pyrene	ND	260	130	ug/Kg	1	05/12/21	WB	SW8270D
Pyridine	ND	260	91	ug/Kg	1	05/12/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	67			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorobiphenyl	64			%	1	05/12/21	WB	30 - 130 %
% 2-Fluorophenol	65			%	1	05/12/21	WB	30 - 130 %
% Nitrobenzene-d5	71			%	1	05/12/21	WB	30 - 130 %
% Phenol-d5	70			%	1	05/12/21	WB	30 - 130 %
% Terphenyl-d14	72			%	1	05/12/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	76	76	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	56			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	75			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	100			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: LIQUID  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI28500  
Phoenix ID: CI28527

Project ID: IPARK 0118 48  
Client ID: FIELD BLANK

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Aluminum	ND	0.020	0.020	mg/L	1	05/13/21	PS	SW6010D
Antimony	ND	0.002	0.002	mg/L	1	05/16/21	TH	SW7010
Arsenic - LDL	ND	0.004	0.001	mg/L	1	05/13/21	TH	SW6010D
Barium	ND	0.010	0.001	mg/L	1	05/13/21	TH	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	05/13/21	TH	SW6010D
Calcium	0.036	0.010	0.003	mg/L	1	05/13/21	TH	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	05/13/21	TH	SW6010D
Chromium	ND	0.001	0.001	mg/L	1	05/13/21	TH	SW6010D
Cobalt	ND	0.005	0.001	mg/L	1	05/13/21	TH	SW6010D
Copper	ND	0.005	0.001	mg/L	1	05/13/21	TH	SW6010D
Iron	ND	0.01	0.01	mg/L	1	05/13/21	TH	SW6010D
Lead	ND	0.002	0.001	mg/L	1	05/13/21	TH	SW6010D
Magnesium	0.019	0.010	0.01	mg/L	1	05/13/21	TH	SW6010D
Manganese	ND	0.005	0.001	mg/L	1	05/13/21	TH	SW6010D
Mercury	ND	0.0002	0.00015	mg/L	1	05/12/21	MGH	SW7470A
Nickel	ND	0.004	0.001	mg/L	1	05/13/21	TH	SW6010D
Potassium	ND	0.1	0.1	mg/L	1	05/13/21	TH	SW6010D
Selenium	ND	0.002	0.001	mg/L	1	05/14/21	TH	SW7010
Silver	ND	0.005	0.001	mg/L	1	05/13/21	TH	SW6010D
Sodium	ND	0.10	0.1	mg/L	1	05/13/21	TH	SW6010D
Thallium - LDL	ND	0.001	0.001	mg/L	1	05/13/21	TH	SW7010
Vanadium	0.002	J 0.010	0.001	mg/L	1	05/13/21	TH	SW6010D
Zinc	ND	0.010	0.002	mg/L	1	05/13/21	TH	SW6010D
Mercury Digestion	Completed					05/12/21	AT/AT	SW7470A
Extraction for Herbicide	Completed					05/14/21	JS/D	SW8151A
PCB Extraction (LDL)	Completed					05/11/21		SW3510C
Extraction for Pest (LDL)	Completed					05/11/21		SW3510C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/11/21	P/CG	SW3520C
Total Metals Digestion	Completed					05/12/21	AG/BF	
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	1.67	0.332	ng/L		05/20/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic acid	ND	4.17	0.410	ng/L		05/20/21	***	EPA 537m
NEtFOSAA	ND	1.67	0.464	ng/L		05/20/21	***	EPA 537m
NMeFOSAA	ND	1.67	0.441	ng/L		05/20/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	1.67	0.478	ng/L		05/20/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	1.67	0.346	ng/L		05/20/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	1.67	0.247	ng/L		05/20/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	1.67	0.245	ng/L		05/20/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	1.67	0.437	ng/L		05/20/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	1.67	0.648	ng/L		05/20/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	1.67	0.529	ng/L		05/20/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	1.67	0.234	ng/L		05/20/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	1.67	0.392	ng/L		05/20/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	1.67	1.36	ng/L		05/20/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	1.67	0.478	ng/L		05/20/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	1.67	0.243	ng/L		05/20/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	1.67	0.442	ng/L		05/20/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	1.67	0.377	ng/L		05/20/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	1.67	0.442	ng/L		05/20/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	1.67	1.14	ng/L		05/20/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	1.67	0.548	ng/L		05/20/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	45.2			%		05/20/21	***	EPA 537m
% d5-N-EtFOSAA	45.8			%		05/20/21	***	EPA 537m
% M2-6:2FTS	78.3			%		05/20/21	***	EPA 537m
% M2-8:2FTS	128			%		05/20/21	***	EPA 537m
% M2PFTeDA	55.5			%		05/20/21	***	EPA 537m
% M3PFBS	108			%		05/20/21	***	EPA 537m
% M3PFHxS	91.7			%		05/20/21	***	EPA 537m
% M4PFHpA	94.2			%		05/20/21	***	EPA 537m
% M5PFHxA	96.1			%		05/20/21	***	EPA 537m
% M5PFPeA	99.2			%		05/20/21	***	EPA 537m
% M6PFDA	86.6			%		05/20/21	***	EPA 537m
% M7PFUdA	78.7			%		05/20/21	***	EPA 537m
% M8FOSA	14.9			%		05/20/21	***	EPA 537m
% M8PFOA	92.9			%		05/20/21	***	EPA 537m
% M8PFOS	99.1			%		05/20/21	***	EPA 537m
% M9PFNA	95.1			%		05/20/21	***	EPA 537m
% MPFBA	128			%		05/20/21	***	EPA 537m
% MPFDoA	76.0			%		05/20/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	2.5	2.5	ug/L	10	05/17/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	2.5	2.5	ug/L	10	05/17/21	JRB	SW8151A
2,4-D	ND	5.0	5.0	ug/L	10	05/17/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	50	50	ug/L	10	05/17/21	JRB	SW8151A
Dalapon	ND	2.5	2.5	ug/L	10	05/17/21	JRB	SW8151A
Dicamba	ND	2.5	2.5	ug/L	10	05/17/21	JRB	SW8151A
Dichloroprop	ND	5.0	5.0	ug/L	10	05/17/21	JRB	SW8151A
Dinoseb	ND	5.0	5.0	ug/L	10	05/17/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	82			%	10	05/17/21	JRB	30 - 150 %
% DCAA (Confirmation)	77			%	10	05/17/21	JRB	30 - 150 %
<b><u>Pesticides</u></b>								
4,4' -DDD	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
4,4' -DDE	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
4,4' -DDT	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
a-BHC	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
a-chlordane	ND	0.010	0.010	ug/L	1	05/13/21	CG	SW8081B
Alachlor	ND	0.071	0.071	ug/L	1	05/13/21	CG	SW8081B
Aldrin	ND	0.003	0.003	ug/L	1	05/13/21	CG	SW8081B
b-BHC	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
Chlordane	ND	0.048	0.048	ug/L	1	05/13/21	CG	SW8081B
d-BHC	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
Dieldrin	ND	0.001	0.001	ug/L	1	05/13/21	CG	SW8081B
Endosulfan I	ND	0.010	0.010	ug/L	1	05/13/21	CG	SW8081B
Endosulfan II	ND	0.010	0.010	ug/L	1	05/13/21	CG	SW8081B
Endosulfan Sulfate	ND	0.010	0.010	ug/L	1	05/13/21	CG	SW8081B
Endrin	ND	0.010	0.010	ug/L	1	05/13/21	CG	SW8081B
Endrin Aldehyde	ND	0.010	0.010	ug/L	1	05/13/21	CG	SW8081B
Endrin ketone	ND	0.010	0.010	ug/L	1	05/13/21	CG	SW8081B
g-BHC (Lindane)	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
g-chlordane	ND	0.010	0.010	ug/L	1	05/13/21	CG	SW8081B
Heptachlor	ND	0.010	0.010	ug/L	1	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	0.010	0.010	ug/L	1	05/13/21	CG	SW8081B
Methoxychlor	ND	0.095	0.095	ug/L	1	05/13/21	CG	SW8081B
Toxaphene	ND	0.19	0.19	ug/L	1	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
%DCBP (Surrogate Rec)	111			%	1	05/13/21	CG	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	56			%	1	05/13/21	CG	30 - 150 %
%TCMX (Surrogate Rec)	89			%	1	05/13/21	CG	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	77			%	1	05/13/21	CG	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	0.048	0.048	ug/L	1	05/12/21	AW	SW8082A
PCB-1221	ND	0.048	0.048	ug/L	1	05/12/21	AW	SW8082A
PCB-1232	ND	0.048	0.048	ug/L	1	05/12/21	AW	SW8082A
PCB-1242	ND	0.048	0.048	ug/L	1	05/12/21	AW	SW8082A
PCB-1248	ND	0.048	0.048	ug/L	1	05/12/21	AW	SW8082A
PCB-1254	ND	0.048	0.048	ug/L	1	05/12/21	AW	SW8082A
PCB-1260	ND	0.048	0.048	ug/L	1	05/12/21	AW	SW8082A
PCB-1262	ND	0.048	0.048	ug/L	1	05/12/21	AW	SW8082A
PCB-1268	ND	0.048	0.048	ug/L	1	05/12/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% DCBP	65			%	1	05/12/21	AW	30 - 150 %
% DCBP (Confirmation)	56			%	1	05/12/21	AW	30 - 150 %
% TCMX	80			%	1	05/12/21	AW	30 - 150 %
% TCMX (Confirmation)	76			%	1	05/12/21	AW	30 - 150 %
<b>Volatiles</b>								
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,2,3-Trichloropropane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,2-Dibromo-3-chloropropane	ND	1.0	0.50	ug/L	1	05/12/21	MH	SW8260C
1,2-Dibromoethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	05/12/21	MH	SW8260C
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
2-Hexanone	ND	2.5	2.5	ug/L	1	05/12/21	MH	SW8260C
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/12/21	MH	SW8260C
Acetone	ND	5.0	2.5	ug/L	1	05/12/21	MH	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	05/12/21	MH	SW8260C
Acrylonitrile	ND	5.0	2.5	ug/L	1	05/12/21	MH	SW8260C
Benzene	ND	0.70	0.25	ug/L	1	05/12/21	MH	SW8260C
Bromobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Bromoform	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Bromomethane	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Chlorobenzene	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Chloroethane	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Chloroform	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Chloromethane	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/12/21	MH	SW8260C
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Dibromomethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	05/12/21	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	05/12/21	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	05/12/21	MH	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	05/12/21	MH	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	05/12/21	MH	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/12/21	MH	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	05/12/21	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	91			%	1	05/12/21	MH	70 - 130 %
% Bromofluorobenzene	98			%	1	05/12/21	MH	70 - 130 %
% Dibromofluoromethane	97			%	1	05/12/21	MH	70 - 130 %
% Toluene-d8	98			%	1	05/12/21	MH	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	0.20	0.20	ug/l	1	05/17/21	AW	SW8270DSIM
<b><u>QA/QC Surrogates</u></b>								
% 1,4-dioxane-d8	88			%	1	05/17/21	AW	30 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	3.7	3.7	ug/L	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	5.4	1.6	ug/L	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	5.4	1.7	ug/L	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	5.4	2.1	ug/L	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	5.4	1.7	ug/L	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	5.4	1.5	ug/L	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	5.4	1.6	ug/L	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	5.4	2.1	ug/L	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	5.4	2.5	ug/L	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	5.4	2.1	ug/L	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	5.4	1.6	ug/L	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	3.7	2.5	ug/L	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	5.4	1.8	ug/L	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	5.4	1.8	ug/L	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
Acenaphthene	ND	5.4	1.6	ug/L	1	05/13/21	WB	SW8270D
Acetophenone	ND	5.4	1.7	ug/L	1	05/13/21	WB	SW8270D
Aniline	ND	3.7	3.7	ug/L	1	05/13/21	WB	SW8270D
Anthracene	ND	5.4	1.8	ug/L	1	05/13/21	WB	SW8270D
Benzidine	ND	4.8	3.1	ug/L	1	05/13/21	WB	SW8270D
Benzoic acid	ND	27	11	ug/L	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	5.4	1.4	ug/L	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	5.4	1.5	ug/L	1	05/13/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	5.4	1.5	ug/L	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
Carbazole	ND	5.4	4.1	ug/L	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	5.4	1.6	ug/L	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	5.4	1.7	ug/L	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	5.4	1.7	ug/L	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	5.4	1.4	ug/L	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	5.4	1.4	ug/L	1	05/13/21	WB	SW8270D
Fluoranthene	ND	5.4	1.7	ug/L	1	05/13/21	WB	SW8270D
Fluorene	ND	5.4	1.8	ug/L	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	5.4	1.6	ug/L	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
Isophorone	ND	5.4	1.5	ug/L	1	05/13/21	WB	SW8270D
Naphthalene	ND	5.4	1.5	ug/L	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	5.4	1.7	ug/L	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	5.4	2.1	ug/L	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	2.7	2.7	ug/L	1	05/13/21	WB	SW8270D
Phenol	ND	1.1	1.1	ug/L	1	05/13/21	WB	SW8270D
Pyrene	ND	5.4	1.8	ug/L	1	05/13/21	WB	SW8270D
Pyridine	ND	11	1.3	ug/L	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	95			%	1	05/13/21	WB	15 - 110 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	70			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	57			%	1	05/13/21	WB	15 - 110 %
% Nitrobenzene-d5	69			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	44			%	1	05/13/21	WB	15 - 110 %
% Terphenyl-d14	78			%	1	05/13/21	WB	30 - 130 %
<b>Semivolatiles</b>								
Acenaphthylene	ND	0.54	0.54	ug/L	1	05/13/21	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.54	0.54	ug/L	1	05/13/21	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.54	0.54	ug/L	1	05/13/21	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/13/21	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.54	0.54	ug/L	1	05/13/21	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Nitrobenzene	ND	0.43	0.43	ug/L	1	05/13/21	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.11	0.11	ug/L	1	05/13/21	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.54	0.54	ug/L	1	05/13/21	WB	SW8270D (SIM)
Phenanthrene	ND	0.54	0.54	ug/L	1	05/13/21	WB	SW8270D (SIM)
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	100			%	1	05/13/21	WB	15 - 110 %
% 2-Fluorobiphenyl	64			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	53			%	1	05/13/21	WB	15 - 110 %
% Nitrobenzene-d5	55			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	40			%	1	05/13/21	WB	15 - 110 %
% Terphenyl-d14	86			%	1	05/13/21	WB	30 - 130 %
Extraction for 1,4-Dioxane	Completed					05/14/21	G/G	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

PFAS (EPA 537m), PFOA/PFOS - Water Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date      Time

05/10/21      15:10  
05/11/21      16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28528

Project ID: IPARK 0118 48  
Client ID: SB-DUP A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	7710	37	7.3	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.7	3.7	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	4.85	0.73	0.73	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	20.6	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.25	J	0.29	0.15	mg/Kg	1	05/12/21	CPP	SW6010D
Calcium	95700	*	37	34	mg/Kg	10	05/12/21	CPP	SW6010D
Cadmium	0.94	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	7.38	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	6.39	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	15.9	0.7	0.37	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	21200	37	37	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	8.7	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	64600	370	370	mg/Kg	100	05/13/21	TH	SW6010D	
Manganese	855	3.7	3.7	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	12.1	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	950	N	7	2.9	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.5	1.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	367	7	3.2	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.5	1.5	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	9.47	0.37	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	37.2	0.7	0.37	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	92			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.263	0.0269	ng/g		05/20/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.263	0.0694	ng/g		05/20/21	***	EPA 537m
NEtFOSAA	ND	0.263	0.110	ng/g		05/20/21	***	EPA 537m
NMeFOSAA	ND	0.263	0.110	ng/g		05/20/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.263	0.0538	ng/g		05/20/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.263	0.0518	ng/g		05/20/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.263	0.0491	ng/g		05/20/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.263	0.368	ng/g		05/20/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.263	0.0538	ng/g		05/20/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.263	0.0788	ng/g		05/20/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.263	0.0478	ng/g		05/20/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.263	0.0326	ng/g		05/20/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.263	0.0693	ng/g		05/20/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.263	0.192	ng/g		05/20/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.263	0.0629	ng/g		05/20/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.263	0.0460	ng/g		05/20/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.263	0.0811	ng/g		05/20/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.263	0.0966	ng/g		05/20/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.263	0.0785	ng/g		05/20/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.263	0.0457	ng/g		05/20/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.263	0.122	ng/g		05/20/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	51.9			%		05/20/21	***	EPA 537m
% d5-N-EtFOSAA	73.5			%		05/20/21	***	EPA 537m
% M2-6:2FTS	76.2			%		05/20/21	***	EPA 537m
% M2-8:2FTS	88.9			%		05/20/21	***	EPA 537m
% M2PFTeDA	59.1			%		05/20/21	***	EPA 537m
% M3PFBS	78.3			%		05/20/21	***	EPA 537m
% M3PFHxS	69.4			%		05/20/21	***	EPA 537m
% M4PFHpA	75.7			%		05/20/21	***	EPA 537m
% M5PFHxA	80.7			%		05/20/21	***	EPA 537m
% M5PFPeA	89.8			%		05/20/21	***	EPA 537m
% M6PFDA	73.7			%		05/20/21	***	EPA 537m
% M7PFUdA	72.4			%		05/20/21	***	EPA 537m
% M8FOSA	45.8			%		05/20/21	***	EPA 537m
% M8PFOA	78.9			%		05/20/21	***	EPA 537m
% M8PFOS	69.9			%		05/20/21	***	EPA 537m
% M9PFNA	84.8			%		05/20/21	***	EPA 537m
% MPFBA	96.1			%		05/20/21	***	EPA 537m
% MPFDoA	68.9			%		05/20/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	270	270	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2700	2700	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	270	270	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	270	270	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	56			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	50			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	76			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	64			%	2	05/13/21	AW	30 - 150 %
% TCMX	73			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	69			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.6	3.6	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.6	3.6	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	36	36	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.6	3.6	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.6	3.6	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor epoxide	ND	7.1	7.1	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	36	36	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	65			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	67			%	2	05/12/21	CG	30 - 150 %
% TCMX	61			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	59			%	2	05/12/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	190	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	180	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	250	88	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	250	220	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	350	710	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	210	71	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	280	170	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	350	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	350	160	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	250	99	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	280	280	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	350	210	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	1800	710	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	250	92	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	98	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	180	96	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	99	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	180	140	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	110	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	250	94	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	250	92	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	180	100	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Isophorone	ND	180	99	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	180	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	210	130	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	250	87	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	78			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	66			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	57			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	69			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	66			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	77			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	71	71	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	52			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	71			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	93			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

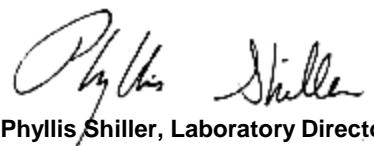
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: SW  
 Analyzed by: see "By" below

05/10/21

15:10

05/11/21

16:44

### Laboratory Data

SDG ID: GCI28500

Phoenix ID: CI28529

Project ID: IPARK 0118 48  
 Client ID: SB-DUP B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/10/21	SW5035A	1
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### Volatiles

1,1,1,2-Tetrachloroethane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	21	4.2	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	21	4.2	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	21	4.2	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	8.4	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.2	1.7	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	25	4.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.4	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	4.2	4.2	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.4	2.1	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.4	2.1	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.2	0.84	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.2	0.42	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	107			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Dibromofluoromethane	101			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	102			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

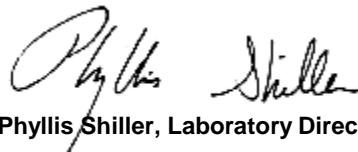
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI28500  
Phoenix ID: CI28530

Project ID: IPARK 0118 48  
Client ID: SB-DUP C

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	11300	33	6.7	mg/Kg	10	05/12/21	CPP	SW6010D	
Antimony	ND	3.3	3.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Arsenic	5.16	0.67	0.67	mg/Kg	1	05/12/21	CPP	SW6010D	
Barium	27.8	0.7	0.33	mg/Kg	1	05/12/21	CPP	SW6010D	
Beryllium	0.47	0.27	0.13	mg/Kg	1	05/12/21	CPP	SW6010D	
Calcium	50700	*	33	mg/Kg	10	05/12/21	CPP	SW6010D	
Cadmium	1.17	0.33	0.33	mg/Kg	1	05/12/21	CPP	SW6010D	
Chromium	10.9	0.33	0.33	mg/Kg	1	05/12/21	CPP	SW6010D	
Cobalt	8.57	0.33	0.33	mg/Kg	1	05/12/21	CPP	SW6010D	
Copper	20.7	0.7	0.33	mg/kg	1	05/12/21	CPP	SW6010D	
Iron	26500	33	33	mg/Kg	10	05/12/21	CPP	SW6010D	
Lead	11.0	0.7	0.33	mg/Kg	1	05/12/21	CPP	SW6010D	
Magnesium	31400	33	33	mg/Kg	10	05/12/21	CPP	SW6010D	
Manganese	622	3.3	3.3	mg/Kg	10	05/12/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/12/21	MGH	SW7471B	
Nickel	17.0	0.33	0.33	mg/Kg	1	05/12/21	CPP	SW6010D	
Potassium	1430	N	7	2.6	mg/Kg	1	05/12/21	CPP	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	05/12/21	CPP	SW6010D	
Silver	ND	0.33	0.33	mg/Kg	1	05/12/21	CPP	SW6010D	
Sodium	340	7	2.9	mg/Kg	1	05/12/21	CPP	SW6010D	
Thallium	ND	1.3	1.3	mg/Kg	1	05/12/21	CPP	SW6010D	
Vanadium	13.6	0.33	0.33	mg/Kg	1	05/12/21	CPP	SW6010D	
Zinc	48.3	0.7	0.33	mg/Kg	1	05/12/21	CPP	SW6010D	
Percent Solid	89			%		05/11/21	AN	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/11/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/11/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/10/21		SW5035A
Mercury Digestion	Completed					05/12/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/11/21	J/AG	SW3050B
PFAS	Completed					05/14/21	***	EPA 537m

**PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.253	0.0259	ng/g		05/20/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.253	0.0668	ng/g		05/20/21	***	EPA 537m
NEtFOSAA	ND	0.253	0.105	ng/g		05/20/21	***	EPA 537m
NMeFOSAA	ND	0.253	0.106	ng/g		05/20/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.253	0.0518	ng/g		05/20/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.253	0.0499	ng/g		05/20/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.253	0.0472	ng/g		05/20/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.253	0.354	ng/g		05/20/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.253	0.0518	ng/g		05/20/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.253	0.0759	ng/g		05/20/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.253	0.0460	ng/g		05/20/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.253	0.0314	ng/g		05/20/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.253	0.0667	ng/g		05/20/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.253	0.185	ng/g		05/20/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.253	0.0605	ng/g		05/20/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.253	0.0443	ng/g		05/20/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.253	0.0781	ng/g		05/20/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.253	0.0929	ng/g		05/20/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.253	0.0756	ng/g		05/20/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.253	0.0440	ng/g		05/20/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.253	0.118	ng/g		05/20/21	***	EPA 537m

**QA/QC Surrogates**

% d3-N-MeFOSAA	51.2			%		05/20/21	***	EPA 537m
% d5-N-EtFOSAA	82.6			%		05/20/21	***	EPA 537m
% M2-6:2FTS	73.8			%		05/20/21	***	EPA 537m
% M2-8:2FTS	78.2			%		05/20/21	***	EPA 537m
% M2PFTeDA	69.7			%		05/20/21	***	EPA 537m
% M3PFBS	90.6			%		05/20/21	***	EPA 537m
% M3PFHxS	72.7			%		05/20/21	***	EPA 537m
% M4PFHpa	87.9			%		05/20/21	***	EPA 537m
% M5PFHxA	91.5			%		05/20/21	***	EPA 537m
% M5PFPeA	105			%		05/20/21	***	EPA 537m
% M6PFDA	73.7			%		05/20/21	***	EPA 537m
% M7PFUda	84.6			%		05/20/21	***	EPA 537m
% M8FOSA	54.0			%		05/20/21	***	EPA 537m
% M8PFOA	88.0			%		05/20/21	***	EPA 537m
% M8PFOS	78.5			%		05/20/21	***	EPA 537m
% M9PFNA	90.2			%		05/20/21	***	EPA 537m
% MPFBA	111			%		05/20/21	***	EPA 537m
% MPFDoA	84.2			%		05/20/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2800	2800	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	51			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	47			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	73	73	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	05/12/21	AW	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	05/12/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	90			%	2	05/12/21	AW	30 - 150 %
% DCBP (Confirmation)	85			%	2	05/12/21	AW	30 - 150 %
% TCMX	62			%	2	05/12/21	AW	30 - 150 %
% TCMX (Confirmation)	63			%	2	05/12/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2	2.2	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	05/12/21	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	05/12/21	CG	SW8081B
a-BHC	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
b-BHC	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	05/12/21	CG	SW8081B
d-BHC	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan I	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan II	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B
Endosulfan sulfate	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B
Endrin	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B
Endrin aldehyde	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B
Endrin ketone	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/12/21	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	05/12/21	CG	SW8081B
Heptachlor	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.3	7.3	ug/Kg	2	05/12/21	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	05/12/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/12/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	66			%	2	05/12/21	CG	30 - 150 %
% DCBP (Confirmation)	71			%	2	05/12/21	CG	30 - 150 %
% TCMX	59			%	2	05/12/21	CG	30 - 150 %
% TCMX (Confirmation)	58			%	2	05/12/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	29	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	29	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	29	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	11	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	5.7	2.3	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	34	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	5.7	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.9	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.9	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	106			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	98			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	103			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	130	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	200	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	180	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	180	130	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	250	90	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	250	250	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	180	140	ug/Kg	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	180	110	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2-Chloronaphthalene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	170	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	250	250	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	250	230	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	180	170	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	360	730	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	220	73	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	290	170	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	360	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	360	160	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	290	290	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	360	210	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	180	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	1800	730	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	250	94	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	180	98	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	180	150	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	180	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	250	96	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	250	94	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	180	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	180	110	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Isophorone	ND	180	100	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Naphthalene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	180	130	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	180	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	250	130	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	220	140	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthenrene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	250	89	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	80			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	71			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	57			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	70			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	69			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	81			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	75	75	ug/Kg	1	05/13/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	59			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	75			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	96			%	1	05/13/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

PFAS (EPA 537m), PFOA/PFOS - Soil Extraction (EPA 537m) were analyzed by NY certified lab #12058.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 15, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: LIQUID  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK0118.48

### Custody Information

Collected by:  
Received by: SW  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI28500  
Phoenix ID: CI28531

Project ID: IPARK 0118 48  
Client ID: FIELD BLANK 2

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Aluminum	ND	0.020	0.020	mg/L	1	05/13/21	PS	SW6010D
Antimony	ND	0.002	0.002	mg/L	1	05/16/21	TH	SW7010
Arsenic - LDL	ND	0.004	0.001	mg/L	1	05/13/21	TH	SW6010D
Barium	ND	0.010	0.001	mg/L	1	05/13/21	TH	SW6010D
Beryllium	ND	0.001	0.001	mg/L	1	05/13/21	TH	SW6010D
Calcium	0.038	0.010	0.003	mg/L	1	05/13/21	TH	SW6010D
Cadmium	ND	0.004	0.0005	mg/L	1	05/13/21	TH	SW6010D
Chromium	ND	0.001	0.001	mg/L	1	05/13/21	TH	SW6010D
Cobalt	ND	0.005	0.001	mg/L	1	05/13/21	TH	SW6010D
Copper	ND	0.005	0.001	mg/L	1	05/13/21	TH	SW6010D
Iron	ND	0.01	0.01	mg/L	1	05/13/21	TH	SW6010D
Lead	ND	0.002	0.001	mg/L	1	05/13/21	TH	SW6010D
Magnesium	0.016	0.010	0.01	mg/L	1	05/13/21	TH	SW6010D
Manganese	ND	0.005	0.001	mg/L	1	05/13/21	TH	SW6010D
Mercury	ND	0.0002	0.00015	mg/L	1	05/12/21	MGH	SW7470A
Nickel	ND	0.004	0.001	mg/L	1	05/13/21	TH	SW6010D
Potassium	ND	0.1	0.1	mg/L	1	05/13/21	TH	SW6010D
Selenium	ND	0.002	0.001	mg/L	1	05/14/21	TH	SW7010
Silver	ND	0.005	0.001	mg/L	1	05/13/21	TH	SW6010D
Sodium	ND	0.10	0.1	mg/L	1	05/13/21	TH	SW6010D
Thallium - LDL	ND	0.001	0.001	mg/L	1	05/13/21	TH	SW7010
Vanadium	0.002	J 0.010	0.001	mg/L	1	05/13/21	TH	SW6010D
Zinc	ND	0.010	0.002	mg/L	1	05/13/21	TH	SW6010D
Mercury Digestion	Completed					05/12/21	AT/AT	SW7470A
Extraction for Herbicide	Completed					05/14/21	JS/D	SW8151A
PCB Extraction (LDL)	Completed					05/11/21		SW3510C
Extraction for Pest (LDL)	Completed					05/11/21		SW3510C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Semi-Volatile Extraction	Completed					05/11/21	P/CG	SW3520C
Total Metals Digestion	Completed					05/12/21	AG/BF	
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	1.92	0.384	ng/L		05/20/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic acid	ND	4.81	0.473	ng/L		05/20/21	***	EPA 537m
NEtFOSAA	ND	1.92	0.536	ng/L		05/20/21	***	EPA 537m
NMeFOSAA	ND	1.92	0.509	ng/L		05/20/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	1.92	0.552	ng/L		05/20/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	1.92	0.399	ng/L		05/20/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	1.92	0.285	ng/L		05/20/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	1.92	0.283	ng/L		05/20/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	1.92	0.504	ng/L		05/20/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	1.92	0.747	ng/L		05/20/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	1.92	0.611	ng/L		05/20/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	1.92	0.270	ng/L		05/20/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	1.92	0.453	ng/L		05/20/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	1.92	1.57	ng/L		05/20/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	1.92	0.552	ng/L		05/20/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	1.92	0.281	ng/L		05/20/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	1.92	0.511	ng/L		05/20/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	1.92	0.435	ng/L		05/20/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	1.92	0.511	ng/L		05/20/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	1.92	1.32	ng/L		05/20/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	1.92	0.632	ng/L		05/20/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	47.1			%		05/20/21	***	EPA 537m
% d5-N-EtFOSAA	58.6			%		05/20/21	***	EPA 537m
% M2-6:2FTS	51.4			%		05/20/21	***	EPA 537m
% M2-8:2FTS	71.7			%		05/20/21	***	EPA 537m
% M2PFTeDA	76.0			%		05/20/21	***	EPA 537m
% M3PFBS	97.6			%		05/20/21	***	EPA 537m
% M3PFHxS	71.2			%		05/20/21	***	EPA 537m
% M4PFHpA	76.3			%		05/20/21	***	EPA 537m
% M5PFHxA	87.4			%		05/20/21	***	EPA 537m
% M5PFPeA	98.5			%		05/20/21	***	EPA 537m
% M6PFDA	74.9			%		05/20/21	***	EPA 537m
% M7PFUdA	70.3			%		05/20/21	***	EPA 537m
% M8FOSA	31.5			%		05/20/21	***	EPA 537m
% M8PFOA	78.1			%		05/20/21	***	EPA 537m
% M8PFOS	78.4			%		05/20/21	***	EPA 537m
% M9PFNA	78.1			%		05/20/21	***	EPA 537m
% MPFBA	135			%		05/20/21	***	EPA 537m
% MPFDoA	82.3			%		05/20/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	2.5	2.5	ug/L	10	05/17/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	2.5	2.5	ug/L	10	05/17/21	JRB	SW8151A
2,4-D	ND	5.0	5.0	ug/L	10	05/17/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-DB	ND	50	50	ug/L	10	05/17/21	JRB	SW8151A
Dalapon	ND	2.5	2.5	ug/L	10	05/17/21	JRB	SW8151A
Dicamba	ND	2.5	2.5	ug/L	10	05/17/21	JRB	SW8151A
Dichloroprop	ND	5.0	5.0	ug/L	10	05/17/21	JRB	SW8151A
Dinoseb	ND	5.0	5.0	ug/L	10	05/17/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	80			%	10	05/17/21	JRB	30 - 150 %
% DCAA (Confirmation)	78			%	10	05/17/21	JRB	30 - 150 %
<b><u>Pesticides</u></b>								
4,4' -DDD	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
4,4' -DDE	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
4,4' -DDT	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
a-BHC	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
a-chlordane	ND	0.009	0.009	ug/L	1	05/13/21	CG	SW8081B
Alachlor	ND	0.071	0.071	ug/L	1	05/13/21	CG	SW8081B
Aldrin	ND	0.001	0.001	ug/L	1	05/13/21	CG	SW8081B
b-BHC	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
Chlordane	ND	0.047	0.047	ug/L	1	05/13/21	CG	SW8081B
d-BHC	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
Dieldrin	ND	0.001	0.001	ug/L	1	05/13/21	CG	SW8081B
Endosulfan I	ND	0.009	0.009	ug/L	1	05/13/21	CG	SW8081B
Endosulfan II	ND	0.009	0.009	ug/L	1	05/13/21	CG	SW8081B
Endosulfan Sulfate	ND	0.009	0.009	ug/L	1	05/13/21	CG	SW8081B
Endrin	ND	0.009	0.009	ug/L	1	05/13/21	CG	SW8081B
Endrin Aldehyde	ND	0.009	0.009	ug/L	1	05/13/21	CG	SW8081B
Endrin ketone	ND	0.009	0.009	ug/L	1	05/13/21	CG	SW8081B
g-BHC (Lindane)	ND	0.005	0.005	ug/L	1	05/13/21	CG	SW8081B
g-chlordane	ND	0.009	0.009	ug/L	1	05/13/21	CG	SW8081B
Heptachlor	ND	0.009	0.009	ug/L	1	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	0.009	0.009	ug/L	1	05/13/21	CG	SW8081B
Methoxychlor	ND	0.094	0.094	ug/L	1	05/13/21	CG	SW8081B
Toxaphene	ND	0.19	0.19	ug/L	1	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
%DCBP (Surrogate Rec)	40			%	1	05/13/21	CG	30 - 150 %
%DCBP (Surrogate Rec) (Confirmation)	88			%	1	05/13/21	CG	30 - 150 %
%TCMX (Surrogate Rec)	43			%	1	05/13/21	CG	30 - 150 %
%TCMX (Surrogate Rec) (Confirmation)	47			%	1	05/13/21	CG	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	0.047	0.047	ug/L	1	05/12/21	AW	SW8082A
PCB-1221	ND	0.047	0.047	ug/L	1	05/12/21	AW	SW8082A
PCB-1232	ND	0.047	0.047	ug/L	1	05/12/21	AW	SW8082A
PCB-1242	ND	0.047	0.047	ug/L	1	05/12/21	AW	SW8082A
PCB-1248	ND	0.047	0.047	ug/L	1	05/12/21	AW	SW8082A
PCB-1254	ND	0.047	0.047	ug/L	1	05/12/21	AW	SW8082A
PCB-1260	ND	0.047	0.047	ug/L	1	05/12/21	AW	SW8082A
PCB-1262	ND	0.047	0.047	ug/L	1	05/12/21	AW	SW8082A
PCB-1268	ND	0.047	0.047	ug/L	1	05/12/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
% DCBP	51			%	1	05/12/21	AW	30 - 150 %	
% DCBP (Confirmation)	45			%	1	05/12/21	AW	30 - 150 %	
% TCMX	54			%	1	05/12/21	AW	30 - 150 %	
% TCMX (Confirmation)	51			%	1	05/12/21	AW	30 - 150 %	
<b>Volatiles</b>									
1,1,1,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,1,1-Trichloroethane	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,1,2-Trichloroethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,1-Dichloroethane	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,1-Dichloroethene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,1-Dichloropropene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,2,3-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,2,3-Trichloropropane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,2,4-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,2-Dibromo-3-chloropropane	ND	1.0	0.50	ug/L	1	05/12/21	MH	SW8260C	
1,2-Dibromoethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,2-Dichlorobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,2-Dichloroethane	ND	0.60	0.50	ug/L	1	05/12/21	MH	SW8260C	
1,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,3,5-Trimethylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,3-Dichlorobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,3-Dichloropropane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
1,4-Dichlorobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
2,2-Dichloropropane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
2-Chlorotoluene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
2-Hexanone	ND	2.5	2.5	ug/L	1	05/12/21	MH	SW8260C	
2-Isopropyltoluene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
4-Chlorotoluene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
4-Methyl-2-pentanone	ND	2.5	2.5	ug/L	1	05/12/21	MH	SW8260C	
Acetone	2.8	JS	5.0	2.5	ug/L	1	05/12/21	MH	SW8260C
Acrolein	ND	5.0	2.5	ug/L	1	05/12/21	MH	SW8260C	
Acrylonitrile	ND	5.0	2.5	ug/L	1	05/12/21	MH	SW8260C	
Benzene	ND	0.70	0.25	ug/L	1	05/12/21	MH	SW8260C	
Bromobenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
Bromochloromethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
Bromodichloromethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
Bromoform	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
Bromomethane	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
Carbon Disulfide	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
Carbon tetrachloride	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
Chlorobenzene	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
Chloroethane	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
Chloroform	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
Chloromethane	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
cis-1,2-Dichloroethene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/12/21	MH	SW8260C	
Dibromochloromethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Dibromomethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Dichlorodifluoromethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Ethylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Hexachlorobutadiene	ND	0.50	0.20	ug/L	1	05/12/21	MH	SW8260C
Isopropylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
m&p-Xylene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Methyl ethyl ketone	ND	2.5	2.5	ug/L	1	05/12/21	MH	SW8260C
Methyl t-butyl ether (MTBE)	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Methylene chloride	ND	3.0	1.0	ug/L	1	05/12/21	MH	SW8260C
Naphthalene	ND	1.0	1.0	ug/L	1	05/12/21	MH	SW8260C
n-Butylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
n-Propylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
o-Xylene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
p-Isopropyltoluene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
sec-Butylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Styrene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
tert-Butylbenzene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Tetrachloroethene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Tetrahydrofuran (THF)	ND	5.0	2.5	ug/L	1	05/12/21	MH	SW8260C
Toluene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
trans-1,2-Dichloroethene	ND	5.0	0.25	ug/L	1	05/12/21	MH	SW8260C
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	05/12/21	MH	SW8260C
trans-1,4-dichloro-2-butene	ND	2.5	2.5	ug/L	1	05/12/21	MH	SW8260C
Trichloroethene	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Trichlorofluoromethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Trichlorotrifluoroethane	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
Vinyl chloride	ND	1.0	0.25	ug/L	1	05/12/21	MH	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	91			%	1	05/12/21	MH	70 - 130 %
% Bromofluorobenzene	102			%	1	05/12/21	MH	70 - 130 %
% Dibromofluoromethane	102			%	1	05/12/21	MH	70 - 130 %
% Toluene-d8	100			%	1	05/12/21	MH	70 - 130 %
<b><u>1,4-dioxane</u></b>								
1,4-dioxane	ND	0.20	0.20	ug/l	1	05/17/21	AW	SW8270DSIM
<b><u>QA/QC Surrogates</u></b>								
% 1,4-dioxane-d8	76			%	1	05/17/21	AW	30 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	3.3	3.3	ug/L	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	4.7	1.4	ug/L	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	4.7	1.5	ug/L	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	4.7	1.9	ug/L	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	4.7	1.5	ug/L	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	4.7	1.3	ug/L	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	4.7	1.4	ug/L	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	4.7	1.9	ug/L	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	4.7	2.2	ug/L	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	4.7	1.9	ug/L	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	4.7	1.4	ug/L	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	3.3	2.2	ug/L	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	4.7	1.6	ug/L	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	4.7	1.6	ug/L	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
Acenaphthene	ND	4.7	1.4	ug/L	1	05/13/21	WB	SW8270D
Acetophenone	ND	4.7	1.5	ug/L	1	05/13/21	WB	SW8270D
Aniline	ND	3.3	3.3	ug/L	1	05/13/21	WB	SW8270D
Anthracene	ND	4.7	1.5	ug/L	1	05/13/21	WB	SW8270D
Benzidine	ND	4.2	2.8	ug/L	1	05/13/21	WB	SW8270D
Benzoic acid	ND	24	9.4	ug/L	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	4.7	1.2	ug/L	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	4.7	1.3	ug/L	1	05/13/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	4.7	1.3	ug/L	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
Carbazole	ND	4.7	3.6	ug/L	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	4.7	1.4	ug/L	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	4.7	1.5	ug/L	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	4.7	1.5	ug/L	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	4.7	1.3	ug/L	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	4.7	1.2	ug/L	1	05/13/21	WB	SW8270D
Fluoranthene	ND	4.7	1.5	ug/L	1	05/13/21	WB	SW8270D
Fluorene	ND	4.7	1.6	ug/L	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	4.7	1.4	ug/L	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
Isophorone	ND	4.7	1.3	ug/L	1	05/13/21	WB	SW8270D
Naphthalene	ND	4.7	1.4	ug/L	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	4.7	1.5	ug/L	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	4.7	1.8	ug/L	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	2.4	2.4	ug/L	1	05/13/21	WB	SW8270D
Phenol	ND	0.94	0.94	ug/L	1	05/13/21	WB	SW8270D
Pyrene	ND	4.7	1.6	ug/L	1	05/13/21	WB	SW8270D
Pyridine	ND	9.4	1.2	ug/L	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	46			%	1	05/13/21	WB	15 - 110 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% 2-Fluorobiphenyl	39			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	35			%	1	05/13/21	WB	15 - 110 %
% Nitrobenzene-d5	42			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	35			%	1	05/13/21	WB	15 - 110 %
% Terphenyl-d14	38			%	1	05/13/21	WB	30 - 130 %
<b>Semivolatiles</b>								
Acenaphthylene	ND	0.47	0.47	ug/L	1	05/13/21	WB	SW8270D (SIM)
Benz(a)anthracene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Benzo(a)pyrene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Benzo(b)fluoranthene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Benzo(ghi)perylene	ND	0.47	0.47	ug/L	1	05/13/21	WB	SW8270D (SIM)
Benzo(k)fluoranthene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Chrysene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Dibenz(a,h)anthracene	ND	0.47	0.47	ug/L	1	05/13/21	WB	SW8270D (SIM)
Hexachlorobenzene	ND	0.04	0.04	ug/L	1	05/13/21	WB	SW8270D (SIM)
Hexachlorobutadiene	ND	0.47	0.47	ug/L	1	05/13/21	WB	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	ND	0.02	0.02	ug/L	1	05/13/21	WB	SW8270D (SIM)
Nitrobenzene	ND	0.38	0.38	ug/L	1	05/13/21	WB	SW8270D (SIM)
N-Nitrosodimethylamine	ND	0.09	0.09	ug/L	1	05/13/21	WB	SW8270D (SIM)
Pentachlorophenol	ND	0.47	0.47	ug/L	1	05/13/21	WB	SW8270D (SIM)
Phenanthrene	ND	0.47	0.47	ug/L	1	05/13/21	WB	SW8270D (SIM)
<b>QA/QC Surrogates</b>								
% 2,4,6-Tribromophenol	48			%	1	05/13/21	WB	15 - 110 %
% 2-Fluorobiphenyl	37			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	30			%	1	05/13/21	WB	15 - 110 %
% Nitrobenzene-d5	34			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	34			%	1	05/13/21	WB	15 - 110 %
% Terphenyl-d14	45			%	1	05/13/21	WB	30 - 130 %
Extraction for 1,4-Dioxane	Completed					05/14/21	G/G	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

C = This parameter is subcontracted.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*See attached

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

PFAS (EPA 537m), PFOA/PFOS - Water Extraction (EPA 537m) were analyzed by NY certified lab #12058.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 15, 2021

Reviewed and Released by: Maryam Taylor, Project Manager



## Environmental Laboratories, Inc.

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# QA/QC Report

June 15, 2021

## QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 575065 (mg/L), QC Sample No: CI28527 (CI28527, CI28531)													
Antimony - Water	BRL	0.003	<0.002	<0.003	NC	99.3			99.6			75 - 125	20
QA/QC Batch 575065 (mg/L), QC Sample No: CI28527 (CI28527, CI28531)													
Selenium - Water	BRL	0.005	<0.002	<0.005	NC	115			113			75 - 125	20
QA/QC Batch 575065 (mg/L), QC Sample No: CI28527 (CI28527, CI28531)													
Thallium - Water	BRL	0.001	<0.001	<0.001	NC	109			106			75 - 125	20
QA/QC Batch 574816 (mg/L), QC Sample No: CI27167 (CI28527, CI28531)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	92.0			102			75 - 125	20
QA/QC Batch 575004 (mg/kg), QC Sample No: CI27405 2X (CI28508, CI28509, CI28511, CI28512, CI28514, CI28515, CI28517, CI28518, CI28520, CI28521, CI28523, CI28524, CI28526, CI28528, CI28530)													
Mercury - Soil	BRL	0.02	31.3	30.1	3.90	98.3	95.6	2.8	NC	NC	NC	75 - 125	30
QA/QC Batch 575003 (mg/kg), QC Sample No: CI27583 2X (CI28500, CI28502, CI28503, CI28505, CI28506)													
Mercury - Soil	BRL	0.03	0.77	0.41	61.0	107	103	3.8	124	75.1	49.1	75 - 125	30
QA/QC Batch 574917 (mg/kg), QC Sample No: CI28500 (CI28500, CI28502, CI28503, CI28505, CI28506, CI28508, CI28509, CI28511, CI28512, CI28514, CI28515, CI28517, CI28518, CI28520, CI28521, CI28523, CI28524, CI28526, CI28528, CI28530)													
<b>ICP Metals - Soil</b>													
Aluminum	BRL	5.0	16300	16400	0.60	84.0	84.0	0.0	NC			80 - 120	30
Antimony	BRL	3.3	<3.7	<4.1	NC	98.8	98.9	0.1	83.9			70 - 130	30
Arsenic	BRL	0.67	5.02	6.15	20.2	101	103	2.0	87.6			80 - 120	30
Barium	BRL	0.33	36.7	33.0	10.6	101	103	2.0	96.4			80 - 120	30
Beryllium	BRL	0.27	0.47	0.50	NC	99.2	101	1.8	90.2			80 - 120	30
Cadmium	BRL	0.33	1.60	1.55	NC	102	105	2.9	90.2			80 - 120	30
Calcium	BRL	5.0	8260 *	13000	44.6	103	105	1.9	NC			80 - 120	30
Chromium	BRL	0.33	16.9	17.4	2.90	106	107	0.9	99.9			80 - 120	30
Cobalt	BRL	0.33	10.3	11.3	9.30	102	104	1.9	87.6			80 - 120	30
Copper	BRL	0.67	26.8	24.7	8.20	95.0	96.3	1.4	87.4			80 - 120	30
Iron	BRL	5.0	32000	29400	8.50	103	104	1.0	NC			80 - 120	30
Lead	BRL	0.33	23.5	22.6	3.90	107	107	0.0	114			80 - 120	30
Magnesium	BRL	5.0	9820	12100	20.8	105	105	0.0	NC			80 - 120	30
Manganese	BRL	0.33	851	682	22.0	97.4	100	2.6	NC			80 - 120	30
Nickel	BRL	0.33	22.6	26.9	17.4	103	104	1.0	85.4			80 - 120	30
Potassium	BRL	5.0	980 N	1120	13.3	102	103	1.0	>130			80 - 120	30
Selenium	BRL	1.3	<1.5	<1.6	NC	92.7	91.7	1.1	80.5			80 - 120	30
Silver	BRL	0.33	<0.37	<0.41	NC	91.5	91.6	0.1	83.5			70 - 130	30
Sodium	BRL	5.0	332	393	16.8	83.8	89.3	6.4	77.8			80 - 120	30
Thallium	BRL	3.0	<1.5	<3.7	NC	103	103	0.0	86.6			80 - 120	30
Vanadium	BRL	0.33	21.3	22.2	4.10	109	109	0.0	93.0			80 - 120	30
Zinc	BRL	0.67	72.4	63.3	13.4	99.7	100	0.3	98.7			80 - 120	30
QA/QC Batch 575091 (mg/L), QC Sample No: CI28531 (CI28527, CI28531)													
<b>ICP Metals - Aqueous</b>													
Aluminum	BRL	0.060	<0.020	0.018	NC	95.7	94.4	1.4	93.7			80 - 120	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	95.3	96.3	1.0	96.3			80 - 120	20

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Barium	BRL	0.002	<0.010	<0.002	NC	93.7	94.8	1.2	94.1			80 - 120	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	96.2	97.3	1.1	96.2			80 - 120	20
Cadmium	BRL	0.001	<0.004	<0.001	NC	96.0	97.2	1.2	96.3			80 - 120	20
Calcium	BRL	0.010	0.038	0.028	NC	94.7	96.3	1.7	95.8			80 - 120	20
Chromium	BRL	0.001	<0.001	<0.001	NC	96.8	97.9	1.1	98.2			80 - 120	20
Cobalt	BRL	0.002	<0.005	<0.002	NC	95.4	96.3	0.9	96.0			80 - 120	20
Copper	BRL	0.005	<0.005	<0.005	NC	95.1	95.5	0.4	96.1			80 - 120	20
Iron	BRL	0.010	<0.01	<0.010	NC	96.1	97.3	1.2	96.6			80 - 120	20
Lead	BRL	0.002	<0.002	<0.002	NC	95.2	95.9	0.7	96.1			80 - 120	20
Magnesium	BRL	0.010	0.016	0.015	NC	93.6	95.5	2.0	94.9			80 - 120	20
Manganese	BRL	0.001	<0.005	<0.001	NC	96.7	97.5	0.8	97.2			80 - 120	20
Nickel	BRL	0.001	<0.004	<0.001	NC	95.5	96.4	0.9	95.8			80 - 120	20
Potassium	BRL	0.1	<0.1	<0.1	NC	97.4	96.8	0.6	95.9			80 - 120	20
Silver	BRL	0.001	<0.005	<0.001	NC	91.4	93.8	2.6	93.4			70 - 130	30
Sodium	BRL	0.10	<0.10	<0.10	NC	102	95.8	6.3	94.4			80 - 120	20
Vanadium	BRL	0.002	0.002 J	<0.002	NC	92.6	94.6	2.1	94.1			80 - 120	20
Zinc	BRL	0.004	<0.010	<0.004	NC	93.7	95.0	1.4	94.4			80 - 120	20

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.



## Environmental Laboratories, Inc.

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# QA/QC Report

June 15, 2021

## QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk	RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 574889 (ug/Kg), QC Sample No: CI28509 10X (CI28500, CI28502, CI28503, CI28505, CI28506, CI28508, CI28509)											
<b>Chlorinated Herbicides - Soil</b>											
2,4,5-T	ND	130		37	47	23.8	49	35	33.3	40 - 140	30
2,4,5-TP (Silvex)	ND	130		40	50	22.2	49	37	27.9	40 - 140	30
2,4-D	ND	250		40	52	26.1	56	41	30.9	40 - 140	30
2,4-DB	ND	2500		27	35	25.8	45	33	30.8	40 - 140	30
Dalapon	ND	130		60	59	1.7	36	31	14.9	40 - 140	30
Dicamba	ND	130		74	73	1.4	60	48	22.2	40 - 140	30
Dichloroprop	ND	130		46	57	21.4	61	45	30.2	40 - 140	30
Dinoseb	ND	130		68	70	2.9	46	40	14.0	40 - 140	30
% DCAA (Surrogate Rec)	41	%		37	44	17.3	48	35	31.3	30 - 150	30
% DCAA (Surrogate Rec) (Confirm)	37	%		35	38	8.2	46	34	30.0	30 - 150	30

QA/QC Batch 575379 (ug/L), QC Sample No: CI28527 10X (CI28527, CI28531)

## Chlorinated Herbicides - Liquid

2,4,5-T	ND	2.5		79	82	3.7			40 - 140	20
2,4,5-TP (Silvex)	ND	2.5		81	85	4.8			40 - 140	20
2,4-D	ND	5.0		82	85	3.6			40 - 140	20
2,4-DB	ND	50		37	38	2.7			40 - 140	20
Dalapon	ND	2.5		66	71	7.3			40 - 140	20
Dicamba	ND	2.5		85	88	3.5			40 - 140	20
Dichloroprop	ND	5.0		100	104	3.9			40 - 140	20
Dinoseb	ND	5.0		78	80	2.5			40 - 140	20
% DCAA (Surrogate Rec)	82	%		87	91	4.5			30 - 150	20
% DCAA (Surrogate Rec) (Confirm)	79	%		75	80	6.5			30 - 150	20

### Comment:

A LCS and LCSD were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 575126 (ug/Kg), QC Sample No: CI28528 10X (CI28521, CI28523, CI28524, CI28526, CI28528, CI28530)

## Chlorinated Herbicides - Soil

2,4,5-T	ND	130		54	47	13.9	49	55	11.5	40 - 140	30
2,4,5-TP (Silvex)	ND	130		55	49	11.5	50	57	13.1	40 - 140	30
2,4-D	ND	250		67	54	21.5	53	60	12.4	40 - 140	30
2,4-DB	ND	2500		42	35	18.2	44	48	8.7	40 - 140	30
Dalapon	ND	130		66	70	5.9	42	45	6.9	40 - 140	30
Dicamba	ND	130		84	81	3.6	64	71	10.4	40 - 140	30
Dichloroprop	ND	130		67	61	9.4	64	72	11.8	40 - 140	30
Dinoseb	ND	130		77	76	1.3	50	53	5.8	40 - 140	30
% DCAA (Surrogate Rec)	69	%		48	44	8.7	48	53	9.9	30 - 150	30
% DCAA (Surrogate Rec) (Confirm)	50	%		45	41	9.3	42	48	13.3	30 - 150	30

QA/QC Batch 575077 (ug/Kg), QC Sample No: CI29825 10X (CI28511, CI28512, CI28514, CI28515, CI28517, CI28518, CI28520)

## Chlorinated Herbicides - Soil

2,4,5-T	ND	83		76	77	1.3	72	68	5.7	40 - 140	30
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QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS				MS		MS		% Rec Limits	% RPD Limits
			%	LCSD %	LCS RPD	%	MSD %	RPD	Limits			
2,4,5-TP (Silvex)	ND	83	80	82	2.5	76	73	4.0	40 - 140	30		
2,4-D	ND	170	75	76	1.3	73	68	7.1	40 - 140	30		
2,4-DB	ND	1700	82	83	1.2	77	74	4.0	40 - 140	30		
Dalapon	ND	83	59	63	6.6	60	54	10.5	40 - 140	30		
Dicamba	ND	83	77	79	2.6	75	71	5.5	40 - 140	30		
Dichloroprop	ND	83	93	96	3.2	89	86	3.4	40 - 140	30		
Dinoseb	ND	83	52	71	30.9	60	52	14.3	40 - 140	30		
% DCAA (Surrogate Rec)	60	%	66	66	0.0	63	60	4.9	30 - 150	30		
% DCAA (Surrogate Rec) (Confirm	64	%	67	68	1.5	64	62	3.2	30 - 150	30		

QA/QC Batch 574920 (ug/Kg), QC Sample No: CI28511 2X (CI28500, CI28502, CI28503, CI28505, CI28506, CI28508, CI28509, CI28511, CI28512, CI28514, CI28515, CI28517, CI28518, CI28520, CI28521, CI28523, CI28524, CI28526, CI28528, CI28530)

**Polychlorinated Biphenyls - Soil**

PCB-1016	ND	33	86	79	8.5	82	83	1.2	40 - 140	30	
PCB-1221	ND	33							40 - 140	30	
PCB-1232	ND	33							40 - 140	30	
PCB-1242	ND	33							40 - 140	30	
PCB-1248	ND	33							40 - 140	30	
PCB-1254	ND	33							40 - 140	30	
PCB-1260	ND	33	108	106	1.9	103	110	6.6	40 - 140	30	
PCB-1262	ND	33							40 - 140	30	
PCB-1268	ND	33							40 - 140	30	
% DCBP (Surrogate Rec)	101	%	119	110	7.9	108	114	5.4	30 - 150	30	
% DCBP (Surrogate Rec) (Confirm	96	%	110	105	4.7	102	109	6.6	30 - 150	30	
% TCMX (Surrogate Rec)	79	%	87	83	4.7	84	89	5.8	30 - 150	30	
% TCMX (Surrogate Rec) (Confirm	80	%	90	86	4.5	87	93	6.7	30 - 150	30	

QA/QC Batch 574961 (ug/L), QC Sample No: CI28527 (CI28527, CI28531)

**Polychlorinated Biphenyls - Liquid**

PCB-1016	ND	0.050	109	116	6.2				40 - 140	20	
PCB-1221	ND	0.050							40 - 140	20	
PCB-1232	ND	0.050							40 - 140	20	
PCB-1242	ND	0.050							40 - 140	20	
PCB-1248	ND	0.050							40 - 140	20	
PCB-1254	ND	0.050							40 - 140	20	
PCB-1260	ND	0.050	93	108	14.9				40 - 140	20	
PCB-1262	ND	0.050							40 - 140	20	
PCB-1268	ND	0.050							40 - 140	20	
% DCBP (Surrogate Rec)	76	%	76	89	15.8				30 - 150	20	
% DCBP (Surrogate Rec) (Confirm	74	%	70	85	19.4				30 - 150	20	
% TCMX (Surrogate Rec)	77	%	99	104	4.9				30 - 150	20	
% TCMX (Surrogate Rec) (Confirm	75	%	96	104	8.0				30 - 150	20	

**Comment:**

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 574921 (ug/Kg), QC Sample No: CI28511 2X (CI28500, CI28502, CI28503, CI28505, CI28506, CI28508, CI28509, CI28511, CI28512, CI28514, CI28515, CI28517, CI28518, CI28520, CI28521, CI28523, CI28524, CI28526, CI28528, CI28530)

**Pesticides - Soil**

4,4'-DDD	ND	1.7	88	92	4.4	70	75	6.9	40 - 140	30	
4,4'-DDE	ND	1.7	85	90	5.7	67	73	8.6	40 - 140	30	
4,4'-DDT	ND	1.7	82	87	5.9	66	71	7.3	40 - 140	30	
a-BHC	ND	1.0	84	89	5.8	68	74	8.5	40 - 140	30	
a-Chlordane	ND	3.3	82	87	5.9	66	72	8.7	40 - 140	30	
Aldrin	ND	1.0	82	87	5.9	66	72	8.7	40 - 140	30	

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	QA/QC Data				SDG I.D.: GCI28500			
			LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
b-BHC	ND	1.0	87	91	4.5	68	73	7.1	40 - 140	30
Chlordane	ND	33	84	87	3.5	66	72	8.7	40 - 140	30
d-BHC	ND	3.3	79	83	4.9	64	70	9.0	40 - 140	30
Dieldrin	ND	1.0	93	99	6.3	77	81	5.1	40 - 140	30
Endosulfan I	ND	3.3	85	90	5.7	69	75	8.3	40 - 140	30
Endosulfan II	ND	3.3	81	86	6.0	66	71	7.3	40 - 140	30
Endosulfan sulfate	ND	3.3	79	83	4.9	64	70	9.0	40 - 140	30
Endrin	ND	3.3	87	93	6.7	71	77	8.1	40 - 140	30
Endrin aldehyde	ND	3.3	68	71	4.3	48	63	27.0	40 - 140	30
Endrin ketone	ND	3.3	80	84	4.9	66	71	7.3	40 - 140	30
g-BHC	ND	1.0	84	88	4.7	67	72	7.2	40 - 140	30
g-Chlordane	ND	3.3	84	87	3.5	66	72	8.7	40 - 140	30
Heptachlor	ND	3.3	83	88	5.8	68	74	8.5	40 - 140	30
Heptachlor epoxide	ND	3.3	78	82	5.0	63	69	9.1	40 - 140	30
Methoxychlor	ND	3.3	83	86	3.6	71	71	0.0	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	74	%	76	79	3.9	76	75	1.3	30 - 150	30
% DCBP (Confirmation)	77	%	79	84	6.1	73	77	5.3	30 - 150	30
% TCMX	73	%	78	82	5.0	68	75	9.8	30 - 150	30
% TCMX (Confirmation)	69	%	74	78	5.3	64	70	9.0	30 - 150	30

QA/QC Batch 574962 (ug/L), QC Sample No: CI28527 (CI28527, CI28531)

**Pesticides - Liquid**

4,4' -DDD	ND	0.003	98	101	3.0			40 - 140	20
4,4' -DDE	ND	0.003	83	91	9.2			40 - 140	20
4,4' -DDT	ND	0.003	88	89	1.1			40 - 140	20
a-BHC	ND	0.002	75	84	11.3			40 - 140	20
a-Chlordane	ND	0.005	83	90	8.1			40 - 140	20
Alachlor	ND	0.005	NA	NA	NC			40 - 140	20
Aldrin	ND	0.002	65	76	15.6			40 - 140	20
b-BHC	ND	0.002	84	94	11.2			40 - 140	20
Chlordane	ND	0.050	75	86	13.7			40 - 140	20
d-BHC	ND	0.005	57	63	10.0			40 - 140	20
Dieldrin	ND	0.002	86	97	12.0			40 - 140	20
Endosulfan I	ND	0.005	86	94	8.9			40 - 140	20
Endosulfan II	ND	0.005	90	99	9.5			40 - 140	20
Endosulfan sulfate	ND	0.005	85	98	14.2			40 - 140	20
Endrin	ND	0.005	88	93	5.5			40 - 140	20
Endrin aldehyde	ND	0.005	72	78	8.0			40 - 140	20
Endrin ketone	ND	0.005	101	112	10.3			40 - 140	20
g-BHC	ND	0.002	80	85	6.1			40 - 140	20
g-Chlordane	ND	0.005	75	86	13.7			40 - 140	20
Heptachlor	ND	0.005	75	84	11.3			40 - 140	20
Heptachlor epoxide	ND	0.005	81	89	9.4			40 - 140	20
Methoxychlor	ND	0.005	92	120	26.4			40 - 140	20
Toxaphene	ND	0.20	NA	NA	NC			40 - 140	20
% DCBP	106	%	94	119	23.5			30 - 150	20
% DCBP (Confirmation)	74	%	64	74	14.5			30 - 150	20
% TCMX	80	%	69	78	12.2			30 - 150	20
% TCMX (Confirmation)	76	%	66	80	19.2			30 - 150	20

**Comment:**

A LCS and LCS duplicate were performed instead of a MS and MSD. Alpha and gamma chlordane were spiked and analyzed instead of technical chlordane. Gamma chlordane recovery is reported as chlordane in the LCS and LCSD

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 576212 (ng/L), QC Sample No: CI28509 (CI28500, CI28502, CI28503, CI28505, CI28506, CI28508, CI28509, CI28511, CI28512, CI28514, CI28515, CI28517, CI28518, CI28520, CI28521, CI28523, CI28524, CI28526, CI28528, CI28530)										
<b>PFAS</b>										
1H,1H,2H,2H-Perfluorodecanesulfo	ND	0.234			113		113		70 - 130	30
1H,1H,2H,2H-Perfluorooctanesulfo	ND	0.234			108		107		70 - 130	30
NEtFOSAA	ND	0.234			96.2		94.4		70 - 130	30
NMeFOSAA	ND	0.234			125		119		70 - 130	30
Perfluoro-1-decanesulfonic acid (P)	ND	0.234			94.2		108		70 - 130	30
Perfluoro-1-heptanesulfonic acid (P)	ND	0.234			118		123		70 - 130	30
Perfluoro-1-octanesulfonamide (FO)	ND	0.234			101		91.6		70 - 130	30
Perfluorobutanesulfonic Acid (PFB)	ND	0.234			108		104		70 - 130	30
Perfluorodecanoic Acid (PFDA)	ND	0.234			108		93.8		70 - 130	30
Perfluorododecanoic Acid (PFDoA)	ND	0.234			113		103		70 - 130	30
Perfluoroheptanoic Acid (PFHpA)	ND	0.234			104		108		70 - 130	30
Perfluorohexanesulfonic Acid (PFH)	ND	0.234			115		108		70 - 130	30
Perfluorohexanoic Acid (PFHxA)	ND	0.234			113		110		70 - 130	30
Perfluoro-n-butanoic acid (PFBA)	ND	0.234			110		108		70 - 130	30
Perfluorononanoic Acid (PFNA)	ND	0.234			100		91.6		70 - 130	30
Perfluoroctanesulfonic Acid (PFO)	ND	0.234			134		121		70 - 130	30
Perfluoroctanoic Acid (PFOA)	ND	0.234			102		95.4		70 - 130	30
Perfluoropentanoic acid (PPPeA)	ND	0.234			111		106		70 - 130	30
Perfluorotetradecanoic Acid (PFTA)	ND	0.234			111		105		70 - 130	30
Perfluorotridecanoic Acid (PFTrDA)	ND	0.234			106		93.8		70 - 130	30
Perfluoroundecanoic Acid (PFUnA)	ND	0.234			106		104		70 - 130	30
% d3-N-MeFOSAA	64.1	0.0468			65.1		58.8		70 - 130	30
% M2-6:2FTS	138	0.0468			131		211		70 - 130	30
% M2-8:2FTS	144	0.0468			125		236		70 - 130	30
% M2PFTEDA	61.6	0.0468			55.1		44.2		70 - 130	30
% M3PFBS	82.4	0.0468			83.3		73.4		70 - 130	30
% M3PFHxS	78.2	0.0468			74.7		68.8		70 - 130	30
% M4PFHpA	79.6	0.0468			78.2		68.1		70 - 130	30
% M5PFHxA	81.9	0.0468			78.4		74.1		70 - 130	30
% M5PFPEA	91.9	0.0468			85.5		80.4		70 - 130	30
% M6PFDA	76.0	0.0468			74.9		68.6		70 - 130	30
% M7PFUDA	60.5	0.0468			63.3		58.4		70 - 130	30
% M8FOSA	59.3	0.0468			54.5		48.1		70 - 130	30
% M8PFOA	79.6	0.0468			80.4		81.3		70 - 130	30
% M8PFOS	75.0	0.0468			71.4		55.8		70 - 130	30
% M9PFNA	76.0	0.0468			77.7		68.9		70 - 130	30
% MPFBA	99.6	0.0468			90.1		85.8		70 - 130	30
% MPFDOA	66.5	0.0468			70.2		62.3		70 - 130	30
QA/QC Batch 576214 (ng/L), QC Sample No: CI28527 (CI28527, CI28531)										
<b>PFAS</b>										
1H,1H,2H,2H-Perfluorodecanesulfo	ND	2.00			98.2	104	5.73		70 - 130	30
1H,1H,2H,2H-Perfluorooctanesulfo	ND	5.00			98.9	105	5.99		70 - 130	30
NEtFOSAA	ND	2.00			95.0	107	11.8		70 - 130	30
NMeFOSAA	ND	2.00			108	111	3.30		70 - 130	30
Perfluoro-1-decanesulfonic acid (P)	ND	2.00			90.5	101	10.7		70 - 130	30
Perfluoro-1-heptanesulfonic acid (P)	ND	2.00			95.0	105	9.66		70 - 130	30
Perfluoro-1-octanesulfonamide (FO)	ND	2.00			100	105	4.31		70 - 130	30
Perfluorobutanesulfonic Acid (PFB)	ND	2.00			98.8	106	7.25		70 - 130	30
Perfluorodecanoic Acid (PFDA)	ND	2.00			95.3	107	11.8		70 - 130	30

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Perfluorododecanoic Acid (PFDoA)	ND	2.00	96.5	110	12.8				70 - 130	30
Perfluoroheptanoic Acid (PFHpA)	ND	2.00	96.3	103	6.71				70 - 130	30
Perfluorohexanesulfonic Acid (PFH)	ND	2.00	104	107	2.95				70 - 130	30
Perfluorohexanoic Acid (PFHxA)	ND	2.00	100	112	11.2				70 - 130	30
Perfluoro-n-butanoic acid (PFBA)	ND	2.00	101	108	6.70				70 - 130	30
Perfluorononanoic Acid (PFNA)	ND	2.00	97.3	101	3.53				70 - 130	30
Perfluorooctanesulfonic Acid (PFO)	ND	2.00	109	120	9.51				70 - 130	30
Perfluorooctanoic Acid (PFOA)	ND	2.00	91.1	99.7	9.01				70 - 130	30
Perfluoropentanoic acid (PFPeA)	ND	2.00	101	110	7.92				70 - 130	30
Perfluorotetradecanoic Acid (PFTA)	ND	2.00	100	108	7.25				70 - 130	30
Perfluorotridecanoic Acid (PFTDA)	ND	2.00	94.8	103	8.65				70 - 130	30
Perfluoroundecanoic Acid (PFUnA)	ND	2.00	99.7	110	9.80				70 - 130	30
% d3-N-MeFOSAA	48.9	0.100	63.9	58.7	8.5				70 - 130	30
% M2-6:2FTS	67.7	0.100	71.4	79.1	10.2				70 - 130	30
% M2-8:2FTS	74.9	0.100	76.7	80.0	4.2				70 - 130	30
% M2PFTEDA	58.5	0.100	72.9	69.2	5.2				70 - 130	30
% M3PFBS	104	0.100	103	103	0.0				70 - 130	30
% M3PFHxS	86.8	0.100	85.3	88.2	3.3				70 - 130	30
% M4PFHpA	92.7	0.100	93.3	91.3	2.2				70 - 130	30
% M5PFHxA	100	0.100	103	97.0	6.0				70 - 130	30
% M5PFPEA	107	0.100	106	101	4.8				70 - 130	30
% M6PFDA	85.1	0.100	86.3	84.7	1.9				70 - 130	30
% M7PFUDA	77.7	0.100	84.3	83.1	1.4				70 - 130	30
% M8FOSA	48.0	0.100	58.9	54.9	7.0				70 - 130	30
% M8PFOA	95.0	0.100	97.2	94.7	2.6				70 - 130	30
% M8PFOS	92.7	0.100	87.0	86.9	0.1				70 - 130	30
% M9PFNA	101	0.100	87.6	92.5	5.4				70 - 130	30
% MPFBA	108	0.100	108	104	3.8				70 - 130	30
% MPFDOA	80.5	0.100	91.2	91.4	0.2				70 - 130	30

QA/QC Batch 574914 (ug/L), QC Sample No: CI26224 (CI28527, CI28531)

Semivolatiles - Liquid

1,2,4,5-Tetrachlorobenzene	ND	3.5	56	63	11.8				30 - 130	20
1,2,4-Trichlorobenzene	ND	3.5	58	65	11.4				30 - 130	20
1,2-Dichlorobenzene	ND	1.0	59	65	9.7				30 - 130	20
1,2-Diphenylhydrazine	ND	1.6	69	81	16.0				30 - 130	20
1,3-Dichlorobenzene	ND	1.0	59	64	8.1				30 - 130	20
1,4-Dichlorobenzene	ND	1.0	59	64	8.1				30 - 130	20
2,4,5-Trichlorophenol	ND	1.0	66	76	14.1				30 - 130	20
2,4,6-Trichlorophenol	ND	1.0	67	77	13.9				30 - 130	20
2,4-Dichlorophenol	ND	1.0	64	71	10.4				30 - 130	20
2,4-Dimethylphenol	ND	1.0	69	76	9.7				30 - 130	20
2,4-Dinitrophenol	ND	1.0	63	73	14.7				30 - 130	20
2,4-Dinitrotoluene	ND	3.5	71	85	17.9				30 - 130	20
2,6-Dinitrotoluene	ND	3.5	66	78	16.7				30 - 130	20
2-Chloronaphthalene	ND	3.5	62	72	14.9				30 - 130	20
2-Chlorophenol	ND	1.0	63	68	7.6				30 - 130	20
2-Methylnaphthalene	ND	3.5	61	68	10.9				30 - 130	20
2-Methylphenol (o-cresol)	ND	1.0	69	74	7.0				30 - 130	20
2-Nitroaniline	ND	3.5	94	107	12.9				30 - 130	20
2-Nitrophenol	ND	1.0	73	80	9.2				30 - 130	20
3&4-Methylphenol (m&p-cresol)	ND	1.0	67	72	7.2				30 - 130	20
3,3'-Dichlorobenzidine	ND	5.0	54	57	5.4				30 - 130	20

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
3-Nitroaniline	ND	5.0	76	88	14.6				30 - 130	20
4,6-Dinitro-2-methylphenol	ND	1.0	69	79	13.5				30 - 130	20
4-Bromophenyl phenyl ether	ND	3.5	63	71	11.9				30 - 130	20
4-Chloro-3-methylphenol	ND	1.0	71	79	10.7				30 - 130	20
4-Chloroaniline	ND	3.5	73	75	2.7				30 - 130	20
4-Chlorophenyl phenyl ether	ND	1.0	61	71	15.2				30 - 130	20
4-Nitroaniline	ND	5.0	75	88	16.0				30 - 130	20
4-Nitrophenol	ND	1.0	87	100	13.9				30 - 130	20
Acenaphthene	ND	1.5	67	76	12.6				30 - 130	20
Acetophenone	ND	3.5	61	67	9.4				30 - 130	20
Aniline	ND	3.5	62	62	0.0				30 - 130	20
Anthracene	ND	1.5	64	73	13.1				30 - 130	20
Benzidine	ND	4.5	91	20	127.9				30 - 130	20
Benzoic acid	ND	10	66	69	4.4				30 - 130	20
Benzyl butyl phthalate	ND	1.5	73	87	17.5				30 - 130	20
Bis(2-chloroethoxy)methane	ND	3.5	67	74	9.9				30 - 130	20
Bis(2-chloroethyl)ether	ND	1.0	63	70	10.5				30 - 130	20
Bis(2-chloroisopropyl)ether	ND	1.0	65	69	6.0				30 - 130	20
Bis(2-ethylhexyl)phthalate	ND	1.5	70	81	14.6				30 - 130	20
Carbazole	ND	5.0	67	76	12.6				30 - 130	20
Dibenzofuran	ND	3.5	62	72	14.9				30 - 130	20
Diethyl phthalate	ND	1.5	67	77	13.9				30 - 130	20
Dimethylphthalate	ND	1.5	66	75	12.8				30 - 130	20
Di-n-butylphthalate	ND	1.5	68	78	13.7				30 - 130	20
Di-n-octylphthalate	ND	1.5	70	86	20.5				30 - 130	20
Fluoranthene	ND	1.5	62	72	14.9				30 - 130	20
Fluorene	ND	1.5	63	73	14.7				30 - 130	20
Hexachlorocyclopentadiene	ND	3.5	29	34	15.9				30 - 130	20
Hexachloroethane	ND	3.5	61	66	7.9				30 - 130	20
Isophorone	ND	3.5	64	69	7.5				30 - 130	20
Naphthalene	ND	1.5	62	66	6.3				30 - 130	20
N-Nitrosodi-n-propylamine	ND	3.5	63	69	9.1				30 - 130	20
N-Nitrosodiphenylamine	ND	3.5	56	66	16.4				30 - 130	20
Pentachloronitrobenzene	ND	5.0	66	77	15.4				30 - 130	20
Phenol	ND	1.0	71	72	1.4				30 - 130	20
Pyrene	ND	1.5	60	73	19.5				30 - 130	20
Pyridine	ND	5.0	53	46	14.1				30 - 130	20
% 2,4,6-Tribromophenol	101	%	79	89	11.9				15 - 110	20
% 2-Fluorobiphenyl	85	%	61	72	16.5				30 - 130	20
% 2-Fluorophenol	67	%	59	61	3.3				15 - 110	20
% Nitrobenzene-d5	84	%	65	72	10.2				30 - 130	20
% Phenol-d5	75	%	60	62	3.3				15 - 110	20
% Terphenyl-d14	86	%	60	71	16.8				30 - 130	20

**Comment:**

Additional 8270 criteria: Four of the compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 574926 (ug/kg), QC Sample No: CI28511 (CI28500, CI28502, CI28503, CI28505, CI28506, CI28508, CI28509, CI28511, CI28512, CI28514, CI28515, CI28517, CI28518, CI28520, CI28521)

**Semivolatiles - Soil**

1,2,4,5-Tetrachlorobenzene	ND	230	87	84	3.5	80	87	8.4	30 - 130	30
1,2,4-Trichlorobenzene	ND	230	88	85	3.5	81	81	0.0	30 - 130	30
1,2-Dichlorobenzene	ND	180	82	75	8.9	72	70	2.8	30 - 130	30

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS	LCSD	LCS	MS	MSD	MS	% Rec Limits	% RPD Limits
			%	%	RPD	%	RPD			
1,2-Diphenylhydrazine	ND	230	88	89	1.1	82	88	7.1	30 - 130	30
1,3-Dichlorobenzene	ND	230	79	73	7.9	69	66	4.4	30 - 130	30
1,4-Dichlorobenzene	ND	230	81	74	9.0	68	68	0.0	30 - 130	30
2,4,5-Trichlorophenol	ND	230	103	103	0.0	96	102	6.1	30 - 130	30
2,4,6-Trichlorophenol	ND	130	105	104	1.0	93	96	3.2	30 - 130	30
2,4-Dichlorophenol	ND	130	100	97	3.0	88	94	6.6	30 - 130	30
2,4-Dimethylphenol	ND	230	94	93	1.1	62	66	6.3	30 - 130	30
2,4-Dinitrophenol	ND	230	95	95	0.0	91	88	3.4	30 - 130	30
2,4-Dinitrotoluene	ND	130	99	101	2.0	94	99	5.2	30 - 130	30
2,6-Dinitrotoluene	ND	130	95	94	1.1	89	93	4.4	30 - 130	30
2-Chloronaphthalene	ND	230	92	90	2.2	84	90	6.9	30 - 130	30
2-Chlorophenol	ND	230	90	83	8.1	79	82	3.7	30 - 130	30
2-Methylnaphthalene	ND	230	85	82	3.6	80	82	2.5	30 - 130	30
2-Methylphenol (o-cresol)	ND	230	100	96	4.1	82	91	10.4	30 - 130	30
2-Nitroaniline	ND	330	199	>200	NC	174	181	3.9	30 - 130	30
2-Nitrophenol	ND	230	122	117	4.2	114	109	4.5	30 - 130	30
3&4-Methylphenol (m&p-cresol)	ND	230	91	89	2.2	74	85	13.8	30 - 130	30
3,3'-Dichlorobenzidine	ND	130	103	107	3.8	96	105	9.0	30 - 130	30
3-Nitroaniline	ND	330	96	108	11.8	96	102	6.1	30 - 130	30
4,6-Dinitro-2-methylphenol	ND	230	102	101	1.0	92	97	5.3	30 - 130	30
4-Bromophenyl phenyl ether	ND	230	97	97	0.0	91	99	8.4	30 - 130	30
4-Chloro-3-methylphenol	ND	230	94	95	1.1	85	94	10.1	30 - 130	30
4-Chloroaniline	ND	230	69	85	20.8	79	84	6.1	30 - 130	30
4-Chlorophenyl phenyl ether	ND	230	100	100	0.0	95	103	8.1	30 - 130	30
4-Nitroaniline	ND	230	98	96	2.1	93	98	5.2	30 - 130	30
4-Nitrophenol	ND	230	103	103	0.0	118	108	8.8	30 - 130	30
Acenaphthene	ND	230	88	88	0.0	83	88	5.8	30 - 130	30
Acenaphthylene	ND	130	79	78	1.3	74	79	6.5	30 - 130	30
Acetophenone	ND	230	89	85	4.6	80	85	6.1	30 - 130	30
Aniline	ND	330	63	67	6.2	58	63	8.3	30 - 130	30
Anthracene	ND	230	87	87	0.0	81	88	8.3	30 - 130	30
Benz(a)anthracene	ND	230	95	98	3.1	90	98	8.5	30 - 130	30
Benzidine	ND	330	51	58	12.8	13	11	16.7	30 - 130	30
Benzo(a)pyrene	ND	130	99	101	2.0	91	99	8.4	30 - 130	30
Benzo(b)fluoranthene	ND	160	94	99	5.2	86	96	11.0	30 - 130	30
Benzo(ghi)perylene	ND	230	96	98	2.1	91	96	5.3	30 - 130	30
Benzo(k)fluoranthene	ND	230	82	84	2.4	80	85	6.1	30 - 130	30
Benzoic Acid	ND	670	63	38	49.5	56	51	9.3	30 - 130	30
Benzyl butyl phthalate	ND	230	92	95	3.2	89	97	8.6	30 - 130	30
Bis(2-chloroethoxy)methane	ND	230	80	79	1.3	74	74	0.0	30 - 130	30
Bis(2-chloroethyl)ether	ND	130	59	54	8.8	52	53	1.9	30 - 130	30
Bis(2-chloroisopropyl)ether	ND	230	60	57	5.1	54	55	1.8	30 - 130	30
Bis(2-ethylhexyl)phthalate	ND	230	93	95	2.1	90	96	6.5	30 - 130	30
Carbazole	ND	230	88	93	5.5	81	86	6.0	30 - 130	30
Chrysene	ND	230	91	92	1.1	86	92	6.7	30 - 130	30
Dibenz(a,h)anthracene	ND	130	95	97	2.1	90	98	8.5	30 - 130	30
Dibenzo furan	ND	230	89	90	1.1	83	89	7.0	30 - 130	30
Diethyl phthalate	ND	230	95	97	2.1	89	95	6.5	30 - 130	30
Dimethylphthalate	ND	230	94	95	1.1	89	96	7.6	30 - 130	30
Di-n-butylphthalate	ND	670	88	91	3.4	85	91	6.8	30 - 130	30
Di-n-octylphthalate	ND	230	96	100	4.1	92	97	5.3	30 - 130	30
Fluoranthene	ND	230	86	91	5.6	83	88	5.8	30 - 130	30
Fluorene	ND	230	93	95	2.1	88	96	8.7	30 - 130	30

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk	RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Hexachlorobenzene	ND	130		102	105	2.9	97	102	5.0	30 - 130	30
Hexachlorobutadiene	ND	230		97	91	6.4	88	89	1.1	30 - 130	30
Hexachlorocyclopentadiene	ND	230		68	66	3.0	66	68	3.0	30 - 130	30
Hexachloroethane	ND	130		85	81	4.8	74	71	4.1	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230		97	99	2.0	91	97	6.4	30 - 130	30
Isophorone	ND	130		77	73	5.3	71	73	2.8	30 - 130	30
Naphthalene	ND	230		83	78	6.2	75	76	1.3	30 - 130	30
Nitrobenzene	ND	130		95	90	5.4	87	91	4.5	30 - 130	30
N-Nitrosodimethylamine	ND	230		52	49	5.9	46	42	9.1	30 - 130	30
N-Nitrosodi-n-propylamine	ND	130		93	89	4.4	84	90	6.9	30 - 130	30
N-Nitrosodiphenylamine	ND	130		91	95	4.3	83	89	7.0	30 - 130	30
Pentachloronitrobenzene	ND	230		105	103	1.9	100	103	3.0	30 - 130	30
Pentachlorophenol	ND	230		123	119	3.3	112	111	0.9	30 - 130	30
Phenanthrene	ND	130		84	87	3.5	81	88	8.3	30 - 130	30
Phenol	ND	230		89	86	3.4	79	86	8.5	30 - 130	30
Pyrene	ND	230		89	93	4.4	86	91	5.6	30 - 130	30
Pyridine	ND	230		41	39	5.0	37	32	14.5	30 - 130	30
% 2,4,6-Tribromophenol	124	%		120	116	3.4	104	112	7.4	30 - 130	30
% 2-Fluorobiphenyl	86	%		85	83	2.4	79	82	3.7	30 - 130	30
% 2-Fluorophenol	74	%		76	72	5.4	64	65	1.6	30 - 130	30
% Nitrobenzene-d5	85	%		89	82	8.2	80	83	3.7	30 - 130	30
% Phenol-d5	84	%		87	83	4.7	77	82	6.3	30 - 130	30
% Terphenyl-d14	93	%		92	97	5.3	88	93	5.5	30 - 130	30

**Comment:**

Additional 8270 criteria: Four of the compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 575059 (ug/kg), QC Sample No: CI28523 (CI28523, CI28524, CI28526, CI28528, CI28530)

**Semivolatiles - Soil**

1,2,4,5-Tetrachlorobenzene	ND	230		67	72	7.2	70	65	7.4	30 - 130	30
1,2,4-Trichlorobenzene	ND	230		57	62	8.4	61	52	15.9	30 - 130	30
1,2-Dichlorobenzene	ND	180		48	57	17.1	55	45	20.0	30 - 130	30
1,2-Diphenylhydrazine	ND	230		75	79	5.2	76	73	4.0	30 - 130	30
1,3-Dichlorobenzene	ND	230		46	56	19.6	54	43	22.7	30 - 130	30
1,4-Dichlorobenzene	ND	230		46	54	16.0	52	43	18.9	30 - 130	30
2,4,5-Trichlorophenol	ND	230		76	84	10.0	77	74	4.0	30 - 130	30
2,4,6-Trichlorophenol	ND	130		78	82	5.0	72	68	5.7	30 - 130	30
2,4-Dichlorophenol	ND	130		76	80	5.1	77	72	6.7	30 - 130	30
2,4-Dimethylphenol	ND	230		74	78	5.3	55	45	20.0	30 - 130	30
2,4-Dinitrophenol	ND	230		110	123	11.2	111	104	6.5	30 - 130	30
2,4-Dinitrotoluene	ND	130		83	86	3.6	84	82	2.4	30 - 130	30
2,6-Dinitrotoluene	ND	130		76	80	5.1	75	74	1.3	30 - 130	30
2-Chloronaphthalene	ND	230		69	75	8.3	71	65	8.8	30 - 130	30
2-Chlorophenol	ND	230		63	72	13.3	66	56	16.4	30 - 130	30
2-Methylnaphthalene	ND	230		64	70	9.0	68	63	7.6	30 - 130	30
2-Methylphenol (o-cresol)	ND	230		74	82	10.3	71	60	16.8	30 - 130	30
2-Nitroaniline	ND	330		100	105	4.9	96	96	0.0	30 - 130	30
2-Nitrophenol	ND	230		72	81	11.8	75	64	15.8	30 - 130	30
3&4-Methylphenol (m&p-cresol)	ND	230		68	76	11.1	63	55	13.6	30 - 130	30
3,3'-Dichlorobenzidine	ND	130		95	106	10.9	79	86	8.5	30 - 130	30
3-Nitroaniline	ND	330		68	70	2.9	65	73	11.6	30 - 130	30
4,6-Dinitro-2-methylphenol	ND	230		85	93	9.0	85	80	6.1	30 - 130	30
4-Bromophenyl phenyl ether	ND	230		76	78	2.6	74	72	2.7	30 - 130	30

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS	LCSD	LCS	MS	MSD	MS	% Rec Limits	% RPD Limits
			%	%	RPD	%	%	RPD		
4-Chloro-3-methylphenol	ND	230	85	87	2.3	82	80	2.5	30 - 130	30
4-Chloroaniline	ND	230	33	55	50.0	44	59	29.1	30 - 130	30
4-Chlorophenyl phenyl ether	ND	230	75	81	7.7	75	72	4.1	30 - 130	30
4-Nitroaniline	ND	230	76	81	6.4	77	73	5.3	30 - 130	30
4-Nitrophenol	ND	230	98	107	8.8	108	99	8.7	30 - 130	30
Acenaphthene	ND	230	74	79	6.5	75	71	5.5	30 - 130	30
Acenaphthylene	ND	130	70	74	5.6	70	66	5.9	30 - 130	30
Acetophenone	ND	230	62	70	12.1	67	56	17.9	30 - 130	30
Aniline	ND	330	43	53	20.8	28	44	44.4	30 - 130	30
Anthracene	ND	230	78	80	2.5	79	75	5.2	30 - 130	30
Benz(a)anthracene	ND	230	78	83	6.2	78	76	2.6	30 - 130	30
Benzidine	ND	330	33	35	5.9	<10	<10	NC	30 - 130	30
Benzo(a)pyrene	ND	130	73	78	6.6	73	70	4.2	30 - 130	30
Benzo(b)fluoranthene	ND	160	79	84	6.1	75	74	1.3	30 - 130	30
Benzo(ghi)perylene	ND	230	71	79	10.7	81	76	6.4	30 - 130	30
Benzo(k)fluoranthene	ND	230	79	79	0.0	74	71	4.1	30 - 130	30
Benzoic Acid	ND	670	70	65	7.4	49	59	18.5	30 - 130	30
Benzyl butyl phthalate	ND	230	85	90	5.7	84	84	0.0	30 - 130	30
Bis(2-chloroethoxy)methane	ND	230	69	72	4.3	70	61	13.7	30 - 130	30
Bis(2-chloroethyl)ether	ND	130	46	54	16.0	67	43	43.6	30 - 130	30
Bis(2-chloroisopropyl)ether	ND	230	50	56	11.3	57	46	21.4	30 - 130	30
Bis(2-ethylhexyl)phthalate	ND	230	85	88	3.5	85	84	1.2	30 - 130	30
Carbazole	ND	230	79	84	6.1	78	73	6.6	30 - 130	30
Chrysene	ND	230	77	81	5.1	76	74	2.7	30 - 130	30
Dibenz(a,h)anthracene	ND	130	73	81	10.4	85	79	7.3	30 - 130	30
Dibenzofuran	ND	230	71	77	8.1	72	69	4.3	30 - 130	30
Diethyl phthalate	ND	230	77	80	3.8	76	74	2.7	30 - 130	30
Dimethylphthalate	ND	230	74	76	2.7	72	70	2.8	30 - 130	30
Di-n-butylphthalate	ND	670	91	93	2.2	90	87	3.4	30 - 130	30
Di-n-octylphthalate	ND	230	87	90	3.4	87	85	2.3	30 - 130	30
Fluoranthene	ND	230	80	84	4.9	82	78	5.0	30 - 130	30
Fluorene	ND	230	76	83	8.8	77	74	4.0	30 - 130	30
Hexachlorobenzene	ND	130	79	82	3.7	81	76	6.4	30 - 130	30
Hexachlorobutadiene	ND	230	57	63	10.0	62	51	19.5	30 - 130	30
Hexachlorocyclopentadiene	ND	230	53	64	18.8	59	51	14.5	30 - 130	30
Hexachloroethane	ND	130	46	56	19.6	55	44	22.2	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	74	83	11.5	86	80	7.2	30 - 130	30
Isophorone	ND	130	63	66	4.7	64	58	9.8	30 - 130	30
Naphthalene	ND	230	60	67	11.0	65	55	16.7	30 - 130	30
Nitrobenzene	ND	130	64	72	11.8	70	59	17.1	30 - 130	30
N-Nitrosodimethylamine	ND	230	48	59	20.6	55	45	20.0	30 - 130	30
N-Nitrosodi-n-propylamine	ND	130	69	76	9.7	73	64	13.1	30 - 130	30
N-Nitrosodiphenylamine	ND	130	73	79	7.9	71	69	2.9	30 - 130	30
Pentachloronitrobenzene	ND	230	82	83	1.2	81	78	3.8	30 - 130	30
Pentachlorophenol	ND	230	118	130	9.7	113	106	6.4	30 - 130	30
Phenanthrene	ND	130	76	80	5.1	76	73	4.0	30 - 130	30
Phenol	ND	230	75	84	11.3	77	70	9.5	30 - 130	30
Pyrene	ND	230	85	88	3.5	87	82	5.9	30 - 130	30
Pyridine	ND	230	45	49	8.5	51	36	34.5	30 - 130	30
% 2,4,6-Tribromophenol	83	%	83	85	2.4	78	71	9.4	30 - 130	30
% 2-Fluorobiphenyl	68	%	68	73	7.1	68	63	7.6	30 - 130	30
% 2-Fluorophenol	64	%	55	64	15.1	58	49	16.8	30 - 130	30
% Nitrobenzene-d5	68	%	64	73	13.1	68	59	14.2	30 - 130	30

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	QA/QC Data				SDG I.D.: GCI28500			
			LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% Phenol-d5	68	%	64	73	13.1	65	59	9.7	30 - 130	30
% Terphenyl-d14	80	%	81	83	2.4	82	78	5.0	30 - 130	30

**Comment:**

Additional 8270 criteria: Four of the compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 575430 (ug/l), QC Sample No: CI27781 (CI28527, CI28531)

**1,4dioxane - Liquid**

1,4-dioxane	ND	0.20	89	92	3.3	91		30 - 130	20
% 1,4-dioxane-d8	86	%	88	89	1.1	90		30 - 130	20

QA/QC Batch 574914 (ug/L), QC Sample No: CI26224 (CI28527, CI28531)

**Semivolatiles (SIM) - Liquid**

Acenaphthylene	ND	0.50	59	66	11.2		30 - 130	20	
Benz(a)anthracene	ND	0.50	77	89	14.5		30 - 130	20	
Benzo(a)pyrene	ND	0.50	86	101	16.0		30 - 130	20	
Benzo(b)fluoranthene	ND	0.50	91	108	17.1		30 - 130	20	
Benzo(ghi)perylene	ND	0.50	88	102	14.7		30 - 130	20	
Benzo(k)fluoranthene	ND	0.50	81	96	16.9		30 - 130	20	
Chrysene	ND	0.50	76	88	14.6		30 - 130	20	
Dibenz(a,h)anthracene	ND	0.50	96	114	17.1		30 - 130	20	
Hexachlorobenzene	ND	0.50	74	84	12.7		30 - 130	20	
Hexachlorobutadiene	ND	0.50	77	88	13.3		30 - 130	20	
Indeno(1,2,3-cd)pyrene	ND	0.50	81	94	14.9		30 - 130	20	
Nitrobenzene	ND	0.50	61	66	7.9		30 - 130	20	
N-Nitrosodimethylamine	ND	0.05	65	71	8.8		30 - 130	20	
Pentachlorophenol	ND	0.50	77	94	19.9		30 - 130	20	
Phenanthere	ND	0.50	66	76	14.1		30 - 130	20	
% 2,4,6-Tribromophenol	86	%	100	118	16.5		15 - 110	20	I
% 2-Fluorobiphenyl	76	%	75	86	13.7		30 - 130	20	
% 2-Fluorophenol	56	%	62	66	6.3		15 - 110	20	
% Nitrobenzene-d5	63	%	65	75	14.3		30 - 130	20	
% Phenol-d5	65	%	66	71	7.3		15 - 110	20	
% Terphenyl-d14	87	%	86	99	14.1		30 - 130	20	

QA/QC Batch 575064 (ug/kg), QC Sample No: CI28511 (CI28500, CI28502, CI28503, CI28505, CI28506, CI28508, CI28509, CI28511, CI28512, CI28514, CI28515, CI28517, CI28518, CI28520, CI28521, CI28523, CI28524, CI28526, CI28528, CI28530)

**Polynuclear Aromatic HC - Soil**

1,4-dioxane	ND	67	44	46	4.4	47	50	6.2	30 - 130	30
% 2-Fluorobiphenyl	53	%	53	55	3.7	58	55	5.3	30 - 130	30
% Nitrobenzene-d5	69	%	72	85	16.6	66	69	4.4	30 - 130	30
% Terphenyl-d14	86	%	85	91	6.8	99	92	7.3	30 - 130	30

QA/QC Batch 575275 (ug/kg), QC Sample No: CI28282 (CI28514, CI28516, CI28517, CI28519, CI28520)

**Volatiles - Soil (Low Level)**

1,1,1,2-Tetrachloroethane	ND	5.0	117	116	0.9	112	101	10.3	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	112	110	1.8	111	103	7.5	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	112	110	1.8	115	88	26.6	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	104	102	1.9	98	88	10.8	70 - 130	30
1,1-Dichloroethane	ND	5.0	106	113	6.4	101	93	8.2	70 - 130	30
1,1-Dichloroethene	ND	5.0	105	102	2.9	95	86	9.9	70 - 130	30
1,1-Dichloropropene	ND	5.0	105	105	0.0	100	94	6.2	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	107	110	2.8	65	71	8.8	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	108	106	1.9	113	88	24.9	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	110	110	0.0	72	76	5.4	70 - 130	30

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS						% Rec		% RPD	
			%	LCSD %	LCS RPD	MS %	MSD %	MS RPD	Limits	Limits		
1,2,4-Trimethylbenzene	ND	1.0		108	111	2.7	65	50	26.1	70 - 130	30	m
1,2-Dibromo-3-chloropropane	ND	5.0		119	116	2.6	117	91	25.0	70 - 130	30	
1,2-Dibromoethane	ND	5.0		109	107	1.9	102	90	12.5	70 - 130	30	
1,2-Dichlorobenzene	ND	5.0		105	106	0.9	91	79	14.1	70 - 130	30	
1,2-Dichloroethane	ND	5.0		111	109	1.8	116	104	10.9	70 - 130	30	
1,2-Dichloropropane	ND	5.0		106	106	0.0	100	90	10.5	70 - 130	30	
1,3,5-Trimethylbenzene	ND	1.0		110	110	0.0	98	75	26.6	70 - 130	30	
1,3-Dichlorobenzene	ND	5.0		107	109	1.9	95	83	13.5	70 - 130	30	
1,3-Dichloropropane	ND	5.0		110	106	3.7	104	91	13.3	70 - 130	30	
1,4-Dichlorobenzene	ND	5.0		105	106	0.9	93	82	12.6	70 - 130	30	
2,2-Dichloropropane	ND	5.0		116	114	1.7	105	100	4.9	70 - 130	30	
2-Chlorotoluene	ND	5.0		108	108	0.0	103	86	18.0	70 - 130	30	
2-Hexanone	ND	25		99	95	4.1	64	64	0.0	70 - 130	30	m
2-Isopropyltoluene	ND	5.0		114	114	0.0	106	92	14.1	70 - 130	30	
4-Chlorotoluene	ND	5.0		106	107	0.9	100	84	17.4	70 - 130	30	
4-Methyl-2-pentanone	ND	25		102	100	2.0	81	77	5.1	70 - 130	30	
Acetone	ND	10		103	96	7.0	84	80	4.9	70 - 130	30	
Acrylonitrile	ND	5.0		102	121	17.0	68	65	4.5	70 - 130	30	m
Benzene	ND	1.0		107	107	0.0	101	91	10.4	70 - 130	30	
Bromobenzene	ND	5.0		108	109	0.9	105	84	22.2	70 - 130	30	
Bromochloromethane	ND	5.0		105	101	3.9	96	88	8.7	70 - 130	30	
Bromodichloromethane	ND	5.0		111	111	0.0	112	101	10.3	70 - 130	30	
Bromoform	ND	5.0		112	112	0.0	100	91	9.4	70 - 130	30	
Bromomethane	ND	5.0		119	114	4.3	104	99	4.9	70 - 130	30	
Carbon Disulfide	ND	5.0		121	119	1.7	103	99	4.0	70 - 130	30	
Carbon tetrachloride	ND	5.0		111	110	0.9	107	103	3.8	70 - 130	30	
Chlorobenzene	ND	5.0		106	107	0.9	97	88	9.7	70 - 130	30	
Chloroethane	ND	5.0		110	106	3.7	107	100	6.8	70 - 130	30	
Chloroform	ND	5.0		102	102	0.0	102	92	10.3	70 - 130	30	
Chloromethane	ND	5.0		105	102	2.9	93	83	11.4	70 - 130	30	
cis-1,2-Dichloroethene	ND	5.0		105	104	1.0	100	88	12.8	70 - 130	30	
cis-1,3-Dichloropropene	ND	5.0		110	110	0.0	99	91	8.4	70 - 130	30	
Dibromochloromethane	ND	3.0		116	113	2.6	108	99	8.7	70 - 130	30	
Dibromomethane	ND	5.0		102	101	1.0	101	88	13.8	70 - 130	30	
Dichlorodifluoromethane	ND	5.0		103	98	5.0	87	86	1.2	70 - 130	30	
Ethylbenzene	ND	1.0		106	109	2.8	94	84	11.2	70 - 130	30	
Hexachlorobutadiene	ND	5.0		111	115	3.5	81	84	3.6	70 - 130	30	
Isopropylbenzene	ND	1.0		110	110	0.0	106	88	18.6	70 - 130	30	
m&p-Xylene	ND	2.0		107	105	1.9	82	77	6.3	70 - 130	30	
Methyl ethyl ketone	ND	5.0		97	95	2.1	79	75	5.2	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0		104	100	3.9	98	90	8.5	70 - 130	30	
Methylene chloride	ND	5.0		88	87	1.1	84	75	11.3	70 - 130	30	
Naphthalene	ND	5.0		111	107	3.7	69	65	6.0	70 - 130	30	m
n-Butylbenzene	ND	1.0		105	106	0.9	91	83	9.2	70 - 130	30	
n-Propylbenzene	ND	1.0		107	106	0.9	100	80	22.2	70 - 130	30	
o-Xylene	ND	2.0		107	107	0.0	88	73	18.6	70 - 130	30	
p-Isopropyltoluene	ND	1.0		111	112	0.9	103	89	14.6	70 - 130	30	
sec-Butylbenzene	ND	1.0		121	122	0.8	110	94	15.7	70 - 130	30	
Styrene	ND	5.0		110	109	0.9	92	86	6.7	70 - 130	30	
tert-Butylbenzene	ND	1.0		109	109	0.0	105	90	15.4	70 - 130	30	
Tetrachloroethene	ND	5.0		100	100	0.0	95	90	5.4	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0		102	101	1.0	95	84	12.3	70 - 130	30	
Toluene	ND	1.0		104	106	1.9	96	90	6.5	70 - 130	30	

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
trans-1,2-Dichloroethene	ND	5.0		111	109	1.8	100	94	6.2	70 - 130	30
trans-1,3-Dichloropropene	ND	5.0		112	111	0.9	100	93	7.3	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0		125	122	2.4	110	87	23.4	70 - 130	30
Trichloroethene	ND	5.0		110	106	3.7	100	94	6.2	70 - 130	30
Trichlorofluoromethane	ND	5.0		110	106	3.7	105	102	2.9	70 - 130	30
Trichlorotrifluoroethane	ND	5.0		106	105	0.9	96	95	1.0	70 - 130	30
Vinyl chloride	ND	5.0		111	108	2.7	99	91	8.4	70 - 130	30
% 1,2-dichlorobenzene-d4	99	%		98	100	2.0	98	100	2.0	70 - 130	30
% Bromofluorobenzene	99	%		100	100	0.0	98	104	5.9	70 - 130	30
% Dibromofluoromethane	99	%		100	98	2.0	99	102	3.0	70 - 130	30
% Toluene-d8	100	%		99	99	0.0	100	99	1.0	70 - 130	30

QA/QC Batch 575218 (ug/L), QC Sample No: CI28378 (CI28527, CI28531)

Volatiles - Liquid

1,1,1,2-Tetrachloroethane	ND	1.0		102	107	4.8			70 - 130	30
1,1,1-Trichloroethane	ND	1.0		95	100	5.1			70 - 130	30
1,1,2,2-Tetrachloroethane	ND	0.50		103	109	5.7			70 - 130	30
1,1,2-Trichloroethane	ND	1.0		97	101	4.0			70 - 130	30
1,1-Dichloroethane	ND	1.0		96	101	5.1			70 - 130	30
1,1-Dichloroethene	ND	1.0		97	103	6.0			70 - 130	30
1,1-Dichloropropene	ND	1.0		96	103	7.0			70 - 130	30
1,2,3-Trichlorobenzene	ND	1.0		74	81	9.0			70 - 130	30
1,2,3-Trichloropropane	ND	1.0		94	96	2.1			70 - 130	30
1,2,4-Trichlorobenzene	ND	1.0		88	93	5.5			70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0		102	109	6.6			70 - 130	30
1,2-Dibromo-3-chloropropane	ND	1.0		96	95	1.0			70 - 130	30
1,2-Dibromoethane	ND	1.0		101	106	4.8			70 - 130	30
1,2-Dichlorobenzene	ND	1.0		104	108	3.8			70 - 130	30
1,2-Dichloroethane	ND	1.0		92	99	7.3			70 - 130	30
1,2-Dichloropropane	ND	1.0		102	107	4.8			70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0		107	112	4.6			70 - 130	30
1,3-Dichlorobenzene	ND	1.0		103	109	5.7			70 - 130	30
1,3-Dichloropropane	ND	1.0		102	105	2.9			70 - 130	30
1,4-Dichlorobenzene	ND	1.0		104	109	4.7			70 - 130	30
2,2-Dichloropropane	ND	1.0		98	102	4.0			70 - 130	30
2-Chlorotoluene	ND	1.0		109	115	5.4			70 - 130	30
2-Hexanone	ND	5.0		91	96	5.3			70 - 130	30
2-Isopropyltoluene	ND	1.0		111	117	5.3			70 - 130	30
4-Chlorotoluene	ND	1.0		104	111	6.5			70 - 130	30
4-Methyl-2-pentanone	ND	5.0		96	106	9.9			70 - 130	30
Acetone	ND	5.0		89	90	1.1			70 - 130	30
Acrolein	ND	5.0		97	104	7.0			70 - 130	30
Acrylonitrile	ND	5.0		97	103	6.0			70 - 130	30
Benzene	ND	0.70		97	102	5.0			70 - 130	30
Bromobenzene	ND	1.0		107	112	4.6			70 - 130	30
Bromochloromethane	ND	1.0		90	95	5.4			70 - 130	30
Bromodichloromethane	ND	0.50		101	105	3.9			70 - 130	30
Bromoform	ND	1.0		90	95	5.4			70 - 130	30
Bromomethane	ND	1.0		104	106	1.9			70 - 130	30
Carbon Disulfide	ND	1.0		111	117	5.3			70 - 130	30
Carbon tetrachloride	ND	1.0		94	121	25.1			70 - 130	30
Chlorobenzene	ND	1.0		105	109	3.7			70 - 130	30
Chloroethane	ND	1.0		94	102	8.2			70 - 130	30

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS	LCSD	LCS	MS	MSD	MS	% Rec Limits	% RPD Limits
			%	%	RPD	%	RPD			
Chloroform	ND	1.0	89	93	4.4				70 - 130	30
Chloromethane	ND	1.0	98	104	5.9				70 - 130	30
cis-1,2-Dichloroethene	ND	1.0	94	99	5.2				70 - 130	30
cis-1,3-Dichloropropene	ND	0.40	102	105	2.9				70 - 130	30
Dibromochloromethane	ND	0.50	99	103	4.0				70 - 130	30
Dibromomethane	ND	1.0	97	100	3.0				70 - 130	30
Dichlorodifluoromethane	ND	1.0	101	109	7.6				70 - 130	30
Ethylbenzene	ND	1.0	105	110	4.7				70 - 130	30
Hexachlorobutadiene	ND	0.40	116	118	1.7				70 - 130	30
Isopropylbenzene	ND	1.0	112	119	6.1				70 - 130	30
m&p-Xylene	ND	1.0	99	104	4.9				70 - 130	30
Methyl ethyl ketone	ND	5.0	98	96	2.1				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	80	85	6.1				70 - 130	30
Methylene chloride	ND	1.0	88	92	4.4				70 - 130	30
Naphthalene	ND	1.0	80	84	4.9				70 - 130	30
n-Butylbenzene	ND	1.0	108	113	4.5				70 - 130	30
n-Propylbenzene	ND	1.0	112	117	4.4				70 - 130	30
o-Xylene	ND	1.0	102	107	4.8				70 - 130	30
p-Isopropyltoluene	ND	1.0	109	116	6.2				70 - 130	30
sec-Butylbenzene	ND	1.0	117	124	5.8				70 - 130	30
Styrene	ND	1.0	103	107	3.8				70 - 130	30
tert-Butylbenzene	ND	1.0	108	114	5.4				70 - 130	30
Tetrachloroethene	ND	1.0	100	105	4.9				70 - 130	30
Tetrahydrofuran (THF)	ND	2.5	76	80	5.1				70 - 130	30
Toluene	ND	1.0	100	105	4.9				70 - 130	30
trans-1,2-Dichloroethene	ND	1.0	101	107	5.8				70 - 130	30
trans-1,3-Dichloropropene	ND	0.40	97	101	4.0				70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	109	114	4.5				70 - 130	30
Trichloroethene	ND	1.0	100	105	4.9				70 - 130	30
Trichlorofluoromethane	ND	1.0	96	101	5.1				70 - 130	30
Trichlorotrifluoroethane	ND	1.0	95	101	6.1				70 - 130	30
Vinyl chloride	ND	1.0	104	112	7.4				70 - 130	30
% 1,2-dichlorobenzene-d4	91	%	99	100	1.0				70 - 130	30
% Bromofluorobenzene	100	%	103	102	1.0				70 - 130	30
% Dibromofluoromethane	102	%	96	93	3.2				70 - 130	30
% Toluene-d8	99	%	110	110	0.0				70 - 130	30

**Comment:**

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 575222 (ug/kg), QC Sample No: CI28502 (CI28501, CI28502, CI28504, CI28505, CI28507, CI28508, CI28510, CI28511, CI28513)

**Volatiles - Soil (Low Level)**

1,1,1,2-Tetrachloroethane	ND	5.0	89	100	11.6	94	105	11.1	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	87	99	12.9	96	101	5.1	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	89	98	9.6	94	103	9.1	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	87	97	10.9	95	102	7.1	70 - 130	30
1,1-Dichloroethane	ND	5.0	89	101	12.6	99	104	4.9	70 - 130	30
1,1-Dichloroethene	ND	5.0	85	95	11.1	91	94	3.2	70 - 130	30
1,1-Dichloropropene	ND	5.0	86	97	12.0	89	99	10.6	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	85	93	9.0	63	77	20.0	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	89	98	9.6	98	107	8.8	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	90	98	8.5	63	79	22.5	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	88	98	10.8	80	97	19.2	70 - 130	30

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS				MS		MS		% Rec Limits	% RPD Limits
			%	LCSD %	LCS RPD	%	MSD %	RPD	Limits			
1,2-Dibromo-3-chloropropane	ND	5.0	86	97	12.0	87	100	13.9	70 - 130	30		
1,2-Dibromoethane	ND	5.0	86	98	13.0	94	103	9.1	70 - 130	30		
1,2-Dichlorobenzene	ND	5.0	85	94	10.1	75	91	19.3	70 - 130	30		
1,2-Dichloroethane	ND	5.0	90	101	11.5	101	107	5.8	70 - 130	30		
1,2-Dichloropropane	ND	5.0	89	101	12.6	97	104	7.0	70 - 130	30		
1,3,5-Trimethylbenzene	ND	1.0	87	97	10.9	80	96	18.2	70 - 130	30		
1,3-Dichlorobenzene	ND	5.0	86	96	11.0	74	92	21.7	70 - 130	30		
1,3-Dichloropropane	ND	5.0	89	100	11.6	97	105	7.9	70 - 130	30		
1,4-Dichlorobenzene	ND	5.0	85	92	7.9	73	88	18.6	70 - 130	30		
2,2-Dichloropropane	ND	5.0	90	100	10.5	95	101	6.1	70 - 130	30		
2-Chlorotoluene	ND	5.0	85	95	11.1	80	95	17.1	70 - 130	30		
2-Hexanone	ND	25	78	86	9.8	84	91	8.0	70 - 130	30		
2-Isopropyltoluene	ND	5.0	91	102	11.4	78	98	22.7	70 - 130	30		
4-Chlorotoluene	ND	5.0	85	97	13.2	78	93	17.5	70 - 130	30		
4-Methyl-2-pentanone	ND	25	87	95	8.8	94	102	8.2	70 - 130	30		
Acetone	ND	10	63	66	4.7	72	74	2.7	70 - 130	30	I	
Acrylonitrile	ND	5.0	94	102	8.2	99	105	5.9	70 - 130	30		
Benzene	ND	1.0	88	99	11.8	96	102	6.1	70 - 130	30		
Bromobenzene	ND	5.0	85	95	11.1	85	97	13.2	70 - 130	30		
Bromochloromethane	ND	5.0	83	93	11.4	92	98	6.3	70 - 130	30		
Bromodichloromethane	ND	5.0	86	98	13.0	95	103	8.1	70 - 130	30		
Bromoform	ND	5.0	86	95	9.9	87	98	11.9	70 - 130	30		
Bromomethane	ND	5.0	90	106	16.3	97	95	2.1	70 - 130	30		
Carbon Disulfide	ND	5.0	98	110	11.5	99	106	6.8	70 - 130	30		
Carbon tetrachloride	ND	5.0	73	82	11.6	91	83	9.2	70 - 130	30		
Chlorobenzene	ND	5.0	86	97	12.0	87	99	12.9	70 - 130	30		
Chloroethane	ND	5.0	84	96	13.3	90	90	0.0	70 - 130	30		
Chloroform	ND	5.0	86	96	11.0	94	98	4.2	70 - 130	30		
Chloromethane	ND	5.0	79	87	9.6	83	85	2.4	70 - 130	30		
cis-1,2-Dichloroethene	ND	5.0	85	97	13.2	93	99	6.3	70 - 130	30		
cis-1,3-Dichloropropene	ND	5.0	92	103	11.3	98	105	6.9	70 - 130	30		
Dibromochloromethane	ND	3.0	86	98	13.0	93	103	10.2	70 - 130	30		
Dibromomethane	ND	5.0	84	94	11.2	91	97	6.4	70 - 130	30		
Dichlorodifluoromethane	ND	5.0	86	93	7.8	83	86	3.6	70 - 130	30		
Ethylbenzene	ND	1.0	87	98	11.9	87	100	13.9	70 - 130	30		
Hexachlorobutadiene	ND	5.0	87	98	11.9	56	68	19.4	70 - 130	30	m	
Isopropylbenzene	ND	1.0	88	99	11.8	84	101	18.4	70 - 130	30		
m&p-Xylene	ND	2.0	87	99	12.9	86	101	16.0	70 - 130	30		
Methyl ethyl ketone	ND	5.0	80	86	7.2	85	91	6.8	70 - 130	30		
Methyl t-butyl ether (MTBE)	ND	1.0	88	98	10.8	98	103	5.0	70 - 130	30		
Methylene chloride	ND	5.0	68	76	11.1	78	82	5.0	70 - 130	30	I	
Naphthalene	ND	5.0	92	99	7.3	74	90	19.5	70 - 130	30		
n-Butylbenzene	ND	1.0	88	96	8.7	67	85	23.7	70 - 130	30	m	
n-Propylbenzene	ND	1.0	86	96	11.0	78	95	19.7	70 - 130	30		
o-Xylene	ND	2.0	88	99	11.8	86	101	16.0	70 - 130	30		
p-Isopropyltoluene	ND	1.0	90	100	10.5	75	94	22.5	70 - 130	30		
sec-Butylbenzene	ND	1.0	97	109	11.7	82	102	21.7	70 - 130	30		
Styrene	ND	5.0	90	102	12.5	87	102	15.9	70 - 130	30		
tert-Butylbenzene	ND	1.0	86	97	12.0	77	95	20.9	70 - 130	30		
Tetrachloroethene	ND	5.0	84	95	12.3	81	96	16.9	70 - 130	30		
Tetrahydrofuran (THF)	ND	5.0	92	101	9.3	100	107	6.8	70 - 130	30		
Toluene	ND	1.0	87	98	11.9	90	100	10.5	70 - 130	30		
trans-1,2-Dichloroethene	ND	5.0	90	101	11.5	94	101	7.2	70 - 130	30		

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk RL	LCS				MS		% Rec		% RPD
			%	LCSD %	LCS RPD	%	MSD %	MS RPD	Limits	RPD Limits	

trans-1,3-Dichloropropene	ND	5.0	92	103	11.3	96	105	9.0	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	99	108	8.7	100	110	9.5	70 - 130	30
Trichloroethene	ND	5.0	86	98	13.0	94	103	9.1	70 - 130	30
Trichlorofluoromethane	ND	5.0	88	100	12.8	93	97	4.2	70 - 130	30
Trichlorotrifluoroethane	ND	5.0	95	104	9.0	95	106	10.9	70 - 130	30
Vinyl chloride	ND	5.0	86	97	12.0	93	94	1.1	70 - 130	30
% 1,2-dichlorobenzene-d4	99	%	100	100	0.0	98	99	1.0	70 - 130	30
% Bromofluorobenzene	96	%	101	102	1.0	99	101	2.0	70 - 130	30
% Dibromofluoromethane	101	%	98	101	3.0	98	97	1.0	70 - 130	30
% Toluene-d8	102	%	100	101	1.0	100	100	0.0	70 - 130	30

QA/QC Batch 575609H (ug/kg), QC Sample No: CI29090 (CI28514 (50X) )

Volatiles - Soil (High Level)

1,1,2,2-Tetrachloroethane	ND	5.0	114	112	1.8	112	113	0.9	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	124	122	1.6	122	121	0.8	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	109	107	1.9	104	106	1.9	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	122	121	0.8	119	117	1.7	70 - 130	30
1,2,4-Trimethylbenzene	ND	5.0	113	113	0.0	111	110	0.9	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	121	115	5.1	129	126	2.4	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	115	115	0.0	113	113	0.0	70 - 130	30
1,3,5-Trimethylbenzene	ND	5.0	112	112	0.0	109	108	0.9	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	114	114	0.0	112	111	0.9	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	114	113	0.9	111	110	0.9	70 - 130	30
2-Chlorotoluene	ND	5.0	113	113	0.0	110	109	0.9	70 - 130	30
2-Isopropyltoluene	ND	5.0	112	112	0.0	111	110	0.9	70 - 130	30
4-Chlorotoluene	ND	5.0	112	113	0.9	109	108	0.9	70 - 130	30
Bromobenzene	ND	5.0	116	115	0.9	114	115	0.9	70 - 130	30
Hexachlorobutadiene	ND	5.0	124	125	0.8	122	123	0.8	70 - 130	30
Isopropylbenzene	ND	5.0	114	115	0.9	112	111	0.9	70 - 130	30
Naphthalene	ND	5.0	117	116	0.9	119	121	1.7	70 - 130	30
n-Butylbenzene	ND	5.0	119	120	0.8	116	113	2.6	70 - 130	30
n-Propylbenzene	ND	5.0	115	114	0.9	110	112	1.8	70 - 130	30
p-Isopropyltoluene	ND	5.0	119	119	0.0	117	115	1.7	70 - 130	30
sec-Butylbenzene	ND	5.0	126	126	0.0	123	122	0.8	70 - 130	30
tert-Butylbenzene	ND	5.0	110	111	0.9	109	109	0.0	70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	114	114	0.0	105	108	2.8	70 - 130	30
% 1,2-dichlorobenzene-d4	97	%	101	102	1.0	100	101	1.0	70 - 130	30
% Bromofluorobenzene	101	%	101	101	0.0	101	102	1.0	70 - 130	30
% Dibromofluoromethane	98	%	93	99	6.3	96	97	1.0	70 - 130	30
% Toluene-d8	98	%	100	102	2.0	102	101	1.0	70 - 130	30

QA/QC Batch 575406 (ug/kg), QC Sample No: CI29828 (CI28522, CI28523, CI28525, CI28526, CI28529, CI28530)

Volatiles - Soil (Low Level)

1,1,1,2-Tetrachloroethane	ND	5.0	95	106	10.9				70 - 130	30
1,1,1-Trichloroethane	ND	5.0	93	106	13.1				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	93	103	10.2				70 - 130	30
1,1,2-Trichloroethane	ND	5.0	89	97	8.6				70 - 130	30
1,1-Dichloroethane	ND	5.0	96	107	10.8				70 - 130	30
1,1-Dichloroethene	ND	5.0	91	103	12.4				70 - 130	30
1,1-Dichloropropene	ND	5.0	91	102	11.4				70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	89	97	8.6				70 - 130	30
1,2,3-Trichloropropane	ND	5.0	96	108	11.8				70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	95	102	7.1				70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	95	106	10.9				70 - 130	30

QA/QC Data

SDG I.D.: GCI28500

Parameter	Blank	Blk	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
1,2-Dibromo-3-chloropropane	ND	5.0	87	99	12.9				70 - 130	30
1,2-Dibromoethane	ND	5.0	91	101	10.4				70 - 130	30
1,2-Dichlorobenzene	ND	5.0	90	101	11.5				70 - 130	30
1,2-Dichloroethane	ND	5.0	95	105	10.0				70 - 130	30
1,2-Dichloropropane	ND	5.0	93	105	12.1				70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	93	105	12.1				70 - 130	30
1,3-Dichlorobenzene	ND	5.0	91	103	12.4				70 - 130	30
1,3-Dichloropropane	ND	5.0	95	105	10.0				70 - 130	30
1,4-Dichlorobenzene	ND	5.0	90	100	10.5				70 - 130	30
2,2-Dichloropropane	ND	5.0	95	113	17.3				70 - 130	30
2-Chlorotoluene	ND	5.0	92	103	11.3				70 - 130	30
2-Hexanone	ND	25	78	85	8.6				70 - 130	30
2-Isopropyltoluene	ND	5.0	92	104	12.2				70 - 130	30
4-Chlorotoluene	ND	5.0	92	103	11.3				70 - 130	30
4-Methyl-2-pentanone	ND	25	85	95	11.1				70 - 130	30
Acetone	ND	10	64	69	7.5				70 - 130	30
Acrylonitrile	ND	5.0	89	97	8.6				70 - 130	30
Benzene	ND	1.0	93	104	11.2				70 - 130	30
Bromobenzene	ND	5.0	91	101	10.4				70 - 130	30
Bromochloromethane	ND	5.0	87	98	11.9				70 - 130	30
Bromodichloromethane	ND	5.0	91	101	10.4				70 - 130	30
Bromoform	ND	5.0	88	100	12.8				70 - 130	30
Bromomethane	ND	5.0	114	129	12.3				70 - 130	30
Carbon Disulfide	ND	5.0	104	118	12.6				70 - 130	30
Carbon tetrachloride	ND	5.0	90	85	5.7				70 - 130	30
Chlorobenzene	ND	5.0	93	103	10.2				70 - 130	30
Chloroethane	ND	5.0	103	117	12.7				70 - 130	30
Chloroform	ND	5.0	90	101	11.5				70 - 130	30
Chloromethane	ND	5.0	97	111	13.5				70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	90	100	10.5				70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	95	106	10.9				70 - 130	30
Dibromochloromethane	ND	3.0	91	103	12.4				70 - 130	30
Dibromomethane	ND	5.0	87	96	9.8				70 - 130	30
Dichlorodifluoromethane	ND	5.0	111	127	13.4				70 - 130	30
Ethylbenzene	ND	1.0	93	104	11.2				70 - 130	30
Hexachlorobutadiene	ND	5.0	94	104	10.1				70 - 130	30
Isopropylbenzene	ND	1.0	94	107	12.9				70 - 130	30
m&p-Xylene	ND	2.0	95	105	10.0				70 - 130	30
Methyl ethyl ketone	ND	5.0	80	85	6.1				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	97	107	9.8				70 - 130	30
Methylene chloride	ND	5.0	73	80	9.2				70 - 130	30
Naphthalene	ND	5.0	93	104	11.2				70 - 130	30
n-Butylbenzene	ND	1.0	93	104	11.2				70 - 130	30
n-Propylbenzene	ND	1.0	92	103	11.3				70 - 130	30
o-Xylene	ND	2.0	94	105	11.1				70 - 130	30
p-Isopropyltoluene	ND	1.0	96	108	11.8				70 - 130	30
sec-Butylbenzene	ND	1.0	105	119	12.5				70 - 130	30
Styrene	ND	5.0	97	108	10.7				70 - 130	30
tert-Butylbenzene	ND	1.0	92	105	13.2				70 - 130	30
Tetrachloroethene	ND	5.0	86	98	13.0				70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	88	96	8.7				70 - 130	30
Toluene	ND	1.0	91	101	10.4				70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	95	108	12.8				70 - 130	30

**QA/QC Data**

SDG I.D.: GCI28500

Parameter	Blank	Blk	LCS				MS		% Rec		% RPD	
			%	LCSD	LCS	RPD	%	MSD	MS	RPD	Limits	Limits
trans-1,3-Dichloropropene	ND	5.0		96	106	9.9					70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0		95	107	11.9					70 - 130	30
Trichloroethene	ND	5.0		91	103	12.4					70 - 130	30
Trichlorofluoromethane	ND	5.0		111	125	11.9					70 - 130	30
Trichlorotrifluoroethane	ND	5.0		95	107	11.9					70 - 130	30
Vinyl chloride	ND	5.0		107	121	12.3					70 - 130	30
% 1,2-dichlorobenzene-d4	106	%		103	104	1.0					70 - 130	30
% Bromofluorobenzene	97	%		102	100	2.0					70 - 130	30
% Dibromofluoromethane	102	%		98	99	1.0					70 - 130	30
% Toluene-d8	102	%		100	99	1.0					70 - 130	30

**Comment:**

The Low Level MS/MSD are not reported for this batch.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.

s = This parameter is outside laboratory Blank Surrogate specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis Shiller, Laboratory Director

June 15, 2021

# Sample Criteria Exceedances Report

## GCI28500 - WALDENE-IPARK

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CI28500	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	690	270	500	500	ug/Kg
CI28500	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1100	270	1000	1000	ug/Kg
CI28500	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	690	270	500	500	ug/Kg
CI28500	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1100	270	1000	1000	ug/Kg
CI28500	\$8270SMRDP	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	690	270	500	500	ug/Kg
CI28500	\$8270SMRDP	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	270	1000	1000	ug/Kg
CI28503	\$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.4	2.3	3.3	3.3	ug/Kg
CI28503	\$PESTSMDPR	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	12	2.3	3.3	3.3	ug/Kg
CI28506	MN-SM	Manganese	NY / 375-6.8 Metals / Unrestricted Use Soil	1990	44	1600	1600	mg/Kg
CI28520	\$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.4	2.3	3.3	3.3	ug/Kg
CI28520	\$PESTSMDPR	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	11	2.3	3.3	3.3	ug/Kg
CI28521	\$PESTSMDPR	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.8	2.1	3.3	3.3	ug/Kg
CI28523	\$PESTSMDPR	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.7	2.1	3.3	3.3	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## NY Temperature Narration

June 15, 2021

SDG I.D.: GCI28500

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The samples in this delivery group were received at 1.6°C.  
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)









# Technical Report

prepared for:

**Phoenix Environmental Laboratories, Inc.**  
P.O. Box 370, 587 East Middle Turnpike  
Manchester CT, 06040  
**Attention: Helen Geoghegan**

Report Date: 05/20/2021

**Client Project ID: CI28500-CI28531**  
York Project (SDG) No.: 21E0606

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
(203) 325-1371

■  
132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)

Report Date: 05/20/2021  
Client Project ID: CI28500-CI28531  
York Project (SDG) No.: 21E0606

**Phoenix Environmental Laboratories, Inc.**  
P.O. Box 370, 587 East Middle Turnpike  
Manchester CT, 06040  
Attention: Helen Geoghegan

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on May 13, 2021 and listed below. The project was identified as your project: **CI28500-CI28531**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
21E0606-01	CI28500	Soil	05/10/2021	05/13/2021
21E0606-02	CI28502	Soil	05/10/2021	05/13/2021
21E0606-03	CI28503	Soil	05/10/2021	05/13/2021
21E0606-04	CI28505	Soil	05/10/2021	05/13/2021
21E0606-05	CI28506	Soil	05/10/2021	05/13/2021
21E0606-06	CI28508	Soil	05/10/2021	05/13/2021
21E0606-07	CI28509	Soil	05/10/2021	05/13/2021
21E0606-08	CI28511	Soil	05/10/2021	05/13/2021
21E0606-09	CI28512	Soil	05/10/2021	05/13/2021
21E0606-10	CI28514	Soil	05/10/2021	05/13/2021
21E0606-11	CI28515	Soil	05/10/2021	05/13/2021
21E0606-12	CI28517	Soil	05/10/2021	05/13/2021
21E0606-13	CI28518	Soil	05/10/2021	05/13/2021
21E0606-14	CI28520	Soil	05/10/2021	05/13/2021
21E0606-15	CI28521	Soil	05/10/2021	05/13/2021
21E0606-16	CI28523	Soil	05/10/2021	05/13/2021
21E0606-17	CI28524	Soil	05/10/2021	05/13/2021
21E0606-18	CI28526	Soil	05/10/2021	05/13/2021
21E0606-19	CI28527	Water	05/10/2021	05/13/2021
21E0606-20	CI28528	Soil	05/10/2021	05/13/2021
21E0606-21	CI28530	Soil	05/10/2021	05/13/2021
21E0606-22	CI28531	Water	05/11/2021	05/13/2021

## **General Notes for York Project (SDG) No.: 21E0606**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:** *Cassie L. Mosher*

**Date:** 05/20/2021

Cassie L. Mosher  
Laboratory Manager





## Sample Information

Client Sample ID: CI28500

York Sample ID: 21E0606-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
21E0606	CI28500-CI28531	Soil	May 10, 2021 9:30 am	05/13/2021

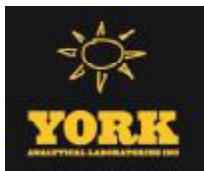
### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
1763-23-1	<b>* Perfluorooctanesulfonic acid (PFOS)</b>	<b>1.70</b>		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL
375-22-4	<b>* Perfluoro-n-butanoic acid (PFBA)</b>	<b>2.13</b>		ug/kg dry	0.320	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:30	WL



## Sample Information

Client Sample ID: CI28500

York Sample ID: 21E0606-01

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 9:30 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
<b>Surrogate Recoveries</b>										
Surrogate: M3PFBs										
Surrogate: M5PFHxA										
Surrogate: M4PFHpA										
Surrogate: M3PFHxS										
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)										
Surrogate: M6PFDA										
Surrogate: M7PFUdA										
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDaA)										
Surrogate: M2PFTeDA										
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)										
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)										
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)										
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)										
Surrogate: d3-N-MeFOSAA										
Surrogate: d5-N-EtFOSAA										
Surrogate: M2-6:2 FTS										
Surrogate: M2-8:2 FTS										
Surrogate: M9PFNA										

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	72.0		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

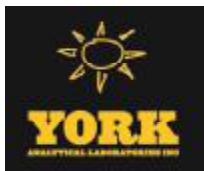
Client Sample ID: CI28502

York Sample ID: 21E0606-02

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 9:30 am      Date Received 05/13/2021



## Sample Information

**Client Sample ID:** CI28502

**York Sample ID:** 21E0606-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 9:30 am	05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

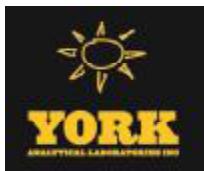
CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.265	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 16:52	WL

### Surrogate Recoveries

Surrogate: M3PFBS Result Acceptance Range

88.5 % 25-150

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06/15/2021	Phoenix Environmental Laboratories, Inc.		Page 266 of 3295	Page 6 of 61



## Sample Information

Client Sample ID: CI28502

York Sample ID: 21E0606-02

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 9:30 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M5PFHxA</i>	86.1 %			25-150					
	<i>Surrogate: M4PFHpA</i>	82.3 %			25-150					
	<i>Surrogate: M3PFHxS</i>	82.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	88.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	72.0 %			25-150					
	<i>Surrogate: M7PFUdA</i>	59.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	74.3 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	56.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	108 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	67.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	98.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	49.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	52.0 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	75.2 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	110 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	124 %			25-150					
	<i>Surrogate: M9PFNA</i>	79.7 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	88.1		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28503

York Sample ID: 21E0606-03

York Project (SDG) No.  
21E0606

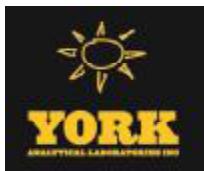
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 10:20 am      Date Received 05/13/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI28503

**York Sample ID:** 21E0606-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 10:20 am	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
1763-23-1	* <b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>4.97</b>		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
307-55-1	* <b>Perfluorododecanoic acid (PFDoA)</b>	<b>0.321</b>		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
27619-97-2	*	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
39108-34-4	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL
375-22-4	* <b>Perfluoro-n-butanoic acid (PFBA)</b>	<b>1.27</b>		ug/kg dry	0.300	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:14	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	83.6 %	25-150
Surrogate: M5PFHxA	77.0 %	25-150

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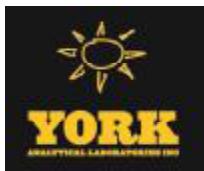
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FAX (203) 357-0166

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## Sample Information

Client Sample ID: CI28503

York Sample ID: 21E0606-03

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 10:20 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	46.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	75.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	79.1 %			25-150					
	<i>Surrogate: M6PFDA</i>	71.6 %			25-150					
	<i>Surrogate: M7PFUdA</i>	61.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	46.0 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	37.5 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	88.5 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	67.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	81.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	32.1 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	53.7 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	58.0 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	272 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	277 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	64.5 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	81.0		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28505

York Sample ID: 21E0606-04

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 10:20 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI28505

**York Sample ID:** 21E0606-04

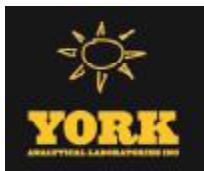
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 10:20 am	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.285	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:37	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
Surrogate: M3PFBS	85.7 %	25-150
Surrogate: M5PFHxA	82.6 %	25-150



## Sample Information

Client Sample ID: CI28505

York Sample ID: 21E0606-04

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 10:20 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	83.8 %			25-150					
	<i>Surrogate: M3PFHxS</i>	80.2 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	87.5 %			25-150					
	<i>Surrogate: M6PFDA</i>	80.0 %			25-150					
	<i>Surrogate: M7PFUdA</i>	73.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	73.5 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	59.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	99.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	74.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	93.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	59.7 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	65.9 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	82.6 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	109 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	120 %			25-150					
	<i>Surrogate: M9PFNA</i>	94.0 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	82.9		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28506

York Sample ID: 21E0606-05

York Project (SDG) No.  
21E0606

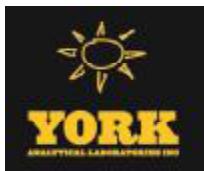
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 11:00 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI28506

**York Sample ID:** 21E0606-05

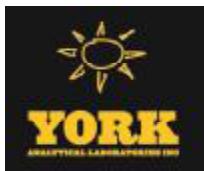
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 11:00 am	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
1763-23-1	* <b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>1.17</b>		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL
375-22-4	* <b>Perfluoro-n-butanoic acid (PFBA)</b>	<b>0.670</b>		ug/kg dry	0.273	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 17:59	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	77.5 %	25-150
Surrogate: M5PFHxA	81.4 %	25-150



## Sample Information

Client Sample ID: CI28506

York Sample ID: 21E0606-05

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix  
Soil

Collection Date/Time  
May 10, 2021 11:00 am

Date Received  
05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	53.8 %			25-150					
	<i>Surrogate: M3PFHxS</i>	73.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	82.6 %			25-150					
	<i>Surrogate: M6PFDA</i>	77.2 %			25-150					
	<i>Surrogate: M7PFUdA</i>	63.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	56.3 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	41.9 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	92.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	68.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	84.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	47.8 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	64.9 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	70.1 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	262 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	293 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	76.3 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.7		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28508

York Sample ID: 21E0606-06

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix  
Soil

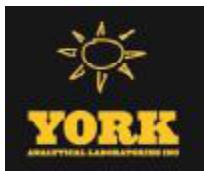
Collection Date/Time  
May 10, 2021 11:00 am

Date Received  
05/13/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI28508

**York Sample ID:** 21E0606-06

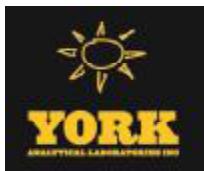
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 11:00 am	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.303	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:21	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
Surrogate: M3PFBS	83.6 %	25-150
Surrogate: M5PFHxA	81.9 %	25-150



## Sample Information

Client Sample ID: CI28508

York Sample ID: 21E0606-06

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 11:00 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	79.7 %			25-150					
	<i>Surrogate: M3PFHxS</i>	75.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	85.0 %			25-150					
	<i>Surrogate: M6PFDA</i>	82.5 %			25-150					
	<i>Surrogate: M7PFUdA</i>	74.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	75.3 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	57.7 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	96.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	77.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	90.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	63.3 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	58.5 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	86.6 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	105 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	134 %			25-150					
	<i>Surrogate: M9PFNA</i>	81.6 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	77.8		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28509

York Sample ID: 21E0606-07

York Project (SDG) No.  
21E0606

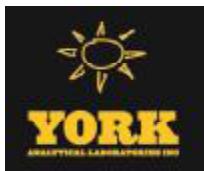
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 11:30 am      Date Received 05/13/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI28509

**York Sample ID:** 21E0606-07

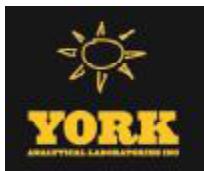
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 11:30 am	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 18:44	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
Surrogate: M3PFBS	76.2 %	25-150
Surrogate: M5PFHxA	77.8 %	25-150



## Sample Information

Client Sample ID: CI28509

York Sample ID: 21E0606-07

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 11:30 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	72.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	72.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	85.3 %			25-150					
	<i>Surrogate: M6PFDA</i>	71.0 %			25-150					
	<i>Surrogate: M7PFUdA</i>	56.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	59.4 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	44.3 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	91.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	58.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	84.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	47.3 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	61.9 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	62.1 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	205 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	205 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	75.7 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.8		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28511

York Sample ID: 21E0606-08

York Project (SDG) No.  
21E0606

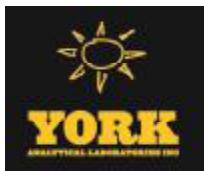
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 11:30 am      Date Received 05/13/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI28511

**York Sample ID:** 21E0606-08

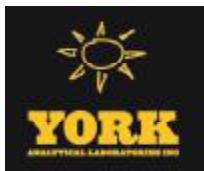
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 11:30 am	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.254	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:13	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
Surrogate: M3PFBS	82.8 %	25-150
Surrogate: M5PFHxA	80.4 %	25-150



## Sample Information

Client Sample ID: CI28511

York Sample ID: 21E0606-08

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 11:30 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	81.6 %			25-150					
	<i>Surrogate: M3PFHxS</i>	72.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.5 %			25-150					
	<i>Surrogate: M6PFDA</i>	70.6 %			25-150					
	<i>Surrogate: M7PFUdA</i>	75.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	73.8 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	65.7 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	94.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	74.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	90.2 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	54.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	55.8 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	75.3 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	92.3 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	101 %			25-150					
	<i>Surrogate: M9PFNA</i>	81.7 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	94.3		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28512

York Sample ID: 21E0606-09

York Project (SDG) No.  
21E0606

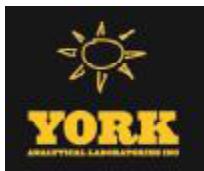
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 12:05 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI28512

**York Sample ID:** 21E0606-09

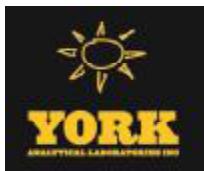
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 12:05 pm	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:35	WL

### Surrogate Recoveries

	Result	Acceptance Range
Surrogate: M3PFBS	77.0 %	25-150
Surrogate: M5PFHxA	81.0 %	25-150



## Sample Information

Client Sample ID: CI28512

York Sample ID: 21E0606-09

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 12:05 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	74.9 %			25-150					
	<i>Surrogate: M3PFHxS</i>	65.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	77.2 %			25-150					
	<i>Surrogate: M6PFDA</i>	62.3 %			25-150					
	<i>Surrogate: M7PFUdA</i>	63.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	60.1 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	42.9 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	101 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	63.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	92.3 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	53.7 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	42.1 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	65.7 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	58.9 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	66.2 %			25-150					
	<i>Surrogate: M9PFNA</i>	76.4 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	91.1		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28514

York Sample ID: 21E0606-10

York Project (SDG) No.  
21E0606

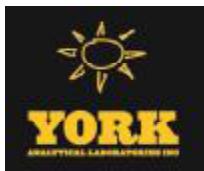
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 12:05 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI28514

**York Sample ID:** 21E0606-10

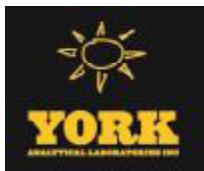
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 12:05 pm	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 20:57	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	77.3 %	25-150
M5PFHxA	84.1 %	25-150



## Sample Information

Client Sample ID: CI28514

York Sample ID: 21E0606-10

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 12:05 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	82.2 %			25-150					
	<i>Surrogate: M3PFHxS</i>	73.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	88.0 %			25-150					
	<i>Surrogate: M6PFDA</i>	79.2 %			25-150					
	<i>Surrogate: M7PFUdA</i>	75.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	65.6 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	48.0 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	112 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	74.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	104 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	53.3 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	52.2 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	81.6 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	70.0 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	68.7 %			25-150					
	<i>Surrogate: M9PFNA</i>	94.6 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	79.9		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28515

York Sample ID: 21E0606-11

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 12:30 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI28515

**York Sample ID:** 21E0606-11

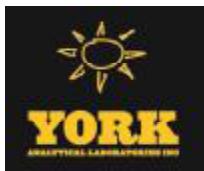
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 12:30 pm	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:20	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
Surrogate: M3PFBS	78.5 %	25-150
Surrogate: M5PFHxA	82.7 %	25-150



## Sample Information

Client Sample ID: CI28515

York Sample ID: 21E0606-11

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 12:30 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	78.6 %			25-150					
	<i>Surrogate: M3PFHxS</i>	70.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.5 %			25-150					
	<i>Surrogate: M6PFDA</i>	65.0 %			25-150					
	<i>Surrogate: M7PFUdA</i>	60.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	64.4 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	47.7 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	96.9 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	65.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	88.5 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	39.0 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	46.4 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	68.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	75.8 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	95.1 %			25-150					
	<i>Surrogate: M9PFNA</i>	74.3 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	91.9		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28517

York Sample ID: 21E0606-12

York Project (SDG) No.  
21E0606

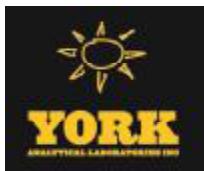
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 12:30 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI28517

**York Sample ID:** 21E0606-12

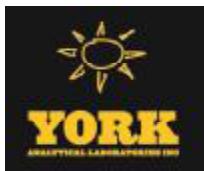
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 12:30 pm	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.301	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 21:42	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
Surrogate: M3PFBS	92.5 %	25-150
Surrogate: M5PFHxA	93.9 %	25-150



## Sample Information

Client Sample ID: CI28517

York Sample ID: 21E0606-12

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 12:30 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	90.2 %			25-150					
	<i>Surrogate: M3PFHxS</i>	76.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	87.5 %			25-150					
	<i>Surrogate: M6PFDA</i>	81.3 %			25-150					
	<i>Surrogate: M7PFUdA</i>	82.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	79.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	66.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	112 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	79.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	107 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	56.2 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	50.9 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	89.1 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	65.7 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	69.3 %			25-150					
	<i>Surrogate: M9PFNA</i>	95.0 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	80.2		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28518

York Sample ID: 21E0606-13

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 1:50 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI28518

**York Sample ID:** 21E0606-13

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 1:50 pm	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.252	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:04	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	77.7 %	25-150
M5PFHxA	80.3 %	25-150



## Sample Information

Client Sample ID: CI28518

York Sample ID: 21E0606-13

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 1:50 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	78.3 %			25-150					
	<i>Surrogate: M3PFHxS</i>	68.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.3 %			25-150					
	<i>Surrogate: M6PFDA</i>	62.8 %			25-150					
	<i>Surrogate: M7PFUdA</i>	67.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	66.1 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	55.1 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	101 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	62.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	96.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	53.3 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	41.1 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	64.7 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	61.6 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	60.4 %			25-150					
	<i>Surrogate: M9PFNA</i>	80.2 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	91.6		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28520

York Sample ID: 21E0606-14

York Project (SDG) No.  
21E0606

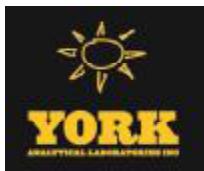
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 1:50 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI28520

**York Sample ID:** 21E0606-14

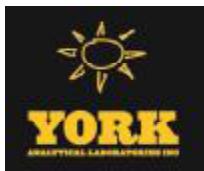
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 1:50 pm	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.269	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:27	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	82.2 %	25-150
M5PFHxA	83.5 %	25-150



## Sample Information

Client Sample ID: CI28520

York Sample ID: 21E0606-14

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 1:50 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	80.2 %			25-150					
	<i>Surrogate: M3PFHxS</i>	75.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	86.2 %			25-150					
	<i>Surrogate: M6PFDA</i>	77.9 %			25-150					
	<i>Surrogate: M7PFUdA</i>	74.2 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	78.0 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	60.7 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	105 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	73.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	98.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	55.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	57.2 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	81.9 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	97.1 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	119 %			25-150					
	<i>Surrogate: M9PFNA</i>	90.8 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	89.3		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28521

York Sample ID: 21E0606-15

York Project (SDG) No.  
21E0606

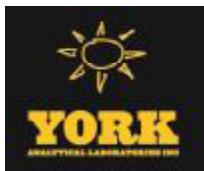
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 3:05 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI28521

**York Sample ID:** 21E0606-15

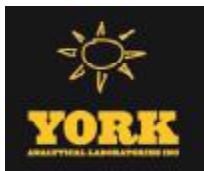
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 3:05 pm	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 22:49	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	81.6 %	25-150
M5PFHxA	81.5 %	25-150



## Sample Information

Client Sample ID: CI28521

York Sample ID: 21E0606-15

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 3:05 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	77.9 %			25-150					
	<i>Surrogate: M3PFHxS</i>	77.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	85.4 %			25-150					
	<i>Surrogate: M6PFDA</i>	73.3 %			25-150					
	<i>Surrogate: M7PFUdA</i>	67.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	71.5 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	60.9 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	103 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	65.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	95.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	48.3 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	55.6 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	73.9 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	114 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	142 %			25-150					
	<i>Surrogate: M9PFNA</i>	83.1 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	91.7		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28523

York Sample ID: 21E0606-16

York Project (SDG) No.  
21E0606

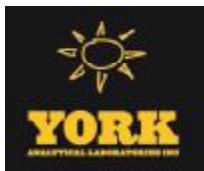
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 3:05 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI28523

**York Sample ID:** 21E0606-16

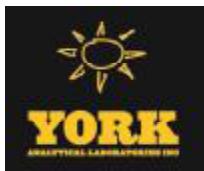
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 3:05 pm	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:11	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	73.1 %	25-150
M5PFHxA	85.0 %	25-150



## Sample Information

Client Sample ID: CI28523

York Sample ID: 21E0606-16

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 3:05 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	76.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	64.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	75.7 %			25-150					
	<i>Surrogate: M6PFDA</i>	68.2 %			25-150					
	<i>Surrogate: M7PFUdA</i>	75.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	77.5 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	72.1 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	117 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	71.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	102 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	56.2 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	40.7 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	79.3 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	51.4 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	51.0 %			25-150					
	<i>Surrogate: M9PFNA</i>	86.8 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	89.8		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28524

York Sample ID: 21E0606-17

York Project (SDG) No.  
21E0606

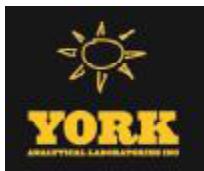
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 4:00 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI28524

**York Sample ID:** 21E0606-17

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 4:00 pm	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.264	1	EPA 537m Certifications:	05/14/2021 15:13	05/19/2021 23:56	WL

### Surrogate Recoveries

	Result	Acceptance Range
Surrogate: M3PFBS	80.7 %	25-150
Surrogate: M5PFHxA	88.7 %	25-150



## Sample Information

Client Sample ID: CI28524

York Sample ID: 21E0606-17

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 4:00 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	78.3 %			25-150					
	<i>Surrogate: M3PFHxS</i>	68.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	86.4 %			25-150					
	<i>Surrogate: M6PFDA</i>	71.0 %			25-150					
	<i>Surrogate: M7PFUDA</i>	83.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	74.5 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	62.0 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	114 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	71.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	104 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	58.1 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	53.8 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	78.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	64.2 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	63.3 %			25-150					
	<i>Surrogate: M9PFNA</i>	95.4 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.5		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28526

York Sample ID: 21E0606-18

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 4:00 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI28526

**York Sample ID:** 21E0606-18

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Soil	May 10, 2021 4:00 pm	05/13/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:18	WL

### Surrogate Recoveries

	Result	Acceptance Range
Surrogate: M3PFBS	82.8 %	25-150
Surrogate: M5PFHxA	90.8 %	25-150



## Sample Information

Client Sample ID: CI28526

York Sample ID: 21E0606-18

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 4:00 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	83.9 %			25-150					
	<i>Surrogate: M3PFHxS</i>	69.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	78.6 %			25-150					
	<i>Surrogate: M6PFDA</i>	79.9 %			25-150					
	<i>Surrogate: M7PFUdA</i>	85.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	87.0 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	67.0 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	114 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	76.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	104 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	60.6 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	53.6 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	86.1 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	85.7 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	97.2 %			25-150					
	<i>Surrogate: M9PFNA</i>	95.2 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	89.8		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28527

York Sample ID: 21E0606-19

York Project (SDG) No.  
21E0606

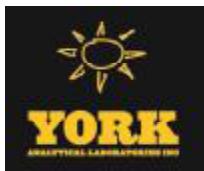
Client Project ID  
CI28500-CI28531

Matrix Water      Collection Date/Time May 10, 2021 2:00 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI28527

**York Sample ID:** 21E0606-19

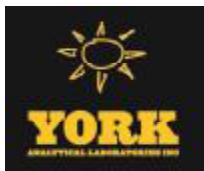
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0606	CI28500-CI28531	Water	May 10, 2021 2:00 pm	05/13/2021

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.17	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	1.67	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 12:51	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	108 %	25-150
M5PFHxA	96.1 %	25-150



## Sample Information

Client Sample ID: CI28527

York Sample ID: 21E0606-19

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Water      Collection Date/Time May 10, 2021 2:00 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	94.2 %			25-150					
	<i>Surrogate: M3PFHxS</i>	91.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	92.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	86.6 %			25-150					
	<i>Surrogate: M7PFUdA</i>	78.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFdOa)</i>	76.0 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	55.5 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	128 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	99.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	99.2 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	14.9 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	45.2 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	45.8 %			25-150					
	<i>Surrogate: M2-6.2 FTS</i>	78.3 %			25-150					
	<i>Surrogate: M2-8.2 FTS</i>	128 %			25-150					
	<i>Surrogate: M9PFNA</i>	95.1 %			25-150					

## Sample Information

Client Sample ID: CI28528

York Sample ID: 21E0606-20

York Project (SDG) No.  
21E0606

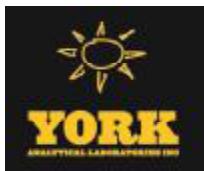
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 3:10 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL



## Sample Information

**Client Sample ID:** CI28528

**York Sample ID:** 21E0606-20

**York Project (SDG) No.**  
21E0606

**Client Project ID**  
CI28500-CI28531

**Matrix**  
Soil

**Collection Date/Time**  
May 10, 2021 3:10 pm

**Date Received**  
05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

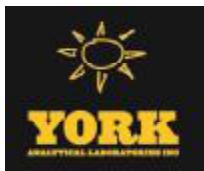
#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.263	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 00:40	WL

#### **Surrogate Recoveries**

	<b>Result</b>	<b>Acceptance Range</b>
Surrogate: M3PFBS	78.3 %	25-150
Surrogate: M5PFHxA	80.7 %	25-150
Surrogate: M4PFHpA	75.7 %	25-150
Surrogate: M3PFHxS	69.4 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	78.9 %	25-150
Surrogate: M6PFDA	73.7 %	25-150
Surrogate: M7PFUDA	72.4 %	25-150



## Sample Information

Client Sample ID: CI28528

York Sample ID: 21E0606-20

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 3:10 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	68.9 %			25-150					
	Surrogate: M2PFTeDA	59.1 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	96.1 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	69.9 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	89.8 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	45.8 %			10-150					
	Surrogate: d3-N-MeFOSAA	51.9 %			25-150					
	Surrogate: d5-N-EtFOSAA	73.5 %			25-150					
	Surrogate: M2-6:2 FTS	76.2 %			25-150					
	Surrogate: M2-8:2 FTS	88.9 %			25-150					
	Surrogate: M9PFNA	84.8 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	91.4		%	0.100	1	SM 2540G Certifications: CTDOH	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28530

York Sample ID: 21E0606-21

York Project (SDG) No.  
21E0606

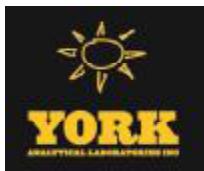
Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 3:10 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL



## Sample Information

Client Sample ID: CI28530

York Sample ID: 21E0606-21

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix  
Soil

Collection Date/Time  
May 10, 2021 3:10 pm

Date Received  
05/13/2021

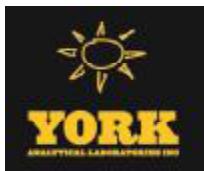
### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/14/2021 15:13	05/20/2021 01:03	WL
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
Surrogate: M3PFBS		90.6 %	25-150							
Surrogate: M5PFHxA		91.5 %	25-150							
Surrogate: M4PFHpA		87.9 %	25-150							
Surrogate: M3PFHxS		72.7 %	25-150							
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)		88.0 %	25-150							
Surrogate: M6PFDA		73.7 %	25-150							



## Sample Information

Client Sample ID: CI28530

York Sample ID: 21E0606-21

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Soil      Collection Date/Time May 10, 2021 3:10 pm      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M7PFUdA	84.6 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	84.2 %			25-150					
	Surrogate: M2PFTeDA	69.7 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	111 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	78.5 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	105 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	54.0 %			10-150					
	Surrogate: d3-N-MeFOSAA	51.2 %			25-150					
	Surrogate: d5-N-EtFOSAA	82.6 %			25-150					
	Surrogate: M2-6:2 FTS	73.8 %			25-150					
	Surrogate: M2-8:2 FTS	78.2 %			25-150					
	Surrogate: M9PFNA	90.2 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.5		%	0.100	1	SM 2540G	05/20/2021 15:06	05/20/2021 15:49	MD

## Sample Information

Client Sample ID: CI28531

York Sample ID: 21E0606-22

York Project (SDG) No.  
21E0606

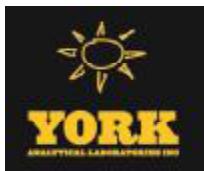
Client Project ID  
CI28500-CI28531

Matrix Water      Collection Date/Time May 11, 2021 8:08 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL



## Sample Information

**Client Sample ID:** CI28531

**York Sample ID:** 21E0606-22

**York Project (SDG) No.**  
21E0606

**Client Project ID**  
CI28500-CI28531

**Matrix**  
Water

**Collection Date/Time**  
May 11, 2021 8:08 am

**Date Received**  
05/13/2021

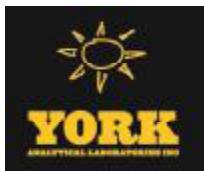
### PFAS by EPA 537 m

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
2355-31-9	* N-MeFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
2991-50-6	* N-EtFOSAA	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	4.81	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	1.92	1	EPA 537m Certifications:	05/18/2021 11:10	05/20/2021 05:08	WL
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
<i>Surrogate: M3PFBS</i>		97.6 %	25-150							
<i>Surrogate: M5PFHxA</i>		87.4 %	25-150							
<i>Surrogate: M4PFHpA</i>		76.3 %	25-150							
<i>Surrogate: M3PFHxS</i>		71.2 %	25-150							



### Sample Information

Client Sample ID: CI28531

York Sample ID: 21E0606-22

York Project (SDG) No.  
21E0606

Client Project ID  
CI28500-CI28531

Matrix Water      Collection Date/Time May 11, 2021 8:08 am      Date Received 05/13/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE Ext-PFAS-EPA 537.1M

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	78.1 %			25-150					
	Surrogate: M6PFDA	74.9 %			25-150					
	Surrogate: M7PFUdA	70.3 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	82.3 %			25-150					
	Surrogate: M2PFTeDA	76.0 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	135 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	78.4 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	98.5 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	31.5 %			10-150					
	Surrogate: d3-N-MeFOSAA	47.1 %			25-150					
	Surrogate: d5-N-EtFOSAA	58.6 %			25-150					
	Surrogate: M2-6:2 FTS	51.4 %			25-150					
	Surrogate: M2-8:2 FTS	71.7 %			25-150					
	Surrogate: M9PFNA	78.1 %			25-150					



## Analytical Batch Summary

**Batch ID:** BE10749

**Preparation Method:** SPE PFAS Extraction-Soil-EPA 537m    **Prepared By:** WL

YORK Sample ID	Client Sample ID	Preparation Date
21E0606-01	CI28500	05/14/21
21E0606-02	CI28502	05/14/21
21E0606-03	CI28503	05/14/21
21E0606-04	CI28505	05/14/21
21E0606-05	CI28506	05/14/21
21E0606-06	CI28508	05/14/21
21E0606-07	CI28509	05/14/21
21E0606-08	CI28511	05/14/21
21E0606-09	CI28512	05/14/21
21E0606-10	CI28514	05/14/21
21E0606-11	CI28515	05/14/21
21E0606-12	CI28517	05/14/21
21E0606-13	CI28518	05/14/21
21E0606-14	CI28520	05/14/21
21E0606-15	CI28521	05/14/21
21E0606-16	CI28523	05/14/21
21E0606-17	CI28524	05/14/21
21E0606-18	CI28526	05/14/21
21E0606-20	CI28528	05/14/21
21E0606-21	CI28530	05/14/21
BE10749-BLK1	Blank	05/14/21
BE10749-BS1	LCS	05/14/21
BE10749-MS1	Matrix Spike	05/14/21
BE10749-MSD1	Matrix Spike Dup	05/14/21

**Batch ID:** BE10893

**Preparation Method:** SPE Ext-PFAS-EPA 537.1M

**Prepared By:** SG

YORK Sample ID	Client Sample ID	Preparation Date
21E0606-19	CI28527	05/18/21
21E0606-22	CI28531	05/18/21
BE10893-BLK1	Blank	05/18/21
BE10893-BS1	LCS	05/18/21
BE10893-BSD1	LCS Dup	05/18/21

**Batch ID:** BE11074

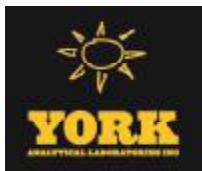
**Preparation Method:** % Solids Prep

**Prepared By:** MD

YORK Sample ID	Client Sample ID	Preparation Date
21E0606-01	CI28500	05/20/21
21E0606-02	CI28502	05/20/21
21E0606-03	CI28503	05/20/21
21E0606-04	CI28505	05/20/21
21E0606-05	CI28506	05/20/21
21E0606-06	CI28508	05/20/21
21E0606-07	CI28509	05/20/21
21E0606-08	CI28511	05/20/21



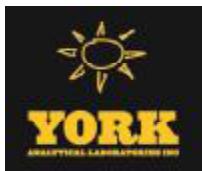
21E0606-09	CI28512	05/20/21
21E0606-10	CI28514	05/20/21
21E0606-11	CI28515	05/20/21
21E0606-12	CI28517	05/20/21
21E0606-13	CI28518	05/20/21
21E0606-14	CI28520	05/20/21
21E0606-15	CI28521	05/20/21
21E0606-16	CI28523	05/20/21
21E0606-17	CI28524	05/20/21
21E0606-18	CI28526	05/20/21
21E0606-20	CI28528	05/20/21
21E0606-21	CI28530	05/20/21
BE11074-DUP1	Duplicate	05/20/21



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

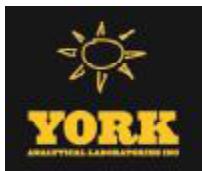
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC %REC	%REC Limits	Flag	RPD RPD	Limit	Flag
<b>Batch BE10749 - SPE PFAS Extraction-Soil-EPA 537m</b>											
Prepared: 05/14/2021 Analyzed: 05/19/2021											
Blank (BE10749-BLK1)											
Perfluorobutanesulfonic acid (PFBS)	ND	0.234	ug/kg wet								
Perfluorohexanoic acid (PFHxA)	ND	0.234	"								
Perfluoroheptanoic acid (PFHpA)	ND	0.234	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	0.234	"								
Perfluorooctanoic acid (PFOA)	ND	0.234	"								
Perfluorooctanesulfonic acid (PFOS)	ND	0.234	"								
Perfluorononanoic acid (PFNA)	ND	0.234	"								
Perfluorodecanoic acid (PFDA)	ND	0.234	"								
Perfluoroundecanoic acid (PFUnA)	ND	0.234	"								
Perfluorododecanoic acid (PFDoA)	ND	0.234	"								
Perfluorotridecanoic acid (PFTrDA)	ND	0.234	"								
Perfluorotetradecanoic acid (PFTA)	ND	0.234	"								
N-MeFOSAA	ND	0.234	"								
N-EtFOSAA	ND	0.234	"								
Perfluoropentanoic acid (PFPeA)	ND	0.234	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.234	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.234	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.234	"								
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	ND	0.234	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	0.234	"								
Perfluoro-n-butanoic acid (PFBA)	ND	0.234	"								
Surrogate: M3PFBS	3.59	"	4.35		82.4	25-150					
Surrogate: M5PFHxA	3.83	"	4.68		81.9	25-150					
Surrogate: M4PFHpA	3.73	"	4.68		79.6	25-150					
Surrogate: M3PFHxS	3.46	"	4.43		78.2	25-150					
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.73	"	4.68		79.6	25-150					
Surrogate: M6PFDA	3.56	"	4.68		76.0	25-150					
Surrogate: M7PFUdA	2.84	"	4.68		60.5	25-150					
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.11	"	4.68		66.5	25-150					
Surrogate: M2PTeDA	2.88	"	4.68		61.6	10-150					
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.67	"	4.68		99.6	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.36	"	4.48		75.0	25-150					
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	4.30	"	4.68		91.9	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.78	"	4.68		59.3	10-150					
Surrogate: d3-N-MeFOSAA	3.00	"	4.68		64.1	25-150					
Surrogate: d5-N-EtFOSAA	4.03	"	4.68		86.0	25-150					
Surrogate: M2-6:2 FTS	6.12	"	4.45		138	25-150					
Surrogate: M2-8:2 FTS	6.47	"	4.49		144	25-150					
Surrogate: M9PFNA	3.56	"	4.68		76.0	25-150					



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10749 - SPE PFAS Extraction-Soil-EPA 537m</b>											
Prepared: 05/14/2021 Analyzed: 05/19/2021											
<b>LCS (BE10749-BS1)</b>											
Perfluorobutanesulfonic acid (PFBS)	4.43	0.232	ug/kg wet	4.11	108	50-130					
Perfluorohexanoic acid (PFHxA)	5.27	0.232	"	4.65	113	50-130					
Perfluoroheptanoic acid (PFHpA)	4.83	0.232	"	4.65	104	50-130					
Perfluorohexanesulfonic acid (PFHxS)	4.85	0.232	"	4.24	115	50-130					
Perfluorooctanoic acid (PFOA)	4.75	0.232	"	4.65	102	50-130					
Perfluorooctanesulfonic acid (PFOS)	5.75	0.232	"	4.30	134	50-130					High Bias
Perfluorononanoic acid (PFNA)	4.65	0.232	"	4.65	100	50-130					
Perfluorodecanoic acid (PFDA)	5.00	0.232	"	4.65	108	50-130					
Perfluoroundecanoic acid (PFUnA)	4.94	0.232	"	4.65	106	50-130					
Perfluorododecanoic acid (PFDoA)	5.23	0.232	"	4.65	113	50-130					
Perfluorotridecanoic acid (PFTrDA)	4.94	0.232	"	4.65	106	50-130					
Perfluorotetradecanoic acid (PFTA)	5.14	0.232	"	4.65	111	50-130					
N-MeFOSAA	5.79	0.232	"	4.65	125	50-130					
N-EtFOSAA	4.47	0.232	"	4.65	96.2	50-130					
Perfluoropentanoic acid (PFPeA)	5.17	0.232	"	4.65	111	50-130					
Perfluoro-1-octanesulfonamide (FOSA)	4.67	0.232	"	4.65	101	50-130					
Perfluoro-1-heptanesulfonic acid (PFHpS)	5.20	0.232	"	4.41	118	50-130					
Perfluoro-1-decanesulfonic acid (PFDS)	4.22	0.232	"	4.48	94.2	50-130					
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	4.77	0.232	"	4.41	108	50-130					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.05	0.232	"	4.46	113	50-130					
Perfluoro-n-butanoic acid (PFBA)	5.13	0.232	"	4.65	110	50-130					
Surrogate: M3PFBS	3.60		"	4.32	83.3	25-150					
Surrogate: M5PFHxA	3.64		"	4.65	78.4	25-150					
Surrogate: M4PFHpA	3.63		"	4.65	78.2	25-150					
Surrogate: M3PFHxS	3.28		"	4.39	74.7	25-150					
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.74		"	4.65	80.4	25-150					
Surrogate: M6PFDA	3.48		"	4.65	74.9	25-150					
Surrogate: M7PFUdA	2.94		"	4.65	63.3	25-150					
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.26		"	4.65	70.2	25-150					
Surrogate: M2PTeDA	2.56		"	4.65	55.1	10-150					
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.18		"	4.65	90.1	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOSA)	3.17		"	4.45	71.4	25-150					
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.97		"	4.65	85.5	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.53		"	4.65	54.5	10-150					
Surrogate: d3-N-MeFOSAA	3.02		"	4.65	65.1	25-150					
Surrogate: d5-N-EtFOSAA	3.98		"	4.65	85.6	25-150					
Surrogate: M2-6:2 FTS	5.79		"	4.41	131	25-150					
Surrogate: M2-8:2 FTS	5.57		"	4.45	125	25-150					
Surrogate: M9PFNA	3.61		"	4.65	77.7	25-150					



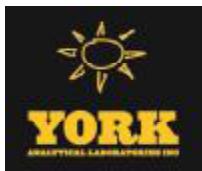
## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BE10749 - SPE PFAS Extraction-Soil-EPA 537m

Matrix Spike (BE10749-MS1)	*Source sample: 21E0606-07 (CI28509)						Prepared: 05/14/2021 Analyzed: 05/19/2021				
Perfluorobutanesulfonic acid (PFBS)	4.75	0.258	ug/kg dry	4.56	ND	104	25-150				
Perfluorohexanoic acid (PFHxA)	5.67	0.258	"	5.15	ND	110	25-150				
Perfluoroheptanoic acid (PFHpA)	5.58	0.258	"	5.15	ND	108	25-150				
Perfluorohexanesulfonic acid (PFHxS)	5.08	0.258	"	4.70	ND	108	25-150				
Perfluorooctanoic acid (PFOA)	4.92	0.258	"	5.15	ND	95.4	25-150				
Perfluorooctanesulfonic acid (PFOS)	5.78	0.258	"	4.77	ND	121	25-150				
Perfluorononanoic acid (PFNA)	4.72	0.258	"	5.15	ND	91.6	25-150				
Perfluorodecanoic acid (PFDA)	4.84	0.258	"	5.15	ND	93.8	25-150				
Perfluoroundecanoic acid (PFUnA)	5.35	0.258	"	5.15	ND	104	25-150				
Perfluorododecanoic acid (PFDoA)	5.32	0.258	"	5.15	ND	103	25-150				
Perfluorotridecanoic acid (PFTrDA)	4.83	0.258	"	5.15	ND	93.8	25-150				
Perfluorotetradecanoic acid (PFTA)	5.40	0.258	"	5.15	ND	105	25-150				
N-MeFOSAA	6.11	0.258	"	5.15	ND	119	25-150				
N-EtFOSAA	4.86	0.258	"	5.15	ND	94.4	25-150				
Perfluoropentanoic acid (PFPeA)	5.55	0.258	"	5.15	0.103	106	25-150				
Perfluoro-1-octanesulfonamide (FOSA)	4.72	0.258	"	5.15	ND	91.6	25-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	6.01	0.258	"	4.90	ND	123	25-150				
Perfluoro-1-decanesulfonic acid (PFDS)	5.35	0.258	"	4.97	ND	108	25-150				
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	5.26	0.258	"	4.90	ND	107	25-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.61	0.258	"	4.95	ND	113	25-150				
Perfluoro-n-butanoic acid (PFBA)	5.59	0.258	"	5.15	ND	108	25-150				
Surrogate: M3PFBS	3.52		"	4.79		73.4	25-150				
Surrogate: M5PFHxA	3.82		"	5.15		74.1	25-150				
Surrogate: M4PFHpA	3.51		"	5.15		68.1	25-150				
Surrogate: M3PFHxS	3.35		"	4.88		68.8	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	4.19		"	5.15		81.3	25-150				
Surrogate: M6PFDA	3.54		"	5.15		68.6	25-150				
Surrogate: M7PFUdA	3.01		"	5.15		58.4	25-150				
Surrogate: Perfluoro-n-[13C2]dodecanoic acid (MPFDoA)	3.21		"	5.15		62.3	25-150				
Surrogate: M2PTeDA	2.28		"	5.15		44.2	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.42		"	5.15		85.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOSA)	2.75		"	4.93		55.8	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	4.15		"	5.15		80.4	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.48		"	5.15		48.1	10-150				
Surrogate: d3-N-MeFOSAA	3.03		"	5.15		58.8	25-150				
Surrogate: d5-N-EtFOSAA	3.54		"	5.15		68.7	25-150				
Surrogate: M2-6:2 FTS	10.3		"	4.89		211	25-150				
Surrogate: M2-8:2 FTS	11.6		"	4.94		236	25-150				
Surrogate: M9PFNA	3.55		"	5.15		68.9	25-150				



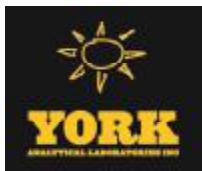
**PFAS Target compounds by LC/MS-MS - Quality Control Data**

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BE10749 - SPE PFAS Extraction-Soil-EPA 537m**

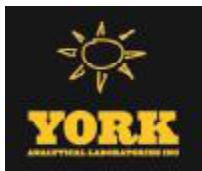
Matrix Spike Dup (BE10749-MSD1)	*Source sample: 21E0606-07 (CI28509)						Prepared: 05/14/2021 Analyzed: 05/19/2021			
Perfluorobutanesulfonic acid (PFBS)	4.80	0.264	ug/kg dry	4.67	ND	103	25-150		1.08	35
Perfluorohexanoic acid (PFHxA)	5.85	0.264	"	5.28	ND	111	25-150		3.18	35
Perfluoroheptanoic acid (PFHpA)	5.44	0.264	"	5.28	ND	103	25-150		2.66	35
Perfluorohexanesulfonic acid (PFHxS)	5.05	0.264	"	4.81	ND	105	25-150		0.582	35
Perfluorooctanoic acid (PFOA)	5.06	0.264	"	5.28	ND	95.9	25-150		2.93	35
Perfluorooctanesulfonic acid (PFOS)	5.85	0.264	"	4.89	ND	120	25-150		1.23	35
Perfluorononanoic acid (PFNA)	4.34	0.264	"	5.28	ND	82.3	25-150		8.30	35
Perfluorodecanoic acid (PFDA)	5.18	0.264	"	5.28	ND	98.1	25-150		6.82	35
Perfluoroundecanoic acid (PFUnA)	4.99	0.264	"	5.28	ND	94.6	25-150		6.92	35
Perfluorododecanoic acid (PFDoA)	5.31	0.264	"	5.28	ND	101	25-150		0.153	35
Perfluorotridecanoic acid (PFTrDA)	5.00	0.264	"	5.28	ND	94.7	25-150		3.31	35
Perfluorotetradecanoic acid (PFTA)	5.43	0.264	"	5.28	ND	103	25-150		0.607	35
N-MeFOSAA	5.71	0.264	"	5.28	ND	108	25-150		6.67	35
N-EtFOSAA	4.61	0.264	"	5.28	ND	87.3	25-150		5.43	35
Perfluoropentanoic acid (PFPeA)	5.47	0.264	"	5.28	0.103	102	25-150		1.48	35
Perfluoro-1-octanesulfonamide (FOSA)	5.12	0.264	"	5.28	ND	97.1	25-150		8.13	35
Perfluoro-1-heptanesulfonic acid (PFHsS)	6.06	0.264	"	5.01	ND	121	25-150		0.796	35
Perfluoro-1-decanesulfonic acid (PFDS)	5.28	0.264	"	5.09	ND	104	25-150		1.44	35
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	5.59	0.264	"	5.01	ND	112	25-150		6.15	35
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.81	0.264	"	5.07	ND	95.0	25-150		15.2	35
Perfluoro-n-butanoic acid (PFBA)	5.60	0.264	"	5.28	ND	106	25-150		0.161	35
<i>Surrogate: M3PFBS</i>	3.60		"	4.90		73.5	25-150			
<i>Surrogate: M5PFHxA</i>	3.94		"	5.28		74.6	25-150			
<i>Surrogate: M4PFHpA</i>	3.76		"	5.28		71.3	25-150			
<i>Surrogate: M3PFHxS</i>	3.53		"	4.99		70.7	25-150			
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	4.16		"	5.28		78.8	25-150			
<i>Surrogate: M6PFDA</i>	3.70		"	5.28		70.1	25-150			
<i>Surrogate: M7PFUdA</i>	3.48		"	5.28		65.9	25-150			
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	3.58		"	5.28		67.8	25-150			
<i>Surrogate: M2PTeDA</i>	2.69		"	5.28		51.0	10-150			
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	4.52		"	5.28		85.6	25-150			
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	2.95		"	5.05		58.5	25-150			
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)</i>	4.37		"	5.28		82.8	25-150			
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	2.88		"	5.28		54.6	10-150			
<i>Surrogate: d3-N-MeFOSAA</i>	3.70		"	5.28		70.0	25-150			
<i>Surrogate: d5-N-EtFOSAA</i>	4.00		"	5.28		75.7	25-150			
<i>Surrogate: M2-6:2 FTS</i>	11.3		"	5.01		225	25-150			
<i>Surrogate: M2-8:2 FTS</i>	13.6		"	5.06		269	25-150			
<i>Surrogate: M9PFNA</i>	4.13		"	5.28		78.2	25-150			



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC %REC	%REC Limits	Flag	RPD RPD	RPD Limit	Flag
<b>Batch BE10893 - SPE Ext-PFAS-EPA 537.1M</b>											
Prepared: 05/18/2021 Analyzed: 05/20/2021											
Blank (BE10893-BLK1)											
Perfluorobutanesulfonic acid (PFBS)	ND	2.00	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	2.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	2.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	2.00	"								
Perfluorooctanoic acid (PFOA)	ND	2.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	2.00	"								
Perfluorononanoic acid (PFNA)	ND	2.00	"								
Perfluorodecanoic acid (PFDA)	ND	2.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	2.00	"								
Perfluorododecanoic acid (PFDoA)	ND	2.00	"								
Perfluorotridecanoic acid (PFTrDA)	ND	2.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	2.00	"								
N-MeFOSAA	ND	2.00	"								
N-EtFOSAA	ND	2.00	"								
Perfluoropentanoic acid (PFPeA)	ND	2.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	2.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	2.00	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	2.00	"								
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	ND	5.00	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	2.00	"								
Perfluoro-n-butanoic acid (PFBA)	ND	2.00	"								
<i>Surrogate: M3PFBS</i>	77.5	"	74.3		104	25-150					
<i>Surrogate: M5PFHxA</i>	80.0	"	80.0		100	25-150					
<i>Surrogate: M4PFHpA</i>	74.2	"	80.0		92.7	25-150					
<i>Surrogate: M3PFHxS</i>	65.7	"	75.7		86.8	25-150					
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	76.0	"	80.0		95.0	25-150					
<i>Surrogate: M6PFDA</i>	68.1	"	80.0		85.1	25-150					
<i>Surrogate: M7PFUdA</i>	62.2	"	80.0		77.7	25-150					
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	64.4	"	80.0		80.5	25-150					
<i>Surrogate: M2PFTeDA</i>	46.8	"	80.0		58.5	10-150					
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	86.7	"	80.0		108	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOSA)</i>	70.9	"	76.6		92.7	25-150					
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)</i>	85.4	"	80.0		107	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	38.4	"	80.0		48.0	10-150					
<i>Surrogate: d3-N-MeFOSAA</i>	39.1	"	80.0		48.9	25-150					
<i>Surrogate: d5-N-EtFOSAA</i>	40.9	"	80.0		51.1	25-150					
<i>Surrogate: M2-6:2 FTS</i>	51.4	"	75.9		67.7	25-150					
<i>Surrogate: M2-8:2 FTS</i>	57.4	"	76.6		74.9	25-150					
<i>Surrogate: M9PFNA</i>	80.4	"	80.0		101	25-150					



**PFAS Target compounds by LC/MS-MS - Quality Control Data**

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10893 - SPE Ext-PFAS-EPA 537.1M</b>											
<b>LCS (BE10893-BS1)</b>											
Prepared: 05/18/2021 Analyzed: 05/20/2021											
Perfluorobutanesulfonic acid (PFBS)	70.0	2.00	ng/L	70.8	98.8	50-130					
Perfluorohexanoic acid (PFHxA)	80.2	2.00	"	80.0	100	50-130					
Perfluoroheptanoic acid (PFHpA)	77.0	2.00	"	80.0	96.3	50-130					
Perfluorohexanesulfonic acid (PFHxS)	76.0	2.00	"	73.0	104	50-130					
Perfluorooctanoic acid (PFOA)	72.9	2.00	"	80.0	91.1	50-130					
Perfluorooctanesulfonic acid (PFOS)	80.8	2.00	"	74.1	109	50-130					
Perfluorononanoic acid (PFNA)	77.8	2.00	"	80.0	97.3	50-130					
Perfluorodecanoic acid (PFDA)	76.2	2.00	"	80.0	95.3	50-130					
Perfluoroundecanoic acid (PFUnA)	79.7	2.00	"	80.0	99.7	50-130					
Perfluorododecanoic acid (PFDoA)	77.2	2.00	"	80.0	96.5	50-130					
Perfluorotridecanoic acid (PFTrDA)	75.8	2.00	"	80.0	94.8	50-130					
Perfluorotetradecanoic acid (PFTA)	80.1	2.00	"	80.0	100	50-130					
N-MeFOSAA	86.2	2.00	"	80.0	108	50-130					
N-EtFOSAA	76.0	2.00	"	80.0	95.0	50-130					
Perfluoropentanoic acid (PFPeA)	81.1	2.00	"	80.0	101	50-130					
Perfluoro-1-octanesulfonamide (FOSA)	80.3	2.00	"	80.0	100	50-130					
Perfluoro-1-heptanesulfonic acid (PFHpS)	72.2	2.00	"	76.0	95.0	50-130					
Perfluoro-1-decanesulfonic acid (PFDS)	69.9	2.00	"	77.2	90.5	50-130					
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	75.2	5.00	"	76.0	98.9	50-130					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	75.5	2.00	"	76.8	98.2	50-130					
Perfluoro-n-butanoic acid (PFBA)	80.7	2.00	"	80.0	101	50-130					
<i>Surrogate: M3PFBS</i>	76.5		"	74.3	103	25-150					
<i>Surrogate: M5PFHxA</i>	82.1		"	80.0	103	25-150					
<i>Surrogate: M4PFHpA</i>	74.6		"	80.0	93.3	25-150					
<i>Surrogate: M3PFHxS</i>	64.6		"	75.7	85.3	25-150					
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	77.7		"	80.0	97.2	25-150					
<i>Surrogate: M6PFDA</i>	69.1		"	80.0	86.3	25-150					
<i>Surrogate: M7PFUdA</i>	67.5		"	80.0	84.3	25-150					
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	73.0		"	80.0	91.2	25-150					
<i>Surrogate: M2PFTeDA</i>	58.3		"	80.0	72.9	10-150					
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	86.5		"	80.0	108	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOSA)</i>	66.6		"	76.6	87.0	25-150					
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	84.8		"	80.0	106	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	47.1		"	80.0	58.9	10-150					
<i>Surrogate: d3-N-MeFOSAA</i>	51.1		"	80.0	63.9	25-150					
<i>Surrogate: d5-N-EtFOSAA</i>	57.2		"	80.0	71.5	25-150					
<i>Surrogate: M2-6:2 FTS</i>	54.2		"	75.9	71.4	25-150					
<i>Surrogate: M2-8:2 FTS</i>	58.8		"	76.6	76.7	25-150					
<i>Surrogate: M9PFNA</i>	70.1		"	80.0	87.6	25-150					



**PFAS Target compounds by LC/MS-MS - Quality Control Data**

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10893 - SPE Ext-PFAS-EPA 537.1M</b>											
<b>LCS Dup (BE10893-BSD1)</b>											
Prepared: 05/18/2021 Analyzed: 05/20/2021											
Perfluorobutanesulfonic acid (PFBS)	75.2	2.00	ng/L	70.8	106	50-130	7.25	30			
Perfluorohexanoic acid (PFHxA)	89.7	2.00	"	80.0	112	50-130	11.2	30			
Perfluoroheptanoic acid (PFHpA)	82.4	2.00	"	80.0	103	50-130	6.71	30			
Perfluorohexanesulfonic acid (PFHxS)	78.2	2.00	"	73.0	107	50-130	2.95	30			
Perfluorooctanoic acid (PFOA)	79.8	2.00	"	80.0	99.7	50-130	9.01	30			
Perfluorooctanesulfonic acid (PFOS)	88.8	2.00	"	74.1	120	50-130	9.51	30			
Perfluorononanoic acid (PFNA)	80.6	2.00	"	80.0	101	50-130	3.53	30			
Perfluorodecanoic acid (PFDA)	85.8	2.00	"	80.0	107	50-130	11.8	30			
Perfluoroundecanoic acid (PFUnA)	87.9	2.00	"	80.0	110	50-130	9.80	30			
Perfluorododecanoic acid (PFDoA)	87.8	2.00	"	80.0	110	50-130	12.8	30			
Perfluorotridecanoic acid (PFTrDA)	82.7	2.00	"	80.0	103	50-130	8.65	30			
Perfluorotetradecanoic acid (PFTA)	86.1	2.00	"	80.0	108	50-130	7.25	30			
N-MeFOSAA	89.1	2.00	"	80.0	111	50-130	3.30	30			
N-EtFOSAA	85.5	2.00	"	80.0	107	50-130	11.8	30			
Perfluoropentanoic acid (PFPeA)	87.8	2.00	"	80.0	110	50-130	7.92	30			
Perfluoro-1-octanesulfonamide (FOSA)	83.8	2.00	"	80.0	105	50-130	4.31	30			
Perfluoro-1-heptanesulfonic acid (PFHpS)	79.6	2.00	"	76.0	105	50-130	9.66	30			
Perfluoro-1-decanesulfonic acid (PFDS)	77.8	2.00	"	77.2	101	50-130	10.7	30			
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	79.8	5.00	"	76.0	105	50-130	5.99	30			
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	79.9	2.00	"	76.8	104	50-130	5.73	30			
Perfluoro-n-butanoic acid (PFBA)	86.3	2.00	"	80.0	108	50-130	6.70	30			
<i>Surrogate: M3PFBS</i>	76.6		"	74.3	103	25-150					
<i>Surrogate: M5PFHxA</i>	77.6		"	80.0	97.0	25-150					
<i>Surrogate: M4PFHpA</i>	73.1		"	80.0	91.3	25-150					
<i>Surrogate: M3PFHxS</i>	66.7		"	75.7	88.2	25-150					
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	75.8		"	80.0	94.7	25-150					
<i>Surrogate: M6PFDA</i>	67.8		"	80.0	84.7	25-150					
<i>Surrogate: M7PFUdA</i>	66.5		"	80.0	83.1	25-150					
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	73.1		"	80.0	91.4	25-150					
<i>Surrogate: M2PFTeDA</i>	55.4		"	80.0	69.2	10-150					
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	83.4		"	80.0	104	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOS)</i>	66.6		"	76.6	86.9	25-150					
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	81.1		"	80.0	101	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	43.9		"	80.0	54.9	10-150					
<i>Surrogate: d3-N-MeFOSAA</i>	46.9		"	80.0	58.7	25-150					
<i>Surrogate: d5-N-EtFOSAA</i>	51.8		"	80.0	64.7	25-150					
<i>Surrogate: M2-6:2 FTS</i>	60.1		"	75.9	79.1	25-150					
<i>Surrogate: M2-8:2 FTS</i>	61.3		"	76.6	80.0	25-150					
<i>Surrogate: M9PFNA</i>	74.0		"	80.0	92.5	25-150					



### Miscellaneous Physical Parameters - Quality Control Data

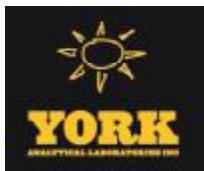
#### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD RPD	Limit	Flag
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#### Batch BE11074 - % Solids Prep

Duplicate (BE11074-DUP1)	*Source sample: 21E0606-16 (CL28523)				Prepared & Analyzed: 05/20/2021						
% Solids	89.5	0.100	%		89.8			0.355	20		





## Sample and Data Qualifiers Relating to This Work Order

PFSu-H      The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence . This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.





Sample: 1260 1000;59u File: 318A044

Software Version: 4.1<1L22>

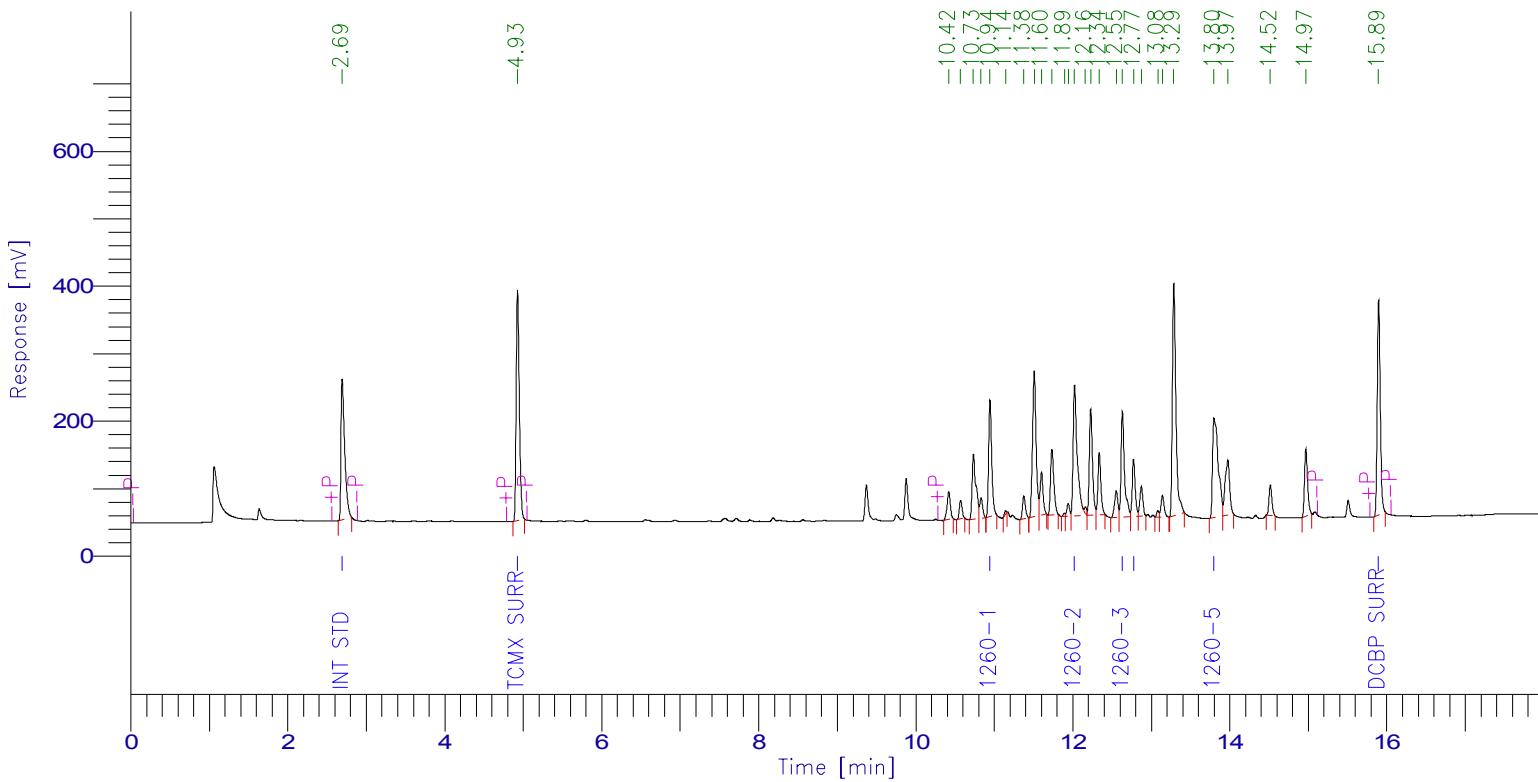
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Sample Name : 1260 1000;59u

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Sequence File: E:\TC2020\ECD29\03-MAR\PCB\_SEQ.SEQ Cycle: 643 Channel : A

Sample Amount : 1.0000 Dilution Factor : 1.00



## PCB Report

Time [min]	Component Name	Raw Amount	Area [ $\mu$ V·s]	Surrogate SM/WM	Surrogate QC / SL	Spike Rec Soils (%)	Spike Rec Water (%)
2.694	Int Std	100.0000	688926.16	250.0000	100.0000	40.0000	20.0000
4.926	TCMX SURR	89.9627	929603.04	224.9068	89.9627	35.9851	17.9925
10.944	1260-1	1000.0000	458893.84	2500.0000	1000.0000	400.0000	200.0000
12.020	1260-2	1000.0000	723367.09	2500.0000	1000.0000	400.0000	200.0000
12.632	1260-3	1000.0000	476530.84	2500.0000	1000.0000	400.0000	200.0000
12.773	1260-4	1000.0000	227520.79	2500.0000	1000.0000	400.0000	200.0000
13.798	1260-5	1000.0000	744787.63	2500.0000	1000.0000	400.0000	200.0000
15.893	DCBP SURR	86.5108	845002.32	216.2770	86.5108	34.6043	17.3022

5276.4735 5094631.70

Sample: 1260 1000;59u File: 318A044

Software Version: 4.1<1L22>

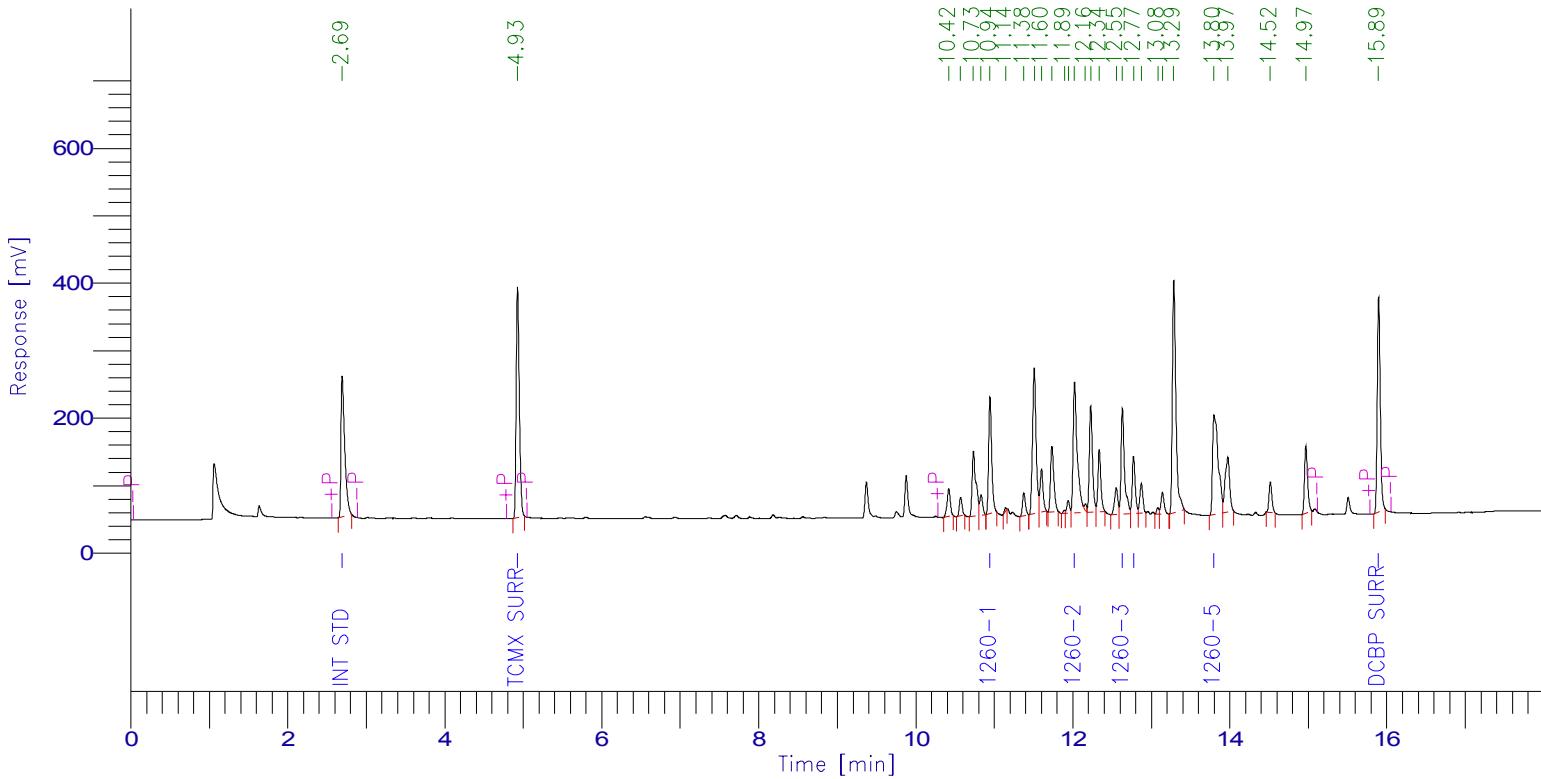
Date: 3/19/2020 07:54 AM

Sample Name : 1260 1000;59u

Data File : E:\TC2020\ECD29\03-MAR\318A044.RAW Date: 3/19/2020 12:56 AM

Sequence File: E:\TC2020\ECD29\03-MAR\PCB\_SEQ.SEQ Cycle: 643 Channel : A

Sample Amount : 1.0000 Dilution Factor : 1.00



## PCB Report

Time [min]	Component Name	Raw Amount	Area [ $\mu$ V·s]	Surrogate SM/WM	Surrogate QC / SL	Spike Rec Soils (%)	Spike Rec Water (%)
2.694	Int Std	100.0000	688926.16	250.0000	100.0000	40.0000	20.0000
4.926	TCMX SURR	89.9627	929603.04	224.9068	89.9627	35.9851	17.9925
10.944	1260-1	1000.0000	458893.84	2500.0000	1000.0000	400.0000	200.0000
12.020	1260-2	1000.0000	723367.09	2500.0000	1000.0000	400.0000	200.0000
12.632	1260-3	1000.0000	476530.84	2500.0000	1000.0000	400.0000	200.0000
12.773	1260-4	1000.0000	227520.79	2500.0000	1000.0000	400.0000	200.0000
13.798	1260-5	1000.0000	744787.63	2500.0000	1000.0000	400.0000	200.0000
15.893	DCBP SURR	86.5108	845002.32	216.2770	86.5108	34.6043	17.3022

5276.4735 5094631.70



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NY ANALYTICAL SERVICES PROTOCOL  
DATA PACKAGE

Client: Walden Environmental Engineering PLLC

IPARK 0118 48

Laboratory Project: GCI28500

Dioxane Soil (Isotope) (Soil)  
Ver 1



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587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
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## NY ANALYTICAL SERVICES PROTOCOL DATA PACKAGE

Walden Environmental Engineering PLLC  
IPARK 0118.48

GCI29073

Ver 1

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ECD1 - 05/13/21 - 513023	633
ECD24 - 05/13/21 - 513002	637
ECD24 - 05/13/21 - 513003	641
ECD24 - 05/13/21 - 513011	645
ECD24 - 05/13/21 - 513013	649
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ECD24 - 05/14/21 - 513039	661
ECD24 - 05/14/21 - 513040	665
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ECD1 - 05/17/21 - 517032	673
ECD1 - 05/18/21 - 517045	677
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CI29100 MSD	700
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CI29100 BLANK	709
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ECD35 - 05/13/21	724
ECD7 - 05/10/21	730
ECD7 - 05/14/21	732
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ECD35 - 05/06/21 - 506021	811
ECD35 - 05/06/21 - 506022	813
ECD35 - 05/06/21 - 506023	815
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ECD7 - 05/10/21 - 510014	893
ECD7 - 05/10/21 - 510015	895
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ECD35 - 05/13/21 - 513010	909
ECD35 - 05/13/21 - 513024	913
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ECD35 - 05/13/21 - 513037	921
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ECD7 - 05/14/21 - 514015	929
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ECD7 - 05/14/21 - 514003	941
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CI29100 MS	975
CI29100 MSD	980
CI29100 QC 2X	985
CI29100 QC 10X	990
CI29100 BLANK	995
Prep Batch Report	999
GCI29073 Metals Soil V1	1000
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Sunday, June 13, 2021

Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

Project ID: IPARK 0118.48

SDG ID: GCI29073

Sample ID#s: CI29073 - CI29075

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301  
CT Lab Registration #PH-0618  
MA Lab Registration #M-CT007  
ME Lab Registration #CT-007  
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003  
NY Lab Registration #11301  
PA Lab Registration #68-03530  
RI Lab Registration #63  
UT Lab Registration #CT00007  
VT Lab Registration #VT11301



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102      Fax (860) 645-0823



**NY ANALYTICAL SERVICES PROTOCOL  
DATA PACKAGE**

**Client: Walden Environmental Engineering PLLC**  
**Project: IPARK 0118.48**  
**Laboratory Project: GCI29073**



**Environmental Laboratories, Inc.**  
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# NY Analytical Services Protocol Format

June 13, 2021

SDG I.D.: GCI29073

Walden Environmental Engineering PLLC IPARK 0118.48

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## Methodology Summary

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DETERMINATION OF SELECTED PERFLUORINATED ALKYL ACIDS IN DRINKING WATER BY SOLID PHASE EXTRACTION AND LIQUID CHROMATOGRAPHY/TANDEM MASS SPECTROMETRY (LC/MS/MS)  
Version 1.1 September 20009

### **Accelerated Solvent Extraction (ASE)**

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update III, Method 3545A.

### **Chlorinated Herbicides:**

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update III, Method 8151A.

### **Mercury Prep**

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 7471B.

### **Metals**

ICP :

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 6010D.

Mercury:

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, 7471B

### **Pesticides:**

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8081B.

### **Polychlorinated Biphenyls (PCBs):**

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8082A.

### **Semivolatile Organic Compounds**

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8270D.



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# NY Analytical Services Protocol Format

June 13, 2021

SDG I.D.: GCI29073

**Walden Environmental Engineering PLLC IPARK 0118.48**

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## Semi-volatiles analysis

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8270D (SIM - selective ion monitoring mode).

## Volatile Organic Compounds:

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update III, Method 8260C and Environmental Protection Agency, EPA-600/4-79-020, Revised March 1983 (Methods 624) as printed in 40CFR part 136.



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## NY Analytical Services Protocol Format

June 13, 2021

SDG I.D.: GCI29073

Walden Environmental Engineering PLLC IPARK 0118.48

### Laboratory Chronicle

The samples in this delivery group were received at 2.1°C.

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CI29073	1,4-Dioxane	05/11/21	05/13/21	05/14/21	WB	Y
CI29073	Aluminum	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Antimony	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Arsenic	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Barium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Beryllium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Cadmium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Calcium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Chlorinated Herbicides	05/11/21	05/12/21	05/14/21	JRB	Y
CI29073	Chromium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Cobalt	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Copper	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Iron	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Lead	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Magnesium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Manganese	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Mercury	05/11/21	05/13/21	05/13/21	MGH	Y
CI29073	Nickel	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29073	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29073	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29073	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29073	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29073	Potassium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Selenium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29073	Silver	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Sodium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Thallium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29073	Vanadium	05/11/21	05/12/21	05/14/21	EK	Y
CI29073	Zinc	05/11/21	05/12/21	05/14/21	CPP	Y
CI29074	Field Extraction	05/11/21	05/11/21	05/11/21		Y



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## NY Analytical Services Protocol Format

June 13, 2021

SDG I.D.: GCI29073

Walden Environmental Engineering PLLC IPARK 0118.48

CI29074	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29075	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29075	Aluminum	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Antimony	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Arsenic	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Barium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Beryllium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Cadmium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Calcium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Chlorinated Herbicides	05/11/21	05/12/21	05/14/21	JRB	Y
CI29075	Chromium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Cobalt	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Copper	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29075	Iron	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Lead	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Magnesium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Manganese	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Mercury	05/11/21	05/13/21	05/13/21	MGH	Y
CI29075	Nickel	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29075	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29075	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29075	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29075	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29075	Potassium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Selenium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Semivolatiles	05/11/21	05/12/21	05/13/21	AW	Y
CI29075	Silver	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Sodium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Thallium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Vanadium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29075	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29075	Zinc	05/11/21	05/12/21	05/14/21	CPP	Y



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## SDG Comments

June 13, 2021

SDG I.D.: GCI29073

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Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 1: Analysis results minus raw data.

Version 2: Complete report with raw data.



Environmental Laboratories, Inc.

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Tel. (860) 645-1102 Fax (860) 645-0823

## Sample Id Cross Reference

June 13, 2021

SDG I.D.: GCI29073

Project ID: IPARK 0118.48

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Client Id	Lab Id	Matrix
SP-DUP A 51121	CI29073	SOIL
SP-DUP B 51121	CI29074	SOIL
SP-DUP C 51121	CI29075	SOIL



## Environmental Laboratories, Inc.

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# Analysis Report

June 13, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#:

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

05/11/21 12:40  
05/12/21 14:50  
SDG ID: GCI29073  
Phoenix ID: CI29073

Project ID: IPARK 0118.48  
Client ID: SP-DUP A 51121

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	16200	39	7.8	mg/Kg	10	05/14/21	CPP	SW6010D	
Antimony	ND	3.9	3.9	mg/Kg	1	05/14/21	CPP	SW6010D	
Arsenic	5.50	0.78	0.78	mg/Kg	1	05/14/21	CPP	SW6010D	
Barium	74.1	0.8	0.39	mg/Kg	1	05/14/21	CPP	SW6010D	
Beryllium	0.49	0.31	0.16	mg/Kg	1	05/14/21	CPP	SW6010D	
Calcium	1190	3.9	3.6	mg/Kg	1	05/14/21	CPP	SW6010D	
Cadmium	1.17	0.39	0.39	mg/Kg	1	05/14/21	CPP	SW6010D	
Chromium	14.4	0.39	0.39	mg/Kg	1	05/14/21	CPP	SW6010D	
Cobalt	8.84	0.39	0.39	mg/Kg	1	05/14/21	CPP	SW6010D	
Copper	21.2	0.8	0.39	mg/kg	1	05/14/21	CPP	SW6010D	
Iron	28700	39	39	mg/Kg	10	05/14/21	CPP	SW6010D	
Lead	19.7	0.8	0.39	mg/Kg	1	05/14/21	CPP	SW6010D	
Magnesium	4770	3.9	3.9	mg/Kg	1	05/14/21	CPP	SW6010D	
Manganese	980	3.9	3.9	mg/Kg	10	05/14/21	CPP	SW6010D	
Mercury	0.03	J	0.03	0.02	mg/Kg	2	05/13/21	MGH SW7471B	
Nickel	18.4	0.39	0.39	mg/Kg	1	05/14/21	CPP	SW6010D	
Potassium	1250	N	8	3.1	mg/Kg	1	05/14/21	CPP	SW6010D
Selenium	ND	1.6	1.3	mg/Kg	1	05/14/21	CPP	SW6010D	
Silver	ND	0.39	0.39	mg/Kg	1	05/14/21	CPP	SW6010D	
Sodium	33	8	3.4	mg/Kg	1	05/14/21	CPP	SW6010D	
Thallium	ND	1.6	1.6	mg/Kg	1	05/14/21	CPP	SW6010D	
Vanadium	22.8	3.9	3.9	mg/Kg	10	05/14/21	EK	SW6010D	
Zinc	63.5	0.8	0.39	mg/Kg	1	05/14/21	CPP	SW6010D	
Percent Solid	83			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/A	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/A	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/13/21	CG/AB/CGSW7471B	
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.302	0.0309	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic acid	ND	0.302	0.0797	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.302	0.126	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.302	0.126	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.302	0.0618	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.302	0.0595	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.302	0.0564	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.302	0.181	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.302	0.0618	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.302	0.0906	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.302	0.0549	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.302	0.0374	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.302	0.0796	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	0.871	0.302	0.221	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.302	0.0722	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.302	0.0529	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	0.471	0.302	0.0932	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.302	0.111	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.302	0.0902	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.302	0.0525	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.302	0.140	ng/g		05/21/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	82.2			%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	101			%		05/21/21	***	EPA 537m
% M2-6:2FTS	247			%		05/21/21	***	EPA 537m
% M2-8:2FTS	262			%		05/21/21	***	EPA 537m
% M2PFTeDA	59.0			%		05/21/21	***	EPA 537m
% M3PFBS	77.2			%		05/21/21	***	EPA 537m
% M3PFHxS	72.9			%		05/21/21	***	EPA 537m
% M4PFHpA	73.6			%		05/21/21	***	EPA 537m
% M5PFHxA	81.5			%		05/21/21	***	EPA 537m
% M5PFPeA	88.2			%		05/21/21	***	EPA 537m
% M6PFDA	79.5			%		05/21/21	***	EPA 537m
% M7PFUdA	81.1			%		05/21/21	***	EPA 537m
% M8FOSA	57.0			%		05/21/21	***	EPA 537m
% M8PFOA	86.9			%		05/21/21	***	EPA 537m
% M8PFOS	66.0			%		05/21/21	***	EPA 537m
% M9PFNA	81.0			%		05/21/21	***	EPA 537m
% MPFBA	93.8			%		05/21/21	***	EPA 537m
% MPFDoA	83.3			%		05/21/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	3000	3000	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	60			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	50			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	70			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	75			%	2	05/13/21	AW	30 - 150 %
% TCMX	81			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	82			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.4	2.4	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	41	2.4	2.4	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	7.0	2.4	2.4	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	4.0	4.0	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	4.0	4.0	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	40	40	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	4.0	4.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	4.0	4.0	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	40	40	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	76			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	69			%	2	05/13/21	CG	30 - 150 %
% TCMX	71			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	68			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	210	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	200	130	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	200	140	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	270	97	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	270	270	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	200	150	ug/Kg	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	200	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	180	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	270	270	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	270	250	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	200	180	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	390	780	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	230	78	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	310	180	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	390	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	390	180	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	310	310	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	390	230	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	200	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	2000	780	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	270	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	200	110	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	200	160	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	200	130	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	270	100	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	270	100	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	200	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	200	120	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Isophorone	ND	200	110	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	200	140	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	200	130	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	230	150	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	270	96	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	80			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	73			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	55			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	69			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	64			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	71			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	79	79	ug/Kg	1	05/14/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	75			%	1	05/14/21	WB	30 - 130 %
% Nitrobenzene-d5	122			%	1	05/14/21	WB	30 - 130 %
% Terphenyl-d14	112			%	1	05/14/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

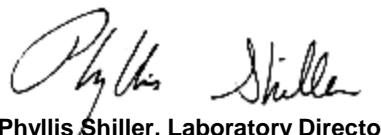
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 13, 2021

Reviewed and Released by: Christina White, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 13, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#:

### Custody Information

Collected by:  
 Received by: CP  
 Analyzed by: see "By" below

Date

Time

SDG ID: GCI29073

Project ID: IPARK 0118.48  
 Client ID: SP-DUP B 51121

### Laboratory Data

Phoenix ID: CI29074

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	1
Field Extraction	Completed					05/11/21		SW5035A	
<b>Volatiles</b>									
1,1,1,2-Tetrachloroethane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloroethane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloroethene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloropropene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dibromoethane	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichloroethane	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichloropropane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3-Dichloropropane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
2,2-Dichloropropane	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Chlorotoluene	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Hexanone	ND	19	3.8	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Isopropyltoluene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
4-Chlorotoluene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
4-Methyl-2-pentanone	ND	19	3.8	ug/Kg	1	05/13/21	JLI	SW8260C	
Acetone	4.5	JS	19	3.8	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	7.6	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Benzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Bromobenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Bromoform	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
Bromomethane	ND	3.8	1.5	ug/Kg	1	05/13/21	JLI	SW8260C	
Carbon Disulfide	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
Carbon tetrachloride	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
Chlorobenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Chloroethane	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Chloroform	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Chloromethane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
cis-1,2-Dichloroethene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
cis-1,3-Dichloropropene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Dibromochloromethane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
Dibromomethane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
Dichlorodifluoromethane	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Ethylbenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Hexachlorobutadiene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Isopropylbenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
m&p-Xylene	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
Methyl Ethyl Ketone	ND	19	3.8	ug/Kg	1	05/13/21	JLI	SW8260C	
Methyl t-butyl ether (MTBE)	ND	7.6	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
Methylene chloride	ND	7.6	3.8	ug/Kg	1	05/13/21	JLI	SW8260C	
Naphthalene	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
n-Butylbenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
n-Propylbenzene	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
o-Xylene	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
p-Isopropyltoluene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
sec-Butylbenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Styrene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
tert-Butylbenzene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Tetrachloroethene	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
Tetrahydrofuran (THF)	ND	7.6	1.9	ug/Kg	1	05/13/21	JLI	SW8260C	
Toluene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Total Xylenes	ND	3.8	3.8	ug/Kg	1	05/13/21	JLI	SW8260C	
trans-1,2-Dichloroethene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
trans-1,3-Dichloropropene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
trans-1,4-dichloro-2-butene	ND	7.6	1.9	ug/Kg	1	05/13/21	JLI	SW8260C	
Trichloroethene	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Trichlorofluoromethane	ND	3.8	0.76	ug/Kg	1	05/13/21	JLI	SW8260C	
Trichlorotrifluoroethane	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
Vinyl chloride	ND	3.8	0.38	ug/Kg	1	05/13/21	JLI	SW8260C	
<b><u>QA/QC Surrogates</u></b>									
% 1,2-dichlorobenzene-d4	106			%	1	05/13/21	JLI	70 - 130 %	

Project ID: IPARK 0118.48  
Client ID: SP-DUP B 51121

Phoenix I.D.: CI29074

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	95			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	100			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	103			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

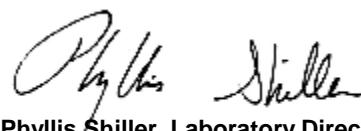
### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 13, 2021

Reviewed and Released by: Christina White, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 13, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#:

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

05/11/21 12:40  
05/12/21 14:50  
SDG ID: GCI29073  
Phoenix ID: CI29075

Project ID: IPARK 0118.48  
Client ID: SP-DUP C 51121

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	23700	43	8.7	mg/Kg	10	05/14/21	CPP	SW6010D	
Antimony	ND	4.3	4.3	mg/Kg	1	05/14/21	CPP	SW6010D	
Arsenic	8.13	0.87	0.87	mg/Kg	1	05/14/21	CPP	SW6010D	
Barium	91.1	0.9	0.43	mg/Kg	1	05/14/21	CPP	SW6010D	
Beryllium	0.75	0.35	0.17	mg/Kg	1	05/14/21	CPP	SW6010D	
Calcium	2190	4.3	4.0	mg/Kg	1	05/14/21	CPP	SW6010D	
Cadmium	1.76	0.43	0.43	mg/Kg	1	05/14/21	CPP	SW6010D	
Chromium	22.9	0.43	0.43	mg/Kg	1	05/14/21	CPP	SW6010D	
Cobalt	15.5	0.43	0.43	mg/Kg	1	05/14/21	CPP	SW6010D	
Copper	40.2	0.9	0.43	mg/kg	1	05/14/21	CPP	SW6010D	
Iron	47700	43	43	mg/Kg	10	05/14/21	CPP	SW6010D	
Lead	16.6	0.9	0.43	mg/Kg	1	05/14/21	CPP	SW6010D	
Magnesium	10700	43	43	mg/Kg	10	05/14/21	CPP	SW6010D	
Manganese	1050	4.3	4.3	mg/Kg	10	05/14/21	CPP	SW6010D	
Mercury	0.03	J	0.03	0.02	mg/Kg	2	05/13/21	MGH SW7471B	
Nickel	32.7	0.43	0.43	mg/Kg	1	05/14/21	CPP	SW6010D	
Potassium	2760	N	9	3.4	mg/Kg	1	05/14/21	CPP	SW6010D
Selenium	ND	1.7	1.5	mg/Kg	1	05/14/21	CPP	SW6010D	
Silver	ND	0.43	0.43	mg/Kg	1	05/14/21	CPP	SW6010D	
Sodium	73	9	3.7	mg/Kg	1	05/14/21	CPP	SW6010D	
Thallium	ND	1.7	1.7	mg/Kg	1	05/14/21	CPP	SW6010D	
Vanadium	23.7	0.43	0.43	mg/Kg	1	05/14/21	CPP	SW6010D	
Zinc	89.7	0.9	0.43	mg/Kg	1	05/14/21	CPP	SW6010D	
Percent Solid	78			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/A	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/A	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/13/21	CG/AB/CCSW7471B	
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.287	0.0294	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.287	0.0759	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.287	0.120	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.287	0.120	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.287	0.0588	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.287	0.0567	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.287	0.0537	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.287	0.172	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.287	0.0588	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.287	0.0862	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.287	0.0523	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.287	0.0356	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.287	0.0757	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.287	0.210	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.287	0.0687	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.287	0.0503	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.287	0.0887	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.287	0.106	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.287	0.0859	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.287	0.0500	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.287	0.134	ng/g		05/21/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	62.5		%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	79.4		%		05/21/21	***	EPA 537m
% M2-6:2FTS	160		%		05/21/21	***	EPA 537m
% M2-8:2FTS	146		%		05/21/21	***	EPA 537m
% M2PFTeDA	58.3		%		05/21/21	***	EPA 537m
% M3PFBS	72.8		%		05/21/21	***	EPA 537m
% M3PFHxS	69.8		%		05/21/21	***	EPA 537m
% M4PFHpa	74.6		%		05/21/21	***	EPA 537m
% M5PFHxA	76.2		%		05/21/21	***	EPA 537m
% M5PFPeA	83.8		%		05/21/21	***	EPA 537m
% M6PFDA	71.1		%		05/21/21	***	EPA 537m
% M7PFUdA	65.7		%		05/21/21	***	EPA 537m
% M8FOSA	51.9		%		05/21/21	***	EPA 537m
% M8PFOA	80.0		%		05/21/21	***	EPA 537m
% M8PFOS	57.7		%		05/21/21	***	EPA 537m
% M9PFNA	79.5		%		05/21/21	***	EPA 537m
% MPFBA	88.4		%		05/21/21	***	EPA 537m
% MPFDoA	63.2		%		05/21/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	160	160	ug/Kg	10	05/14/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	160	160	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	320	320	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	3200	3200	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	160	160	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	160	160	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	320	320	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	320	320	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	48			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	47			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	83	83	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	83	83	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	83	83	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	83	83	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	83	83	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	83	83	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	83	83	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	83	83	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	83	83	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	82			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	83			%	2	05/13/21	AW	30 - 150 %
% TCMX	78			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	78			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.5	2.5	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.5	2.5	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.5	2.5	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	4.1	4.1	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	4.1	4.1	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	41	41	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	4.1	4.1	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.7	1.7	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	4.1	4.1	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	8.3	8.3	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	41	41	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	170	170	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	74			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	70			%	2	05/13/21	CG	30 - 150 %
% TCMX	67			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	64			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	28	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	28	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	28	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	11	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	5.5	2.2	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	11	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.8	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	5.5	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.8	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	105			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	100			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	102			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	300	150	ug/Kg	1	05/13/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	300	130	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Dichlorobenzene	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D
1,3-Dichlorobenzene	ND	300	130	ug/Kg	1	05/13/21	AW	SW8270D
1,4-Dichlorobenzene	ND	300	130	ug/Kg	1	05/13/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	300	230	ug/Kg	1	05/13/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	210	140	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dichlorophenol	ND	210	150	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dimethylphenol	ND	300	110	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrophenol	ND	300	300	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrotoluene	ND	210	170	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
2,6-Dinitrotoluene	ND	210	140	ug/Kg	1	05/13/21	AW	SW8270D	
2-Chloronaphthalene	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D	
2-Chlorophenol	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D	
2-Methylnaphthalene	ND	300	130	ug/Kg	1	05/13/21	AW	SW8270D	
2-Methylphenol (o-cresol)	ND	300	200	ug/Kg	1	05/13/21	AW	SW8270D	
2-Nitroaniline	ND	300	300	ug/Kg	1	05/13/21	AW	SW8270D	
2-Nitrophenol	ND	300	270	ug/Kg	1	05/13/21	AW	SW8270D	
3&4-Methylphenol (m&p-cresol)	ND	300	170	ug/Kg	1	05/13/21	AW	SW8270D	
3,3'-Dichlorobenzidine	ND	210	200	ug/Kg	1	05/13/21	AW	SW8270D	
3-Nitroaniline	ND	430	850	ug/Kg	1	05/13/21	AW	SW8270D	
4,6-Dinitro-2-methylphenol	ND	260	85	ug/Kg	1	05/13/21	AW	SW8270D	
4-Bromophenyl phenyl ether	ND	300	130	ug/Kg	1	05/13/21	AW	SW8270D	
4-Chloro-3-methylphenol	ND	300	150	ug/Kg	1	05/13/21	AW	SW8270D	
4-Chloroaniline	ND	340	200	ug/Kg	1	05/13/21	AW	SW8270D	
4-Chlorophenyl phenyl ether	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D	
4-Nitroaniline	ND	430	140	ug/Kg	1	05/13/21	AW	SW8270D	
4-Nitrophenol	ND	430	190	ug/Kg	1	05/13/21	AW	SW8270D	
Acenaphthene	ND	300	130	ug/Kg	1	05/13/21	AW	SW8270D	
Acenaphthylene	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D	
Acetophenone	ND	300	130	ug/Kg	1	05/13/21	AW	SW8270D	
Aniline	ND	340	340	ug/Kg	1	05/13/21	AW	SW8270D	
Anthracene	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D	
Benz(a)anthracene	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D	
Benzidine	ND	430	250	ug/Kg	1	05/13/21	AW	SW8270D	
Benzo(a)pyrene	ND	210	140	ug/Kg	1	05/13/21	AW	SW8270D	
Benzo(b)fluoranthene	ND	300	150	ug/Kg	1	05/13/21	AW	SW8270D	
Benzo(ghi)perylene	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D	
Benzo(k)fluoranthene	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D	
Benzoic acid	ND	2100	850	ug/Kg	1	05/13/21	AW	SW8270D	
Benzyl butyl phthalate	ND	300	110	ug/Kg	1	05/13/21	AW	SW8270D	
Bis(2-chloroethoxy)methane	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D	
Bis(2-chloroethyl)ether	ND	210	120	ug/Kg	1	05/13/21	AW	SW8270D	
Bis(2-chloroisopropyl)ether	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D	
Bis(2-ethylhexyl)phthalate	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D	
Carbazole	ND	210	170	ug/Kg	1	05/13/21	AW	SW8270D	
Chrysene	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D	
Dibenz(a,h)anthracene	ND	210	140	ug/Kg	1	05/13/21	AW	SW8270D	
Dibenzofuran	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D	
Diethyl phthalate	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D	
Dimethylphthalate	ND	300	130	ug/Kg	1	05/13/21	AW	SW8270D	
Di-n-butylphthalate	ND	300	110	ug/Kg	1	05/13/21	AW	SW8270D	
Di-n-octylphthalate	110	J	300	110	ug/Kg	1	05/13/21	AW	SW8270D
Fluoranthene	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D	
Fluorene	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D	
Hexachlorobenzene	ND	210	120	ug/Kg	1	05/13/21	AW	SW8270D	
Hexachlorobutadiene	ND	300	150	ug/Kg	1	05/13/21	AW	SW8270D	
Hexachlorocyclopentadiene	ND	300	130	ug/Kg	1	05/13/21	AW	SW8270D	
Hexachloroethane	ND	210	130	ug/Kg	1	05/13/21	AW	SW8270D	
Indeno(1,2,3-cd)pyrene	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	210	120	ug/Kg	1	05/13/21	AW	SW8270D
Naphthalene	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D
Nitrobenzene	ND	210	150	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodimethylamine	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	210	140	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	300	160	ug/Kg	1	05/13/21	AW	SW8270D
Pentachloronitrobenzene	ND	300	160	ug/Kg	1	05/13/21	AW	SW8270D
Pentachlorophenol	ND	260	160	ug/Kg	1	05/13/21	AW	SW8270D
Phenanthrene	ND	300	120	ug/Kg	1	05/13/21	AW	SW8270D
Phenol	ND	300	140	ug/Kg	1	05/13/21	AW	SW8270D
Pyrene	ND	300	150	ug/Kg	1	05/13/21	AW	SW8270D
Pyridine	ND	300	110	ug/Kg	1	05/13/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	91			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorobiphenyl	83			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorophenol	63			%	1	05/13/21	AW	30 - 130 %
% Nitrobenzene-d5	75			%	1	05/13/21	AW	30 - 130 %
% Phenol-d5	72			%	1	05/13/21	AW	30 - 130 %
% Terphenyl-d14	93			%	1	05/13/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	83	83	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	48			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	55			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	97			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

**Comments:**

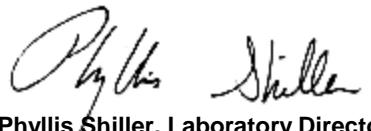
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 13, 2021

Reviewed and Released by: Christina White, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# QA/QC Report

June 13, 2021

## QA/QC Data

SDG I.D.: GCI29073

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 575175 (mg/kg), QC Sample No: CI27608 2X (CI29073, CI29075)													
Mercury - Soil	BRL	0.02	<0.02	<0.03	NC	97.7	94.9	2.9	113	90.0	22.7	75 - 125	30
QA/QC Batch 575097 (mg/kg), QC Sample No: CI29073 (CI29073, CI29075)													
<b>ICP Metals - Soil</b>													
Aluminum	BRL	5.0	16200	16400	1.20	75.5	85.1	12.0	NC			80 - 120	30
Antimony	BRL	3.3	<3.9	<4.1	NC	90.4	106	15.9	83.6			70 - 130	30
Arsenic	BRL	0.67	5.50	5.37	2.40	97.7	111	12.7	88.9			80 - 120	30
Barium	BRL	0.33	74.1	74.1	0	92.8	106	13.3	92.3			80 - 120	30
Beryllium	BRL	0.27	0.49	0.45	NC	91.0	113	21.6	90.0			80 - 120	30
Cadmium	BRL	0.33	1.17	1.13	NC	97.6	117	18.1	89.0			80 - 120	30
Calcium	BRL	5.0	1190	1260	5.70	97.9	114	15.2	NC			80 - 120	30
Chromium	BRL	0.33	14.4	13.3	7.90	97.3	116	17.5	90.1			80 - 120	30
Cobalt	BRL	0.33	8.84	8.65	2.20	94.7	115	19.4	87.8			80 - 120	30
Copper	BRL	0.67	21.2	20.5	3.40	85.7	102	17.4	91.4			80 - 120	30
Iron	BRL	5.0	28700	29800	3.80	94.0	104	10.1	NC			80 - 120	30
Lead	BRL	0.33	19.7	19.8	0.50	99.4	111	11.0	91.3			80 - 120	30
Magnesium	BRL	5.0	4770	4520	5.40	99.2	113	13.0	NC			80 - 120	30
Manganese	BRL	0.33	980	1110	12.4	91.6	109	17.3	NC			80 - 120	30
Nickel	BRL	0.33	18.4	18.0	2.20	95.5	118	21.1	86.5			80 - 120	30
Potassium	BRL	5.0	1250 N	1150	8.30	95.7	110	13.9	>130			80 - 120	30
Selenium	BRL	1.3	<1.6	<1.6	NC	88.4	105	17.2	82.9			80 - 120	30
Silver	BRL	0.33	<0.39	<0.41	NC	87.4	97.4	10.8	85.7			70 - 130	30
Sodium	BRL	5.0	33	32.3	NC	77.2	92.1	17.6	102			80 - 120	30
Thallium	BRL	3.0	<1.6	<3.7	NC	94.8	110	14.8	86.6			80 - 120	30
Vanadium	BRL	0.33	22.8	23.0	0.90	99.6	117	16.1	90.8			80 - 120	30
Zinc	BRL	0.67	63.5	60.4	5.00	92.3	110	17.5	84.9			80 - 120	30

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.



## Environmental Laboratories, Inc.

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# QA/QC Report

June 13, 2021

## QA/QC Data

SDG I.D.: GCI29073

Parameter	Blank	Blk	RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 575126 (ug/Kg), QC Sample No: CI28528 10X (CI29073, CI29075)

### Chlorinated Herbicides - Soil

2,4,5-T	ND	130		54	47	13.9	49	55	11.5	40 - 140	30
2,4,5-TP (Silvex)	ND	130		55	49	11.5	50	57	13.1	40 - 140	30
2,4-D	ND	250		67	54	21.5	53	60	12.4	40 - 140	30
2,4-DB	ND	2500		42	35	18.2	44	48	8.7	40 - 140	30
Dalapon	ND	130		66	70	5.9	42	45	6.9	40 - 140	30
Dicamba	ND	130		84	81	3.6	64	71	10.4	40 - 140	30
Dichloroprop	ND	130		67	61	9.4	64	72	11.8	40 - 140	30
Dinoseb	ND	130		77	76	1.3	50	53	5.8	40 - 140	30
% DCAA (Surrogate Rec)	69	%		48	44	8.7	48	53	9.9	30 - 150	30
% DCAA (Surrogate Rec) (Confirm	50	%		45	41	9.3	42	48	13.3	30 - 150	30

QA/QC Batch 575098 (ug/Kg), QC Sample No: CI29100 2X (CI29073, CI29075)

### Polychlorinated Biphenyls - Soil

PCB-1016	ND	33		112	106	5.5	112	80	33.3	40 - 140	30
PCB-1221	ND	33								40 - 140	30
PCB-1232	ND	33								40 - 140	30
PCB-1242	ND	33								40 - 140	30
PCB-1248	ND	33								40 - 140	30
PCB-1254	ND	33								40 - 140	30
PCB-1260	ND	33		106	99	6.8	106	73	36.9	40 - 140	30
PCB-1262	ND	33								40 - 140	30
PCB-1268	ND	33								40 - 140	30
% DCBP (Surrogate Rec)	117	%		115	109	5.4	115	79	37.1	30 - 150	30
% DCBP (Surrogate Rec) (Confirm	105	%		107	99	7.8	105	71	38.6	30 - 150	30
% TCMX (Surrogate Rec)	106	%		109	105	3.7	107	75	35.2	30 - 150	30
% TCMX (Surrogate Rec) (Confirm	103	%		107	102	4.8	107	74	36.5	30 - 150	30

QA/QC Batch 575099 (ug/Kg), QC Sample No: CI29100 2X (CI29073, CI29075)

### Pesticides - Soil

4,4'-DDD	ND	1.7		89	97	8.6	78	81	3.8	40 - 140	30
4,4'-DDE	ND	1.7		85	92	7.9	NC	NC	NC	40 - 140	30
4,4'-DDT	ND	1.7		83	91	9.2	43	60	33.0	40 - 140	30
a-BHC	ND	1.0		83	90	8.1	73	76	4.0	40 - 140	30
a-Chlordane	ND	3.3		81	89	9.4	71	75	5.5	40 - 140	30
Aldrin	ND	1.0		82	90	9.3	72	80	10.5	40 - 140	30
b-BHC	ND	1.0		85	93	9.0	74	77	4.0	40 - 140	30
Chlordane	ND	33		82	89	8.2	66	68	3.0	40 - 140	30
d-BHC	ND	3.3		78	85	8.6	69	72	4.3	40 - 140	30
Dieldrin	ND	1.0		94	103	9.1	83	87	4.7	40 - 140	30
Endosulfan I	ND	3.3		86	94	8.9	78	81	3.8	40 - 140	30
Endosulfan II	ND	3.3		85	92	7.9	75	78	3.9	40 - 140	30
Endosulfan sulfate	ND	3.3		85	92	7.9	74	77	4.0	40 - 140	30

QA/QC Data

SDG I.D.: GCI29073

Parameter	Blank	Blk RL	LCS	LCSD	LCS	MS	MSD	MS	%	%
			%	%	RPD	%	RPD	Rec	RPD	
Endrin	ND	3.3	88	96	8.7	80	83	3.7	40 - 140	30
Endrin aldehyde	ND	3.3	72	80	10.5	60	61	1.7	40 - 140	30
Endrin ketone	ND	3.3	84	92	9.1	72	76	5.4	40 - 140	30
g-BHC	ND	1.0	82	89	8.2	71	74	4.1	40 - 140	30
g-Chlordane	ND	3.3	82	89	8.2	66	68	3.0	40 - 140	30
Heptachlor	ND	3.3	83	91	9.2	74	78	5.3	40 - 140	30
Heptachlor epoxide	ND	3.3	77	84	8.7	67	69	2.9	40 - 140	30
Methoxychlor	ND	3.3	87	94	7.7	76	80	5.1	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	94	%	93	100	7.3	82	89	8.2	30 - 150	30
% DCBP (Confirmation)	88	%	85	95	11.1	77	78	1.3	30 - 150	30
% TCMX	84	%	80	90	11.8	73	77	5.3	30 - 150	30
% TCMX (Confirmation)	81	%	77	86	11.0	68	72	5.7	30 - 150	30

QA/QC Batch 576606 (ng/L), QC Sample No: CI29073 (CI29073, CI29075)

**PFAS**

1H,1H,2H,2H-Perfluorodecanesulfo	ND	0.244	106	104	70 - 130	30				
1H,1H,2H,2H-Perfluorooctanesulfo	ND	0.244	110	98.5	70 - 130	30				
NEtFOSAA	ND	0.244	96.5	92.5	70 - 130	30				
NMeFOSAA	ND	0.244	112	116	70 - 130	30				
Perfluoro-1-decanesulfonic acid (P)	ND	0.244	84.1	88.4	70 - 130	30				
Perfluoro-1-heptanesulfonic acid (P)	ND	0.244	114	127	70 - 130	30				
Perfluoro-1-octanesulfonamide (FO)	ND	0.244	105	96.2	70 - 130	30				
Perfluorobutanesulfonic Acid (PFB)	ND	0.244	106	99.2	70 - 130	30				
Perfluorodecanoic Acid (PFDA)	ND	0.244	103	102	70 - 130	30				
Perfluorododecanoic Acid (PFDoA)	ND	0.244	105	105	70 - 130	30				
Perfluoroheptanoic Acid (PFHpA)	ND	0.244	92.9	110	70 - 130	30				
Perfluorohexanesulfonic Acid (PFH)	ND	0.244	100	107	70 - 130	30				
Perfluorohexanoic Acid (PFHxA)	ND	0.244	109	107	70 - 130	30				
Perfluoro-n-butanoic acid (PFBA)	ND	0.244	103	100	70 - 130	30				
Perfluorononanoic Acid (PFNA)	ND	0.244	88.0	91.1	70 - 130	30				
Perfluorooctanesulfonic Acid (PFO)	ND	0.244	124	117	70 - 130	30				
Perfluorooctanoic Acid (PFOA)	ND	0.244	97.3	90.1	70 - 130	30				
Perfluoropentanoic acid (PFPeA)	ND	0.244	105	106	70 - 130	30				
Perfluorotetradecanoic Acid (PFTA)	ND	0.244	103	106	70 - 130	30				
Perfluorotridecanoic Acid (PFTrDA)	ND	0.244	109	94.4	70 - 130	30				
Perfluoroundecanoic Acid (PFUnA)	ND	0.244	99.7	107	70 - 130	30				
% d3-N-MeFOSAA	93.3	0.0488	90.4	68.5	70 - 130	30	m			
% M2-6:2FTS	207	0.0488	165	313	70 - 130	30	I,m,s			
% M2-8:2FTS	188	0.0488	155	340	70 - 130	30	I,m,s			
% M2PFTEDA	81.6	0.0488	73.6	44.5	70 - 130	30	m			
% M3PFBS	90.0	0.0488	93.1	81.7	70 - 130	30				
% M3PFHxS	87.0	0.0488	94.1	72.9	70 - 130	30				
% M4PFHpA	88.6	0.0488	93.5	68.5	70 - 130	30	m			
% M5PFHxA	86.9	0.0488	86.9	80.2	70 - 130	30				
% M5PFPEA	91.2	0.0488	94.5	83.1	70 - 130	30				
% M6PFDA	92.6	0.0488	83.7	73.9	70 - 130	30				
% M7PFUDA	80.3	0.0488	80.9	62.7	70 - 130	30	m			
% M8FOSA	73.5	0.0488	68.6	48.3	70 - 130	30	I,m			
% M8PFOA	96.3	0.0488	90.8	87.2	70 - 130	30				
% M8PFOS	89.8	0.0488	86.6	62.5	70 - 130	30				
% M9PFNA	94.0	0.0488	101	80.5	70 - 130	30				
% MPFBA	98.4	0.0488	101	91.4	70 - 130	30				

QA/QC Data

SDG I.D.: GCI29073

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% MPFDOA	79.1	0.0488	77.2		63.8				70 - 130	30 m
QA/QC Batch 575094 (ug/kg), QC Sample No: CI29093 (CI29073, CI29075)										
<b>Semivolatiles - Soil</b>										
1,2,4,5-Tetrachlorobenzene	ND	230	75	77	2.6	76	73	4.0	30 - 130	30
1,2,4-Trichlorobenzene	ND	230	71	70	1.4	69	67	2.9	30 - 130	30
1,2-Dichlorobenzene	ND	180	64	64	0.0	63	57	10.0	30 - 130	30
1,2-Diphenylhydrazine	ND	230	73	77	5.3	78	74	5.3	30 - 130	30
1,3-Dichlorobenzene	ND	230	62	63	1.6	60	54	10.5	30 - 130	30
1,4-Dichlorobenzene	ND	230	63	63	0.0	63	56	11.8	30 - 130	30
2,4,5-Trichlorophenol	ND	230	86	91	5.6	91	86	5.6	30 - 130	30
2,4,6-Trichlorophenol	ND	130	89	92	3.3	88	84	4.7	30 - 130	30
2,4-Dichlorophenol	ND	130	82	83	1.2	82	80	2.5	30 - 130	30
2,4-Dimethylphenol	ND	230	81	84	3.6	71	71	0.0	30 - 130	30
2,4-Dinitrophenol	ND	230	69	73	5.6	65	64	1.6	30 - 130	30
2,4-Dinitrotoluene	ND	130	89	94	5.5	93	89	4.4	30 - 130	30
2,6-Dinitrotoluene	ND	130	92	95	3.2	95	91	4.3	30 - 130	30
2-Chloronaphthalene	ND	230	77	78	1.3	79	76	3.9	30 - 130	30
2-Chlorophenol	ND	230	74	74	0.0	73	70	4.2	30 - 130	30
2-Methylnaphthalene	ND	230	71	73	2.8	72	70	2.8	30 - 130	30
2-Methylphenol (o-cresol)	ND	230	76	79	3.9	77	73	5.3	30 - 130	30
2-Nitroaniline	ND	330	123	130	5.5	132	123	7.1	30 - 130	30 m
2-Nitrophenol	ND	230	79	80	1.3	80	77	3.8	30 - 130	30
3&4-Methylphenol (m&p-cresol)	ND	230	76	79	3.9	77	75	2.6	30 - 130	30
3,3'-Dichlorobenzidine	ND	130	103	108	4.7	106	107	0.9	30 - 130	30
3-Nitroaniline	ND	330	77	81	5.1	87	81	7.1	30 - 130	30
4,6-Dinitro-2-methylphenol	ND	230	71	77	8.1	75	72	4.1	30 - 130	30
4-Bromophenyl phenyl ether	ND	230	84	87	3.5	87	81	7.1	30 - 130	30
4-Chloro-3-methylphenol	ND	230	82	86	4.8	84	81	3.6	30 - 130	30
4-Chloroaniline	ND	230	56	62	10.2	67	60	11.0	30 - 130	30
4-Chlorophenyl phenyl ether	ND	230	83	86	3.6	86	82	4.8	30 - 130	30
4-Nitroaniline	ND	230	82	87	5.9	89	83	7.0	30 - 130	30
4-Nitrophenol	ND	230	96	102	6.1	100	96	4.1	30 - 130	30
Acenaphthene	ND	230	79	81	2.5	82	77	6.3	30 - 130	30
Acenaphthylene	ND	130	78	80	2.5	81	77	5.1	30 - 130	30
Acetophenone	ND	230	65	67	3.0	67	64	4.6	30 - 130	30
Aniline	ND	330	49	51	4.0	52	43	18.9	30 - 130	30
Anthracene	ND	230	78	82	5.0	82	77	6.3	30 - 130	30
Benz(a)anthracene	ND	230	84	88	4.7	87	83	4.7	30 - 130	30
Benzidine	ND	330	50	57	13.1	30	32	6.5	30 - 130	30
Benzo(a)pyrene	ND	130	81	88	8.3	88	83	5.8	30 - 130	30
Benzo(b)fluoranthene	ND	160	82	89	8.2	89	82	8.2	30 - 130	30
Benzo(ghi)perylene	ND	230	72	79	9.3	72	75	4.1	30 - 130	30
Benzo(k)fluoranthene	ND	230	84	90	6.9	86	80	7.2	30 - 130	30
Benzoic Acid	ND	670	66	70	5.9	45	44	2.2	30 - 130	30
Benzyl butyl phthalate	ND	230	83	88	5.8	86	82	4.8	30 - 130	30
Bis(2-chloroethoxy)methane	ND	230	67	68	1.5	68	66	3.0	30 - 130	30
Bis(2-chloroethyl)ether	ND	130	57	58	1.7	57	54	5.4	30 - 130	30
Bis(2-chloroisopropyl)ether	ND	230	52	53	1.9	52	50	3.9	30 - 130	30
Bis(2-ethylhexyl)phthalate	ND	230	82	87	5.9	85	80	6.1	30 - 130	30
Carbazole	ND	230	79	83	4.9	81	78	3.8	30 - 130	30
Chrysene	ND	230	80	86	7.2	85	79	7.3	30 - 130	30
Dibenz(a,h)anthracene	ND	130	77	84	8.7	80	82	2.5	30 - 130	30

QA/QC Data

SDG I.D.: GCI29073

Parameter	Blank	Blk RL	LCS	LCSD	LCS	MS	MSD	MS	% Rec Limits	% RPD Limits
			%	%	RPD	%	%	RPD	Limits	
Dibenzofuran	ND	230	77	80	3.8	81	76	6.4	30 - 130	30
Diethyl phthalate	ND	230	81	86	6.0	86	81	6.0	30 - 130	30
Dimethylphthalate	ND	230	81	85	4.8	85	81	4.8	30 - 130	30
Di-n-butylphthalate	ND	670	85	91	6.8	89	85	4.6	30 - 130	30
Di-n-octylphthalate	ND	230	86	90	4.5	90	86	4.5	30 - 130	30
Fluoranthene	ND	230	80	85	6.1	84	80	4.9	30 - 130	30
Fluorene	ND	230	83	86	3.6	86	82	4.8	30 - 130	30
Hexachlorobenzene	ND	130	83	86	3.6	86	82	4.8	30 - 130	30
Hexachlorobutadiene	ND	230	78	77	1.3	77	73	5.3	30 - 130	30
Hexachlorocyclopentadiene	ND	230	61	60	1.7	60	56	6.9	30 - 130	30
Hexachloroethane	ND	130	64	64	0.0	64	58	9.8	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	72	79	9.3	73	74	1.4	30 - 130	30
Isophorone	ND	130	65	66	1.5	66	64	3.1	30 - 130	30
Naphthalene	ND	230	68	68	0.0	68	65	4.5	30 - 130	30
Nitrobenzene	ND	130	70	72	2.8	72	68	5.7	30 - 130	30
N-Nitrosodimethylamine	ND	230	58	59	1.7	57	50	13.1	30 - 130	30
N-Nitrosodi-n-propylamine	ND	130	70	72	2.8	73	69	5.6	30 - 130	30
N-Nitrosodiphenylamine	ND	130	79	82	3.7	82	77	6.3	30 - 130	30
Pentachloronitrobenzene	ND	230	92	95	3.2	96	91	5.3	30 - 130	30
Pentachlorophenol	ND	230	77	80	3.8	71	71	0.0	30 - 130	30
Phenanthrene	ND	130	76	80	5.1	79	75	5.2	30 - 130	30
Phenol	ND	230	71	74	4.1	74	70	5.6	30 - 130	30
Pyrene	ND	230	79	85	7.3	83	79	4.9	30 - 130	30
Pyridine	ND	230	48	47	2.1	44	38	14.6	30 - 130	30
% 2,4,6-Tribromophenol	89	%	87	92	5.6	88	84	4.7	30 - 130	30
% 2-Fluorobiphenyl	82	%	76	79	3.9	80	75	6.5	30 - 130	30
% 2-Fluorophenol	65	%	63	63	0.0	61	59	3.3	30 - 130	30
% Nitrobenzene-d5	74	%	72	73	1.4	73	70	4.2	30 - 130	30
% Phenol-d5	69	%	68	70	2.9	69	66	4.4	30 - 130	30
% Terphenyl-d14	86	%	81	87	7.1	86	80	7.2	30 - 130	30

**Comment:**

Additional 8270 criteria: Four of the compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 575263 (ug/kg), QC Sample No: CI29094 (CI29073, CI29075)

**Polynuclear Aromatic HC - Soil**

1,4-dioxane	ND	67	46	45	2.2	46	42	9.1	30 - 130	30
% 2-Fluorobiphenyl	58	%	55	57	3.6	61	55	10.3	30 - 130	30
% Nitrobenzene-d5	90	%	82	94	13.6	95	84	12.3	30 - 130	30
% Terphenyl-d14	91	%	86	84	2.4	85	82	3.6	30 - 130	30

QA/QC Batch 575406 (ug/kg), QC Sample No: CI29828 (CI29074, CI29075)

**Volatiles - Soil (Low Level)**

1,1,1,2-Tetrachloroethane	ND	5.0	95	106	10.9				70 - 130	30
1,1,1-Trichloroethane	ND	5.0	93	106	13.1				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	93	103	10.2				70 - 130	30
1,1,2-Trichloroethane	ND	5.0	89	97	8.6				70 - 130	30
1,1-Dichloroethane	ND	5.0	96	107	10.8				70 - 130	30
1,1-Dichloroethene	ND	5.0	91	103	12.4				70 - 130	30
1,1-Dichloropropene	ND	5.0	91	102	11.4				70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	89	97	8.6				70 - 130	30
1,2,3-Trichloropropane	ND	5.0	96	108	11.8				70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	95	102	7.1				70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	95	106	10.9				70 - 130	30

QA/QC Data

SDG I.D.: GCI29073

Parameter	Blank	Blk	RL	LCS	LCSD	LCS	MS	MSD	MS	%	%
				%	%	RPD	%	%	RPD	Rec	RPD
1,2-Dibromo-3-chloropropane	ND	5.0		87	99	12.9				70 - 130	30
1,2-Dibromoethane	ND	5.0		91	101	10.4				70 - 130	30
1,2-Dichlorobenzene	ND	5.0		90	101	11.5				70 - 130	30
1,2-Dichloroethane	ND	5.0		95	105	10.0				70 - 130	30
1,2-Dichloropropane	ND	5.0		93	105	12.1				70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0		93	105	12.1				70 - 130	30
1,3-Dichlorobenzene	ND	5.0		91	103	12.4				70 - 130	30
1,3-Dichloropropane	ND	5.0		95	105	10.0				70 - 130	30
1,4-Dichlorobenzene	ND	5.0		90	100	10.5				70 - 130	30
2,2-Dichloropropane	ND	5.0		95	113	17.3				70 - 130	30
2-Chlorotoluene	ND	5.0		92	103	11.3				70 - 130	30
2-Hexanone	ND	25		78	85	8.6				70 - 130	30
2-Isopropyltoluene	ND	5.0		92	104	12.2				70 - 130	30
4-Chlorotoluene	ND	5.0		92	103	11.3				70 - 130	30
4-Methyl-2-pentanone	ND	25		85	95	11.1				70 - 130	30
Acetone	ND	10		64	69	7.5				70 - 130	30
Acrylonitrile	ND	5.0		89	97	8.6				70 - 130	30
Benzene	ND	1.0		93	104	11.2				70 - 130	30
Bromobenzene	ND	5.0		91	101	10.4				70 - 130	30
Bromochloromethane	ND	5.0		87	98	11.9				70 - 130	30
Bromodichloromethane	ND	5.0		91	101	10.4				70 - 130	30
Bromoform	ND	5.0		88	100	12.8				70 - 130	30
Bromomethane	ND	5.0		114	129	12.3				70 - 130	30
Carbon Disulfide	ND	5.0		104	118	12.6				70 - 130	30
Carbon tetrachloride	ND	5.0		90	85	5.7				70 - 130	30
Chlorobenzene	ND	5.0		93	103	10.2				70 - 130	30
Chloroethane	ND	5.0		103	117	12.7				70 - 130	30
Chloroform	ND	5.0		90	101	11.5				70 - 130	30
Chloromethane	ND	5.0		97	111	13.5				70 - 130	30
cis-1,2-Dichloroethene	ND	5.0		90	100	10.5				70 - 130	30
cis-1,3-Dichloropropene	ND	5.0		95	106	10.9				70 - 130	30
Dibromochloromethane	ND	3.0		91	103	12.4				70 - 130	30
Dibromomethane	ND	5.0		87	96	9.8				70 - 130	30
Dichlorodifluoromethane	ND	5.0		111	127	13.4				70 - 130	30
Ethylbenzene	ND	1.0		93	104	11.2				70 - 130	30
Hexachlorobutadiene	ND	5.0		94	104	10.1				70 - 130	30
Isopropylbenzene	ND	1.0		94	107	12.9				70 - 130	30
m&p-Xylene	ND	2.0		95	105	10.0				70 - 130	30
Methyl ethyl ketone	ND	5.0		80	85	6.1				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0		97	107	9.8				70 - 130	30
Methylene chloride	ND	5.0		73	80	9.2				70 - 130	30
Naphthalene	ND	5.0		93	104	11.2				70 - 130	30
n-Butylbenzene	ND	1.0		93	104	11.2				70 - 130	30
n-Propylbenzene	ND	1.0		92	103	11.3				70 - 130	30
o-Xylene	ND	2.0		94	105	11.1				70 - 130	30
p-Isopropyltoluene	ND	1.0		96	108	11.8				70 - 130	30
sec-Butylbenzene	ND	1.0		105	119	12.5				70 - 130	30
Styrene	ND	5.0		97	108	10.7				70 - 130	30
tert-Butylbenzene	ND	1.0		92	105	13.2				70 - 130	30
Tetrachloroethene	ND	5.0		86	98	13.0				70 - 130	30
Tetrahydrofuran (THF)	ND	5.0		88	96	8.7				70 - 130	30
Toluene	ND	1.0		91	101	10.4				70 - 130	30
trans-1,2-Dichloroethene	ND	5.0		95	108	12.8				70 - 130	30

**QA/QC Data**

SDG I.D.: GCI29073

Parameter	Blank	Blk	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
trans-1,3-Dichloropropene	ND	5.0	96	106	9.9				70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	95	107	11.9				70 - 130	30
Trichloroethene	ND	5.0	91	103	12.4				70 - 130	30
Trichlorofluoromethane	ND	5.0	111	125	11.9				70 - 130	30
Trichlorotrifluoroethane	ND	5.0	95	107	11.9				70 - 130	30
Vinyl chloride	ND	5.0	107	121	12.3				70 - 130	30
% 1,2-dichlorobenzene-d4	106	%	103	104	1.0				70 - 130	30
% Bromofluorobenzene	97	%	102	100	2.0				70 - 130	30
% Dibromofluoromethane	102	%	98	99	1.0				70 - 130	30
% Toluene-d8	102	%	100	99	1.0				70 - 130	30

**Comment:**

The Low Level MS/MSD are not reported for this batch.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.

s = This parameter is outside laboratory Blank Surrogate specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis Shiller, Laboratory Director

June 13, 2021

Sunday, June 13, 2021

Criteria: NY: 375, 375NR, 375RRS, 375RS

State: NY

## Sample Criteria Exceedances Report

### GCI29073 - WALDENE-IPARK

Page 1 of 1

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CI29073	\$PESTSMDPR	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.0	2.4	3.3	3.3	ug/Kg
CI29073	\$PESTSMDPR	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	41	2.4	3.3	3.3	ug/Kg
CI29075	NI-SM	Nickel	NY / 375-6.8 Metals / Unrestricted Use Soil	32.7	0.43	30	30	mg/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## NY Temperature Narration

June 13, 2021

SDG I.D.: GCI29073

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The samples in this delivery group were received at 2.1°C.  
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)





# Technical Report

prepared for:

**Phoenix Environmental Laboratories, Inc.**  
P.O. Box 370, 587 East Middle Turnpike  
Manchester CT, 06040  
**Attention: Helen Geoghegan**

Report Date: 05/24/2021

**Client Project ID: CI29073-CI29108**  
York Project (SDG) No.: 21E0675

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
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132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)

Report Date: 05/24/2021  
Client Project ID: CI29073-CI29108  
York Project (SDG) No.: 21E0675

**Phoenix Environmental Laboratories, Inc.**  
P.O. Box 370, 587 East Middle Turnpike  
Manchester CT, 06040  
Attention: Helen Geoghegan

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on May 14, 2021 and listed below. The project was identified as your project: **CI29073-CI29108**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
21E0675-01	CI29073	Soil	05/11/2021	05/14/2021
21E0675-02	CI29075	Soil	05/11/2021	05/14/2021
21E0675-03	CI29076	Soil	05/11/2021	05/14/2021
21E0675-04	CI29078	Soil	05/11/2021	05/14/2021
21E0675-05	CI29079	Soil	05/11/2021	05/14/2021
21E0675-06	CI29081	Soil	05/11/2021	05/14/2021
21E0675-07	CI29082	Soil	05/11/2021	05/14/2021
21E0675-08	CI29084	Soil	05/11/2021	05/14/2021
21E0675-09	CI29085	Soil	05/11/2021	05/14/2021
21E0675-10	CI29087	Soil	05/11/2021	05/14/2021
21E0675-11	CI29088	Soil	05/11/2021	05/14/2021
21E0675-12	CI29090	Soil	05/11/2021	05/14/2021
21E0675-13	CI29091	Soil	05/11/2021	05/14/2021
21E0675-14	CI29093	Soil	05/11/2021	05/14/2021
21E0675-15	CI29094	Soil	05/11/2021	05/14/2021
21E0675-16	CI29096	Soil	05/11/2021	05/14/2021
21E0675-17	CI29097	Soil	05/11/2021	05/14/2021
21E0675-18	CI29099	Soil	05/11/2021	05/14/2021
21E0675-19	CI29100	Soil	05/11/2021	05/14/2021
21E0675-20	CI29102	Soil	05/11/2021	05/14/2021
21E0675-21	CI29103	Soil	05/11/2021	05/14/2021
21E0675-22	CI29105	Soil	05/11/2021	05/14/2021

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
21E0675-23	CI29106	Soil	05/11/2021	05/14/2021
21E0675-24	CI29108	Soil	05/11/2021	05/14/2021

### **General Notes for York Project (SDG) No.: 21E0675**

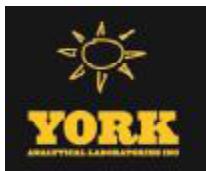
1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**

**Date:** 05/24/2021

Cassie L. Mosher  
Laboratory Manager





## Sample Information

Client Sample ID: CI29073

York Sample ID: 21E0675-01

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:40 pm

Date Received  
05/14/2021

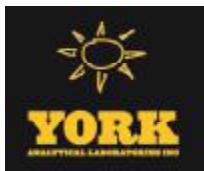
### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
335-67-1	<b>* Perfluorooctanoic acid (PFOA)</b>	<b>0.471</b>		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
375-22-4	<b>* Perfluoro-n-butanoic acid (PFBA)</b>	<b>0.871</b>		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL



## Sample Information

Client Sample ID: CI29073

York Sample ID: 21E0675-01

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 12:40 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
<b>Surrogate Recoveries</b>										
	<i>Surrogate: M3PFBs</i>	77.2 %			25-150					
	<i>Surrogate: M5PFHxA</i>	81.5 %			25-150					
	<i>Surrogate: M4PFHpA</i>	73.6 %			25-150					
	<i>Surrogate: M3PFHxS</i>	72.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	86.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	79.5 %			25-150					
	<i>Surrogate: M7PFUdA</i>	81.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	83.3 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	59.0 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	93.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	66.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	88.2 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	57.0 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	82.2 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	101 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	247 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	262 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	81.0 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	82.6		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

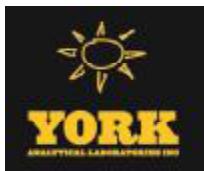
Client Sample ID: CI29075

York Sample ID: 21E0675-02

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 12:40 pm      Date Received 05/14/2021



## Sample Information

Client Sample ID: CI29075

York Sample ID: 21E0675-02

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:40 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

#### Log-in Notes:

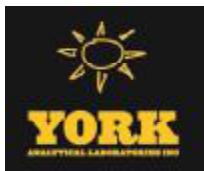
#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL

#### Surrogate Recoveries

*Surrogate: M3PFBS*      Result      Acceptance Range

72.8 %      25-150



## Sample Information

Client Sample ID: CI29075

York Sample ID: 21E0675-02

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:40 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M5PFHxA</i>	76.2 %			25-150					
	<i>Surrogate: M4PFHpA</i>	74.6 %			25-150					
	<i>Surrogate: M3PFHxS</i>	69.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	80.0 %			25-150					
	<i>Surrogate: M6PFDA</i>	71.1 %			25-150					
	<i>Surrogate: M7PFUdA</i>	65.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	63.2 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	58.3 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	88.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	57.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	83.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	51.9 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	62.5 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	79.4 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	160 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	146 %			25-150					
	<i>Surrogate: M9PFNA</i>	79.5 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	86.2		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

Certifications: CTDH

## Sample Information

Client Sample ID: CI29076

York Sample ID: 21E0675-03

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

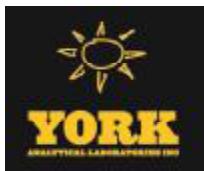
Collection Date/Time  
May 11, 2021 8:20 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29076

**York Sample ID:** 21E0675-03

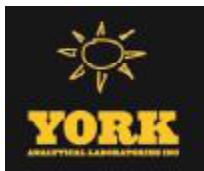
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 8:20 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	79.2 %	25-150
M5PFHxA	81.3 %	25-150



## Sample Information

Client Sample ID: CI29076

York Sample ID: 21E0675-03

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 8:20 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	83.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	71.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	77.4 %			25-150					
	<i>Surrogate: M7PFUdA</i>	76.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	76.1 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	72.1 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	92.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	71.2 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	86.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	57.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	68.4 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	90.6 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	117 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	131 %			25-150					
	<i>Surrogate: M9PFNA</i>	85.1 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	92.2		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29078

York Sample ID: 21E0675-04

York Project (SDG) No.  
21E0675

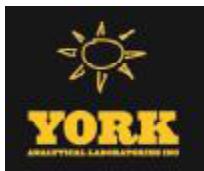
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 8:20 am      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29078

**York Sample ID:** 21E0675-04

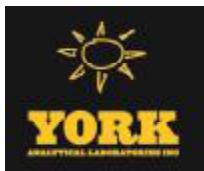
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 8:20 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
Surrogate: M3PFBS	65.5 %	25-150
Surrogate: M5PFHxA	77.1 %	25-150



## Sample Information

Client Sample ID: CI29078

York Sample ID: 21E0675-04

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 8:20 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	76.6 %			25-150					
	<i>Surrogate: M3PFHxS</i>	63.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	76.5 %			25-150					
	<i>Surrogate: M6PFDA</i>	73.4 %			25-150					
	<i>Surrogate: M7PFUdA</i>	79.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	69.8 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	70.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	88.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	62.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	82.6 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	56.7 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	70.2 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	95.8 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	109 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	107 %			25-150					
	<i>Surrogate: M9PFNA</i>	84.7 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.0		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29079

York Sample ID: 21E0675-05

York Project (SDG) No.  
21E0675

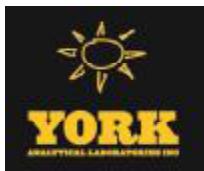
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 11:50 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI29079

**York Sample ID:** 21E0675-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 11:50 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
1763-23-1	<b>* Perfluorooctanesulfonic acid (PFOS)</b>	<b>1.65</b>		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
2706-90-3	<b>* Perfluoropentanoic acid (PFPeA)</b>	<b>0.283</b>		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
375-22-4	<b>* Perfluoro-n-butanoic acid (PFBA)</b>	<b>1.10</b>		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL

### Surrogate Recoveries      Result      Acceptance Range

Surrogate: M3PFBS	71.9 %	25-150
Surrogate: M5PFHxA	74.5 %	25-150

120 RESEARCH DRIVE

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STRATFORD, CT 06615

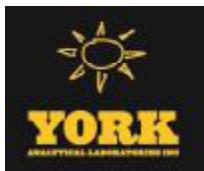
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@ Page 12 of 67



## Sample Information

Client Sample ID: CI29079

York Sample ID: 21E0675-05

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 11:50 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	49.6 %			25-150					
	<i>Surrogate: M3PFHxS</i>	67.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	79.8 %			25-150					
	<i>Surrogate: M6PFDA</i>	81.9 %			25-150					
	<i>Surrogate: M7PFUdA</i>	67.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	54.7 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	39.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	80.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	62.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	75.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	47.9 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	68.5 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	72.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	278 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	349 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	71.4 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.4		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29081

York Sample ID: 21E0675-06

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 11:50 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29081

**York Sample ID:** 21E0675-06

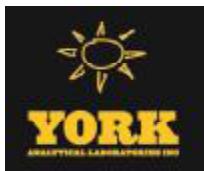
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 11:50 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	80.3 %	25-150
M5PFHxA	77.3 %	25-150



## Sample Information

Client Sample ID: CI29081

York Sample ID: 21E0675-06

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 11:50 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	79.8 %			25-150					
	<i>Surrogate: M3PFHxS</i>	77.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.3 %			25-150					
	<i>Surrogate: M6PFDA</i>	77.5 %			25-150					
	<i>Surrogate: M7PFUdA</i>	85.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	83.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	75.2 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	93.9 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	72.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	84.9 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	60.9 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	70.5 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	85.1 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	125 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	147 %			25-150					
	<i>Surrogate: M9PFNA</i>	92.6 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	95.1		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29082

York Sample ID: 21E0675-07

York Project (SDG) No.  
21E0675

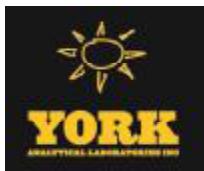
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 10:40 am      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29082

**York Sample ID:** 21E0675-07

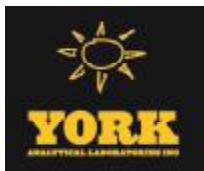
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
21E0675	CI29073-CI29108	Soil	May 11, 2021 10:40 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL

### Surrogate Recoveries

	Result	Acceptance Range
Surrogate: M3PFBS	80.6 %	25-150
Surrogate: M5PFHxA	77.4 %	25-150



## Sample Information

Client Sample ID: CI29082

York Sample ID: 21E0675-07

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 10:40 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	79.2 %			25-150					
	<i>Surrogate: M3PFHxS</i>	73.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.8 %			25-150					
	<i>Surrogate: M6PFDA</i>	80.3 %			25-150					
	<i>Surrogate: M7PFUdA</i>	73.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	72.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	71.5 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	90.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	68.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	85.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	56.6 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	66.1 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	74.7 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	127 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	141 %			25-150					
	<i>Surrogate: M9PFNA</i>	77.2 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.2		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29084

York Sample ID: 21E0675-08

York Project (SDG) No.  
21E0675

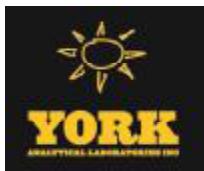
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 10:40 am      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29084

**York Sample ID:** 21E0675-08

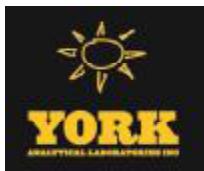
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 10:40 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
Surrogate: M3PFBS	87.5 %	25-150
Surrogate: M5PFHxA	81.6 %	25-150



## Sample Information

Client Sample ID: CI29084

York Sample ID: 21E0675-08

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 10:40 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	85.4 %			25-150					
	<i>Surrogate: M3PFHxS</i>	76.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	74.1 %			25-150					
	<i>Surrogate: M6PFDA</i>	83.3 %			25-150					
	<i>Surrogate: M7PFUdA</i>	83.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	82.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	75.6 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	98.3 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	81.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	92.3 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	64.0 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	66.9 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	81.7 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	116 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	133 %			25-150					
	<i>Surrogate: M9PFNA</i>	86.8 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.4		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29085

York Sample ID: 21E0675-09

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 9:50 am      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29085

**York Sample ID:** 21E0675-09

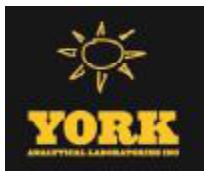
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 9:50 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	85.4 %	25-150
M5PFHxA	85.3 %	25-150



## Sample Information

Client Sample ID: CI29085

York Sample ID: 21E0675-09

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 9:50 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	85.2 %			25-150					
	<i>Surrogate: M3PFHxS</i>	74.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	86.7 %			25-150					
	<i>Surrogate: M6PFDA</i>	81.2 %			25-150					
	<i>Surrogate: M7PFUdA</i>	71.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	73.7 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	64.5 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	105 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	73.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	92.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	55.1 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	65.0 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	77.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	107 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	121 %			25-150					
	<i>Surrogate: M9PFNA</i>	91.0 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.8		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29087

York Sample ID: 21E0675-10

York Project (SDG) No.  
21E0675

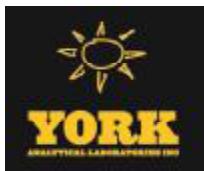
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 9:50 am      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29087

**York Sample ID:** 21E0675-10

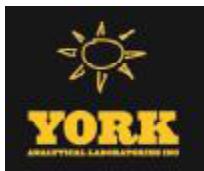
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 9:50 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	81.5 %	25-150
M5PFHxA	81.5 %	25-150



## Sample Information

Client Sample ID: CI29087

York Sample ID: 21E0675-10

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 9:50 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	81.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	67.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	80.4 %			25-150					
	<i>Surrogate: M6PFDA</i>	76.1 %			25-150					
	<i>Surrogate: M7PFUdA</i>	77.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	62.1 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	56.8 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	103 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	83.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	94.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	52.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	55.1 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	64.3 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	74.0 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	85.6 %			25-150					
	<i>Surrogate: M9PFNA</i>	94.8 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	94.5		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29088

York Sample ID: 21E0675-11

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

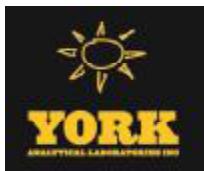
Collection Date/Time  
May 11, 2021 9:10 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29088

**York Sample ID:** 21E0675-11

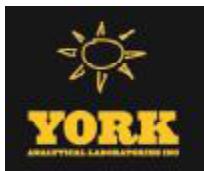
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 9:10 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	82.1 %	25-150
M5PFHxA	81.4 %	25-150



## Sample Information

Client Sample ID: CI29088

York Sample ID: 21E0675-11

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 9:10 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	83.2 %			25-150					
	<i>Surrogate: M3PFHxS</i>	74.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	85.2 %			25-150					
	<i>Surrogate: M6PFDA</i>	86.9 %			25-150					
	<i>Surrogate: M7PFUdA</i>	74.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	78.1 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	69.9 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	104 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	73.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	92.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	60.7 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	72.3 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	86.4 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	109 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	136 %			25-150					
	<i>Surrogate: M9PFNA</i>	92.9 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	91.5		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29090

York Sample ID: 21E0675-12

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

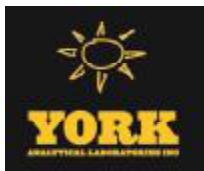
Collection Date/Time  
May 11, 2021 9:10 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29090

**York Sample ID:** 21E0675-12

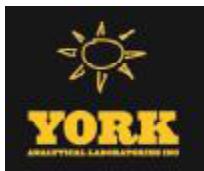
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 9:10 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	82.3 %	25-150
M5PFHxA	80.2 %	25-150



## Sample Information

Client Sample ID: CI29090

York Sample ID: 21E0675-12

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 9:10 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	78.7 %			25-150					
	<i>Surrogate: M3PFHxS</i>	72.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	78.0 %			25-150					
	<i>Surrogate: M6PFDA</i>	72.6 %			25-150					
	<i>Surrogate: M7PFUdA</i>	77.2 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	76.5 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	71.8 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	100 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	70.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	91.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	58.3 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	64.3 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	79.2 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	91.6 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	97.1 %			25-150					
	<i>Surrogate: M9PFNA</i>	81.3 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	81.9		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29091

York Sample ID: 21E0675-13

York Project (SDG) No.  
21E0675

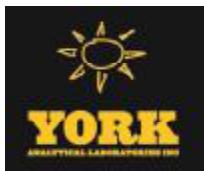
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 1:15 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29091

**York Sample ID:** 21E0675-13

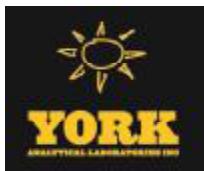
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 1:15 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.381		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.928		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	77.4 %	25-150
Surrogate: M5PFHxA	81.3 %	25-150



## Sample Information

Client Sample ID: CI29091

York Sample ID: 21E0675-13

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 1:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	64.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	70.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	80.4 %			25-150					
	<i>Surrogate: M6PFDA</i>	58.9 %			25-150					
	<i>Surrogate: M7PFUdA</i>	60.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	60.2 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	42.2 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	90.6 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	47.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	84.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	46.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	53.5 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	61.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	163 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	134 %			25-150					
	<i>Surrogate: M9PFNA</i>	66.2 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	86.4		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29093

York Sample ID: 21E0675-14

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 1:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29093

**York Sample ID:** 21E0675-14

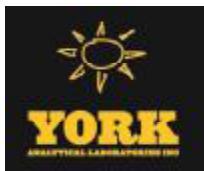
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
21E0675	CI29073-CI29108	Soil	May 11, 2021 1:15 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	98.2 %	25-150
M5PFHxA	91.4 %	25-150



## Sample Information

Client Sample ID: CI29093

York Sample ID: 21E0675-14

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 1:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	87.7 %			25-150					
	<i>Surrogate: M3PFHxS</i>	80.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	86.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	80.9 %			25-150					
	<i>Surrogate: M7PFUdA</i>	89.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	79.5 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	78.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBBA)</i>	110 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	98.2 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	102 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	60.9 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	64.1 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	81.2 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	74.9 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	85.1 %			25-150					
	<i>Surrogate: M9PFNA</i>	103 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	94.8		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29094

York Sample ID: 21E0675-15

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

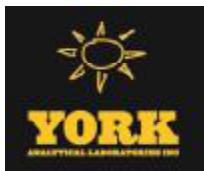
Collection Date/Time  
May 11, 2021 12:10 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29094

**York Sample ID:** 21E0675-15

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 12:10 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.392		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.438		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	1.93		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	71.0 %	25-150
Surrogate: M5PFHxA	74.3 %	25-150

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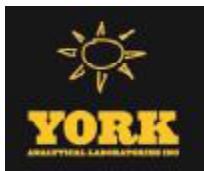
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

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## Sample Information

Client Sample ID: CI29094

York Sample ID: 21E0675-15

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:10 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	56.7 %			25-150					
	<i>Surrogate: M3PFHxS</i>	66.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.4 %			25-150					
	<i>Surrogate: M6PFDA</i>	67.5 %			25-150					
	<i>Surrogate: M7PFUdA</i>	67.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	63.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	45.8 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	82.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	54.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	77.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	51.3 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	59.7 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	72.9 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	164 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	163 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	67.4 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	80.9		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29096

York Sample ID: 21E0675-16

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

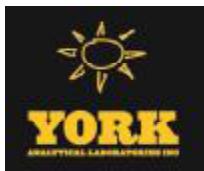
Collection Date/Time  
May 11, 2021 12:10 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29096

**York Sample ID:** 21E0675-16

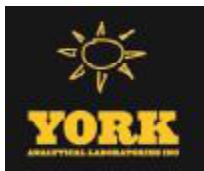
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 12:10 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	77.9 %	25-150
M5PFHxA	82.7 %	25-150



## Sample Information

Client Sample ID: CI29096

York Sample ID: 21E0675-16

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:10 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	81.9 %			25-150					
	<i>Surrogate: M3PFHxS</i>	68.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	83.3 %			25-150					
	<i>Surrogate: M6PFDA</i>	74.4 %			25-150					
	<i>Surrogate: M7PFUdA</i>	71.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	59.2 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	54.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	103 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	71.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	91.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	52.8 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	58.0 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	76.0 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	89.5 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	75.1 %			25-150					
	<i>Surrogate: M9PFNA</i>	89.4 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	74.9		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29097

York Sample ID: 21E0675-17

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

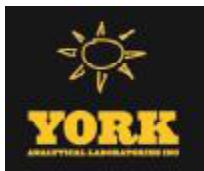
Collection Date/Time  
May 11, 2021 2:30 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29097

**York Sample ID:** 21E0675-17

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 2:30 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.473		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.470		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.601		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	78.1 %	25-150
Surrogate: M5PFHxA	78.8 %	25-150

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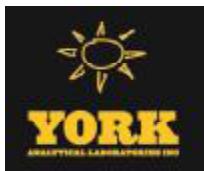
132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

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## Sample Information

Client Sample ID: CI29097

York Sample ID: 21E0675-17

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 2:30 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	71.9 %			25-150					
	<i>Surrogate: M3PFHxS</i>	72.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	84.3 %			25-150					
	<i>Surrogate: M6PFDA</i>	78.7 %			25-150					
	<i>Surrogate: M7PFUdA</i>	71.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	71.6 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	47.7 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	91.9 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	66.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	89.2 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	60.2 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	63.6 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	82.3 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	168 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	160 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	89.7 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.1		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29099

York Sample ID: 21E0675-18

York Project (SDG) No.  
21E0675

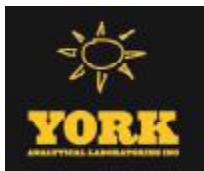
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 2:30 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29099

**York Sample ID:** 21E0675-18

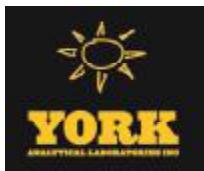
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 2:30 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	82.0 %	25-150
M5PFHxA	78.5 %	25-150



## Sample Information

Client Sample ID: CI29099

York Sample ID: 21E0675-18

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 2:30 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	79.4 %			25-150					
	<i>Surrogate: M3PFHxS</i>	65.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	75.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	66.9 %			25-150					
	<i>Surrogate: M7PFUdA</i>	67.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	69.4 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	64.6 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	92.6 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	68.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	87.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	44.1 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	49.8 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	62.2 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	68.0 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	75.1 %			25-150					
	<i>Surrogate: M9PFNA</i>	76.5 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	97.7		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29100

York Sample ID: 21E0675-19

York Project (SDG) No.  
21E0675

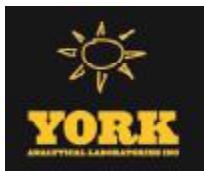
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 3:00 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29100

**York Sample ID:** 21E0675-19

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:00 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	<b>0.842</b>		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	<b>0.621</b>		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	<b>1.62</b>		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	59.1 %	25-150
Surrogate: M5PFHxA	62.9 %	25-150

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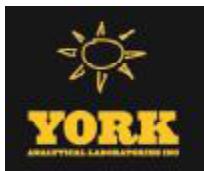
132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@

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## Sample Information

Client Sample ID: CI29100

York Sample ID: 21E0675-19

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 3:00 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	45.8 %			25-150					
	<i>Surrogate: M3PFHxS</i>	51.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	66.1 %			25-150					
	<i>Surrogate: M6PFDA</i>	46.4 %			25-150					
	<i>Surrogate: M7PFUdA</i>	39.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	37.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	26.3 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	68.2 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	39.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	66.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	30.8 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	34.9 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	42.3 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	174 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	130 %			25-150					
	<i>Surrogate: M9PFNA</i>	55.3 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	83.8		%	0.100	1	SM 2540G	05/21/2021 14:08	05/21/2021 14:13	MD

## Sample Information

Client Sample ID: CI29102

York Sample ID: 21E0675-20

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 3:00 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29102

**York Sample ID:** 21E0675-20

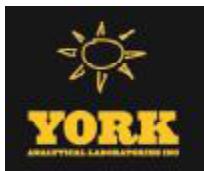
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:00 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
Surrogate: M3PFBS	71.1 %	25-150
Surrogate: M5PFHxA	74.1 %	25-150



## Sample Information

Client Sample ID: CI29102

York Sample ID: 21E0675-20

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 3:00 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	73.9 %			25-150					
	<i>Surrogate: M3PFHxS</i>	60.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	71.6 %			25-150					
	<i>Surrogate: M6PFDA</i>	61.3 %			25-150					
	<i>Surrogate: M7PFUdA</i>	61.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	61.1 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	54.1 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	92.5 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	54.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	84.5 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	42.6 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	45.8 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	63.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	95.0 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	96.4 %			25-150					
	<i>Surrogate: M9PFNA</i>	77.3 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	95.7		%	0.100	1	SM 2540G	05/21/2021 14:08	05/21/2021 14:13	MD

## Sample Information

Client Sample ID: CI29103

York Sample ID: 21E0675-21

York Project (SDG) No.  
21E0675

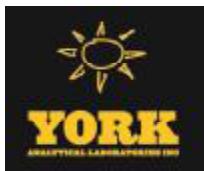
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 3:30 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29103

**York Sample ID:** 21E0675-21

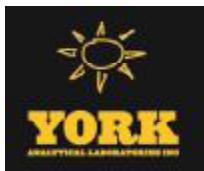
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:30 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	<b>0.330</b>		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	<b>0.763</b>		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	<b>1.13</b>		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
376-06-7	* Perflurotetradecanoic acid (PFTA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	<b>1.06</b>		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL

### Surrogate Recoveries

Surrogate: M3PFBS      Result: 75.1 %      Acceptance Range: 25-150



## Sample Information

Client Sample ID: CI29103

York Sample ID: 21E0675-21

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:30 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M5PFHxA</i>	72.6 %			25-150					
	<i>Surrogate: M4PFHpA</i>	53.0 %			25-150					
	<i>Surrogate: M3PFHxS</i>	63.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	78.2 %			25-150					
	<i>Surrogate: M6PFDA</i>	70.2 %			25-150					
	<i>Surrogate: M7PFUdA</i>	57.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	49.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	34.6 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	83.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	61.2 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	77.5 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	46.2 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	57.4 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	66.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	224 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	235 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	77.7 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	84.5		%	0.100	1	SM 2540G	05/21/2021 14:08	05/21/2021 14:13	MD

Certifications: CTDH

## Sample Information

Client Sample ID: CI29105

York Sample ID: 21E0675-22

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:30 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29105

**York Sample ID:** 21E0675-22

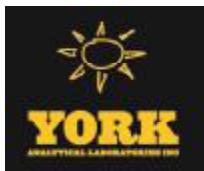
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:30 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	80.9 %	25-150
M5PFHxA	74.0 %	25-150



## Sample Information

Client Sample ID: CI29105

York Sample ID: 21E0675-22

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 3:30 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	74.8 %			25-150					
	<i>Surrogate: M3PFHxS</i>	71.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	78.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	71.0 %			25-150					
	<i>Surrogate: M7PFUdA</i>	73.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	76.5 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	64.5 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	92.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	65.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	86.3 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	53.2 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	58.0 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	78.8 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	166 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	168 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	82.0 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	88.9		%	0.100	1	SM 2540G	05/21/2021 14:08	05/21/2021 14:13	MD

## Sample Information

Client Sample ID: CI29106

York Sample ID: 21E0675-23

York Project (SDG) No.  
21E0675

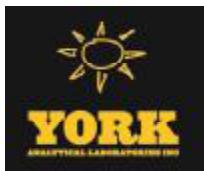
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 3:15 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29106

**York Sample ID:** 21E0675-23

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:15 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.478		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.962		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.983		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	67.6 %	25-150
Surrogate: M5PFHxA	64.1 %	25-150

120 RESEARCH DRIVE

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(203) 325-1371

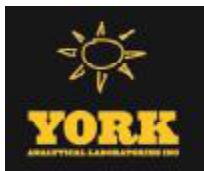
132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@

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## Sample Information

Client Sample ID: CI29106

York Sample ID: 21E0675-23

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	54.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	59.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	78.8 %			25-150					
	<i>Surrogate: M6PFDA</i>	73.8 %			25-150					
	<i>Surrogate: M7PFUdA</i>	61.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	59.6 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	42.5 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	80.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	57.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	74.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	52.0 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	61.1 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	74.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	234 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	252 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	79.3 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	79.5		%	0.100	1	SM 2540G	05/21/2021 14:08	05/21/2021 14:13	MD

## Sample Information

Client Sample ID: CI29108

York Sample ID: 21E0675-24

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29108

**York Sample ID:** 21E0675-24

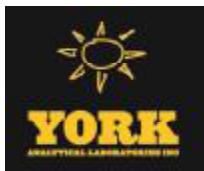
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:15 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
Surrogate: M3PFBS	87.4 %	25-150
Surrogate: M5PFHxA	84.0 %	25-150



## Sample Information

Client Sample ID: CI29108

York Sample ID: 21E0675-24

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	82.3 %			25-150					
	<i>Surrogate: M3PFHxS</i>	74.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	84.6 %			25-150					
	<i>Surrogate: M6PFDA</i>	64.1 %			25-150					
	<i>Surrogate: M7PFUdA</i>	73.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	77.4 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	70.6 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	101 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	67.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	93.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	52.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	58.7 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	76.9 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	108 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	102 %			25-150					
	<i>Surrogate: M9PFNA</i>	83.0 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.7		%	0.100	1	SM 2540G Certifications: CTDOH	05/21/2021 14:08	05/21/2021 14:13	MD



## Analytical Batch Summary

**Batch ID:** BE10920

**Preparation Method:** SPE PFAS Extraction-Soil-EPA 537m    **Prepared By:** SG

YORK Sample ID	Client Sample ID	Preparation Date
21E0675-01	CI29073	05/18/21
21E0675-02	CI29075	05/18/21
21E0675-03	CI29076	05/18/21
21E0675-04	CI29078	05/18/21
21E0675-05	CI29079	05/18/21
21E0675-06	CI29081	05/18/21
21E0675-07	CI29082	05/18/21
21E0675-08	CI29084	05/18/21
21E0675-09	CI29085	05/18/21
21E0675-10	CI29087	05/18/21
21E0675-11	CI29088	05/18/21
21E0675-12	CI29090	05/18/21
21E0675-13	CI29091	05/18/21
21E0675-14	CI29093	05/18/21
21E0675-15	CI29094	05/18/21
21E0675-16	CI29096	05/18/21
21E0675-17	CI29097	05/18/21
BE10920-BLK1	Blank	05/18/21
BE10920-BS1	LCS	05/18/21
BE10920-MS1	Matrix Spike	05/18/21
BE10920-MSD1	Matrix Spike Dup	05/18/21

**Batch ID:** BE10922

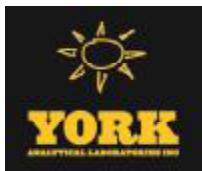
**Preparation Method:** SPE PFAS Extraction-Soil-EPA 537m    **Prepared By:** SG

YORK Sample ID	Client Sample ID	Preparation Date
21E0675-18	CI29099	05/18/21
21E0675-19	CI29100	05/18/21
21E0675-20	CI29102	05/18/21
21E0675-21	CI29103	05/18/21
21E0675-22	CI29105	05/18/21
21E0675-23	CI29106	05/18/21
21E0675-24	CI29108	05/18/21
BE10922-BLK1	Blank	05/18/21
BE10922-BS1	LCS	05/18/21
BE10922-MS1	Matrix Spike	05/18/21
BE10922-MSD1	Matrix Spike Dup	05/18/21

**Batch ID:** BE11134

**Preparation Method:** % Solids Prep    **Prepared By:** MD

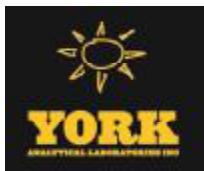
YORK Sample ID	Client Sample ID	Preparation Date
21E0675-01	CI29073	05/21/21
21E0675-02	CI29075	05/21/21
21E0675-03	CI29076	05/21/21
21E0675-04	CI29078	05/21/21
21E0675-05	CI29079	05/21/21



21E0675-06	CI29081	05/21/21
21E0675-07	CI29082	05/21/21
21E0675-08	CI29084	05/21/21
21E0675-09	CI29085	05/21/21
21E0675-10	CI29087	05/21/21
21E0675-11	CI29088	05/21/21
21E0675-12	CI29090	05/21/21
21E0675-13	CI29091	05/21/21
21E0675-14	CI29093	05/21/21
21E0675-15	CI29094	05/21/21
21E0675-16	CI29096	05/21/21
21E0675-17	CI29097	05/21/21
21E0675-18	CI29099	05/21/21
BE11134-DUP1	Duplicate	05/21/21

**Batch ID:** BE11139      **Preparation Method:** % Solids Prep      **Prepared By:** MD

YORK Sample ID	Client Sample ID	Preparation Date
21E0675-19	CI29100	05/21/21
21E0675-20	CI29102	05/21/21
21E0675-21	CI29103	05/21/21
21E0675-22	CI29105	05/21/21
21E0675-23	CI29106	05/21/21
21E0675-24	CI29108	05/21/21
BE11139-DUP1	Duplicate	05/21/21



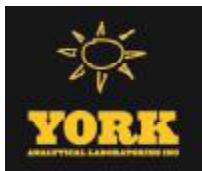
## PFAS Target compounds by LC/MS-MS - Quality Control Data

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC %REC	%REC Limits	Flag	RPD RPD	RPD Limit	Flag
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### **Batch BE10920 - SPE PFAS Extraction-Soil-EPA 537m**

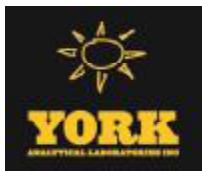
<b>Blank (BE10920-BLK1)</b>											Prepared: 05/18/2021 Analyzed: 05/21/2021
Perfluorobutanesulfonic acid (PFBS)	ND	0.244	ug/kg wet								
Perfluorohexanoic acid (PFHxA)	ND	0.244	"								
Perfluoroheptanoic acid (PFHpA)	ND	0.244	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	0.244	"								
Perfluorooctanoic acid (PFOA)	ND	0.244	"								
Perfluorooctanesulfonic acid (PFOS)	ND	0.244	"								
Perfluorononanoic acid (PFNA)	ND	0.244	"								
Perfluorodecanoic acid (PFDA)	ND	0.244	"								
Perfluoroundecanoic acid (PFUnA)	ND	0.244	"								
Perfluorododecanoic acid (PFDoA)	ND	0.244	"								
Perfluorotridecanoic acid (PFTrDA)	ND	0.244	"								
Perfluorotetradecanoic acid (PFTA)	ND	0.244	"								
N-MeFOSAA	ND	0.244	"								
N-EtFOSAA	ND	0.244	"								
Perfluoropentanoic acid (PFPeA)	ND	0.244	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.244	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.244	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.244	"								
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	ND	0.244	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	0.244	"								
Perfluoro-n-butanoic acid (PFBA)	ND	0.244	"								
<i>Surrogate: M3PFBS</i>	4.08	"	4.54		90.0	25-150					
<i>Surrogate: M5PFHxA</i>	4.24	"	4.88		86.9	25-150					
<i>Surrogate: M4PFHpA</i>	4.33	"	4.88		88.6	25-150					
<i>Surrogate: M3PFHxS</i>	4.02	"	4.62		87.0	25-150					
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	4.70	"	4.88		96.3	25-150					
<i>Surrogate: M6PFDA</i>	4.52	"	4.88		92.6	25-150					
<i>Surrogate: M7PFUdA</i>	3.92	"	4.88		80.3	25-150					
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	3.86	"	4.88		79.1	25-150					
<i>Surrogate: M2PFTeDA</i>	3.98	"	4.88		81.6	10-150					
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	4.80	"	4.88		98.4	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	4.20	"	4.67		89.8	25-150					
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	4.45	"	4.88		91.2	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	3.59	"	4.88		73.5	10-150					
<i>Surrogate: d3-N-MeFOSAA</i>	4.55	"	4.88		93.3	25-150					
<i>Surrogate: d5-N-EtFOSAA</i>	5.45	"	4.88		112	25-150					
<i>Surrogate: M2-6:2 FTS</i>	9.58	"	4.63		207	25-150					
<i>Surrogate: M2-8:2 FTS</i>	8.81	"	4.68		188	25-150					
<i>Surrogate: M9PFNA</i>	4.59	"	4.88		94.0	25-150					



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

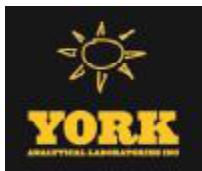
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10920 - SPE PFAS Extraction-Soil-EPA 537m</b>											
Prepared: 05/18/2021 Analyzed: 05/21/2021											
<b>LCS (BE10920-BS1)</b>											
Perfluorobutanesulfonic acid (PFBS)	4.49	0.239	ug/kg wet	4.24	106	50-130					
Perfluorohexanoic acid (PFHxA)	5.23	0.239	"	4.79	109	50-130					
Perfluoroheptanoic acid (PFHpA)	4.45	0.239	"	4.79	92.9	50-130					
Perfluorohexanesulfonic acid (PFHxS)	4.38	0.239	"	4.36	100	50-130					
Perfluorooctanoic acid (PFOA)	4.65	0.239	"	4.79	97.3	50-130					
Perfluorooctanesulfonic acid (PFOS)	5.51	0.239	"	4.43	124	50-130					
Perfluorononanoic acid (PFNA)	4.21	0.239	"	4.79	88.0	50-130					
Perfluorodecanoic acid (PFDA)	4.94	0.239	"	4.79	103	50-130					
Perfluoroundecanoic acid (PFUnA)	4.77	0.239	"	4.79	99.7	50-130					
Perfluorododecanoic acid (PFDoA)	5.05	0.239	"	4.79	105	50-130					
Perfluorotridecanoic acid (PFTrDA)	5.20	0.239	"	4.79	109	50-130					
Perfluorotetradecanoic acid (PFTA)	4.94	0.239	"	4.79	103	50-130					
N-MeFOSAA	5.34	0.239	"	4.79	112	50-130					
N-EtFOSAA	4.62	0.239	"	4.79	96.5	50-130					
Perfluoropentanoic acid (PFPeA)	5.01	0.239	"	4.79	105	50-130					
Perfluoro-1-octanesulfonamide (FOSA)	5.01	0.239	"	4.79	105	50-130					
Perfluoro-1-heptanesulfonic acid (PFHpS)	5.19	0.239	"	4.55	114	50-130					
Perfluoro-1-decanesulfonic acid (PFDS)	3.88	0.239	"	4.62	84.1	50-130					
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	5.01	0.239	"	4.55	110	50-130					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.88	0.239	"	4.59	106	50-130					
Perfluoro-n-butanoic acid (PFBA)	4.95	0.239	"	4.79	103	50-130					
Surrogate: M3PFBS	4.14		"	4.45	93.1	25-150					
Surrogate: M5PFHxA	4.16		"	4.79	86.9	25-150					
Surrogate: M4PFHpA	4.47		"	4.79	93.5	25-150					
Surrogate: M3PFHxS	4.26		"	4.53	94.1	25-150					
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	4.35		"	4.79	90.8	25-150					
Surrogate: M6PFDA	4.01		"	4.79	83.7	25-150					
Surrogate: M7PFUdA	3.87		"	4.79	80.9	25-150					
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.69		"	4.79	77.2	25-150					
Surrogate: M2PTeDA	3.52		"	4.79	73.6	10-150					
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.83		"	4.79	101	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.97		"	4.58	86.6	25-150					
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)	4.52		"	4.79	94.5	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.28		"	4.79	68.6	10-150					
Surrogate: d3-N-MeFOSAA	4.33		"	4.79	90.4	25-150					
Surrogate: d5-N-EtFOSAA	5.03		"	4.79	105	25-150					
Surrogate: M2-6:2 FTS	7.50		"	4.54	165	25-150					
Surrogate: M2-8:2 FTS	7.12		"	4.59	155	25-150					
Surrogate: M9PFNA	4.83		"	4.79	101	25-150					



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10920 - SPE PFAS Extraction-Soil-EPA 537m</b>											
<b>Matrix Spike (BE10920-MS1)</b> *Source sample: 21E0675-01 (CI29073) Prepared: 05/18/2021 Analyzed: 05/21/2021											
Perfluorobutanesulfonic acid (PFBS)											
4.88      0.278 ug/kg dry											
Perfluorohexanoic acid (PFHxA)											
6.10      0.278 "											
Perfluoroheptanoic acid (PFHpA)											
6.23      0.278 "											
Perfluorohexanesulfonic acid (PFHxS)											
5.42      0.278 "											
Perfluorooctanoic acid (PFOA)											
5.48      0.278 "											
Perfluorooctanesulfonic acid (PFOS)											
6.26      0.278 "											
Perfluorononanoic acid (PFNA)											
5.06      0.278 "											
Perfluorodecanoic acid (PFDA)											
5.65      0.278 "											
Perfluoroundecanoic acid (PFUnA)											
5.94      0.278 "											
Perfluorododecanoic acid (PFDoA)											
5.84      0.278 "											
Perfluorotridecanoic acid (PFTrDA)											
5.25      0.278 "											
Perfluorotetradecanoic acid (PFTA)											
5.87      0.278 "											
N-MeFOSAA											
6.42      0.278 "											
N-EtFOSAA											
5.14      0.278 "											
Perfluoropentanoic acid (PPPeA)											
6.07      0.278 "											
Perfluoro-1-octanesulfonamide (FOSA)											
5.35      0.278 "											
Perfluoro-1-heptanesulfonic acid (PFHpS)											
6.69      0.278 "											
Perfluoro-1-decanesulfonic acid (PFDS)											
4.74      0.278 "											
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)											
5.20      0.278 "											
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)											
5.56      0.278 "											
Perfluoro-n-butanoic acid (PFBA)											
6.45      0.278 "											
<i>Surrogate: M3PFBS</i>											
4.22      "											
<i>Surrogate: M5PFHxA</i>											
4.46      "											
<i>Surrogate: M4PFHpA</i>											
3.81      "											
<i>Surrogate: M3PFHxS</i>											
3.83      "											
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>											
4.85      "											
<i>Surrogate: M6PFDA</i>											
4.11      "											
<i>Surrogate: M7PFUdA</i>											
3.48      "											
<i>Surrogate: Perfluoro-n-[13C2]dodecanoic acid (MPFDoA)</i>											
3.55      "											
<i>Surrogate: M2PTeDA</i>											
2.47      "											
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>											
5.08      "											
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOSA)</i>											
3.33      "											
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)</i>											
4.62      "											
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>											
2.68      "											
<i>Surrogate: d3-N-MeFOSAA</i>											
3.81      "											
<i>Surrogate: d5-N-EtFOSAA</i>											
4.14      "											
<i>Surrogate: M2-6:2 FTS</i>											
16.5      "											
<i>Surrogate: M2-8:2 FTS</i>											
18.1      "											
<i>Surrogate: M9PFNA</i>											
4.48      "											

**PFAS Target compounds by LC/MS-MS - Quality Control Data****York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10920 - SPE PFAS Extraction-Soil-EPA 537m</b>											
<b>Matrix Spike Dup (BE10920-MSD1)</b> *Source sample: 21E0675-01 (CI29073) Prepared: 05/18/2021 Analyzed: 05/21/2021											
Perfluorobutanesulfonic acid (PFBS)											
4.94 0.278 ug/kg dry 4.92 ND 100 25-150 1.14 35											
Perfluorohexanoic acid (PFHxA)											
6.20 0.278 " 5.56 0.133 109 25-150 1.69 35											
Perfluoroheptanoic acid (PFHpA)											
6.21 0.278 " 5.56 0.134 109 25-150 0.313 35											
Perfluorohexanesulfonic acid (PFHxS)											
5.06 0.278 " 5.07 ND 99.8 25-150 6.88 35											
Perfluorooctanoic acid (PFOA)											
5.48 0.278 " 5.56 0.471 90.2 25-150 0.0197 35											
Perfluorooctanesulfonic acid (PFOS)											
6.51 0.278 " 5.15 0.257 121 25-150 3.82 35											
Perfluorononanoic acid (PFNA)											
5.43 0.278 " 5.56 ND 97.7 25-150 6.99 35											
Perfluorodecanoic acid (PFDA)											
5.55 0.278 " 5.56 ND 99.8 25-150 1.77 35											
Perfluoroundecanoic acid (PFUnA)											
5.39 0.278 " 5.56 ND 96.9 25-150 9.79 35											
Perfluorododecanoic acid (PFDoA)											
5.63 0.278 " 5.56 ND 101 25-150 3.65 35											
Perfluorotridecanoic acid (PFTrDA)											
5.28 0.278 " 5.56 ND 95.0 25-150 0.611 35											
Perfluorotetradecanoic acid (PFTA)											
5.73 0.278 " 5.56 ND 103 25-150 2.53 35											
N-MeFOSAA											
6.17 0.278 " 5.56 ND 111 25-150 4.06 35											
N-EtFOSAA											
5.82 0.278 " 5.56 ND 105 25-150 12.4 35											
Perfluoropentanoic acid (PPPeA)											
5.97 0.278 " 5.56 0.174 104 25-150 1.69 35											
Perfluoro-1-octanesulfonamide (FOSA)											
5.53 0.278 " 5.56 ND 99.6 25-150 3.38 35											
Perfluoro-1-heptanesulfonic acid (PFHpS)											
6.18 0.278 " 5.28 ND 117 25-150 7.85 35											
Perfluoro-1-decanesulfonic acid (PFDS)											
5.74 0.278 " 5.36 ND 107 25-150 19.0 35											
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)											
5.40 0.278 " 5.28 ND 102 25-150 3.70 35											
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)											
5.31 0.278 " 5.33 ND 99.5 25-150 4.56 35											
Perfluoro-n-butanoic acid (PFBA)											
7.04 0.278 " 5.56 0.871 111 25-150 8.86 35											
<i>Surrogate: M3PFBS</i>											
4.12 " 5.16 79.8 25-150											
<i>Surrogate: M5PFHxA</i>											
4.35 " 5.56 78.2 25-150											
<i>Surrogate: M4PFHpA</i>											
3.89 " 5.56 70.1 25-150											
<i>Surrogate: M3PFHxS</i>											
3.97 " 5.26 75.6 25-150											
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>											
4.76 " 5.56 85.7 25-150											
<i>Surrogate: M6PFDA</i>											
4.34 " 5.56 78.1 25-150											
<i>Surrogate: M7PFUdA</i>											
4.30 " 5.56 77.4 25-150											
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>											
4.59 " 5.56 82.6 25-150											
<i>Surrogate: [1,2-13C2]dodecanoic acid (MPFDoA)</i>											
3.15 " 5.56 56.7 10-150											
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>											
4.99 " 5.56 89.8 25-150											
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOSA)</i>											
3.26 " 5.32 61.3 25-150											
<i>Surrogate: d3-N-MeFOSAA</i>											
4.54 " 5.56 81.6 25-150											
<i>Surrogate: d5-N-EtFOSAA</i>											
4.80 " 5.56 86.5 25-150											
<i>Surrogate: M2-6:2 FTS</i>											
14.2 " 5.27 268 25-150											
<i>Surrogate: M2-8:2 FTS</i>											
14.1 " 5.32 264 25-150											
<i>Surrogate: M9PFNA</i>											
4.15 " 5.56 74.6 25-150											



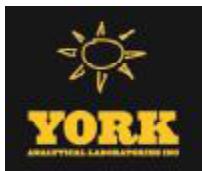
## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BE10922 - SPE PFAS Extraction-Soil-EPA 537m

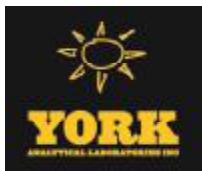
Blank (BE10922-BLK1)	Prepared: 05/18/2021 Analyzed: 05/22/2021					
Perfluorobutanesulfonic acid (PFBS)	ND	0.244	ug/kg wet			
Perfluorohexanoic acid (PFHxA)	ND	0.244	"			
Perfluoroheptanoic acid (PFHpA)	ND	0.244	"			
Perfluorohexanesulfonic acid (PFHxS)	ND	0.244	"			
Perfluorooctanoic acid (PFOA)	ND	0.244	"			
Perfluorooctanesulfonic acid (PFOS)	ND	0.244	"			
Perfluorononanoic acid (PFNA)	ND	0.244	"			
Perfluorodecanoic acid (PFDA)	ND	0.244	"			
Perfluoroundecanoic acid (PFUnA)	ND	0.244	"			
Perfluorododecanoic acid (PFDoA)	ND	0.244	"			
Perfluorotridecanoic acid (PFTrDA)	ND	0.244	"			
Perfluorotetradecanoic acid (PFTA)	ND	0.244	"			
N-MeFOSAA	ND	0.244	"			
N-EtFOSAA	ND	0.244	"			
Perfluoropentanoic acid (PFPeA)	ND	0.244	"			
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.244	"			
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.244	"			
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.244	"			
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	0.244	"			
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	0.244	"			
Perfluoro-n-butanoic acid (PFBA)	ND	0.244	"			
<i>Surrogate: M3PFBS</i>	4.11	"	4.53	90.8	25-150	
<i>Surrogate: M5PFHxA</i>	3.93	"	4.87	80.6	25-150	
<i>Surrogate: M4PFHpA</i>	4.08	"	4.87	83.7	25-150	
<i>Surrogate: M3PFHxS</i>	3.66	"	4.61	79.5	25-150	
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	3.98	"	4.87	81.7	25-150	
<i>Surrogate: M6PFDA</i>	3.91	"	4.87	80.2	25-150	
<i>Surrogate: M7PFUdA</i>	4.08	"	4.87	83.7	25-150	
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	3.93	"	4.87	80.7	25-150	
<i>Surrogate: M2PFTeDA</i>	3.45	"	4.87	70.8	10-150	
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	4.83	"	4.87	99.2	25-150	
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOSA)</i>	3.87	"	4.66	83.1	25-150	
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)</i>	4.45	"	4.87	91.4	25-150	
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	2.84	"	4.87	58.2	10-150	
<i>Surrogate: d3-N-MeFOSAA</i>	2.84	"	4.87	58.2	25-150	
<i>Surrogate: d5-N-EtFOSAA</i>	4.02	"	4.87	82.5	25-150	
<i>Surrogate: M2-6:2 FTS</i>	4.15	"	4.62	89.7	25-150	
<i>Surrogate: M2-8:2 FTS</i>	4.74	"	4.67	101	25-150	
<i>Surrogate: M9PFNA</i>	4.33	"	4.87	88.9	25-150	



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10922 - SPE PFAS Extraction-Soil-EPA 537m</b>											
Prepared: 05/18/2021 Analyzed: 05/22/2021											
<b>LCS (BE10922-BS1)</b>											
Perfluorobutanesulfonic acid (PFBS)	3.91	0.242	ug/kg wet	4.29	91.0	50-130					
Perfluorohexanoic acid (PFHxA)	4.95	0.242	"	4.85	102	50-130					
Perfluoroheptanoic acid (PFHpA)	4.17	0.242	"	4.85	85.9	50-130					
Perfluorohexanesulfonic acid (PFHxS)	4.39	0.242	"	4.42	99.3	50-130					
Perfluorooctanoic acid (PFOA)	4.52	0.242	"	4.85	93.2	50-130					
Perfluorooctanesulfonic acid (PFOS)	4.66	0.242	"	4.49	104	50-130					
Perfluorononanoic acid (PFNA)	3.95	0.242	"	4.85	81.5	50-130					
Perfluorodecanoic acid (PFDA)	4.30	0.242	"	4.85	88.6	50-130					
Perfluoroundecanoic acid (PFUnA)	4.19	0.242	"	4.85	86.4	50-130					
Perfluorododecanoic acid (PFDoA)	4.42	0.242	"	4.85	91.1	50-130					
Perfluorotridecanoic acid (PFTrDA)	4.77	0.242	"	4.85	98.4	50-130					
Perfluorotetradecanoic acid (PFTA)	4.63	0.242	"	4.85	95.5	50-130					
N-MeFOSAA	4.94	0.242	"	4.85	102	50-130					
N-EtFOSAA	4.34	0.242	"	4.85	89.6	50-130					
Perfluoropentanoic acid (PFPeA)	4.79	0.242	"	4.85	98.8	50-130					
Perfluoro-1-octanesulfonamide (FOSA)	4.40	0.242	"	4.85	90.7	50-130					
Perfluoro-1-heptanesulfonic acid (PFHpS)	3.97	0.242	"	4.61	86.3	50-130					
Perfluoro-1-decanesulfonic acid (PFDS)	3.43	0.242	"	4.68	73.2	50-130					
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	4.37	0.242	"	4.61	94.9	50-130					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	3.74	0.242	"	4.65	80.5	50-130					
Perfluoro-n-butanoic acid (PFBA)	4.63	0.242	"	4.85	95.6	50-130					
Surrogate: M3PFBS	4.18		"	4.50	92.7	25-150					
Surrogate: M5PFHxA	3.96		"	4.85	81.8	25-150					
Surrogate: M4PFHpA	4.24		"	4.85	87.4	25-150					
Surrogate: M3PFHxS	3.65		"	4.59	79.5	25-150					
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.90		"	4.85	80.5	25-150					
Surrogate: M6PFDA	3.93		"	4.85	81.0	25-150					
Surrogate: M7PFUdA	3.87		"	4.85	79.7	25-150					
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.60		"	4.85	74.2	25-150					
Surrogate: M2PTeDA	3.19		"	4.85	65.8	10-150					
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.78		"	4.85	98.6	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	4.07		"	4.64	87.8	25-150					
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)	4.38		"	4.85	90.3	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.91		"	4.85	60.1	10-150					
Surrogate: d3-N-MeFOSAA	3.05		"	4.85	63.0	25-150					
Surrogate: d5-N-EtFOSAA	4.10		"	4.85	84.5	25-150					
Surrogate: M2-6:2 FTS	4.62		"	4.60	100	25-150					
Surrogate: M2-8:2 FTS	5.28		"	4.64	114	25-150					
Surrogate: M9PFNA	4.66		"	4.85	96.2	25-150					



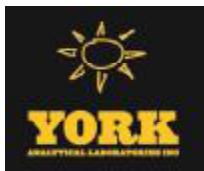
**PFAS Target compounds by LC/MS-MS - Quality Control Data**

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BE10922 - SPE PFAS Extraction-Soil-EPA 537m**

Matrix Spike (BE10922-MS1)	*Source sample: 21E0675-24 (CI29108)						Prepared: 05/18/2021 Analyzed: 05/22/2021				
Perfluorobutanesulfonic acid (PFBS)	4.40	0.268	ug/kg dry	4.75	ND	92.7	25-150				
Perfluorohexanoic acid (PFHxA)	5.38	0.268	"	5.37	ND	100	25-150				
Perfluoroheptanoic acid (PFHpA)	4.61	0.268	"	5.37	ND	85.9	25-150				
Perfluorohexanesulfonic acid (PFHxS)	4.59	0.268	"	4.89	ND	93.7	25-150				
Perfluorooctanoic acid (PFOA)	4.84	0.268	"	5.37	ND	90.3	25-150				
Perfluorooctanesulfonic acid (PFOS)	5.33	0.268	"	4.97	ND	107	25-150				
Perfluorononanoic acid (PFNA)	4.35	0.268	"	5.37	ND	81.0	25-150				
Perfluorodecanoic acid (PFDA)	5.24	0.268	"	5.37	ND	97.7	25-150				
Perfluoroundecanoic acid (PFUnA)	5.11	0.268	"	5.37	ND	95.3	25-150				
Perfluorododecanoic acid (PFDoA)	5.11	0.268	"	5.37	ND	95.3	25-150				
Perfluorotridecanoic acid (PFTrDA)	5.02	0.268	"	5.37	ND	93.6	25-150				
Perfluorotetradecanoic acid (PFTA)	5.03	0.268	"	5.37	ND	93.8	25-150				
N-MeFOSAA	5.14	0.268	"	5.37	ND	95.9	25-150				
N-EtFOSAA	4.89	0.268	"	5.37	ND	91.2	25-150				
Perfluoropentanoic acid (PFPeA)	5.20	0.268	"	5.37	ND	96.8	25-150				
Perfluoro-1-octanesulfonamide (FOSA)	4.59	0.268	"	5.37	ND	85.5	25-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	4.99	0.268	"	5.10	ND	97.8	25-150				
Perfluoro-1-decanesulfonic acid (PFDS)	3.93	0.268	"	5.18	ND	76.0	25-150				
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	4.25	0.268	"	5.10	ND	83.4	25-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	3.99	0.268	"	5.15	ND	77.5	25-150				
Perfluoro-n-butanicoic acid (PFBA)	5.11	0.268	"	5.37	ND	95.3	25-150				
<i>Surrogate: M3PFBS</i>	4.17		"	4.98		83.7	25-150				
<i>Surrogate: M5PFHxA</i>	4.32		"	5.37		80.5	25-150				
<i>Surrogate: M4PFHpA</i>	4.47		"	5.37		83.4	25-150				
<i>Surrogate: M3PFHxS</i>	4.03		"	5.08		79.4	25-150				
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	4.28		"	5.37		79.8	25-150				
<i>Surrogate: M6PFDA</i>	3.85		"	5.37		71.7	25-150				
<i>Surrogate: M7PFUdA</i>	3.62		"	5.37		67.6	25-150				
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	3.68		"	5.37		68.7	25-150				
<i>Surrogate: M2PTeDA</i>	3.21		"	5.37		59.8	10-150				
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	5.01		"	5.37		93.4	25-150				
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	3.80		"	5.13		73.9	25-150				
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)</i>	4.67		"	5.37		87.0	25-150				
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	3.00		"	5.37		55.8	10-150				
<i>Surrogate: d3-N-MeFOSAA</i>	3.22		"	5.37		60.0	25-150				
<i>Surrogate: d5-N-EtFOSAA</i>	4.09		"	5.37		76.3	25-150				
<i>Surrogate: M2-6:2 FTS</i>	6.43		"	5.09		126	25-150				
<i>Surrogate: M2-8:2 FTS</i>	6.79		"	5.14		132	25-150				
<i>Surrogate: M9PFNA</i>	4.85		"	5.37		90.5	25-150				



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10922 - SPE PFAS Extraction-Soil-EPA 537m</b>											
<b>Matrix Spike Dup (BE10922-MSD1)</b> *Source sample: 21E0675-24 (CI29108) Prepared: 05/18/2021 Analyzed: 05/22/2021											
Perfluorobutanesulfonic acid (PFBS)											
4.59      0.277 ug/kg dry      4.90      ND      93.6      25-150      4.07      35											
Perfluorohexanoic acid (PFHxA)											
5.46      0.277 "      5.53      ND      98.7      25-150      1.62      35											
Perfluoroheptanoic acid (PFHpA)											
5.06      0.277 "      5.53      ND      91.4      25-150      9.34      35											
Perfluorohexanesulfonic acid (PFHxS)											
4.96      0.277 "      5.05      ND      98.4      25-150      7.91      35											
Perfluorooctanoic acid (PFOA)											
4.78      0.277 "      5.53      ND      86.4      25-150      1.28      35											
Perfluorooctanesulfonic acid (PFOS)											
5.30      0.277 "      5.13      ND      103      25-150      0.680      35											
Perfluorononanoic acid (PFNA)											
4.70      0.277 "      5.53      ND      84.8      25-150      7.71      35											
Perfluorodecanoic acid (PFDA)											
5.03      0.277 "      5.53      ND      90.8      25-150      4.20      35											
Perfluoroundecanoic acid (PFUnA)											
4.99      0.277 "      5.53      ND      90.2      25-150      2.34      35											
Perfluorododecanoic acid (PFDoA)											
5.24      0.277 "      5.53      ND      94.6      25-150      2.46      35											
Perfluorotridecanoic acid (PFTrDA)											
5.30      0.277 "      5.53      ND      95.8      25-150      5.44      35											
Perfluorotetradecanoic acid (PFTA)											
5.09      0.277 "      5.53      ND      97.3      25-150      4.65      35											
N-MeFOSAA											
5.39      0.277 "      5.53      ND      80.0      25-150      9.92      35											
N-EtFOSAA											
4.43      0.277 "      5.53      ND      95.0      25-150      1.21      35											
Perfluoropentanoic acid (PPPeA)											
5.09      0.277 "      5.53      ND      92.0      25-150      10.5      35											
Perfluoro-1-heptanesulfonic acid (PFHpS)											
5.68      0.277 "      5.26      ND      108      25-150      13.0      35											
Perfluoro-1-decanesulfonic acid (PFDS)											
4.26      0.277 "      5.34      ND      79.8      25-150      8.01      35											
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)											
4.79      0.277 "      5.26      ND      91.1      25-150      11.9      35											
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)											
4.70      0.277 "      5.31      ND      88.4      25-150      16.3      35											
Perfluoro-n-butanoic acid (PFBA)											
5.17      0.277 "      5.53      ND      93.3      25-150      1.02      35											
Surrogate: M3PFBS											
4.24      "      5.14      ND      82.5      25-150											
Surrogate: M5PFHxA											
4.50      "      5.53      ND      81.4      25-150											
Surrogate: M4PFHpA											
4.59      "      5.53      ND      82.9      25-150											
Surrogate: M3PFHxS											
4.12      "      5.24      ND      78.6      25-150											
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)											
4.73      "      5.53      ND      85.5      25-150											
Surrogate: M6PFDA											
4.45      "      5.53      ND      80.3      25-150											
Surrogate: M7PFUdA											
4.55      "      5.53      ND      82.2      25-150											
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)											
4.24      "      5.53      ND      76.5      25-150											
Surrogate: [1,2-13C2]dodecanoic acid (MPFDoA)											
3.59      "      5.53      ND      64.8      10-150											
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)											
5.61      "      5.53      ND      101      25-150											
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOSA)											
3.71      "      5.30      ND      70.1      25-150											
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)											
5.05      "      5.53      ND      91.3      25-150											
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)											
4.13      "      5.53      ND      74.7      25-150											
Surrogate: d5-N-EtFOSAA											
5.41      "      5.53      ND      97.7      25-150											
Surrogate: M2-6:2 FTS											
13.2      "      5.25      ND      252      25-150											
Surrogate: M2-8:2 FTS											
14.0      "      5.30      ND      264      25-150											
Surrogate: M9PFNA											
5.23      "      5.53      ND      94.4      25-150											

**Miscellaneous Physical Parameters - Quality Control Data****York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

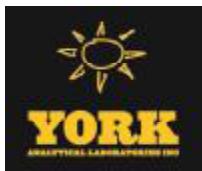
**Batch BE11134 - % Solids Prep**

Duplicate (BE11134-DUP1) \*Source sample: 21E0675-16 (CL29096) Prepared & Analyzed: 05/21/2021  
% Solids 84.5 0.100 % 74.9 12.1 20

**Batch BE11139 - % Solids Prep**

Duplicate (BE11139-DUP1) \*Source sample: 21E0675-24 (CL29108) Prepared & Analyzed: 05/21/2021  
% Solids 88.0 0.100 % 87.7 0.345 20





## Sample and Data Qualifiers Relating to This Work Order

PFSu-H      The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.





## CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
 Email: info@phoenixlabs.com Fax (860) 645-0823  
**Client Services (860) 645-8726**

Customer: York Analytical Laboratories  
 Address: 20 Research Drive  
 Stratford, CT 06615

Project:  
 Report to: HelenG@PhoenixLabs.com / Helen Geohagan  
 Invoice to: AccountsPayable@PhoenixLabs.com  
 Quote#:

### Client Sample - Information - Identification

Sampler's Signature \_\_\_\_\_ Date: \_\_\_\_\_  
 Matrix Code:  
 DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water  
 RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe  
 OIL=Oil B=Bulk L=Liquid

SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Analysis Request	
					PPQs	PPQs & PFOs
CI 29076	SB-10A (0-i)	S	5/1/21	08:20	X	
CI 29078	SB-10C (B-i)	S	5/1/21	08:20		
CI 29079	SB-11A (0-i)	S	5/1/21	11:50	X	
CI 29081	SB-11C (10-i)	S	5/1/21	11:50	XX	
CI 29082	SB-12A (1-i)	S	5/1/21	10:40		
CI 29084	SB-12C (13-i)	S	5/1/21	10:40	X	
CI 29085	SB-13A (1-2)	S	5/1/21	09:50	XX	
CI 29087	SB-13C (10-i)	S	5/1/21	09:50		
CI 29088	SB-14A (1-i)	S	5/1/21	09:10	X	
CI 29090	SB-14C (6-B)	S	5/1/21	09:10	XX	
CI 29091	SB-15A (0-i)	S	5/1/21	13:15	X	

Relinquished by:	Accepted by:	Date:	Time:	Turnaround:		Report Type:	State Criteria:
				1 Day	2 Days		
John Roanquist	Roger Gau	5/14/21	7:00			Standard FDF	<input checked="" type="checkbox"/> MA MCP CAM Cert.
Jeanne Tappell		5/14/21	09:50			GISKey	<input type="checkbox"/> CT RCP Cert.
						EQuIS	<input type="checkbox"/> NJ Hazsite EDD
						Deliverable	<input type="checkbox"/> NY EZ EDD (ASP)
						NJ Full Deliverable	<input type="checkbox"/> Other
						NY ASP B	<input checked="" type="checkbox"/>

Comments, Special Requirements or Regulations:

Please send notice as soon as possible not exceeding 24 hours of obtaining valid data, of the results of all drinking water samples that exceed any EPA or Department-established maximum contaminant level, maximum residual disinfectant level or reportable concentration.

Please notify Phoenix Environmental Laboratories, Inc. immediately and prior to conducting analysis if certification is not held for the analyses requested.

What State were samples collected?

NY \_\_\_\_\_



**Environmental Laboratories, Inc.**

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
Email: info@phoenixlabs.com Fax (860) 645-0823

**Client Services (860) 645-8726**

Customer: York Analytical Laboratories

Address: 20 Research Drive  
Stratford, CT 06615

Project:

Report to: HelenG@PhoenixLabs.com / Helen Gezonian  
Invoice to: AccountsPayable@PhoenixLabs.com

Quote# :

**Client Sample - Information - Identification**

Sampler's Signature \_\_\_\_\_ Date: \_\_\_\_\_

Analysis Request

Project P.O. #

Customer Sample Identification

Sample Matrix

Date Sampled

Time Sampled

Matrix Code:

DW=Drinking Water

SW=Ground Water

SE=Surface Water

WW=Waste Water

SL=Sediment

SD=Soil

SD=Solid

W=Wipe

OIL=Oil

B=Bulk

L=Liquid

PHOENIX USE ONLY

Customer Sample

Identification

SAMPLE #

Matrix

Date

Sampled

Time

Sampled

Sample: 1260 1000;59u File: 318A044

Software Version: 4.1<1L22>

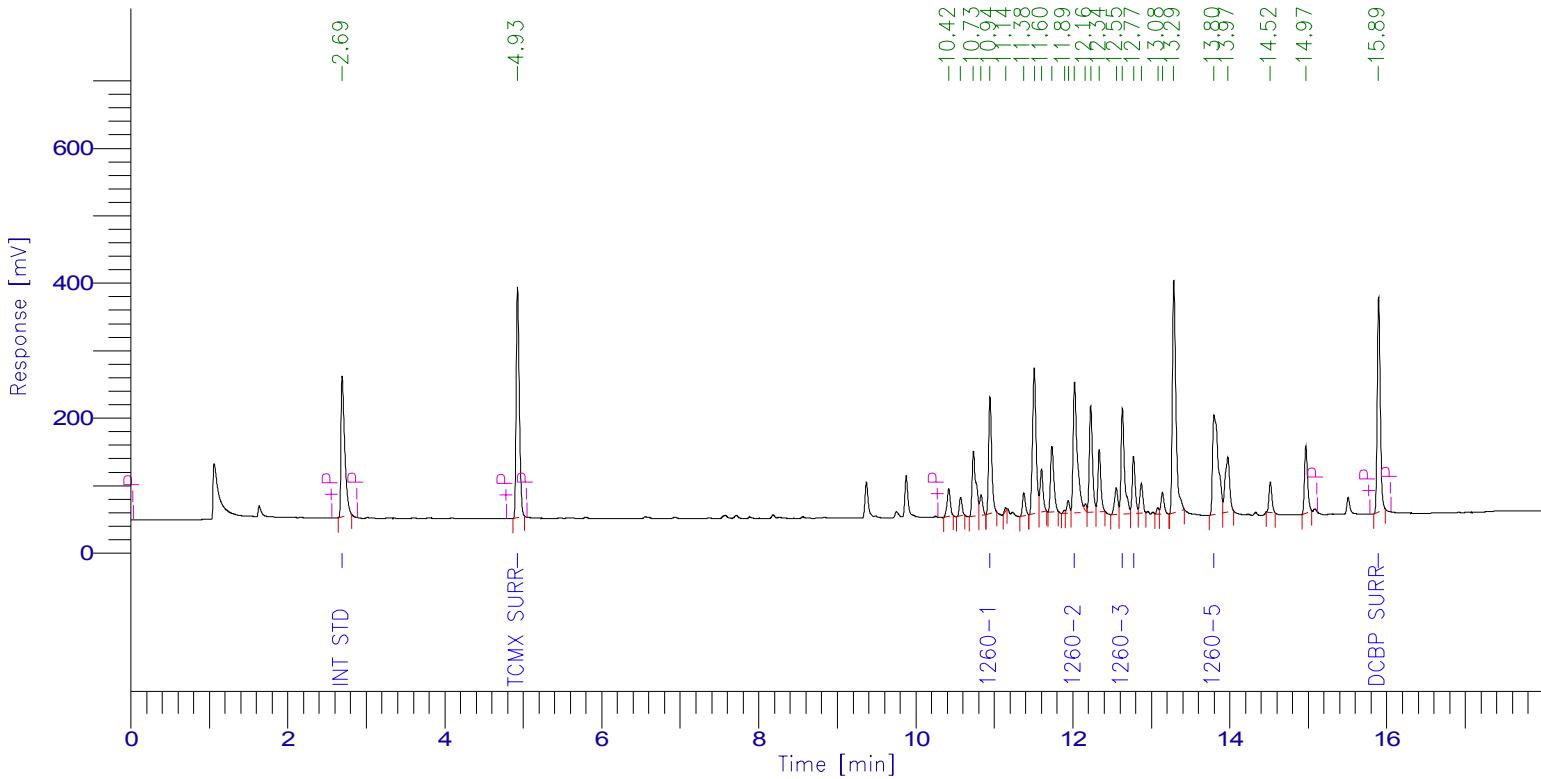
Date: 3/19/2020 07:54 AM

Sample Name : 1260 1000;59u

Data File : E:\TC2020\ECD29\03-MAR\318A044.RAW Date: 3/19/2020 12:56 AM

Sequence File: E:\TC2020\ECD29\03-MAR\PCB\_SEQ.SEQ Cycle: 643 Channel : A

Sample Amount : 1.0000 Dilution Factor : 1.00



## PCB Report

Time [min]	Component Name	Raw Amount	Area [ $\mu$ V·s]	Surrogate SM/WM	Surrogate QC / SL	Spike Rec Soils (%)	Spike Rec Water (%)
2.694	Int Std	100.0000	688926.16	250.0000	100.0000	40.0000	20.0000
4.926	TCMX SURR	89.9627	929603.04	224.9068	89.9627	35.9851	17.9925
10.944	1260-1	1000.0000	458893.84	2500.0000	1000.0000	400.0000	200.0000
12.020	1260-2	1000.0000	723367.09	2500.0000	1000.0000	400.0000	200.0000
12.632	1260-3	1000.0000	476530.84	2500.0000	1000.0000	400.0000	200.0000
12.773	1260-4	1000.0000	227520.79	2500.0000	1000.0000	400.0000	200.0000
13.798	1260-5	1000.0000	744787.63	2500.0000	1000.0000	400.0000	200.0000
15.893	DCBP SURR	86.5108	845002.32	216.2770	86.5108	34.6043	17.3022

5276.4735 5094631.70



587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
Telephone: 860.645.1102 • Fax: 860.645.0823

NY ANALYTICAL SERVICES PROTOCOL  
DATA PACKAGE

Client: Walden Environmental Engineering PLLC

IPARK 0118.48

Laboratory Project: GCI29073

Dioxane Soil (Isotope) (Soil)  
Ver 1



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587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
Telephone: 860.645.1102 • Fax: 860.645.0823

## NY ANALYTICAL SERVICES PROTOCOL DATA PACKAGE

Walden Environmental Engineering PLLC  
IPARK 0118.48

GCI29076

Ver 1

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CI29082 / SB-12A (1-2') 10X	1164
CI29084 / SB-12C (13-15') 10X	1168
CI29085 / SB-13A (1-2') 10X	1172
CI29087 / SB-13C (10-12') 10X	1176
CI29088 / SB-14A (1-2') 10X	1180
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ECD29 - 05/13/21	1504
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CI29081 / SB-11C (6-12` ) 2X	1530
CI29082 / SB-12A (1-2` ) 2X	1534
CI29084 / SB-12C (13-15` ) 2X	1538
CI29085 / SB-13A (1-2` ) 2X	1542
CI29087 / SB-13C (10-12` ) 2X	1546
CI29088 / SB-14A (1-2` ) 2X	1550
CI29090 / SB-14C (6-8` ) 2X	1554
CI29091 / SB-15A (0-1` ) 2X	1558
CI29093 / SB-15C (10-12` ) 2X	1562
CI29094 / SB-16A (0-1` ) 2X	1566
CI29096 / SB-16C (13-15` ) 2X	1570
CI29097 / SB-17A (0-1` ) 2X	1574
CI29099 / SB-17C (9-11` ) 2X	1578
CI29100 / SB-18A (0-1` ) 2X	1582
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ECD3 - 05/14/21 - 513037	1980
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ECD3 - 05/14/21 - 513050	1988
ECD8 - 05/14/21 - 514019	1992
ECD8 - 05/14/21 - 514020	1996
ECD8 - 05/14/21 - 514031	2000
ECD8 - 05/14/21 - 514033	2004
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CI29103 / SB-19A (0-1` ) 10X	2210
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CI29209 LCS	2645
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CI29209 MS	2655
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CI29082 / SB-12A (1-2`)	2988
CI29084 / SB-12C (13-15`)	2991
CI29085 / SB-13A (1-2` ) 5X	2994
CI29087 / SB-13C (10-12` ) 5X	2997
CI29088 / SB-14A (1-2` )	3000
CI29090 / SB-14C (6-8` )	3003
CI29091 / SB-15A (0-1` )	3006
CI29093 / SB-15C (10-12` )	3009
CI29094 / SB-16A (0-1` )	3012
CI29096 / SB-16C (13-15` )	3015
CI29097 / SB-17A (0-1` )	3018
CI29099 / SB-17C (9-11` )	3021
CI29100 / SB-18A (0-1` )	3024
CI29102 / SB-18C (13-15` )	3027
CI29103 / SB-19A (0-1` )	3030
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Monday, June 21, 2021

Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

Project ID: IPARK 0118.48

SDG ID: GCI29076

Sample ID#s: CI29076 - CI29108

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

Enclosed are revised Analysis Report pages. Please replace and discard the original pages. If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink that reads "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301  
CT Lab Registration #PH-0618  
MA Lab Registration #M-CT007  
ME Lab Registration #CT-007  
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003  
NY Lab Registration #11301  
PA Lab Registration #68-03530  
RI Lab Registration #63  
UT Lab Registration #CT00007  
VT Lab Registration #VT11301



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102      Fax (860) 645-0823



**NY ANALYTICAL SERVICES PROTOCOL  
DATA PACKAGE**

**Client: Walden Environmental Engineering PLLC**  
**Project: IPARK 0118.48**  
**Laboratory Project: GCI29076**



**Environmental Laboratories, Inc.**  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040  
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# NY Analytical Services Protocol Format

June 21, 2021

SDG I.D.: GCI29076

Walden Environmental Engineering PLLC IPARK 0118.48

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## Methodology Summary

537

DETERMINATION OF SELECTED PERFLUORINATED ALKYL ACIDS IN DRINKING WATER BY SOLID PHASE EXTRACTION AND LIQUID CHROMATOGRAPHY/TANDEM MASS SPECTROMETRY (LC/MS/MS)  
Version 1.1 September 20009

### **Accelerated Solvent Extraction (ASE)**

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update III, Method 3545A.

### **Chlorinated Herbicides:**

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update III, Method 8151A.

### **Mercury Prep**

Soil Sample - USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 7471B.

### **Metals**

ICP :  
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 6010D.

Mercury:  
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, 7471B

### **Pesticides:**

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8081B.

### **Polychlorinated Biphenyls (PCBs):**

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8082A.

### **Semivolatile Organic Compounds**

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8270D.



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# NY Analytical Services Protocol Format

June 21, 2021

SDG I.D.: GCI29076

**Walden Environmental Engineering PLLC IPARK 0118.48**

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## Semi-volatiles analysis

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update IV, Method 8270D (SIM - selective ion monitoring mode).

## Volatile Organic Compounds:

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd Ed. Update III, Method 8260C and Environmental Protection Agency, EPA-600/4-79-020, Revised March 1983 (Methods 624) as printed in 40CFR part 136.



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## NY Analytical Services Protocol Format

June 21, 2021

SDG I.D.: GCI29076

Walden Environmental Engineering PLLC IPARK 0118.48

### Laboratory Chronicle

The samples in this delivery group were received at 2.1°C.

Sample	Analysis	Collection Date	Prep Date	Analysis Date	Analyst	Hold Time Met
CI29076	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29076	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Chlorinated Herbicides	05/11/21	05/12/21	05/14/21	JRB	Y
CI29076	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29076	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29076	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29076	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29076	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29076	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29076	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29076	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Sodium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29076	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29077	Field Extraction	05/11/21	05/11/21	05/11/21		Y

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CI29077	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29078	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29078	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Chlorinated Herbicides	05/11/21	05/12/21	05/14/21	JRB	Y
CI29078	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29078	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29078	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29078	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29078	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29078	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29078	Polychlorinated Biphenyls	05/11/21	05/12/21	05/14/21	AW	Y
CI29078	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Semivolatiles	05/11/21	05/12/21	05/13/21	AW	Y
CI29078	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Sodium	05/11/21	05/12/21	05/17/21	EK	Y
CI29078	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29078	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29078	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29079	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Antimony	05/11/21	05/12/21	05/17/21	TH	Y

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CI29079	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Chlorinated Herbicides	05/11/21	05/12/21	05/14/21	JRB	Y
CI29079	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29079	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29079	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29079	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29079	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29079	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29079	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Semivolatiles	05/11/21	05/12/21	05/13/21	AW	Y
CI29079	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Sodium	05/11/21	05/12/21	05/19/21	EK	Y
CI29079	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29079	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29080	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29080	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29081	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29081	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y

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CI29081	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Chlorinated Herbicides	05/11/21	05/12/21	05/14/21	JRB	Y
CI29081	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29081	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29081	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29081	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29081	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29081	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29081	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29081	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Semivolatiles	05/11/21	05/12/21	05/13/21	AW	Y
CI29081	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Sodium	05/11/21	05/12/21	05/19/21	EK	Y
CI29081	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29081	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29081	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29082	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29082	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y

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CI29082	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29082	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29082	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29082	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29082	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29082	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29082	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Semivolatiles	05/11/21	05/12/21	05/13/21	AW	Y
CI29082	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Sodium	05/11/21	05/12/21	05/19/21	EK	Y
CI29082	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29082	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29083	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29083	Volatiles	05/11/21	05/14/21	05/14/21	JLI	Y
CI29084	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29084	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29084	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29084	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Lead	05/11/21	05/12/21	05/17/21	TH	Y



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CI29084	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29084	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29084	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29084	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29084	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29084	Polychlorinated Biphenyls	05/11/21	05/12/21	05/14/21	AW	Y
CI29084	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Semivolatiles	05/11/21	05/12/21	05/13/21	AW	Y
CI29084	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Sodium	05/11/21	05/12/21	05/19/21	EK	Y
CI29084	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29084	Volatiles	05/11/21	05/14/21	05/14/21	JLI	Y
CI29084	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29085	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29085	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29085	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y



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CI29085	Pesticides - Soil	05/11/21	05/12/21	05/14/21	CG	Y
CI29085	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29085	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29085	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29085	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29085	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Sodium	05/11/21	05/12/21	05/19/21	EK	Y
CI29085	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29085	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29086	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29086	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29087	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29087	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29087	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29087	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29087	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29087	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29087	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29087	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y



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CI29087	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29087	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29087	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Sodium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29087	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29087	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29088	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29088	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29088	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29088	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29088	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29088	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29088	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29088	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29088	Silver	05/11/21	05/12/21	05/17/21	TH	Y



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CI29088	Sodium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29088	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29089	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29089	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29090	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29090	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29090	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29090	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29090	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29090	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29090	PFAS	05/11/21	05/21/21	05/21/21	***	Y
CI29090	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29090	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29090	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Semivolatiles	05/11/21	05/12/21	05/13/21	AW	Y
CI29090	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Sodium	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29090	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y



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CI29090	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29090	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29091	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29091	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29091	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29091	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29091	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29091	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29091	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29091	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Semivolatiles	05/11/21	05/12/21	05/13/21	AW	Y
CI29091	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Sodium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29091	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29092	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29092	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29093	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29093	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y



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CI29093	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Calcium	05/11/21	05/12/21	05/19/21	EK	Y
CI29093	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29093	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29093	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Magnesium	05/11/21	05/12/21	05/19/21	EK	Y
CI29093	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29093	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29093	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29093	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29093	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29093	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29093	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Semivolatiles	05/11/21	05/12/21	05/12/21	AW	Y
CI29093	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Sodium	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29093	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29093	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	1,4-Dioxane	05/11/21	05/13/21	05/14/21	WB	Y
CI29094	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y



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CI29094	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29094	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29094	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29094	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29094	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29094	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29094	Polychlorinated Biphenyls	05/11/21	05/12/21	05/14/21	SC	Y
CI29094	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Semivolatiles	05/11/21	05/12/21	05/13/21	AW	Y
CI29094	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Sodium	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29094	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29095	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29095	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29096	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29096	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29096	Chromium	05/11/21	05/12/21	05/17/21	TH	Y



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CI29096	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29096	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Lead	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Mercury	05/11/21	05/13/21	05/14/21	MGH	Y
CI29096	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29096	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29096	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29096	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29096	Polychlorinated Biphenyls	05/11/21	05/12/21	05/14/21	SC	Y
CI29096	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Semivolatiles	05/11/21	05/12/21	05/13/21	AW	Y
CI29096	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Sodium	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29096	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29096	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29097	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Antimony	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Arsenic	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Barium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Beryllium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Cadmium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Chlorinated Herbicides	05/11/21	05/13/21	05/14/21	JRB	Y
CI29097	Chromium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Cobalt	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Copper	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Lead	05/11/21	05/12/21	05/17/21	TH	Y

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CI29097	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Mercury	05/11/21	05/14/21	05/14/21	MGH	Y
CI29097	Nickel	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29097	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29097	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29097	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29097	Polychlorinated Biphenyls	05/11/21	05/12/21	05/14/21	SC	Y
CI29097	Potassium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Selenium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29097	Silver	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Sodium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Thallium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Vanadium	05/11/21	05/12/21	05/17/21	TH	Y
CI29097	Zinc	05/11/21	05/12/21	05/17/21	TH	Y
CI29098	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29098	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29099	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29099	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29099	Antimony	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Arsenic	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Barium	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Beryllium	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Cadmium	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29099	Chlorinated Herbicides	05/11/21	05/13/21	05/15/21	JRB	Y
CI29099	Chromium	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Cobalt	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Copper	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29099	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29099	Lead	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29099	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29099	Mercury	05/11/21	05/14/21	05/14/21	MGH	Y

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CI29099	Nickel	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29099	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29099	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29099	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29099	Polychlorinated Biphenyls	05/11/21	05/12/21	05/18/21	SC	Y
CI29099	Potassium	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Selenium	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29099	Silver	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Sodium	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Thallium	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Vanadium	05/11/21	05/12/21	05/18/21	TH	Y
CI29099	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29099	Zinc	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29100	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29100	Antimony	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Arsenic	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Barium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Beryllium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Cadmium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Calcium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Chlorinated Herbicides	05/11/21	05/13/21	05/15/21	JRB	Y
CI29100	Chromium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Cobalt	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Copper	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29100	Lead	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Magnesium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29100	Mercury	05/11/21	05/14/21	05/14/21	MGH	Y
CI29100	Nickel	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29100	Pesticides - Soil	05/11/21	05/12/21	05/14/21	CG	Y
CI29100	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29100	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y

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CI29100	Polychlorinated Biphenyls	05/11/21	05/12/21	05/18/21	SC	Y
CI29100	Potassium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Selenium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29100	Silver	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Sodium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Thallium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Vanadium	05/11/21	05/12/21	05/18/21	TH	Y
CI29100	Zinc	05/11/21	05/12/21	05/18/21	TH	Y
CI29101	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29101	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29102	1,4-Dioxane	05/11/21	05/13/21	05/15/21	WB	Y
CI29102	Aluminum	05/11/21	05/12/21	05/17/21	TH	Y
CI29102	Antimony	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Arsenic	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Barium	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Beryllium	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Cadmium	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Calcium	05/11/21	05/12/21	05/17/21	TH	Y
CI29102	Chlorinated Herbicides	05/11/21	05/13/21	05/15/21	JRB	Y
CI29102	Chromium	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Cobalt	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Copper	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29102	Iron	05/11/21	05/12/21	05/17/21	TH	Y
CI29102	Lead	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Magnesium	05/11/21	05/12/21	05/17/21	TH	Y
CI29102	Manganese	05/11/21	05/12/21	05/17/21	TH	Y
CI29102	Mercury	05/11/21	05/17/21	05/17/21	MGH	Y
CI29102	Nickel	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29102	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29102	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29102	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29102	Polychlorinated Biphenyls	05/11/21	05/12/21	05/14/21	SC	Y
CI29102	Potassium	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Selenium	05/11/21	05/12/21	05/18/21	TH	Y



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CI29102	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29102	Silver	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Sodium	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Thallium	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Vanadium	05/11/21	05/12/21	05/18/21	TH	Y
CI29102	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29102	Zinc	05/11/21	05/12/21	05/18/21	TH	Y
CI29103	1,4-Dioxane	05/11/21	05/13/21	05/14/21	WB	Y
CI29103	Aluminum	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Antimony	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Arsenic	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Barium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Beryllium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Cadmium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Calcium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Chlorinated Herbicides	05/11/21	05/13/21	05/15/21	JRB	Y
CI29103	Chromium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Cobalt	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Copper	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Iron	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Lead	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Magnesium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Manganese	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Mercury	05/11/21	05/17/21	05/17/21	MGH	Y
CI29103	Nickel	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29103	Pesticides - Soil	05/11/21	05/12/21	05/17/21	CG	Y
CI29103	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29103	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29103	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29103	Potassium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Selenium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29103	Silver	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Sodium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Thallium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29103	Vanadium	05/11/21	05/12/21	05/14/21	CPP	Y



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CI29103	Zinc	05/11/21	05/12/21	05/14/21	CPP	Y
CI29104	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29104	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29105	1,4-Dioxane	05/11/21	05/13/21	05/14/21	WB	Y
CI29105	Aluminum	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Antimony	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Arsenic	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Barium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Beryllium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Cadmium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Calcium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Chlorinated Herbicides	05/11/21	05/13/21	05/15/21	JRB	Y
CI29105	Chromium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Cobalt	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Copper	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29105	Iron	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Lead	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Magnesium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Manganese	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Mercury	05/11/21	05/17/21	05/17/21	MGH	Y
CI29105	Nickel	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29105	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29105	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29105	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29105	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
CI29105	Potassium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Selenium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29105	Silver	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Sodium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Thallium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Vanadium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29105	Volatiles	05/11/21	05/13/21	05/13/21	JLI	Y
CI29105	Zinc	05/11/21	05/12/21	05/14/21	CPP	Y
CI29106	1,4-Dioxane	05/11/21	05/13/21	05/14/21	WB	Y



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Cl29106	Aluminum	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Antimony	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Arsenic	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Barium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Beryllium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Cadmium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Calcium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Chlorinated Herbicides	05/11/21	05/13/21	05/15/21	JRB	Y
Cl29106	Chromium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Cobalt	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Copper	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Iron	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Lead	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Magnesium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Manganese	05/11/21	05/12/21	05/19/21	EK	Y
Cl29106	Mercury	05/11/21	05/17/21	05/17/21	MGH	Y
Cl29106	Nickel	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
Cl29106	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
Cl29106	PFAS	05/11/21	05/22/21	05/22/21	***	Y
Cl29106	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
Cl29106	Polychlorinated Biphenyls	05/11/21	05/12/21	05/13/21	AW	Y
Cl29106	Potassium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Selenium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
Cl29106	Silver	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Sodium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Thallium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Vanadium	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29106	Zinc	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29107	Field Extraction	05/11/21	05/11/21	05/11/21		Y
Cl29107	Volatiles	05/11/21	05/14/21	05/14/21	JLI	Y
Cl29108	1,4-Dioxane	05/11/21	05/13/21	05/14/21	WB	Y
Cl29108	Aluminum	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29108	Antimony	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29108	Arsenic	05/11/21	05/12/21	05/14/21	CPP	Y
Cl29108	Barium	05/11/21	05/12/21	05/14/21	CPP	Y



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CI29108	Beryllium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Cadmium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Calcium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Chlorinated Herbicides	05/11/21	05/14/21	05/17/21	JRB	Y
CI29108	Chromium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Cobalt	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Copper	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Field Extraction	05/11/21	05/11/21	05/11/21		Y
CI29108	Iron	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Lead	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Magnesium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Manganese	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Mercury	05/11/21	05/17/21	05/18/21	MGH	Y
CI29108	Nickel	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Percent Solid	05/11/21	05/12/21	05/12/21	KL	Y
CI29108	Pesticides - Soil	05/11/21	05/12/21	05/13/21	CG	Y
CI29108	PFAS	05/11/21	05/22/21	05/22/21	***	Y
CI29108	PFOA/PFOS - Soil Extraction	05/11/21	05/18/21	05/18/21	***	Y
CI29108	Polychlorinated Biphenyls	05/11/21	05/12/21	05/14/21	AW	Y
CI29108	Potassium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Selenium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Semivolatiles	05/11/21	05/12/21	05/13/21	WB	Y
CI29108	Silver	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Sodium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Thallium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Vanadium	05/11/21	05/12/21	05/14/21	CPP	Y
CI29108	Volatiles	05/11/21	05/14/21	05/14/21	JLI	Y
CI29108	Zinc	05/11/21	05/12/21	05/14/21	CPP	Y



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## SDG Comments

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Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Version 2:  
ASP DP was added.

Any compound that is not detected above the MDL/LOD is reported as ND on the report and is reported in the electronic deliverables (EDD) as <RL or U at the RL per state and EPA guidance.

Version 2: Analysis results minus raw data.

Version 3: Complete report with raw data.



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## Sample Id Cross Reference

June 21, 2021

SDG I.D.: GCI29076

Project ID: IPARK 0118.48

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Client Id	Lab Id	Matrix
SB-10A (0-1`)	CI29076	SOIL
SB-10B (1-2`)	CI29077	SOIL
SB-10C (13-15`)	CI29078	SOIL
SB-11A (0-1`)	CI29079	SOIL
SB-11B (1-2`)	CI29080	SOIL
SB-11C (6-12`)	CI29081	SOIL
SB-12A (1-2`)	CI29082	SOIL
SB-12B (2-3`)	CI29083	SOIL
SB-12C (13-15`)	CI29084	SOIL
SB-13A (1-2`)	CI29085	SOIL
SB-13B (2-3`)	CI29086	SOIL
SB-13C (10-12`)	CI29087	SOIL
SB-14A (1-2`)	CI29088	SOIL
SB-14B (2-3`)	CI29089	SOIL
SB-14C (6-8`)	CI29090	SOIL
SB-15A (0-1`)	CI29091	SOIL
SB-15B (1-2`)	CI29092	SOIL
SB-15C (10-12`)	CI29093	SOIL
SB-16A (0-1`)	CI29094	SOIL
SB-16B (1-2`)	CI29095	SOIL
SB-16C (13-15`)	CI29096	SOIL
SB-17A (0-1`)	CI29097	SOIL
SB-17B (1-2`)	CI29098	SOIL
SB-17C (9-11`)	CI29099	SOIL
SB-18A (0-1`)	CI29100	SOIL
SB-18B (1-2`)	CI29101	SOIL
SB-18C (13-15`)	CI29102	SOIL
SB-19A (0-1`)	CI29103	SOIL
SB-19B (1-2`)	CI29104	SOIL
SB-19C (10-12`)	CI29105	SOIL



Environmental Laboratories, Inc.  
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823



## Sample Id Cross Reference

June 21, 2021

SDG I.D.: GCI29076

Project ID: IPARK 0118.48

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Client Id	Lab Id	Matrix
SB-20A (0-1`)	CI29106	SOIL
SB-20B (1-2`)	CI29107	SOIL
SB-20C (13-15`)	CI29108	SOIL



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076  
Phoenix ID: CI29076

Project ID: IPARK 0118.48  
Client ID: SB-10A (0-1')

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	12100	52	7.0	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.5	3.5	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	4.92	*	0.70	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	35.0	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.35	0.28	0.14	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	23900	52	32	mg/Kg	10	05/17/21	TH	SW6010D	
Cadmium	0.86	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	11.8	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	9.33	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	25.8	0.7	0.35	mg/kg	1	05/17/21	TH	SW6010D	
Iron	26400	52	35	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	15.1	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	17100	52	35	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	881	3.5	3.5	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	19.5	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1420	N	5.2	2.7	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	535	5.2	3.0	mg/Kg	1	05/17/21	TH	SW6010D	
Thallium	ND	3.1	1.4	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	18.2	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	55.6	0.7	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	94			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/A	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/A	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.258	0.0264	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.258	0.0682	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.258	0.108	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.258	0.108	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.258	0.0529	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.258	0.0509	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.258	0.0482	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.258	0.155	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.258	0.0529	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.258	0.0775	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.258	0.0470	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.258	0.0320	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.258	0.0681	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.258	0.189	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.258	0.0618	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.258	0.0452	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.258	0.0797	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.258	0.0949	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.258	0.0772	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.258	0.0449	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.258	0.120	ng/g		05/21/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	68.4			%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	90.6			%		05/21/21	***	EPA 537m
% M2-6:2FTS	117			%		05/21/21	***	EPA 537m
% M2-8:2FTS	131			%		05/21/21	***	EPA 537m
% M2PFTeDA	72.1			%		05/21/21	***	EPA 537m
% M3PFBS	79.2			%		05/21/21	***	EPA 537m
% M3PFHxS	71.5			%		05/21/21	***	EPA 537m
% M4PFHpA	83.1			%		05/21/21	***	EPA 537m
% M5PFHxA	81.3			%		05/21/21	***	EPA 537m
% M5PFPeA	86.7			%		05/21/21	***	EPA 537m
% M6PFDA	77.4			%		05/21/21	***	EPA 537m
% M7PFUdA	76.1			%		05/21/21	***	EPA 537m
% M8FOSA	57.5			%		05/21/21	***	EPA 537m
% M8PFOA	81.9			%		05/21/21	***	EPA 537m
% M8PFOS	71.2			%		05/21/21	***	EPA 537m
% M9PFNA	85.1			%		05/21/21	***	EPA 537m
% MPFBA	92.7			%		05/21/21	***	EPA 537m
% MPFDoA	76.1			%		05/21/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	260	260	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2600	2600	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	260	260	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	260	260	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	50			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	47			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	78			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	78			%	2	05/13/21	AW	30 - 150 %
% TCMX	83			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	83			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	87			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	80			%	2	05/13/21	CG	30 - 150 %
% TCMX	75			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	79			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	240	84	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	240	98	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	240	91	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	240	86	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	350	170	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	240	99	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	240	99	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	240	160	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	350	100	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	560	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	240	70	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	240	98	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	700	140	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	240	90	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	240	96	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	350	94	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	97	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	240	90	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	240	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Isophorone	ND	240	98	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	350	98	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	350	130	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	350	100	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	350	130	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	350	86	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	96			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	84			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	70			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	89			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	85			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	90			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	70	70	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	66			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	111			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	103			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK 0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: CP  
 Analyzed by: see "By" below

05/11/21

8:20

05/12/21

14:50

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29077

Project ID: IPARK 0118.48  
 Client ID: SB-10B (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/11/21	SW5035A	1
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### Volatiles

1,1,1,2-Tetrachloroethane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	29	5.9	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	29	5.9	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	29	5.9	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	12	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	5.9	2.3	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	29	5.9	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	12	5.9	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	2.9	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	5.9	5.9	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	2.9	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.9	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	5.9	0.59	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	107			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	94			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	103			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	103			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076

Project ID: IPARK 0118.48  
Client ID: SB-10C (13-15`)

### Laboratory Data

Phoenix ID: CI29078

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	19400	58	7.7	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.9	3.9	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	6.94	*	0.77	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	71.9	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.62	0.31	0.15	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	22400	58	36	mg/Kg	10	05/17/21	TH	SW6010D	
Cadmium	1.26	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	17.7	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	14.3	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	34.9	0.8	0.39	mg/kg	1	05/17/21	TH	SW6010D	
Iron	36300	58	39	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	15.6	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	19000	58	39	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	1200	3.9	3.9	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	29.3	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	2350	N	5.8	3.0	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	1030	58	33	mg/Kg	10	05/17/21	EK	SW6010D	
Thallium	ND	3.5	1.5	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	19.5	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	75.2	0.8	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	85			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.283	0.0290	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.283	0.0748	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.283	0.118	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.283	0.118	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.283	0.0580	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.283	0.0558	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.283	0.0529	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.283	0.170	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.283	0.0580	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.283	0.0850	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.283	0.0515	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.283	0.0351	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.283	0.0746	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.283	0.207	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.283	0.0677	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.283	0.0496	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.283	0.0874	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.283	0.104	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.283	0.0846	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.283	0.0493	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.283	0.132	ng/g		05/21/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	70.2		%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	95.8		%		05/21/21	***	EPA 537m
% M2-6:2FTS	109		%		05/21/21	***	EPA 537m
% M2-8:2FTS	107		%		05/21/21	***	EPA 537m
% M2PFTeDA	70.4		%		05/21/21	***	EPA 537m
% M3PFBS	65.5		%		05/21/21	***	EPA 537m
% M3PFHxS	63.8		%		05/21/21	***	EPA 537m
% M4PFHpa	76.6		%		05/21/21	***	EPA 537m
% M5PFHxA	77.1		%		05/21/21	***	EPA 537m
% M5PFPeA	82.6		%		05/21/21	***	EPA 537m
% M6PFDA	73.4		%		05/21/21	***	EPA 537m
% M7PFUdA	79.9		%		05/21/21	***	EPA 537m
% M8FOSA	56.7		%		05/21/21	***	EPA 537m
% M8PFOA	76.5		%		05/21/21	***	EPA 537m
% M8PFOS	62.3		%		05/21/21	***	EPA 537m
% M9PFNA	84.7		%		05/21/21	***	EPA 537m
% MPFBA	88.8		%		05/21/21	***	EPA 537m
% MPFDoA	69.8		%		05/21/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	290	290	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2900	2900	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	290	290	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	290	290	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	41			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	39			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	78	78	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1221	ND	78	78	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1232	ND	78	78	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1242	ND	78	78	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1248	ND	78	78	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1254	ND	78	78	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1260	ND	78	78	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1262	ND	78	78	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1268	ND	78	78	ug/Kg	2	05/14/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	84			%	2	05/14/21	AW	30 - 150 %
% DCBP (Confirmation)	73			%	2	05/14/21	AW	30 - 150 %
% TCMX	69			%	2	05/14/21	AW	30 - 150 %
% TCMX (Confirmation)	70			%	2	05/14/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.9	3.9	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.9	3.9	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	39	39	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.9	3.9	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.9	3.9	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.8	7.8	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	39	39	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	75			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	73			%	2	05/13/21	CG	30 - 150 %
% TCMX	61			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	60			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	31	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	31	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	31	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	12	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	6.2	2.5	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	31	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	12	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	3.1	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	6.2	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	3.1	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	109			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	104			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	104			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	270	93	ug/Kg	1	05/13/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
1,3-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
1,4-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	270	100	ug/Kg	1	05/13/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dichlorophenol	ND	270	140	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dimethylphenol	ND	270	96	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrophenol	ND	390	190	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrotoluene	ND	270	150	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylnaphthalene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylphenol (o-cresol)	ND	270	150	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitroaniline	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitrophenol	ND	270	150	ug/Kg	1	05/13/21	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
3,3'-Dichlorobenzidine	ND	270	180	ug/Kg	1	05/13/21	AW	SW8270D
3-Nitroaniline	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
4-Bromophenyl phenyl ether	ND	390	110	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloro-3-methylphenol	ND	270	140	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloroaniline	ND	270	150	ug/Kg	1	05/13/21	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitroaniline	ND	620	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitrophenol	ND	270	77	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Aniline	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
Anthracene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Benz(a)anthracene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzidine	ND	270	150	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(a)pyrene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(ghi)perylene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzoic acid	ND	770	150	ug/Kg	1	05/13/21	AW	SW8270D
Benzyl butyl phthalate	ND	270	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethyl)ether	ND	390	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Carbazole	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
Chrysene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Dibenz(a,h)anthracene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-butylphthalate	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-octylphthalate	ND	270	100	ug/Kg	1	05/13/21	AW	SW8270D
Fluoranthene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Fluorene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobenzene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachloroethane	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Nitrobenzene	ND	270	140	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodimethylamine	ND	390	110	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
Pentachloronitrobenzene	ND	390	120	ug/Kg	1	05/13/21	AW	SW8270D
Pentachlorophenol	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
Phenanthrene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Phenol	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Pyrene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Pyridine	ND	390	95	ug/Kg	1	05/13/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	90			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorobiphenyl	78			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorophenol	57			%	1	05/13/21	AW	30 - 130 %
% Nitrobenzene-d5	69			%	1	05/13/21	AW	30 - 130 %
% Phenol-d5	66			%	1	05/13/21	AW	30 - 130 %
% Terphenyl-d14	91			%	1	05/13/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	77	77	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	66			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	95			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	103			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

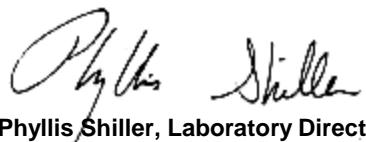
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date      Time

05/11/21      11:50  
05/12/21      14:50

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29079

Project ID: IPARK 0118.48  
Client ID: SB-11A (0-1')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	15700	59	7.8	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.9	3.9	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	6.08	*	0.78	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	52.6	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.47	0.31	0.16	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	4290	5.9	3.6	mg/Kg	1	05/17/21	TH	SW6010D	
Cadmium	1.13	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	18.7	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	11.4	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	29.1	0.8	0.39	mg/kg	1	05/17/21	TH	SW6010D	
Iron	31100	59	39	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	35.3	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	8500	59	39	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	1140	3.9	3.9	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	24.1	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1150	N	5.9	3.0	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.6	1.3	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	239	5.9	3.4	mg/Kg	1	05/19/21	EK	SW6010D	
Thallium	ND	3.5	1.6	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	18.6	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	70.3	0.8	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	81			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.283	0.0290	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic ac	ND	0.283	0.0748	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.283	0.118	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.283	0.118	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.283	0.0580	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.283	0.0559	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.283	0.0529	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.283	0.170	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.283	0.0580	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.283	0.0850	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.283	0.0516	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.283	0.0351	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.283	0.0747	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	1.10	0.283	0.207	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.283	0.0678	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	1.65	0.283	0.0496	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.283	0.0875	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	0.283	0.283	0.104	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.283	0.0847	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.283	0.0493	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.283	0.132	ng/g		05/21/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	68.5			%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	72.5			%		05/21/21	***	EPA 537m
% M2-6:2FTS	278			%		05/21/21	***	EPA 537m
% M2-8:2FTS	349			%		05/21/21	***	EPA 537m
% M2PFTeDA	39.4			%		05/21/21	***	EPA 537m
% M3PFBS	71.9			%		05/21/21	***	EPA 537m
% M3PFHxS	67.3			%		05/21/21	***	EPA 537m
% M4PFHpA	49.6			%		05/21/21	***	EPA 537m
% M5PFHxA	74.5			%		05/21/21	***	EPA 537m
% M5PFPeA	75.7			%		05/21/21	***	EPA 537m
% M6PFDA	81.9			%		05/21/21	***	EPA 537m
% M7PFUdA	67.6			%		05/21/21	***	EPA 537m
% M8FOSA	47.9			%		05/21/21	***	EPA 537m
% M8PFOA	79.8			%		05/21/21	***	EPA 537m
% M8PFOS	62.6			%		05/21/21	***	EPA 537m
% M9PFNA	71.4			%		05/21/21	***	EPA 537m
% MPFBA	80.0			%		05/21/21	***	EPA 537m
% MPFDoA	54.7			%		05/21/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	3000	3000	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	57			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	52			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	82	82	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	87			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	82			%	2	05/13/21	AW	30 - 150 %
% TCMX	70			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	68			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.5	2.5	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	16	2.5	2.5	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	12	2.5	2.5	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	4.1	4.1	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	4.1	4.1	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	41	41	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	4.1	4.1	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	4.1	4.1	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	8.2	8.2	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	41	41	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	75			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	67			%	2	05/13/21	CG	30 - 150 %
% TCMX	62			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	61			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	280	98	ug/Kg	1	05/13/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Dichlorobenzene	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	410	160	ug/Kg	1	05/13/21	AW	SW8270D
1,3-Dichlorobenzene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
1,4-Dichlorobenzene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dichlorophenol	ND	280	140	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dimethylphenol	ND	280	100	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrophenol	ND	410	200	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrotoluene	ND	280	160	ug/Kg	1	05/13/21	AW	SW8270D
2,6-Dinitrotoluene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
2-Chloronaphthalene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Chlorophenol	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylnaphthalene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylphenol (o-cresol)	ND	280	160	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitroaniline	ND	410	160	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitrophenol	ND	280	160	ug/Kg	1	05/13/21	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	410	160	ug/Kg	1	05/13/21	AW	SW8270D
3,3'-Dichlorobenzidine	ND	280	190	ug/Kg	1	05/13/21	AW	SW8270D
3-Nitroaniline	ND	410	160	ug/Kg	1	05/13/21	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	410	160	ug/Kg	1	05/13/21	AW	SW8270D
4-Bromophenyl phenyl ether	ND	410	120	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloro-3-methylphenol	ND	280	140	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloroaniline	ND	280	160	ug/Kg	1	05/13/21	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	280	140	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitroaniline	ND	650	140	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitrophenol	ND	280	81	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthylene	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
Acetophenone	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Aniline	ND	410	160	ug/Kg	1	05/13/21	AW	SW8270D
Anthracene	310	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Benz(a)anthracene	1400	280	140	ug/Kg	1	05/13/21	AW	SW8270D
Benzidine	ND	280	160	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(a)pyrene	1400	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(b)fluoranthene	1400	280	140	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(ghi)perylene	840	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(k)fluoranthene	1400	280	140	ug/Kg	1	05/13/21	AW	SW8270D
Benzoic acid	ND	810	160	ug/Kg	1	05/13/21	AW	SW8270D
Benzyl butyl phthalate	ND	280	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	410	110	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Carbazole	ND	410	160	ug/Kg	1	05/13/21	AW	SW8270D
Chrysene	1500	280	140	ug/Kg	1	05/13/21	AW	SW8270D
Dibenz(a,h)anthracene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Dibenzofuran	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Diethyl phthalate	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Dimethylphthalate	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-butylphthalate	ND	410	160	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-octylphthalate	ND	280	100	ug/Kg	1	05/13/21	AW	SW8270D
Fluoranthene	3600	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Fluorene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobenzene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobutadiene	ND	280	150	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorocyclopentadiene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachloroethane	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Indeno(1,2,3-cd)pyrene	950	280	140	ug/Kg	1	05/13/21	AW	SW8270D
Isophorone	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
Naphthalene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Nitrobenzene	ND	280	140	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodimethylamine	ND	410	110	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	410	160	ug/Kg	1	05/13/21	AW	SW8270D
Pentachloronitrobenzene	ND	410	120	ug/Kg	1	05/13/21	AW	SW8270D
Pentachlorophenol	ND	410	150	ug/Kg	1	05/13/21	AW	SW8270D
Phenanthrene	1700	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Phenol	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Pyrene	2700	280	140	ug/Kg	1	05/13/21	AW	SW8270D
Pyridine	ND	410	100	ug/Kg	1	05/13/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	89			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorobiphenyl	82			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorophenol	65			%	1	05/13/21	AW	30 - 130 %
% Nitrobenzene-d5	77			%	1	05/13/21	AW	30 - 130 %
% Phenol-d5	72			%	1	05/13/21	AW	30 - 130 %
% Terphenyl-d14	88			%	1	05/13/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	81	81	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	70			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	108			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	117			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

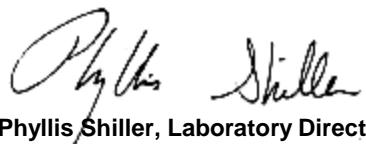
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date      Time

05/11/21      11:50  
05/12/21      14:50

Project ID: IPARK 0118.48  
Client ID: SB-11B (1-2')

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29080

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Field Extraction	Completed					05/11/21		SW5035A	1
<b>Volatiles</b>									
1,1,1,2-Tetrachloroethane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloroethane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloroethene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloropropene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dibromoethane	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichloroethane	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichloropropane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3-Dichloropropane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
2,2-Dichloropropane	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Chlorotoluene	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Hexanone	ND	25	5.1	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Isopropyltoluene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C	1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	25	5.1	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	25	5.1	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	10	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	5.1	2.0	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	25	5.1	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	10	5.1	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	2.5	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	5.1	5.1	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	2.5	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.1	1.0	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	5.1	0.51	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	106			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	94			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	100			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	103			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076

Phoenix ID: CI29081

Project ID: IPARK 0118.48  
Client ID: SB-11C (6-12')

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	7510	56	7.5	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.8	3.8	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	3.97	*	0.75	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	26.3	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	ND	0.30	0.15	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	23700	56	35	mg/Kg	10	05/17/21	TH	SW6010D	
Cadmium	0.62	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	9.45	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	6.42	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	15.4	0.8	0.38	mg/kg	1	05/17/21	TH	SW6010D	
Iron	17600	56	38	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	8.12	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	13000	56	38	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	515	3.8	3.8	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.02	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	14.2	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	870	N	5.6	2.9	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	118	5.6	3.2	mg/Kg	1	05/19/21	EK	SW6010D	
Thallium	ND	3.4	1.5	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	7.96	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	39.5	0.8	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	95			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/12/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

**PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.243	0.0249	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.243	0.0643	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.243	0.101	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.243	0.102	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.243	0.0499	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.243	0.0480	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.243	0.0455	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.243	0.146	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.243	0.0499	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.243	0.0730	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.243	0.0443	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.243	0.0302	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.243	0.0642	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.243	0.178	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.243	0.0582	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.243	0.0426	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.243	0.0752	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.243	0.0895	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.243	0.0727	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.243	0.0424	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.243	0.113	ng/g		05/21/21	***	EPA 537m

**QA/QC Surrogates**

% d3-N-MeFOSAA	70.5		%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	85.1		%		05/21/21	***	EPA 537m
% M2-6:2FTS	125		%		05/21/21	***	EPA 537m
% M2-8:2FTS	147		%		05/21/21	***	EPA 537m
% M2PFTeDA	75.2		%		05/21/21	***	EPA 537m
% M3PFBS	80.3		%		05/21/21	***	EPA 537m
% M3PFHxS	77.7		%		05/21/21	***	EPA 537m
% M4PFHpa	79.8		%		05/21/21	***	EPA 537m
% M5PFHxA	77.3		%		05/21/21	***	EPA 537m
% M5PFPeA	84.9		%		05/21/21	***	EPA 537m
% M6PFDA	77.5		%		05/21/21	***	EPA 537m
% M7PFUdA	85.8		%		05/21/21	***	EPA 537m
% M8FOSA	60.9		%		05/21/21	***	EPA 537m
% M8PFOA	81.3		%		05/21/21	***	EPA 537m
% M8PFOS	72.1		%		05/21/21	***	EPA 537m
% M9PFNA	92.6		%		05/21/21	***	EPA 537m
% MPFBA	93.9		%		05/21/21	***	EPA 537m
% MPFDoA	83.9		%		05/21/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	260	260	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2600	2600	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	260	260	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	260	260	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	44			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	42			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	86			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	86			%	2	05/13/21	AW	30 - 150 %
% TCMX	75			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	74			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	87			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	88			%	2	05/13/21	CG	30 - 150 %
% TCMX	73			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	66			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	28	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	28	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	28	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	11	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	5.5	2.2	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	11	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.8	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	5.5	5.5	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.8	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.5	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	5.5	0.55	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	106			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	95			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	102			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	102			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	240	84	ug/Kg	1	05/13/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Dichlorobenzene	ND	240	98	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	350	140	ug/Kg	1	05/13/21	AW	SW8270D
1,3-Dichlorobenzene	ND	240	100	ug/Kg	1	05/13/21	AW	SW8270D
1,4-Dichlorobenzene	ND	240	100	ug/Kg	1	05/13/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	240	91	ug/Kg	1	05/13/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dichlorophenol	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dimethylphenol	ND	240	87	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrophenol	ND	350	170	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrotoluene	ND	240	140	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Chloronaphthalene	ND	240	99	ug/Kg	1	05/13/21	AW	SW8270D
2-Chlorophenol	ND	240	99	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylphenol (o-cresol)	ND	240	140	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitrophenol	ND	240	140	ug/Kg	1	05/13/21	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	350	140	ug/Kg	1	05/13/21	AW	SW8270D
3,3'-Dichlorobenzidine	ND	240	160	ug/Kg	1	05/13/21	AW	SW8270D
3-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	350	140	ug/Kg	1	05/13/21	AW	SW8270D
4-Bromophenyl phenyl ether	ND	350	100	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloroaniline	ND	240	140	ug/Kg	1	05/13/21	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitroaniline	ND	560	120	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitrophenol	ND	240	70	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthene	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthylene	ND	240	98	ug/Kg	1	05/13/21	AW	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Aniline	ND	350	140	ug/Kg	1	05/13/21	AW	SW8270D
Anthracene	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Benz(a)anthracene	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzidine	ND	240	140	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(a)pyrene	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(k)fluoranthene	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzoic acid	ND	700	140	ug/Kg	1	05/13/21	AW	SW8270D
Benzyl butyl phthalate	ND	240	90	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	240	96	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethyl)ether	ND	350	94	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	97	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	100	ug/Kg	1	05/13/21	AW	SW8270D
Carbazole	ND	350	140	ug/Kg	1	05/13/21	AW	SW8270D
Chrysene	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D
Dibenz(a,h)anthracene	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Dibenzofuran	ND	240	100	ug/Kg	1	05/13/21	AW	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-butylphthalate	ND	350	140	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-octylphthalate	ND	240	90	ug/Kg	1	05/13/21	AW	SW8270D
Fluoranthene	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Fluorene	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobenzene	ND	240	100	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobutadiene	ND	240	130	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorocyclopentadiene	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Hexachloroethane	ND	240	100	ug/Kg	1	05/13/21	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	240	98	ug/Kg	1	05/13/21	AW	SW8270D
Naphthalene	ND	240	100	ug/Kg	1	05/13/21	AW	SW8270D
Nitrobenzene	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodimethylamine	ND	350	98	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	350	130	ug/Kg	1	05/13/21	AW	SW8270D
Pentachloronitrobenzene	ND	350	100	ug/Kg	1	05/13/21	AW	SW8270D
Pentachlorophenol	ND	350	130	ug/Kg	1	05/13/21	AW	SW8270D
Phenanthrene	ND	240	100	ug/Kg	1	05/13/21	AW	SW8270D
Phenol	ND	240	110	ug/Kg	1	05/13/21	AW	SW8270D
Pyrene	ND	240	120	ug/Kg	1	05/13/21	AW	SW8270D
Pyridine	ND	350	86	ug/Kg	1	05/13/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	82			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorobiphenyl	76			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorophenol	64			%	1	05/13/21	AW	30 - 130 %
% Nitrobenzene-d5	77			%	1	05/13/21	AW	30 - 130 %
% Phenol-d5	69			%	1	05/13/21	AW	30 - 130 %
% Terphenyl-d14	82			%	1	05/13/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	70	70	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	68			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	106			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	108			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

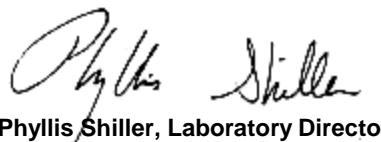
\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076

Project ID: IPARK 0118.48  
Client ID: SB-12A (1-2')

### Laboratory Data

Phoenix ID: CI29082

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	10200	51	6.8	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.4	3.4	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	4.32	*	0.68	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	29.6	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.27	0.27	0.14	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	29400	51	31	mg/Kg	10	05/17/21	TH	SW6010D	
Cadmium	0.90	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	14.1	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	7.88	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	25.9	0.7	0.34	mg/kg	1	05/17/21	TH	SW6010D	
Iron	21800	51	34	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	173	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	21100	51	34	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	826	3.4	3.4	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	18.0	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1040	N	5.1	2.6	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	120	5.1	2.9	mg/Kg	1	05/19/21	EK	SW6010D	
Thallium	ND	3.1	1.4	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	15.9	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	75.6	0.7	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	92			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.267	0.0274	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.267	0.0705	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.267	0.111	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.267	0.112	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.267	0.0547	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.267	0.0527	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.267	0.0499	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.267	0.160	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.267	0.0547	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.267	0.0801	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.267	0.0486	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.267	0.0331	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.267	0.0704	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.267	0.195	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.267	0.0639	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.267	0.0468	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.267	0.0825	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.267	0.0982	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.267	0.0798	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.267	0.0465	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.267	0.124	ng/g		05/21/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	66.1			%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	74.7			%		05/21/21	***	EPA 537m
% M2-6:2FTS	127			%		05/21/21	***	EPA 537m
% M2-8:2FTS	141			%		05/21/21	***	EPA 537m
% M2PFTeDA	71.5			%		05/21/21	***	EPA 537m
% M3PFBS	80.6			%		05/21/21	***	EPA 537m
% M3PFHxS	73.1			%		05/21/21	***	EPA 537m
% M4PFHpA	79.2			%		05/21/21	***	EPA 537m
% M5PFHxA	77.4			%		05/21/21	***	EPA 537m
% M5PFPeA	85.4			%		05/21/21	***	EPA 537m
% M6PFDA	80.3			%		05/21/21	***	EPA 537m
% M7PFUdA	73.1			%		05/21/21	***	EPA 537m
% M8FOSA	56.6			%		05/21/21	***	EPA 537m
% M8PFOA	81.8			%		05/21/21	***	EPA 537m
% M8PFOS	68.6			%		05/21/21	***	EPA 537m
% M9PFNA	77.2			%		05/21/21	***	EPA 537m
% MPFBA	90.1			%		05/21/21	***	EPA 537m
% MPFDoA	72.9			%		05/21/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	270	270	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2700	2700	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	270	270	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	270	270	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	43			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	52			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	70	70	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	79			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	71			%	2	05/13/21	AW	30 - 150 %
% TCMX	67			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	66			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	3.1	3.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	7.0	7.0	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	75			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	66			%	2	05/13/21	CG	30 - 150 %
% TCMX	62			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	61			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	420	140	ug/Kg	1	05/13/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	420	180	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Dichlorobenzene	ND	420	170	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	600	240	ug/Kg	1	05/13/21	AW	SW8270D
1,3-Dichlorobenzene	ND	420	180	ug/Kg	1	05/13/21	AW	SW8270D
1,4-Dichlorobenzene	ND	420	180	ug/Kg	1	05/13/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	420	160	ug/Kg	1	05/13/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	420	190	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dichlorophenol	ND	420	210	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dimethylphenol	ND	420	150	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrophenol	ND	600	300	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrotoluene	ND	420	240	ug/Kg	1	05/13/21	AW	SW8270D
2,6-Dinitrotoluene	ND	420	190	ug/Kg	1	05/13/21	AW	SW8270D
2-Chloronaphthalene	ND	420	170	ug/Kg	1	05/13/21	AW	SW8270D
2-Chlorophenol	ND	420	170	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylnaphthalene	ND	420	180	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylphenol (o-cresol)	ND	330	240	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitroaniline	ND	600	240	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitrophenol	ND	420	240	ug/Kg	1	05/13/21	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	600	240	ug/Kg	1	05/13/21	AW	SW8270D
3,3'-Dichlorobenzidine	ND	420	280	ug/Kg	1	05/13/21	AW	SW8270D
3-Nitroaniline	ND	600	240	ug/Kg	1	05/13/21	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	600	240	ug/Kg	1	05/13/21	AW	SW8270D
4-Bromophenyl phenyl ether	ND	600	180	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloro-3-methylphenol	ND	420	210	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloroaniline	ND	420	240	ug/Kg	1	05/13/21	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitroaniline	ND	960	200	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitrophenol	ND	420	120	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthene	ND	420	180	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthylene	ND	420	170	ug/Kg	1	05/13/21	AW	SW8270D
Acetophenone	ND	420	190	ug/Kg	1	05/13/21	AW	SW8270D
Aniline	ND	600	240	ug/Kg	1	05/13/21	AW	SW8270D
Anthracene	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
Benz(a)anthracene	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
Benzidine	ND	420	240	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(a)pyrene	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(b)fluoranthene	ND	420	210	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(ghi)perylene	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(k)fluoranthene	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
Benzoic acid	ND	1200	240	ug/Kg	1	05/13/21	AW	SW8270D
Benzyl butyl phthalate	ND	420	160	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	420	170	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	600	160	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	420	170	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	420	170	ug/Kg	1	05/13/21	AW	SW8270D
Carbazole	ND	600	240	ug/Kg	1	05/13/21	AW	SW8270D
Chrysene	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
Dibenz(a,h)anthracene	ND	330	200	ug/Kg	1	05/13/21	AW	SW8270D
Dibenzofuran	ND	420	180	ug/Kg	1	05/13/21	AW	SW8270D
Diethyl phthalate	ND	420	190	ug/Kg	1	05/13/21	AW	SW8270D
Dimethylphthalate	ND	420	190	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-butylphthalate	ND	600	240	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-octylphthalate	ND	420	160	ug/Kg	1	05/13/21	AW	SW8270D
Fluoranthene	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
Fluorene	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobenzene	ND	330	180	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobutadiene	ND	420	220	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorocyclopentadiene	ND	420	180	ug/Kg	1	05/13/21	AW	SW8270D
Hexachloroethane	ND	420	180	ug/Kg	1	05/13/21	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
Isophorone	ND	420	170	ug/Kg	1	05/13/21	AW	SW8270D
Naphthalene	ND	420	170	ug/Kg	1	05/13/21	AW	SW8270D
Nitrobenzene	ND	420	210	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodimethylamine	ND	600	170	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	420	200	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	600	230	ug/Kg	1	05/13/21	AW	SW8270D
Pentachloronitrobenzene	ND	600	180	ug/Kg	1	05/13/21	AW	SW8270D
Pentachlorophenol	ND	600	230	ug/Kg	1	05/13/21	AW	SW8270D
Phenanthrene	ND	420	170	ug/Kg	1	05/13/21	AW	SW8270D
Phenol	ND	330	190	ug/Kg	1	05/13/21	AW	SW8270D
Pyrene	ND	420	210	ug/Kg	1	05/13/21	AW	SW8270D
Pyridine	ND	600	150	ug/Kg	1	05/13/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	89			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorobiphenyl	80			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorophenol	62			%	1	05/13/21	AW	30 - 130 %
% Nitrobenzene-d5	72			%	1	05/13/21	AW	30 - 130 %
% Phenol-d5	70			%	1	05/13/21	AW	30 - 130 %
% Terphenyl-d14	87			%	1	05/13/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	71	71	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	66			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	99			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	108			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

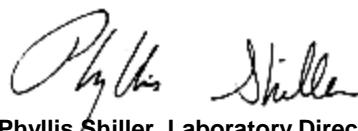
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

#### Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK 0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: CP  
 Analyzed by: see "By" below

05/11/21

10:40

05/12/21

14:50

Project ID: IPARK 0118.48  
 Client ID: SB-12B (2-3')

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29083

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Field Extraction	Completed					05/11/21		SW5035A	1
<b>Volatiles</b>									
1,1,1,2-Tetrachloroethane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1-Dichloroethane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1-Dichloroethene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1-Dichloropropene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dibromoethane	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dichloroethane	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dichloropropane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
1,3-Dichloropropane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
2,2-Dichloropropane	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	
2-Chlorotoluene	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C	
2-Hexanone	ND	22	4.4	ug/Kg	1	05/14/21	JLI	SW8260C	
2-Isopropyltoluene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C	1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	22	4.4	ug/Kg	1	05/14/21	JLI	SW8260C
Acetone	ND	22	4.4	ug/Kg	1	05/14/21	JLI	SW8260C
Acrylonitrile	ND	8.8	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Benzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Bromobenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Bromoform	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
Bromomethane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
Carbon Disulfide	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
Carbon tetrachloride	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
Chlorobenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Chloroethane	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Chloroform	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Chloromethane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Dibromochloromethane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
Dibromomethane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Ethylbenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Isopropylbenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
m&p-Xylene	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	22	4.4	ug/Kg	1	05/14/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.8	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
Methylene chloride	ND	8.8	4.4	ug/Kg	1	05/14/21	JLI	SW8260C
Naphthalene	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
n-Butylbenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
n-Propylbenzene	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
o-Xylene	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
sec-Butylbenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Styrene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
tert-Butylbenzene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Tetrachloroethene	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.8	2.2	ug/Kg	1	05/14/21	JLI	SW8260C
Toluene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Total Xylenes	ND	4.4	4.4	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.8	2.2	ug/Kg	1	05/14/21	JLI	SW8260C
Trichloroethene	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.4	0.88	ug/Kg	1	05/14/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
Vinyl chloride	ND	4.4	0.44	ug/Kg	1	05/14/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	102			%	1	05/14/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	96			%	1	05/14/21	JLI	70 - 130 %
% Dibromofluoromethane	95			%	1	05/14/21	JLI	70 - 130 %
% Toluene-d8	100			%	1	05/14/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

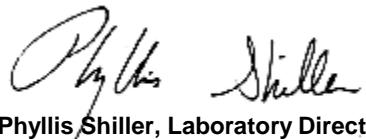
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date      Time

05/11/21      10:40  
05/12/21      14:50

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29084

Project ID: IPARK 0118.48  
Client ID: SB-12C (13-15`)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	10700	58	7.7	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.9	3.9	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	4.71	*	0.77	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	38.5	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.47	0.31	0.15	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	10000	5.8	3.5	mg/Kg	1	05/17/21	TH	SW6010D	
Cadmium	0.81	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	9.71	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	9.01	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	21.2	0.8	0.39	mg/kg	1	05/17/21	TH	SW6010D	
Iron	24900	58	39	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	11.1	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	10700	58	39	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	890	3.9	3.9	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	20.0	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1120	N	5.8	3.0	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	252	5.8	3.3	mg/Kg	1	05/19/21	EK	SW6010D	
Thallium	ND	3.5	1.5	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	11.7	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	54.7	0.8	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	90			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.259	0.0266	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.259	0.0685	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.259	0.108	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.259	0.108	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.259	0.0531	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.259	0.0512	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.259	0.0485	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.259	0.156	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.259	0.0531	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.259	0.0778	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.259	0.0472	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.259	0.0322	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.259	0.0684	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.259	0.190	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.259	0.0621	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.259	0.0455	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.259	0.0801	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.259	0.0954	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.259	0.0775	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.259	0.0451	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.259	0.121	ng/g		05/21/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	66.9		%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	81.7		%		05/21/21	***	EPA 537m
% M2-6:2FTS	116		%		05/21/21	***	EPA 537m
% M2-8:2FTS	133		%		05/21/21	***	EPA 537m
% M2PFTeDA	75.6		%		05/21/21	***	EPA 537m
% M3PFBS	87.5		%		05/21/21	***	EPA 537m
% M3PFHxS	76.0		%		05/21/21	***	EPA 537m
% M4PFHpa	85.4		%		05/21/21	***	EPA 537m
% M5PFHxA	81.6		%		05/21/21	***	EPA 537m
% M5PFPeA	92.3		%		05/21/21	***	EPA 537m
% M6PFDA	83.3		%		05/21/21	***	EPA 537m
% M7PFUdA	83.7		%		05/21/21	***	EPA 537m
% M8FOSA	64.0		%		05/21/21	***	EPA 537m
% M8PFOA	74.1		%		05/21/21	***	EPA 537m
% M8PFOS	81.8		%		05/21/21	***	EPA 537m
% M9PFNA	86.8		%		05/21/21	***	EPA 537m
% MPFBA	98.3		%		05/21/21	***	EPA 537m
% MPFDoA	82.9		%		05/21/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2800	2800	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	46			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	57			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	72	72	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1221	ND	72	72	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1232	ND	72	72	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1242	ND	72	72	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1248	ND	72	72	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1254	ND	72	72	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1260	ND	72	72	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1262	ND	72	72	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1268	ND	72	72	ug/Kg	2	05/14/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	88			%	2	05/14/21	AW	30 - 150 %
% DCBP (Confirmation)	79			%	2	05/14/21	AW	30 - 150 %
% TCMX	73			%	2	05/14/21	AW	30 - 150 %
% TCMX (Confirmation)	73			%	2	05/14/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	36	36	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	36	36	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	79			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	77			%	2	05/13/21	CG	30 - 150 %
% TCMX	64			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	68			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
1,1-Dichloroethane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
1,1-Dichloroethene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
1,1-Dichloropropene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
1,2-Dibromoethane	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
1,2-Dichloroethane	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
1,2-Dichloropropane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
1,3-Dichloropropane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
2,2-Dichloropropane	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
2-Chlorotoluene	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
2-Hexanone	ND	26	5.2	ug/Kg	1	05/14/21	JLI	SW8260C
2-Isopropyltoluene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
4-Chlorotoluene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	26	5.2	ug/Kg	1	05/14/21	JLI	SW8260C
Acetone	ND	26	5.2	ug/Kg	1	05/14/21	JLI	SW8260C
Acrylonitrile	ND	10	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Benzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Bromobenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Bromochloromethane	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Bromodichloromethane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
Bromoform	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
Bromomethane	ND	5.2	2.1	ug/Kg	1	05/14/21	JLI	SW8260C
Carbon Disulfide	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
Carbon tetrachloride	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
Chlorobenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Chloroethane	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Chloroform	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Chloromethane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Dibromochloromethane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
Dibromomethane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Ethylbenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Isopropylbenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
m&p-Xylene	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	26	5.2	ug/Kg	1	05/14/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	10	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
Methylene chloride	ND	10	5.2	ug/Kg	1	05/14/21	JLI	SW8260C
Naphthalene	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
n-Butylbenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
n-Propylbenzene	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
o-Xylene	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
sec-Butylbenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Styrene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
tert-Butylbenzene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Tetrachloroethene	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	10	2.6	ug/Kg	1	05/14/21	JLI	SW8260C
Toluene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Total Xylenes	ND	5.2	5.2	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	10	2.6	ug/Kg	1	05/14/21	JLI	SW8260C
Trichloroethene	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.2	1.0	ug/Kg	1	05/14/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
Vinyl chloride	ND	5.2	0.52	ug/Kg	1	05/14/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	101			%	1	05/14/21	JLI	70 - 130 %
% Bromofluorobenzene	94			%	1	05/14/21	JLI	70 - 130 %
% Dibromofluoromethane	97			%	1	05/14/21	JLI	70 - 130 %
% Toluene-d8	99			%	1	05/14/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	88	ug/Kg	1	05/13/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	260	95	ug/Kg	1	05/13/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dichlorophenol	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrophenol	ND	370	180	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrotoluene	ND	260	140	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylphenol (o-cresol)	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitrophenol	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	140	ug/Kg	1	05/13/21	AW	SW8270D
3,3'-Dichlorobenzidine	ND	260	170	ug/Kg	1	05/13/21	AW	SW8270D
3-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
4-Bromophenyl phenyl ether	ND	370	110	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloroaniline	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitroaniline	ND	580	120	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitrophenol	ND	260	73	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Aniline	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
Anthracene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benz(a)anthracene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzidine	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(a)pyrene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzoic acid	ND	730	150	ug/Kg	1	05/13/21	AW	SW8270D
Benzyl butyl phthalate	ND	260	94	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethyl)ether	ND	370	99	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Carbazole	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
Chrysene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Dibenz(a,h)anthracene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-butylphthalate	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-octylphthalate	ND	260	94	ug/Kg	1	05/13/21	AW	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Fluorene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Hexachloroethane	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Nitrobenzene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodimethylamine	ND	370	100	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	370	140	ug/Kg	1	05/13/21	AW	SW8270D
Pentachloronitrobenzene	ND	370	110	ug/Kg	1	05/13/21	AW	SW8270D
Pentachlorophenol	ND	370	140	ug/Kg	1	05/13/21	AW	SW8270D
Phenanthrene	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
Phenol	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Pyrene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Pyridine	ND	370	90	ug/Kg	1	05/13/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	90			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorobiphenyl	84			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorophenol	70			%	1	05/13/21	AW	30 - 130 %
% Nitrobenzene-d5	84			%	1	05/13/21	AW	30 - 130 %
% Phenol-d5	77			%	1	05/13/21	AW	30 - 130 %
% Terphenyl-d14	95			%	1	05/13/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	72	72	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	64			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	93			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	103			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

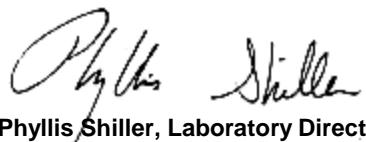
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

05/11/21 9:50

05/12/21 14:50

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29085

Project ID: IPARK 0118.48  
Client ID: SB-13A (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	11600	62	8.3	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	4.1	4.1	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	6.13	*	0.83	0.83	mg/Kg	1	05/17/21	TH	SW6010D
Barium	31.9	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.74	0.33	0.17	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	16500	62	38	mg/Kg	10	05/17/21	TH	SW6010D	
Cadmium	0.96	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	12.4	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	9.11	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	25.2	0.8	0.41	mg/kg	1	05/17/21	TH	SW6010D	
Iron	29900	62	41	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	14.1	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	13800	62	41	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	774	4.1	4.1	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	22.3	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1500	N	6.2	3.2	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.7	1.4	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	248	6.2	3.6	mg/Kg	1	05/19/21	EK	SW6010D	
Thallium	ND	3.7	1.7	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	23.8	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	61.1	0.8	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	84			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.272	0.0279	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.272	0.0719	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.272	0.114	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.272	0.114	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.272	0.0558	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.272	0.0537	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.272	0.0509	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.272	0.163	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.272	0.0558	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.272	0.0817	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.272	0.0496	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.272	0.0338	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.272	0.0718	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.272	0.199	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.272	0.0652	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.272	0.0477	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.272	0.0841	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.272	0.100	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.272	0.0814	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.272	0.0474	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.272	0.127	ng/g		05/21/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	65.0			%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	77.5			%		05/21/21	***	EPA 537m
% M2-6:2FTS	107			%		05/21/21	***	EPA 537m
% M2-8:2FTS	121			%		05/21/21	***	EPA 537m
% M2PFTeDA	64.5			%		05/21/21	***	EPA 537m
% M3PFBS	85.4			%		05/21/21	***	EPA 537m
% M3PFHxS	74.1			%		05/21/21	***	EPA 537m
% M4PFHpA	85.2			%		05/21/21	***	EPA 537m
% M5PFHxA	85.3			%		05/21/21	***	EPA 537m
% M5PFPeA	92.4			%		05/21/21	***	EPA 537m
% M6PFDA	81.2			%		05/21/21	***	EPA 537m
% M7PFUdA	71.3			%		05/21/21	***	EPA 537m
% M8FOSA	55.1			%		05/21/21	***	EPA 537m
% M8PFOA	86.7			%		05/21/21	***	EPA 537m
% M8PFOS	73.0			%		05/21/21	***	EPA 537m
% M9PFNA	91.0			%		05/21/21	***	EPA 537m
% MPFBA	105			%		05/21/21	***	EPA 537m
% MPFDoA	73.7			%		05/21/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	3000	3000	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	43			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	53			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	77	77	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	77	77	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	77	77	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	77	77	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	77	77	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	77	77	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	77	77	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	77	77	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	77	77	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	83			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	77			%	2	05/13/21	AW	30 - 150 %
% TCMX	71			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	68			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3	2.3	ug/Kg	2	05/14/21	CG	SW8081B
4,4' -DDE	ND	2.3	2.3	ug/Kg	2	05/14/21	CG	SW8081B
4,4' -DDT	ND	2.3	2.3	ug/Kg	2	05/14/21	CG	SW8081B
a-BHC	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
a-Chlordane	ND	3.9	3.9	ug/Kg	2	05/14/21	CG	SW8081B
Aldrin	ND	3.9	3.9	ug/Kg	2	05/14/21	CG	SW8081B
b-BHC	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Chlordane	ND	39	39	ug/Kg	2	05/14/21	CG	SW8081B
d-BHC	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Dieldrin	ND	3.9	3.9	ug/Kg	2	05/14/21	CG	SW8081B
Endosulfan I	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Endosulfan II	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Endosulfan sulfate	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Endrin	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Endrin aldehyde	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Endrin ketone	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/14/21	CG	SW8081B
g-Chlordane	ND	3.9	3.9	ug/Kg	2	05/14/21	CG	SW8081B
Heptachlor	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Heptachlor epoxide	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Methoxychlor	ND	39	39	ug/Kg	2	05/14/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/14/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	73			%	2	05/14/21	CG	30 - 150 %
% DCBP (Confirmation)	69			%	2	05/14/21	CG	30 - 150 %
% TCMX	69			%	2	05/14/21	CG	30 - 150 %
% TCMX (Confirmation)	65			%	2	05/14/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	270	94	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	390	160	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	100	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	270	97	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	390	190	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	160	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	390	160	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	270	160	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	270	180	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	390	160	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	390	160	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	390	110	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	270	160	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	620	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	270	78	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	390	160	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	270	160	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	780	160	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	270	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	390	110	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	390	160	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	390	160	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	270	100	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Isophorone	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	390	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	390	120	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	390	96	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	83			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	64			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	56			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	77			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	68			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	65			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	390	390	ug/Kg	5	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl (5x)	61			%	5	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5 (5x)	102			%	5	05/15/21	WB	30 - 130 %
% Terphenyl-d14 (5x)	94			%	5	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

#### Semi-Volatile Comment:

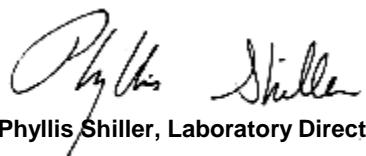
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

#### Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Date      Time

Collected by:  
Received by: CP  
Analyzed by: see "By" below

05/11/21      9:50

05/12/21      14:50

Project ID: IPARK 0118.48  
Client ID: SB-13B (2-3')

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29086

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction

Completed

05/11/21

SW5035A

1

### Volatiles

1,1,1,2-Tetrachloroethane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	23	4.7	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	23	4.7	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	23	4.7	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	9.3	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.7	1.9	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	23	4.7	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.3	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	9.3	4.7	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.3	2.3	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	4.7	4.7	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.3	2.3	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.7	0.93	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.7	0.47	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	98			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	100			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	103			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	96			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

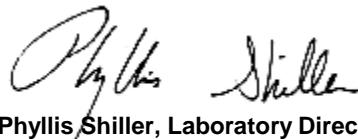
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

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# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076

Project ID: IPARK 0118.48  
Client ID: SB-13C (10-12`)

### Laboratory Data

Phoenix ID: CI29087

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	7070	51	6.7	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.4	3.4	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	4.56	* 0.67	0.67	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	22.8	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	ND	0.27	0.13	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	85800	51	31	mg/Kg	10	05/17/21	TH	SW6010D	
Cadmium	0.63	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	10.8	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	6.19	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	16.7	0.7	0.34	mg/kg	1	05/17/21	TH	SW6010D	
Iron	15700	51	34	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	9.71	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	41100	51	34	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	608	3.4	3.4	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	14.0	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1090	N	5.1	2.6	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	245	5.1	2.9	mg/Kg	1	05/17/21	TH	SW6010D	
Thallium	ND	3.0	1.3	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	12.9	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	40.8	0.7	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	95			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.261	0.0268	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.261	0.0690	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.261	0.109	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.261	0.109	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.261	0.0535	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.261	0.0515	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.261	0.0488	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.261	0.157	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.261	0.0535	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.261	0.0784	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.261	0.0476	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.261	0.0324	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.261	0.0689	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.261	0.191	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.261	0.0625	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.261	0.0458	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.261	0.0807	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.261	0.0961	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.261	0.0781	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.261	0.0455	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.261	0.122	ng/g		05/21/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	55.1		%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	64.3		%		05/21/21	***	EPA 537m
% M2-6:2FTS	74.0		%		05/21/21	***	EPA 537m
% M2-8:2FTS	85.6		%		05/21/21	***	EPA 537m
% M2PFTeDA	56.8		%		05/21/21	***	EPA 537m
% M3PFBS	81.5		%		05/21/21	***	EPA 537m
% M3PFHxS	67.5		%		05/21/21	***	EPA 537m
% M4PFHpa	81.1		%		05/21/21	***	EPA 537m
% M5PFHxA	81.5		%		05/21/21	***	EPA 537m
% M5PFPeA	94.0		%		05/21/21	***	EPA 537m
% M6PFDA	76.1		%		05/21/21	***	EPA 537m
% M7PFUdA	77.8		%		05/21/21	***	EPA 537m
% M8FOSA	52.5		%		05/21/21	***	EPA 537m
% M8PFOA	80.4		%		05/21/21	***	EPA 537m
% M8PFOS	83.1		%		05/21/21	***	EPA 537m
% M9PFNA	94.8		%		05/21/21	***	EPA 537m
% MPFBA	103		%		05/21/21	***	EPA 537m
% MPFDoA	62.1		%		05/21/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	260	260	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2600	2600	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	260	260	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	260	260	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	38			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	40			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	69	69	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	79			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	74			%	2	05/13/21	AW	30 - 150 %
% TCMX	68			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	67			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	80			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	83			%	2	05/13/21	CG	30 - 150 %
% TCMX	66			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	65			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	39	7.7	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	39	7.7	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	39	7.7	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	15	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	7.7	3.1	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	39	7.7	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	15	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	15	7.7	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	15	3.9	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	7.7	7.7	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	15	3.9	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	7.7	1.5	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	7.7	0.77	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	95			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	101			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	104			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	97			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	240	83	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	240	98	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	240	90	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	240	86	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	350	170	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	240	98	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	240	98	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	240	160	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	350	100	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	550	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	240	69	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	240	97	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	690	140	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	240	89	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	240	96	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	350	93	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	96	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	240	89	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	240	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	240	97	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	350	98	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	350	130	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	350	100	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	350	130	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	240	99	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	350	85	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	83			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	67			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	59			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	80			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	70			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	71			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	350	350	ug/Kg	5	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl (5x)	63			%	5	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5 (5x)	103			%	5	05/15/21	WB	30 - 130 %
% Terphenyl-d14 (5x)	99			%	5	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

#### Semi-Volatile Comment:

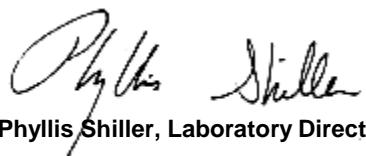
Due to a matrix interference and/or the presence of a large amount of non-target material in the sample, a dilution was required resulting in an elevated RL for the semivolatile analysis.

#### Semi-Volatile Comment:

To achieve client's objectives, where the lowest calibration standard or LOD justifies lowering the RL/PQL, the RL/PQL of some compounds have been lowered to meet criteria.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date      Time

05/11/21      9:10  
05/12/21      14:50

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29088

Project ID: IPARK 0118.48  
Client ID: SB-14A (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	9280	54	7.2	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.6	3.6	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	4.96	*	0.72	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	26.8	0.36	0.36	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	ND	0.29	0.14	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	51600	54	33	mg/Kg	10	05/17/21	TH	SW6010D	
Cadmium	0.84	0.36	0.36	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	10.1	0.36	0.36	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	8.07	0.36	0.36	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	22.0	0.7	0.36	mg/kg	1	05/17/21	TH	SW6010D	
Iron	21800	54	36	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	11.8	0.36	0.36	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	30700	54	36	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	1070	3.6	3.6	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	18.7	0.36	0.36	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	854	N	5.4	2.8	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.36	0.36	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	199	5.4	3.1	mg/Kg	1	05/17/21	TH	SW6010D	
Thallium	ND	3.2	1.4	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	16.3	0.36	0.36	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	49.2	0.7	0.36	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	89			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.271	0.0278	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic acid	ND	0.271	0.0715	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.271	0.113	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.271	0.113	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.271	0.0555	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.271	0.0534	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.271	0.0506	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.271	0.163	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.271	0.0555	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.271	0.0813	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.271	0.0493	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.271	0.0336	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.271	0.0714	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.271	0.198	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.271	0.0648	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.271	0.0475	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.271	0.0837	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.271	0.0996	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.271	0.0810	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.271	0.0472	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.271	0.126	ng/g		05/21/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	72.3			%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	86.4			%		05/21/21	***	EPA 537m
% M2-6:2FTS	109			%		05/21/21	***	EPA 537m
% M2-8:2FTS	136			%		05/21/21	***	EPA 537m
% M2PFTeDA	69.9			%		05/21/21	***	EPA 537m
% M3PFBS	82.1			%		05/21/21	***	EPA 537m
% M3PFHxS	74.1			%		05/21/21	***	EPA 537m
% M4PFHpA	83.2			%		05/21/21	***	EPA 537m
% M5PFHxA	81.4			%		05/21/21	***	EPA 537m
% M5PFPeA	92.0			%		05/21/21	***	EPA 537m
% M6PFDA	86.9			%		05/21/21	***	EPA 537m
% M7PFUdA	74.4			%		05/21/21	***	EPA 537m
% M8FOSA	60.7			%		05/21/21	***	EPA 537m
% M8PFOA	85.2			%		05/21/21	***	EPA 537m
% M8PFOS	73.6			%		05/21/21	***	EPA 537m
% M9PFNA	92.9			%		05/21/21	***	EPA 537m
% MPFBA	104			%		05/21/21	***	EPA 537m
% MPFDoA	78.1			%		05/21/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2800	2800	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	43			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	52			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	74	74	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	74	74	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	74	74	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	74	74	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	74	74	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	74	74	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	74	74	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	74	74	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	74	74	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	85			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	80			%	2	05/13/21	AW	30 - 150 %
% TCMX	72			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	71			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	83			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	75			%	2	05/13/21	CG	30 - 150 %
% TCMX	72			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	69			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	88	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	96	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	260	91	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	370	180	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	260	170	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	370	110	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	590	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	260	74	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	740	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	370	99	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Isophorone	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	370	100	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	370	140	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	370	110	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	370	140	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	370	91	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	95			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	69			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	60			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	81			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	74			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	74			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	73	73	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	69			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	100			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	113			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Date      Time

Collected by: \_\_\_\_\_  
Received by: CP  
Analyzed by: see "By" below

05/11/21      9:10

05/12/21      14:50

Project ID: IPARK 0118.48  
Client ID: SB-14B (2-3')

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29089

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction

Completed

05/11/21

SW5035A

1

### Volatiles

1,1,1,2-Tetrachloroethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	21	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	21	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	21	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	8.5	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.3	1.7	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	21	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.5	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	8.5	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.5	2.1	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	4.3	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.5	2.1	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	100			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	101			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	97			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

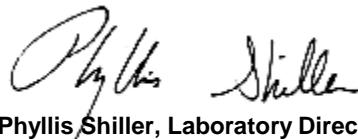
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

05/11/21 9:10

05/12/21 14:50

Project ID: IPARK 0118.48  
Client ID: SB-14C (6-8')

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29090

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	11400	61	8.1	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	4.1	4.1	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	7.92	*	0.81	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	33.6	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.60	0.33	0.16	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	1210	6.1	3.7	mg/Kg	1	05/17/21	TH	SW6010D	
Cadmium	1.07	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	13.9	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	12.0	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	28.8	0.8	0.41	mg/kg	1	05/17/21	TH	SW6010D	
Iron	29800	61	41	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	19.3	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	5840	6.1	4.1	mg/Kg	1	05/17/21	TH	SW6010D	
Manganese	863	4.1	4.1	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	25.1	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1370	N	6.1	3.2	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.6	1.4	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	668	6.1	3.5	mg/Kg	1	05/17/21	TH	SW6010D	
Thallium	ND	3.7	1.6	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	21.3	0.41	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	59.1	0.8	0.41	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	82			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

**PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.278	0.0285	ng/g		05/21/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.278	0.0735	ng/g		05/21/21	***	EPA 537m
NEtFOSAA	ND	0.278	0.116	ng/g		05/21/21	***	EPA 537m
NMeFOSAA	ND	0.278	0.116	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.278	0.0570	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.278	0.0549	ng/g		05/21/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.278	0.0520	ng/g		05/21/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.278	0.167	ng/g		05/21/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.278	0.0570	ng/g		05/21/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.278	0.0835	ng/g		05/21/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.278	0.0507	ng/g		05/21/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.278	0.0345	ng/g		05/21/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.278	0.0734	ng/g		05/21/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.278	0.203	ng/g		05/21/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.278	0.0666	ng/g		05/21/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.278	0.0488	ng/g		05/21/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.278	0.0860	ng/g		05/21/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.278	0.102	ng/g		05/21/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.278	0.0832	ng/g		05/21/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.278	0.0484	ng/g		05/21/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.278	0.129	ng/g		05/21/21	***	EPA 537m

**QA/QC Surrogates**

% d3-N-MeFOSAA	64.3		%		05/21/21	***	EPA 537m
% d5-N-EtFOSAA	79.2		%		05/21/21	***	EPA 537m
% M2-6:2FTS	91.6		%		05/21/21	***	EPA 537m
% M2-8:2FTS	97.1		%		05/21/21	***	EPA 537m
% M2PFTeDA	71.8		%		05/21/21	***	EPA 537m
% M3PFBS	82.3		%		05/21/21	***	EPA 537m
% M3PFHxS	72.0		%		05/21/21	***	EPA 537m
% M4PFHpa	78.7		%		05/21/21	***	EPA 537m
% M5PFHxA	80.2		%		05/21/21	***	EPA 537m
% M5PFPeA	91.1		%		05/21/21	***	EPA 537m
% M6PFDA	72.6		%		05/21/21	***	EPA 537m
% M7PFUdA	77.2		%		05/21/21	***	EPA 537m
% M8FOSA	58.3		%		05/21/21	***	EPA 537m
% M8PFOA	78.0		%		05/21/21	***	EPA 537m
% M8PFOS	70.1		%		05/21/21	***	EPA 537m
% M9PFNA	81.3		%		05/21/21	***	EPA 537m
% MPFBA	100		%		05/21/21	***	EPA 537m
% MPFDoA	76.5		%		05/21/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	3000	3000	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	300	300	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	43			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	52			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	80	80	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	77			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	75			%	2	05/13/21	AW	30 - 150 %
% TCMX	68			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	68			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.4	2.4	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.4	2.4	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.4	2.4	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	4.0	4.0	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	4.0	4.0	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	40	40	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	4.0	4.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.6	1.6	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	4.0	4.0	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	8.0	8.0	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	40	40	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	160	160	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	76			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	78			%	2	05/13/21	CG	30 - 150 %
% TCMX	70			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	71			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	24	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	24	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	9.5	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.8	1.9	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	24	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.5	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	9.5	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	4.9	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.5	2.4	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	4.8	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.5	2.4	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.8	0.95	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	101			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	99			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	97			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	280	95	ug/Kg	1	05/13/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Dichlorobenzene	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	390	160	ug/Kg	1	05/13/21	AW	SW8270D
1,3-Dichlorobenzene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
1,4-Dichlorobenzene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	280	100	ug/Kg	1	05/13/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dichlorophenol	ND	280	140	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dimethylphenol	ND	280	98	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrophenol	ND	390	200	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrotoluene	ND	280	160	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Chloronaphthalene	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Chlorophenol	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylnaphthalene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylphenol (o-cresol)	ND	280	160	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitroaniline	ND	390	160	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitrophenol	ND	280	160	ug/Kg	1	05/13/21	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	390	160	ug/Kg	1	05/13/21	AW	SW8270D
3,3'-Dichlorobenzidine	ND	280	190	ug/Kg	1	05/13/21	AW	SW8270D
3-Nitroaniline	ND	390	160	ug/Kg	1	05/13/21	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	390	160	ug/Kg	1	05/13/21	AW	SW8270D
4-Bromophenyl phenyl ether	ND	390	120	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloro-3-methylphenol	ND	280	140	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloroaniline	ND	280	160	ug/Kg	1	05/13/21	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitroaniline	ND	630	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitrophenol	ND	280	79	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthylene	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
Acetophenone	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Aniline	ND	390	160	ug/Kg	1	05/13/21	AW	SW8270D
Anthracene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Benz(a)anthracene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzidine	ND	280	160	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(a)pyrene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(b)fluoranthene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(ghi)perylene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(k)fluoranthene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzoic acid	ND	790	160	ug/Kg	1	05/13/21	AW	SW8270D
Benzyl butyl phthalate	ND	280	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethyl)ether	ND	390	110	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
Carbazole	ND	390	160	ug/Kg	1	05/13/21	AW	SW8270D
Chrysene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Dibenz(a,h)anthracene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Dibenzofuran	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Diethyl phthalate	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Dimethylphthalate	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-butylphthalate	ND	390	160	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-octylphthalate	ND	280	100	ug/Kg	1	05/13/21	AW	SW8270D
Fluoranthene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Fluorene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobenzene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobutadiene	ND	280	140	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorocyclopentadiene	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachloroethane	ND	280	120	ug/Kg	1	05/13/21	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
Naphthalene	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
Nitrobenzene	ND	280	140	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodimethylamine	ND	390	110	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
Pentachloronitrobenzene	ND	390	120	ug/Kg	1	05/13/21	AW	SW8270D
Pentachlorophenol	ND	390	150	ug/Kg	1	05/13/21	AW	SW8270D
Phenanthrene	ND	280	110	ug/Kg	1	05/13/21	AW	SW8270D
Phenol	ND	280	130	ug/Kg	1	05/13/21	AW	SW8270D
Pyrene	ND	280	140	ug/Kg	1	05/13/21	AW	SW8270D
Pyridine	ND	390	97	ug/Kg	1	05/13/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	85			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorobiphenyl	77			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorophenol	57			%	1	05/13/21	AW	30 - 130 %
% Nitrobenzene-d5	69			%	1	05/13/21	AW	30 - 130 %
% Phenol-d5	66			%	1	05/13/21	AW	30 - 130 %
% Terphenyl-d14	92			%	1	05/13/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	80	80	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	43			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	60			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	100			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076

Phoenix ID: CI29091

Project ID: IPARK 0118.48  
Client ID: SB-15A (0-1')

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	17200	57	7.6	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.8	3.8	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	5.12	*	0.76	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	86.8	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.62	0.30	0.15	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	990	5.7	3.5	mg/Kg	1	05/17/21	TH	SW6010D	
Cadmium	1.14	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	17.1	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	10.5	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	18.4	0.8	0.38	mg/kg	1	05/17/21	TH	SW6010D	
Iron	24100	57	38	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	20.4	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	4910	5.7	3.8	mg/Kg	1	05/17/21	TH	SW6010D	
Manganese	875	3.8	3.8	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	0.03	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	22.0	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	974	N	5.7	2.9	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	33.3	5.7	3.3	mg/Kg	1	05/17/21	TH	SW6010D	
Thallium	ND	3.4	1.5	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	22.2	0.38	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	70.1	0.8	0.38	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	87			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.268	0.0274	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic ac	ND	0.268	0.0706	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.268	0.112	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.268	0.112	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.268	0.0548	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.268	0.0528	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.268	0.0500	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.268	0.161	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.268	0.0548	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.268	0.0803	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.268	0.0487	ng/g		05/22/21	***	EPA 537m
Perfluorohexamersulfonic Acid (PFHxS)	ND	0.268	0.0332	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.268	0.0705	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	0.928	0.268	0.196	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.268	0.0640	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.268	0.0469	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	0.381	0.268	0.0826	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.268	0.0984	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.268	0.0800	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.268	0.0466	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.268	0.124	ng/g		05/22/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	53.5			%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	61.5			%		05/22/21	***	EPA 537m
% M2-6:2FTS	163			%		05/22/21	***	EPA 537m
% M2-8:2FTS	134			%		05/22/21	***	EPA 537m
% M2PFTeDA	42.2			%		05/22/21	***	EPA 537m
% M3PFBS	77.4			%		05/22/21	***	EPA 537m
% M3PFHxS	70.3			%		05/22/21	***	EPA 537m
% M4PFHpA	64.1			%		05/22/21	***	EPA 537m
% M5PFHxA	81.3			%		05/22/21	***	EPA 537m
% M5PFPeA	84.0			%		05/22/21	***	EPA 537m
% M6PFDA	58.9			%		05/22/21	***	EPA 537m
% M7PFUdA	60.0			%		05/22/21	***	EPA 537m
% M8FOSA	46.5			%		05/22/21	***	EPA 537m
% M8PFOA	80.4			%		05/22/21	***	EPA 537m
% M8PFOS	47.8			%		05/22/21	***	EPA 537m
% M9PFNA	66.2			%		05/22/21	***	EPA 537m
% MPFBA	90.6			%		05/22/21	***	EPA 537m
% MPFDoA	60.2			%		05/22/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	290	290	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2900	2900	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	290	290	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	290	290	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	42			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	51			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	76	76	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	86			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	83			%	2	05/13/21	AW	30 - 150 %
% TCMX	74			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	73			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	4.3	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	60	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	17	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	89			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	84			%	2	05/13/21	CG	30 - 150 %
% TCMX	72			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	70			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	270	91	ug/Kg	1	05/13/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
1,3-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
1,4-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	270	99	ug/Kg	1	05/13/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dichlorophenol	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dimethylphenol	ND	270	94	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrophenol	ND	380	190	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrotoluene	ND	270	150	ug/Kg	1	05/13/21	AW	SW8270D
2,6-Dinitrotoluene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylnaphthalene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylphenol (o-cresol)	ND	270	150	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitroaniline	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitrophenol	ND	270	150	ug/Kg	1	05/13/21	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
3,3'-Dichlorobenzidine	ND	270	180	ug/Kg	1	05/13/21	AW	SW8270D
3-Nitroaniline	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
4-Bromophenyl phenyl ether	ND	380	110	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloro-3-methylphenol	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloroaniline	ND	270	150	ug/Kg	1	05/13/21	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitroaniline	ND	610	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitrophenol	ND	270	76	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Aniline	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
Anthracene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Benz(a)anthracene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzidine	ND	270	150	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(a)pyrene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(ghi)perylene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzoic acid	ND	760	150	ug/Kg	1	05/13/21	AW	SW8270D
Benzyl butyl phthalate	ND	270	98	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	380	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Carbazole	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
Chrysene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Dibenz(a,h)anthracene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-butylphthalate	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-octylphthalate	ND	270	98	ug/Kg	1	05/13/21	AW	SW8270D
Fluoranthene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Fluorene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobenzene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachloroethane	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Isophorone	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Nitrobenzene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodimethylamine	ND	380	110	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
Pentachloronitrobenzene	ND	380	110	ug/Kg	1	05/13/21	AW	SW8270D
Pentachlorophenol	ND	380	140	ug/Kg	1	05/13/21	AW	SW8270D
Phenanthrene	ND	270	110	ug/Kg	1	05/13/21	AW	SW8270D
Phenol	ND	270	120	ug/Kg	1	05/13/21	AW	SW8270D
Pyrene	ND	270	130	ug/Kg	1	05/13/21	AW	SW8270D
Pyridine	ND	380	94	ug/Kg	1	05/13/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	81			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorobiphenyl	70			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorophenol	52			%	1	05/13/21	AW	30 - 130 %
% Nitrobenzene-d5	64			%	1	05/13/21	AW	30 - 130 %
% Phenol-d5	61			%	1	05/13/21	AW	30 - 130 %
% Terphenyl-d14	85			%	1	05/13/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	76	76	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	68			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	105			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	112			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date      Time

05/11/21      13:15  
05/12/21      14:50

Project ID: IPARK 0118.48  
Client ID: SB-15B (1-2')

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29092

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction

Completed

05/11/21

SW5035A

1

### Volatiles

1,1,1,2-Tetrachloroethane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	22	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	22	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	22	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	8.6	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	22	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.6	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	8.6	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.6	2.2	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	4.3	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.6	2.2	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.3	0.86	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	101			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	107			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	96			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076

Phoenix ID: CI29093

Project ID: IPARK 0118.48  
Client ID: SB-15C (10-12`)

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	4030	50	6.7	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.4	3.4	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	4.75	*	0.67	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	10.2	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	ND	0.27	0.13	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	135000	500	310	mg/Kg	100	05/19/21	EK	SW6010D	
Cadmium	0.43	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	6.18	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	5.43	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	18.3	0.7	0.34	mg/kg	1	05/17/21	TH	SW6010D	
Iron	12600	50	34	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	14.1	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	77000	500	340	mg/Kg	100	05/19/21	EK	SW6010D	
Manganese	316	3.4	3.4	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	10.1	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1070	N	5.0	2.6	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	89.7	5.0	2.9	mg/Kg	1	05/17/21	TH	SW6010D	
Thallium	ND	3.0	1.3	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	8.69	0.34	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	19.6	0.7	0.34	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	92			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.234	0.0240	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.234	0.0619	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.234	0.0977	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.234	0.0979	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.234	0.0480	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.234	0.0462	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.234	0.0438	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.234	0.141	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.234	0.0480	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.234	0.0703	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.234	0.0427	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.234	0.0291	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.234	0.0618	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.234	0.171	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.234	0.0561	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.234	0.0411	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.234	0.0724	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.234	0.0862	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.234	0.0700	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.234	0.0408	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.234	0.109	ng/g		05/22/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	64.1		%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	81.2		%		05/22/21	***	EPA 537m
% M2-6:2FTS	74.9		%		05/22/21	***	EPA 537m
% M2-8:2FTS	85.1		%		05/22/21	***	EPA 537m
% M2PFTeDA	78.4		%		05/22/21	***	EPA 537m
% M3PFBS	98.2		%		05/22/21	***	EPA 537m
% M3PFHxS	80.3		%		05/22/21	***	EPA 537m
% M4PFHpa	87.7		%		05/22/21	***	EPA 537m
% M5PFHxA	91.4		%		05/22/21	***	EPA 537m
% M5PFPeA	102		%		05/22/21	***	EPA 537m
% M6PFDA	80.9		%		05/22/21	***	EPA 537m
% M7PFUdA	89.8		%		05/22/21	***	EPA 537m
% M8FOSA	60.9		%		05/22/21	***	EPA 537m
% M8PFOA	86.9		%		05/22/21	***	EPA 537m
% M8PFOS	98.2		%		05/22/21	***	EPA 537m
% M9PFNA	103		%		05/22/21	***	EPA 537m
% MPFBA	110		%		05/22/21	***	EPA 537m
% MPFDoA	79.5		%		05/22/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	270	270	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2700	2700	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	270	270	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	270	270	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	43			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	51			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	72	72	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	72	72	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	72	72	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	72	72	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	72	72	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	72	72	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	72	72	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	72	72	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	72	72	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	52			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	55			%	2	05/13/21	AW	30 - 150 %
% TCMX	71			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	72			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	36	36	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.6	3.6	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.2	7.2	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	36	36	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	82			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	76			%	2	05/13/21	CG	30 - 150 %
% TCMX	68			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	63			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	28	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	28	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	28	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	11	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	5.7	2.3	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	28	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	11	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	11	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	11	2.8	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	5.7	5.7	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	11	2.8	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.7	1.1	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	5.7	0.57	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	100			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	97			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	96			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	85	ug/Kg	1	05/12/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
1,2-Dichlorobenzene	ND	250	100	ug/Kg	1	05/12/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	350	140	ug/Kg	1	05/12/21	AW	SW8270D
1,3-Dichlorobenzene	ND	250	100	ug/Kg	1	05/12/21	AW	SW8270D
1,4-Dichlorobenzene	ND	250	100	ug/Kg	1	05/12/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	250	92	ug/Kg	1	05/12/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
2,4-Dichlorophenol	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
2,4-Dimethylphenol	ND	250	88	ug/Kg	1	05/12/21	AW	SW8270D
2,4-Dinitrophenol	ND	350	180	ug/Kg	1	05/12/21	AW	SW8270D
2,4-Dinitrotoluene	ND	250	140	ug/Kg	1	05/12/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	05/12/21	AW	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	05/12/21	AW	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
2-Methylphenol (o-cresol)	ND	250	140	ug/Kg	1	05/12/21	AW	SW8270D
2-Nitroaniline	ND	350	140	ug/Kg	1	05/12/21	AW	SW8270D
2-Nitrophenol	ND	250	140	ug/Kg	1	05/12/21	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	350	140	ug/Kg	1	05/12/21	AW	SW8270D
3,3'-Dichlorobenzidine	ND	250	170	ug/Kg	1	05/12/21	AW	SW8270D
3-Nitroaniline	ND	350	140	ug/Kg	1	05/12/21	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	350	140	ug/Kg	1	05/12/21	AW	SW8270D
4-Bromophenyl phenyl ether	ND	350	100	ug/Kg	1	05/12/21	AW	SW8270D
4-Chloro-3-methylphenol	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
4-Chloroaniline	ND	250	140	ug/Kg	1	05/12/21	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
4-Nitroaniline	ND	570	120	ug/Kg	1	05/12/21	AW	SW8270D
4-Nitrophenol	ND	250	71	ug/Kg	1	05/12/21	AW	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
Acenaphthylene	ND	250	99	ug/Kg	1	05/12/21	AW	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
Aniline	ND	350	140	ug/Kg	1	05/12/21	AW	SW8270D
Anthracene	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
Benzidine	ND	250	140	ug/Kg	1	05/12/21	AW	SW8270D
Benzo(a)pyrene	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
Benzo(ghi)perylene	ND	300	110	ug/Kg	1	05/12/21	AW	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
Benzoic acid	ND	710	140	ug/Kg	1	05/12/21	AW	SW8270D
Benzyl butyl phthalate	ND	250	91	ug/Kg	1	05/12/21	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	250	98	ug/Kg	1	05/12/21	AW	SW8270D
Bis(2-chloroethyl)ether	ND	350	96	ug/Kg	1	05/12/21	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	98	ug/Kg	1	05/12/21	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	05/12/21	AW	SW8270D
Carbazole	ND	350	140	ug/Kg	1	05/12/21	AW	SW8270D
Chrysene	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
Dibenz(a,h)anthracene	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	05/12/21	AW	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
Di-n-butylphthalate	ND	350	140	ug/Kg	1	05/12/21	AW	SW8270D
Di-n-octylphthalate	ND	250	91	ug/Kg	1	05/12/21	AW	SW8270D
Fluoranthene	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
Fluorene	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
Hexachlorobenzene	ND	250	100	ug/Kg	1	05/12/21	AW	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	05/12/21	AW	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
Hexachloroethane	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	300	120	ug/Kg	1	05/12/21	AW	SW8270D

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	250	99	ug/Kg	1	05/12/21	AW	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	05/12/21	AW	SW8270D
Nitrobenzene	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
N-Nitrosodimethylamine	ND	350	100	ug/Kg	1	05/12/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	350	140	ug/Kg	1	05/12/21	AW	SW8270D
Pentachloronitrobenzene	ND	350	110	ug/Kg	1	05/12/21	AW	SW8270D
Pentachlorophenol	ND	350	130	ug/Kg	1	05/12/21	AW	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	05/12/21	AW	SW8270D
Phenol	ND	250	110	ug/Kg	1	05/12/21	AW	SW8270D
Pyrene	ND	250	120	ug/Kg	1	05/12/21	AW	SW8270D
Pyridine	ND	350	87	ug/Kg	1	05/12/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	84			%	1	05/12/21	AW	30 - 130 %
% 2-Fluorobiphenyl	77			%	1	05/12/21	AW	30 - 130 %
% 2-Fluorophenol	60			%	1	05/12/21	AW	30 - 130 %
% Nitrobenzene-d5	70			%	1	05/12/21	AW	30 - 130 %
% Phenol-d5	68			%	1	05/12/21	AW	30 - 130 %
% Terphenyl-d14	88			%	1	05/12/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	71	71	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	63			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	100			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	102			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

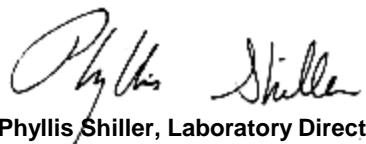
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076

Phoenix ID: CI29094

Project ID: IPARK 0118.48  
Client ID: SB-16A (0-1')

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	19100	59	7.9	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.9	3.9	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	5.63	*	0.79	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	73.1	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.54	0.32	0.16	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	918	5.9	3.6	mg/Kg	1	05/17/21	TH	SW6010D	
Cadmium	1.13	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	15.8	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	10.1	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	21.9	0.8	0.39	mg/kg	1	05/17/21	TH	SW6010D	
Iron	28000	59	39	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	18.7	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	5200	5.9	3.9	mg/Kg	1	05/17/21	TH	SW6010D	
Manganese	931	3.9	3.9	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	22.0	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1120	N	5.9	3.1	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.6	1.3	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	33.0	5.9	3.4	mg/Kg	1	05/17/21	TH	SW6010D	
Thallium	ND	3.6	1.6	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	21.5	0.39	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	65.4	0.8	0.39	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	88			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.294	0.0301	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic ac	ND	0.294	0.0776	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.294	0.123	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.294	0.123	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.294	0.0602	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.294	0.0580	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.294	0.0549	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.294	0.176	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.294	0.0602	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.294	0.0882	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.294	0.0535	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.294	0.0365	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.294	0.0775	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	1.93	0.294	0.215	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.294	0.0703	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	0.438	0.294	0.0515	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	0.392	0.294	0.0908	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.294	0.108	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.294	0.0878	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.294	0.0512	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.294	0.137	ng/g		05/22/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	59.7			%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	72.9			%		05/22/21	***	EPA 537m
% M2-6:2FTS	164			%		05/22/21	***	EPA 537m
% M2-8:2FTS	163			%		05/22/21	***	EPA 537m
% M2PFTeDA	45.8			%		05/22/21	***	EPA 537m
% M3PFBS	71.0			%		05/22/21	***	EPA 537m
% M3PFHxS	66.3			%		05/22/21	***	EPA 537m
% M4PFHpA	56.7			%		05/22/21	***	EPA 537m
% M5PFHxA	74.3			%		05/22/21	***	EPA 537m
% M5PFPeA	77.8			%		05/22/21	***	EPA 537m
% M6PFDA	67.5			%		05/22/21	***	EPA 537m
% M7PFUdA	67.4			%		05/22/21	***	EPA 537m
% M8FOSA	51.3			%		05/22/21	***	EPA 537m
% M8PFOA	81.4			%		05/22/21	***	EPA 537m
% M8PFOS	54.3			%		05/22/21	***	EPA 537m
% M9PFNA	67.4			%		05/22/21	***	EPA 537m
% MPFBA	82.1			%		05/22/21	***	EPA 537m
% MPFDoA	63.9			%		05/22/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2800	2800	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	41			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	49			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	76	76	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1221	ND	76	76	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1232	ND	76	76	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1242	ND	76	76	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1248	ND	76	76	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1254	ND	76	76	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1260	ND	76	76	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1262	ND	76	76	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1268	ND	76	76	ug/Kg	2	05/14/21	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	74			%	2	05/14/21	SC	30 - 150 %
% DCBP (Confirmation)	75			%	2	05/14/21	SC	30 - 150 %
% TCMX	71			%	2	05/14/21	SC	30 - 150 %
% TCMX (Confirmation)	73			%	2	05/14/21	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	14	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	4.9	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	7.6	7.6	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	78			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	61			%	2	05/13/21	CG	30 - 150 %
% TCMX	65			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	62			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	89	ug/Kg	1	05/13/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	260	97	ug/Kg	1	05/13/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dichlorophenol	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dimethylphenol	ND	260	92	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrophenol	ND	370	190	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrotoluene	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
2,6-Dinitrotoluene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Chloronaphthalene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylphenol (o-cresol)	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitrophenol	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
3,3'-Dichlorobenzidine	ND	260	180	ug/Kg	1	05/13/21	AW	SW8270D
3-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
4-Bromophenyl phenyl ether	ND	370	110	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloroaniline	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitroaniline	ND	600	120	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitrophenol	ND	260	75	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Aniline	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
Anthracene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benz(a)anthracene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzidine	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(a)pyrene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzoic acid	ND	750	150	ug/Kg	1	05/13/21	AW	SW8270D
Benzyl butyl phthalate	ND	260	96	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	370	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Carbazole	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
Chrysene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Dibenz(a,h)anthracene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Dimethylphthalate	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-butylphthalate	ND	370	150	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-octylphthalate	ND	260	96	ug/Kg	1	05/13/21	AW	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Fluorene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Hexachloroethane	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Isophorone	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Nitrobenzene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodimethylamine	ND	370	110	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	370	140	ug/Kg	1	05/13/21	AW	SW8270D
Pentachloronitrobenzene	ND	370	110	ug/Kg	1	05/13/21	AW	SW8270D
Pentachlorophenol	ND	370	140	ug/Kg	1	05/13/21	AW	SW8270D
Phenanthrene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Phenol	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Pyrene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Pyridine	ND	370	92	ug/Kg	1	05/13/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	71			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorobiphenyl	57			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorophenol	40			%	1	05/13/21	AW	30 - 130 %
% Nitrobenzene-d5	49			%	1	05/13/21	AW	30 - 130 %
% Phenol-d5	48			%	1	05/13/21	AW	30 - 130 %
% Terphenyl-d14	72			%	1	05/13/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	75	75	ug/Kg	1	05/14/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	60			%	1	05/14/21	WB	30 - 130 %
% Nitrobenzene-d5	96			%	1	05/14/21	WB	30 - 130 %
% Terphenyl-d14	89			%	1	05/14/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

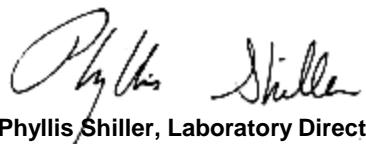
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date      Time

05/11/21      12:10  
05/12/21      14:50

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29095

Project ID: IPARK 0118.48  
Client ID: SB-16B (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction	Completed					05/11/21		SW5035A
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### Volatiles

1,1,1,2-Tetrachloroethane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	20	4.0	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	20	4.0	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	20	4.0	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	8.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.0	1.6	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	20	4.0	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	8.0	4.0	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.0	2.0	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	4.0	4.0	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.0	2.0	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.0	0.80	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.0	0.40	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	99			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	107			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	97			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076  
Phoenix ID: CI29096

Project ID: IPARK 0118.48  
Client ID: SB-16C (13-15`)

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	11700	53	7.0	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.5	3.5	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	6.52	*	0.70	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	46.9	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.43	0.28	0.14	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	9780	5.3	3.2	mg/Kg	1	05/17/21	TH	SW6010D	
Cadmium	0.99	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	13.3	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	11.9	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	24.0	0.7	0.35	mg/kg	1	05/17/21	TH	SW6010D	
Iron	24900	53	35	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	14.5	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	10000	53	35	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	1190	3.5	3.5	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	23.7	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1590	N	5.3	2.7	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	46.3	5.3	3.0	mg/Kg	1	05/17/21	TH	SW6010D	
Thallium	ND	3.2	1.4	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	15.1	0.35	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	54.9	0.7	0.35	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	86			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/13/21	AT/AT	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/A	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.310	0.0318	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.310	0.0819	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.310	0.129	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.310	0.130	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.310	0.0635	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.310	0.0612	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.310	0.0580	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.310	0.186	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.310	0.0635	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.310	0.0931	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.310	0.0565	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.310	0.0385	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.310	0.0818	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.310	0.227	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.310	0.0742	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.310	0.0544	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.310	0.0958	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.310	0.114	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.310	0.0927	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.310	0.0540	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.310	0.144	ng/g		05/22/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	58.0		%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	76.0		%		05/22/21	***	EPA 537m
% M2-6:2FTS	89.5		%		05/22/21	***	EPA 537m
% M2-8:2FTS	75.1		%		05/22/21	***	EPA 537m
% M2PFTeDA	54.4		%		05/22/21	***	EPA 537m
% M3PFBS	77.9		%		05/22/21	***	EPA 537m
% M3PFHxS	68.7		%		05/22/21	***	EPA 537m
% M4PFHpa	81.9		%		05/22/21	***	EPA 537m
% M5PFHxA	82.7		%		05/22/21	***	EPA 537m
% M5PFPeA	91.8		%		05/22/21	***	EPA 537m
% M6PFDA	74.4		%		05/22/21	***	EPA 537m
% M7PFUdA	71.5		%		05/22/21	***	EPA 537m
% M8FOSA	52.8		%		05/22/21	***	EPA 537m
% M8PFOA	83.3		%		05/22/21	***	EPA 537m
% M8PFOS	71.4		%		05/22/21	***	EPA 537m
% M9PFNA	89.4		%		05/22/21	***	EPA 537m
% MPFBA	103		%		05/22/21	***	EPA 537m
% MPFDoA	59.2		%		05/22/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	290	290	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2900	2900	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	290	290	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	290	290	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	42			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	49			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	77	77	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1221	ND	77	77	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1232	ND	77	77	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1242	ND	77	77	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1248	ND	77	77	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1254	ND	77	77	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1260	ND	77	77	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1262	ND	77	77	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1268	ND	77	77	ug/Kg	2	05/14/21	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	80			%	2	05/14/21	SC	30 - 150 %
% DCBP (Confirmation)	79			%	2	05/14/21	SC	30 - 150 %
% TCMX	75			%	2	05/14/21	SC	30 - 150 %
% TCMX (Confirmation)	75			%	2	05/14/21	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.3	2.3	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.9	3.9	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.9	3.9	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	39	39	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.9	3.9	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.9	3.9	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.7	7.7	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	39	39	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	77			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	70			%	2	05/13/21	CG	30 - 150 %
% TCMX	67			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	65			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	33	6.5	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	33	6.5	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	33	6.5	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	13	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	6.5	2.6	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	33	6.5	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	13	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	13	6.5	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	13	3.3	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	6.5	6.5	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	13	3.3	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	6.5	1.3	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	6.5	0.65	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	101			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	97			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	97			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	91	ug/Kg	1	05/13/21	AW	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
1,2-Diphenylhydrazine	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
2,4,5-Trichlorophenol	ND	260	98	ug/Kg	1	05/13/21	AW	SW8270D
2,4,6-Trichlorophenol	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dichlorophenol	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dimethylphenol	ND	260	94	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrophenol	ND	380	190	ug/Kg	1	05/13/21	AW	SW8270D
2,4-Dinitrotoluene	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
2-Chloronaphthalene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
2-Methylphenol (o-cresol)	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitroaniline	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
2-Nitrophenol	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
3,3'-Dichlorobenzidine	ND	260	180	ug/Kg	1	05/13/21	AW	SW8270D
3-Nitroaniline	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
4,6-Dinitro-2-methylphenol	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
4-Bromophenyl phenyl ether	ND	380	110	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Chloroaniline	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
4-Chlorophenyl phenyl ether	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitroaniline	ND	610	130	ug/Kg	1	05/13/21	AW	SW8270D
4-Nitrophenol	ND	260	76	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Acenaphthylene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Aniline	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
Anthracene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benz(a)anthracene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzidine	ND	260	150	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(a)pyrene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Benzo(k)fluoranthene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Benzoic acid	ND	760	150	ug/Kg	1	05/13/21	AW	SW8270D
Benzyl butyl phthalate	ND	260	98	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroethyl)ether	ND	380	100	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Carbazole	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
Chrysene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Dibenz(a,h)anthracene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Dimethylphthalate	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-butylphthalate	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
Di-n-octylphthalate	ND	260	98	ug/Kg	1	05/13/21	AW	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Fluorene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobenzene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorobutadiene	ND	260	140	ug/Kg	1	05/13/21	AW	SW8270D
Hexachlorocyclopentadiene	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Hexachloroethane	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Nitrobenzene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodimethylamine	ND	380	110	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodi-n-propylamine	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
N-Nitrosodiphenylamine	ND	380	150	ug/Kg	1	05/13/21	AW	SW8270D
Pentachloronitrobenzene	ND	380	110	ug/Kg	1	05/13/21	AW	SW8270D
Pentachlorophenol	ND	380	140	ug/Kg	1	05/13/21	AW	SW8270D
Phenanthrene	ND	260	110	ug/Kg	1	05/13/21	AW	SW8270D
Phenol	ND	260	120	ug/Kg	1	05/13/21	AW	SW8270D
Pyrene	ND	260	130	ug/Kg	1	05/13/21	AW	SW8270D
Pyridine	ND	380	93	ug/Kg	1	05/13/21	AW	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	85			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorobiphenyl	73			%	1	05/13/21	AW	30 - 130 %
% 2-Fluorophenol	53			%	1	05/13/21	AW	30 - 130 %
% Nitrobenzene-d5	66			%	1	05/13/21	AW	30 - 130 %
% Phenol-d5	63			%	1	05/13/21	AW	30 - 130 %
% Terphenyl-d14	95			%	1	05/13/21	AW	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	77	77	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	49			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	71			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	102			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

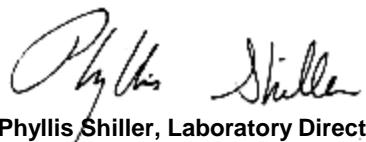
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076

Phoenix ID: CI29097

Project ID: IPARK 0118.48  
Client ID: SB-17A (0-1')

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	8340	56	7.5	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.7	3.7	mg/Kg	1	05/17/21	TH	SW6010D	
Arsenic	5.68	*	0.75	mg/Kg	1	05/17/21	TH	SW6010D	
Barium	28.4	0.37	0.37	mg/Kg	1	05/17/21	TH	SW6010D	
Beryllium	0.33	0.30	0.15	mg/Kg	1	05/17/21	TH	SW6010D	
Calcium	81300	56	34	mg/Kg	10	05/17/21	TH	SW6010D	
Cadmium	0.70	0.37	0.37	mg/Kg	1	05/17/21	TH	SW6010D	
Chromium	12.7	0.37	0.37	mg/Kg	1	05/17/21	TH	SW6010D	
Cobalt	6.49	0.37	0.37	mg/Kg	1	05/17/21	TH	SW6010D	
Copper	17.5	0.7	0.37	mg/kg	1	05/17/21	TH	SW6010D	
Iron	15500	56	37	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	46.1	0.37	0.37	mg/Kg	1	05/17/21	TH	SW6010D	
Magnesium	50200	56	37	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	448	3.7	3.7	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	14.2	0.37	0.37	mg/Kg	1	05/17/21	TH	SW6010D	
Potassium	1400	N	5.6	2.9	mg/Kg	1	05/17/21	TH	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/17/21	TH	SW6010D	
Silver	ND	0.37	0.37	mg/Kg	1	05/17/21	TH	SW6010D	
Sodium	164	5.6	3.2	mg/Kg	1	05/17/21	TH	SW6010D	
Thallium	ND	3.4	1.5	mg/Kg	1	05/17/21	TH	SW6010D	
Vanadium	15.7	0.37	0.37	mg/Kg	1	05/17/21	TH	SW6010D	
Zinc	46.3	0.7	0.37	mg/Kg	1	05/17/21	TH	SW6010D	
Percent Solid	89			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/14/21	AT/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/K	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.256	0.0262	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic ac	ND	0.256	0.0677	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.256	0.107	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.256	0.107	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.256	0.0525	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.256	0.0505	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.256	0.0479	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.256	0.154	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.256	0.0525	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.256	0.0769	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.256	0.0466	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.256	0.0318	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.256	0.0676	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	0.601	0.256	0.187	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.256	0.0613	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	0.470	0.256	0.0449	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	0.473	0.256	0.0791	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.256	0.0942	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.256	0.0766	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.256	0.0446	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.256	0.119	ng/g		05/22/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	63.6			%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	82.3			%		05/22/21	***	EPA 537m
% M2-6:2FTS	168			%		05/22/21	***	EPA 537m
% M2-8:2FTS	160			%		05/22/21	***	EPA 537m
% M2PFTeDA	47.7			%		05/22/21	***	EPA 537m
% M3PFBS	78.1			%		05/22/21	***	EPA 537m
% M3PFHxS	72.8			%		05/22/21	***	EPA 537m
% M4PFHpA	71.9			%		05/22/21	***	EPA 537m
% M5PFHxA	78.8			%		05/22/21	***	EPA 537m
% M5PFPeA	89.2			%		05/22/21	***	EPA 537m
% M6PFDA	78.7			%		05/22/21	***	EPA 537m
% M7PFUdA	71.8			%		05/22/21	***	EPA 537m
% M8FOSA	60.2			%		05/22/21	***	EPA 537m
% M8PFOA	84.3			%		05/22/21	***	EPA 537m
% M8PFOS	66.0			%		05/22/21	***	EPA 537m
% M9PFNA	89.7			%		05/22/21	***	EPA 537m
% MPFBA	91.9			%		05/22/21	***	EPA 537m
% MPFDoA	71.6			%		05/22/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-D	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
2,4-DB	ND	2800	2800	ug/Kg	10	05/14/21	JRB	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/14/21	JRB	SW8151A
Dichloroprop	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
Dinoseb	ND	280	280	ug/Kg	10	05/14/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	41			%	10	05/14/21	JRB	30 - 150 %
% DCAA (Confirmation)	54			%	10	05/14/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	74	74	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1221	ND	74	74	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1232	ND	74	74	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1242	ND	74	74	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1248	ND	74	74	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1254	ND	74	74	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1260	ND	74	74	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1262	ND	74	74	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1268	ND	74	74	ug/Kg	2	05/14/21	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	78			%	2	05/14/21	SC	30 - 150 %
% DCBP (Confirmation)	78			%	2	05/14/21	SC	30 - 150 %
% TCMX	76			%	2	05/14/21	SC	30 - 150 %
% TCMX (Confirmation)	76			%	2	05/14/21	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	3.3	3.3	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	7.6	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.5	2.5	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	7.4	7.4	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	87			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	78			%	2	05/13/21	CG	30 - 150 %
% TCMX	68			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	64			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	89	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	96	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	260	92	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	370	180	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	260	170	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	370	110	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	590	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	260	74	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	740	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	260	95	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	370	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	260	95	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	410	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Isophorone	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	370	100	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	370	140	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	370	110	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	370	140	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	330	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	370	91	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	108			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	84			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	75			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	87			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	85			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	92			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	74	74	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	60			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	95			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	102			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

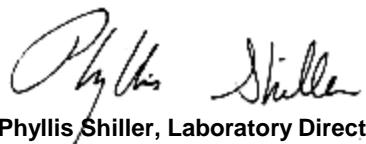
Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK 0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: CP  
 Analyzed by: see "By" below

05/11/21

14:30

05/12/21

14:50

Project ID: IPARK 0118.48  
 Client ID: SB-17B (1-2')

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29098

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Field Extraction	Completed					05/11/21		SW5035A	1
<b>Volatiles</b>									
1,1,1,2-Tetrachloroethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloroethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloropropene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dibromoethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichloroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichloropropane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3-Dichloropropane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
2,2-Dichloropropane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Chlorotoluene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Hexanone	ND	21	4.3	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Isopropyltoluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C	1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	21	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	21	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	8.5	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.3	1.7	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	21	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.5	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	8.5	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.5	2.1	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	4.3	4.3	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.5	2.1	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.3	0.85	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.3	0.43	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	100			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	105			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	97			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

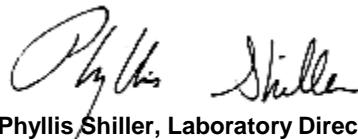
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date      Time

05/11/21      14:30  
05/12/21      14:50

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29099

Project ID: IPARK 0118.48  
Client ID: SB-17C (9-11`)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	9000	50	6.6	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.3	3.3	mg/Kg	1	05/18/21	TH	SW6010D	
Arsenic	4.73	*	0.66	mg/Kg	1	05/18/21	TH	SW6010D	
Barium	26.6	0.33	0.33	mg/Kg	1	05/18/21	TH	SW6010D	
Beryllium	ND	0.27	0.13	mg/Kg	1	05/18/21	TH	SW6010D	
Calcium	72800	50	31	mg/Kg	10	05/17/21	TH	SW6010D	
Cadmium	0.72	0.33	0.33	mg/Kg	1	05/18/21	TH	SW6010D	
Chromium	9.90	0.33	0.33	mg/Kg	1	05/18/21	TH	SW6010D	
Cobalt	7.24	0.33	0.33	mg/Kg	1	05/18/21	TH	SW6010D	
Copper	18.0	0.7	0.33	mg/kg	1	05/18/21	TH	SW6010D	
Iron	20100	50	33	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	9.38	0.33	0.33	mg/Kg	1	05/18/21	TH	SW6010D	
Magnesium	36800	50	33	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	582	3.3	3.3	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	15.8	0.33	0.33	mg/Kg	1	05/18/21	TH	SW6010D	
Potassium	1300	N	5.0	2.6	mg/Kg	1	05/18/21	TH	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	05/18/21	TH	SW6010D	
Silver	ND	0.33	0.33	mg/Kg	1	05/18/21	TH	SW6010D	
Sodium	95.0	5.0	2.9	mg/Kg	1	05/18/21	TH	SW6010D	
Thallium	ND	3.0	1.3	mg/Kg	1	05/18/21	TH	SW6010D	
Vanadium	11.3	0.33	0.33	mg/Kg	1	05/18/21	TH	SW6010D	
Zinc	41.2	0.7	0.33	mg/Kg	1	05/18/21	TH	SW6010D	
Percent Solid	94			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/14/21	AT/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/K	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

**PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.250	0.0256	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.250	0.0661	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.250	0.104	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.250	0.105	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.250	0.0513	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.250	0.0494	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.250	0.0468	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.250	0.150	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.250	0.0513	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.250	0.0751	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.250	0.0456	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.250	0.0311	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.250	0.0660	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.250	0.183	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.250	0.0599	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.250	0.0439	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.250	0.0773	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.250	0.0921	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.250	0.0748	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.250	0.0436	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.250	0.117	ng/g		05/22/21	***	EPA 537m

**QA/QC Surrogates**

% d3-N-MeFOSAA	49.8		%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	62.2		%		05/22/21	***	EPA 537m
% M2-6:2FTS	68.0		%		05/22/21	***	EPA 537m
% M2-8:2FTS	75.1		%		05/22/21	***	EPA 537m
% M2PFTeDA	64.6		%		05/22/21	***	EPA 537m
% M3PFBS	82.0		%		05/22/21	***	EPA 537m
% M3PFHxS	65.7		%		05/22/21	***	EPA 537m
% M4PFHpa	79.4		%		05/22/21	***	EPA 537m
% M5PFHxA	78.5		%		05/22/21	***	EPA 537m
% M5PFPeA	87.4		%		05/22/21	***	EPA 537m
% M6PFDA	66.9		%		05/22/21	***	EPA 537m
% M7PFUdA	67.1		%		05/22/21	***	EPA 537m
% M8FOSA	44.1		%		05/22/21	***	EPA 537m
% M8PFOA	75.9		%		05/22/21	***	EPA 537m
% M8PFOS	68.8		%		05/22/21	***	EPA 537m
% M9PFNA	76.5		%		05/22/21	***	EPA 537m
% MPFBA	92.6		%		05/22/21	***	EPA 537m
% MPFDoA	69.4		%		05/22/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-D	ND	260	260	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-DB	ND	2600	2600	ug/Kg	10	05/15/21	JRB	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
Dichloroprop	ND	260	260	ug/Kg	10	05/15/21	JRB	SW8151A
Dinoseb	ND	260	260	ug/Kg	10	05/15/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	40			%	10	05/15/21	JRB	30 - 150 %
% DCAA (Confirmation)	47			%	10	05/15/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	69	69	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1221	ND	69	69	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1232	ND	69	69	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1242	ND	69	69	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1248	ND	69	69	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1254	ND	69	69	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1260	ND	69	69	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1262	ND	69	69	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1268	ND	69	69	ug/Kg	2	05/18/21	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	69			%	2	05/18/21	SC	30 - 150 %
% DCBP (Confirmation)	70			%	2	05/18/21	SC	30 - 150 %
% TCMX	69			%	2	05/18/21	SC	30 - 150 %
% TCMX (Confirmation)	69			%	2	05/18/21	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	34	34	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	34	34	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	86			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	79			%	2	05/13/21	CG	30 - 150 %
% TCMX	68			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	62			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	31	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	31	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	31	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	12	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	6.2	2.5	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	31	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	12	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	3.1	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	6.2	6.2	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	3.1	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	6.2	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	6.2	0.62	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	99			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	106			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	98			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	240	84	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	240	98	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	240	91	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	240	86	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	350	170	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	240	99	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	240	99	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	240	160	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	350	100	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	560	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	240	70	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	240	98	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	240	140	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	700	140	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	240	90	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	240	96	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	350	94	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	240	97	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	240	90	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	240	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	240	98	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	350	98	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	350	130	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	350	100	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	350	130	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	240	100	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	240	110	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	240	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	350	86	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	104			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	83			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	77			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	90			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	86			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	88			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	69	69	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	59			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	89			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	111			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

SDG ID: GCI29076  
Phoenix ID: CI29100

Project ID: IPARK 0118.48  
Client ID: SB-18A (0-1')

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	18000	62	8.3	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	4.1	4.1	mg/Kg	1	05/18/21	TH	SW6010D	
Arsenic	7.06	*	0.83	0.83	mg/Kg	1	05/18/21	TH	SW6010D
Barium	81.5	0.41	0.41	mg/Kg	1	05/18/21	TH	SW6010D	
Beryllium	0.63	0.33	0.17	mg/Kg	1	05/18/21	TH	SW6010D	
Calcium	1770	6.2	3.8	mg/Kg	1	05/18/21	TH	SW6010D	
Cadmium	1.28	0.41	0.41	mg/Kg	1	05/18/21	TH	SW6010D	
Chromium	17.4	0.41	0.41	mg/Kg	1	05/18/21	TH	SW6010D	
Cobalt	11.4	0.41	0.41	mg/Kg	1	05/18/21	TH	SW6010D	
Copper	25.4	0.8	0.41	mg/kg	1	05/18/21	TH	SW6010D	
Iron	26900	62	41	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	29.8	0.41	0.41	mg/Kg	1	05/18/21	TH	SW6010D	
Magnesium	5600	6.2	4.1	mg/Kg	1	05/18/21	TH	SW6010D	
Manganese	1080	4.1	4.1	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	0.05	0.03	0.02	mg/Kg	2	05/14/21	MGH	SW7471B	
Nickel	23.8	0.41	0.41	mg/Kg	1	05/18/21	TH	SW6010D	
Potassium	997	N	6.2	3.2	mg/Kg	1	05/18/21	TH	SW6010D
Selenium	ND	1.7	1.4	mg/Kg	1	05/18/21	TH	SW6010D	
Silver	ND	0.41	0.41	mg/Kg	1	05/18/21	TH	SW6010D	
Sodium	40.1	6.2	3.6	mg/Kg	1	05/18/21	TH	SW6010D	
Thallium	ND	3.7	1.7	mg/Kg	1	05/18/21	TH	SW6010D	
Vanadium	25.9	0.41	0.41	mg/Kg	1	05/18/21	TH	SW6010D	
Zinc	74.7	0.8	0.41	mg/Kg	1	05/18/21	TH	SW6010D	
Percent Solid	85			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/A	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/A	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/14/21	AT/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/K	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.280	0.0287	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic ac	ND	0.280	0.0740	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.280	0.117	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.280	0.117	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.280	0.0574	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.280	0.0553	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.280	0.0524	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.280	0.168	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.280	0.0574	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.280	0.0841	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.280	0.0510	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.280	0.0348	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.280	0.0739	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	1.62	0.280	0.205	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.280	0.0671	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	0.621	0.280	0.0491	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	0.842	0.280	0.0866	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.280	0.103	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.280	0.0838	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.280	0.0488	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.280	0.130	ng/g		05/22/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	34.9			%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	42.3			%		05/22/21	***	EPA 537m
% M2-6:2FTS	174			%		05/22/21	***	EPA 537m
% M2-8:2FTS	130			%		05/22/21	***	EPA 537m
% M2PFTeDA	26.3			%		05/22/21	***	EPA 537m
% M3PFBS	59.1			%		05/22/21	***	EPA 537m
% M3PFHxS	51.0			%		05/22/21	***	EPA 537m
% M4PFHpA	45.8			%		05/22/21	***	EPA 537m
% M5PFHxA	62.9			%		05/22/21	***	EPA 537m
% M5PFPeA	66.0			%		05/22/21	***	EPA 537m
% M6PFDA	46.4			%		05/22/21	***	EPA 537m
% M7PFUdA	39.1			%		05/22/21	***	EPA 537m
% M8FOSA	30.8			%		05/22/21	***	EPA 537m
% M8PFOA	66.1			%		05/22/21	***	EPA 537m
% M8PFOS	39.0			%		05/22/21	***	EPA 537m
% M9PFNA	55.3			%		05/22/21	***	EPA 537m
% MPFBA	68.2			%		05/22/21	***	EPA 537m
% MPFDoA	37.9			%		05/22/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	150	150	ug/Kg	10	05/15/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	150	150	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-D	ND	290	290	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-DB	ND	2900	2900	ug/Kg	10	05/15/21	JRB	SW8151A
Dalapon	ND	150	150	ug/Kg	10	05/15/21	JRB	SW8151A
Dicamba	ND	150	150	ug/Kg	10	05/15/21	JRB	SW8151A
Dichloroprop	ND	290	290	ug/Kg	10	05/15/21	JRB	SW8151A
Dinoseb	ND	290	290	ug/Kg	10	05/15/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	43			%	10	05/15/21	JRB	30 - 150 %
% DCAA (Confirmation)	53			%	10	05/15/21	JRB	30 - 150 %

**Polychlorinated Biphenyls**

PCB-1016	ND	77	77	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1221	ND	77	77	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1232	ND	77	77	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1242	ND	77	77	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1248	ND	77	77	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1254	ND	77	77	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1260	ND	77	77	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1262	ND	77	77	ug/Kg	2	05/18/21	SC	SW8082A
PCB-1268	ND	77	77	ug/Kg	2	05/18/21	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	77			%	2	05/18/21	SC	30 - 150 %
% DCBP (Confirmation)	76			%	2	05/18/21	SC	30 - 150 %
% TCMX	73			%	2	05/18/21	SC	30 - 150 %
% TCMX (Confirmation)	79			%	2	05/18/21	SC	30 - 150 %

**Pesticides - Soil**

4,4' -DDD	ND	2.3	2.3	ug/Kg	2	05/14/21	CG	SW8081B
4,4' -DDE	250	12	12	ug/Kg	10	05/13/21	CG	SW8081B
4,4' -DDT	56	2.3	2.3	ug/Kg	2	05/14/21	CG	SW8081B
a-BHC	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
a-Chlordane	ND	3.9	3.9	ug/Kg	2	05/14/21	CG	SW8081B
Aldrin	ND	3.9	3.9	ug/Kg	2	05/14/21	CG	SW8081B
b-BHC	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Chlordane	ND	39	39	ug/Kg	2	05/14/21	CG	SW8081B
d-BHC	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Dieldrin	ND	3.9	3.9	ug/Kg	2	05/14/21	CG	SW8081B
Endosulfan I	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Endosulfan II	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Endosulfan sulfate	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Endrin	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Endrin aldehyde	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Endrin ketone	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/14/21	CG	SW8081B
g-Chlordane	ND	3.9	3.9	ug/Kg	2	05/14/21	CG	SW8081B
Heptachlor	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Heptachlor epoxide	ND	7.7	7.7	ug/Kg	2	05/14/21	CG	SW8081B
Methoxychlor	ND	39	39	ug/Kg	2	05/14/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/14/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	88			%	2	05/14/21	CG	30 - 150 %
% DCBP (Confirmation)	62			%	2	05/14/21	CG	30 - 150 %
% TCMX	61			%	2	05/14/21	CG	30 - 150 %
% TCMX (Confirmation)	38			%	2	05/14/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	270	91	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	380	150	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	99	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	270	94	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	380	190	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	380	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	380	150	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	270	180	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	380	150	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	380	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	380	110	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	610	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	270	76	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	380	150	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	760	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	270	98	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	100	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	380	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	380	150	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	380	150	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	270	98	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	330	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Isophorone	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	380	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	380	150	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	380	110	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	380	140	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	280	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	380	93	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	107			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	82			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	74			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	85			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	83			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	89			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	78	78	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	67			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	97			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	107			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK 0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: CP  
 Analyzed by: see "By" below

05/11/21

15:00

05/12/21

14:50

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29101

Project ID: IPARK 0118.48  
 Client ID: SB-18B (1-2')

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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Field Extraction

Completed

05/11/21

SW5035A

1

### Volatiles

1,1,1,2-Tetrachloroethane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	29	5.8	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	29	5.8	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	29	5.8	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	12	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	5.8	2.3	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	29	5.8	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	12	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	12	5.8	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	12	2.9	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	5.8	5.8	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	12	2.9	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	5.8	1.2	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	5.8	0.58	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	99			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	106			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	97			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

Project ID: IPARK 0118.48  
Client ID: SB-18C (13-15`)

SDG ID: GCI29076

Phoenix ID: CI29102

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	13100	55	7.4	mg/Kg	10	05/17/21	TH	SW6010D	
Antimony	ND	3.7	3.7	mg/Kg	1	05/18/21	TH	SW6010D	
Arsenic	5.44	*	0.74	mg/Kg	1	05/18/21	TH	SW6010D	
Barium	57.9	0.37	0.37	mg/Kg	1	05/18/21	TH	SW6010D	
Beryllium	0.37	0.30	0.15	mg/Kg	1	05/18/21	TH	SW6010D	
Calcium	18400	55	34	mg/Kg	10	05/17/21	TH	SW6010D	
Cadmium	1.09	0.37	0.37	mg/Kg	1	05/18/21	TH	SW6010D	
Chromium	17.7	0.37	0.37	mg/Kg	1	05/18/21	TH	SW6010D	
Cobalt	11.1	0.37	0.37	mg/Kg	1	05/18/21	TH	SW6010D	
Copper	30.6	0.7	0.37	mg/kg	1	05/18/21	TH	SW6010D	
Iron	29100	55	37	mg/Kg	10	05/17/21	TH	SW6010D	
Lead	15.6	0.37	0.37	mg/Kg	1	05/18/21	TH	SW6010D	
Magnesium	12900	55	37	mg/Kg	10	05/17/21	TH	SW6010D	
Manganese	1390	3.7	3.7	mg/Kg	10	05/17/21	TH	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	1	05/17/21	MGH	SW7471B	
Nickel	23.1	0.37	0.37	mg/Kg	1	05/18/21	TH	SW6010D	
Potassium	1440	N	5.5	2.9	mg/Kg	1	05/18/21	TH	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/18/21	TH	SW6010D	
Silver	ND	0.37	0.37	mg/Kg	1	05/18/21	TH	SW6010D	
Sodium	60.0	5.5	3.2	mg/Kg	1	05/18/21	TH	SW6010D	
Thallium	ND	3.3	1.5	mg/Kg	1	05/18/21	TH	SW6010D	
Vanadium	14.4	0.37	0.37	mg/Kg	1	05/18/21	TH	SW6010D	
Zinc	67.2	0.7	0.37	mg/Kg	1	05/18/21	TH	SW6010D	
Percent Solid	94			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	L/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/17/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/K	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.255	0.0261	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.255	0.0674	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.255	0.106	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.255	0.107	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.255	0.0523	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.255	0.0504	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.255	0.0477	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.255	0.153	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.255	0.0523	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.255	0.0766	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.255	0.0465	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.255	0.0317	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.255	0.0673	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.255	0.187	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.255	0.0611	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.255	0.0447	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.255	0.0789	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.255	0.0939	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.255	0.0763	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.255	0.0444	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.255	0.119	ng/g		05/22/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	45.8		%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	63.5		%		05/22/21	***	EPA 537m
% M2-6:2FTS	95.0		%		05/22/21	***	EPA 537m
% M2-8:2FTS	96.4		%		05/22/21	***	EPA 537m
% M2PFTeDA	54.1		%		05/22/21	***	EPA 537m
% M3PFBS	71.1		%		05/22/21	***	EPA 537m
% M3PFHxS	60.5		%		05/22/21	***	EPA 537m
% M4PFHpa	73.9		%		05/22/21	***	EPA 537m
% M5PFHxA	74.1		%		05/22/21	***	EPA 537m
% M5PFPeA	84.5		%		05/22/21	***	EPA 537m
% M6PFDA	61.3		%		05/22/21	***	EPA 537m
% M7PFUdA	61.4		%		05/22/21	***	EPA 537m
% M8FOSA	42.6		%		05/22/21	***	EPA 537m
% M8PFOA	71.6		%		05/22/21	***	EPA 537m
% M8PFOS	54.3		%		05/22/21	***	EPA 537m
% M9PFNA	77.3		%		05/22/21	***	EPA 537m
% MPFBA	92.5		%		05/22/21	***	EPA 537m
% MPFDoA	61.1		%		05/22/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-D	ND	260	260	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-DB	ND	2600	2600	ug/Kg	10	05/15/21	JRB	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
Dichloroprop	ND	260	260	ug/Kg	10	05/15/21	JRB	SW8151A
Dinoseb	ND	260	260	ug/Kg	10	05/15/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	36			%	10	05/15/21	JRB	30 - 150 %
% DCAA (Confirmation)	37			%	10	05/15/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	69	69	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1221	ND	69	69	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1232	ND	69	69	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1242	ND	69	69	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1248	ND	69	69	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1254	ND	69	69	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1260	ND	69	69	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1262	ND	69	69	ug/Kg	2	05/14/21	SC	SW8082A
PCB-1268	ND	69	69	ug/Kg	2	05/14/21	SC	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	75			%	2	05/14/21	SC	30 - 150 %
% DCBP (Confirmation)	73			%	2	05/14/21	SC	30 - 150 %
% TCMX	68			%	2	05/14/21	SC	30 - 150 %
% TCMX (Confirmation)	68			%	2	05/14/21	SC	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	6.6	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	34	34	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.4	3.4	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	6.9	6.9	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	34	34	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	73			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	69			%	2	05/13/21	CG	30 - 150 %
% TCMX	61			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	63			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	34	6.9	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	34	6.9	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	34	6.9	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	14	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	6.9	2.7	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	34	6.9	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	14	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	14	6.9	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	14	3.4	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	6.9	6.9	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	14	3.4	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	6.9	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	6.9	0.69	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	97			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	101			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	108			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	98			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	85	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	250	99	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	92	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	250	87	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	350	180	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	250	170	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	350	100	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	560	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	250	71	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	250	99	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	710	140	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	250	91	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	97	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	350	95	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	98	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	250	91	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	250	99	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	350	99	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	350	110	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	350	130	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	350	87	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	102			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	80			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	70			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	82			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	80			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	86			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	69	69	ug/Kg	1	05/15/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	58			%	1	05/15/21	WB	30 - 130 %
% Nitrobenzene-d5	88			%	1	05/15/21	WB	30 - 130 %
% Terphenyl-d14	120			%	1	05/15/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

05/11/21 15:30

05/12/21 14:50

SDG ID: GCI29076

Phoenix ID: CI29103

Project ID: IPARK 0118.48  
Client ID: SB-19A (0-1')

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	13100	60	8.0	mg/Kg	10	05/14/21	CPP	SW6010D	
Antimony	ND	4.0	4.0	mg/Kg	1	05/14/21	CPP	SW6010D	
Arsenic	5.23	0.80	0.80	mg/Kg	1	05/14/21	CPP	SW6010D	
Barium	41.8	0.40	0.40	mg/Kg	1	05/14/21	CPP	SW6010D	
Beryllium	0.35	0.32	0.16	mg/Kg	1	05/14/21	CPP	SW6010D	
Calcium	25300	60	37	mg/Kg	10	05/14/21	CPP	SW6010D	
Cadmium	1.13	0.40	0.40	mg/Kg	1	05/14/21	CPP	SW6010D	
Chromium	18.2	0.40	0.40	mg/Kg	1	05/14/21	CPP	SW6010D	
Cobalt	7.48	0.40	0.40	mg/Kg	1	05/14/21	CPP	SW6010D	
Copper	24.3	0.8	0.40	mg/kg	1	05/14/21	CPP	SW6010D	
Iron	29000	60	40	mg/Kg	10	05/14/21	CPP	SW6010D	
Lead	38.1	0.40	0.40	mg/Kg	1	05/14/21	CPP	SW6010D	
Magnesium	16100	60	40	mg/Kg	10	05/14/21	CPP	SW6010D	
Manganese	1030	4.0	4.0	mg/Kg	10	05/14/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	1	05/17/21	MGH	SW7471B	
Nickel	16.9	0.40	0.40	mg/Kg	1	05/14/21	CPP	SW6010D	
Potassium	1200	N	6.0	3.1	mg/Kg	1	05/14/21	CPP	SW6010D
Selenium	ND	1.6	1.4	mg/Kg	1	05/14/21	CPP	SW6010D	
Silver	ND	0.40	0.40	mg/Kg	1	05/14/21	CPP	SW6010D	
Sodium	306	6.0	3.4	mg/Kg	1	05/14/21	CPP	SW6010D	
Thallium	ND	3.6	1.6	mg/Kg	1	05/14/21	CPP	SW6010D	
Vanadium	20.4	0.40	0.40	mg/Kg	1	05/14/21	CPP	SW6010D	
Zinc	74.4	0.8	0.40	mg/Kg	1	05/14/21	CPP	SW6010D	
Percent Solid	86			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/17/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/K	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.274	0.0280	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluorooctanesulfonic ac	ND	0.274	0.0723	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.274	0.114	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.274	0.114	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.274	0.0561	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.274	0.0540	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.274	0.0511	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.274	0.164	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.274	0.0561	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.274	0.0821	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.274	0.0498	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.274	0.0340	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	0.330	0.274	0.0722	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	1.06	0.274	0.200	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.274	0.0655	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	1.13	0.274	0.0480	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	0.763	0.274	0.0846	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.274	0.101	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.274	0.0818	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.274	0.0476	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.274	0.127	ng/g		05/22/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	57.4			%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	66.5			%		05/22/21	***	EPA 537m
% M2-6:2FTS	224			%		05/22/21	***	EPA 537m
% M2-8:2FTS	235			%		05/22/21	***	EPA 537m
% M2PFTeDA	34.6			%		05/22/21	***	EPA 537m
% M3PFBS	75.1			%		05/22/21	***	EPA 537m
% M3PFHxS	63.8			%		05/22/21	***	EPA 537m
% M4PFHpA	53.0			%		05/22/21	***	EPA 537m
% M5PFHxA	72.6			%		05/22/21	***	EPA 537m
% M5PFPeA	77.5			%		05/22/21	***	EPA 537m
% M6PFDA	70.2			%		05/22/21	***	EPA 537m
% M7PFUdA	57.3			%		05/22/21	***	EPA 537m
% M8FOSA	46.2			%		05/22/21	***	EPA 537m
% M8PFOA	78.2			%		05/22/21	***	EPA 537m
% M8PFOS	61.2			%		05/22/21	***	EPA 537m
% M9PFNA	77.7			%		05/22/21	***	EPA 537m
% MPFBA	83.0			%		05/22/21	***	EPA 537m
% MPFDoA	49.9			%		05/22/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/15/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-D	ND	290	290	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-DB	ND	2900	2900	ug/Kg	10	05/15/21	JRB	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/15/21	JRB	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/15/21	JRB	SW8151A
Dichloroprop	ND	290	290	ug/Kg	10	05/15/21	JRB	SW8151A
Dinoseb	ND	290	290	ug/Kg	10	05/15/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	42			%	10	05/15/21	JRB	30 - 150 %
% DCAA (Confirmation)	51			%	10	05/15/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	75	75	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	75	75	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	75	75	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	75	75	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	75	75	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	75	75	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	75	75	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	75	75	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	75	75	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	81			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	70			%	2	05/13/21	AW	30 - 150 %
% TCMX	67			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	66			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	4.7	2.3	2.3	ug/Kg	2	05/14/21	CG	SW8081B
4,4' -DDE	160	11	11	ug/Kg	10	05/17/21	CG	SW8081B
4,4' -DDT	100	11	11	ug/Kg	10	05/17/21	CG	SW8081B
a-BHC	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
a-Chlordane	ND	3.8	3.8	ug/Kg	2	05/14/21	CG	SW8081B
Aldrin	ND	3.8	3.8	ug/Kg	2	05/14/21	CG	SW8081B
b-BHC	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
Chlordane	ND	38	38	ug/Kg	2	05/14/21	CG	SW8081B
d-BHC	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
Dieldrin	ND	3.8	3.8	ug/Kg	2	05/14/21	CG	SW8081B
Endosulfan I	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
Endosulfan II	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
Endosulfan sulfate	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
Endrin	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
Endrin aldehyde	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
Endrin ketone	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/14/21	CG	SW8081B
g-Chlordane	ND	3.8	3.8	ug/Kg	2	05/14/21	CG	SW8081B
Heptachlor	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
Heptachlor epoxide	ND	7.5	7.5	ug/Kg	2	05/14/21	CG	SW8081B
Methoxychlor	ND	38	38	ug/Kg	2	05/14/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/14/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	89			%	2	05/14/21	CG	30 - 150 %
% DCBP (Confirmation)	55			%	2	05/14/21	CG	30 - 150 %
% TCMX	66			%	2	05/14/21	CG	30 - 150 %
% TCMX (Confirmation)	38			%	2	05/14/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	270	93	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	270	100	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	270	96	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	390	190	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	270	180	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	390	110	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	620	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	270	77	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	1200	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	270	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	1200	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	1200	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	780	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	1100	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	770	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	270	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	390	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	1200	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	270	100	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	2500	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	930	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Isophorone	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	270	140	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	390	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	270	130	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	390	120	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	390	150	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	840	270	110	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	270	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	2100	270	130	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	390	95	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	108			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	82			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	80			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	93			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	89			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	92			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	76	76	ug/Kg	1	05/14/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	66			%	1	05/14/21	WB	30 - 130 %
% Nitrobenzene-d5	101			%	1	05/14/21	WB	30 - 130 %
% Terphenyl-d14	87			%	1	05/14/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



**Environmental Laboratories, Inc.**  
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
 Tel. (860) 645-1102 Fax (860) 645-0823



## Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
 Walden Environmental Engineering PLLC  
 16 Spring Street  
 Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
 Location Code: WALDENE-IPARK  
 Rush Request: Standard  
 P.O.#: IPARK 0118.48

### Custody Information

Date

Time

Collected by:  
 Received by: CP  
 Analyzed by: see "By" below

05/11/21

15:30

05/12/21

14:50

Project ID: IPARK 0118.48  
 Client ID: SB-19B (1-2')

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29104

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Field Extraction	Completed					05/11/21		SW5035A	1
<b>Volatiles</b>									
1,1,1,2-Tetrachloroethane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloroethane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloroethene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
1,1-Dichloropropene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dibromoethane	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichloroethane	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
1,2-Dichloropropane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
1,3-Dichloropropane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
2,2-Dichloropropane	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Chlorotoluene	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Hexanone	ND	18	3.5	ug/Kg	1	05/13/21	JLI	SW8260C	
2-Isopropyltoluene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C	1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	18	3.5	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	18	3.5	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	7.0	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	3.5	1.4	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	18	3.5	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	7.0	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	7.0	3.5	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	7.0	1.8	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	3.5	3.5	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	7.0	1.8	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	3.5	0.70	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	3.5	0.35	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	05/13/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	101			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	110			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	98			%	1	05/13/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

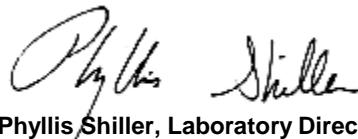
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date      Time

05/11/21      15:30  
05/12/21      14:50

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29105

Project ID: IPARK 0118.48  
Client ID: SB-19C (10-12`)

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	9580	50	6.6	mg/Kg	10	05/14/21	CPP	SW6010D	
Antimony	ND	3.3	3.3	mg/Kg	1	05/14/21	CPP	SW6010D	
Arsenic	4.94	0.66	0.66	mg/Kg	1	05/14/21	CPP	SW6010D	
Barium	25.7	0.33	0.33	mg/Kg	1	05/14/21	CPP	SW6010D	
Beryllium	0.29	0.27	0.13	mg/Kg	1	05/14/21	CPP	SW6010D	
Calcium	63100	50	31	mg/Kg	10	05/14/21	CPP	SW6010D	
Cadmium	0.87	0.33	0.33	mg/Kg	1	05/14/21	CPP	SW6010D	
Chromium	10.6	0.33	0.33	mg/Kg	1	05/14/21	CPP	SW6010D	
Cobalt	6.54	0.33	0.33	mg/Kg	1	05/14/21	CPP	SW6010D	
Copper	20.2	0.7	0.33	mg/kg	1	05/14/21	CPP	SW6010D	
Iron	22000	50	33	mg/Kg	10	05/14/21	CPP	SW6010D	
Lead	9.70	0.33	0.33	mg/Kg	1	05/14/21	CPP	SW6010D	
Magnesium	38800	50	33	mg/Kg	10	05/14/21	CPP	SW6010D	
Manganese	750	3.3	3.3	mg/Kg	10	05/14/21	CPP	SW6010D	
Mercury	ND	0.03	0.02	mg/Kg	1	05/17/21	MGH	SW7471B	
Nickel	13.2	0.33	0.33	mg/Kg	1	05/14/21	CPP	SW6010D	
Potassium	1140	N	5.0	2.6	mg/Kg	1	05/14/21	CPP	SW6010D
Selenium	ND	1.3	1.1	mg/Kg	1	05/14/21	CPP	SW6010D	
Silver	ND	0.33	0.33	mg/Kg	1	05/14/21	CPP	SW6010D	
Sodium	146	5.0	2.9	mg/Kg	1	05/14/21	CPP	SW6010D	
Thallium	ND	3.0	1.3	mg/Kg	1	05/14/21	CPP	SW6010D	
Vanadium	11.8	0.33	0.33	mg/Kg	1	05/14/21	CPP	SW6010D	
Zinc	41.3	0.7	0.33	mg/Kg	1	05/14/21	CPP	SW6010D	
Percent Solid	93			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/17/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/K	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.270	0.0276	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.270	0.0712	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.270	0.112	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.270	0.113	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.270	0.0553	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.270	0.0532	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.270	0.0504	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.270	0.162	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.270	0.0553	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.270	0.0809	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.270	0.0491	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.270	0.0335	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.270	0.0711	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.270	0.197	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.270	0.0645	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.270	0.0473	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.270	0.0833	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.270	0.0992	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.270	0.0806	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.270	0.0469	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.270	0.126	ng/g		05/22/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	58.0		%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	78.8		%		05/22/21	***	EPA 537m
% M2-6:2FTS	166		%		05/22/21	***	EPA 537m
% M2-8:2FTS	168		%		05/22/21	***	EPA 537m
% M2PFTeDA	64.5		%		05/22/21	***	EPA 537m
% M3PFBS	80.9		%		05/22/21	***	EPA 537m
% M3PFHxS	71.4		%		05/22/21	***	EPA 537m
% M4PFHpa	74.8		%		05/22/21	***	EPA 537m
% M5PFHxA	74.0		%		05/22/21	***	EPA 537m
% M5PFPeA	86.3		%		05/22/21	***	EPA 537m
% M6PFDA	71.0		%		05/22/21	***	EPA 537m
% M7PFUdA	73.8		%		05/22/21	***	EPA 537m
% M8FOSA	53.2		%		05/22/21	***	EPA 537m
% M8PFOA	78.9		%		05/22/21	***	EPA 537m
% M8PFOS	65.4		%		05/22/21	***	EPA 537m
% M9PFNA	82.0		%		05/22/21	***	EPA 537m
% MPFBA	92.1		%		05/22/21	***	EPA 537m
% MPFDoA	76.5		%		05/22/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-D	ND	270	270	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-DB	ND	2700	2700	ug/Kg	10	05/15/21	JRB	SW8151A
Dalapon	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
Dicamba	ND	130	130	ug/Kg	10	05/15/21	JRB	SW8151A
Dichloroprop	ND	270	270	ug/Kg	10	05/15/21	JRB	SW8151A
Dinoseb	ND	270	270	ug/Kg	10	05/15/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	45			%	10	05/15/21	JRB	30 - 150 %
% DCAA (Confirmation)	53			%	10	05/15/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	71	71	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	90			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	81			%	2	05/13/21	AW	30 - 150 %
% TCMX	76			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	76			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	6.1	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	16	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	5.1	2.1	2.1	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.4	1.4	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.5	3.5	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	7.1	7.1	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	35	35	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	140	140	ug/Kg	2	05/13/21	CG	SW8081B
<b><u>QA/QC Surrogates</u></b>								
% DCBP	93			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	88			%	2	05/13/21	CG	30 - 150 %
% TCMX	77			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	75			%	2	05/13/21	CG	30 - 150 %
<b><u>Volatiles</u></b>								
1,1,1,2-Tetrachloroethane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,1-Trichloroethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
1,1,2-Trichloroethane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloroethene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,1-Dichloropropene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,3-Trichloropropane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dibromoethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloroethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,2-Dichloropropane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
1,3-Dichloropropane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
1,4-Dichlorobenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
2,2-Dichloropropane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
2-Chlorotoluene	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
2-Hexanone	ND	24	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
2-Isopropyltoluene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
4-Chlorotoluene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	24	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
Acetone	ND	24	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
Acrylonitrile	ND	9.6	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Benzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Bromobenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Bromochloromethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Bromodichloromethane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
Bromoform	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
Bromomethane	ND	4.8	1.9	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon Disulfide	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
Carbon tetrachloride	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
Chlorobenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Chloroform	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Chloromethane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromochloromethane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
Dibromomethane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Ethylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Isopropylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
m&p-Xylene	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	24	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.6	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
Methylene chloride	ND	9.6	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
Naphthalene	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
n-Butylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
n-Propylbenzene	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
o-Xylene	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
sec-Butylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Styrene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
tert-Butylbenzene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrachloroethene	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.6	2.4	ug/Kg	1	05/13/21	JLI	SW8260C
Toluene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Total Xylenes	ND	4.8	4.8	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.6	2.4	ug/Kg	1	05/13/21	JLI	SW8260C
Trichloroethene	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.8	0.96	ug/Kg	1	05/13/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
Vinyl chloride	ND	4.8	0.48	ug/Kg	1	05/13/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	96			%	1	05/13/21	JLI	70 - 130 %
% Bromofluorobenzene	100			%	1	05/13/21	JLI	70 - 130 %
% Dibromofluoromethane	109			%	1	05/13/21	JLI	70 - 130 %
% Toluene-d8	97			%	1	05/13/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	250	85	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	250	99	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	250	92	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	250	87	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	350	180	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	250	170	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	350	100	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	560	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	250	71	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	250	99	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	250	140	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	710	140	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	250	91	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	250	97	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	350	95	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	250	98	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	250	91	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	250	130	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D

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Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	250	99	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	350	99	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	350	140	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	350	110	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	350	130	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	250	100	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	250	110	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	250	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	350	87	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	108			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	83			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	76			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	90			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	87			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	89			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	71	71	ug/Kg	1	05/14/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	72			%	1	05/14/21	WB	30 - 130 %
% Nitrobenzene-d5	111			%	1	05/14/21	WB	30 - 130 %
% Terphenyl-d14	91			%	1	05/14/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date      Time

05/11/21      15:15  
05/12/21      14:50

Project ID: IPARK 0118.48  
Client ID: SB-20A (0-1')

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29106

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	14900	54	7.2	mg/Kg	10	05/14/21	CPP	SW6010D	
Antimony	ND	3.6	3.6	mg/Kg	1	05/14/21	CPP	SW6010D	
Arsenic	6.70	0.72	0.72	mg/Kg	1	05/14/21	CPP	SW6010D	
Barium	62.4	0.36	0.36	mg/Kg	1	05/14/21	CPP	SW6010D	
Beryllium	0.46	0.29	0.14	mg/Kg	1	05/14/21	CPP	SW6010D	
Calcium	2630	5.4	3.3	mg/Kg	1	05/14/21	CPP	SW6010D	
Cadmium	1.33	0.36	0.36	mg/Kg	1	05/14/21	CPP	SW6010D	
Chromium	13.8	0.36	0.36	mg/Kg	1	05/14/21	CPP	SW6010D	
Cobalt	10.3	0.36	0.36	mg/Kg	1	05/14/21	CPP	SW6010D	
Copper	31.0	0.7	0.36	mg/kg	1	05/14/21	CPP	SW6010D	
Iron	29600	54	36	mg/Kg	10	05/14/21	CPP	SW6010D	
Lead	21.6	0.36	0.36	mg/Kg	1	05/14/21	CPP	SW6010D	
Magnesium	7430	54	36	mg/Kg	10	05/14/21	CPP	SW6010D	
Manganese	1930	36	36	mg/Kg	100	05/19/21	EK	SW6010D	
Mercury	0.03	0.03	0.02	mg/Kg	1	05/17/21	MGH	SW7471B	
Nickel	21.4	0.36	0.36	mg/Kg	1	05/14/21	CPP	SW6010D	
Potassium	1220	N	5.4	2.8	mg/Kg	1	05/14/21	CPP	SW6010D
Selenium	ND	1.4	1.2	mg/Kg	1	05/14/21	CPP	SW6010D	
Silver	ND	0.36	0.36	mg/Kg	1	05/14/21	CPP	SW6010D	
Sodium	43.3	5.4	3.1	mg/Kg	1	05/14/21	CPP	SW6010D	
Thallium	ND	3.2	1.4	mg/Kg	1	05/14/21	CPP	SW6010D	
Vanadium	18.2	0.36	0.36	mg/Kg	1	05/14/21	CPP	SW6010D	
Zinc	68.5	0.7	0.36	mg/Kg	1	05/14/21	CPP	SW6010D	
Percent Solid	89			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Mercury Digestion	Completed					05/17/21	AB/AB	SW7471B
Soil Extraction for Herbicide	Completed					05/13/21	J/D	SW3550C
Soil Extraction for SVOA	Completed					05/12/21	K/K	SW3546
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m
<b>PFAS</b>								
1H,1H,2H,2H-Perfluorodecanesulfonic acid	ND	0.293	0.0300	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic acid	ND	0.293	0.0772	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.293	0.122	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.293	0.122	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.293	0.0599	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.293	0.0577	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.293	0.0547	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.293	0.176	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.293	0.0599	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.293	0.0878	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.293	0.0533	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.293	0.0363	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.293	0.0771	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	0.983	0.293	0.214	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.293	0.0700	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	0.962	0.293	0.0513	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	0.478	0.293	0.0904	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.293	0.108	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.293	0.0874	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.293	0.0509	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.293	0.136	ng/g		05/22/21	***	EPA 537m
<b>QA/QC Surrogates</b>								
% d3-N-MeFOSAA	61.1			%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	74.5			%		05/22/21	***	EPA 537m
% M2-6:2FTS	234			%		05/22/21	***	EPA 537m
% M2-8:2FTS	252			%		05/22/21	***	EPA 537m
% M2PFTeDA	42.5			%		05/22/21	***	EPA 537m
% M3PFBS	67.6			%		05/22/21	***	EPA 537m
% M3PFHxS	59.9			%		05/22/21	***	EPA 537m
% M4PFHpA	54.1			%		05/22/21	***	EPA 537m
% M5PFHxA	64.1			%		05/22/21	***	EPA 537m
% M5PFPeA	74.8			%		05/22/21	***	EPA 537m
% M6PFDA	73.8			%		05/22/21	***	EPA 537m
% M7PFUdA	61.7			%		05/22/21	***	EPA 537m
% M8FOSA	52.0			%		05/22/21	***	EPA 537m
% M8PFOA	78.8			%		05/22/21	***	EPA 537m
% M8PFOS	57.9			%		05/22/21	***	EPA 537m
% M9PFNA	79.3			%		05/22/21	***	EPA 537m
% MPFBA	80.8			%		05/22/21	***	EPA 537m
% MPFDoA	59.6			%		05/22/21	***	EPA 537m
<b>Chlorinated Herbicides</b>								
2,4,5-T	ND	140	140	ug/Kg	10	05/15/21	JRB	SW8151A

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4,5-TP (Silvex)	ND	140	140	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-D	ND	280	280	ug/Kg	10	05/15/21	JRB	SW8151A
2,4-DB	ND	2800	2800	ug/Kg	10	05/15/21	JRB	SW8151A
Dalapon	ND	140	140	ug/Kg	10	05/15/21	JRB	SW8151A
Dicamba	ND	140	140	ug/Kg	10	05/15/21	JRB	SW8151A
Dichloroprop	ND	280	280	ug/Kg	10	05/15/21	JRB	SW8151A
Dinoseb	ND	280	280	ug/Kg	10	05/15/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	40			%	10	05/15/21	JRB	30 - 150 %
% DCAA (Confirmation)	50			%	10	05/15/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	73	73	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1221	ND	73	73	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1232	ND	73	73	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1242	ND	73	73	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1248	ND	73	73	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1254	ND	73	73	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1260	ND	73	73	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1262	ND	73	73	ug/Kg	2	05/13/21	AW	SW8082A
PCB-1268	ND	73	73	ug/Kg	2	05/13/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	77			%	2	05/13/21	AW	30 - 150 %
% DCBP (Confirmation)	68			%	2	05/13/21	AW	30 - 150 %
% TCMX	68			%	2	05/13/21	AW	30 - 150 %
% TCMX (Confirmation)	67			%	2	05/13/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	3.0	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	7.6	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.9	2.9	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor epoxide	ND	7.3	7.3	ug/Kg	2	05/13/21	CG	SW8081B
Methoxychlor	ND	37	37	ug/Kg	2	05/13/21	CG	SW8081B
Toxaphene	ND	150	150	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>QA/QC Surrogates</u></b>								
% DCBP	86			%	2	05/13/21	CG	30 - 150 %
% DCBP (Confirmation)	74			%	2	05/13/21	CG	30 - 150 %
% TCMX	70			%	2	05/13/21	CG	30 - 150 %
% TCMX (Confirmation)	62			%	2	05/13/21	CG	30 - 150 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	90	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	97	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	260	93	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	370	190	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
2,6-Dinitrotoluene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	260	180	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	370	110	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	600	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	260	75	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	750	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	260	96	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Bis(2-chloroethyl)ether	ND	370	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	260	96	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	430	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	260	140	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Isophorone	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	370	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	370	140	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	370	110	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	370	140	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	350	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	370	92	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	103			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	80			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	80			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	92			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	84			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	87			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	74	74	ug/Kg	1	05/14/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	55			%	1	05/14/21	WB	30 - 130 %
% Nitrobenzene-d5	85			%	1	05/14/21	WB	30 - 130 %
% Terphenyl-d14	72			%	1	05/14/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

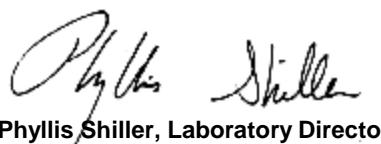
\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Date      Time

Collected by: \_\_\_\_\_  
Received by: CP  
Analyzed by: see "By" below

05/11/21      15:15

05/12/21      14:50

Project ID: IPARK 0118.48  
Client ID: SB-20B (1-2')

### Laboratory Data

SDG ID: GCI29076

Phoenix ID: CI29107

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Field Extraction	Completed					05/11/21		SW5035A	1
<b>Volatiles</b>									
1,1,1,2-Tetrachloroethane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1-Dichloroethane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1-Dichloroethene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1-Dichloropropene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dibromoethane	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dichloroethane	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dichloropropane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
1,3-Dichloropropane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
2,2-Dichloropropane	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	
2-Chlorotoluene	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C	
2-Hexanone	ND	22	4.5	ug/Kg	1	05/14/21	JLI	SW8260C	
2-Isopropyltoluene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C	1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
4-Chlorotoluene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
4-Methyl-2-pentanone	ND	22	4.5	ug/Kg	1	05/14/21	JLI	SW8260C
Acetone	ND	22	4.5	ug/Kg	1	05/14/21	JLI	SW8260C
Acrylonitrile	ND	8.9	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Benzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Bromobenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Bromoform	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
Bromomethane	ND	4.5	1.8	ug/Kg	1	05/14/21	JLI	SW8260C
Carbon Disulfide	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
Carbon tetrachloride	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
Chlorobenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Chloroethane	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Chloroform	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Chloromethane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
cis-1,2-Dichloroethene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Dibromochloromethane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
Dibromomethane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Ethylbenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Isopropylbenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
m&p-Xylene	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	22	4.5	ug/Kg	1	05/14/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	8.9	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
Methylene chloride	ND	8.9	4.5	ug/Kg	1	05/14/21	JLI	SW8260C
Naphthalene	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
n-Butylbenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
n-Propylbenzene	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
o-Xylene	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
sec-Butylbenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Styrene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
tert-Butylbenzene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Tetrachloroethene	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	8.9	2.2	ug/Kg	1	05/14/21	JLI	SW8260C
Toluene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Total Xylenes	ND	4.5	4.5	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	8.9	2.2	ug/Kg	1	05/14/21	JLI	SW8260C
Trichloroethene	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.5	0.89	ug/Kg	1	05/14/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
Vinyl chloride	ND	4.5	0.45	ug/Kg	1	05/14/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	106			%	1	05/14/21	JLI	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Bromofluorobenzene	94			%	1	05/14/21	JLI	70 - 130 %
% Dibromofluoromethane	102			%	1	05/14/21	JLI	70 - 130 %
% Toluene-d8	103			%	1	05/14/21	JLI	70 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

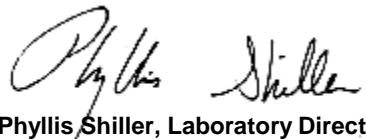
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

Results are reported on an ``as received`` basis, and are not corrected for dry weight.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# Analysis Report

June 21, 2021

FOR: Attn: Nora Brew  
Walden Environmental Engineering PLLC  
16 Spring Street  
Oyster Bay, NY 11771

### Sample Information

Matrix: SOIL  
Location Code: WALDENE-IPARK  
Rush Request: Standard  
P.O.#: IPARK 0118.48

### Custody Information

Collected by:  
Received by: CP  
Analyzed by: see "By" below

Date

Time

05/11/21 15:15

05/12/21 14:50

SDG ID: GCI29076

Phoenix ID: CI29108

Project ID: IPARK 0118.48

Client ID: SB-20C (13-15`)

### Laboratory Data

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Aluminum	13700	58	7.7	mg/Kg	10	05/14/21	CPP	SW6010D	
Antimony	ND	3.8	3.8	mg/Kg	1	05/14/21	CPP	SW6010D	
Arsenic	5.21	0.77	0.77	mg/Kg	1	05/14/21	CPP	SW6010D	
Barium	42.1	0.38	0.38	mg/Kg	1	05/14/21	CPP	SW6010D	
Beryllium	0.37	0.31	0.15	mg/Kg	1	05/14/21	CPP	SW6010D	
Calcium	21600	58	35	mg/Kg	10	05/14/21	CPP	SW6010D	
Cadmium	1.14	0.38	0.38	mg/Kg	1	05/14/21	CPP	SW6010D	
Chromium	14.6	0.38	0.38	mg/Kg	1	05/14/21	CPP	SW6010D	
Cobalt	9.45	0.38	0.38	mg/Kg	1	05/14/21	CPP	SW6010D	
Copper	29.6	0.8	0.38	mg/kg	1	05/14/21	CPP	SW6010D	
Iron	27200	58	38	mg/Kg	10	05/14/21	CPP	SW6010D	
Lead	12.1	0.38	0.38	mg/Kg	1	05/14/21	CPP	SW6010D	
Magnesium	16200	58	38	mg/Kg	10	05/14/21	CPP	SW6010D	
Manganese	1080	3.8	3.8	mg/Kg	10	05/14/21	CPP	SW6010D	
Mercury	ND	* 0.03	0.02	mg/Kg	2	05/18/21	MGH	SW7471B	
Nickel	18.9	0.38	0.38	mg/Kg	1	05/14/21	CPP	SW6010D	
Potassium	1320	N	5.8	3.0	mg/Kg	1	05/14/21	CPP	SW6010D
Selenium	ND	1.5	1.3	mg/Kg	1	05/14/21	CPP	SW6010D	
Silver	ND	0.38	0.38	mg/Kg	1	05/14/21	CPP	SW6010D	
Sodium	126	5.8	3.3	mg/Kg	1	05/14/21	CPP	SW6010D	
Thallium	ND	3.5	1.5	mg/Kg	1	05/14/21	CPP	SW6010D	
Vanadium	15.9	0.38	0.38	mg/Kg	1	05/14/21	CPP	SW6010D	
Zinc	58.1	0.8	0.38	mg/Kg	1	05/14/21	CPP	SW6010D	
Percent Solid	88			%		05/12/21	KL	SW846-%Solid	
Extraction for SVOA SIM	Completed					05/13/21	/E	SW3545A	
Soil Extraction for PCB	Completed					05/12/21	L/E	SW3545A	
Soil Extraction for Pesticides	Completed					05/12/21	L/E	SW3545A	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Field Extraction	Completed					05/11/21		SW5035A
Mercury Digestion	Completed					05/17/21	AB/AT	SW7471B
Soil Extraction for SVOA	Completed					05/12/21	K/K	SW3546
Soil Extraction for Herbicide	Completed					05/14/21	J/D	SW3550C
Total Metals Digest	Completed					05/12/21	B/AG/BF	SW3050B
PFAS	Completed					05/18/21	***	EPA 537m

## **PFAS**

1H,1H,2H,2H-Perfluorodecanesulfonic a	ND	0.253	0.0259	ng/g		05/22/21	***	EPA 537m
1H,1H,2H,2H-Perfluoroctanesulfonic ac	ND	0.253	0.0669	ng/g		05/22/21	***	EPA 537m
NEtFOSAA	ND	0.253	0.106	ng/g		05/22/21	***	EPA 537m
NMeFOSAA	ND	0.253	0.106	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.253	0.0519	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-heptanesulfonic acid (PFHp)	ND	0.253	0.0499	ng/g		05/22/21	***	EPA 537m
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.253	0.0473	ng/g		05/22/21	***	EPA 537m
Perfluorobutanesulfonic acid (PFBS)	ND	0.253	0.152	ng/g		05/22/21	***	EPA 537m
Perfluorodecanoic acid (PFDA)	ND	0.253	0.0519	ng/g		05/22/21	***	EPA 537m
Perfluorododecanoic acid (PFDoA)	ND	0.253	0.0760	ng/g		05/22/21	***	EPA 537m
Perfluoroheptanoic acid (PFHpA)	ND	0.253	0.0461	ng/g		05/22/21	***	EPA 537m
Perfluorohexanesulfonic Acid (PFHxS)	ND	0.253	0.0314	ng/g		05/22/21	***	EPA 537m
Perfluorohexanoic acid (PFHxA)	ND	0.253	0.0668	ng/g		05/22/21	***	EPA 537m
Perfluoro-n-butanoic acid (PFBA)	ND	0.253	0.185	ng/g		05/22/21	***	EPA 537m
Perfluorononanoic acid (PFNA)	ND	0.253	0.0606	ng/g		05/22/21	***	EPA 537m
Perfluorooctanesulfonic Acid (PFOS)	ND	0.253	0.0444	ng/g		05/22/21	***	EPA 537m
Perfluorooctanoic acid (PFOA)	ND	0.253	0.0782	ng/g		05/22/21	***	EPA 537m
Perfluoropentanoic acid (PFPeA)	ND	0.253	0.0931	ng/g		05/22/21	***	EPA 537m
Perfluorotetradecanoic acid (PFTA)	ND	0.253	0.0757	ng/g		05/22/21	***	EPA 537m
Perfluorotridecanoic acid (PFTrDA)	ND	0.253	0.0441	ng/g		05/22/21	***	EPA 537m
Perfluoroundecanoic acid (PFUnA)	ND	0.253	0.118	ng/g		05/22/21	***	EPA 537m

## **QA/QC Surrogates**

% d3-N-MeFOSAA	58.7		%		05/22/21	***	EPA 537m
% d5-N-EtFOSAA	76.9		%		05/22/21	***	EPA 537m
% M2-6:2FTS	108		%		05/22/21	***	EPA 537m
% M2-8:2FTS	102		%		05/22/21	***	EPA 537m
% M2PFTeDA	70.6		%		05/22/21	***	EPA 537m
% M3PFBS	87.4		%		05/22/21	***	EPA 537m
% M3PFHxS	74.7		%		05/22/21	***	EPA 537m
% M4PFHpa	82.3		%		05/22/21	***	EPA 537m
% M5PFHxA	84.0		%		05/22/21	***	EPA 537m
% M5PFPeA	93.7		%		05/22/21	***	EPA 537m
% M6PFDA	64.1		%		05/22/21	***	EPA 537m
% M7PFUdA	73.0		%		05/22/21	***	EPA 537m
% M8FOSA	52.5		%		05/22/21	***	EPA 537m
% M8PFOA	84.6		%		05/22/21	***	EPA 537m
% M8PFOS	67.4		%		05/22/21	***	EPA 537m
% M9PFNA	83.0		%		05/22/21	***	EPA 537m
% MPFBA	101		%		05/22/21	***	EPA 537m
% MPFDoA	77.4		%		05/22/21	***	EPA 537m

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<b><u>Chlorinated Herbicides</u></b>								
2,4,5-T	ND	94	94	ug/Kg	10	05/17/21	JRB	SW8151A
2,4,5-TP (Silvex)	ND	94	94	ug/Kg	10	05/17/21	JRB	SW8151A
2,4-D	ND	190	190	ug/Kg	10	05/17/21	JRB	SW8151A
2,4-DB	ND	1900	1900	ug/Kg	10	05/17/21	JRB	SW8151A
Dalapon	ND	94	94	ug/Kg	10	05/17/21	JRB	SW8151A
Dicamba	ND	94	94	ug/Kg	10	05/17/21	JRB	SW8151A
Dichloroprop	ND	190	190	ug/Kg	10	05/17/21	JRB	SW8151A
Dinoseb	ND	190	190	ug/Kg	10	05/17/21	JRB	SW8151A
<b><u>QA/QC Surrogates</u></b>								
% DCAA	68			%	10	05/17/21	JRB	30 - 150 %
% DCAA (Confirmation)	66			%	10	05/17/21	JRB	30 - 150 %
<b><u>Polychlorinated Biphenyls</u></b>								
PCB-1016	ND	75	75	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1221	ND	75	75	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1232	ND	75	75	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1242	ND	75	75	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1248	ND	75	75	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1254	ND	75	75	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1260	ND	75	75	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1262	ND	75	75	ug/Kg	2	05/14/21	AW	SW8082A
PCB-1268	ND	75	75	ug/Kg	2	05/14/21	AW	SW8082A
<b><u>QA/QC Surrogates</u></b>								
% DCBP	79			%	2	05/14/21	AW	30 - 150 %
% DCBP (Confirmation)	70			%	2	05/14/21	AW	30 - 150 %
% TCMX	64			%	2	05/14/21	AW	30 - 150 %
% TCMX (Confirmation)	64			%	2	05/14/21	AW	30 - 150 %
<b><u>Pesticides - Soil</u></b>								
4,4' -DDD	14	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDE	9.8	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
4,4' -DDT	ND	2.2	2.2	ug/Kg	2	05/13/21	CG	SW8081B
a-BHC	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
a-Chlordane	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Aldrin	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
b-BHC	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Chlordane	ND	37	37	ug/Kg	2	05/13/21	CG	SW8081B
d-BHC	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Dieldrin	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan I	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan II	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endosulfan sulfate	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endrin	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endrin aldehyde	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
Endrin ketone	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B
g-BHC	ND	1.5	1.5	ug/Kg	2	05/13/21	CG	SW8081B
g-Chlordane	ND	3.7	3.7	ug/Kg	2	05/13/21	CG	SW8081B
Heptachlor	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference	
Heptachlor epoxide	ND	7.5	7.5	ug/Kg	2	05/13/21	CG	SW8081B	
Methoxychlor	ND	37	37	ug/Kg	2	05/13/21	CG	SW8081B	
Toxaphene	ND	150	150	ug/Kg	2	05/13/21	CG	SW8081B	
<b><u>QA/QC Surrogates</u></b>									
% DCBP	72			%	2	05/13/21	CG	30 - 150 %	
% DCBP (Confirmation)	68			%	2	05/13/21	CG	30 - 150 %	
% TCMX	65			%	2	05/13/21	CG	30 - 150 %	
% TCMX (Confirmation)	62			%	2	05/13/21	CG	30 - 150 %	
<b><u>Volatiles</u></b>									
1,1,1,2-Tetrachloroethane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1,1-Trichloroethane	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1,2,2-Tetrachloroethane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1,2-Trichloroethane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1-Dichloroethane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1-Dichloroethene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
1,1-Dichloropropene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,3-Trichlorobenzene	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,3-Trichloropropane	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,4-Trichlorobenzene	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2,4-Trimethylbenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dibromo-3-chloropropane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dibromoethane	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dichloroethane	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
1,2-Dichloropropane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
1,3,5-Trimethylbenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
1,3-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
1,3-Dichloropropane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
1,4-Dichlorobenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
2,2-Dichloropropane	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
2-Chlorotoluene	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
2-Hexanone	ND	23	4.6	ug/Kg	1	05/14/21	JLI	SW8260C	
2-Isopropyltoluene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
4-Chlorotoluene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
4-Methyl-2-pentanone	ND	23	4.6	ug/Kg	1	05/14/21	JLI	SW8260C	
Acetone	34	S	23	4.6	ug/Kg	1	05/14/21	JLI	SW8260C
Acrylonitrile	ND	9.2	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
Benzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
Bromobenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
Bromochloromethane	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
Bromodichloromethane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
Bromoform	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
Bromomethane	ND	4.6	1.8	ug/Kg	1	05/14/21	JLI	SW8260C	
Carbon Disulfide	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
Carbon tetrachloride	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	
Chlorobenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
Chloroethane	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
Chloroform	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C	
Chloromethane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C	

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
cis-1,3-Dichloropropene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
Dibromochloromethane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C
Dibromomethane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C
Dichlorodifluoromethane	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
Ethylbenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
Hexachlorobutadiene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
Isopropylbenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
m&p-Xylene	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C
Methyl Ethyl Ketone	ND	23	4.6	ug/Kg	1	05/14/21	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	9.2	0.92	ug/Kg	1	05/14/21	JLI	SW8260C
Methylene chloride	ND	9.2	4.6	ug/Kg	1	05/14/21	JLI	SW8260C
Naphthalene	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C
n-Butylbenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
n-Propylbenzene	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C
o-Xylene	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C
p-Isopropyltoluene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
sec-Butylbenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
Styrene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
tert-Butylbenzene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
Tetrachloroethene	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C
Tetrahydrofuran (THF)	ND	9.2	2.3	ug/Kg	1	05/14/21	JLI	SW8260C
Toluene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
Total Xylenes	ND	4.6	4.6	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,2-Dichloroethene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,3-Dichloropropene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	9.2	2.3	ug/Kg	1	05/14/21	JLI	SW8260C
Trichloroethene	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
Trichlorofluoromethane	ND	4.6	0.92	ug/Kg	1	05/14/21	JLI	SW8260C
Trichlorotrifluoroethane	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
Vinyl chloride	ND	4.6	0.46	ug/Kg	1	05/14/21	JLI	SW8260C
<b><u>QA/QC Surrogates</u></b>								
% 1,2-dichlorobenzene-d4	105			%	1	05/14/21	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	05/14/21	JLI	70 - 130 %
% Dibromofluoromethane	101			%	1	05/14/21	JLI	70 - 130 %
% Toluene-d8	103			%	1	05/14/21	JLI	70 - 130 %
<b><u>Semivolatiles</u></b>								
1,2,4,5-Tetrachlorobenzene	ND	260	90	ug/Kg	1	05/13/21	WB	SW8270D
1,2,4-Trichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
1,2-Diphenylhydrazine	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
1,3-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
1,4-Dichlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2,4,5-Trichlorophenol	ND	260	97	ug/Kg	1	05/13/21	WB	SW8270D
2,4,6-Trichlorophenol	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dichlorophenol	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dimethylphenol	ND	260	93	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrophenol	ND	370	190	ug/Kg	1	05/13/21	WB	SW8270D
2,4-Dinitrotoluene	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,6-Dinitrotoluene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
2-Chloronaphthalene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Chlorophenol	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylnaphthalene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
2-Methylphenol (o-cresol)	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
2-Nitrophenol	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
3,3'-Dichlorobenzidine	ND	260	180	ug/Kg	1	05/13/21	WB	SW8270D
3-Nitroaniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Bromophenyl phenyl ether	ND	370	110	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloro-3-methylphenol	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Chloroaniline	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitroaniline	ND	600	120	ug/Kg	1	05/13/21	WB	SW8270D
4-Nitrophenol	ND	260	75	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Acenaphthylene	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Acetophenone	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Aniline	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Anthracene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benz(a)anthracene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzidine	ND	260	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(a)pyrene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(b)fluoranthene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(ghi)perylene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzo(k)fluoranthene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Benzoic acid	ND	750	150	ug/Kg	1	05/13/21	WB	SW8270D
Benzyl butyl phthalate	ND	260	96	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroethyl)ether	ND	370	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-chloroisopropyl)ether	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Carbazole	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Chrysene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Dibenz(a,h)anthracene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Dibenzofuran	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Diethyl phthalate	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Dimethylphthalate	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-butylphthalate	ND	370	150	ug/Kg	1	05/13/21	WB	SW8270D
Di-n-octylphthalate	ND	260	96	ug/Kg	1	05/13/21	WB	SW8270D
Fluoranthene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Fluorene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobenzene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorobutadiene	ND	260	140	ug/Kg	1	05/13/21	WB	SW8270D
Hexachlorocyclopentadiene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Hexachloroethane	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D

1

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	260	100	ug/Kg	1	05/13/21	WB	SW8270D
Naphthalene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Nitrobenzene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodimethylamine	ND	370	110	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
N-Nitrosodiphenylamine	ND	370	140	ug/Kg	1	05/13/21	WB	SW8270D
Pentachloronitrobenzene	ND	370	110	ug/Kg	1	05/13/21	WB	SW8270D
Pentachlorophenol	ND	370	140	ug/Kg	1	05/13/21	WB	SW8270D
Phenanthrene	ND	260	110	ug/Kg	1	05/13/21	WB	SW8270D
Phenol	ND	260	120	ug/Kg	1	05/13/21	WB	SW8270D
Pyrene	ND	260	130	ug/Kg	1	05/13/21	WB	SW8270D
Pyridine	ND	370	92	ug/Kg	1	05/13/21	WB	SW8270D
<b><u>QA/QC Surrogates</u></b>								
% 2,4,6-Tribromophenol	112			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorobiphenyl	84			%	1	05/13/21	WB	30 - 130 %
% 2-Fluorophenol	76			%	1	05/13/21	WB	30 - 130 %
% Nitrobenzene-d5	85			%	1	05/13/21	WB	30 - 130 %
% Phenol-d5	85			%	1	05/13/21	WB	30 - 130 %
% Terphenyl-d14	91			%	1	05/13/21	WB	30 - 130 %
<b><u>1,4-Dioxane</u></b>								
1,4-dioxane	ND	75	75	ug/Kg	1	05/14/21	WB	SW8270D (SIM)
<b><u>QA/QC Surrogates</u></b>								
% 2-Fluorobiphenyl	55			%	1	05/14/21	WB	30 - 130 %
% Nitrobenzene-d5	50			%	1	05/14/21	WB	30 - 130 %
% Terphenyl-d14	95			%	1	05/14/21	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

### **Comments:**

\*PFAS analysis by EPA 537 modified was subcontracted to York Analytical Laboratories, Inc. NY does not currently offer certification for this analysis/matrix combination. See report attached.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Please be advised that the NY 375 soil criteria for chromium are based on hexavalent chromium and trivalent chromium.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

June 21, 2021

Reviewed and Released by: Ethan Lee, Project Manager



## Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045  
Tel. (860) 645-1102 Fax (860) 645-0823

# QA/QC Report

June 21, 2021

## QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 575373 (mg/kg), QC Sample No: CI28157 2X (CI29097, CI29099, CI29100)													
Mercury - Soil	BRL	0.02	3.92	4.81	20.4	101	106	4.8	117			75 - 125	30
QA/QC Batch 575220 (mg/kg), QC Sample No: CI28890 2X (CI29076, CI29078, CI29079, CI29081, CI29082, CI29084, CI29085, CI29087, CI29088, CI29090, CI29091, CI29093, CI29094, CI29096)													
Mercury - Soil	BRL	0.03	<0.03	0.03	NC	94.5	101	6.6	109	100	8.6	75 - 125	30
QA/QC Batch 575557 (mg/kg), QC Sample No: CI29102 (CI29102, CI29103, CI29105, CI29106)													
Mercury - Soil	BRL	0.02	<0.03	<0.03	NC	97.3	97.2	0.1	105	99.1	5.8	75 - 125	30
QA/QC Batch 575618 (mg/kg), QC Sample No: CI29111 2X (CI29108)													
Mercury - Soil	BRL	0.03	0.16	0.24	40.0	97.7	97.5	0.2	118			75 - 125	30
QA/QC Batch 575097 (mg/kg), QC Sample No: CI29073 (CI29103, CI29105, CI29106, CI29108)													
<b>ICP Metals - Soil</b>													
Aluminum	BRL	5.0	16200	16400	1.20	75.5	85.1	12.0	NC			80 - 120	30
Antimony	BRL	3.3	<3.9	<4.1	NC	90.4	106	15.9	83.6			70 - 130	30
Arsenic	BRL	0.67	5.50	5.37	2.40	97.7	111	12.7	88.9			80 - 120	30
Barium	BRL	0.33	74.1	74.1	0	92.8	106	13.3	92.3			80 - 120	30
Beryllium	BRL	0.27	0.49	0.45	NC	91.0	113	21.6	90.0			80 - 120	30
Cadmium	BRL	0.33	1.17	1.13	NC	97.6	117	18.1	89.0			80 - 120	30
Calcium	BRL	5.0	1190	1260	5.70	97.9	114	15.2	NC			80 - 120	30
Chromium	BRL	0.33	14.4	13.3	7.90	97.3	116	17.5	90.1			80 - 120	30
Cobalt	BRL	0.33	8.84	8.65	2.20	94.7	115	19.4	87.8			80 - 120	30
Copper	BRL	0.67	21.2	20.5	3.40	85.7	102	17.4	91.4			80 - 120	30
Iron	BRL	5.0	28700	29800	3.80	94.0	104	10.1	NC			80 - 120	30
Lead	BRL	0.33	19.7	19.8	0.50	99.4	111	11.0	91.3			80 - 120	30
Magnesium	BRL	5.0	4770	4520	5.40	99.2	113	13.0	NC			80 - 120	30
Manganese	BRL	0.33	980	1110	12.4	91.6	109	17.3	NC			80 - 120	30
Nickel	BRL	0.33	18.4	18.0	2.20	95.5	118	21.1	86.5			80 - 120	30
Potassium	BRL	5.0	1250 N	1150	8.30	95.7	110	13.9	>130			80 - 120	30
Selenium	BRL	1.3	<1.6	<1.6	NC	88.4	105	17.2	82.9			80 - 120	30
Silver	BRL	0.33	<0.39	<0.41	NC	87.4	97.4	10.8	85.7			70 - 130	30
Sodium	BRL	5.0	33	32.3	NC	77.2	92.1	17.6	102			80 - 120	30
Thallium	BRL	3.0	<1.6	<3.7	NC	94.8	110	14.8	86.6			80 - 120	30
Vanadium	BRL	0.33	22.8	23.0	0.90	99.6	117	16.1	90.8			80 - 120	30
Zinc	BRL	0.67	63.5	60.4	5.00	92.3	110	17.5	84.9			80 - 120	30
QA/QC Batch 575096 (mg/kg), QC Sample No: CI29076 (CI29076, CI29078, CI29079, CI29081, CI29082, CI29084, CI29085, CI29087, CI29088, CI29090, CI29091, CI29093, CI29094, CI29096, CI29097, CI29099, CI29100, CI29102)													
<b>ICP Metals - Soil</b>													
Aluminum	BRL	5.0	12100	13000	7.20	90.4	84.8	6.4	NC			80 - 120	30
Antimony	BRL	3.3	<3.5	<3.1	NC	94.3	90.3	4.3	86.4			70 - 130	30
Arsenic	BRL	0.67	4.92 *	7.23	38.0	106	97.6	8.3	90.4			80 - 120	30
Barium	BRL	0.33	35.0	29.1	18.4	114	107	6.3	108			80 - 120	30
Beryllium	BRL	0.27	0.35	0.32	NC	101	96.6	4.5	90.1			80 - 120	30
Cadmium	BRL	0.33	0.86	0.97	NC	97.9	95.3	2.7	86.2			80 - 120	30

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Calcium	BRL	5.0	23900	30400	23.9	99.6	94.9	4.8	NC			80 - 120	30
Chromium	BRL	0.33	11.8	11.8	0	104	98.1	5.8	88.6			80 - 120	30
Cobalt	BRL	0.33	9.33	10.1	7.90	101	98.1	2.9	87.6			80 - 120	30
Copper	BRL	0.67	25.8	23.5	9.30	105	98.3	6.6	91.6			80 - 120	30
Iron	BRL	5.0	26400	28300	6.90	94.4	84.8	10.7	NC			80 - 120	30
Lead	BRL	0.33	15.1	14.2	6.10	105	95.7	9.3	91.1			80 - 120	30
Magnesium	BRL	5.0	17100	21200	21.4	108	101	6.7	NC			80 - 120	30
Manganese	BRL	0.33	881	821	7.10	105	105	0.0	NC			80 - 120	30
Nickel	BRL	0.33	19.5	21.6	10.2	105	102	2.9	86.7			80 - 120	30
Potassium	BRL	5.0	1420 N	1110	24.5	119	113	5.2	>130			80 - 120	30
Selenium	BRL	1.3	<1.4	<1.3	NC	107	101	5.8	92.5			80 - 120	30
Silver	BRL	0.33	<0.35	<0.31	NC	99.4	87.8	12.4	89.0			70 - 130	30
Sodium	BRL	5.0	535	479	11.0	112	95.1	16.3	75.6			80 - 120	30
Thallium	BRL	3.0	<3.1	<2.8	NC	104	99.7	4.2	88.7			80 - 120	30
Vanadium	BRL	0.33	18.2	17.0	6.80	111	103	7.5	89.9			80 - 120	30
Zinc	BRL	0.67	55.6	60.6	8.60	99.2	98.4	0.8	88.4			80 - 120	30

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.



**Environmental Laboratories, Inc.**  
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## QA/QC Report

June 21, 2021

### QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk	RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 575126 (ug/Kg), QC Sample No: CI28528 10X (CI29076, CI29078, CI29079, CI29081)

#### Chlorinated Herbicides - Soil

2,4,5-T	ND	130		54	47	13.9	49	55	11.5	40 - 140	30
2,4,5-TP (Silvex)	ND	130		55	49	11.5	50	57	13.1	40 - 140	30
2,4-D	ND	250		67	54	21.5	53	60	12.4	40 - 140	30
2,4-DB	ND	2500		42	35	18.2	44	48	8.7	40 - 140	30
Dalapon	ND	130		66	70	5.9	42	45	6.9	40 - 140	30
Dicamba	ND	130		84	81	3.6	64	71	10.4	40 - 140	30
Dichloroprop	ND	130		67	61	9.4	64	72	11.8	40 - 140	30
Dinoseb	ND	130		77	76	1.3	50	53	5.8	40 - 140	30
% DCAA (Surrogate Rec)	69	%		48	44	8.7	48	53	9.9	30 - 150	30
% DCAA (Surrogate Rec) (Confirm)	50	%		45	41	9.3	42	48	13.3	30 - 150	30

QA/QC Batch 575303 (ug/Kg), QC Sample No: CI29099 10X (CI29082, CI29084, CI29085, CI29087, CI29088, CI29090, CI29091, CI29093, CI29094, CI29096, CI29097, CI29099, CI29100, CI29102, CI29103, CI29105, CI29106)

#### Chlorinated Herbicides - Soil

2,4,5-T	ND	130		51	45	12.5	68	65	4.5	40 - 140	30
2,4,5-TP (Silvex)	ND	130		55	52	5.6	60	59	1.7	40 - 140	30
2,4-D	ND	250		59	56	5.2	67	65	3.0	40 - 140	30
2,4-DB	ND	2500		38	45	16.9	54	55	1.8	40 - 140	30
Dalapon	ND	130		83	80	3.7	64	63	1.6	40 - 140	30
Dicamba	ND	130		79	78	1.3	66	64	3.1	40 - 140	30
Dichloroprop	ND	130		68	61	10.9	73	70	4.2	40 - 140	30
Dinoseb	ND	130		73	81	10.4	56	55	1.8	40 - 140	30
% DCAA (Surrogate Rec)	41	%		43	40	7.2	44	43	2.3	30 - 150	30
% DCAA (Surrogate Rec) (Confirm)	50	%		50	44	12.8	52	49	5.9	30 - 150	30

QA/QC Batch 575425 (ug/Kg), QC Sample No: CI31370 10X (CI29108)

#### Chlorinated Herbicides - Soil

2,4,5-T	ND	83		78	79	1.3	65	68	4.5	40 - 140	30
2,4,5-TP (Silvex)	ND	83		82	82	0.0	67	70	4.4	40 - 140	30
2,4-D	ND	170		73	81	10.4	66	67	1.5	40 - 140	30
2,4-DB	ND	1700		73	74	1.4	61	65	6.3	40 - 140	30
Dalapon	ND	83		71	61	15.2	60	64	6.5	40 - 140	30
Dicamba	ND	83		74	82	10.3	67	68	1.5	40 - 140	30
Dichloroprop	ND	83		91	99	8.4	92	97	5.3	40 - 140	30
Dinoseb	ND	83		70	75	6.9	70	75	6.9	40 - 140	30
% DCAA (Surrogate Rec)	66	%		66	71	7.3	64	68	6.1	30 - 150	30
% DCAA (Surrogate Rec) (Confirm)	65	%		60	66	9.5	56	59	5.2	30 - 150	30

QA/QC Batch 575098 (ug/Kg), QC Sample No: CI29100 2X (CI29076, CI29078, CI29079, CI29081, CI29082, CI29084, CI29085, CI29087, CI29088, CI29090, CI29091, CI29093, CI29094, CI29096, CI29097, CI29099, CI29100, CI29102)

#### Polychlorinated Biphenyls - Soil

PCB-1016	ND	33		112	106	5.5	112	80	33.3	40 - 140	30
PCB-1221	ND	33								40 - 140	30

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk	RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
PCB-1232	ND	33								40 - 140	30
PCB-1242	ND	33								40 - 140	30
PCB-1248	ND	33								40 - 140	30
PCB-1254	ND	33								40 - 140	30
PCB-1260	ND	33		106	99	6.8	106	73	36.9	40 - 140	30
PCB-1262	ND	33								40 - 140	30
PCB-1268	ND	33								40 - 140	30
% DCBP (Surrogate Rec)	117	%		115	109	5.4	115	79	37.1	30 - 150	30
% DCBP (Surrogate Rec) (Confirm	105	%		107	99	7.8	105	71	38.6	30 - 150	30
% TCMX (Surrogate Rec)	106	%		109	105	3.7	107	75	35.2	30 - 150	30
% TCMX (Surrogate Rec) (Confirm	103	%		107	102	4.8	107	74	36.5	30 - 150	30

QA/QC Batch 575062 (ug/Kg), QC Sample No: CI29209 2X (CI29103, CI29105, CI29106, CI29108)

Polychlorinated Biphenyls - Soil

PCB-1016	ND	33		100	114	13.1	109	99	9.6	40 - 140	30
PCB-1221	ND	33								40 - 140	30
PCB-1232	ND	33								40 - 140	30
PCB-1242	ND	33								40 - 140	30
PCB-1248	ND	33								40 - 140	30
PCB-1254	ND	33								40 - 140	30
PCB-1260	ND	33		92	104	12.2	99	92	7.3	40 - 140	30
PCB-1262	ND	33								40 - 140	30
PCB-1268	ND	33								40 - 140	30
% DCBP (Surrogate Rec)	95	%		105	120	13.3	109	95	13.7	30 - 150	30
% DCBP (Surrogate Rec) (Confirm	91	%		96	104	8.0	94	92	2.2	30 - 150	30
% TCMX (Surrogate Rec)	87	%		96	114	17.1	106	95	10.9	30 - 150	30
% TCMX (Surrogate Rec) (Confirm	84	%		95	112	16.4	105	94	11.1	30 - 150	30

QA/QC Batch 575099 (ug/Kg), QC Sample No: CI29100 2X (CI29076, CI29078, CI29079, CI29081, CI29082, CI29084, CI29085, CI29087, CI29088, CI29090, CI29091, CI29093, CI29094, CI29096, CI29097, CI29099, CI29100, CI29102)

Pesticides - Soil

4,4' -DDD	ND	1.7		89	97	8.6	78	81	3.8	40 - 140	30
4,4' -DDE	ND	1.7		85	92	7.9	NC	NC	NC	40 - 140	30
4,4' -DDT	ND	1.7		83	91	9.2	43	60	33.0	40 - 140	30
a-BHC	ND	1.0		83	90	8.1	73	76	4.0	40 - 140	30
a-Chlordane	ND	3.3		81	89	9.4	71	75	5.5	40 - 140	30
Aldrin	ND	1.0		82	90	9.3	72	80	10.5	40 - 140	30
b-BHC	ND	1.0		85	93	9.0	74	77	4.0	40 - 140	30
Chlordane	ND	33		82	89	8.2	66	68	3.0	40 - 140	30
d-BHC	ND	3.3		78	85	8.6	69	72	4.3	40 - 140	30
Dieldrin	ND	1.0		94	103	9.1	83	87	4.7	40 - 140	30
Endosulfan I	ND	3.3		86	94	8.9	78	81	3.8	40 - 140	30
Endosulfan II	ND	3.3		85	92	7.9	75	78	3.9	40 - 140	30
Endosulfan sulfate	ND	3.3		85	92	7.9	74	77	4.0	40 - 140	30
Endrin	ND	3.3		88	96	8.7	80	83	3.7	40 - 140	30
Endrin aldehyde	ND	3.3		72	80	10.5	60	61	1.7	40 - 140	30
Endrin ketone	ND	3.3		84	92	9.1	72	76	5.4	40 - 140	30
g-BHC	ND	1.0		82	89	8.2	71	74	4.1	40 - 140	30
g-Chlordane	ND	3.3		82	89	8.2	66	68	3.0	40 - 140	30
Heptachlor	ND	3.3		83	91	9.2	74	78	5.3	40 - 140	30
Heptachlor epoxide	ND	3.3		77	84	8.7	67	69	2.9	40 - 140	30
Methoxychlor	ND	3.3		87	94	7.7	76	80	5.1	40 - 140	30
Toxaphene	ND	130		NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	94	%		93	100	7.3	82	89	8.2	30 - 150	30

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	QA/QC Data				SDG I.D.: GCI29076			
			LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% DCBP (Confirmation)	88	%	85	95	11.1	77	78	1.3	30 - 150	30
% TCMX	84	%	80	90	11.8	73	77	5.3	30 - 150	30
% TCMX (Confirmation)	81	%	77	86	11.0	68	72	5.7	30 - 150	30
QA/QC Batch 575063 (ug/Kg), QC Sample No: CI29209 2X (CI29103, CI29105, CI29106, CI29108)										
<b>Pesticides - Soil</b>										
4,4'-DDD	ND	1.7	98	79	21.5	80	77	3.8	40 - 140	30
4,4'-DDE	ND	1.7	86	77	11.0	77	78	1.3	40 - 140	30
4,4'-DDT	ND	1.7	89	70	23.9	70	68	2.9	40 - 140	30
a-BHC	ND	1.0	81	74	9.0	68	69	1.5	40 - 140	30
a-Chlordane	ND	3.3	97	87	10.9	84	85	1.2	40 - 140	30
Aldrin	ND	1.0	102	91	11.4	86	87	1.2	40 - 140	30
b-BHC	ND	1.0	107	93	14.0	84	99	16.4	40 - 140	30
Chlordane	ND	33	103	92	11.3	87	87	0.0	40 - 140	30
d-BHC	ND	3.3	98	78	22.7	77	75	2.6	40 - 140	30
Dieldrin	ND	1.0	89	82	8.2	82	80	2.5	40 - 140	30
Endosulfan I	ND	3.3	102	96	6.1	90	90	0.0	40 - 140	30
Endosulfan II	ND	3.3	101	81	22.0	83	81	2.4	40 - 140	30
Endosulfan sulfate	ND	3.3	118	91	25.8	112	109	2.7	40 - 140	30
Endrin	ND	3.3	88	77	13.3	77	76	1.3	40 - 140	30
Endrin aldehyde	ND	3.3	88	76	14.6	84	83	1.2	40 - 140	30
Endrin ketone	ND	3.3	106	87	19.7	85	83	2.4	40 - 140	30
g-BHC	ND	1.0	96	84	13.3	75	77	2.6	40 - 140	30
g-Chlordane	ND	3.3	103	92	11.3	87	87	0.0	40 - 140	30
Heptachlor	ND	3.3	95	82	14.7	77	88	13.3	40 - 140	30
Heptachlor epoxide	ND	3.3	105	92	13.2	88	88	0.0	40 - 140	30
Methoxychlor	ND	3.3	94	72	26.5	70	70	0.0	40 - 140	30
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30
% DCBP	112	%	118	108	8.8	104	103	1.0	30 - 150	30
% DCBP (Confirmation)	73	%	83	73	12.8	70	69	1.4	30 - 150	30
% TCMX	79	%	90	86	4.5	79	80	1.3	30 - 150	30
% TCMX (Confirmation)	72	%	91	78	15.4	68	69	1.5	30 - 150	30
QA/QC Batch 576606 (ng/L), QC Sample No: CI29073 (CI29076, CI29078, CI29079, CI29081, CI29082, CI29084, CI29085, CI29087, CI29088, CI29090, CI29091, CI29093, CI29094, CI29096, CI29097)										
<b>PFAS</b>										
1H,1H,2H,2H-Perfluorodecanesulfo	ND	0.244	106		104				70 - 130	30
1H,1H,2H,2H-Perfluorooctanesulfo	ND	0.244	110		98.5				70 - 130	30
NEtFOSAA	ND	0.244	96.5		92.5				70 - 130	30
NMeFOSAA	ND	0.244	112		116				70 - 130	30
Perfluoro-1-decanesulfonic acid (P)	ND	0.244	84.1		88.4				70 - 130	30
Perfluoro-1-heptanesulfonic acid (P)	ND	0.244	114		127				70 - 130	30
Perfluoro-1-octanesulfonamide (FO)	ND	0.244	105		96.2				70 - 130	30
Perfluorobutanesulfonic Acid (PFB)	ND	0.244	106		99.2				70 - 130	30
Perfluorodecanoic Acid (PFDA)	ND	0.244	103		102				70 - 130	30
Perfluorododecanoic Acid (PFDoA)	ND	0.244	105		105				70 - 130	30
Perfluoroheptanoic Acid (PFHpA)	ND	0.244	92.9		110				70 - 130	30
Perfluorohexanesulfonic Acid (PFH)	ND	0.244	100		107				70 - 130	30
Perfluorohexanoic Acid (PFHxA)	ND	0.244	109		107				70 - 130	30
Perfluoro-n-butanoic acid (PFBA)	ND	0.244	103		100				70 - 130	30
Perfluorononanoic Acid (PFNA)	ND	0.244	88.0		91.1				70 - 130	30
Perfluorooctanesulfonic Acid (PFO)	ND	0.244	124		117				70 - 130	30
Perfluorooctanoic Acid (PFOA)	ND	0.244	97.3		90.1				70 - 130	30
Perfluoropentanoic acid (PPPeA)	ND	0.244	105		106				70 - 130	30

**QA/QC Data**

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	LCS	LCSD	LCS	MS	MSD	MS	%	%
			%	%	RPD	%	%	RPD	Rec	Limits
Perfluorotetradecanoic Acid (PFTA)	ND	0.244	103		106				70 - 130	30
Perfluorotridecanoic Acid (PFTrDA)	ND	0.244	109		94.4				70 - 130	30
Perfluoroundecanoic Acid (PFUnA)	ND	0.244	99.7		107				70 - 130	30
% d3-N-MeFOSAA	93.3	0.0488	90.4		68.5				70 - 130	30
% M2-6:2FTS	207	0.0488	165		313				70 - 130	30
% M2-8:2FTS	188	0.0488	155		340				70 - 130	30
% M2PFTEDA	81.6	0.0488	73.6		44.5				70 - 130	30
% M3PFBS	90.0	0.0488	93.1		81.7				70 - 130	30
% M3PFHxS	87.0	0.0488	94.1		72.9				70 - 130	30
% M4PFHpA	88.6	0.0488	93.5		68.5				70 - 130	30
% M5PFHxA	86.9	0.0488	86.9		80.2				70 - 130	30
% M5PFPEA	91.2	0.0488	94.5		83.1				70 - 130	30
% M6PFDA	92.6	0.0488	83.7		73.9				70 - 130	30
% M7PFUDA	80.3	0.0488	80.9		62.7				70 - 130	30
% M8FOSA	73.5	0.0488	68.6		48.3				70 - 130	30
% M8PFOA	96.3	0.0488	90.8		87.2				70 - 130	30
% M8PFOS	89.8	0.0488	86.6		62.5				70 - 130	30
% M9PFNA	94.0	0.0488	101		80.5				70 - 130	30
% MPFBA	98.4	0.0488	101		91.4				70 - 130	30
% MPFDOA	79.1	0.0488	77.2		63.8				70 - 130	30

QA/QC Batch 576607 (ng/L), QC Sample No: CI29108 (CI29099, CI29100, CI29102, CI29103, CI29105, CI29106, CI29108)

**PFAS**

1H,1H,2H,2H-Perfluorodecanesulfo	ND	0.244	80.5		77.5				70 - 130	30
1H,1H,2H,2H-Perfluorooctanesulfo	ND	0.244	94.9		83.4				70 - 130	30
NEtFOSAA	ND	0.244	89.6		91.2				70 - 130	30
NMeFOSAA	ND	0.244	102		95.9				70 - 130	30
Perfluoro-1-decanesulfonic acid (P)	ND	0.244	73.2		76.0				70 - 130	30
Perfluoro-1-heptanesulfonic acid (P)	ND	0.244	86.3		97.8				70 - 130	30
Perfluoro-1-octanesulfonamide (FO)	ND	0.244	90.7		85.5				70 - 130	30
Perfluorobutanesulfonic Acid (PFB)	ND	0.244	91.0		92.7				70 - 130	30
Perfluorodecanoic Acid (PFDA)	ND	0.244	88.6		97.7				70 - 130	30
Perfluorododecanoic Acid (PFDoA)	ND	0.244	91.1		95.3				70 - 130	30
Perfluoroheptanoic Acid (PFHpA)	ND	0.244	85.9		85.9				70 - 130	30
Perfluorohexamersulfonic Acid (PFH)	ND	0.244	99.3		93.7				70 - 130	30
Perfluorohexanoic Acid (PFHxA)	ND	0.244	102		100				70 - 130	30
Perfluoro-n-butanoic acid (PFBA)	ND	0.244	95.6		95.3				70 - 130	30
Perfluorononanoic Acid (PFNA)	ND	0.244	81.5		81.0				70 - 130	30
Perfluorooctanesulfonic Acid (PFO)	ND	0.244	104		107				70 - 130	30
Perfluorooctanoic Acid (PFOA)	ND	0.244	93.2		90.3				70 - 130	30
Perfluoropentanoic acid (PFPeA)	ND	0.244	98.8		96.8				70 - 130	30
Perfluorotetradecanoic Acid (PFTA)	ND	0.244	95.5		93.8				70 - 130	30
Perfluorotridecanoic Acid (PFTrDA)	ND	0.244	98.4		93.6				70 - 130	30
Perfluoroundecanoic Acid (PFUnA)	ND	0.244	86.4		95.3				70 - 130	30
% d3-N-MeFOSAA	58.2	0.0487	63.0		60.0				70 - 130	30
% M2-6:2FTS	89.7	0.0487	100		126				70 - 130	30
% M2-8:2FTS	101	0.0487	114		132				70 - 130	30
% M2PFTEDA	70.8	0.0487	65.8		59.8				70 - 130	30
% M3PFBS	90.8	0.0487	92.7		83.7				70 - 130	30
% M3PFHxS	79.5	0.0487	79.5		79.4				70 - 130	30
% M4PFHpA	83.7	0.0487	87.4		83.4				70 - 130	30
% M5PFHxA	80.6	0.0487	81.8		80.5				70 - 130	30
% M5PFPEA	91.4	0.0487	90.3		87.0				70 - 130	30

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% M6PFDA	80.2	0.0487	81.0		71.7			70 - 130	30	
% M7PFUDA	83.7	0.0487	79.7		67.6			70 - 130	30	m
% M8FOSA	58.2	0.0487	60.1		55.8			70 - 130	30	I,m,s
% M8PFOA	81.7	0.0487	80.5		79.8			70 - 130	30	
% M8PFOS	83.1	0.0487	87.8		73.9			70 - 130	30	
% M9PFNA	88.9	0.0487	96.2		90.5			70 - 130	30	
% MPFBA	99.2	0.0487	98.6		93.4			70 - 130	30	
% MPFDOA	80.7	0.0487	74.2		68.7			70 - 130	30	m

QA/QC Batch 575094 (ug/kg), QC Sample No: CI29093 (CI29076, CI29078, CI29079, CI29081, CI29082, CI29084, CI29085, CI29087, CI29088, CI29090, CI29091, CI29093, CI29094, CI29096)

**Semivolatiles - Soil**

1,2,4,5-Tetrachlorobenzene	ND	230	75	77	2.6	76	73	4.0	30 - 130	30
1,2,4-Trichlorobenzene	ND	230	71	70	1.4	69	67	2.9	30 - 130	30
1,2-Dichlorobenzene	ND	180	64	64	0.0	63	57	10.0	30 - 130	30
1,2-Diphenylhydrazine	ND	230	73	77	5.3	78	74	5.3	30 - 130	30
1,3-Dichlorobenzene	ND	230	62	63	1.6	60	54	10.5	30 - 130	30
1,4-Dichlorobenzene	ND	230	63	63	0.0	63	56	11.8	30 - 130	30
2,4,5-Trichlorophenol	ND	230	86	91	5.6	91	86	5.6	30 - 130	30
2,4,6-Trichlorophenol	ND	130	89	92	3.3	88	84	4.7	30 - 130	30
2,4-Dichlorophenol	ND	130	82	83	1.2	82	80	2.5	30 - 130	30
2,4-Dimethylphenol	ND	230	81	84	3.6	71	71	0.0	30 - 130	30
2,4-Dinitrophenol	ND	230	69	73	5.6	65	64	1.6	30 - 130	30
2,4-Dinitrotoluene	ND	130	89	94	5.5	93	89	4.4	30 - 130	30
2,6-Dinitrotoluene	ND	130	92	95	3.2	95	91	4.3	30 - 130	30
2-Chloronaphthalene	ND	230	77	78	1.3	79	76	3.9	30 - 130	30
2-Chlorophenol	ND	230	74	74	0.0	73	70	4.2	30 - 130	30
2-Methylnaphthalene	ND	230	71	73	2.8	72	70	2.8	30 - 130	30
2-Methylphenol (o-cresol)	ND	230	76	79	3.9	77	73	5.3	30 - 130	30
2-Nitroaniline	ND	330	123	130	5.5	132	123	7.1	30 - 130	30
2-Nitrophenol	ND	230	79	80	1.3	80	77	3.8	30 - 130	30
3&4-Methylphenol (m&p-cresol)	ND	230	76	79	3.9	77	75	2.6	30 - 130	30
3,3'-Dichlorobenzidine	ND	130	103	108	4.7	106	107	0.9	30 - 130	30
3-Nitroaniline	ND	330	77	81	5.1	87	81	7.1	30 - 130	30
4,6-Dinitro-2-methylphenol	ND	230	71	77	8.1	75	72	4.1	30 - 130	30
4-Bromophenyl phenyl ether	ND	230	84	87	3.5	87	81	7.1	30 - 130	30
4-Chloro-3-methylphenol	ND	230	82	86	4.8	84	81	3.6	30 - 130	30
4-Chloroaniline	ND	230	56	62	10.2	67	60	11.0	30 - 130	30
4-Chlorophenyl phenyl ether	ND	230	83	86	3.6	86	82	4.8	30 - 130	30
4-Nitroaniline	ND	230	82	87	5.9	89	83	7.0	30 - 130	30
4-Nitrophenol	ND	230	96	102	6.1	100	96	4.1	30 - 130	30
Acenaphthene	ND	230	79	81	2.5	82	77	6.3	30 - 130	30
Acenaphthylene	ND	130	78	80	2.5	81	77	5.1	30 - 130	30
Acetophenone	ND	230	65	67	3.0	67	64	4.6	30 - 130	30
Aniline	ND	330	49	51	4.0	52	43	18.9	30 - 130	30
Anthracene	ND	230	78	82	5.0	82	77	6.3	30 - 130	30
Benz(a)anthracene	ND	230	84	88	4.7	87	83	4.7	30 - 130	30
Benzidine	ND	330	50	57	13.1	30	32	6.5	30 - 130	30
Benzo(a)pyrene	ND	130	81	88	8.3	88	83	5.8	30 - 130	30
Benzo(b)fluoranthene	ND	160	82	89	8.2	89	82	8.2	30 - 130	30
Benzo(ghi)perylene	ND	230	72	79	9.3	72	75	4.1	30 - 130	30
Benzo(k)fluoranthene	ND	230	84	90	6.9	86	80	7.2	30 - 130	30
Benzoic Acid	ND	670	66	70	5.9	45	44	2.2	30 - 130	30

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	LCS				MS		MS		% Rec Limits	% RPD Limits
			%	LCSD %	LCS RPD	%	MSD %	RPD				
Benzyl butyl phthalate	ND	230	83	88	5.8	86	82	4.8	30 - 130	30		
Bis(2-chloroethoxy)methane	ND	230	67	68	1.5	68	66	3.0	30 - 130	30		
Bis(2-chloroethyl)ether	ND	130	57	58	1.7	57	54	5.4	30 - 130	30		
Bis(2-chloroisopropyl)ether	ND	230	52	53	1.9	52	50	3.9	30 - 130	30		
Bis(2-ethylhexyl)phthalate	ND	230	82	87	5.9	85	80	6.1	30 - 130	30		
Carbazole	ND	230	79	83	4.9	81	78	3.8	30 - 130	30		
Chrysene	ND	230	80	86	7.2	85	79	7.3	30 - 130	30		
Dibenz(a,h)anthracene	ND	130	77	84	8.7	80	82	2.5	30 - 130	30		
Dibenzofuran	ND	230	77	80	3.8	81	76	6.4	30 - 130	30		
Diethyl phthalate	ND	230	81	86	6.0	86	81	6.0	30 - 130	30		
Dimethylphthalate	ND	230	81	85	4.8	85	81	4.8	30 - 130	30		
Di-n-butylphthalate	ND	670	85	91	6.8	89	85	4.6	30 - 130	30		
Di-n-octylphthalate	ND	230	86	90	4.5	90	86	4.5	30 - 130	30		
Fluoranthene	ND	230	80	85	6.1	84	80	4.9	30 - 130	30		
Fluorene	ND	230	83	86	3.6	86	82	4.8	30 - 130	30		
Hexachlorobenzene	ND	130	83	86	3.6	86	82	4.8	30 - 130	30		
Hexachlorobutadiene	ND	230	78	77	1.3	77	73	5.3	30 - 130	30		
Hexachlorocyclopentadiene	ND	230	61	60	1.7	60	56	6.9	30 - 130	30		
Hexachloroethane	ND	130	64	64	0.0	64	58	9.8	30 - 130	30		
Indeno(1,2,3-cd)pyrene	ND	230	72	79	9.3	73	74	1.4	30 - 130	30		
Isophorone	ND	130	65	66	1.5	66	64	3.1	30 - 130	30		
Naphthalene	ND	230	68	68	0.0	68	65	4.5	30 - 130	30		
Nitrobenzene	ND	130	70	72	2.8	72	68	5.7	30 - 130	30		
N-Nitrosodimethylamine	ND	230	58	59	1.7	57	50	13.1	30 - 130	30		
N-Nitrosodi-n-propylamine	ND	130	70	72	2.8	73	69	5.6	30 - 130	30		
N-Nitrosodiphenylamine	ND	130	79	82	3.7	82	77	6.3	30 - 130	30		
Pentachloronitrobenzene	ND	230	92	95	3.2	96	91	5.3	30 - 130	30		
Pentachlorophenol	ND	230	77	80	3.8	71	71	0.0	30 - 130	30		
Phenanthrene	ND	130	76	80	5.1	79	75	5.2	30 - 130	30		
Phenol	ND	230	71	74	4.1	74	70	5.6	30 - 130	30		
Pyrene	ND	230	79	85	7.3	83	79	4.9	30 - 130	30		
Pyridine	ND	230	48	47	2.1	44	38	14.6	30 - 130	30		
% 2,4,6-Tribromophenol	89	%	87	92	5.6	88	84	4.7	30 - 130	30		
% 2-Fluorobiphenyl	82	%	76	79	3.9	80	75	6.5	30 - 130	30		
% 2-Fluorophenol	65	%	63	63	0.0	61	59	3.3	30 - 130	30		
% Nitrobenzene-d5	74	%	72	73	1.4	73	70	4.2	30 - 130	30		
% Phenol-d5	69	%	68	70	2.9	69	66	4.4	30 - 130	30		
% Terphenyl-d14	86	%	81	87	7.1	86	80	7.2	30 - 130	30		

**Comment:**

Additional 8270 criteria: Four of the compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 575104 (ug/kg), QC Sample No: CI29233 (CI29097, CI29099, CI29100, CI29102, CI29103, CI29105, CI29106, CI29108)

**Semivolatiles - Soil**

1,2,4,5-Tetrachlorobenzene	ND	230	70	74	5.6	72	67	7.2	30 - 130	30		
1,2,4-Trichlorobenzene	ND	230	71	76	6.8	71	62	13.5	30 - 130	30		
1,2-Dichlorobenzene	ND	180	71	77	8.1	65	51	24.1	30 - 130	30		
1,2-Diphenylhydrazine	ND	230	87	89	2.3	89	86	3.4	30 - 130	30		
1,3-Dichlorobenzene	ND	230	70	75	6.9	62	46	29.6	30 - 130	30		
1,4-Dichlorobenzene	ND	230	71	75	5.5	64	49	26.5	30 - 130	30		
2,4,5-Trichlorophenol	ND	230	84	87	3.5	88	85	3.5	30 - 130	30		
2,4,6-Trichlorophenol	ND	130	86	89	3.4	89	85	4.6	30 - 130	30		

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	LCS	LCSD	LCS	MS	MSD	MS	% Rec Limits	% RPD Limits
			%	%	RPD	%	RPD			
2,4-Dichlorophenol	ND	130	82	88	7.1	84	80	4.9	30 - 130	30
2,4-Dimethylphenol	ND	230	87	92	5.6	87	81	7.1	30 - 130	30
2,4-Dinitrophenol	ND	230	82	95	14.7	89	87	2.3	30 - 130	30
2,4-Dinitrotoluene	ND	130	94	99	5.2	99	96	3.1	30 - 130	30
2,6-Dinitrotoluene	ND	130	89	93	4.4	93	91	2.2	30 - 130	30
2-Chloronaphthalene	ND	230	84	85	1.2	85	80	6.1	30 - 130	30
2-Chlorophenol	ND	230	79	88	10.8	82	69	17.2	30 - 130	30
2-Methylnaphthalene	ND	230	76	79	3.9	76	72	5.4	30 - 130	30
2-Methylphenol (o-cresol)	ND	230	87	96	9.8	89	81	9.4	30 - 130	30
2-Nitroaniline	ND	330	134	138	2.9	129	128	0.8	30 - 130	30
2-Nitrophenol	ND	230	92	100	8.3	96	82	15.7	30 - 130	30
3&4-Methylphenol (m&p-cresol)	ND	230	85	93	9.0	88	83	5.8	30 - 130	30
3,3'-Dichlorobenzidine	ND	130	83	87	4.7	87	82	5.9	30 - 130	30
3-Nitroaniline	ND	330	92	99	7.3	89	89	0.0	30 - 130	30
4,6-Dinitro-2-methylphenol	ND	230	82	89	8.2	87	83	4.7	30 - 130	30
4-Bromophenyl phenyl ether	ND	230	83	84	1.2	85	83	2.4	30 - 130	30
4-Chloro-3-methylphenol	ND	230	86	93	7.8	89	87	2.3	30 - 130	30
4-Chloroaniline	ND	230	66	76	14.1	61	64	4.8	30 - 130	30
4-Chlorophenyl phenyl ether	ND	230	82	83	1.2	84	81	3.6	30 - 130	30
4-Nitroaniline	ND	230	96	100	4.1	98	96	2.1	30 - 130	30
4-Nitrophenol	ND	230	115	123	6.7	125	115	8.3	30 - 130	30
Acenaphthene	ND	230	84	85	1.2	85	83	2.4	30 - 130	30
Acenaphthylene	ND	130	82	82	0.0	84	80	4.9	30 - 130	30
Acetophenone	ND	230	74	81	9.0	75	65	14.3	30 - 130	30
Aniline	ND	330	56	68	19.4	48	42	13.3	30 - 130	30
Anthracene	ND	230	84	85	1.2	87	84	3.5	30 - 130	30
Benz(a)anthracene	ND	230	87	87	0.0	91	87	4.5	30 - 130	30
Benzidine	ND	330	79	89	11.9	11	<10	NC	30 - 130	30
Benzo(a)pyrene	ND	130	88	89	1.1	90	87	3.4	30 - 130	30
Benzo(b)fluoranthene	ND	160	90	90	0.0	94	92	2.2	30 - 130	30
Benzo(ghi)perylene	ND	230	91	90	1.1	93	90	3.3	30 - 130	30
Benzo(k)fluoranthene	ND	230	88	89	1.1	88	86	2.3	30 - 130	30
Benzoic Acid	ND	670	68	81	17.4	79	77	2.6	30 - 130	30
Benzyl butyl phthalate	ND	230	100	101	1.0	103	101	2.0	30 - 130	30
Bis(2-chloroethoxy)methane	ND	230	82	87	5.9	82	74	10.3	30 - 130	30
Bis(2-chloroethyl)ether	ND	130	72	80	10.5	70	55	24.0	30 - 130	30
Bis(2-chloroisopropyl)ether	ND	230	73	80	9.2	71	58	20.2	30 - 130	30
Bis(2-ethylhexyl)phthalate	ND	230	99	101	2.0	105	100	4.9	30 - 130	30
Carbazole	ND	230	86	86	0.0	90	86	4.5	30 - 130	30
Chrysene	ND	230	86	86	0.0	90	86	4.5	30 - 130	30
Dibenz(a,h)anthracene	ND	130	92	96	4.3	98	92	6.3	30 - 130	30
Dibenzofuran	ND	230	82	84	2.4	83	81	2.4	30 - 130	30
Diethyl phthalate	ND	230	87	90	3.4	90	86	4.5	30 - 130	30
Dimethylphthalate	ND	230	84	87	3.5	86	84	2.4	30 - 130	30
Di-n-butylphthalate	ND	670	93	92	1.1	94	92	2.2	30 - 130	30
Di-n-octylphthalate	ND	230	105	107	1.9	110	105	4.7	30 - 130	30
Fluoranthene	ND	230	86	85	1.2	89	85	4.6	30 - 130	30
Fluorene	ND	230	83	86	3.6	87	84	3.5	30 - 130	30
Hexachlorobenzene	ND	130	87	90	3.4	90	89	1.1	30 - 130	30
Hexachlorobutadiene	ND	230	72	78	8.0	72	60	18.2	30 - 130	30
Hexachlorocyclopentadiene	ND	230	57	64	11.6	54	41	27.4	30 - 130	30
Hexachloroethane	ND	130	74	79	6.5	67	50	29.1	30 - 130	30
Indeno(1,2,3-cd)pyrene	ND	230	96	98	2.1	101	99	2.0	30 - 130	30

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL			LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Isophorone	ND	130			74	78	5.3	74	68	8.5	30 - 130	30
Naphthalene	ND	230			75	77	2.6	73	65	11.6	30 - 130	30
Nitrobenzene	ND	130			80	89	10.7	82	70	15.8	30 - 130	30
N-Nitrosodimethylamine	ND	230			72	75	4.1	59	43	31.4	30 - 130	30
N-Nitrosodi-n-propylamine	ND	130			81	89	9.4	84	73	14.0	30 - 130	30
N-Nitrosodiphenylamine	ND	130			81	85	4.8	84	81	3.6	30 - 130	30
Pentachloronitrobenzene	ND	230			88	91	3.4	91	89	2.2	30 - 130	30
Pentachlorophenol	ND	230			85	93	9.0	91	90	1.1	30 - 130	30
Phenanthrene	ND	130			83	83	0.0	87	85	2.3	30 - 130	30
Phenol	ND	230			87	96	9.8	89	83	7.0	30 - 130	30
Pyrene	ND	230			88	87	1.1	90	86	4.5	30 - 130	30
Pyridine	ND	230			59	58	1.7	48	36	28.6	30 - 130	30
% 2,4,6-Tribromophenol	104	%			93	96	3.2	98	95	3.1	30 - 130	30
% 2-Fluorobiphenyl	83	%			81	81	0.0	80	76	5.1	30 - 130	30
% 2-Fluorophenol	77	%			72	79	9.3	70	57	20.5	30 - 130	30
% Nitrobenzene-d5	86	%			80	89	10.7	80	70	13.3	30 - 130	30
% Phenol-d5	81	%			76	84	10.0	78	71	9.4	30 - 130	30
% Terphenyl-d14	88	%			86	85	1.2	87	83	4.7	30 - 130	30

**Comment:**

Additional 8270 criteria: Four of the compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 575263 (ug/kg), QC Sample No: CI29094 (CI29076, CI29078, CI29079, CI29081, CI29082, CI29084, CI29085, CI29087, CI29088, CI29090, CI29091, CI29093, CI29094, CI29096, CI29097, CI29099, CI29100, CI29102)

**Polynuclear Aromatic HC - Soil**

1,4-dioxane	ND	67			46	45	2.2	46	42	9.1	30 - 130	30
% 2-Fluorobiphenyl	58	%			55	57	3.6	61	55	10.3	30 - 130	30
% Nitrobenzene-d5	90	%			82	94	13.6	95	84	12.3	30 - 130	30
% Terphenyl-d14	91	%			86	84	2.4	85	82	3.6	30 - 130	30

QA/QC Batch 575288 (ug/kg), QC Sample No: CI29106 (CI29103, CI29105, CI29106, CI29108)

**Polynuclear Aromatic HC - Soil**

1,4-dioxane	ND	67			47	41	13.6	46	45	2.2	30 - 130	30
% 2-Fluorobiphenyl	60	%			61	57	6.8	57	59	3.4	30 - 130	30
% Nitrobenzene-d5	85	%			87	76	13.5	84	86	2.4	30 - 130	30
% Terphenyl-d14	89	%			85	85	0.0	82	84	2.4	30 - 130	30

QA/QC Batch 575397 (ug/kg), QC Sample No: CI28795 (CI29086, CI29087, CI29089, CI29090, CI29092, CI29093, CI29095, CI29096, CI29098, CI29099, CI29101, CI29102, CI29104, CI29105)

**Volatiles - Soil (Low Level)**

1,1,1,2-Tetrachloroethane	ND	5.0			103	104	1.0	87			70 - 130	30
1,1,1-Trichloroethane	ND	5.0			105	106	0.9	92			70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0			107	106	0.9	85			70 - 130	30
1,1,2-Trichloroethane	ND	5.0			104	106	1.9	91			70 - 130	30
1,1-Dichloroethane	ND	5.0			101	104	2.9	92			70 - 130	30
1,1-Dichloroethene	ND	5.0			98	99	1.0	87			70 - 130	30
1,1-Dichloropropene	ND	5.0			106	102	3.8	84			70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0			107	108	0.9	50			70 - 130	30
1,2,3-Trichloropropane	ND	5.0			103	101	2.0	84			70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0			106	106	0.0	51			70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0			101	101	0.0	69			70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0			113	114	0.9	89			70 - 130	30
1,2-Dibromoethane	ND	5.0			102	104	1.9	85			70 - 130	30
1,2-Dichlorobenzene	ND	5.0			103	104	1.0	70			70 - 130	30
1,2-Dichloroethane	ND	5.0			103	104	1.0	89			70 - 130	30

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
		RL								
1,2-Dichloropropane	ND	5.0	102	105	2.9	90			70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	101	101	0.0	70			70 - 130	30
1,3-Dichlorobenzene	ND	5.0	102	101	1.0	68			70 - 130	30
1,3-Dichloropropane	ND	5.0	103	104	1.0	88			70 - 130	30
1,4-Dichlorobenzene	ND	5.0	101	101	0.0	66			70 - 130	30
2,2-Dichloropropane	ND	5.0	101	103	2.0	87			70 - 130	30
2-Chlorotoluene	ND	5.0	101	102	1.0	74			70 - 130	30
2-Hexanone	ND	25	90	90	0.0	77			70 - 130	30
2-Isopropyltoluene	ND	5.0	99	100	1.0	65			70 - 130	30
4-Chlorotoluene	ND	5.0	100	100	0.0	70			70 - 130	30
4-Methyl-2-pentanone	ND	25	102	99	3.0	86			70 - 130	30
Acetone	ND	10	84	83	1.2	87			70 - 130	30
Acrylonitrile	ND	5.0	94	95	1.1	82			70 - 130	30
Benzene	ND	1.0	103	104	1.0	89			70 - 130	30
Bromobenzene	ND	5.0	106	104	1.9	79			70 - 130	30
Bromoform	ND	5.0	97	100	3.0	87			70 - 130	30
Bromochloromethane	ND	5.0	103	105	1.9	90			70 - 130	30
Bromodichloromethane	ND	5.0	104	104	0.0	83			70 - 130	30
Bromoform	ND	5.0	121	122	0.8	84			70 - 130	30
Bromomethane	ND	5.0	113	115	1.8	92			70 - 130	30
Carbon Disulfide	ND	5.0	102	105	2.9	88			70 - 130	30
Carbon tetrachloride	ND	5.0	100	102	2.0	79			70 - 130	30
Chlorobenzene	ND	5.0	122	127	4.0	90			70 - 130	30
Chloroethane	ND	5.0	97	98	1.0	88			70 - 130	30
Chloroform	ND	5.0	121	121	0.0	83			70 - 130	30
Chloromethane	ND	5.0	100	103	3.0	88			70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	107	110	2.8	88			70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	106	108	1.9	89			70 - 130	30
Dibromochloromethane	ND	3.0	102	101	1.0	86			70 - 130	30
Dibromomethane	ND	5.0	141	144	2.1	99			70 - 130	30
Ethylbenzene	ND	1.0	101	102	1.0	80			70 - 130	30
Hexachlorobutadiene	ND	5.0	107	108	0.9	34			70 - 130	30
Isopropylbenzene	ND	1.0	104	104	0.0	75			70 - 130	30
m&p-Xylene	ND	2.0	98	99	1.0	76			70 - 130	30
Methyl ethyl ketone	ND	5.0	98	105	6.9	86			70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	101	102	1.0	92			70 - 130	30
Methylene chloride	ND	5.0	75	78	3.9	72			70 - 130	30
Naphthalene	ND	5.0	107	106	0.9	<10			70 - 130	30
n-Butylbenzene	ND	1.0	104	103	1.0	54			70 - 130	30
n-Propylbenzene	ND	1.0	103	102	1.0	70			70 - 130	30
o-Xylene	ND	2.0	101	103	2.0	80			70 - 130	30
p-Isopropyltoluene	ND	1.0	106	106	0.0	63			70 - 130	30
sec-Butylbenzene	ND	1.0	114	114	0.0	69			70 - 130	30
Styrene	ND	5.0	102	104	1.9	80			70 - 130	30
tert-Butylbenzene	ND	1.0	101	101	0.0	68			70 - 130	30
Tetrachloroethene	ND	5.0	101	103	2.0	78			70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	94	94	0.0	85			70 - 130	30
Toluene	ND	1.0	103	106	2.9	85			70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	103	105	1.9	88			70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	105	108	2.8	84			70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	106	106	0.0	80			70 - 130	30
Trichloroethene	ND	5.0	105	107	1.9	89			70 - 130	30
Trichlorofluoromethane	ND	5.0	118	121	2.5	89			70 - 130	30

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec	% RPD
		RL								
Trichlorotrifluoroethane	ND	5.0	103	104	1.0	90			70 - 130	30
Vinyl chloride	ND	5.0	121	122	0.8	91			70 - 130	30
% 1,2-dichlorobenzene-d4	96	%	103	102	1.0	101			70 - 130	30
% Bromofluorobenzene	99	%	99	100	1.0	101			70 - 130	30
% Dibromofluoromethane	101	%	103	101	2.0	108			70 - 130	30
% Toluene-d8	97	%	102	102	0.0	102			70 - 130	30
<b>Comment:</b>										
The MSD is not reported for this LL soil batch.										
QA/QC Batch 575406 (ug/kg), QC Sample No: CI29828 (CI29077, CI29078, CI29080, CI29081)										
<b>Volatiles - Soil (Low Level)</b>										
1,1,1,2-Tetrachloroethane	ND	5.0	95	106	10.9				70 - 130	30
1,1,1-Trichloroethane	ND	5.0	93	106	13.1				70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	93	103	10.2				70 - 130	30
1,1,2-Trichloroethane	ND	5.0	89	97	8.6				70 - 130	30
1,1-Dichloroethane	ND	5.0	96	107	10.8				70 - 130	30
1,1-Dichloroethene	ND	5.0	91	103	12.4				70 - 130	30
1,1-Dichloropropene	ND	5.0	91	102	11.4				70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	89	97	8.6				70 - 130	30
1,2,3-Trichloropropane	ND	5.0	96	108	11.8				70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	95	102	7.1				70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	95	106	10.9				70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	87	99	12.9				70 - 130	30
1,2-Dibromoethane	ND	5.0	91	101	10.4				70 - 130	30
1,2-Dichlorobenzene	ND	5.0	90	101	11.5				70 - 130	30
1,2-Dichloroethane	ND	5.0	95	105	10.0				70 - 130	30
1,2-Dichloropropane	ND	5.0	93	105	12.1				70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	93	105	12.1				70 - 130	30
1,3-Dichlorobenzene	ND	5.0	91	103	12.4				70 - 130	30
1,3-Dichloropropane	ND	5.0	95	105	10.0				70 - 130	30
1,4-Dichlorobenzene	ND	5.0	90	100	10.5				70 - 130	30
2,2-Dichloropropane	ND	5.0	95	113	17.3				70 - 130	30
2-Chlorotoluene	ND	5.0	92	103	11.3				70 - 130	30
2-Hexanone	ND	25	78	85	8.6				70 - 130	30
2-Isopropyltoluene	ND	5.0	92	104	12.2				70 - 130	30
4-Chlorotoluene	ND	5.0	92	103	11.3				70 - 130	30
4-Methyl-2-pentanone	ND	25	85	95	11.1				70 - 130	30
Acetone	ND	10	64	69	7.5				70 - 130	30
Acrylonitrile	ND	5.0	89	97	8.6				70 - 130	30
Benzene	ND	1.0	93	104	11.2				70 - 130	30
Bromobenzene	ND	5.0	91	101	10.4				70 - 130	30
Bromochloromethane	ND	5.0	87	98	11.9				70 - 130	30
Bromodichloromethane	ND	5.0	91	101	10.4				70 - 130	30
Bromoform	ND	5.0	88	100	12.8				70 - 130	30
Bromomethane	ND	5.0	114	129	12.3				70 - 130	30
Carbon Disulfide	ND	5.0	104	118	12.6				70 - 130	30
Carbon tetrachloride	ND	5.0	90	85	5.7				70 - 130	30
Chlorobenzene	ND	5.0	93	103	10.2				70 - 130	30
Chloroethane	ND	5.0	103	117	12.7				70 - 130	30
Chloroform	ND	5.0	90	101	11.5				70 - 130	30
Chloromethane	ND	5.0	97	111	13.5				70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	90	100	10.5				70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	95	106	10.9				70 - 130	30

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Dibromochloromethane	ND	3.0	91	103	12.4				70 - 130	30
Dibromomethane	ND	5.0	87	96	9.8				70 - 130	30
Dichlorodifluoromethane	ND	5.0	111	127	13.4				70 - 130	30
Ethylbenzene	ND	1.0	93	104	11.2				70 - 130	30
Hexachlorobutadiene	ND	5.0	94	104	10.1				70 - 130	30
Isopropylbenzene	ND	1.0	94	107	12.9				70 - 130	30
m&p-Xylene	ND	2.0	95	105	10.0				70 - 130	30
Methyl ethyl ketone	ND	5.0	80	85	6.1				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	97	107	9.8				70 - 130	30
Methylene chloride	ND	5.0	73	80	9.2				70 - 130	30
Naphthalene	ND	5.0	93	104	11.2				70 - 130	30
n-Butylbenzene	ND	1.0	93	104	11.2				70 - 130	30
n-Propylbenzene	ND	1.0	92	103	11.3				70 - 130	30
o-Xylene	ND	2.0	94	105	11.1				70 - 130	30
p-Isopropyltoluene	ND	1.0	96	108	11.8				70 - 130	30
sec-Butylbenzene	ND	1.0	105	119	12.5				70 - 130	30
Styrene	ND	5.0	97	108	10.7				70 - 130	30
tert-Butylbenzene	ND	1.0	92	105	13.2				70 - 130	30
Tetrachloroethene	ND	5.0	86	98	13.0				70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	88	96	8.7				70 - 130	30
Toluene	ND	1.0	91	101	10.4				70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	95	108	12.8				70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	96	106	9.9				70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	95	107	11.9				70 - 130	30
Trichloroethene	ND	5.0	91	103	12.4				70 - 130	30
Trichlorofluoromethane	ND	5.0	111	125	11.9				70 - 130	30
Trichlorotrifluoroethane	ND	5.0	95	107	11.9				70 - 130	30
Vinyl chloride	ND	5.0	107	121	12.3				70 - 130	30
% 1,2-dichlorobenzene-d4	106	%	103	104	1.0				70 - 130	30
% Bromofluorobenzene	97	%	102	100	2.0				70 - 130	30
% Dibromofluoromethane	102	%	98	99	1.0				70 - 130	30
% Toluene-d8	102	%	100	99	1.0				70 - 130	30

**Comment:**

The Low Level MS/MSD are not reported for this batch.

QA/QC Batch 575611 (ug/kg), QC Sample No: CI30237 (CI29107, CI29108)

**Volatiles - Soil (Low Level)**

1,1,1,2-Tetrachloroethane	ND	5.0	97	108	10.7	116	109	6.2	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	98	105	6.9	116	110	5.3	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	96	105	9.0	118	111	6.1	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	91	101	10.4	109	102	6.6	70 - 130	30
1,1-Dichloroethane	ND	5.0	100	108	7.7	117	109	7.1	70 - 130	30
1,1-Dichloroethene	ND	5.0	98	104	5.9	111	105	5.6	70 - 130	30
1,1-Dichloropropene	ND	5.0	96	104	8.0	111	106	4.6	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	89	97	8.6	112	105	6.5	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	96	113	16.3	121	112	7.7	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	95	103	8.1	114	108	5.4	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	99	106	6.8	114	109	4.5	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	91	102	11.4	106	101	4.8	70 - 130	30
1,2-Dibromoethane	ND	5.0	92	103	11.3	111	105	5.6	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	92	101	9.3	109	103	5.7	70 - 130	30
1,2-Dichloroethane	ND	5.0	99	110	10.5	118	111	6.1	70 - 130	30
1,2-Dichloropropane	ND	5.0	96	107	10.8	114	107	6.3	70 - 130	30

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	LCS				MS		MS		% Rec Limits	% RPD Limits
			%	LCSD %	LCS RPD	%	MSD %	RPD				
1,3,5-Trimethylbenzene	ND	1.0	98	106	7.8	116	108	7.1	70 - 130	30		
1,3-Dichlorobenzene	ND	5.0	95	103	8.1	111	104	6.5	70 - 130	30		
1,3-Dichloropropane	ND	5.0	97	108	10.7	116	108	7.1	70 - 130	30		
1,4-Dichlorobenzene	ND	5.0	93	100	7.3	108	102	5.7	70 - 130	30		
2,2-Dichloropropane	ND	5.0	101	108	6.7	114	108	5.4	70 - 130	30		
2-Chlorotoluene	ND	5.0	95	103	8.1	113	105	7.3	70 - 130	30		
2-Hexanone	ND	25	81	89	9.4	94	88	6.6	70 - 130	30		
2-Isopropyltoluene	ND	5.0	98	105	6.9	114	107	6.3	70 - 130	30		
4-Chlorotoluene	ND	5.0	96	104	8.0	113	105	7.3	70 - 130	30		
4-Methyl-2-pentanone	ND	25	89	99	10.6	105	99	5.9	70 - 130	30		
Acetone	ND	10	70	77	9.5	74	65	12.9	70 - 130	30	m	
Acrylonitrile	ND	5.0	95	107	11.9	111	103	7.5	70 - 130	30		
Benzene	ND	1.0	96	105	9.0	113	106	6.4	70 - 130	30		
Bromobenzene	ND	5.0	92	100	8.3	111	104	6.5	70 - 130	30		
Bromoform	ND	5.0	88	100	12.8	107	100	6.8	70 - 130	30		
Bromodichloromethane	ND	5.0	95	104	9.0	112	105	6.5	70 - 130	30		
Bromoform	ND	5.0	91	104	13.3	105	100	4.9	70 - 130	30		
Bromomethane	ND	5.0	107	115	7.2	109	102	6.6	70 - 130	30		
Carbon Disulfide	ND	5.0	114	122	6.8	123	116	5.9	70 - 130	30		
Carbon tetrachloride	ND	5.0	96	87	9.8	94	104	10.1	70 - 130	30		
Chlorobenzene	ND	5.0	96	104	8.0	112	105	6.5	70 - 130	30		
Chloroethane	ND	5.0	97	100	3.0	105	97	7.9	70 - 130	30		
Chloroform	ND	5.0	95	102	7.1	112	105	6.5	70 - 130	30		
Chloromethane	ND	5.0	87	92	5.6	97	89	8.6	70 - 130	30		
cis-1,2-Dichloroethene	ND	5.0	92	100	8.3	109	101	7.6	70 - 130	30		
cis-1,3-Dichloropropene	ND	5.0	98	108	9.7	114	108	5.4	70 - 130	30		
Dibromochloromethane	ND	3.0	92	104	12.2	110	103	6.6	70 - 130	30		
Dibromomethane	ND	5.0	90	98	8.5	105	99	5.9	70 - 130	30		
Dichlorodifluoromethane	ND	5.0	99	104	4.9	110	102	7.5	70 - 130	30		
Ethylbenzene	ND	1.0	96	104	8.0	114	108	5.4	70 - 130	30		
Hexachlorobutadiene	ND	5.0	98	105	6.9	114	108	5.4	70 - 130	30		
Isopropylbenzene	ND	1.0	99	107	7.8	118	110	7.0	70 - 130	30		
m&p-Xylene	ND	2.0	98	107	8.8	116	109	6.2	70 - 130	30		
Methyl ethyl ketone	ND	5.0	82	91	10.4	95	89	6.5	70 - 130	30		
Methyl t-butyl ether (MTBE)	ND	1.0	97	107	9.8	116	108	7.1	70 - 130	30		
Methylene chloride	ND	5.0	76	82	7.6	90	83	8.1	70 - 130	30		
Naphthalene	ND	5.0	94	105	11.1	118	112	5.2	70 - 130	30		
n-Butylbenzene	ND	1.0	100	106	5.8	113	107	5.5	70 - 130	30		
n-Propylbenzene	ND	1.0	96	103	7.0	113	107	5.5	70 - 130	30		
o-Xylene	ND	2.0	96	106	9.9	114	108	5.4	70 - 130	30		
p-Isopropyltoluene	ND	1.0	102	108	5.7	117	111	5.3	70 - 130	30		
sec-Butylbenzene	ND	1.0	111	119	7.0	128	120	6.5	70 - 130	30		
Styrene	ND	5.0	99	109	9.6	118	110	7.0	70 - 130	30		
tert-Butylbenzene	ND	1.0	97	104	7.0	114	107	6.3	70 - 130	30		
Tetrachloroethene	ND	5.0	91	98	7.4	107	102	4.8	70 - 130	30		
Tetrahydrofuran (THF)	ND	5.0	96	106	9.9	113	105	7.3	70 - 130	30		
Toluene	ND	1.0	94	103	9.1	112	105	6.5	70 - 130	30		
trans-1,2-Dichloroethene	ND	5.0	100	109	8.6	117	108	8.0	70 - 130	30		
trans-1,3-Dichloropropene	ND	5.0	98	109	10.6	117	109	7.1	70 - 130	30		
trans-1,4-dichloro-2-butene	ND	5.0	104	113	8.3	119	112	6.1	70 - 130	30		
Trichloroethene	ND	5.0	94	103	9.1	111	105	5.6	70 - 130	30		
Trichlorofluoromethane	ND	5.0	105	111	5.6	115	108	6.3	70 - 130	30		
Trichlorotrifluoroethane	ND	5.0	104	111	6.5	120	113	6.0	70 - 130	30		

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	LCS				MS		% Rec Limits		% RPD Limits	
			%	LCSD %	LCS RPD	%	MSD %	MS RPD	RPD			
Vinyl chloride	ND	5.0	96	102	6.1	109	101	7.6	70 - 130	30		
% 1,2-dichlorobenzene-d4	106	%	105	104	1.0	104	104	0.0	70 - 130	30		
% Bromofluorobenzene	97	%	101	102	1.0	100	100	0.0	70 - 130	30		
% Dibromofluoromethane	99	%	99	100	1.0	99	97	2.0	70 - 130	30		
% Toluene-d8	102	%	100	100	0.0	100	100	0.0	70 - 130	30		
QA/QC Batch 575624 (ug/kg), QC Sample No: CI30484 (CI29083, CI29084)												
<b>Volatiles - Soil (Low Level)</b>												
1,1,1,2-Tetrachloroethane	ND	5.0	118	120	1.7				70 - 130	30		
1,1,1-Trichloroethane	ND	5.0	116	123	5.9				70 - 130	30		
1,1,2,2-Tetrachloroethane	ND	3.0	122	122	0.0				70 - 130	30		
1,1,2-Trichloroethane	ND	5.0	117	118	0.9				70 - 130	30		
1,1-Dichloroethane	ND	5.0	113	119	5.2				70 - 130	30		
1,1-Dichloroethene	ND	5.0	111	120	7.8				70 - 130	30		
1,1-Dichloropropene	ND	5.0	116	119	2.6				70 - 130	30		
1,2,3-Trichlorobenzene	ND	5.0	122	123	0.8				70 - 130	30		
1,2,3-Trichloropropane	ND	5.0	121	122	0.8				70 - 130	30		
1,2,4-Trichlorobenzene	ND	5.0	122	125	2.4				70 - 130	30		
1,2,4-Trimethylbenzene	ND	1.0	116	120	3.4				70 - 130	30		
1,2-Dibromo-3-chloropropane	ND	5.0	124	123	0.8				70 - 130	30		
1,2-Dibromoethane	ND	5.0	118	119	0.8				70 - 130	30		
1,2-Dichlorobenzene	ND	5.0	117	117	0.0				70 - 130	30		
1,2-Dichloroethane	ND	5.0	119	120	0.8				70 - 130	30		
1,2-Dichloropropane	ND	5.0	116	122	5.0				70 - 130	30		
1,3,5-Trimethylbenzene	ND	1.0	116	121	4.2				70 - 130	30		
1,3-Dichlorobenzene	ND	5.0	116	118	1.7				70 - 130	30		
1,3-Dichloropropane	ND	5.0	118	119	0.8				70 - 130	30		
1,4-Dichlorobenzene	ND	5.0	115	117	1.7				70 - 130	30		
2,2-Dichloropropane	ND	5.0	119	117	1.7				70 - 130	30		
2-Chlorotoluene	ND	5.0	114	118	3.4				70 - 130	30		
2-Hexanone	ND	25	99	98	1.0				70 - 130	30		
2-Isopropyltoluene	ND	5.0	111	114	2.7				70 - 130	30		
4-Chlorotoluene	ND	5.0	115	117	1.7				70 - 130	30		
4-Methyl-2-pentanone	ND	25	109	106	2.8				70 - 130	30		
Acetone	ND	10	91	96	5.3				70 - 130	30		
Acrylonitrile	ND	5.0	103	106	2.9				70 - 130	30		
Benzene	ND	1.0	117	120	2.5				70 - 130	30		
Bromobenzene	ND	5.0	115	119	3.4				70 - 130	30		
Bromochloromethane	ND	5.0	111	112	0.9				70 - 130	30		
Bromodichloromethane	ND	5.0	116	117	0.9				70 - 130	30		
Bromoform	ND	5.0	115	115	0.0				70 - 130	30		
Bromomethane	ND	5.0	98	105	6.9				70 - 130	30		
Carbon Disulfide	ND	5.0	115	121	5.1				70 - 130	30		
Carbon tetrachloride	ND	5.0	113	117	3.5				70 - 130	30		
Chlorobenzene	ND	5.0	116	119	2.6				70 - 130	30		
Chloroethane	ND	5.0	100	104	3.9				70 - 130	30		
Chloroform	ND	5.0	111	116	4.4				70 - 130	30		
Chloromethane	ND	5.0	95	101	6.1				70 - 130	30		
cis-1,2-Dichloroethene	ND	5.0	115	119	3.4				70 - 130	30		
cis-1,3-Dichloropropene	ND	5.0	119	121	1.7				70 - 130	30		
Dibromochloromethane	ND	3.0	117	118	0.9				70 - 130	30		
Dibromomethane	ND	5.0	113	113	0.0				70 - 130	30		
Dichlorodifluoromethane	ND	5.0	107	110	2.8				70 - 130	30		

QA/QC Data

SDG I.D.: GCI29076

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Ethylbenzene	ND	1.0	117	121	3.4				70 - 130	30
Hexachlorobutadiene	ND	5.0	124	128	3.2				70 - 130	30
Isopropylbenzene	ND	1.0	116	120	3.4				70 - 130	30
m&p-Xylene	ND	2.0	114	116	1.7				70 - 130	30
Methyl ethyl ketone	ND	5.0	106	105	0.9				70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	106	107	0.9				70 - 130	30
Methylene chloride	ND	5.0	95	99	4.1				70 - 130	30
Naphthalene	ND	5.0	126	127	0.8				70 - 130	30
n-Butylbenzene	ND	1.0	118	120	1.7				70 - 130	30
n-Propylbenzene	ND	1.0	117	121	3.4				70 - 130	30
o-Xylene	ND	2.0	115	118	2.6				70 - 130	30
p-Isopropyltoluene	ND	1.0	121	124	2.4				70 - 130	30
sec-Butylbenzene	ND	1.0	130	134	3.0				70 - 130	30
Styrene	ND	5.0	116	119	2.6				70 - 130	30
tert-Butylbenzene	ND	1.0	115	119	3.4				70 - 130	30
Tetrachloroethene	ND	5.0	116	120	3.4				70 - 130	30
Tetrahydrofuran (THF)	ND	5.0	109	110	0.9				70 - 130	30
Toluene	ND	1.0	115	119	3.4				70 - 130	30
trans-1,2-Dichloroethene	ND	5.0	116	124	6.7				70 - 130	30
trans-1,3-Dichloropropene	ND	5.0	116	118	1.7				70 - 130	30
trans-1,4-dichloro-2-butene	ND	5.0	111	112	0.9				70 - 130	30
Trichloroethene	ND	5.0	120	123	2.5				70 - 130	30
Trichlorofluoromethane	ND	5.0	99	106	6.8				70 - 130	30
Trichlorotrifluoroethane	ND	5.0	117	120	2.5				70 - 130	30
Vinyl chloride	ND	5.0	98	104	5.9				70 - 130	30
% 1,2-dichlorobenzene-d4	100	%	102	101	1.0				70 - 130	30
% Bromofluorobenzene	96	%	101	98	3.0				70 - 130	30
% Dibromofluoromethane	101	%	102	102	0.0				70 - 130	30
% Toluene-d8	99	%	102	102	0.0				70 - 130	30

**Comment:**

The Low Level MS/MSD are not reported for this batch.

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.

s = This parameter is outside laboratory Blank Surrogate specified recovery limits.

**If there are any questions regarding this data, please call Phoenix Client Services at extension 200.**

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

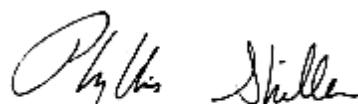
LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference


Phyllis Shiller, Laboratory Director  
June 21, 2021

Criteria: NY: 375, 375NR, 375RRS, 375RS

State: NY

# Sample Criteria Exceedances Report

## GCI29076 - WALDENE-IPARK

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CI29079	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	950	280	500	500	ug/Kg
CI29079	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Chrysene	NY / 375-6.8 Semivolatiles / Residential	1500	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	950	280	500	500	ug/Kg
CI29079	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1400	280	800	800	ug/Kg
CI29079	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1400	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1500	280	1000	1000	ug/Kg
CI29079	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	950	280	500	500	ug/Kg
CI29079	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	16	2.5	3.3	3.3	ug/Kg
CI29079	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	12	2.5	3.3	3.3	ug/Kg
CI29082	PB-SM	Lead	NY / 375-6.8 Metals / Unrestricted Use Soil	173	0.34	63	63	mg/Kg
CI29085	\$DIOX-SM8270	1,4-dioxane	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	390	100	100	ug/Kg
CI29087	\$DIOX-SM8270	1,4-dioxane	NY / 375-6.8 Volatiles / Unrestricted Use Soil	ND	350	100	100	ug/Kg
CI29091	\$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.3	2.3	3.3	3.3	ug/Kg
CI29091	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	60	2.3	3.3	3.3	ug/Kg
CI29091	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	17	2.3	3.3	3.3	ug/Kg
CI29094	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	14	2.3	3.3	3.3	ug/Kg
CI29094	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.9	2.3	3.3	3.3	ug/Kg
CI29097	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.6	2.2	3.3	3.3	ug/Kg
CI29100	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	56	2.3	3.3	3.3	ug/Kg
CI29100	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	250	12	3.3	3.3	ug/Kg
CI29102	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.6	2.1	3.3	3.3	ug/Kg
CI29103	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Commercial	1200	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Chrysene	NY / 375-6.8 Semivolatiles / Residential	1200	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential	1200	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential	1200	270	1000	1000	ug/Kg

Criteria: NY: 375, 375NR, 375RRS, 375RS

State: NY

# Sample Criteria Exceedances Report

## GCI29076 - WALDENE-IPARK

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
CI29103	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1200	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential	930	270	500	500	ug/Kg
CI29103	\$8270-SMR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Residential	1100	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Residential Restricted	1200	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	1200	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Residential Restricted	930	270	500	500	ug/Kg
CI29103	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Residential Restricted	1200	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Indeno(1,2,3-cd)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	930	270	500	500	ug/Kg
CI29103	\$8270-SMR	Benzo(k)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1100	270	800	800	ug/Kg
CI29103	\$8270-SMR	Benzo(b)fluoranthene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Benzo(a)pyrene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Benz(a)anthracene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	270	1000	1000	ug/Kg
CI29103	\$8270-SMR	Chrysene	NY / 375-6.8 Semivolatiles / Unrestricted Use Soil	1200	270	1000	1000	ug/Kg
CI29103	\$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	4.7	2.3	3.3	3.3	ug/Kg
CI29103	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	160	11	3.3	3.3	ug/Kg
CI29103	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	100	11	3.3	3.3	ug/Kg
CI29105	\$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	6.1	2.1	3.3	3.3	ug/Kg
CI29105	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	16	2.1	3.3	3.3	ug/Kg
CI29105	\$PESTSM_NY	4,4' -DDT	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	5.1	2.1	3.3	3.3	ug/Kg
CI29106	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	7.6	2.2	3.3	3.3	ug/Kg
CI29106	MN-SM	Manganese	NY / 375-6.8 Metals / Unrestricted Use Soil	1930	36	1600	1600	mg/Kg
CI29108	\$PESTSM_NY	4,4' -DDE	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	9.8	2.2	3.3	3.3	ug/Kg
CI29108	\$PESTSM_NY	4,4' -DDD	NY / 375-6.8 PCBs/Pesticides / Unrestricted Use Soil	14	2.2	3.3	3.3	ug/Kg

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



**Environmental Laboratories, Inc.**  
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## NY Temperature Narration

June 21, 2021

SDG I.D.: GCI29076

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The samples in this delivery group were received at 2.1°C.  
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)



# PHOENIX

*Environmental Laboratories, Inc.*

Customer: Park E&B Environmental  
Address: 485 West Putnam Ave  
Greenwich, CT 06850

Project: Park 0108-48  
Report to: NOA-Brewer  
Invoice to: CAXI MANGAL  
QUOTE #: Park 0108-48

## NY/NJ/PA CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
Email: info@phoenixlabs.com Fax (860) 645-0823

Client Services (860) 645-8726

Cooler: Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Cobalt: IPK <input type="checkbox"/>	TGE <input type="checkbox"/>
Temp.: C <input type="checkbox"/>	F <input type="checkbox"/>
Contact Options:	
Phone: _____	Fax: _____
Email: <a href="mailto:info@phoenixlabs.com">info@phoenixlabs.com</a>	Project P.O: O108-48

This section MUST be completed with  
Bottle Quantities.

Sampler's Signature	Client Sample - Information - Identification			Analysis Request	Time Sampled	Date Sampled	Customer Sample Matrix	Sample Matrix	Date Sampled	Time Sampled
	Customer Sample Identification	Identifier Sample Identification	Date:							
<i>[Signature]</i>	5/11/21									
<b>Matrix Code:</b> DW=Drinking Water SW=Ground Water SE=Surface Water WW=Waste Water RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil B=Bulk L=Liquid										
<b>PHOENIX USE ONLY</b>										
SAMPLE #	Customer Sample Identification	Identifier Sample Identification	Date:							
29087	SB-13C (0-12)	S	5/11/21	060	X	X	X	X	X	X
29088	SB-14A (1-1)	S		9:10	X	X	X	X	X	X
29089	SB-14B (2-3)	S		9:15	X	X	X	X	X	X
29090	SB-14C (6-8)	S		9:10	X	X	X	X	X	X
29091	SB-15A (0-1)	S		13:15	X	X	X	X	X	X
29092	SB-15B (1-2)	S		13:15	X	X	X	X	X	X
29093	SB-15C (10-11)	S		13:15	X	X	X	X	X	X
29094	SB-16A (0-1)	S		12:10	X	X	X	X	X	X
29095	SB-16B (1-2)	S		12:10	X	X	X	X	X	X
29096	SB-16C (13-14)	S		12:10	X	X	X	X	X	X
29097	SB-17A (0-1)	S		14:10	X	X	X	X	X	X
Relinquished by: Accepted by: Date: Time:										
<i>[Signature]</i> <i>[Signature]</i> 5/12/21 08:15										
5/12/21 14:50										
Comments, Special Requirements or Regulations:										
Data Format:										
<input type="checkbox"/> Phoenix Std Report <input type="checkbox"/> EQuIS <input checked="" type="checkbox"/> Excel <input type="checkbox"/> NJ Hazsite EDD <input type="checkbox"/> PDF <input type="checkbox"/> NY EZ EDD (ASP) <input type="checkbox"/> GIS/Key <input type="checkbox"/> Other										
Please adhere to GAPP as provided by Walter NY Enhanced (ASP B).										
Data Package: <input type="checkbox"/> NJ Reduced Deliv. * <input type="checkbox"/> Other <input checked="" type="checkbox"/> NY Enhanced (ASP B).										
State Samples Collected? <b>NN</b>										
PA Clean Fill Limits <input type="checkbox"/> TOGS GW <input type="checkbox"/> CP-51 SOIL <input type="checkbox"/> Non-Res. Criteria <input checked="" type="checkbox"/> 375SCO <input type="checkbox"/> Impact to GW Soil <input checked="" type="checkbox"/> Unrestricted Soil <input type="checkbox"/> Cleanup Criteria <input checked="" type="checkbox"/> 375SCO <input type="checkbox"/> Impact to GW Residential Soil <input type="checkbox"/> soil screen <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Criteria <input checked="" type="checkbox"/> 375SCO <input type="checkbox"/> GW Criteria <input type="checkbox"/> Commercial Soil <input checked="" type="checkbox"/> 375SCO <input type="checkbox"/> Industrial Soil <input type="checkbox"/> Subpart 5 DW										

# PHOENIX

*Environmental Laboratories, Inc.*

Customer: Park East Fishkill - Corimachek  
Address: 405 West Putnam Ave  
Greenwich, CT 06850

## NY/NJ/PA CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
Email: info@phoenixlabs.com Fax (860) 645-0823

**Client Services (860) 645-8726**

yes

No

IPK

ICE

Pg

of

Contact Options:

Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

Email: *EJohnston@Walden-*  
*assoc.com*

This section MUST be completed with  
Bottle Quantities.

Project P.O.: 01/08-48

Report to: Nora Bureau

Invoice to: Can Month

QUOTE #: Park 01/08-48

### Client Sample - Information - Identification

Date: 5/11/21

Time: 14:30

Sampled:

5/11/21

Analysis Request

Water

Customer Sample Identification

Matrix

Date Sampled

Time Sampled

Sampled

Matrix



# Technical Report

prepared for:

**Phoenix Environmental Laboratories, Inc.**  
P.O. Box 370, 587 East Middle Turnpike  
Manchester CT, 06040  
**Attention: Helen Geoghegan**

Report Date: 05/24/2021

**Client Project ID: CI29073-CI29108**  
York Project (SDG) No.: 21E0675

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
(203) 325-1371

■  
132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)

Report Date: 05/24/2021  
Client Project ID: CI29073-CI29108  
York Project (SDG) No.: 21E0675

**Phoenix Environmental Laboratories, Inc.**  
P.O. Box 370, 587 East Middle Turnpike  
Manchester CT, 06040  
Attention: Helen Geoghegan

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on May 14, 2021 and listed below. The project was identified as your project: **CI29073-CI29108**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
21E0675-01	CI29073	Soil	05/11/2021	05/14/2021
21E0675-02	CI29075	Soil	05/11/2021	05/14/2021
21E0675-03	CI29076	Soil	05/11/2021	05/14/2021
21E0675-04	CI29078	Soil	05/11/2021	05/14/2021
21E0675-05	CI29079	Soil	05/11/2021	05/14/2021
21E0675-06	CI29081	Soil	05/11/2021	05/14/2021
21E0675-07	CI29082	Soil	05/11/2021	05/14/2021
21E0675-08	CI29084	Soil	05/11/2021	05/14/2021
21E0675-09	CI29085	Soil	05/11/2021	05/14/2021
21E0675-10	CI29087	Soil	05/11/2021	05/14/2021
21E0675-11	CI29088	Soil	05/11/2021	05/14/2021
21E0675-12	CI29090	Soil	05/11/2021	05/14/2021
21E0675-13	CI29091	Soil	05/11/2021	05/14/2021
21E0675-14	CI29093	Soil	05/11/2021	05/14/2021
21E0675-15	CI29094	Soil	05/11/2021	05/14/2021
21E0675-16	CI29096	Soil	05/11/2021	05/14/2021
21E0675-17	CI29097	Soil	05/11/2021	05/14/2021
21E0675-18	CI29099	Soil	05/11/2021	05/14/2021
21E0675-19	CI29100	Soil	05/11/2021	05/14/2021
21E0675-20	CI29102	Soil	05/11/2021	05/14/2021
21E0675-21	CI29103	Soil	05/11/2021	05/14/2021
21E0675-22	CI29105	Soil	05/11/2021	05/14/2021

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
21E0675-23	CI29106	Soil	05/11/2021	05/14/2021
21E0675-24	CI29108	Soil	05/11/2021	05/14/2021

### **General Notes for York Project (SDG) No.: 21E0675**

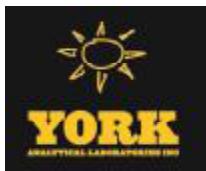
1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**

**Date:** 05/24/2021

Cassie L. Mosher  
Laboratory Manager





## Sample Information

Client Sample ID: CI29073

York Sample ID: 21E0675-01

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:40 pm

Date Received  
05/14/2021

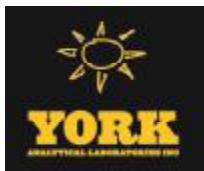
### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
335-67-1	<b>* Perfluorooctanoic acid (PFOA)</b>	<b>0.471</b>		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL
375-22-4	<b>* Perfluoro-n-butanoic acid (PFBA)</b>	<b>0.871</b>		ug/kg dry	0.302	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 18:26	WL



## Sample Information

Client Sample ID: CI29073

York Sample ID: 21E0675-01

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 12:40 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
<b>Surrogate Recoveries</b>										
Surrogate: M3PFBs										
Surrogate: M5PFHxA										
Surrogate: M4PFHpA										
Surrogate: M3PFHxS										
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)										
Surrogate: M6PFDA										
Surrogate: M7PFUdA										
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)										
Surrogate: M2PFTeDA										
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)										
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)										
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)										
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)										
Surrogate: d3-N-MeFOSAA										
Surrogate: d5-N-EtFOSAA										
Surrogate: M2-6:2 FTS										
Surrogate: M2-8:2 FTS										
Surrogate: M9PFNA										

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	82.6		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

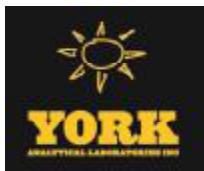
Client Sample ID: CI29075

York Sample ID: 21E0675-02

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 12:40 pm      Date Received 05/14/2021



## Sample Information

Client Sample ID: CI29075

York Sample ID: 21E0675-02

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:40 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
27619-97-2	*	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)									
39108-34-4	*	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL
	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)									
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.287	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:33	WL

#### Surrogate Recoveries

*Surrogate: M3PFBS*      Result      Acceptance Range

72.8 %      25-150

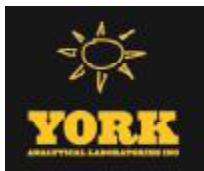
120 RESEARCH DRIVE  
www.YORKLAB.com

STRATFORD, CT 06615  
(203) 325-1371

132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
ClientServices@

Page 6 of 67



## Sample Information

Client Sample ID: CI29075

York Sample ID: 21E0675-02

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:40 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M5PFHxA</i>	76.2 %			25-150					
	<i>Surrogate: M4PFHxA</i>	74.6 %			25-150					
	<i>Surrogate: M3PFHxA</i>	69.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	80.0 %			25-150					
	<i>Surrogate: M6PFDA</i>	71.1 %			25-150					
	<i>Surrogate: M7PFUdA</i>	65.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	63.2 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	58.3 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	88.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	57.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	83.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	51.9 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	62.5 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	79.4 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	160 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	146 %			25-150					
	<i>Surrogate: M9PFNA</i>	79.5 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	86.2		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

Certifications: CTDH

## Sample Information

Client Sample ID: CI29076

York Sample ID: 21E0675-03

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

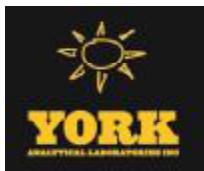
Collection Date/Time  
May 11, 2021 8:20 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29076

**York Sample ID:** 21E0675-03

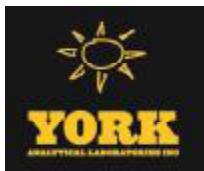
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 8:20 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.258	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 19:55	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	79.2 %	25-150
M5PFHxA	81.3 %	25-150



## Sample Information

Client Sample ID: CI29076

York Sample ID: 21E0675-03

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 8:20 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	83.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	71.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	77.4 %			25-150					
	<i>Surrogate: M7PFUdA</i>	76.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	76.1 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	72.1 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	92.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	71.2 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	86.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	57.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	68.4 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	90.6 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	117 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	131 %			25-150					
	<i>Surrogate: M9PFNA</i>	85.1 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	92.2		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29078

York Sample ID: 21E0675-04

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

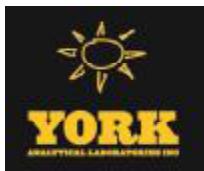
Collection Date/Time  
May 11, 2021 8:20 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

#### Log-in Notes:

#### Sample Notes:



## Sample Information

**Client Sample ID:** CI29078

**York Sample ID:** 21E0675-04

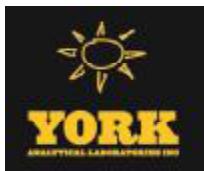
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 8:20 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:17	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	65.5 %	25-150
M5PFHxA	77.1 %	25-150



## Sample Information

Client Sample ID: CI29078

York Sample ID: 21E0675-04

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 8:20 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	76.6 %			25-150					
	<i>Surrogate: M3PFHxS</i>	63.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	76.5 %			25-150					
	<i>Surrogate: M6PFDA</i>	73.4 %			25-150					
	<i>Surrogate: M7PFUdA</i>	79.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	69.8 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	70.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	88.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	62.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	82.6 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	56.7 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	70.2 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	95.8 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	109 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	107 %			25-150					
	<i>Surrogate: M9PFNA</i>	84.7 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.0		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29079

York Sample ID: 21E0675-05

York Project (SDG) No.  
21E0675

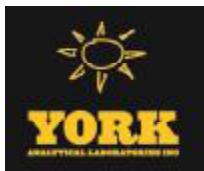
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 11:50 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI29079

**York Sample ID:** 21E0675-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 11:50 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
1763-23-1	<b>* Perfluorooctanesulfonic acid (PFOS)</b>	<b>1.65</b>		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
2706-90-3	<b>* Perfluoropentanoic acid (PFPeA)</b>	<b>0.283</b>		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL
375-22-4	<b>* Perfluoro-n-butanoic acid (PFBA)</b>	<b>1.10</b>		ug/kg dry	0.283	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 20:40	WL

### Surrogate Recoveries      Result      Acceptance Range

Surrogate: M3PFBS	71.9 %	25-150
Surrogate: M5PFHxA	74.5 %	25-150

120 RESEARCH DRIVE

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STRATFORD, CT 06615

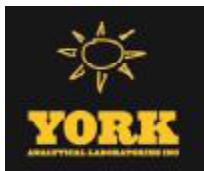
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@ Page 12 of 67



## Sample Information

Client Sample ID: CI29079

York Sample ID: 21E0675-05

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 11:50 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	49.6 %			25-150					
	<i>Surrogate: M3PFHxS</i>	67.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	79.8 %			25-150					
	<i>Surrogate: M6PFDA</i>	81.9 %			25-150					
	<i>Surrogate: M7PFUdA</i>	67.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	54.7 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	39.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	80.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	62.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	75.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	47.9 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	68.5 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	72.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	278 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	349 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	71.4 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.4		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29081

York Sample ID: 21E0675-06

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 11:50 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI29081

**York Sample ID:** 21E0675-06

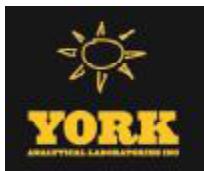
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 11:50 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.243	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:02	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	80.3 %	25-150
M5PFHxA	77.3 %	25-150



## Sample Information

Client Sample ID: CI29081

York Sample ID: 21E0675-06

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 11:50 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	79.8 %			25-150					
	<i>Surrogate: M3PFHxS</i>	77.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.3 %			25-150					
	<i>Surrogate: M6PFDA</i>	77.5 %			25-150					
	<i>Surrogate: M7PFUdA</i>	85.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	83.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	75.2 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	93.9 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	72.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	84.9 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	60.9 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	70.5 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	85.1 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	125 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	147 %			25-150					
	<i>Surrogate: M9PFNA</i>	92.6 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	95.1		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29082

York Sample ID: 21E0675-07

York Project (SDG) No.  
21E0675

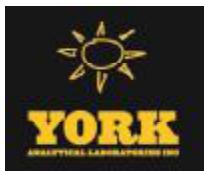
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 10:40 am      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29082

**York Sample ID:** 21E0675-07

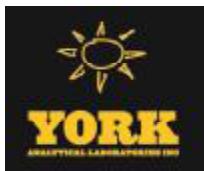
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 10:40 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.267	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 21:47	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	80.6 %	25-150
M5PFHxA	77.4 %	25-150



## Sample Information

Client Sample ID: CI29082

York Sample ID: 21E0675-07

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 10:40 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	79.2 %			25-150					
	<i>Surrogate: M3PFHxS</i>	73.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.8 %			25-150					
	<i>Surrogate: M6PFDA</i>	80.3 %			25-150					
	<i>Surrogate: M7PFUdA</i>	73.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	72.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	71.5 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	90.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	68.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	85.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	56.6 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	66.1 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	74.7 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	127 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	141 %			25-150					
	<i>Surrogate: M9PFNA</i>	77.2 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.2		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29084

York Sample ID: 21E0675-08

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 10:40 am      Date Received 05/14/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI29084

**York Sample ID:** 21E0675-08

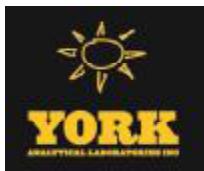
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 10:40 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.259	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:09	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	87.5 %	25-150
M5PFHxA	81.6 %	25-150



## Sample Information

Client Sample ID: CI29084

York Sample ID: 21E0675-08

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 10:40 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	85.4 %			25-150					
	<i>Surrogate: M3PFHxS</i>	76.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	74.1 %			25-150					
	<i>Surrogate: M6PFDA</i>	83.3 %			25-150					
	<i>Surrogate: M7PFUdA</i>	83.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	82.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	75.6 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	98.3 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	81.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	92.3 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	64.0 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	66.9 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	81.7 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	116 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	133 %			25-150					
	<i>Surrogate: M9PFNA</i>	86.8 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.4		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29085

York Sample ID: 21E0675-09

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

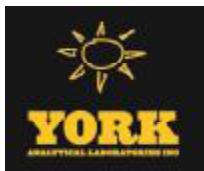
Collection Date/Time  
May 11, 2021 9:50 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29085

**York Sample ID:** 21E0675-09

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 9:50 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.272	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:31	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	85.4 %	25-150
M5PFHxA	85.3 %	25-150



## Sample Information

Client Sample ID: CI29085

York Sample ID: 21E0675-09

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 9:50 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	85.2 %			25-150					
	<i>Surrogate: M3PFHxS</i>	74.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	86.7 %			25-150					
	<i>Surrogate: M6PFDA</i>	81.2 %			25-150					
	<i>Surrogate: M7PFUdA</i>	71.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	73.7 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	64.5 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	105 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	73.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	92.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	55.1 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	65.0 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	77.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	107 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	121 %			25-150					
	<i>Surrogate: M9PFNA</i>	91.0 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.8		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29087

York Sample ID: 21E0675-10

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

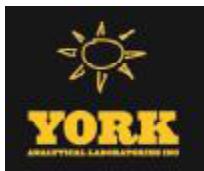
Collection Date/Time  
May 11, 2021 9:50 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29087

**York Sample ID:** 21E0675-10

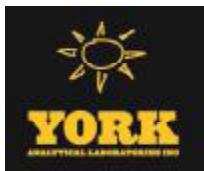
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 9:50 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.261	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 22:53	WL

### Surrogate Recoveries      Result      Acceptance Range

Surrogate: M3PFBS	81.5 %	25-150
Surrogate: M5PFHxA	81.5 %	25-150



## Sample Information

Client Sample ID: CI29087

York Sample ID: 21E0675-10

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 9:50 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	81.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	67.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	80.4 %			25-150					
	<i>Surrogate: M6PFDA</i>	76.1 %			25-150					
	<i>Surrogate: M7PFUdA</i>	77.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	62.1 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	56.8 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	103 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	83.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	94.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	52.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	55.1 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	64.3 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	74.0 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	85.6 %			25-150					
	<i>Surrogate: M9PFNA</i>	94.8 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	94.5		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29088

York Sample ID: 21E0675-11

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

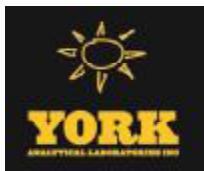
Collection Date/Time  
May 11, 2021 9:10 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29088

**York Sample ID:** 21E0675-11

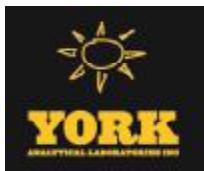
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 9:10 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.271	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:16	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	82.1 %	25-150
M5PFHxA	81.4 %	25-150



## Sample Information

Client Sample ID: CI29088

York Sample ID: 21E0675-11

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 9:10 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	83.2 %			25-150					
	<i>Surrogate: M3PFHxS</i>	74.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	85.2 %			25-150					
	<i>Surrogate: M6PFDA</i>	86.9 %			25-150					
	<i>Surrogate: M7PFUDA</i>	74.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	78.1 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	69.9 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	104 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	73.6 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	92.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	60.7 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	72.3 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	86.4 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	109 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	136 %			25-150					
	<i>Surrogate: M9PFNA</i>	92.9 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	91.5		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29090

York Sample ID: 21E0675-12

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 9:10 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Log-in Notes:

Sample Notes:



## Sample Information

**Client Sample ID:** CI29090

**York Sample ID:** 21E0675-12

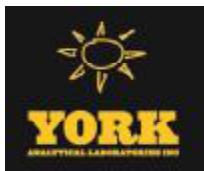
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 9:10 am	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.278	1	EPA 537m Certifications:	05/18/2021 15:23	05/21/2021 23:38	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	82.3 %	25-150
M5PFHxA	80.2 %	25-150



## Sample Information

Client Sample ID: CI29090

York Sample ID: 21E0675-12

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 9:10 am

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	78.7 %			25-150					
	<i>Surrogate: M3PFHxS</i>	72.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	78.0 %			25-150					
	<i>Surrogate: M6PFDA</i>	72.6 %			25-150					
	<i>Surrogate: M7PFUdA</i>	77.2 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	76.5 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	71.8 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	100 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	70.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	91.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	58.3 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	64.3 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	79.2 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	91.6 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	97.1 %			25-150					
	<i>Surrogate: M9PFNA</i>	81.3 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	81.9		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29091

York Sample ID: 21E0675-13

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

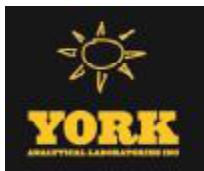
Collection Date/Time  
May 11, 2021 1:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29091

**York Sample ID:** 21E0675-13

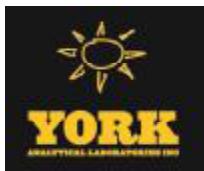
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 1:15 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.381		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.928		ug/kg dry	0.268	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:00	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	77.4 %	25-150
Surrogate: M5PFHxA	81.3 %	25-150



## Sample Information

Client Sample ID: CI29091

York Sample ID: 21E0675-13

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 1:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	64.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	70.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	80.4 %			25-150					
	<i>Surrogate: M6PFDA</i>	58.9 %			25-150					
	<i>Surrogate: M7PFUDA</i>	60.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	60.2 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	42.2 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	90.6 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	47.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	84.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	46.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	53.5 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	61.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	163 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	134 %			25-150					
	<i>Surrogate: M9PFNA</i>	66.2 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	86.4		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29093

York Sample ID: 21E0675-14

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 1:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29093

**York Sample ID:** 21E0675-14

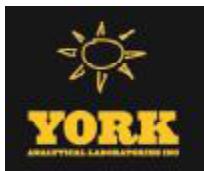
<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
21E0675	CI29073-CI29108	Soil	May 11, 2021 1:15 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.234	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:23	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	98.2 %	25-150
M5PFHxA	91.4 %	25-150



## Sample Information

Client Sample ID: CI29093

York Sample ID: 21E0675-14

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 1:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	87.7 %			25-150					
	<i>Surrogate: M3PFHxS</i>	80.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	86.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	80.9 %			25-150					
	<i>Surrogate: M7PFUdA</i>	89.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	79.5 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	78.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	110 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	98.2 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	102 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	60.9 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	64.1 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	81.2 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	74.9 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	85.1 %			25-150					
	<i>Surrogate: M9PFNA</i>	103 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	94.8		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29094

York Sample ID: 21E0675-15

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

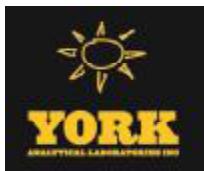
Collection Date/Time  
May 11, 2021 12:10 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29094

**York Sample ID:** 21E0675-15

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 12:10 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.392		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.438		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	1.93		ug/kg dry	0.294	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 00:45	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	71.0 %	25-150
Surrogate: M5PFHxA	74.3 %	25-150

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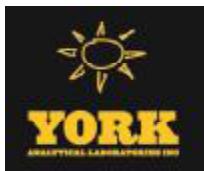
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@ Page 32 of 67



## Sample Information

Client Sample ID: CI29094

York Sample ID: 21E0675-15

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:10 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	56.7 %			25-150					
	<i>Surrogate: M3PFHxS</i>	66.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	81.4 %			25-150					
	<i>Surrogate: M6PFDA</i>	67.5 %			25-150					
	<i>Surrogate: M7PFUdA</i>	67.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	63.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	45.8 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	82.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	54.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	77.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	51.3 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	59.7 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	72.9 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	164 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	163 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	67.4 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	80.9		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29096

York Sample ID: 21E0675-16

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:10 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

#### Log-in Notes:

#### Sample Notes:



## Sample Information

**Client Sample ID:** CI29096

**York Sample ID:** 21E0675-16

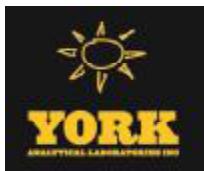
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 12:10 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.310	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:07	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	77.9 %	25-150
M5PFHxA	82.7 %	25-150



## Sample Information

Client Sample ID: CI29096

York Sample ID: 21E0675-16

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 12:10 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	81.9 %			25-150					
	<i>Surrogate: M3PFHxS</i>	68.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	83.3 %			25-150					
	<i>Surrogate: M6PFDA</i>	74.4 %			25-150					
	<i>Surrogate: M7PFUdA</i>	71.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	59.2 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	54.4 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	103 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	71.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	91.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	52.8 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	58.0 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	76.0 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	89.5 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	75.1 %			25-150					
	<i>Surrogate: M9PFNA</i>	89.4 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	74.9		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29097

York Sample ID: 21E0675-17

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

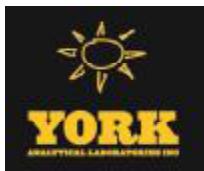
Collection Date/Time  
May 11, 2021 2:30 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29097

**York Sample ID:** 21E0675-17

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 2:30 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.473		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.470		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.601		ug/kg dry	0.256	1	EPA 537m Certifications:	05/18/2021 15:23	05/22/2021 01:52	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	78.1 %	25-150
Surrogate: M5PFHxA	78.8 %	25-150

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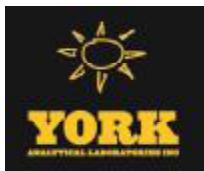
(203) 325-1371

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FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@ Page 36 of 67



## Sample Information

Client Sample ID: CI29097

York Sample ID: 21E0675-17

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 2:30 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	71.9 %			25-150					
	<i>Surrogate: M3PFHxS</i>	72.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	84.3 %			25-150					
	<i>Surrogate: M6PFDA</i>	78.7 %			25-150					
	<i>Surrogate: M7PFUdA</i>	71.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	71.6 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	47.7 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	91.9 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	66.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	89.2 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	60.2 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	63.6 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	82.3 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	168 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	160 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	89.7 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.1		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29099

York Sample ID: 21E0675-18

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 2:30 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29099

**York Sample ID:** 21E0675-18

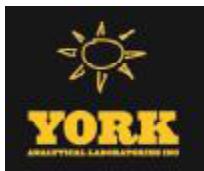
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 2:30 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.250	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 02:59	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	82.0 %	25-150
M5PFHxA	78.5 %	25-150



## Sample Information

Client Sample ID: CI29099

York Sample ID: 21E0675-18

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 2:30 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	79.4 %			25-150					
	<i>Surrogate: M3PFHxS</i>	65.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	75.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	66.9 %			25-150					
	<i>Surrogate: M7PFUdA</i>	67.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	69.4 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	64.6 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	92.6 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	68.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	87.4 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	44.1 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	49.8 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	62.2 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	68.0 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	75.1 %			25-150					
	<i>Surrogate: M9PFNA</i>	76.5 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	97.7		%	0.100	1	SM 2540G	05/21/2021 13:51	05/21/2021 13:52	MD

## Sample Information

Client Sample ID: CI29100

York Sample ID: 21E0675-19

York Project (SDG) No.  
21E0675

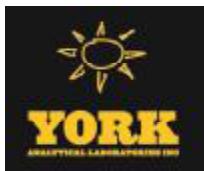
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 3:00 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29100

**York Sample ID:** 21E0675-19

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:00 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	<b>0.842</b>		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	<b>0.621</b>		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	<b>1.62</b>		ug/kg dry	0.280	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:21	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	59.1 %	25-150
Surrogate: M5PFHxA	62.9 %	25-150

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STRATFORD, CT 06615

(203) 325-1371

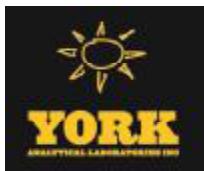
132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@

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## Sample Information

Client Sample ID: CI29100

York Sample ID: 21E0675-19

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:00 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	45.8 %			25-150					
	<i>Surrogate: M3PFHxS</i>	51.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	66.1 %			25-150					
	<i>Surrogate: M6PFDA</i>	46.4 %			25-150					
	<i>Surrogate: M7PFUdA</i>	39.1 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	37.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	26.3 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	68.2 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	39.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	66.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	30.8 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	34.9 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	42.3 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	174 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	130 %			25-150					
	<i>Surrogate: M9PFNA</i>	55.3 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	83.8		%	0.100	1	SM 2540G	05/21/2021 14:08	05/21/2021 14:13	MD

## Sample Information

Client Sample ID: CI29102

York Sample ID: 21E0675-20

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

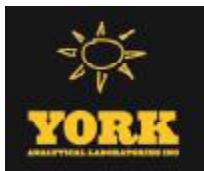
Collection Date/Time  
May 11, 2021 3:00 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29102

**York Sample ID:** 21E0675-20

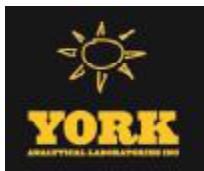
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:00 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.255	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 03:43	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	71.1 %	25-150
M5PFHxA	74.1 %	25-150



## Sample Information

Client Sample ID: CI29102

York Sample ID: 21E0675-20

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 3:00 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	73.9 %			25-150					
	<i>Surrogate: M3PFHxS</i>	60.5 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	71.6 %			25-150					
	<i>Surrogate: M6PFDA</i>	61.3 %			25-150					
	<i>Surrogate: M7PFUdA</i>	61.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	61.1 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	54.1 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	92.5 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	54.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	84.5 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	42.6 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	45.8 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	63.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	95.0 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	96.4 %			25-150					
	<i>Surrogate: M9PFNA</i>	77.3 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	95.7		%	0.100	1	SM 2540G	05/21/2021 14:08	05/21/2021 14:13	MD

## Sample Information

Client Sample ID: CI29103

York Sample ID: 21E0675-21

York Project (SDG) No.  
21E0675

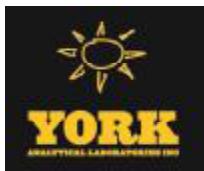
Client Project ID  
CI29073-CI29108

Matrix Soil      Collection Date/Time May 11, 2021 3:30 pm      Date Received 05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29103

**York Sample ID:** 21E0675-21

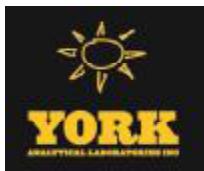
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:30 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	<b>0.330</b>		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	<b>0.763</b>		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	<b>1.13</b>		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
376-06-7	* Perflurotetradecanoic acid (PFTA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	<b>1.06</b>		ug/kg dry	0.274	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:06	WL

### Surrogate Recoveries      Result      Acceptance Range

Surrogate: M3PFBS      Result: 75.1 %      Acceptance Range: 25-150



## Sample Information

Client Sample ID: CI29103

York Sample ID: 21E0675-21

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:30 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M5PFHxA</i>	72.6 %			25-150					
	<i>Surrogate: M4PFHxA</i>	53.0 %			25-150					
	<i>Surrogate: M3PFHxA</i>	63.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	78.2 %			25-150					
	<i>Surrogate: M6PFDA</i>	70.2 %			25-150					
	<i>Surrogate: M7PFUdA</i>	57.3 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	49.9 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	34.6 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	83.0 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	61.2 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	77.5 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	46.2 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	57.4 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	66.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	224 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	235 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	77.7 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	84.5		%	0.100	1	SM 2540G	05/21/2021 14:08	05/21/2021 14:13	MD

Certifications: CTDH

## Sample Information

Client Sample ID: CI29105

York Sample ID: 21E0675-22

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:30 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29105

**York Sample ID:** 21E0675-22

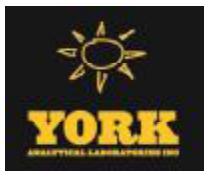
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:30 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.270	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:28	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	80.9 %	25-150
M5PFHxA	74.0 %	25-150



## Sample Information

Client Sample ID: CI29105

York Sample ID: 21E0675-22

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:30 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	74.8 %			25-150					
	<i>Surrogate: M3PFHxS</i>	71.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	78.9 %			25-150					
	<i>Surrogate: M6PFDA</i>	71.0 %			25-150					
	<i>Surrogate: M7PFUdA</i>	73.8 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	76.5 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	64.5 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	92.1 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	65.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	86.3 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	53.2 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	58.0 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	78.8 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	166 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	168 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	82.0 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	88.9		%	0.100	1	SM 2540G	05/21/2021 14:08	05/21/2021 14:13	MD

## Sample Information

Client Sample ID: CI29106

York Sample ID: 21E0675-23

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

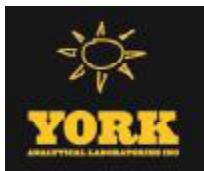
Collection Date/Time  
May 11, 2021 3:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

#### Log-in Notes:

#### Sample Notes:



## Sample Information

**Client Sample ID:** CI29106

**York Sample ID:** 21E0675-23

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:15 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	0.478		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	0.962		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	0.983		ug/kg dry	0.293	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 04:50	WL

### Surrogate Recoveries

Surrogate: M3PFBS	Result	Acceptance Range
Surrogate: M3PFBS	67.6 %	25-150
Surrogate: M5PFHxA	64.1 %	25-150

120 RESEARCH DRIVE

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STRATFORD, CT 06615

(203) 325-1371

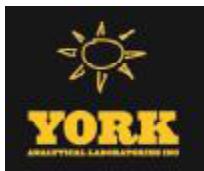
132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@

Page 48 of 67



## Sample Information

Client Sample ID: CI29106

York Sample ID: 21E0675-23

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	54.1 %			25-150					
	<i>Surrogate: M3PFHxS</i>	59.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	78.8 %			25-150					
	<i>Surrogate: M6PFDA</i>	73.8 %			25-150					
	<i>Surrogate: M7PFUdA</i>	61.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	59.6 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	42.5 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	80.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	57.9 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	74.8 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	52.0 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	61.1 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	74.5 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	234 %	PFSu-H		25-150					
	<i>Surrogate: M2-8:2 FTS</i>	252 %	PFSu-H		25-150					
	<i>Surrogate: M9PFNA</i>	79.3 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	79.5		%	0.100	1	SM 2540G	05/21/2021 14:08	05/21/2021 14:13	MD

## Sample Information

Client Sample ID: CI29108

York Sample ID: 21E0675-24

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

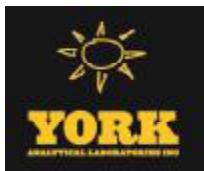
Collection Date/Time  
May 11, 2021 3:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

### Log-in Notes:

### Sample Notes:



## Sample Information

**Client Sample ID:** CI29108

**York Sample ID:** 21E0675-24

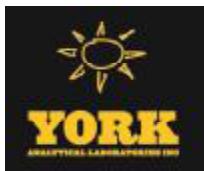
York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
21E0675	CI29073-CI29108	Soil	May 11, 2021 3:15 pm	05/14/2021

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	* Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
307-24-4	* Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
375-85-9	* Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
355-46-4	* Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
335-67-1	* Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
1763-23-1	* Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
375-95-1	* Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
335-76-2	* Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
2058-94-8	* Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
307-55-1	* Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
72629-94-8	* Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
376-06-7	* Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
2355-31-9	* N-MeFOSAA	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
2991-50-6	* N-EtFOSAA	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
2706-90-3	* Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
754-91-6	* Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
375-92-8	* Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
335-77-3	* Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
27619-97-2	* 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
39108-34-4	* 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL
375-22-4	* Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.253	1	EPA 537m Certifications:	05/18/2021 15:34	05/22/2021 05:12	WL

### Surrogate Recoveries

Surrogate	Recovery %	Acceptance Range
M3PFBS	87.4 %	25-150
M5PFHxA	84.0 %	25-150



## Sample Information

Client Sample ID: CI29108

York Sample ID: 21E0675-24

York Project (SDG) No.  
21E0675

Client Project ID  
CI29073-CI29108

Matrix  
Soil

Collection Date/Time  
May 11, 2021 3:15 pm

Date Received  
05/14/2021

### PFAS by EPA 537 m

Sample Prepared by Method: SPE PFAS Extraction-Soil-EPA 537m

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	<i>Surrogate: M4PFHpA</i>	82.3 %			25-150					
	<i>Surrogate: M3PFHxS</i>	74.7 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	84.6 %			25-150					
	<i>Surrogate: M6PFDA</i>	64.1 %			25-150					
	<i>Surrogate: M7PFUdA</i>	73.0 %			25-150					
	<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	77.4 %			25-150					
	<i>Surrogate: M2PFTeDA</i>	70.6 %			10-150					
	<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	101 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	67.4 %			25-150					
	<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	93.7 %			25-150					
	<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	52.5 %			10-150					
	<i>Surrogate: d3-N-MeFOSAA</i>	58.7 %			25-150					
	<i>Surrogate: d5-N-EtFOSAA</i>	76.9 %			25-150					
	<i>Surrogate: M2-6:2 FTS</i>	108 %			25-150					
	<i>Surrogate: M2-8:2 FTS</i>	102 %			25-150					
	<i>Surrogate: M9PFNA</i>	83.0 %			25-150					

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	87.7		%	0.100	1	SM 2540G Certifications: CTDOH	05/21/2021 14:08	05/21/2021 14:13	MD



## Analytical Batch Summary

**Batch ID:** BE10920

**Preparation Method:** SPE PFAS Extraction-Soil-EPA 537m    **Prepared By:** SG

YORK Sample ID	Client Sample ID	Preparation Date
21E0675-01	CI29073	05/18/21
21E0675-02	CI29075	05/18/21
21E0675-03	CI29076	05/18/21
21E0675-04	CI29078	05/18/21
21E0675-05	CI29079	05/18/21
21E0675-06	CI29081	05/18/21
21E0675-07	CI29082	05/18/21
21E0675-08	CI29084	05/18/21
21E0675-09	CI29085	05/18/21
21E0675-10	CI29087	05/18/21
21E0675-11	CI29088	05/18/21
21E0675-12	CI29090	05/18/21
21E0675-13	CI29091	05/18/21
21E0675-14	CI29093	05/18/21
21E0675-15	CI29094	05/18/21
21E0675-16	CI29096	05/18/21
21E0675-17	CI29097	05/18/21
BE10920-BLK1	Blank	05/18/21
BE10920-BS1	LCS	05/18/21
BE10920-MS1	Matrix Spike	05/18/21
BE10920-MSD1	Matrix Spike Dup	05/18/21

**Batch ID:** BE10922

**Preparation Method:** SPE PFAS Extraction-Soil-EPA 537m    **Prepared By:** SG

YORK Sample ID	Client Sample ID	Preparation Date
21E0675-18	CI29099	05/18/21
21E0675-19	CI29100	05/18/21
21E0675-20	CI29102	05/18/21
21E0675-21	CI29103	05/18/21
21E0675-22	CI29105	05/18/21
21E0675-23	CI29106	05/18/21
21E0675-24	CI29108	05/18/21
BE10922-BLK1	Blank	05/18/21
BE10922-BS1	LCS	05/18/21
BE10922-MS1	Matrix Spike	05/18/21
BE10922-MSD1	Matrix Spike Dup	05/18/21

**Batch ID:** BE11134

**Preparation Method:** % Solids Prep    **Prepared By:** MD

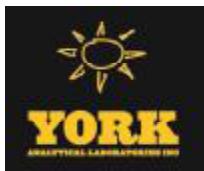
YORK Sample ID	Client Sample ID	Preparation Date
21E0675-01	CI29073	05/21/21
21E0675-02	CI29075	05/21/21
21E0675-03	CI29076	05/21/21
21E0675-04	CI29078	05/21/21
21E0675-05	CI29079	05/21/21



21E0675-06	CI29081	05/21/21
21E0675-07	CI29082	05/21/21
21E0675-08	CI29084	05/21/21
21E0675-09	CI29085	05/21/21
21E0675-10	CI29087	05/21/21
21E0675-11	CI29088	05/21/21
21E0675-12	CI29090	05/21/21
21E0675-13	CI29091	05/21/21
21E0675-14	CI29093	05/21/21
21E0675-15	CI29094	05/21/21
21E0675-16	CI29096	05/21/21
21E0675-17	CI29097	05/21/21
21E0675-18	CI29099	05/21/21
BE11134-DUP1	Duplicate	05/21/21

**Batch ID:** BE11139      **Preparation Method:** % Solids Prep      **Prepared By:** MD

YORK Sample ID	Client Sample ID	Preparation Date
21E0675-19	CI29100	05/21/21
21E0675-20	CI29102	05/21/21
21E0675-21	CI29103	05/21/21
21E0675-22	CI29105	05/21/21
21E0675-23	CI29106	05/21/21
21E0675-24	CI29108	05/21/21
BE11139-DUP1	Duplicate	05/21/21



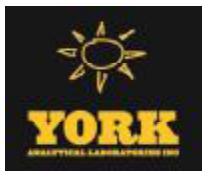
## PFAS Target compounds by LC/MS-MS - Quality Control Data

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC %REC	%REC Limits	Flag	RPD RPD	RPD Limit	Flag
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### **Batch BE10920 - SPE PFAS Extraction-Soil-EPA 537m**

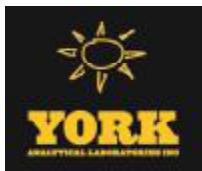
<b>Blank (BE10920-BLK1)</b>											Prepared: 05/18/2021 Analyzed: 05/21/2021
Perfluorobutanesulfonic acid (PFBS)	ND	0.244	ug/kg wet								
Perfluorohexanoic acid (PFHxA)	ND	0.244	"								
Perfluoroheptanoic acid (PFHpA)	ND	0.244	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	0.244	"								
Perfluorooctanoic acid (PFOA)	ND	0.244	"								
Perfluorooctanesulfonic acid (PFOS)	ND	0.244	"								
Perfluorononanoic acid (PFNA)	ND	0.244	"								
Perfluorodecanoic acid (PFDA)	ND	0.244	"								
Perfluoroundecanoic acid (PFUnA)	ND	0.244	"								
Perfluorododecanoic acid (PFDoA)	ND	0.244	"								
Perfluorotridecanoic acid (PFTrDA)	ND	0.244	"								
Perfluorotetradecanoic acid (PFTA)	ND	0.244	"								
N-MeFOSAA	ND	0.244	"								
N-EtFOSAA	ND	0.244	"								
Perfluoropentanoic acid (PFPeA)	ND	0.244	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.244	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.244	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.244	"								
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	ND	0.244	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	0.244	"								
Perfluoro-n-butanoic acid (PFBA)	ND	0.244	"								
<i>Surrogate: M3PFBS</i>	4.08	"	4.54		90.0	25-150					
<i>Surrogate: M5PFHxA</i>	4.24	"	4.88		86.9	25-150					
<i>Surrogate: M4PFHpA</i>	4.33	"	4.88		88.6	25-150					
<i>Surrogate: M3PFHxS</i>	4.02	"	4.62		87.0	25-150					
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	4.70	"	4.88		96.3	25-150					
<i>Surrogate: M6PFDA</i>	4.52	"	4.88		92.6	25-150					
<i>Surrogate: M7PFUdA</i>	3.92	"	4.88		80.3	25-150					
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	3.86	"	4.88		79.1	25-150					
<i>Surrogate: M2PFTeDA</i>	3.98	"	4.88		81.6	10-150					
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	4.80	"	4.88		98.4	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	4.20	"	4.67		89.8	25-150					
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	4.45	"	4.88		91.2	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	3.59	"	4.88		73.5	10-150					
<i>Surrogate: d3-N-MeFOSAA</i>	4.55	"	4.88		93.3	25-150					
<i>Surrogate: d5-N-EtFOSAA</i>	5.45	"	4.88		112	25-150					
<i>Surrogate: M2-6:2 FTS</i>	9.58	"	4.63		207	25-150					
<i>Surrogate: M2-8:2 FTS</i>	8.81	"	4.68		188	25-150					
<i>Surrogate: M9PFNA</i>	4.59	"	4.88		94.0	25-150					



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

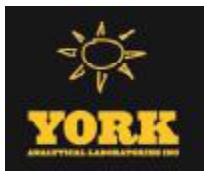
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10920 - SPE PFAS Extraction-Soil-EPA 537m</b>											
<b>LCS (BE10920-BS1)</b>											
Prepared: 05/18/2021 Analyzed: 05/21/2021											
Perfluorobutanesulfonic acid (PFBS)	4.49	0.239	ug/kg wet	4.24	106	50-130					
Perfluorohexanoic acid (PFHxA)	5.23	0.239	"	4.79	109	50-130					
Perfluoroheptanoic acid (PFHpA)	4.45	0.239	"	4.79	92.9	50-130					
Perfluorohexanesulfonic acid (PFHxS)	4.38	0.239	"	4.36	100	50-130					
Perfluorooctanoic acid (PFOA)	4.65	0.239	"	4.79	97.3	50-130					
Perfluorooctanesulfonic acid (PFOS)	5.51	0.239	"	4.43	124	50-130					
Perfluorononanoic acid (PFNA)	4.21	0.239	"	4.79	88.0	50-130					
Perfluorodecanoic acid (PFDA)	4.94	0.239	"	4.79	103	50-130					
Perfluoroundecanoic acid (PFUnA)	4.77	0.239	"	4.79	99.7	50-130					
Perfluorododecanoic acid (PFDoA)	5.05	0.239	"	4.79	105	50-130					
Perfluorotridecanoic acid (PFTrDA)	5.20	0.239	"	4.79	109	50-130					
Perfluorotetradecanoic acid (PFTA)	4.94	0.239	"	4.79	103	50-130					
N-MeFOSAA	5.34	0.239	"	4.79	112	50-130					
N-EtFOSAA	4.62	0.239	"	4.79	96.5	50-130					
Perfluoropentanoic acid (PFPeA)	5.01	0.239	"	4.79	105	50-130					
Perfluoro-1-octanesulfonamide (FOSA)	5.01	0.239	"	4.79	105	50-130					
Perfluoro-1-heptanesulfonic acid (PFHpS)	5.19	0.239	"	4.55	114	50-130					
Perfluoro-1-decanesulfonic acid (PFDS)	3.88	0.239	"	4.62	84.1	50-130					
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	5.01	0.239	"	4.55	110	50-130					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.88	0.239	"	4.59	106	50-130					
Perfluoro-n-butanoic acid (PFBA)	4.95	0.239	"	4.79	103	50-130					
<i>Surrogate: M3PFBS</i>	4.14		"	4.45	93.1	25-150					
<i>Surrogate: M5PFHxA</i>	4.16		"	4.79	86.9	25-150					
<i>Surrogate: M4PFHpA</i>	4.47		"	4.79	93.5	25-150					
<i>Surrogate: M3PFHxS</i>	4.26		"	4.53	94.1	25-150					
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	4.35		"	4.79	90.8	25-150					
<i>Surrogate: M6PFDA</i>	4.01		"	4.79	83.7	25-150					
<i>Surrogate: M7PFUdA</i>	3.87		"	4.79	80.9	25-150					
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	3.69		"	4.79	77.2	25-150					
<i>Surrogate: M2PFTeDA</i>	3.52		"	4.79	73.6	10-150					
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	4.83		"	4.79	101	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	3.97		"	4.58	86.6	25-150					
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)</i>	4.52		"	4.79	94.5	25-150					
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	3.28		"	4.79	68.6	10-150					
<i>Surrogate: d3-N-MeFOSAA</i>	4.33		"	4.79	90.4	25-150					
<i>Surrogate: d5-N-EtFOSAA</i>	5.03		"	4.79	105	25-150					
<i>Surrogate: M2-6:2 FTS</i>	7.50		"	4.54	165	25-150					
<i>Surrogate: M2-8:2 FTS</i>	7.12		"	4.59	155	25-150					
<i>Surrogate: M9PFNA</i>	4.83		"	4.79	101	25-150					



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10920 - SPE PFAS Extraction-Soil-EPA 537m</b>											
<b>Matrix Spike (BE10920-MS1)</b> *Source sample: 21E0675-01 (CI29073) Prepared: 05/18/2021 Analyzed: 05/21/2021											
Perfluorobutanesulfonic acid (PFBS)											
4.88 0.278 ug/kg dry 4.92 ND 99.2 25-150											
Perfluorohexanoic acid (PFHxA)											
6.10 0.278 " 5.56 0.133 107 25-150											
Perfluoroheptanoic acid (PFHpA)											
6.23 0.278 " 5.56 0.134 110 25-150											
Perfluorohexanesulfonic acid (PFHxS)											
5.42 0.278 " 5.07 ND 107 25-150											
Perfluorooctanoic acid (PFOA)											
5.48 0.278 " 5.56 0.471 90.1 25-150											
Perfluorooctanesulfonic acid (PFOS)											
6.26 0.278 " 5.15 0.257 117 25-150											
Perfluorononanoic acid (PFNA)											
5.06 0.278 " 5.56 ND 91.1 25-150											
Perfluorodecanoic acid (PFDA)											
5.65 0.278 " 5.56 ND 102 25-150											
Perfluoroundecanoic acid (PFUnA)											
5.94 0.278 " 5.56 ND 107 25-150											
Perfluorododecanoic acid (PFDoA)											
5.84 0.278 " 5.56 ND 105 25-150											
Perfluorotridecanoic acid (PFTrDA)											
5.25 0.278 " 5.56 ND 94.4 25-150											
Perfluorotetradecanoic acid (PFTA)											
5.87 0.278 " 5.56 ND 106 25-150											
N-MeFOSAA											
6.42 0.278 " 5.56 ND 116 25-150											
N-EtFOSAA											
5.14 0.278 " 5.56 ND 92.5 25-150											
Perfluoropentanoic acid (PFPeA)											
6.07 0.278 " 5.56 0.174 106 25-150											
Perfluoro-1-octanesulfonamide (FOSA)											
5.35 0.278 " 5.56 ND 96.2 25-150											
Perfluoro-1-heptanesulfonic acid (PFHpS)											
6.69 0.278 " 5.28 ND 127 25-150											
Perfluoro-1-decanesulfonic acid (PFDS)											
4.74 0.278 " 5.37 ND 88.4 25-150											
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)											
5.20 0.278 " 5.28 ND 98.5 25-150											
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)											
5.56 0.278 " 5.34 ND 104 25-150											
Perfluoro-n-butanoic acid (PFBA)											
6.45 0.278 " 5.56 0.871 100 25-150											
<i>Surrogate: M3PFBS</i>											
4.22 " 5.17 81.7 25-150											
<i>Surrogate: M5PFHxA</i>											
4.46 " 5.56 80.2 25-150											
<i>Surrogate: M4PFHpA</i>											
3.81 " 5.56 68.5 25-150											
<i>Surrogate: M3PFHxS</i>											
3.83 " 5.26 72.9 25-150											
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>											
4.85 " 5.56 87.2 25-150											
<i>Surrogate: M6PFDA</i>											
4.11 " 5.56 73.9 25-150											
<i>Surrogate: M7PFUdA</i>											
3.48 " 5.56 62.7 25-150											
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>											
3.55 " 5.56 63.8 25-150											
<i>Surrogate: [1,2-13C2]dodecanoic acid (MPFDoA)</i>											
2.47 " 5.56 44.5 10-150											
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>											
5.08 " 5.56 91.4 25-150											
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOSA)</i>											
3.33 " 5.32 62.5 25-150											
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>											
4.62 " 5.56 83.1 25-150											
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>											
2.68 " 5.56 48.3 10-150											
<i>Surrogate: d3-N-MeFOSAA</i>											
3.81 " 5.56 68.5 25-150											
<i>Surrogate: d5-N-EtFOSAA</i>											
4.14 " 5.56 74.4 25-150											
<i>Surrogate: M2-6:2 FTS</i>											
16.5 " 5.28 313 25-150											
<i>Surrogate: M2-8:2 FTS</i>											
18.1 " 5.33 340 25-150											
<i>Surrogate: M9PFNA</i>											
4.48 " 5.56 80.5 25-150											



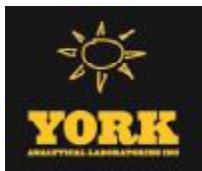
**PFAS Target compounds by LC/MS-MS - Quality Control Data**

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BE10920 - SPE PFAS Extraction-Soil-EPA 537m**

Matrix Spike Dup (BE10920-MSD1)	*Source sample: 21E0675-01 (CI29073)						Prepared: 05/18/2021 Analyzed: 05/21/2021				
Perfluorobutanesulfonic acid (PFBS)	4.94	0.278	ug/kg dry	4.92	ND	100	25-150		1.14	35	
Perfluorohexanoic acid (PFHxA)	6.20	0.278	"	5.56	0.133	109	25-150		1.69	35	
Perfluoroheptanoic acid (PFHpA)	6.21	0.278	"	5.56	0.134	109	25-150		0.313	35	
Perfluorohexanesulfonic acid (PFHxS)	5.06	0.278	"	5.07	ND	99.8	25-150		6.88	35	
Perfluorooctanoic acid (PFOA)	5.48	0.278	"	5.56	0.471	90.2	25-150		0.0197	35	
Perfluorooctanesulfonic acid (PFOS)	6.51	0.278	"	5.15	0.257	121	25-150		3.82	35	
Perfluorononanoic acid (PFNA)	5.43	0.278	"	5.56	ND	97.7	25-150		6.99	35	
Perfluorodecanoic acid (PFDA)	5.55	0.278	"	5.56	ND	99.8	25-150		1.77	35	
Perfluoroundecanoic acid (PFUnA)	5.39	0.278	"	5.56	ND	96.9	25-150		9.79	35	
Perfluorododecanoic acid (PFDoA)	5.63	0.278	"	5.56	ND	101	25-150		3.65	35	
Perfluorotridecanoic acid (PFTrDA)	5.28	0.278	"	5.56	ND	95.0	25-150		0.611	35	
Perfluorotetradecanoic acid (PFTA)	5.73	0.278	"	5.56	ND	103	25-150		2.53	35	
N-MeFOSAA	6.17	0.278	"	5.56	ND	111	25-150		4.06	35	
N-EtFOSAA	5.82	0.278	"	5.56	ND	105	25-150		12.4	35	
Perfluoropentanoic acid (PPPeA)	5.97	0.278	"	5.56	0.174	104	25-150		1.69	35	
Perfluoro-1-octanesulfonamide (FOSA)	5.53	0.278	"	5.56	ND	99.6	25-150		3.38	35	
Perfluoro-1-heptanesulfonic acid (PFHpS)	6.18	0.278	"	5.28	ND	117	25-150		7.85	35	
Perfluoro-1-decanesulfonic acid (PFDS)	5.74	0.278	"	5.36	ND	107	25-150		19.0	35	
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	5.40	0.278	"	5.28	ND	102	25-150		3.70	35	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	5.31	0.278	"	5.33	ND	99.5	25-150		4.56	35	
Perfluoro-n-butanoic acid (PFBA)	7.04	0.278	"	5.56	0.871	111	25-150		8.86	35	
<i>Surrogate: M3PFBS</i>	4.12		"	5.16		79.8	25-150				
<i>Surrogate: M5PFHxA</i>	4.35		"	5.56		78.2	25-150				
<i>Surrogate: M4PFHpA</i>	3.89		"	5.56		70.1	25-150				
<i>Surrogate: M3PFHxS</i>	3.97		"	5.26		75.6	25-150				
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	4.76		"	5.56		85.7	25-150				
<i>Surrogate: M6PFDA</i>	4.34		"	5.56		78.1	25-150				
<i>Surrogate: M7PFUdA</i>	4.30		"	5.56		77.4	25-150				
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	4.59		"	5.56		82.6	25-150				
<i>Surrogate: M2PTeDA</i>	3.15		"	5.56		56.7	10-150				
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	4.99		"	5.56		89.8	25-150				
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOS)</i>	3.26		"	5.32		61.3	25-150				
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)</i>	4.63		"	5.56		83.3	25-150				
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	3.17		"	5.56		57.0	10-150				
<i>Surrogate: d3-N-MeFOSAA</i>	4.54		"	5.56		81.6	25-150				
<i>Surrogate: d5-N-EtFOSAA</i>	4.80		"	5.56		86.5	25-150				
<i>Surrogate: M2-6:2 FTS</i>	14.2		"	5.27		268	25-150				
<i>Surrogate: M2-8:2 FTS</i>	14.1		"	5.32		264	25-150				
<i>Surrogate: M9PFNA</i>	4.15		"	5.56		74.6	25-150				



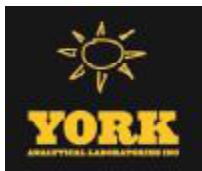
## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BE10922 - SPE PFAS Extraction-Soil-EPA 537m

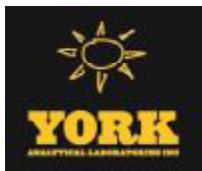
Blank (BE10922-BLK1)	Prepared: 05/18/2021 Analyzed: 05/22/2021					
Perfluorobutanesulfonic acid (PFBS)	ND	0.244	ug/kg wet			
Perfluorohexanoic acid (PFHxA)	ND	0.244	"			
Perfluoroheptanoic acid (PFHpA)	ND	0.244	"			
Perfluorohexanesulfonic acid (PFHxS)	ND	0.244	"			
Perfluorooctanoic acid (PFOA)	ND	0.244	"			
Perfluorooctanesulfonic acid (PFOS)	ND	0.244	"			
Perfluorononanoic acid (PFNA)	ND	0.244	"			
Perfluorodecanoic acid (PFDA)	ND	0.244	"			
Perfluoroundecanoic acid (PFUnA)	ND	0.244	"			
Perfluorododecanoic acid (PFDoA)	ND	0.244	"			
Perfluorotridecanoic acid (PFTrDA)	ND	0.244	"			
Perfluorotetradecanoic acid (PFTA)	ND	0.244	"			
N-MeFOSAA	ND	0.244	"			
N-EtFOSAA	ND	0.244	"			
Perfluoropentanoic acid (PFPeA)	ND	0.244	"			
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.244	"			
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.244	"			
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.244	"			
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND	0.244	"			
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND	0.244	"			
Perfluoro-n-butanoic acid (PFBA)	ND	0.244	"			
<i>Surrogate: M3PFBS</i>	4.11	"	4.53	90.8	25-150	
<i>Surrogate: M5PFHxA</i>	3.93	"	4.87	80.6	25-150	
<i>Surrogate: M4PFHpA</i>	4.08	"	4.87	83.7	25-150	
<i>Surrogate: M3PFHxS</i>	3.66	"	4.61	79.5	25-150	
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	3.98	"	4.87	81.7	25-150	
<i>Surrogate: M6PFDA</i>	3.91	"	4.87	80.2	25-150	
<i>Surrogate: M7PFUdA</i>	4.08	"	4.87	83.7	25-150	
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	3.93	"	4.87	80.7	25-150	
<i>Surrogate: M2PFTeDA</i>	3.45	"	4.87	70.8	10-150	
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	4.83	"	4.87	99.2	25-150	
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8FOSA)</i>	3.87	"	4.66	83.1	25-150	
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)</i>	4.45	"	4.87	91.4	25-150	
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	2.84	"	4.87	58.2	10-150	
<i>Surrogate: d3-N-MeFOSAA</i>	2.84	"	4.87	58.2	25-150	
<i>Surrogate: d5-N-EtFOSAA</i>	4.02	"	4.87	82.5	25-150	
<i>Surrogate: M2-6:2 FTS</i>	4.15	"	4.62	89.7	25-150	
<i>Surrogate: M2-8:2 FTS</i>	4.74	"	4.67	101	25-150	
<i>Surrogate: M9PFNA</i>	4.33	"	4.87	88.9	25-150	



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BE10922 - SPE PFAS Extraction-Soil-EPA 537m</b>											
Prepared: 05/18/2021 Analyzed: 05/22/2021											
<b>LCS (BE10922-BS1)</b>											
Perfluorobutanesulfonic acid (PFBS)	3.91	0.242	ug/kg wet	4.29	91.0	50-130					
Perfluorohexanoic acid (PFHxA)	4.95	0.242	"	4.85	102	50-130					
Perfluoroheptanoic acid (PFHpA)	4.17	0.242	"	4.85	85.9	50-130					
Perfluorohexanesulfonic acid (PFHxS)	4.39	0.242	"	4.42	99.3	50-130					
Perfluorooctanoic acid (PFOA)	4.52	0.242	"	4.85	93.2	50-130					
Perfluorooctanesulfonic acid (PFOS)	4.66	0.242	"	4.49	104	50-130					
Perfluorononanoic acid (PFNA)	3.95	0.242	"	4.85	81.5	50-130					
Perfluorodecanoic acid (PFDA)	4.30	0.242	"	4.85	88.6	50-130					
Perfluoroundecanoic acid (PFUnA)	4.19	0.242	"	4.85	86.4	50-130					
Perfluorododecanoic acid (PFDoA)	4.42	0.242	"	4.85	91.1	50-130					
Perfluorotridecanoic acid (PFTrDA)	4.77	0.242	"	4.85	98.4	50-130					
Perfluorotetradecanoic acid (PFTA)	4.63	0.242	"	4.85	95.5	50-130					
N-MeFOSAA	4.94	0.242	"	4.85	102	50-130					
N-EtFOSAA	4.34	0.242	"	4.85	89.6	50-130					
Perfluoropentanoic acid (PFPeA)	4.79	0.242	"	4.85	98.8	50-130					
Perfluoro-1-octanesulfonamide (FOSA)	4.40	0.242	"	4.85	90.7	50-130					
Perfluoro-1-heptanesulfonic acid (PFHpS)	3.97	0.242	"	4.61	86.3	50-130					
Perfluoro-1-decanesulfonic acid (PFDS)	3.43	0.242	"	4.68	73.2	50-130					
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	4.37	0.242	"	4.61	94.9	50-130					
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	3.74	0.242	"	4.65	80.5	50-130					
Perfluoro-n-butyric acid (PFBA)	4.63	0.242	"	4.85	95.6	50-130					
Surrogate: M3PFBS	4.18		"	4.50	92.7	25-150					
Surrogate: M5PFHxA	3.96		"	4.85	81.8	25-150					
Surrogate: M4PFHpA	4.24		"	4.85	87.4	25-150					
Surrogate: M3PFHxS	3.65		"	4.59	79.5	25-150					
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.90		"	4.85	80.5	25-150					
Surrogate: M6PFDA	3.93		"	4.85	81.0	25-150					
Surrogate: M7PFUdA	3.87		"	4.85	79.7	25-150					
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	3.60		"	4.85	74.2	25-150					
Surrogate: M2PTeDA	3.19		"	4.85	65.8	10-150					
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.78		"	4.85	98.6	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	4.07		"	4.64	87.8	25-150					
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)	4.38		"	4.85	90.3	25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.91		"	4.85	60.1	10-150					
Surrogate: d3-N-MeFOSAA	3.05		"	4.85	63.0	25-150					
Surrogate: d5-N-EtFOSAA	4.10		"	4.85	84.5	25-150					
Surrogate: M2-6:2 FTS	4.62		"	4.60	100	25-150					
Surrogate: M2-8:2 FTS	5.28		"	4.64	114	25-150					
Surrogate: M9PFNA	4.66		"	4.85	96.2	25-150					



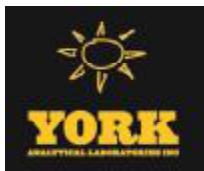
**PFAS Target compounds by LC/MS-MS - Quality Control Data**

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BE10922 - SPE PFAS Extraction-Soil-EPA 537m**

Matrix Spike (BE10922-MS1)	*Source sample: 21E0675-24 (CI29108)						Prepared: 05/18/2021 Analyzed: 05/22/2021				
Perfluorobutanesulfonic acid (PFBS)	4.40	0.268	ug/kg dry	4.75	ND	92.7	25-150				
Perfluorohexanoic acid (PFHxA)	5.38	0.268	"	5.37	ND	100	25-150				
Perfluoroheptanoic acid (PFHpA)	4.61	0.268	"	5.37	ND	85.9	25-150				
Perfluorohexanesulfonic acid (PFHxS)	4.59	0.268	"	4.89	ND	93.7	25-150				
Perfluorooctanoic acid (PFOA)	4.84	0.268	"	5.37	ND	90.3	25-150				
Perfluorooctanesulfonic acid (PFOS)	5.33	0.268	"	4.97	ND	107	25-150				
Perfluorononanoic acid (PFNA)	4.35	0.268	"	5.37	ND	81.0	25-150				
Perfluorodecanoic acid (PFDA)	5.24	0.268	"	5.37	ND	97.7	25-150				
Perfluoroundecanoic acid (PFUnA)	5.11	0.268	"	5.37	ND	95.3	25-150				
Perfluorododecanoic acid (PFDoA)	5.11	0.268	"	5.37	ND	95.3	25-150				
Perfluorotridecanoic acid (PFTDA)	5.02	0.268	"	5.37	ND	93.6	25-150				
Perfluorotetradecanoic acid (PFTA)	5.03	0.268	"	5.37	ND	93.8	25-150				
N-MeFOSAA	5.14	0.268	"	5.37	ND	95.9	25-150				
N-EtFOSAA	4.89	0.268	"	5.37	ND	91.2	25-150				
Perfluoropentanoic acid (PFPeA)	5.20	0.268	"	5.37	ND	96.8	25-150				
Perfluoro-1-octanesulfonamide (FOSA)	4.59	0.268	"	5.37	ND	85.5	25-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	4.99	0.268	"	5.10	ND	97.8	25-150				
Perfluoro-1-decanesulfonic acid (PFDS)	3.93	0.268	"	5.18	ND	76.0	25-150				
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	4.25	0.268	"	5.10	ND	83.4	25-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	3.99	0.268	"	5.15	ND	77.5	25-150				
Perfluoro-n-butanoic acid (PFBA)	5.11	0.268	"	5.37	ND	95.3	25-150				
<i>Surrogate: M3PFBS</i>	4.17		"	4.98		83.7	25-150				
<i>Surrogate: M5PFHxA</i>	4.32		"	5.37		80.5	25-150				
<i>Surrogate: M4PFHpA</i>	4.47		"	5.37		83.4	25-150				
<i>Surrogate: M3PFHxS</i>	4.03		"	5.08		79.4	25-150				
<i>Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)</i>	4.28		"	5.37		79.8	25-150				
<i>Surrogate: M6PFDA</i>	3.85		"	5.37		71.7	25-150				
<i>Surrogate: M7PFUdA</i>	3.62		"	5.37		67.6	25-150				
<i>Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)</i>	3.68		"	5.37		68.7	25-150				
<i>Surrogate: M2PTeDA</i>	3.21		"	5.37		59.8	10-150				
<i>Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)</i>	5.01		"	5.37		93.4	25-150				
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)</i>	3.80		"	5.13		73.9	25-150				
<i>Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)</i>	4.67		"	5.37		87.0	25-150				
<i>Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)</i>	3.00		"	5.37		55.8	10-150				
<i>Surrogate: d3-N-MeFOSAA</i>	3.22		"	5.37		60.0	25-150				
<i>Surrogate: d5-N-EtFOSAA</i>	4.09		"	5.37		76.3	25-150				
<i>Surrogate: M2-6:2 FTS</i>	6.43		"	5.09		126	25-150				
<i>Surrogate: M2-8:2 FTS</i>	6.79		"	5.14		132	25-150				
<i>Surrogate: M9PFNA</i>	4.85		"	5.37		90.5	25-150				



## PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

### Batch BE10922 - SPE PFAS Extraction-Soil-EPA 537m

Matrix Spike Dup (BE10922-MSD1)	*Source sample: 21E0675-24 (CI29108)							Prepared: 05/18/2021 Analyzed: 05/22/2021			
Perfluorobutanesulfonic acid (PFBS)	4.59	0.277	ug/kg dry	4.90	ND	93.6	25-150		4.07	35	
Perfluorohexanoic acid (PFHxA)	5.46	0.277	"	5.53	ND	98.7	25-150		1.62	35	
Perfluoroheptanoic acid (PFHpA)	5.06	0.277	"	5.53	ND	91.4	25-150		9.34	35	
Perfluorohexanesulfonic acid (PFHxS)	4.96	0.277	"	5.05	ND	98.4	25-150		7.91	35	
Perfluorooctanoic acid (PFOA)	4.78	0.277	"	5.53	ND	86.4	25-150		1.28	35	
Perfluorooctanesulfonic acid (PFOS)	5.30	0.277	"	5.13	ND	103	25-150		0.680	35	
Perfluorononanoic acid (PFNA)	4.70	0.277	"	5.53	ND	84.8	25-150		7.71	35	
Perfluorodecanoic acid (PFDA)	5.03	0.277	"	5.53	ND	90.8	25-150		4.20	35	
Perfluoroundecanoic acid (PFUnA)	4.99	0.277	"	5.53	ND	90.2	25-150		2.34	35	
Perfluorododecanoic acid (PFDoA)	5.24	0.277	"	5.53	ND	94.6	25-150		2.46	35	
Perfluorotridecanoic acid (PFTrDA)	5.30	0.277	"	5.53	ND	95.8	25-150		5.44	35	
Perfluorotetradecanoic acid (PFTA)	5.09	0.277	"	5.53	ND	92.0	25-150		1.15	35	
N-MeFOSAA	5.39	0.277	"	5.53	ND	97.3	25-150		4.65	35	
N-EtFOSAA	4.43	0.277	"	5.53	ND	80.0	25-150		9.92	35	
Perfluoropentanoic acid (PPPeA)	5.26	0.277	"	5.53	ND	95.0	25-150		1.21	35	
Perfluoro-1-octanesulfonamide (FOSA)	5.09	0.277	"	5.53	ND	92.0	25-150		10.5	35	
Perfluoro-1-heptanesulfonic acid (PFHpS)	5.68	0.277	"	5.26	ND	108	25-150		13.0	35	
Perfluoro-1-decanesulfonic acid (PFDS)	4.26	0.277	"	5.34	ND	79.8	25-150		8.01	35	
1H,1H,2H,2H-Perfluoroctanesulfonic acid (6:2 FTS)	4.79	0.277	"	5.26	ND	91.1	25-150		11.9	35	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	4.70	0.277	"	5.31	ND	88.4	25-150		16.3	35	
Perfluoro-n-butanoic acid (PFBA)	5.17	0.277	"	5.53	ND	93.3	25-150		1.02	35	
Surrogate: M3PFBS	4.24		"	5.14		82.5	25-150				
Surrogate: M5PFHxA	4.50		"	5.53		81.4	25-150				
Surrogate: M4PFHpA	4.59		"	5.53		82.9	25-150				
Surrogate: M3PFHxS	4.12		"	5.24		78.6	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	4.73		"	5.53		85.5	25-150				
Surrogate: M6PFDA	4.45		"	5.53		80.3	25-150				
Surrogate: M7PFUdA	4.55		"	5.53		82.2	25-150				
Surrogate: Perfluoro-n-[13C2]dodecanoic acid (MPFDoA)	4.24		"	5.53		76.5	25-150				
Surrogate: M2PTeDA	3.59		"	5.53		64.8	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	5.61		"	5.53		101	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	3.71		"	5.30		70.1	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PPeA)	5.05		"	5.53		91.3	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	3.17		"	5.53		57.3	10-150				
Surrogate: d3-N-MeFOSAA	4.13		"	5.53		74.7	25-150				
Surrogate: d5-N-EtFOSAA	5.41		"	5.53		97.7	25-150				
Surrogate: M2-6:2 FTS	13.2		"	5.25		252	25-150				
Surrogate: M2-8:2 FTS	14.0		"	5.30		264	25-150				
Surrogate: M9PFNA	5.23		"	5.53		94.4	25-150				

**Miscellaneous Physical Parameters - Quality Control Data****York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
---------	--------	-----------------	-------	-------------	----------------	------	-------------	------	-----	-----------	------

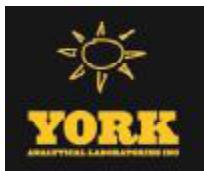
**Batch BE11134 - % Solids Prep**

Duplicate (BE11134-DUP1)	*Source sample: 21E0675-16 (CL29096)					Prepared & Analyzed: 05/21/2021				
% Solids	84.5	0.100	%		74.9				12.1	20

**Batch BE11139 - % Solids Prep**

Duplicate (BE11139-DUP1)	*Source sample: 21E0675-24 (CL29108)					Prepared & Analyzed: 05/21/2021				
% Solids	88.0	0.100	%		87.7				0.345	20





## Sample and Data Qualifiers Relating to This Work Order

PFSu-H      The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence . This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.





## CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040  
 Email: info@phoenixlabs.com Fax (860) 645-0823  
**Client Services (860) 645-8726**

Customer: York Analytical Laboratories  
 Address: 20 Research Drive  
 Stratford, CT 06615

Project P.O.:

Report to: HelenG@PhoenixLabs.com / Helen Geohagan  
 Invoice to: AccountsPayable@PhoenixLabs.com  
 Quote# :

Project:

**Contact Options:**  
 Temp H. 1°C Pg 2 of 3  
 Cooler: Yes  No  
 Coolant: IPK  ICE  
 Fax: 860-645-0823  
 Phone: 860-827-5426  
 Email: HelenG@PhoenixLabs.com

**This section MUST be completed with Bottle Quantities.**

Client Sample - Information - Identification		Analysis Request				PFS & PFOA	S		
Sampler's Signature	Date:	Sample Matrix	Date Sampled	Time Sampled					
<b>DFR35371U21A</b>									
Customer Sample Identification	Customer Sample Identification	Matrix	Date Sampled	Time Sampled					
PHOENIX USE ONLY	SAMPLE #								
GW=Ground Water	SW=Surface Water	WW=Waste Water							
DW=Drinking Water	SE=Sediment	SL=Sludge							
RW=Raw Water	SD=Solid	S=Soil							
OIL=Oil	B=Bulk	L=Liquid							
Customer Sample Identification	Customer Sample Identification	Matrix	Date Sampled	Time Sampled					
CL29076 SB-10A (0-i)	S	5/1/21	08:20	X					
CL29078 SB-10C (B-i)	S	5/1/21	08:20						
CL29079 SB-11A (0-i)	S	5/1/21	11:50	X					
CL29081 SB-11C (10-i)	S	5/1/21	11:50	XX					
CL29082 SB-12A (1-i)	S	5/1/21	10:40						
CL29084 SB-12C (13-i)	S	5/1/21	10:40	X					
CL29085 SB-13A (1-i)	S	5/1/21	09:50	XX					
CL29087 SB-13C (10-i)	S	5/1/21	09:50						
CL29088 SB-14A (1-i)	S	5/1/21	09:10	X					
CL29090 SB-14C (6-i)	S	5/1/21	09:10	XX					
CL29091 SB-15A (0-i)	S	5/1/21	13:15	X					
Relinquished by:	Accepted by:	Date:	Time:	Turnaround:	Report Type:	State Criteria:			
<i>John Roanquist</i>	<i>Roger Gau</i>	5/14/21	7:00	1 Day	<input checked="" type="checkbox"/> Standard FDF	<input type="checkbox"/> MA MCP CAM Cert.			
<i>John Roanquist</i>	<i>Todd Hall</i>	5/14/21	09:50	2 Days	<input type="checkbox"/> GISKey	<input type="checkbox"/> CT RCP Cert.			
				3 Days	<input type="checkbox"/> EQuIS	<input type="checkbox"/> NJ Hazsite EDD			
				5 Days	<input type="checkbox"/> Deliverable	<input type="checkbox"/> NY EZ EDD (ASP)			
				10 Days	<input type="checkbox"/> NJ Full Deliverable	<input type="checkbox"/> Other _____			
				Standard	<input type="checkbox"/> NY ASP B				
				Other _____					
Comments, Special Requirements or Regulations:									
Please send notice as soon as possible not exceeding 24 hours of obtaining valid data, of the results of all drinking water samples that exceed any EPA or Department-established maximum contaminant level, maximum residual disinfectant level or reportable concentration.									
Please notify Phoenix Environmental Laboratories, Inc. immediately and prior to conducting analysis if certification is not held for the analyses requested.									
What State were samples collected?									
<i>NY</i>									



Sample: 1260 1000;59u File: 318A044

Software Version: 4.1<1L22>

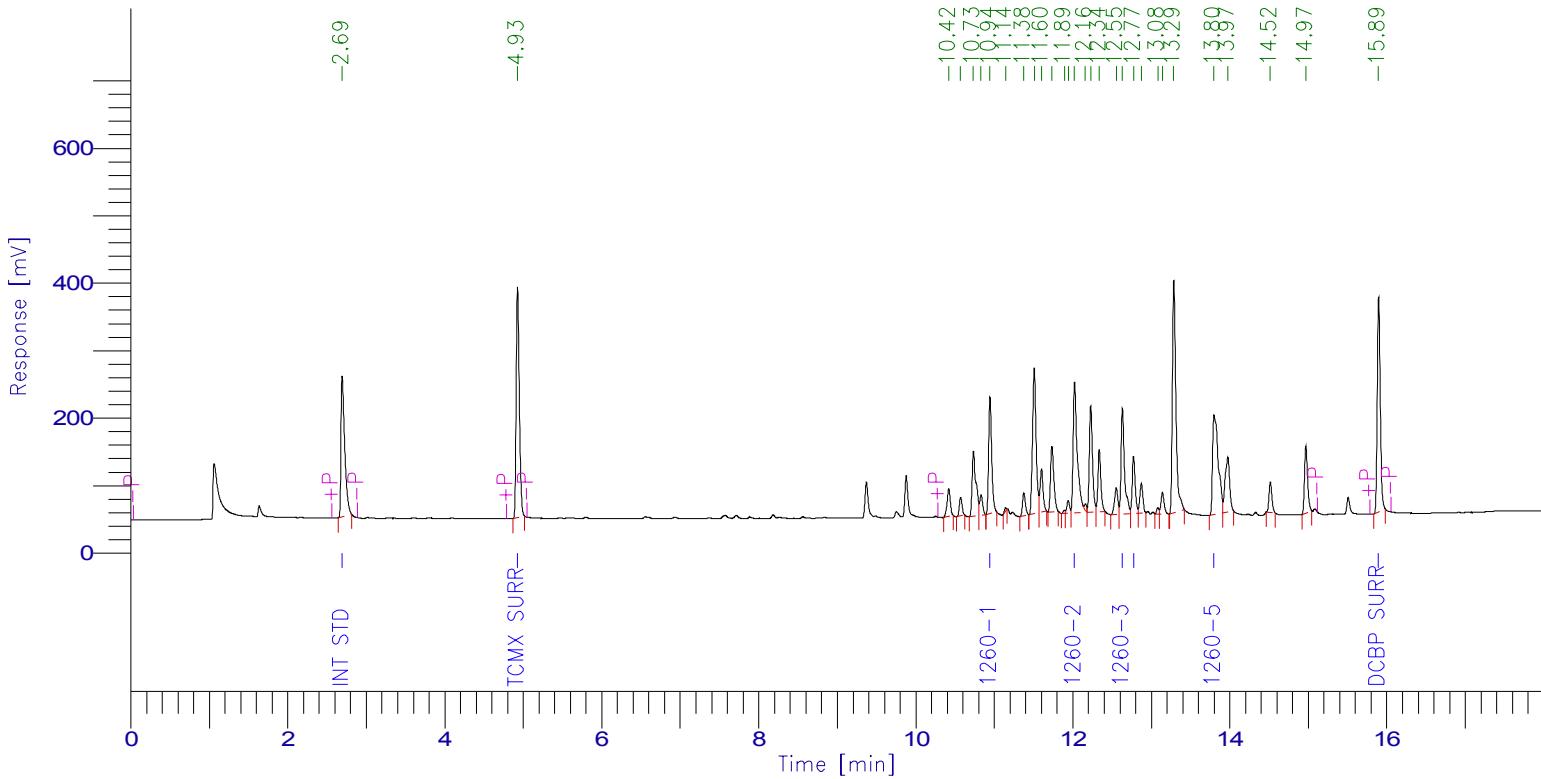
Date: 3/19/2020 07:54 AM

Sample Name : 1260 1000;59u

Data File : E:\TC2020\ECD29\03-MAR\318A044.RAW Date: 3/19/2020 12:56 AM

Sequence File: E:\TC2020\ECD29\03-MAR\PCB\_SEQ.SEQ Cycle: 643 Channel : A

Sample Amount : 1.0000 Dilution Factor : 1.00



## PCB Report

Time [min]	Component Name	Raw Amount	Area [ $\mu$ V·s]	Surrogate SM/WM	Surrogate QC / SL	Spike Rec Soils (%)	Spike Rec Water (%)
2.694	Int Std	100.0000	688926.16	250.0000	100.0000	40.0000	20.0000
4.926	TCMX SURR	89.9627	929603.04	224.9068	89.9627	35.9851	17.9925
10.944	1260-1	1000.0000	458893.84	2500.0000	1000.0000	400.0000	200.0000
12.020	1260-2	1000.0000	723367.09	2500.0000	1000.0000	400.0000	200.0000
12.632	1260-3	1000.0000	476530.84	2500.0000	1000.0000	400.0000	200.0000
12.773	1260-4	1000.0000	227520.79	2500.0000	1000.0000	400.0000	200.0000
13.798	1260-5	1000.0000	744787.63	2500.0000	1000.0000	400.0000	200.0000
15.893	DCBP SURR	86.5108	845002.32	216.2770	86.5108	34.6043	17.3022

5276.4735 5094631.70

**APPENDIX E**

**DATA USABILITY SUMMARY REPORT**

## **Data Usability Summary Report**

Boundary Modification Soil Sampling Investigation  
Route 52 Corridor Area  
iPark 84  
Former IBM East Fishkill Facility  
200 North Drive, Hopewell Junction, NY 12533

This Data Usability Summary Report (DUSR) has been prepared to validate the results of the soil sampling conducted at Route 52 Corridor, Hopewell Junction, New York on May 10 and 11, 2021, in accordance with the *Route 52 Corridor Boundary Modification Field Investigation Work Plan (Work Plan)* (Walden, May, 2021) approved by NYSDEC on May 4, 2021.

A summary of the Route 52 Corridor soil sampling results was submitted to NYSDEC and NYSDOH in the *Route 52 Corridor Boundary Modification Field Investigation Summary Report* dated July 6, 2021.

This DUSR has been prepared in accordance with NYSDEC Draft DER-10, Appendix 2B – “*Guidance for Data Deliverables and the Development of Data Usability Summary Reports*”. The DUSR provides a thorough evaluation of analytical data without using the services of an independent third-party data validator. The primary objective of the DUSR is to determine whether or not the data presented meets project-specific criteria for data quality and use.

The analytical data were evaluated by Lathika Varanasi of Walden Environmental Engineering PLLC, whose experience and qualifications to prepare the DUSR for this project are presented in the attached resume. Soil samples collected for laboratory analysis were submitted to Phoenix Environmental Laboratories, Inc. (Phoenix) of Manchester, Connecticut, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory (NY Lab Registration #11301). Samples for pre-and polyfluoroalkyl (PFAS) substances were then submitted by Phoenix to York Analytical Laboratories of Stratford, Connecticut, a NELAP accredited laboratory (NY Certification #10854 and #12058). All soil samples were analyzed for New York Code of Rules and Regulations (NYCRR) Part 375-6.8 VOCs, SVOCs, pesticides, herbicides, PCBs and TAL metals, via USEPA Methods 8260C, 8270D, 8081 B, 8151A, 8082A and 6010D, respectively. Additionally, soil samples were analyzed for the full list of PFAS and 1,4-dioxane in accordance with NYSDEC’s Sampling, Analysis and Assessment of Per-and Polyfluoroalkyl Substances (PFAS) under NYSDEC’s Part 375 Remedial Programs (January 2021).

The DUSR process consisted of evaluating the analytical data packages produced by Phoenix and York and answering the following questions.

**1. Were there any components of the sampling protocol which deviated from established sampling procedures?**

The sampling followed the established sampling procedures in the NYSDEC-approved *Work Plan* for the Site (Walden, May, 2021). Samples were collected in sample bottles provided by the laboratory and appropriate for the analysis being performed (VOCs, SVOCs, metals, pesticides, herbicides and PCBs), were labeled in the field, placed into a sampling cooler and kept on ice for subsequent delivery to the laboratory. All samples were sent following chain-of-custody protocols.

**2. Is the data package complete as defined under the requirements for the NYSDEC ASP Category B or USEPA CLP deliverables?**

The sampling and analytical program outlined in the Work Plan was designed to conform to the NYSDEC ASP Category B and USEPA CLP deliverables criteria. Both field sampling and laboratory analytical activities were performed with built-in QA/QC programs. Field samples were collected at a rate of ten percent (10%), or one field duplicate for every 10 samples and one equipment blank was collected per day throughout the soil sampling event. The analytical testing included method blanks and batch QA/QC samples as part of the laboratories' standard QA/QC program. Additionally, the samples were handled in compliance with the holding time allowances, meeting the NYSDEC ASP Category B and USEPA CLP deliverables criteria requirements.

**3. Have all holding times been met?**

Times of sample receipt, extraction and analysis have been evaluated to determine whether the holding time specifications have been met. All of the samples were analyzed within the specified holding times.

**4. Do all QC data (blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls, and sample data) fall within the protocol-required limits and specifications?**

All the primary samples and QC data were reviewed. Duplicate and Matrix Spike sample analyses demonstrated a reasonable level of accuracy in the analytical results. Some of the QA/QC data that do not meet the protocol-required criteria in the data packages as follows:

- Several compounds do not meet the % deviation criteria with respect to the soil or water conformance/non-conformance summary data.

- Several compounds in the initial and continuing calibrations do not meet the % deviation criteria with respect to the soil conformance/non-conformance summary data.
- A few of the calibration compounds do not meet % deviation criteria and/or recommended response factors with respect to the water conformance/non-conformance summary data.
- The % recovery for several compounds during initial calibration was out of range and some did not meet criteria for MS recoveries.

Although not all QA/QC data met the protocol-required criteria, these outliers do not impact the quality of the data package or the reliability of the laboratory results.

**5. Have all the data been generated using established and agreed upon analytical protocols?**

Laboratory analytical protocols have been developed by the USEPA and are published in SW-846 Method SW5035 for soil sample extraction, SW-846 Method SW8260C for volatile organic compounds (VOC) analysis, SW-846 Method 8270D for semi-volatile organic compounds (SVOC) analysis, SW-846 Method 7470A and SW-846 Method 7471 B for mercury analysis, SW-846 Method 6010D for metals analysis, SW-846 Method SW8270-MOD (SIM) for 1,4-Dioxane analysis, SW-846 Method 8151A for chlorinated herbicides analysis, SW-846 Method 8081B for pesticides analysis, SW-846 Method 8082A for polychlorinated biphenyls analysis, and modified Method 537 for PFAS substances analysis. The review of the laboratory deliverables indicated that the analytical data for this project were generated following these standard protocols.

**6. Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?**

An evaluation of the raw data confirmed the accuracy of results provided in the data summary sheets and the quality control verification forms included in the analytical data packages prepared by the laboratory.

**7. Have the correct data qualifiers been used?**

The laboratory provided a list of qualifiers used in their data reporting. QC failures such as potential sample contamination by laboratory solvents or estimation of sample result values due to analyte concentrations detected above calibration ranges were checked back to the reported data to determine whether the qualifiers were properly used. The evaluation indicated that the laboratory flagged the data using the correct data qualifiers when necessary. The data qualifiers comply with the NYSDEC Analytical Services Protocol (ASP) 95 revised guidelines.

## **8. Have the minimum detection limits been met?**

The minimum detection limits derived from the USEPA analytical methods and the laboratories' quality control for the soil samples are as follows:

- MDL for VOCs: 5 µg/kg (wet weight)
- MDL for SVOCs: 660 µg/kg (wet weight)
- MDL for 1,4 Dioxane: 70 – 81 µg/kg
- MDL for PFAS: 0.5 µg/kg
- MDL for PCBs: 70 – 81 µg/kg
- MDL for Pesticides: 70 µg/kg
- MDL for Chlorinated Herbicides: 0.11 – 0.28 µg/kg
- MDL for Metals: 0.13 – 44 mg/kg

All the minimum detection limits were met for the soil sample analysis.

### **Summary**

In summary, the analytical data package review conducted while preparing this DUSR found that no significant data deficiencies, analytical protocol deviations, or quality control problems impacted the quality of the data. No significant QC exceedances were identified and it was determined that the data should not be rejected.

Prepared by:



Lathika Varanasi, Ph.D.



## Lathika Varanasi, Ph.D. Project Engineer



Project Engineer with experience in energy recovery/energy auditing of water and wastewater treatment facilities, wastewater treatment and renewable energy. She also has a strong background in environmental remediation, technical writing, techno-economic feasibility studies, engineering data analysis, analytical and organic chemistry.

### SELECTED RELEVANT EXPERIENCE

- Energy optimization of Water and Wastewater Treatment Plants: Conducted energy consumption and process evaluations for equipment and process systems of water and wastewater treatment facilities and associated Combined Heat and Power (CHP) systems. Developed energy efficiency funding applications and quantified energy savings associated with treatment and process equipment as well as lighting and HVAC systems of water and wastewater treatment facilities. Developed energy conservation measures and provided recommendations for alternative low energy technologies for the upgrade of process operations and performances of water and wastewater treatment facilities. Created operation and maintenance manuals for water and wastewater treatment facilities.
- Environmental Impact Assessment: Evaluated sustainability, techno-economic feasibility of solar energy systems and analyzed energy consumption data to optimize energy efficiency for clients.
- Energy optimization of Sewage Treatment Plants: Established potential areas of energy optimization through data analysis of the unit processes of sewage treatment plants (STP), including pumps, blowers and compressors. Developed technical summaries of STP facilities' site operating manuals. Designed a template with the layout of unit processes of a sewage treatment plant and highlighted segments of high energy consumption for the stakeholders.
- Wastewater Treatment: Designed bench scale UV/Advanced Oxidation Processes (UV/AOPs) and investigated transformation of dissolved organic matter (DOM) of secondary effluent wastewater in the UV/AOPs. Characterized DOM transformation using ultra-high-resolution mass spectrometer. Identified specific low-molecular weight organic acids and chlorinated by-products formed due to interaction of DOM with UV/AOPs. Analyzed the role of DOM in reducing the treatment efficiency of UV-AOPs. Developed methods for the application of analytical chemistry instruments for data analysis. Prepared research reports, grant proposals, research proposals and journal articles.
- Renewable Energy Applications: Identified, analyzed and applied renewable and energy efficient technologies (Solar, Biomass, Biogas, Solar-LED) for industrial and community use. Made site visits to evaluate clients' operations and provided appropriate recommendations based on clients' requirements and project viability. Prepared detailed project reports, presentations, techno-economic feasibility studies and financial projections. Secured funds for renewable energy projects in rural areas by applying for seed grants.

### EDUCATION

*Ph.D. in Environmental Engineering*, Michigan Technological University

### LICENSES/ CERTIFICATIONS

NYSDEC 4-Hour Erosion and Sediment Control Training

Confined Space Trained General Industry

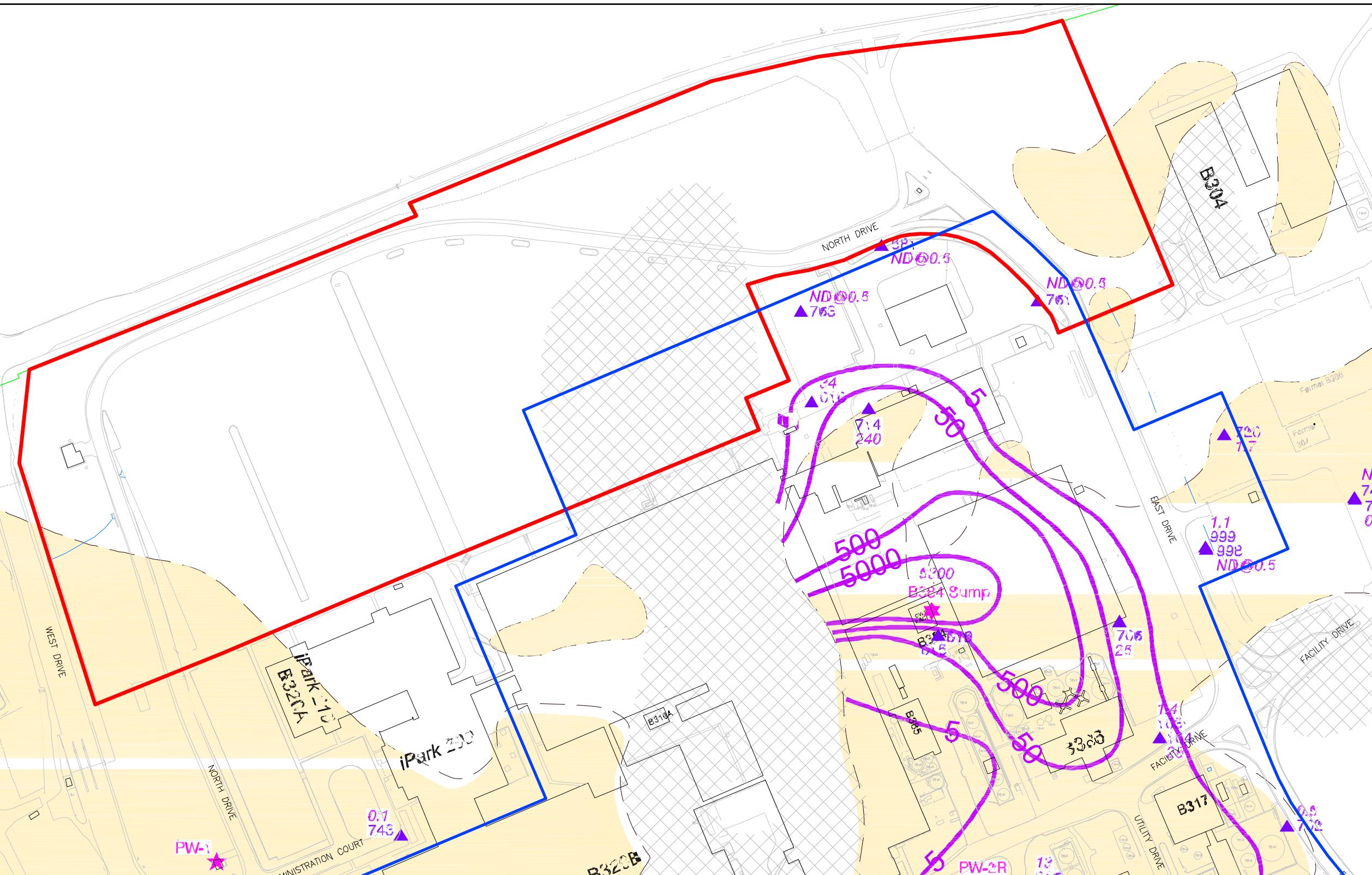
NFPA 70E: Standard for Electrical Safety in the Workplace

OSHA 10 Hour General Industry

OSHA 40 Hour HAZWOPER

**APPENDIX F**

**GROUNDWATER MONITORING INFORMATION**

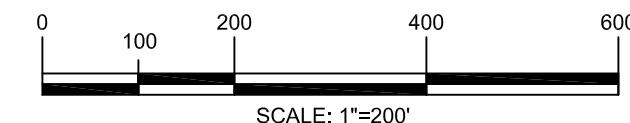


#### LEGEND

- FORMER IBM EAST FISHKILL FACILITY PROPERTY LINE
- FORMER STRUCTURE
- GMP SOIL MONITORING WELL
- OU OPERABLE UNIT
- PCE CONCENTRATION CONTOUR (UG/L)
- PCE CONCENTRATION
- EXTENT OF GLACIOLACUSTRINE CLAY (EAST COMPLEX ONLY) (APPROXIMATE)
- EXTENT OF CLAY MAPPING
- INFERRRED AREAS OF NO SATURATED SOIL
- NOT DETECTED AT LABORATORY DETECTION LIMIT "X"
- APPROXIMATE BOUNDARY OF ROUTE 52 CORRIDOR AREA
- BOUNDARY OF AREA "A" (OPERABLE UNIT 5, OU5)

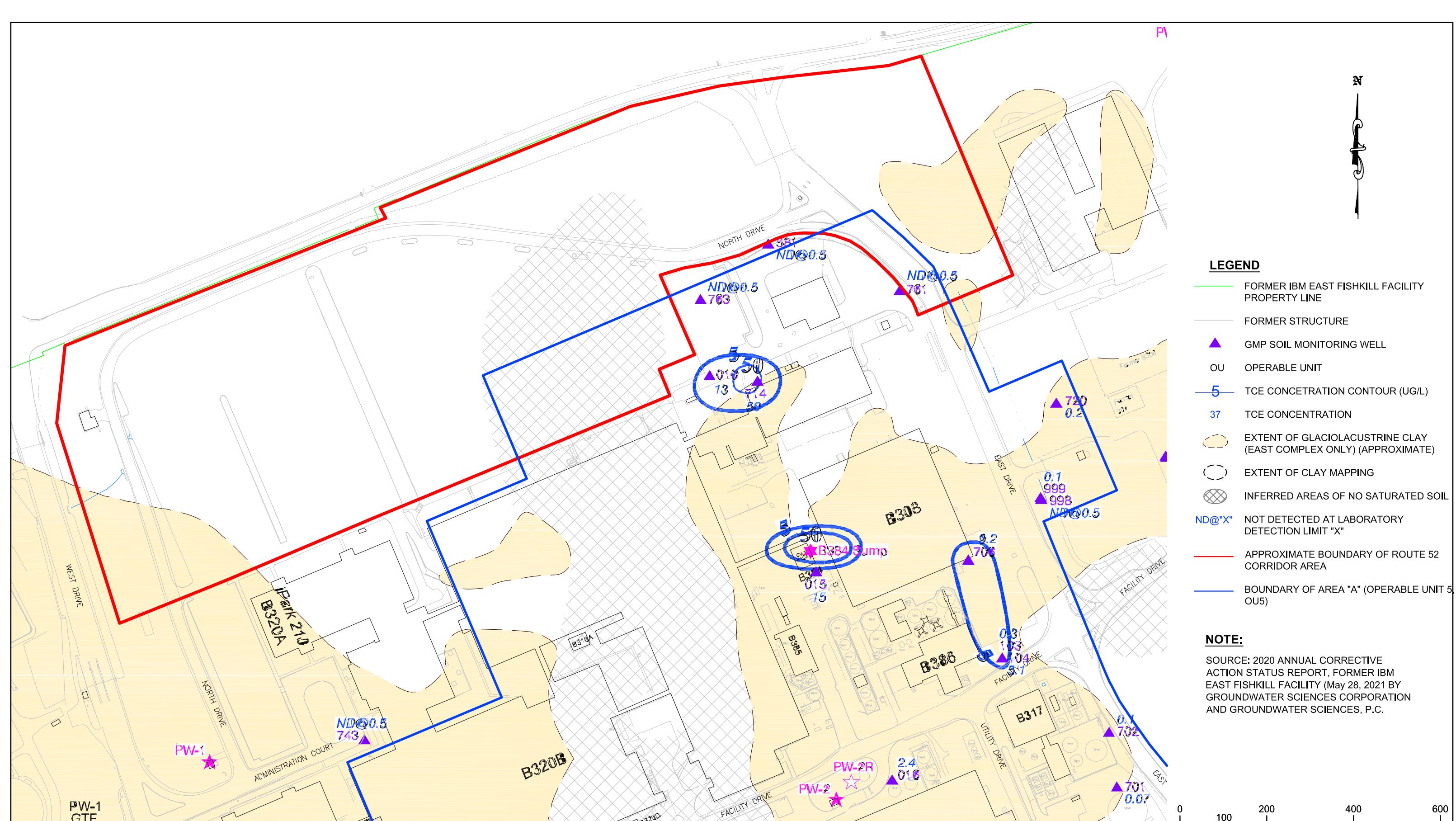
#### NOTE:

SOURCE: 2020 ANNUAL CORRECTIVE ACTION STATUS REPORT, FORMER IBM EAST FISHKILL FACILITY (May 28, 2021 BY GROUNDWATER SCIENCES CORPORATION AND GROUNDWATER SCIENCES, P.C.)



#### PCE CONCENTRATIONS (2020) IN SOIL GROUNDWATER UNIT

SCALE: 1" = 200'



#### LEGEND

- Former IBM East Fishkill Facility Property Line
- Former Structure
- GMP Soil Monitoring Well
- OU
- 5 - TCE Concentration Contour (UG/L)
- 37 - TCE Concentration
- Extent of Glaciolacustrine Clay (East Complex Only) (Approximate)
- Extent of Clay Mapping
- Inferred Areas of No Saturated Soil
- ND@"X" - Not Detected at Laboratory Detection Limit "X"
- Approximate Boundary of Route 52 Corridor Area
- Boundary of Area "A" (Operable Unit 5, OU5)

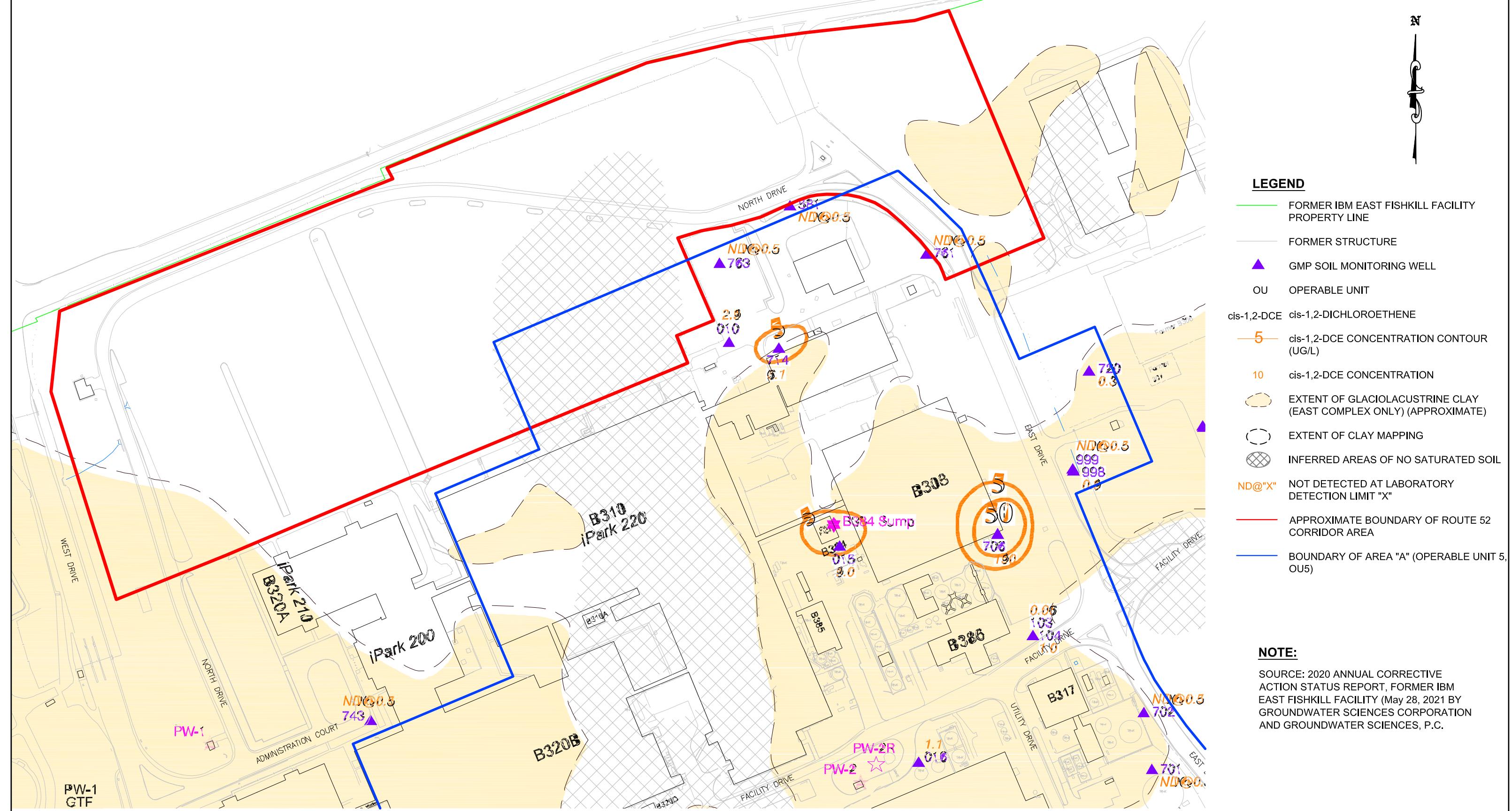
#### NOTE:

SOURCE: 2020 ANNUAL CORRECTIVE ACTION STATUS REPORT, FORMER IBM EAST FISHKILL FACILITY (May 28, 2021 BY GROUNDWATER SCIENCES CORPORATION AND GROUNDWATER SCIENCES, P.C.)

0 100 200 400 600  
SCALE: 1"=200'

#### TCE CONCENTRATIONS (2020) IN SOIL GROUNDWATER UNIT

SCALE: 1" = 200'



## **cis-1,2-DCE CONCENTRATIONS (2020)**

### **IN SOIL GROUNDWATER UNIT**

SCALE: 1" = 200

FOR: **I-PARK 84**  
200 North Drive  
Hopewell Junction, NY 12533

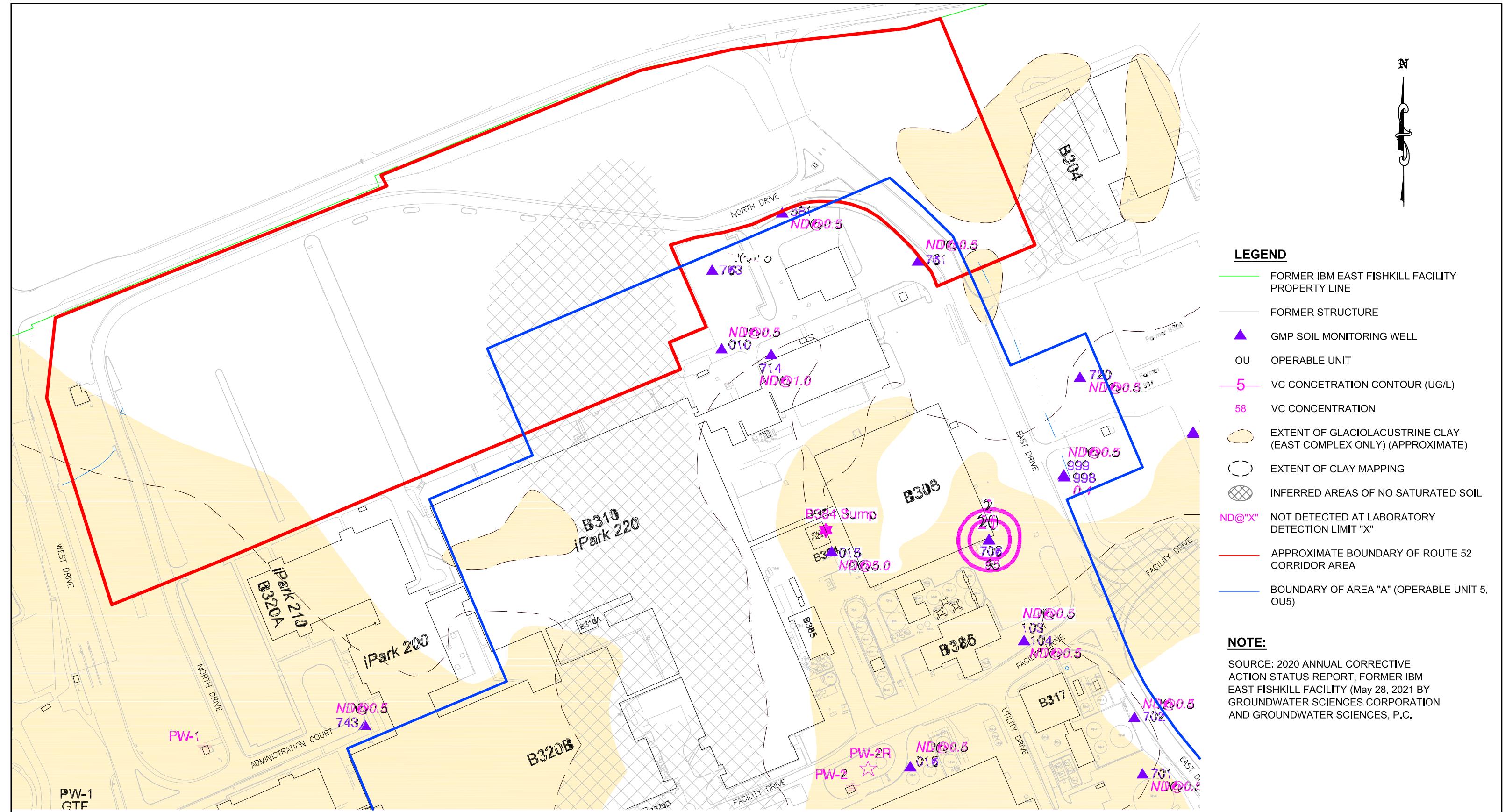
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**CIS-1,2-DCE CONCENTRATIONS (2020)**  
**IN SOIL GROUNDWATER UNIT**  
i-Park 84 North Drive  
Hopewell Junction, NY 12533

URE NO:	<u>ISSUED</u>
3	REVISION NO 0



WALDEN ENVIRONMENTAL ENGINEERING, PLLC  
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## VC CONCENTRATIONS (2020) IN SOIL GROUNDWATER UNIT

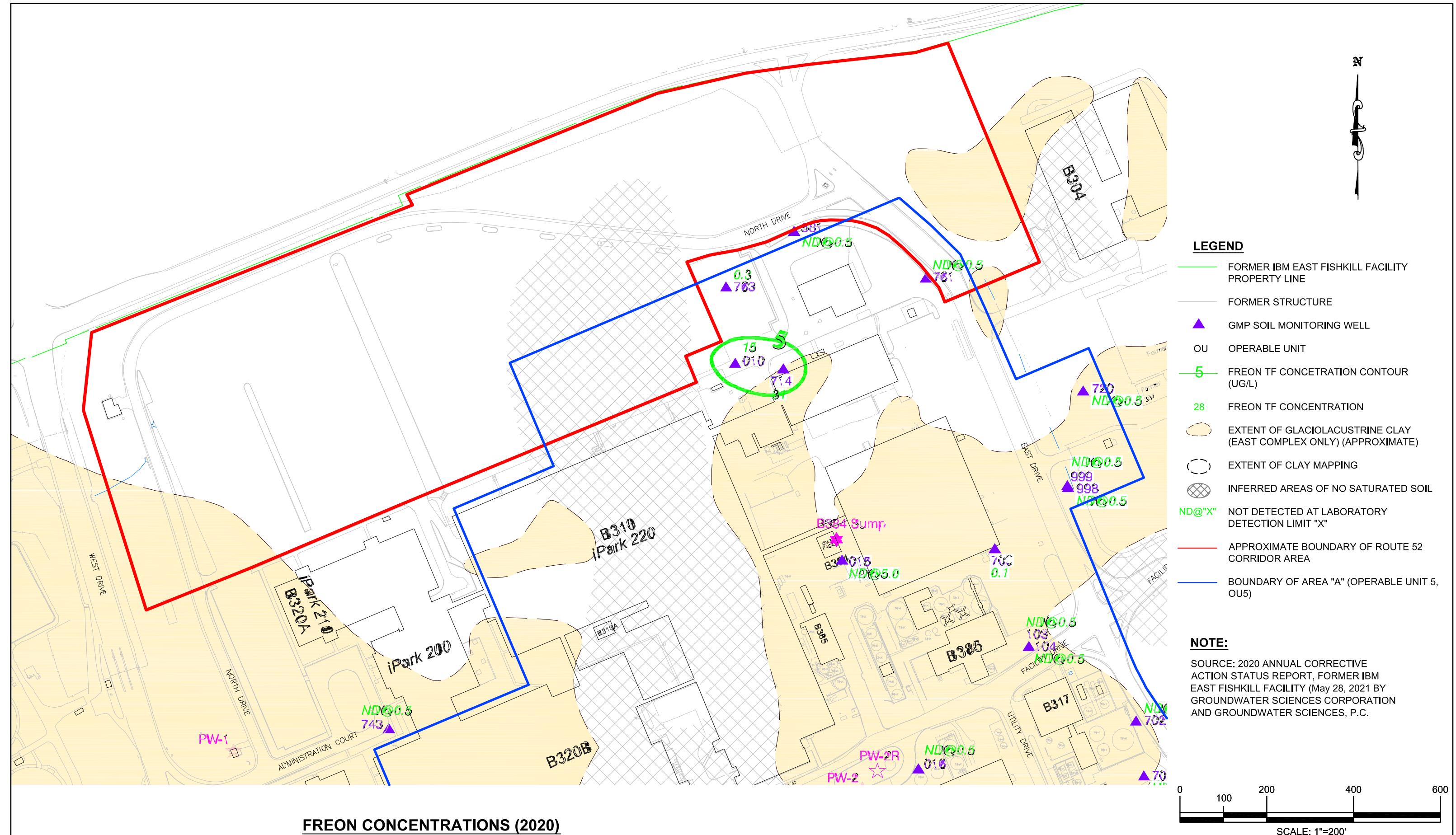
SCALE: 1" = 200

REVISIONS			FOR:  i-PARK 84 200 North Drive Hopewell Junction, NY 12533	DRAWING TITLE:  VC CONCENTRATIONS (2020) IN SOIL GROUNDWATER UNIT i-Park 84 North Drive Hopewell Junction, NY 12533	FIGURE NO:  4	ISSUED  REVISION NO:  0
No.	Date	Comments				
EAL						
			DESIGNED BY: NMB/AB	DRAWN BY: LS	CHECKED BY:NMB	JOB NO: iPark0118.48 DATE: 7/2/21 11x17 SHEET NO: 4 OF 10
			APPROVED BY: NMB	SCALE: AS NOTED	CAD FILE NAME: C:\Users\MM\Desktop\Downloads\ACAD\WatsonDWGS\iPark\iPark0118.48_Project\iPark0118.48_Route 52 Figures (7-2-21).dwg	



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## **FREON CONCENTRATIONS (2020) IN SOIL GROUNDWATER UNIT**

SCALE: 1" = 200'

FOR: **I-PARK 84**  
200 North Drive  
Hopewell Junction, NY 12533

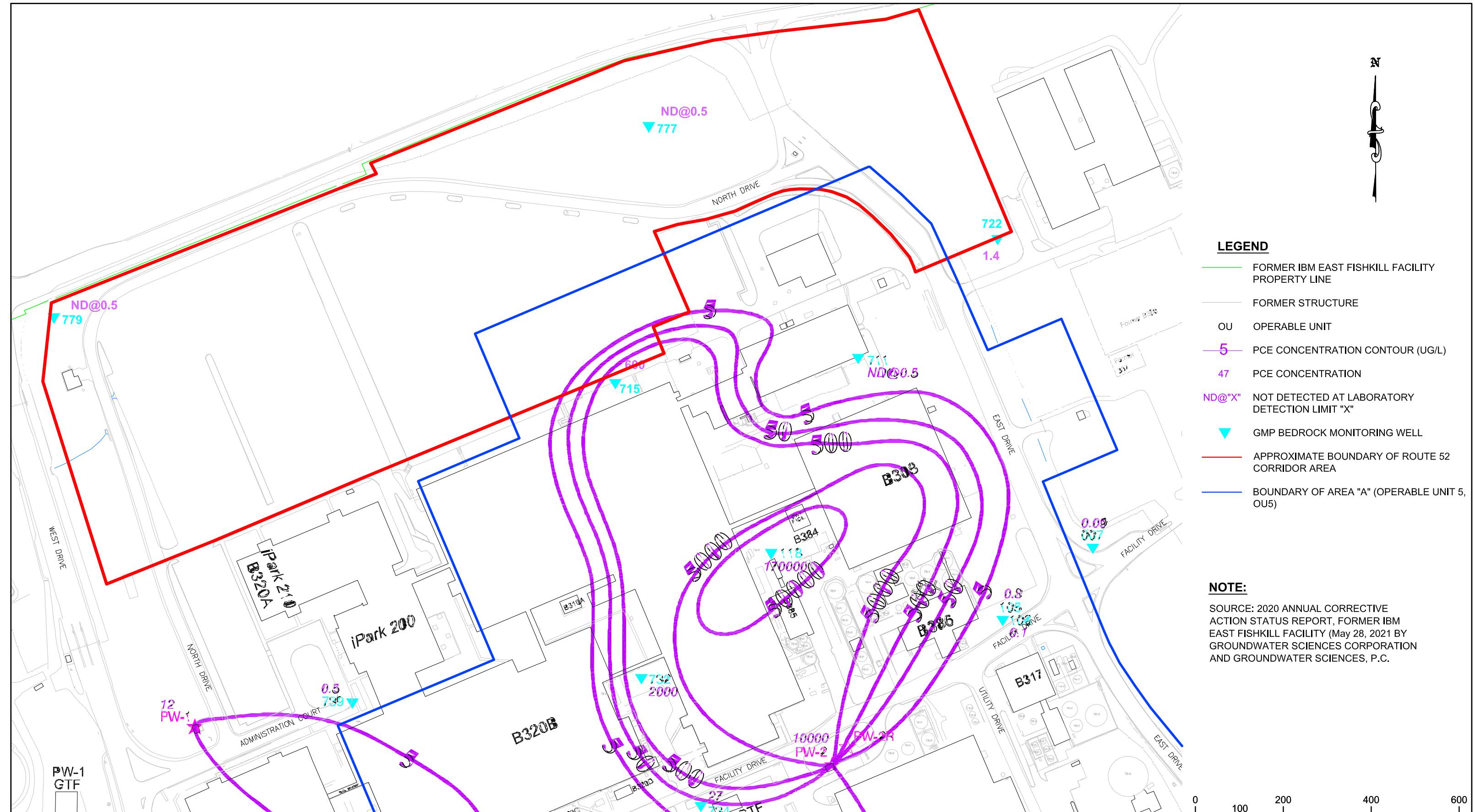
DRAWING TITLE:  
**FREON CONCENTRATIONS (2020) IN  
SOIL GROUNDWATER UNIT  
i-Park 84 North Drive  
Hopewell Junction, NY 12533**

FIGURE NO:	<u>ISSUED</u>
5	REVISION NO 0



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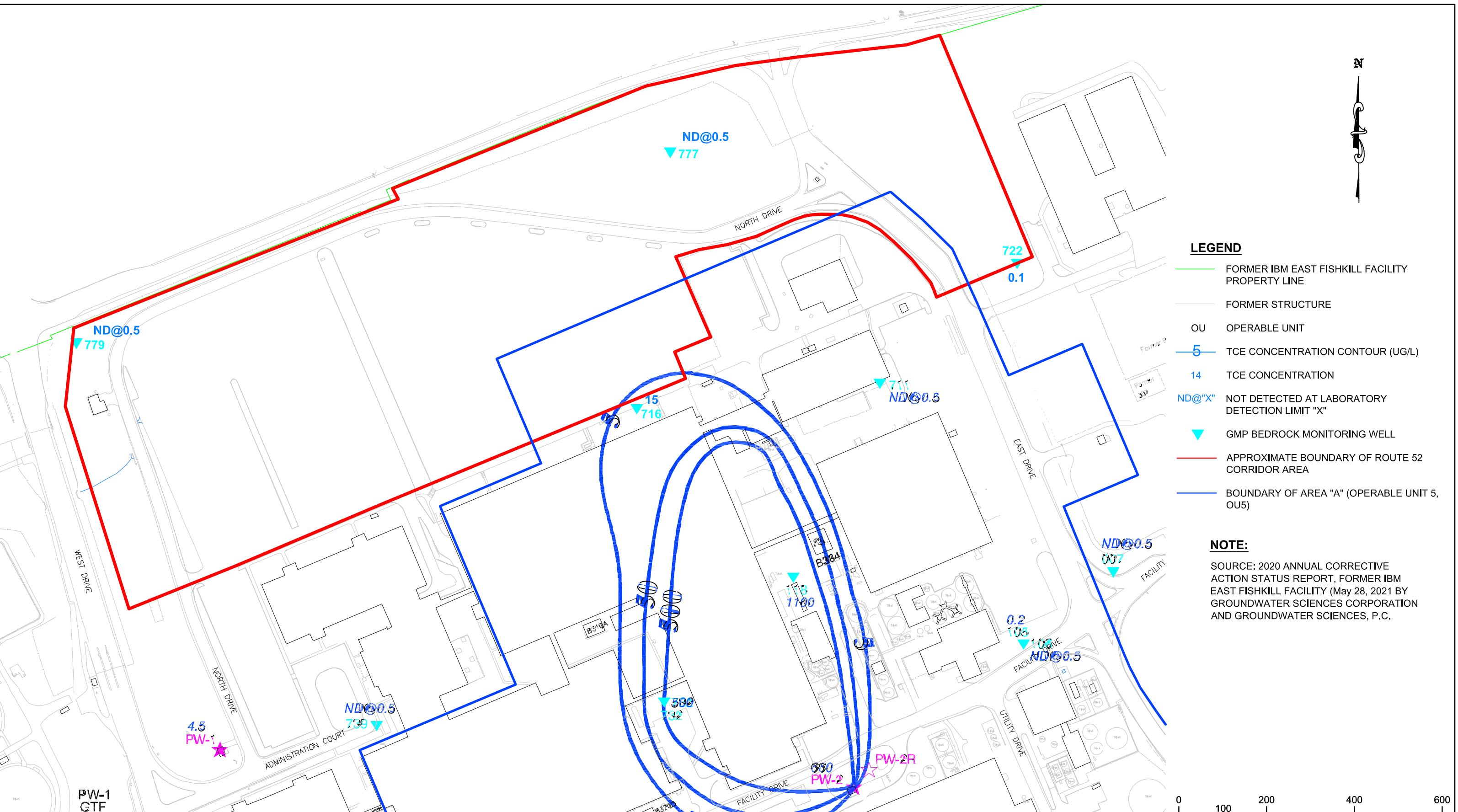
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## PCE CONCENTRATIONS (2020) IN BEDROCK GROUNDWATER UNIT

SCALE: 1" = 200'

REVISIONS		FOR:	DRAWING TITLE:	FIGURE NO:	ISSUED
No.	Date				
		I-PARK 84 200 North Drive Hopewell Junction, NY 12533	PCE CONCENTRATIONS (2020) IN BEDROCK GROUNDWATER UNIT i-Park 84 North Drive Hopewell Junction, NY 12533	6	
		DESIGNED BY: NMB/AB DRAWN BY: LS CHECKED BY:NMB	JOB NO: iPark0118.48	DATE: 7/2/21	11x17 SHEET NO: 6 OF 10
		APPROVED BY: NMB SCALE: AS NOTED	CAD FILE NAME: C:\Users\MTal\Desktop\Downloads\ACAD\Walden\DWGS\IPark\IPark0118.48_Project\Blgnd\IPark0118.48_Route 52 Figures (7-2-21).dwg		REVISION NO: 0



## TCE CONCENTRATIONS (2020) IN BEDROCK GROUNDWATER UNIT

SCALE: 1" = 200'

		REVISIONS		FOR:	DRAWING TITLE:	FIGURE NO:	ISSUED
No.	Date	Comments					
					i-PARK 84 200 North Drive Hopewell Junction, NY 12533		
					DESIGNED BY: NMB/AB DRAWN BY: LS CHECKED BY: NMB	JOB NO: iPark0118.48	DATE: 7/2/21
					APPROVED BY: NMB	SCALE: AS NOTED	CAD FILE NAME: C:\Users\MTal\Desktop\Downloads\ACAD\Walden\DWGSP\iPark\iPark0118.48_Project\Blg\iPark0118.48_Route 52 Figures (7-2-21).dwg

FORMER IBM EAST FISHKILL FACILITY PROPERTY LINE
FORMER STRUCTURE
OU OPERABLE UNIT
5 TCE CONCENTRATION CONTOUR (UG/L)
14 TCE CONCENTRATION
ND@"X" NOT DETECTED AT LABORATORY DETECTION LIMIT "X"
▼ GMP BEDROCK MONITORING WELL
APPROXIMATE BOUNDARY OF ROUTE 52 CORRIDOR AREA
BOUNDARY OF AREA "A" (OPERABLE UNIT 5, OU5)

### NOTE:

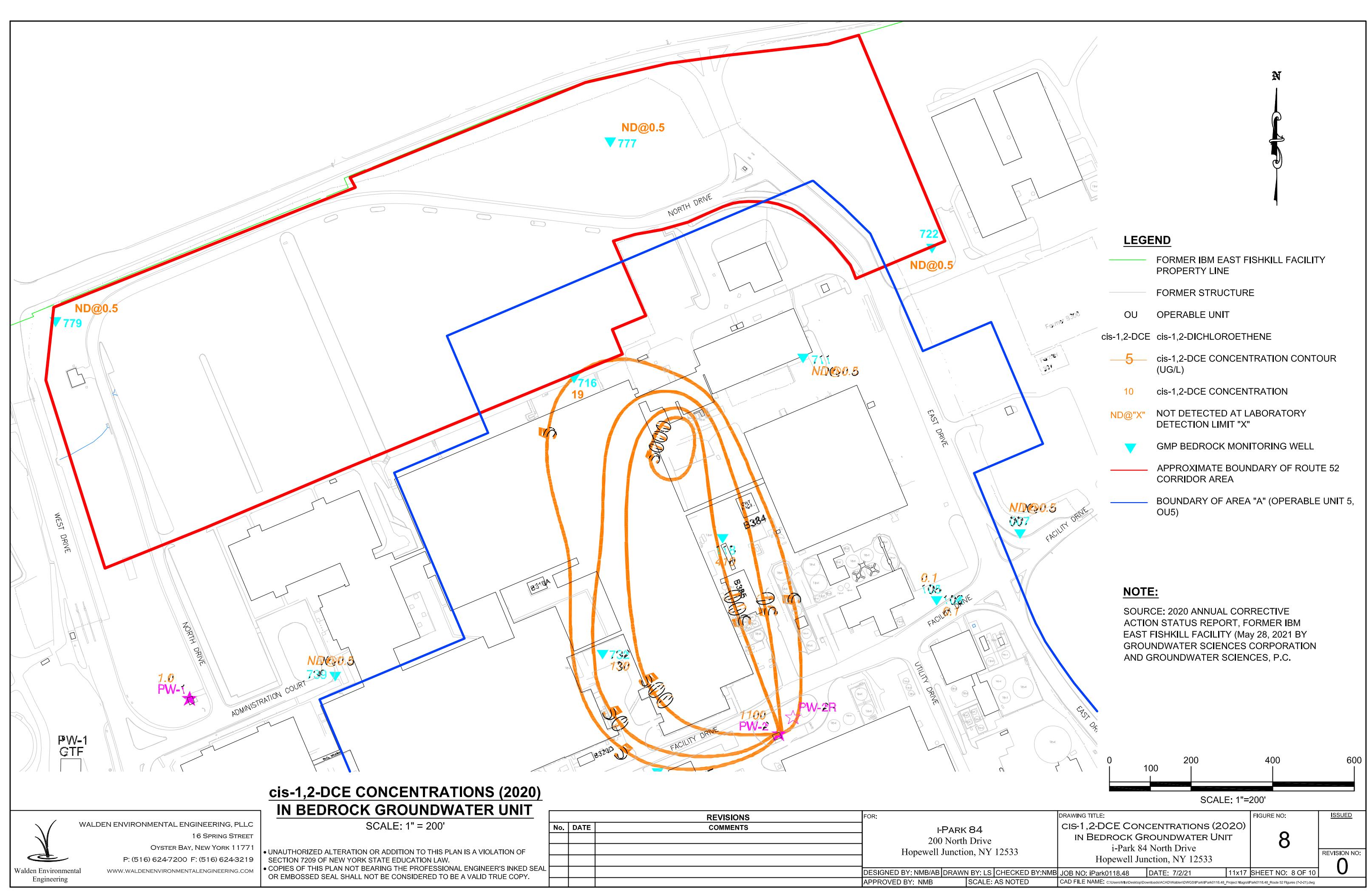
SOURCE: 2020 ANNUAL CORRECTIVE ACTION STATUS REPORT, FORMER IBM EAST FISHKILL FACILITY (May 28, 2021 BY GROUNDWATER SCIENCES CORPORATION AND GROUNDWATER SCIENCES, P.C.)

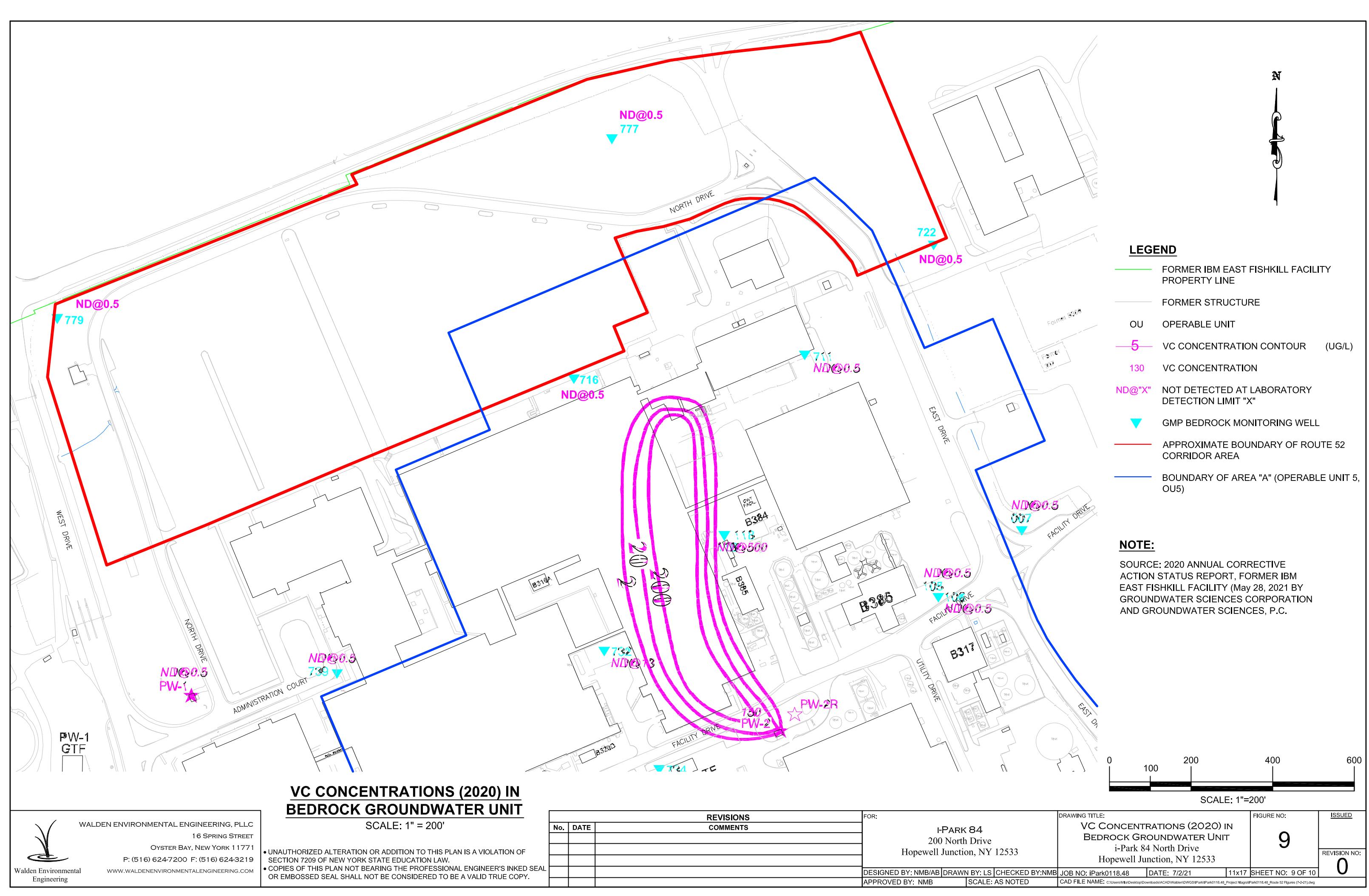
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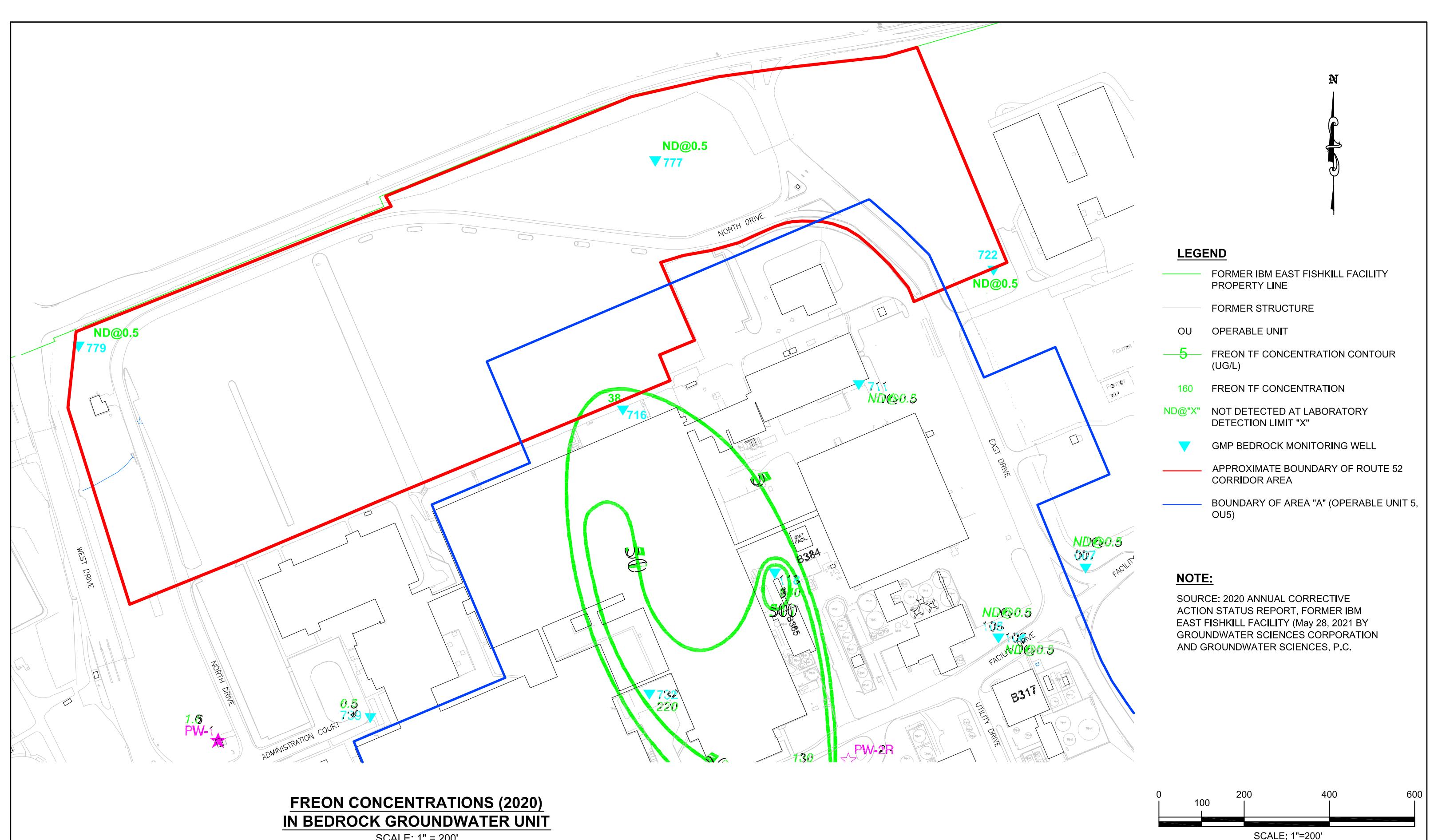


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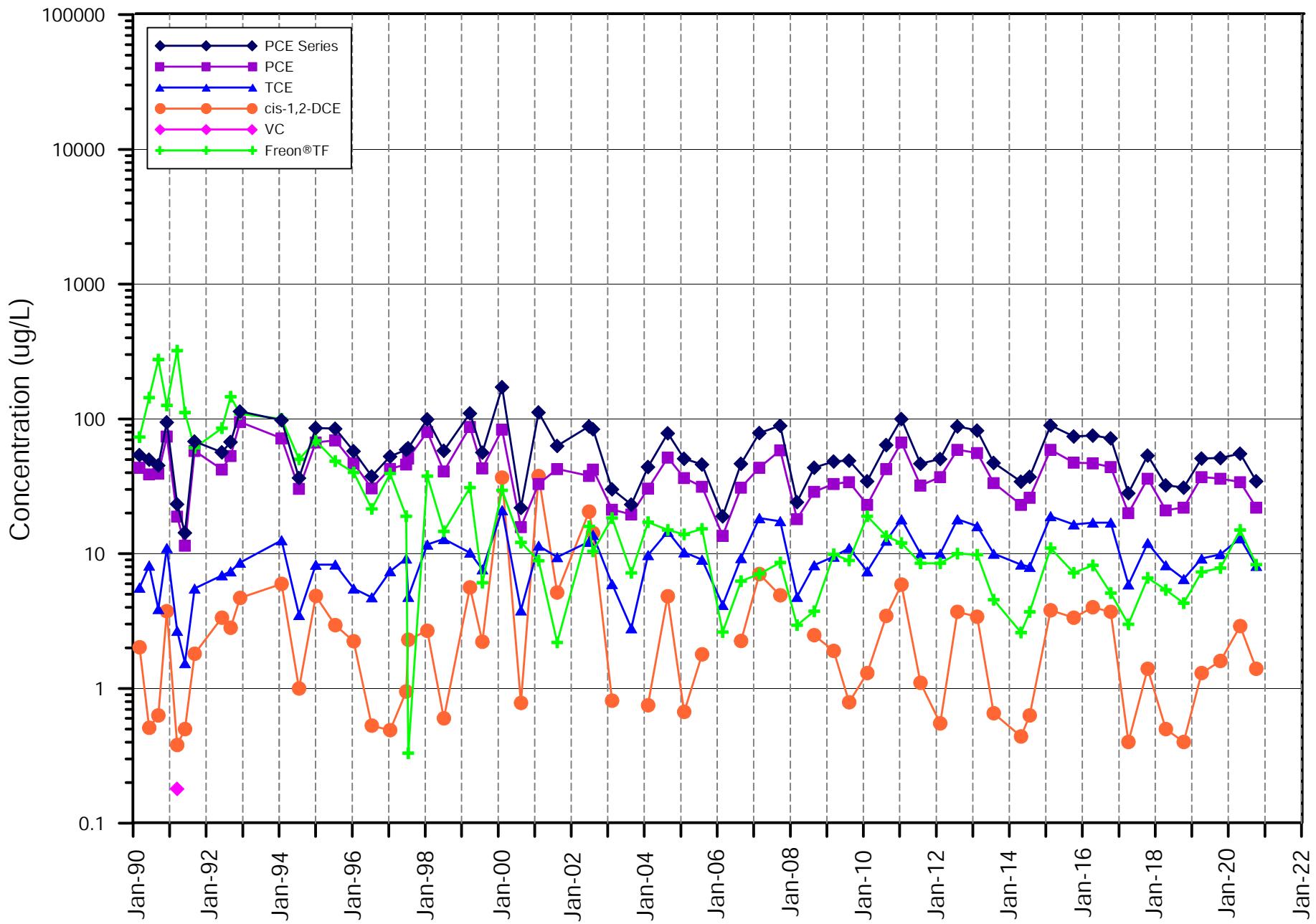
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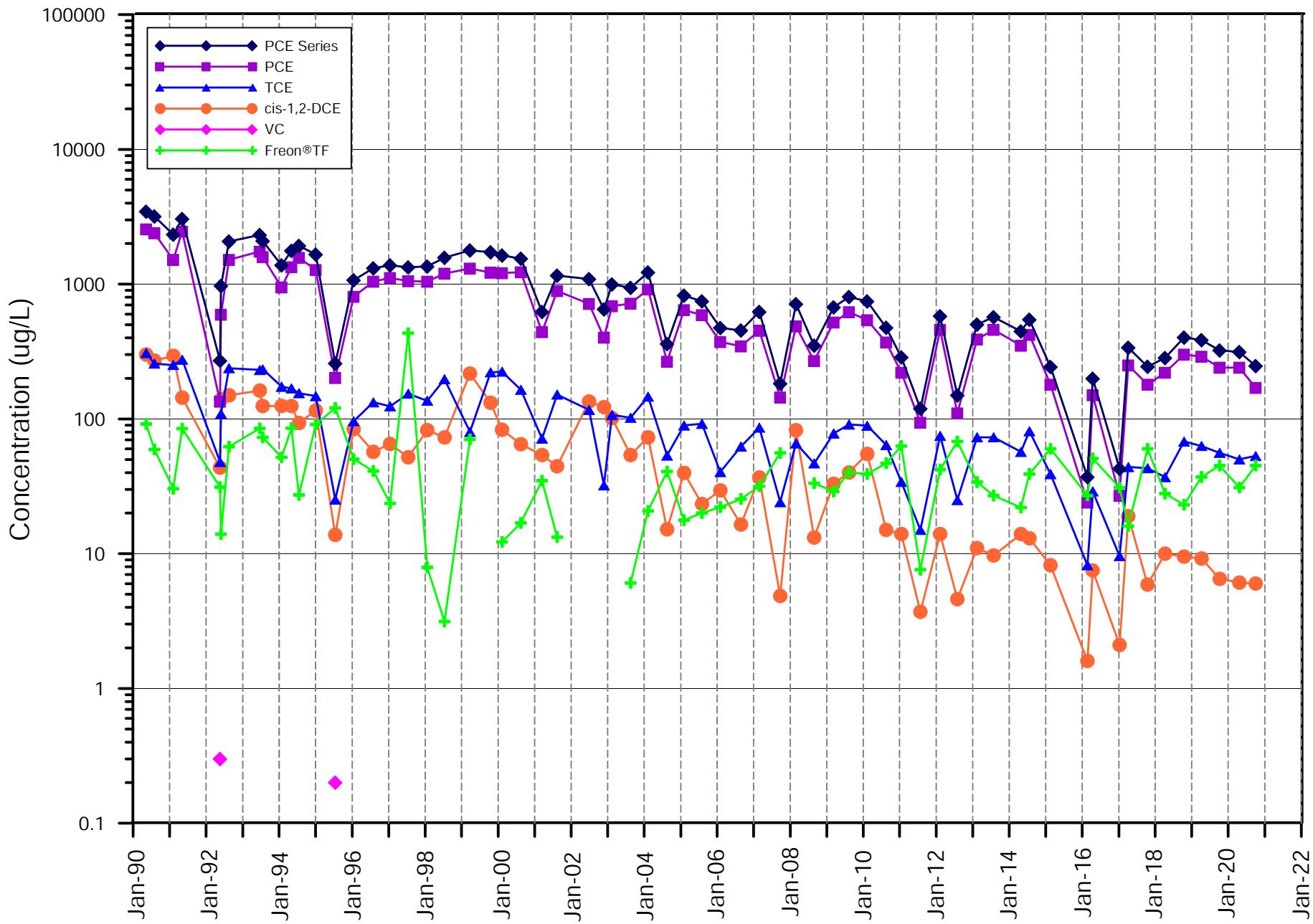


**Former IBM East Fishkill Facility  
GW-010 (Soil)**



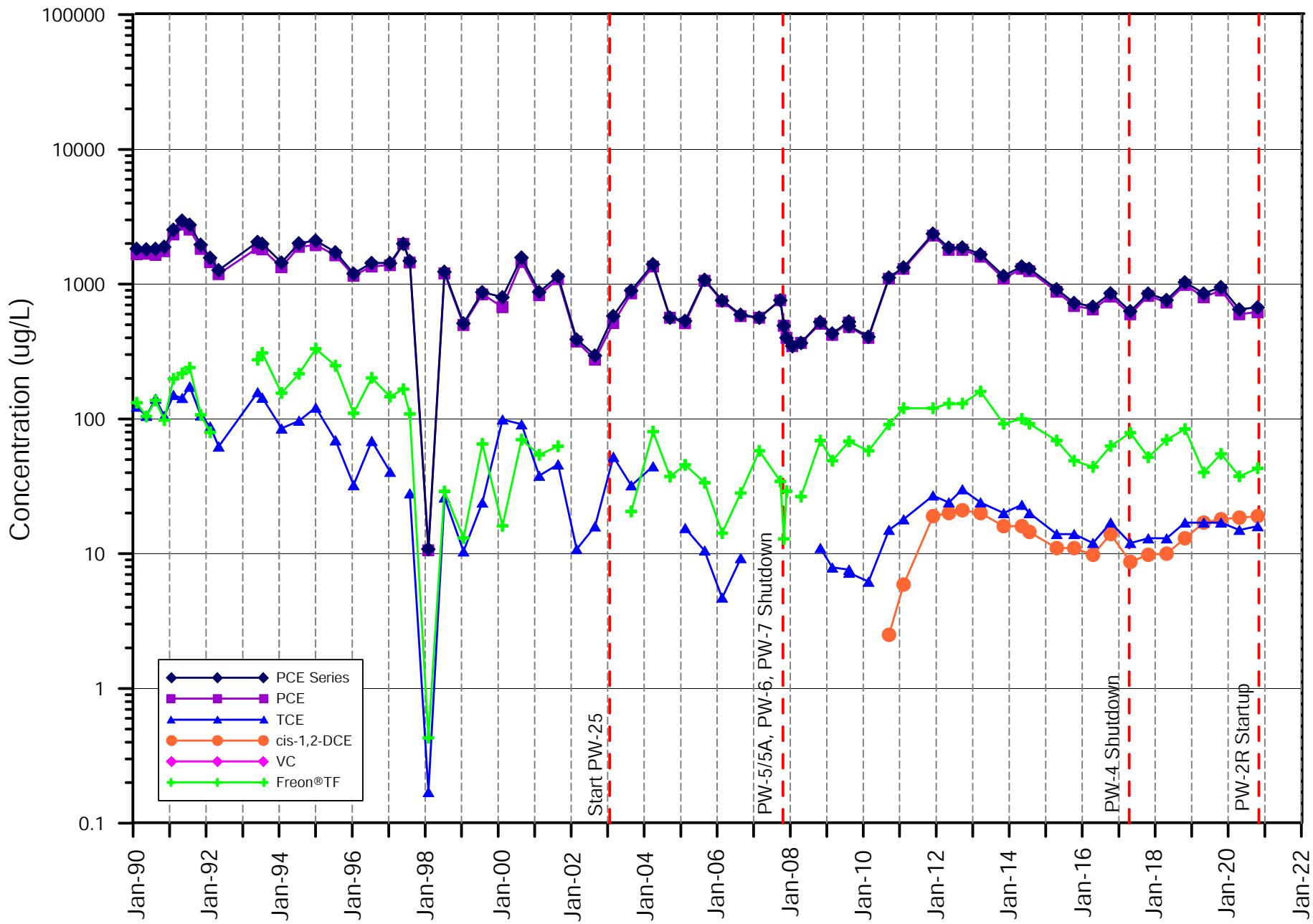
**Figure 5-1**  
Taken from IBM  
Annual Report

## Former IBM East Fishkill Facility GW-714 (Soil)



**Figure 5-8**  
Taken from IBM  
Annual Report

**Former IBM East Fishkill Facility  
GW-716 (Bedrock)**



**Figure 5-9**  
Taken from IBM  
Annual Report

**ATTACHMENT A**

**ROUTE 52 CORRIDOR BOUNDARY MODIFICATION FIELD INVESTIGATION  
WORK PLAN**

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau D  
625 Broadway, 12th Floor, Albany, NY 12233-7013  
P: (518) 402-9676 | F: (518) 402-9773  
[www.dec.ny.gov](http://www.dec.ny.gov)

May 4, 2021

Joseph Cotter  
iPark 84  
200 North Drive  
Hopewell Junction, NY 12533

Re: iPark 84  
Former IBM East Fishkill Facility  
Route 52 Corridor Boundary Modification  
Field Investigation Work Plan

Dear Mr. Cotter:

The Department of Environmental Conservation and the Department of Health (Departments) have reviewed the revised Route 52 Corridor Boundary Modification Field Investigation Work Plan submitted on April 20, 2021 by Walden Environmental Engineering on behalf of iPark. The work plan was revised based on the Departments' letter dated March 11, 2021 commenting on the Lot 8 Boundary Modification Field Investigation Work Plan and comments on the Route 52 Corridor original proposed sampling locations figure. The Route 52 Corridor area is the northern portion of the property and includes Lot 2 and Lot 3. The goal of this work plan is to characterize the existing soil conditions to support a planned petition for a boundary modification. It is anticipated that an environmental easement will be placed on this portion of the property and that the use will be restricted to Commercial or Industrial Use depending on the soil results.

The Departments request the SB-16 location to be moved to the west. A figure is attached to indicate the preferred location of SB-16.

The sampling workplan to support a boundary modification of the Route 52 Corridor area is conditionally approved. Please provide the Departments a final electronic version of the workplan with the revised drawing and continue to keep the Departments notified of scheduled work. If you have any questions, please contact me at (518) 402-9821 or [jess.laclair@dec.ny.gov](mailto:jess.laclair@dec.ny.gov).

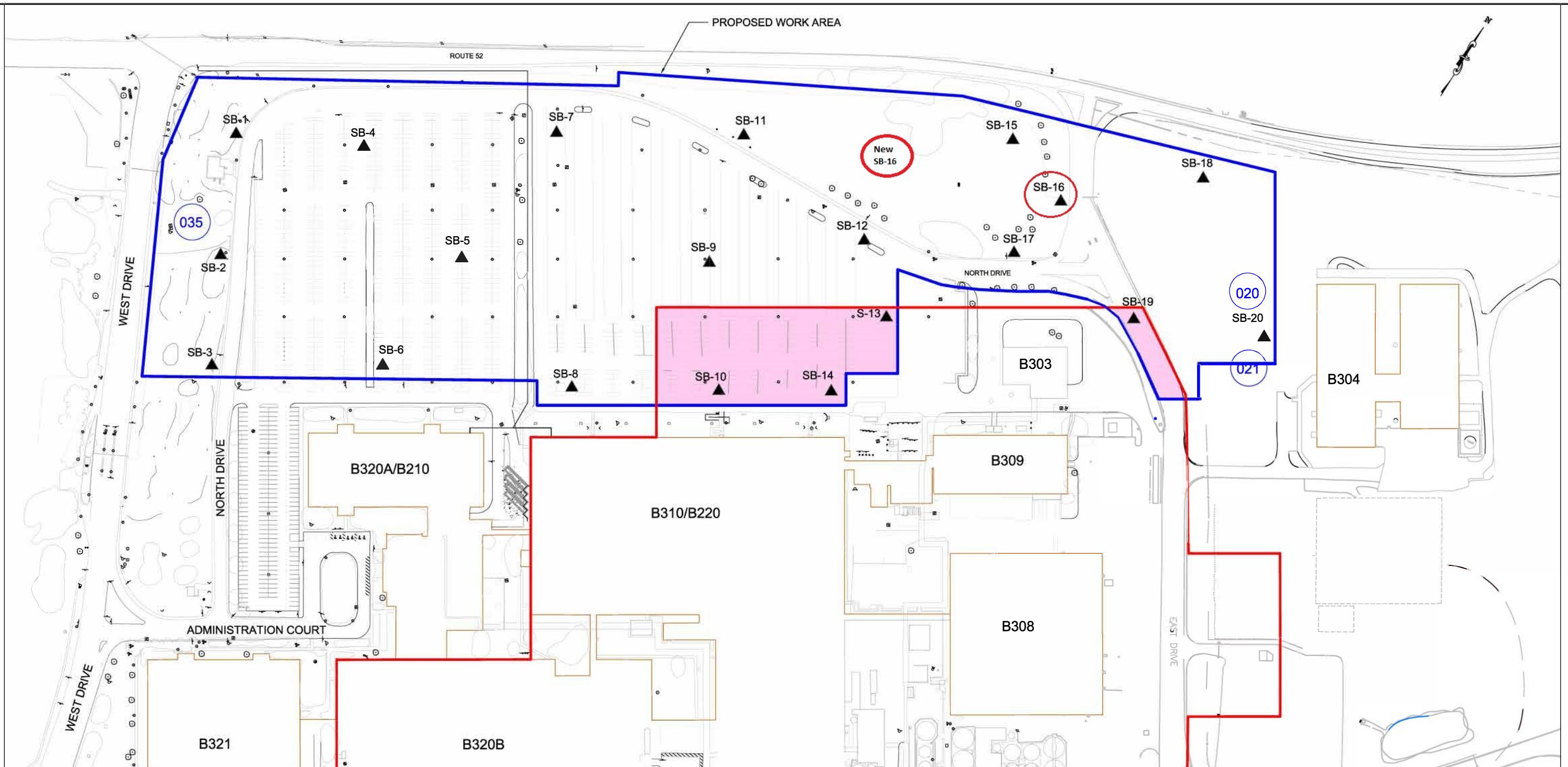
Sincerely,



Jess LaClair  
Project Manager

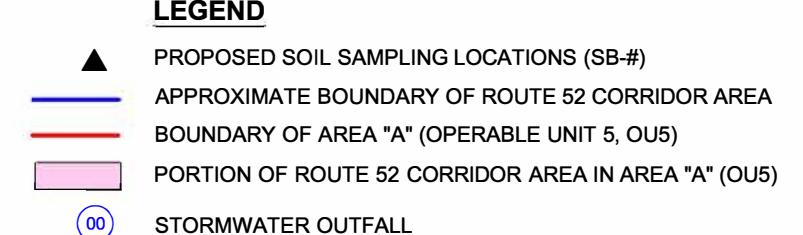
Attachment

ec: C. Monheit, iPark  
D. Vitija, iPark  
D. Pennesi, NR  
L. Ward, NR  
D. Chartrand, GS  
L. Daubert, IBM  
G. Marone, GF  
E. Lutz, GF  
S. Edwards, DEC  
J. Armitage, DEC  
J. Stenerson, DEC  
L. Winterberger, DEC  
J. Kenney, DOH  
M. Schuck, DOH  
N. Brew, Walden



## **ROUTE 52 CORRIDOR AREA PROPOSED SAMPLING LOCATIONS**

**SCALE: 1" =200'-0"**



A horizontal scale bar with tick marks at 0, 100, 200, 400, and 600. The text "SCALE: 1\" data-bbox="350 850 550 880" data-label="Text"="200' is centered below the scale bar.

W

WALDEN ENVIRONMENTAL ENGINEERING, PLLC  
16 SPRING STREET  
OYSTER BAY, NEW YORK 11771  
P: (516) 624-7200 F: (516) 624-3211

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REVISION			FOR:	DRAWING TITLE:	DRAWING NO.:	ISSUED
No.	Date	Comments				
0	4/13/21	Route 52 Sampling Plan	ROUTE 52 CORRIDOR AREA iPARK CAMPUS 2070 ROUTE 52 HOPEWELL JUNCTION, NEW YORK	PROPOSED SAMPLING PLAN ROUTE 52 CORRIDOR SAMPLING PLAN	2	4/13/21
						REVISION NO:
AL			DESIGNED BY:NB/BET DRAWN BY: BET CHECKED BY: NB	JOB NO: iPark118.48 DATE: 4/20/21 11x17		0
			APPROVED BY: NB SCALE: AS NOTED	CAD FILE NAME: zwpark118Park118.48 - Rte 52 Corridor Boundary Modification Sampling Plan.dwg (A) Route 52 Corridor Boundary Modification (4-20-21).dwg		



Sent via email to jess.laclair@dec.ny.gov

April 20, 2021

iPARK0118.48

Jessica LaClair  
Environmental Engineer  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-7013

Re: iPark 84  
Former IBM East Fishkill Facility  
Route 52 Corridor Boundary Modification  
Field Investigation Work Plan

Dear Ms. LaClair:

Walden Environmental Engineering, PLLC (Walden) has revised the *Route 52 Corridor Boundary Modification Field Investigation Work Plan* (November 2020) on behalf of iPark East Fishkill, LLC (iPark), the owner of the iPark 84 Facility (former IBM East Fishkill Facility, the “Facility”) located in Hopewell Junction, New York. The revised *Route 52 Work Plan* is attached for the State’s review and approval. While NYSDEC has not issued specific comments on the content of the *Route 52 Work Plan*, it did issue a March 11, 2021 letter commenting on the *Lot 8 Boundary Modification Field Investigation Work Plan*. Given the similarities between the sampling procedures presented in both Plans, the *Route 52 Work Plan* has been updated based on the Lot 8 comments as applicable.

The revised *Route 52 Work Plan* presents text in bold italics to show the updates made in accordance with the State’s comments for Lot 8 (March 11, 2021 letter included as Attachment A of the revised plan) which are referenced herein. Figure 2 of the Route 52 Work Plan has been updated to reflect the expanded boundaries of the Route 52 corridor area and the comments provided by NYSDEC on the originally proposed sampling locations figure. In addition, the proposed Route 52 sampling locations have been revised based on Comment #3 and the legend on Figure 2 has been clarified based on Comment #12.

The State’s Comment #6 calls for 20% of the soil boring locations to be sampled in intervals of 0-2 inches, 2-12 inches and 1-2 feet below grade and remainder of the core on two-foot intervals.

Ms. Jessica LaClair

Route 52 Corridor Field Investigation Work Plan - 2 -

April 20, 2021



Sampling each soil core at 0-1 ft bg, 1-2 ft bg, and two-foot intervals from 2 ft bg to the bottom of the core as proposed in the revised *Route 52 Work Plan* is sufficient to characterize existing soil conditions throughout the Route 52 corridor area.

The State's Comment #7 calls for soil samples from 3 sampling depths to be submitted for laboratory analysis. The revised *Route 52 Work Plan* proposes the following soil sample analysis:

1. Soil sample from 0-1 ft bg interval: SVOCs (including the full list of PFAS and 1,4-dioxane), target analyte list (TAL) metals, pesticides, herbicides and PCBs
2. Soil sample from 1-2 ft bg interval: VOCs only
3. Soil sample from the two (2)-foot soil depth interval (from 2 ft bg to the bottom of the core) exhibiting the greatest evidence of contamination (odors/staining) and/or the highest PID reading, or if there is no evidence of contamination, the sample from the deepest unsaturated 2-foot soil interval will be collected: VOCs, SVOCs (including PFAS and 1,4-dioxane), TAL metals, pesticides, herbicides and PCBs

If you have any questions or require any additional information, please call (516) 624-7200.

Very truly yours,

Walden Environmental Engineering, PLLC

A handwritten signature in black ink that reads "Nora M. Brew".

Nora M. Brew, P.E.

VP/Senior Project Manager

cc: J. Kenney, NYSDOH  
C. Monheit, iPark East Fishkill, LLC  
D. Vitija, iPark East Fishkill, LLC

Z:\iPark0118\iPark0118.48 - Rte 52 Corridor Boundary Modification Sampling Plan\NYSDEC Comments and Revisions Route 52\Letter re Route 52 Work Plan Revisions 4.20.2021.doc

**ROUTE 52 CORRIDOR AREA  
BOUNDARY MODIFICATION  
FIELD INVESTIGATION WORK PLAN**

**AT**

**IPARK 84  
FORMER IBM EAST FISHKILL FACILITY**

**NOVEMBER 2020 (REVISED APRIL 2021)**

**PREPARED FOR:**

**JESSICA LACLAIR  
NEW YORK STATE DEPT. OF ENVIRONMENTAL CONSERVATION  
DEPT. OF ENVIRONMENTAL REMEDIATION  
625 BROADWAY  
ALBANY, NEW YORK 12233-7013**

**WALDEN ENVIRONMENTAL ENGINEERING, PLLC  
Industry Leader in Environmental Engineering Consulting**

————— PROACTIVE SOLUTIONS SINCE 1995 ———



Sent via email to jess.laclair@dec.ny.gov

November 20, 2020 (*revised April 20, 2021*)

iPARK0118.48

Jessica LaClair  
Environmental Engineer  
Division of Environmental Remediation  
New York State Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-7013

Re: iPark 84  
Former IBM East Fishkill Facility  
Route 52 Corridor Boundary Modification  
Field Investigation Work Plan

Dear Ms. LaClair:

Walden Environmental Engineering, PLLC (Walden) is submitting this *Field Investigation Work Plan* (herein referred to as *Work Plan*) on behalf of iPark East Fishkill, LLC (iPark), the owner of property along the Route 52 corridor at the iPark 84 Facility (former IBM East Fishkill Facility, the “Facility”) located in Hopewell Junction, New York. The Facility is being remediated in accordance with the site’s 6 NYCRR Part 373 Permit, EPA ID NYD000707901 (“RCRA Permit”). The Interim Site Management Plan (ISMP, December 2015) sets forth the procedures that govern the operation/implementation of remedial engineering and institutional controls and manage future redevelopment activities at the Facility.

*While NYSDEC has not issued specific comments on the content of the Route 52 Work Plan, it did issue a March 11, 2021 letter commenting on the Lot 8 Boundary Modification Field Investigation Work Plan. (A copy of the March 11, 2021 NYSDEC letter is presented in Appendix A.) Given the similarities between the sampling procedures presented in both Plans, the Route 52 Work Plan has been updated based on the Lot 8 comments as applicable. Revisions to the Route 52 Work Plan are indicated in bold italics. In addition, Figure 2 of the Route 52 Work Plan has been updated to reflect the expanded boundaries of the Route 52 corridor area and NYSDEC’s comments (also included in Attachment A) on the originally proposed sampling locations figure.*



This *Work Plan* has been prepared to detail the sampling proposed to collect data to characterize existing soil conditions in the Route 52 corridor area in support of iPark's planned petition for a boundary modification that would be reflected in subsequent modifications to the RCRA Permit and the Site Management Plan for the iPark 84 Facility. Please note that this *Work Plan* supersedes the *Site Investigation Work Plan – Route 52 Corridor* (GZA, April 18, 2019) previously submitted to the State.

The site location map showing the Route 52 corridor area along the northern property line of the Facility is presented as **Figure 1**. iPark may also petition for boundary modifications for Lot 6 and/or Lot 8 at the Facility; field investigation work plans for these areas will be submitted to the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) under separate cover.

Note that IBM has been implementing a comprehensive groundwater monitoring program at the Facility since 1988, and regularly reports the data to the NYSDEC in accordance with the RCRA permit requirements. IBM's long-term water quality monitoring program consists of routine sampling from the extensive monitoring well network at the Facility. The most recent groundwater monitoring data will be requested from IBM for the monitoring wells located in and around the Route 52 corridor area. This data will be evaluated to characterize groundwater conditions in this area. If the groundwater data evaluation indicates that additional groundwater monitoring is needed to supplement the data, limited groundwater sampling will be proposed.

The sampling proposed in this *Work Plan* is the first step in petitioning for a boundary modification; please note that iPark may also include Lot 6 and/or Lot 8 in the boundary modification petition. Once the State approves this *Work Plan*, the field sampling for the Route 52 corridor area will be completed and the results will be summarized and submitted to NYSDEC and NYSDOH. iPark understands that NYSDEC and NYSDOH may request additional sampling based on the findings of the sampling proposed in this *Work Plan* and the evaluation of IBM's groundwater monitoring data. After the State determines the sampling results are sufficient to characterize environmental conditions in the proposed boundary modification areas, NYSDEC will begin the remaining steps in the process, which include public notice of the proposed boundary modification, modification to the RCRA permit, issuing an environmental easement, and submitting a change of use notification. When formally approved by NYSDEC, the boundary modification would define the areas of the site (Route 52 corridor, Lot 6 and/or Lot 8) that would be separated from the rest of the Facility, thereby removing the constraints imposed by RCRA permit and the deed restrictions that currently apply to these areas.



***As noted in the March 11, 2021 NYSDEC letter, it is understood that areas outside the permitted facility boundary, as modified, would not be subject to Part 373 permit conditions and the boundary modification would not affect the deed restriction. NYSDEC and NYSDOH will require (i) an Environmental Easement to ensure certain controls on the Route 52 corridor area, including commercial or industrial use, (ii) an excavation work plan, and (iii) a passive vapor system for any new construction that includes follow up indoor air sampling to determine if additional actions are necessary.***

This Work Plan outlines the soil sampling to be conducted in general accordance with the NYSDEC Division of Environmental Resources “*Technical Guidance for Site Investigation and Remediation*” (DER-10). The soil characterization results will be presented in a summary report along with an analysis of long-term groundwater monitoring data to support the boundary modification petition.

### **Route 52 Corridor History**

The former IBM Fishkill Facility encompasses approximately 464 acres; the limits of the Facility are Roethal Drive to the south, Route 52 to the north, John Jay Senior High School and wooded areas to the east, and Lime Kiln Road and wooded areas to the west. **Figure 1** illustrates the layout of the site. The ***approximate boundaries of the Route 52 corridor area are shown on Figure 2***; this area is located south of Route 52 and north of buildings ***B320A/B210, B310/B220 and B303***, is bounded by West Drive on the western *side* and extends approximately 250 feet beyond East Drive on the eastern side.

***As shown on Figure 2, most of the Route 52 corridor area is located in the Perimeter Area of the Facility while two (2) smaller areas to the north of B310/B220 and along East Drive are located in Area A (Operable Unit 5, OU5) as defined in the ISMP.*** The Perimeter Area consists of the portions of the site that are primarily outside the central portion of the Facility and are not associated with manufacturing activities. ***Area A (OU5) is located in the vicinity of buildings B308, B309 and B310/B220 and IBM continues to operate groundwater extraction systems to remediate VOC plumes attributable to former solvent storage and distribution systems in this area. Site use and construction activities in Area A are subject to the restrictions set forth in IBM's June 17, 2015 Declaration of Restrictions, Easements and Covenants. The sampling proposed within Area A will be performed in accordance with the ISMP and Intrusive Activities Work Plan.***

Currently, the surface of the Route 52 corridor area is covered by asphalt pavement (parking lot and interior Facility access roads) and adjacent landscaped areas. ***Stormwater outfall locations are identified on Figure 2.*** The surface elevation in this area varies from approximately 260 to 270 feet, and the bedrock surface elevation varies from approximately 210 to 250 feet based on



ISMP Figure 1-7 (Bedrock Surface Elevation Contour Map) and boring/monitoring well logs presented in ISMP Appendix D (Groundwater Monitoring Plan). The depth to bedrock is approximately 10 to 60 feet below grade (bg), with the shallowest bedrock occurring in the northeastern portion of the Route 52 corridor area. ***There are no NYSDEC regulated wetlands in this area.***

A review of available historical records indicates that there was no development within the Route 52 corridor area. The *Site Investigation Work Plan – Route 52 Corridor* (GZA, April 18, 2019) identified a spill which occurred in December 2010 northwest of Building 303 involving a tanker truck containing 200 gallons of No. 2 fuel oil. According to the NYSDEC Spill Incidents Database, the spill (#1009937) was closed in August 2011. According to the ISMP, the initial Facility investigations in the late 1970s and early 1980s found PCE, TCE and cis-1,2-dichloroethene contamination in groundwater in the vicinity of buildings B308, B309 and B310/B220, located in Area A (OU5). The production well 2 (PW-2) bedrock groundwater remediation system and Building 316 carbon treatment system were installed and continue operating to capture and treat this groundwater. ***The solvent storage and distribution systems associated with the Area A (OU5) VOC contaminant plume are primarily located between building B310/B220 and buildings B308 and B309, outside the Route 52 corridor area shown on Figure 2.***

As mentioned above, groundwater sampling results from IBM's on-going site-wide monitoring program will be used to support the Route 52 corridor boundary modification petition.

### **Field Investigation**

iPark is considering developing the Route 52 corridor area for potential *reuse*. The ISMP describes the cover system at the site, which consists of a minimum of three (3) feet of surface soil that meets the Part 375 Soil Cleanup Objectives (SCOs) for industrial use, asphalt pavement, and concrete sidewalks and building slabs.

The scope of work proposed below details sampling to characterize the current subsurface soil conditions in the Route 52 corridor area to support the boundary modification petition. A maximum sampling depth of *fifteen (15) feet* is proposed to document the nature of soils that would remain in place beneath any structures or backfill placed during future construction in this area; the maximum depth of *any future* excavation is anticipated to be less than five (5) feet. Should future site development require excavation deeper than five (5) feet, additional soil sampling would be performed in step with construction if required by NYSDEC.



### **Soil Sampling**

Soil samples will be collected at twenty (20) locations (SB-1 through SB-20) throughout the Route 52 corridor area. ***The approximate soil boring locations are depicted in Figure 2 and*** were selected randomly to achieve representative coverage of the area. Certain locations were chosen based on available information which suggests the potential for contamination may exist (for example, several borings are concentrated in the buried tanks area noted on historic mapping). ***Borings are also located near stormwater outfalls within the Route 52 corridor area.***

Soil sampling will be conducted in general accordance with the NYSDEC Division of Environmental Resources (DER) Technical Guidance for Site Investigation and Remediation (DER-10), ***NYSDEC's Sampling, Analysis and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (January 2021)***; Appendix C [Intrusive Activities Work Plan (IAWP)] of the ISMP, and 29 CFR 1910.120. Note that the sampling locations will be modified in the field, as needed, to avoid interference with underground utilities and structures which will be marked out prior to the investigation. All sampling locations will be cleared by ground-penetrating radar before drilling commences. Should grossly contaminated media be encountered during the investigation, all work activities will be suspended and the NYSDEC will be notified.

Soil samples will be collected utilizing a direct-push (e.g., Geoprobe®) drill rig with five (5)-foot long Macro-Cores® or similar, beginning at grade and continuing to a maximum depth of ***fifteen (15) feet*** below grade (bg). Groundwater is not anticipated to be encountered during drilling. If bedrock is encountered at any of the proposed locations at depths shallower than ***15*** feet bg, drilling will cease and the soil core will be retrieved from this depth. Should any core not contain enough material for sufficient screening, a second core shall be collected immediately adjacent to the first. If refusal occurs at depths shallower than five (5) feet bg due to bedrock in the unsaturated zone, the subsurface material in that location will be noted and the Geoprobe® will be moved to attempt successful soil coring at a nearby location.

Each soil core will be visually inspected and field screened for the presence of organic vapors within the ***0-15 ft bg*** core depth using a photoionization detector (PID) that has been properly calibrated according to manufacturer's instructions each day prior to sampling. ***The soil cores will be visually observed and screened using a PID at the following depth intervals: 0-1 ft bg, 1-2 ft bg, and two-foot intervals from 2 ft bg to the bottom of the core. For cores in paved areas, the sampling depths will be measured from the bottom of the pavement layer.*** All observations and screening readings will be

logged in the field book by field personnel. Excess soils removed from each sampling location shall be placed back into the respective holes before moving on to the next sampling location. *If gross contamination is observed in any samples as indicated by the presence of non-aqueous phase liquids or PID screening concentrations greater than 50 ppm calibration gas equivalents, the soils from that boring will be segregated (drummed or stockpiled on plastic) for appropriate disposal based on the sampling results and NYSDEC/NYSDOH will be notified.*

A total of **three (3)** soil samples will be collected for laboratory analysis from each of the 20 proposed sampling locations *as follows:*

- “A” *Sample from the 0-1 ft bg interval*
  - *To be analyzed for semi-volatile organic compounds (SVOCs) [including the full list of Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-dioxane], target analyte list (TAL) metals, pesticides, herbicides and polychlorinated biphenyls (PCBs)*
- “B” *Sample from the 1-2 ft bg interval*
  - *To be analyzed for volatile organic compounds (VOCs) only*
- “C” *Sample from the two (2)-foot soil depth interval (from 2 ft bg to the bottom of the core) exhibiting the greatest visual or olfactory evidence of contamination (odors/staining) and/or the highest PID reading. If screening and observations show no evidence of contamination from within interval from 2 ft bg to the bottom of the core, the sample from the deepest unsaturated 2-foot soil interval will be collected.*
  - *To be analyzed for VOCs, SVOCs (including PFAS and 1,4-dioxane), TAL metals, pesticides, herbicides and PCBs*

Discrete samples from each boring will be collected for VOC analysis from the “B” and “C” intervals described above. Composite samples will be collected from the “A” and “C” intervals for laboratory analysis of **SVOCs (including PFAS and 1,4-dioxane), TAL metals, pesticides, herbicides and PCBs**. A total of **60 soil samples** will be secured for laboratory analysis **and 40 soil samples will be analyzed for each parameter.**

Note that the scope of the sampling may be modified in the field as needed to collect additional site characterization information based on observations and conditions encountered during the investigation. Field adjustments may include installing additional soil cores or extending coring depths, depending on site conditions. All modifications to the sampling scope will be documented in the field book. Any additional samples shall be screened, logged and handled in the same manner as the other soil samples, as described herein.



Field personnel will don the appropriate health and safety equipment, as outlined in the Health and Safety Plan (HASP) prepared for the Route 52 Corridor sampling activities, provided as **Attachment B**.

The sampling and recordkeeping procedures are detailed in the attached Quality Assurance Project Plan (QAPP) for the Route 52 corridor field investigation presented in **Attachment C**. A project logbook/field notebook will be maintained to record all field activities and observations during the sampling, and soil boring logs will be prepared as described in the QAPP.

The Community Air Monitoring Plan (CAMP) presented in **Attachment D** will be implemented during all ground intrusive activities as part of the Route 52 corridor investigation. The CAMP reports will be submitted to NYSDEC and NYSDOH weekly during the investigation. ***NYSDEC and NYSDOH will be notified of any exceedances that stop work prior to the weekly report.***

Sample bottles, provided by the laboratory and appropriate for the analysis being performed (VOCs, semi-volatile organic compounds [SVOCs], metals, pesticides, herbicides and polychlorinated biphenyls [PCBs]), will be labeled in the field, placed into a sampling cooler and kept on ice for subsequent delivery to the laboratory. Each of the samples shall be sent under chain-of-custody protocol to a laboratory certified by the New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) for analysis. Field duplicates will be collected at a rate of five percent (5%) (one field duplicate for every 20 samples) and one (1) equipment blank will be collected per day throughout the soil sampling event.

#### **Decontamination Procedures**

Non-disposable sampling equipment will be decontaminated between sampling intervals and locations using the following procedures:

- Remove any large debris, such as clumps of soil, from the equipment by hand;
- Wash and scrub the equipment with a detergent solution, such as Alconox or equivalent, and potable water; and
- Rinse the equipment with potable water.

#### **Waste Handling**

Disposable sampling supplies will be bagged/containerized and properly disposed of as solid waste. Decontamination fluids will be containerized and discharged to the on-site industrial waste drainage system.



## **Laboratory Analysis**

Information on the soil samples laboratory analysis and data quality review is presented below.

### **Soil Samples**

Soil samples will be sent under chain-of-custody protocol and on ice via overnight courier or hand delivery to Phoenix Environmental Laboratories, Inc., an ELAP certified laboratory (NYSDOH ELAP #11301) located in Manchester, CT. All analyses will be conducted on a standard turn-around time basis unless iPark calls for expedited analysis. The laboratory results will be provided with NYSDEC Analytical Services Protocol (ASP) Category B deliverable packages.

All soil samples will be analyzed for New York Code of Rules and Regulations (NYCRR) Part 375-6.8 VOCs, SVOCs, pesticides, herbicides, PCBs and TAL metals, via USEPA Methods 8260, 8270, 8081B, 8151A, 8082A and 6010, respectively. ***In addition, the soil samples will be analyzed for the full list of PFAS and 1,4-dioxane in accordance with NYSDEC's Sampling, Analysis and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (January 2021). Note that the PFAS analysis will be performed by an outside laboratory (with the required PFAS certification) contracted by Phoenix Laboratories.***

### **Data Review**

The data will be reviewed in order to define and document analytical data quality in accordance with NYSDEC requirements that project data must be of known and acceptable quality and as discussed in the QAPP, provided as **Attachment C**. The laboratory data reports will be evaluated and a Data Usability Summary Report (DUSR) will be prepared in accordance with the NYSDEC DER-10 Appendix 2B Guidance for the Development of Data Usability Summary Reports.

### **Reporting**

Upon completion of the Route 52 corridor soil characterization activities and acceptance of final analytical results, a report of findings will be prepared to document all of the fieldwork described herein, including tables of analytical results, field logs, figures and recommendations. The laboratory analytical data for the soil samples will be compared to the NYCRR Part 375-6.8(b) restricted use Soil Cleanup Objectives (SCOs) for various categories ranging from unrestricted residential to industrial use. In addition, the summary report will discuss the IBM groundwater data for the monitoring wells located in and around the Route 52 corridor area to characterize groundwater conditions in this area ***and evaluate groundwater trends over the last five (5) years for the monitoring wells located in the Route 52 corridor area. iPark understands that***



***additional groundwater monitoring wells may be needed to determine the extent of contamination for a specific location and to provide additional data where a data gap may currently exist.***

***The analytical results from the Route 52 area sampling will be submitted to NYSDEC in the Electronic Data deliverable (EDD) format pursuant to 6 NYCRR 375-1.11(a).***

If you have any questions or require any additional information, please call (516) 624-7200.

Very truly yours,

Walden Environmental Engineering, PLLC

A handwritten signature in black ink that reads "Nora M. Brew".

Nora M. Brew, P.E.

VP/Senior Project Manager

cc:     J. Kenney, NYSDOH  
          C. Monheit, iPark East Fishkill, LLC  
          D. Vitija, iPark East Fishkill, LLC

Figure 1 – Site Plan

Figure 2 – Route 52 Corridor Area Proposed Sampling Locations

***Attachment A – NYSDEC's March 11, 2021 Comment Letter on Lot 8 Boundary Modification Field Investigation Work Plan and Comments on Route 52 Sampling Locations Figure***

***Attachment B – Health and Safety Plan***

***Attachment C – Quality Assurance Project Plan***

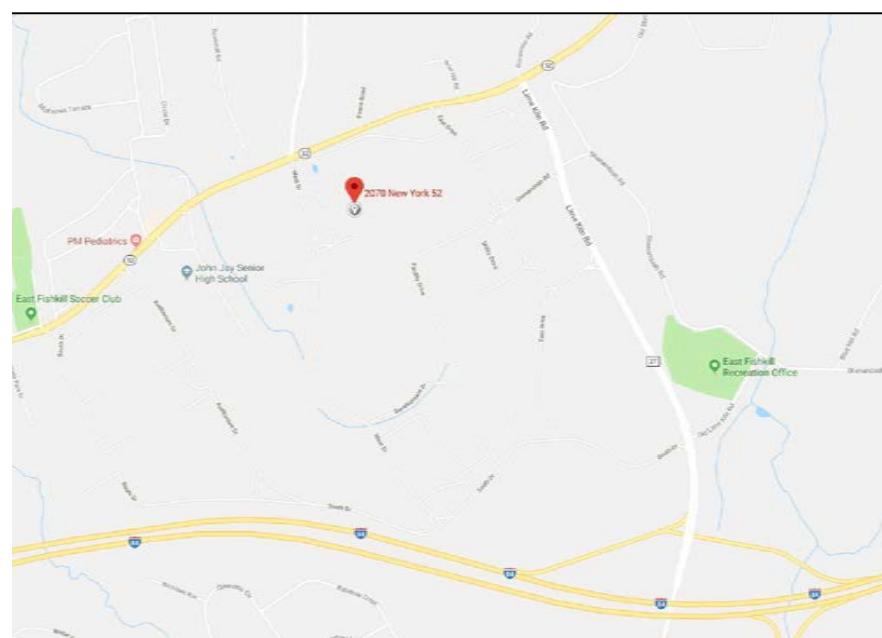
***Attachment D – Community Air Monitoring Plan***

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## **PROPERTY MAP**

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## **LOCATION MAP**

A horizontal scale bar with tick marks at 0, 500, 1000, 2000, and 3000. The text "SCALE: 1\" data-bbox="298 815 483 835" is centered below the bar.

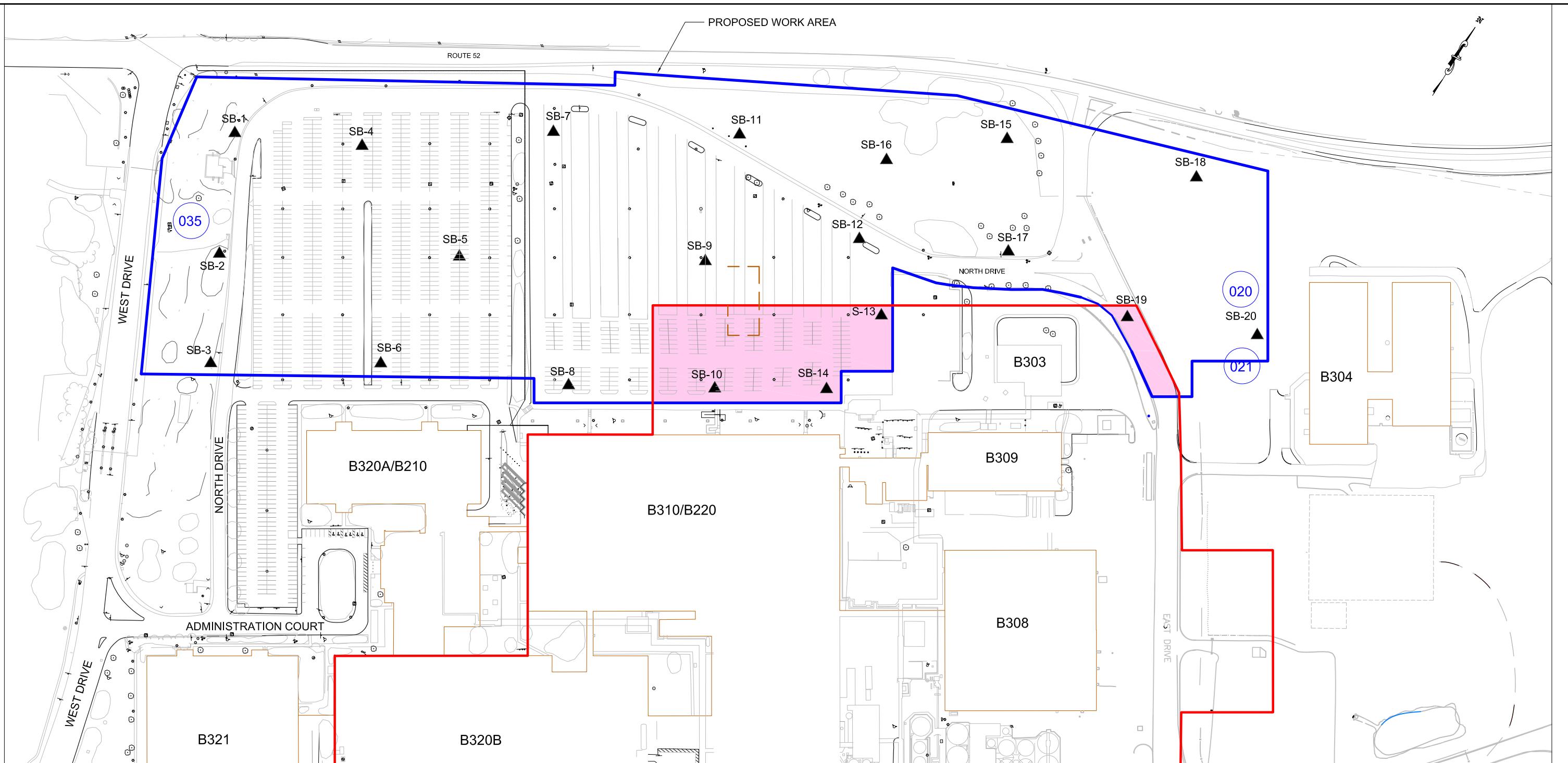
SITE PLAN  
SCALE: 1" = 1000'-0"

1

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REVISION			FOR:	DRAWING TITLE:	DRAWING NO:	ISSUED		
No.	Date	Comments						
			ROUTE 52 CORRIDOR iPARK CAMPUS 2070 ROUTE 52 HOPEWELL JUNCTION, NEW YORK	<u>SITE PLAN</u> ROUTE 52 CORRIDOR SAMPLING PLAN	1	REVISION NO: 0		
AL								
			DESIGNED BY:NB/BET	DRAWN BY: BET	CHECKED BY: EJK	JOB NO: iPark118.48	DATE: 8/26/20	11x17
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### ROUTE 52 CORRIDOR AREA PROPOSED SAMPLING LOCATIONS

SCALE: 1" =200'-0"

#### LEGEND

- ▲ PROPOSED SOIL SAMPLING LOCATIONS (SB-#)
- APPROXIMATE BOUNDARY OF ROUTE 52 CORRIDOR AREA
- BOUNDARY OF AREA "A" (OPERABLE UNIT 5, OU5)
- PORTION OF ROUTE 52 CORRIDOR AREA IN AREA "A" (OU5)
- STORMWATER OUTFALL

**ATTACHMENT A**  
***NYSDEC's March 11, 2021 Comment Letter on  
Lot 8 Boundary Modification Field Investigation Work Plan  
and Comments on Route 52 Corridor Area Sampling Locations Figure***

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau D  
625 Broadway, 12th Floor, Albany, NY 12233-7013  
P: (518) 402-9676 | F: (518) 402-9773  
[www.dec.ny.gov](http://www.dec.ny.gov)

March 11, 2021

Joseph Cotter

Re: iPark Lot 8 Boundary Modification  
Field Investigation Work Plan  
Former IBM East Fishkill Facility  
EPA ID No. NYD000707901, NYSDEC Site No. 314054

Dear Mr. Cotter:

The Department of Environmental Conservation (DEC) and the Department of Health (DOH) (collectively, Departments) have reviewed the Lot 8 Boundary Modification Field Investigation Work Plan (Work Plan) dated November 20, 2020 by Walden Environmental Engineering on behalf of iPark East Fishkill. The Work Plan describes the sampling proposed to collect data to characterize existing soil conditions in Lot 8 to support iPark's planned petition for a boundary modification. Based on the Work Plan, iPark is considering developing Lot 8 for potential commercial use. The Departments have the following comments:

1. Page 2, 2<sup>nd</sup> paragraph, last sentence – States “when formally approved by NYSDEC, the boundary modification would define the areas of the site that would be separated from the rest of the Facility, thereby removing the constraints imposed by RCRA permit and the deed restriction that currently apply to these areas.”
  - a. The DEC would like to clarify that areas outside the permitted facility boundary, as modified, would not be subject to Part 373 permit conditions. Additionally, the boundary modification would not affect the deed restriction.
  - b. The Departments will require (i) an Environmental Easement to ensure certain controls on Lot 8, including commercial or industrial use, (ii) an excavation work plan, and (iii) a passive vapor system for any new construction that includes follow up indoor air sampling to determine if additional actions are necessary.
2. Field Investigations, 2<sup>nd</sup> paragraph – The maximum sampling depth must be fifteen (15) feet where possible.
3. Field Investigation, Soil Sampling – Provide clarification on how the sample locations were selected. The text of the Work Plan states locations were selected at random and to avoid the wetland area and steep slopes. However, based on Drawing 2 of the Work Plan, it appears there are proposed locations within the wetland. The language of the Work Plan therefore contradicts Drawing 2, and written clarification is requested.
  - a. The Departments request that if the location of proposed construction is known, that the density of locations be increased within the proposed building footprint(s).
  - b. The Departments request sediment samples of the wetland.
  - c. The Departments have attached a figure indicating additional locations. If these locations cannot be added to the Work Plan, please provide the written justification.

4. Field Investigation, Soil Sampling, 4<sup>th</sup> paragraph – If gross contamination (Non-Aqueous Phase Liquid, elevated PID readings) is observed, the soils should be drummed for appropriate disposal and the Departments notified as soon as possible.
5. Field Investigation, Soil Sampling, 5<sup>th</sup> paragraph – The Departments request locations be sampled in intervals of 0-1 ft bgs; 1-2 ft bgs; and the remaining core on two-foot intervals.
6. Field Investigation, Soil Sampling, 5<sup>th</sup> paragraph – The Departments request twenty (20) percent of the locations be sampled in intervals of 0-2 inches and 2-12 inches bgs; 1-2 ft bgs; and the remaining core on two-foot intervals.
7. Field Investigation, Soil Sampling, 5<sup>th</sup> paragraph – The Departments request laboratory analysis from each of the sampling locations at 0-1 ft; 1-2 ft; and (A) one from the 2-foot soil depth interval exhibiting the greatest visual or olfactory evidence of contamination (odors/staining) and/or (B) the highest PID reading. If screening and observations show no evidence of contamination from within the 2-15 ft bgs interval, a sample from the deepest unsaturated soil interval must be collected.
8. Field Investigation, Soil Sampling, Community Air Monitoring Plan (CAMP) – The Departments must be notified of any exceedances that stop work prior to the weekly report
9. Laboratory Analysis, Soil Samples – Soil samples must be analyzed for the full list of Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-dioxane must also be conducting for composite samples. (Sampling procedures are attached.)
10. Reporting – Analytical results from Lot 8 must be submitted to the Department in the Electronic Data deliverable (EDD) format pursuant to 6 NYCRR 375-1.11(a).
  - a. Information on the format of data submissions can be found at <http://www.dec.ny.gov/chemical/62440.html>
11. Reporting – Please provide groundwater trends for the last five years for the monitoring wells on Lot 8. Please note that additional groundwater monitoring wells may be needed to determine the extent of contamination for a specific location and to provide additional data where a data gap may currently exist.
12. Drawing 2 – Include a key for the blue line, red line, and light blue hatched area. Also include a description of what is meant by “ground obscured”.

Please revise and resubmit the Work Plan for the Departments' review. If you have any questions, please contact me at (518) 402-9821.

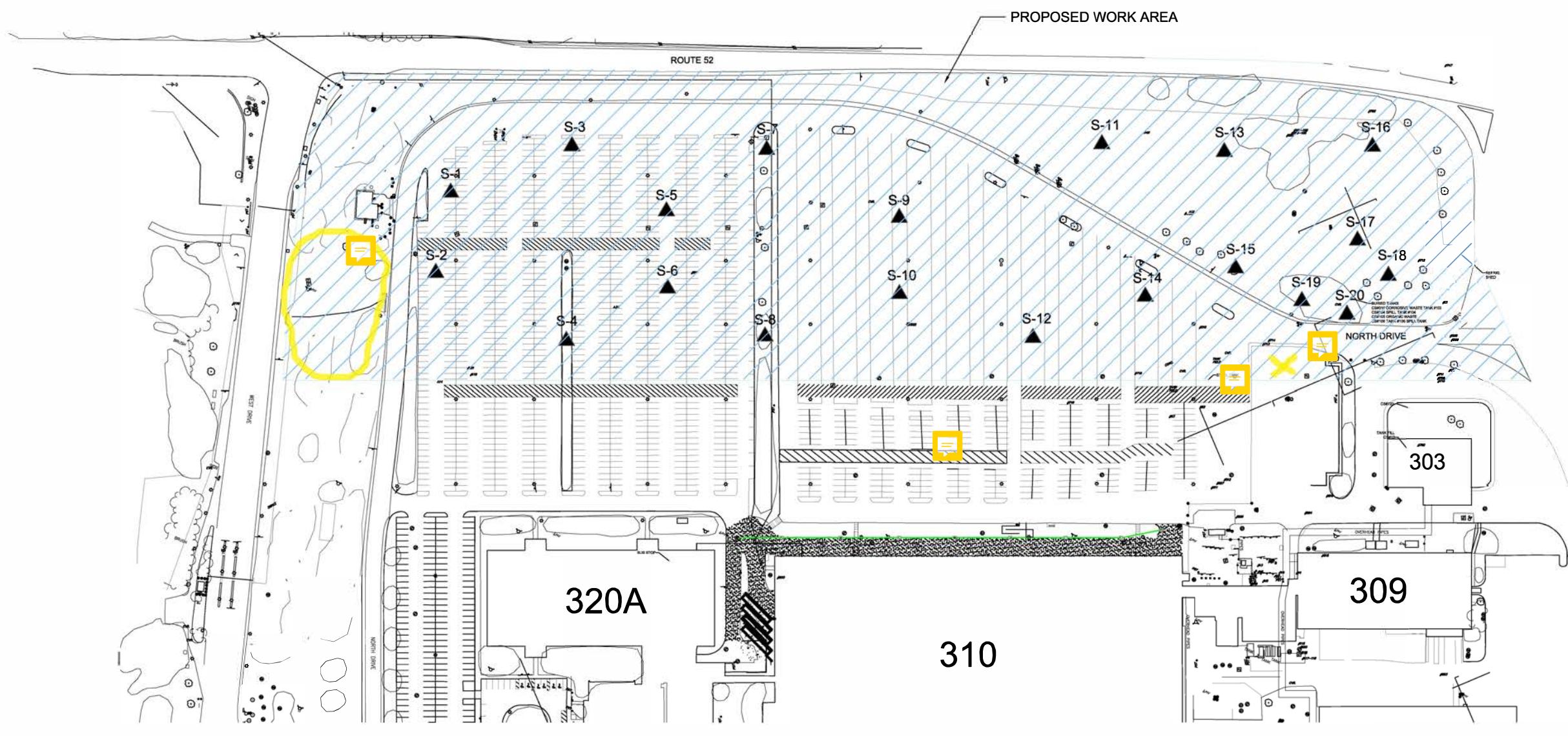
Sincerely,



Jess LaClair  
Project Manager

Attachment

ec: C. Monheit, iPark  
D. Pennessi, NR  
L. Ward, NR  
G. Marone, GF  
E. Lutz, GF  
D. Chartrand, IBM  
S. Edwards, DEC  
J. Armitage, DEC  
J. Stenerson, DEC  
L. Winterberger, DEC  
J. Kenney, DOH  
M. Schuck, DOH  
N. Brew, Walden



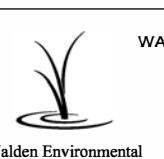
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### ROUTE 52 CORRIDOR PROPOSED SAMPLING LOCATIONS

SCALE: 1" = 200'-0"

#### LEGEND

- PROPOSED SAMPLING LOCATIONS
- SAMPLING WORK AREA



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		REVISION	
No.	DATE	COMMENTS	

FOR: ROUTE 52 CORRIDOR  
IPARK CAMPUS  
2070 ROUTE 52  
HOPEWELL JUNCTION, NEW YORK

DRAWING TITLE:  
PROPOSED SAMPLING PLAN  
ROUTE 52 CORRIDOR SAMPLING PLAN

DRAWING NO: 2  
ISSUED  
REVISION NO: 0

DESIGNED BY: NB DRAWN BY: BET CHECKED BY: EJK JOB NO: iPark118.48 DATE: 11/20/20 11x17  
APPROVED BY: NB SCALE: AS NOTED CAD FILE NAME: Z:\Park01\ipark0118.dwg - Re-Border Boundary Plan Sampling Plan 11x17 Modification (11-20-20).dwg

**ATTACHMENT B**  
HEALTH AND SAFETY PLAN

**ATTACHMENT C**  
QUALITY ASSURANCE PROJECT PLAN

**ATTACHMENT D**  
COMMUNITY AIR MONITORING PLAN