



**Department of
Environmental
Conservation**

KATHY HOCHUL
Governor

AMANDA LEFTON
Commissioner

November 10, 2025

Jane Forbes
Division of Environmental Quality
City Hall
30 Church Street, Room 300B
Rochester, New York 14614

Re: Soil Sampling and Analysis Work Plan
565 Culver Road
Portion of Vacuum Oil Refinery Site
Site No.: C828190
City of Rochester, Monroe (C)

Dear Ms. Forbes:

The New York State Department of Environmental Conservation (Department) has completed a review of the October 9, 2025 Soil Sampling and Analysis Work Plan (Work Plan) for the proposed soil sampling event at 565 Culver Road, Rochester, Monroe County to be used for the Beneficial Use Determination (BUD) petition. The Work Plan is approved with the following clarifications and modifications.

1. The Department understands that the analytical laboratory will have the appropriate ELAP certifications for the analytical methods to be completed.
2. The Department understands that the soil samples collected will be analyzed for TCL VOCs plus TICs.
3. The Department understands that the soil samples collected will be analyzed TCL SVOCs plus TICs. This also includes all QA/QC samples collected during the sampling event.
4. The Department understands that the reporting limits for PFOA and PFOS as presented in the Department's April 2023 guidance.
5. The Department understands that the analytical results will be compared to DER-10 Appendix 5 Allowable Constituent Levels for Imported Fill or Soil Subdivision 5.4(e) and the Department's April 2023 PFOA and PFOS guidance document.

Within fifteen (15) days of the date of this letter and prior to any fieldwork activities, the Applicant must elect in writing (electronic notification is acceptable) one of the following options:

- Option A: Accept the modified work plan;
- Option B: Invoke dispute resolution as set forth in 6 NYCRR Part 35-1.5(b)(2); or
- Option C: Terminate the Brownfield Cleanup Agreement in accordance with 6 NYCRR Part 375-3.5.

If the Applicant chooses to accept Option A then this letter becomes part of the approved Soil Sampling and Analysis Work Plan dated October 9, 2025 for 565 Culver Road. Also, if Option A is chosen then a copy of the approved Soil Sampling and Analysis Work Plan for 565 Culver Road along with this letter attached must be placed in the document repository within 1 week of accepting Option A and prior to any fieldwork activities. Please provide notification to the Department that the Soil Sampling and Analysis Work Plan for 565 Culver Road and a copy of this letter have been placed in the document repository (electronic notification is acceptable).

NYSDEC seeks to resolve outstanding differences in a mutually agreeable manner which addresses the requirements of the Brownfield Cleanup Agreement, Part 375, and all applicable laws, regulations, and guidance. If you or your technical team have any questions or concerns regarding this request, please contact me via email at charlotte.theobald@dec.ny.gov or at 585-226-5354. If your legal team have any questions or concerns regarding this request, please feel free to contact Deborah Gorman via e-mail at Deborah.Gorman@dec.ny.gov or at 518-402-9525 and Kyle Pero at kyle.pero@dec.ny.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "Charlotte B. Theobald". The signature is fluid and cursive, with the first name "Charlotte" being more prominent than the last name "Theobald".

Charlotte B. Theobald
Assistant Engineer

cc:

Anne Spaulding (City of Rochester)
Greg Andrus (Lu Engineering)
Jeff Danzinger (Day Environmental)
Justin Deming (NYSDOH)
Julia Kenney (NYSDOH)
Christopher Budd (NYSDOH)
Starr O'Neil (MCHD)
Dr. Velez De Brown (MCHD)
Kyle Pero (NYSDEC)
Deborah Gorman (NYSDEC)
David Pratt (NYSDEC)
Michael Ormanoski (NYSDEC)

SOIL SAMPLING AND ANALYSIS PLAN

**SITE #3
565 CULVER ROAD
ROCHESTER, NEW YORK**

Prepared for: City of Rochester
Division of Environmental Quality
30 Church Street, Room 300B
Rochester, New York 14614

Prepared by: Lu Engineers
200 East Broad Street
Rochester, New York 14606

And

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

Project No.: 6254S-25

Date: October 9, 2025

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SAMPLING AND ANALYSIS PLAN	2
3.0	DATA PACKAGE	5
4.0	LIST OF ACRONYMS AND ABBREVIATIONS	6

FIGURES

Figure 1-1	Project Locus Map
Figure 1-2	Soil Pile Elevation Data
Figure 1-3	Soil Pile Test Locations

ATTACHMENTS

Attachment A	Analytical Laboratory Report for Previous Composite Samples
--------------	---

1.0 INTRODUCTION

The City of Rochester (City) is proposing to complete sampling and analysis of a source of soil at 565 Culver Road, Rochester, New York (Site #3). A Locus Map is included as Figure 3-1. The viability of using this soil as a source of imported material at the City-owned former Vacuum Oil Brownfield Cleanup Program (BCP) Site (NYSDEC BCP Site #C828190) is being considered.

On August 14, 2025, Marques and Associates, P.C. (Marques) surveyed the location and elevation of two soil piles (A and B) at Site #3. The soil piles at Site #3 consist of surplus soils that were generated as a result of a Park Avenue road reconstruction project. The piles are staged on asphalt pavement. The horizontal and vertical survey data collected by Marques was entered into a geographic information system (GIS) by Day Environmental, Inc. (DAY) Figure 3-2 shows the survey points and 3-D Analyst modeled topographic contours of soil piles A and B. In addition, lower rasters to represent a bottom cut elevation surface beneath the soil piles were prepared based on perimeter “toe” survey points where the piles meet the underlying asphalt. GIS Spatial Analyst was subsequently used to calculate a volume of the soil piles above the lower rasters. As provided on Figure 3-2, the available combined volume of the soil piles A and B on the asphalt pavement was calculated to be 600 cubic yards (CY).

As required by the New York State Department of Environmental Conservation (NYSDEC), the soil piles at Site #3 need to be chemically characterized to determine possible uses at the NYSDEC BCP Site #C828190.

2.0 SAMPLING AND ANALYSIS PLAN

Three composite samples (designated Soil Pile #3, Soil Pile #4 and Soil Pile #5) were previously collected April 10, 2025 and tested at a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory. These three composite samples were tested for the following parameters.

- Target compound list (TCL) volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method 8260.
- TCL semi-volatile organic compounds (SVOCs) via USEPA Method 8270.
- Resource Conservation and Recovery Act (RCRA) Metals via USEPA Method 6010/7471.
- Polychlorinated biphenyls (PCBs) via USEPA Method 8082.
- Pesticides via USEPA Method 8081.
- Herbicides via USEPA Method 8151.
- Toxicity Characteristic Leaching Procedure (TCLP) lead via USEPA Methods 1311 and 6010.
- Ignitability
- Reactivity (cyanide and sulfide)
- Corrosivity (pH)

A copy of the analytical laboratory report for composite samples Soil Pile #3, Soil Pile #4 and Soil Pile #5 is included in Attachment A.

The sampling and analysis plan outlined herein is intended to supplement the analytical laboratory data for composite samples Soil Pile #3, Soil Pile #4 and Soil Pile #5 that were collected on April 10, 2025.

NYSDEC Part 360.13(e) and Section 5.4(e) of NYSDEC DER-10 provide guidance on number of samples based on volume, and test parameters to characterize a proposed source. Since the Site is in the BCP, guidance from Section 5.4(e) of NYSDEC DER-10 takes precedence, and is used along with input from the NYSDEC Project Manager for BCP Site #C828190 given the history and nature of Site #3. Based on a volume of 600 CY and with input from the NYSDEC Project Manager, it is planned to collect six (6) discrete soil samples and two (2) composite soil samples from six (6) test pit locations. The six planned test pit locations are shown on Figure 3-3.

A subcontractor will be retained to excavate six (6) test pits to the desired depths using a mini-excavator. Soil samples will be collected using the mini-excavator bucket. The excavator bucket will be decontaminated using an Alconox and water wash/water rinse prior to use at each location.

A representative of DAY or LU will observe, document, and screen the soil samples and associated headspace soil samples in the field for total volatile organic compounds (VOCs) using a photoionization detector (PID). In addition, the representative will observe the samples for visual and olfactory evidence of apparent environmental impact (e.g., odors, staining, and free product). The representative will collect portions of samples for analytical laboratory testing. The samples submitted for testing will be biased towards the portions of the specific depth interval that have the highest field evidence of apparent impact. For test locations with no field evidence of apparent impact, portions of samples for analytical laboratory testing will be collected from random depths within the selected depth interval to be tested at the specific test pit. Test pit logs will be prepared that describe pertinent information (e.g., PID measurements, evidence of contamination, lithology, sample moisture, sample depth intervals, depths, evidence of groundwater, etc.).

The test pits excavated during this task will be located via tape measure by reference to existing site features and/or using a global positioning system (GPS) unit. Upon completion of the work, the test pits will be backfilled with soil cuttings.

Discrete soil samples are anticipated to be collected from each test pit from the targeted depth intervals in parentheses provided below:

TP3-1 (0-2 ft below the ground surface [bgs])

TP3-2 (3-5 ft bgs)

TP3-3 (1-3 ft bgs)

TP3-4 (3-52 ft bgs)

TP3-5 (2-4 ft bgs)

TP3-6 (0-2 ft bgs)

A separate aliquot for compositing will be collected at each test location's planned sample depth interval, which will be composited into the following composite laboratory samples:

Sample 3-1,2,3: Composite aliquots from locations TB3-1, TB3-2 and TB3-3

Sample 3-4,5,6: Composite aliquots from locations TB3-4, TB3-5 and TB3-6

ALS Environmental (ALS) will complete the analytical laboratory testing of discrete samples and composite samples of the surplus soil. ALS is a NYSDOH ELAP-certified analytical laboratory (ELAP #10145). The samples will be submitted to ALS under chain-of-custody control, and testing program, including that for associated quality assurance/quality control samples, is provided below.

Field Samples

The six (6) discrete soil field samples will be tested for:

- a. TCL VOCs via USEPA Method 8260.

The two (2) composite soil field samples will be tested for:

- a. Target Analyte List (TAL) Metals via USEPA Method 6010/7470/7471.
- b. Cyanide via USEPA Method 9012.
- c. Per- and polyfluoroalkyl substances (PFAS) via USEPA Method 1633 [submit samples under a separate chain of custody].
- d. 1,4-dioxane via USEPA Method 8270 SIM [submit samples under a separate chain of custody].

Quality Assurance/Quality Control (QA/QC) Samples

- a. Matrix spike/matrix spike duplicate (MS/MSD) on one (1) discrete sample will be tested for:
 - TCL VOCs via USEPA Method 8260.
- b. MS/MSD on one (1) composite sample will be tested for:
 - TAL Metals via USEPA Method 6010/7470/7471.
 - Cyanide via USEPA Method 9012.
 - PFAS via USEPA Method 1633 [submit sample under a separate chain of custody].
 - 1,4-dioxane via USEPA Method 8270 SIM [submit sample under a separate chain of custody].

- c. Blind field duplicates on one (1) discrete sample will be tested for:
 - TCL VOCs via USEPA Method 8260.
- d. Blind field duplicate on one (1) composite sample will be tested for:
 - TAL Metals via USEPA Method 6010/7470/7471.
 - Cyanide via USEPA Method 9012.
 - PFAS via USEPA Method 1633 [submit sample under a separate chain of custody].
 - 1,4-dioxane via USEPA Method 8270 SIM [submit sample under a separate chain of custody].
- e. One (1) equipment blank will be tested for PFAS via USEPA Method 1633 [submit sample under a separate chain of custody].

ALS will report its findings in analytical services protocol (ASP) Category B deliverables and NYSDEC Equis EXCEL EDD in approximately 10 to 15 business days after receipt of the samples.

Initially, a Data Usability Summary Report (DUSR) will not be completed on the Category B deliverables for the analytical laboratory test results. If subsequent to review of the test results the City decides to pursue a BUD to propose use of the soil from this Site at BCP Site #C828190, the NYSDEC project manager for BCP Site #C828190 will be contacted to determine if NYSDEC requires a DUSR be performed on the test results. If required by the NYSDEC, then a DUSR will be completed and components of the Data Package outlined in Section 3.0 will be updated accordingly.

3.0 DATA PACKAGE

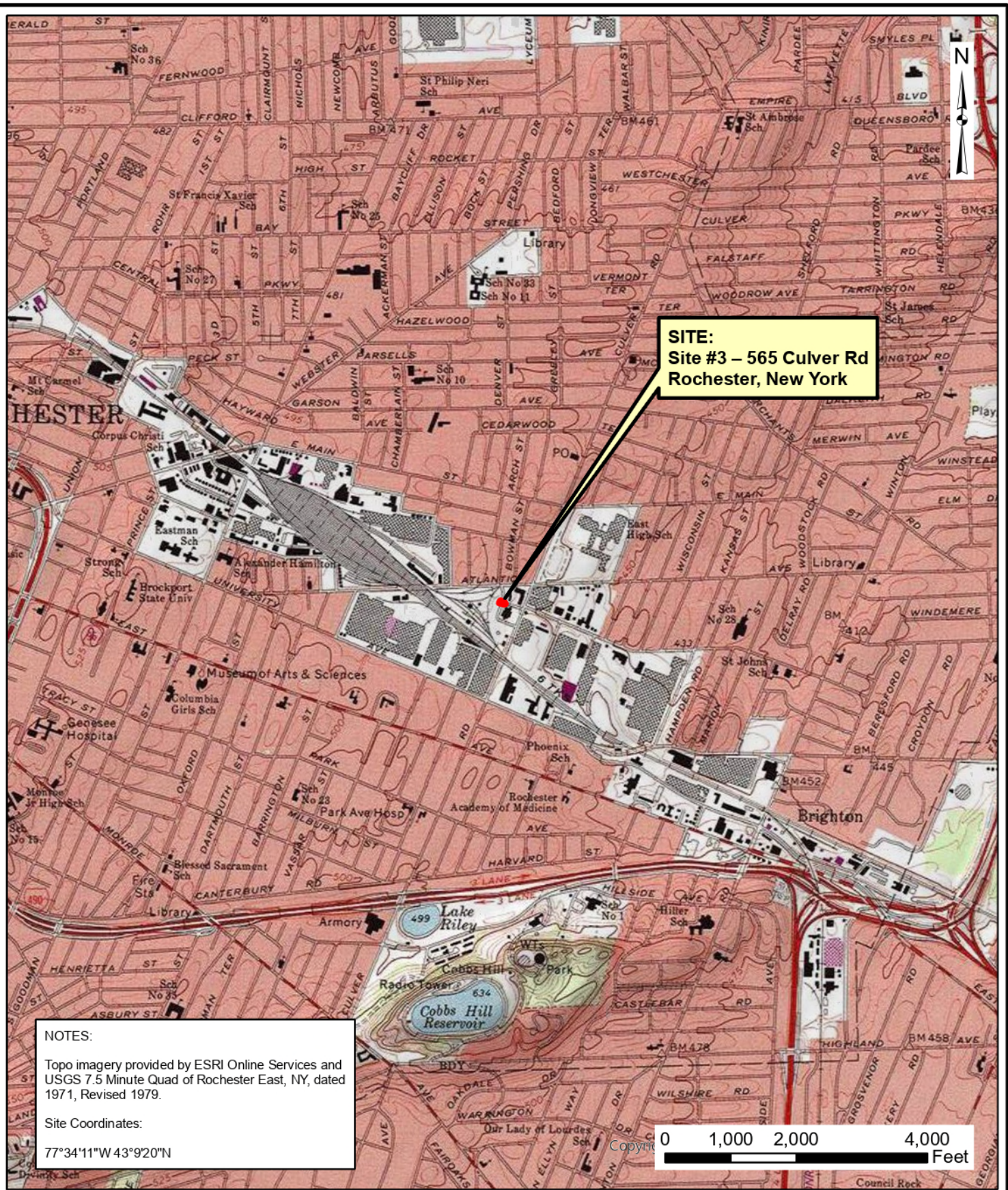
Subsequent to receipt of the analytical laboratory results, a data package will be prepared that includes, a project locus map, a figure depicting test locations in relation to pile topography, the analytical laboratory report, field logs for each test location that include a description of soil lithology, sample intervals, peak PID readings on sample intervals screened, observations concerning environmental impact (if present), and one or more data table that include comparison of field sample test results to NYSDEC Restricted Residential Use soil cleanup objectives (RRSCOs) and Protection of Groundwater soil cleanup objectives (PGSCOs) as set forth in Table 375-6.8(b) of 6 New York Codes, Rules and Regulations (NYCRR) Part 375. These SCOs are the criteria that need to be met for imported materials at BCP Site #C828190.

The resulting sampling and analysis information and data in the data package may subsequently be used in a Beneficial Use Determination (BUD) petition for NYSDEC BCP Site #C828190.

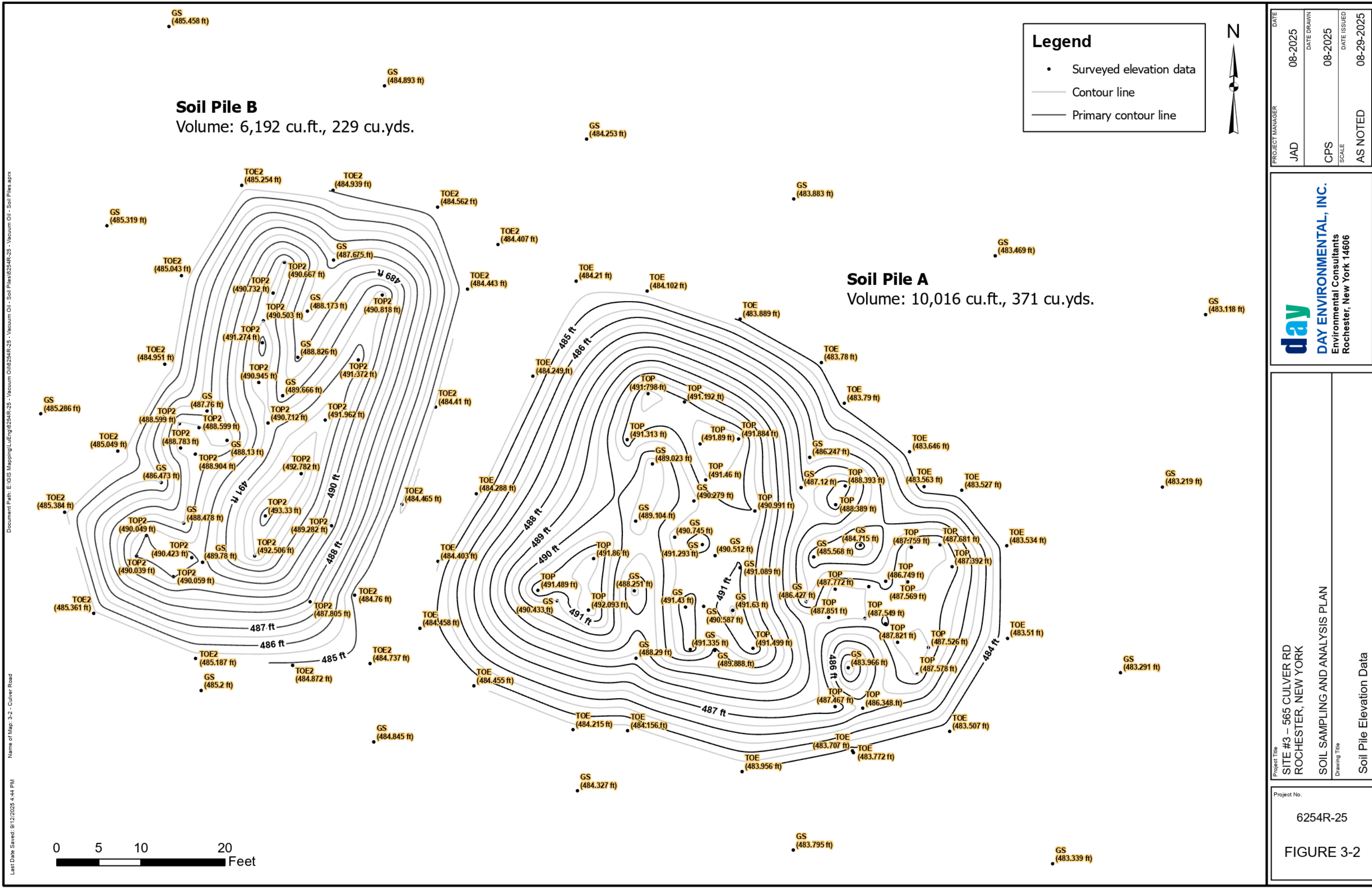
4.0 LIST OF ACRONYMS AND ABBREVIATIONS

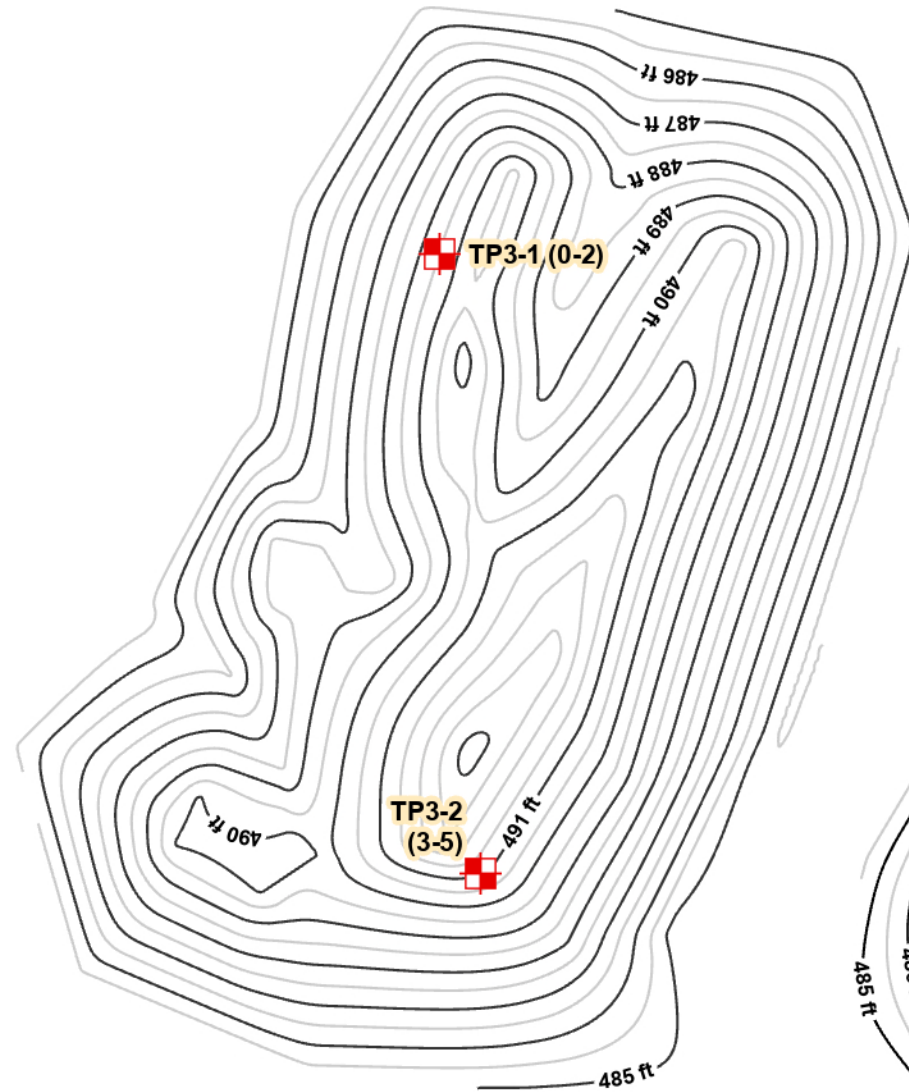
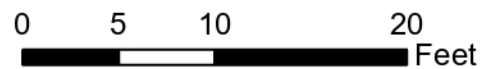
ALS	ALS Environmental
ASP	Analytical Services Protocol
BCP	Brownfield Cleanup Program
BGS	Below the Ground Surface
BUD	Beneficial Use Determination
City	City of Rochester
CY	Cubic Yard
DAY	Day Environmental, Inc.
ELAP	Environmental Laboratory Approval Program
GIS	Geographic Information System
GPS	Global Positioning System
Marques	Marques and Associates, P.C
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCB	Polychlorinated Biphenyl
PFAS	Per- and polyfluoroalkyl substances
PGSCO	Protection of Groundwater Soil Cleanup Objective
PID	Photoionization Detector
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RRSCO	Restricted Residential Use Soil Cleanup Objective
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

FIGURES

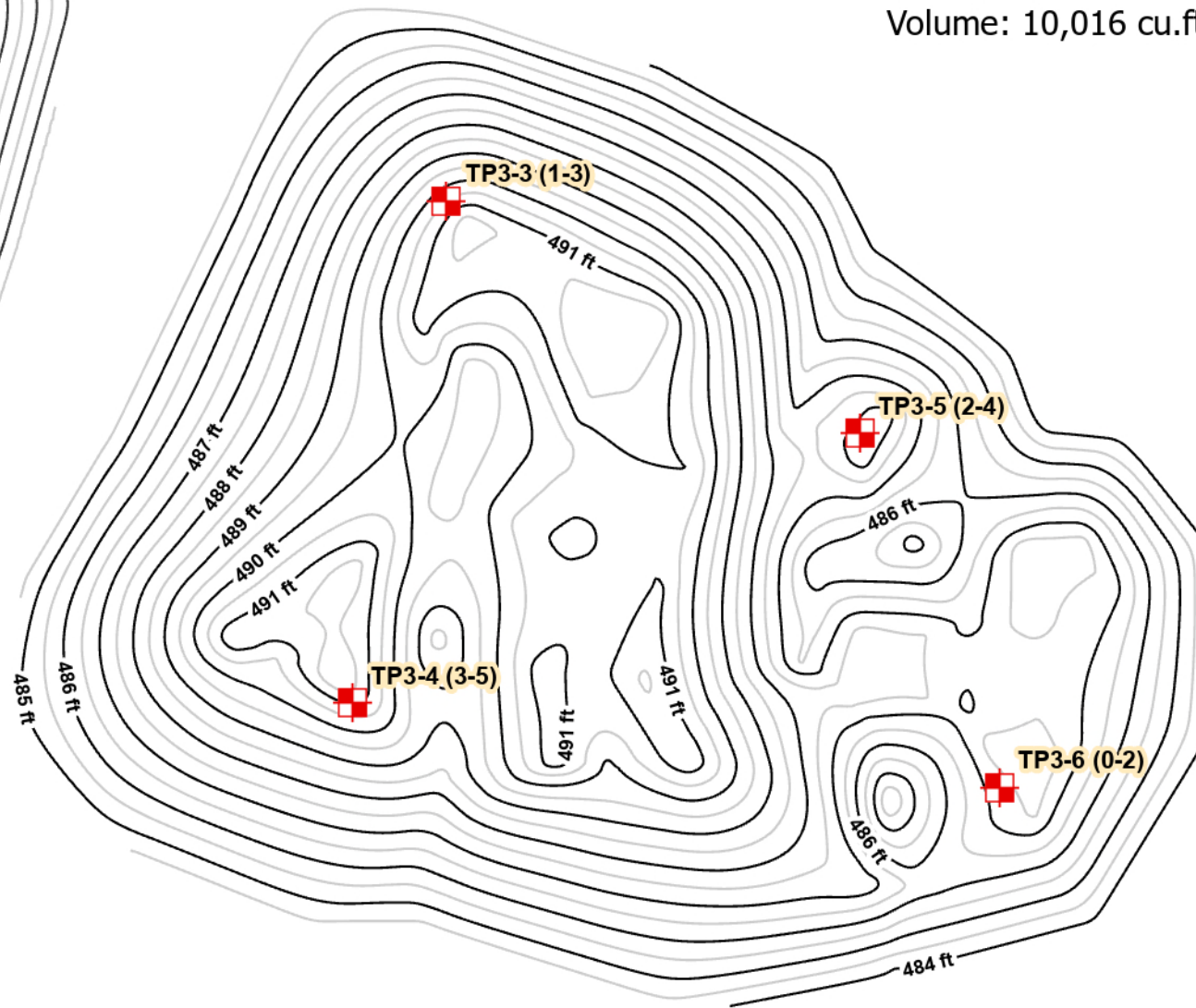


Date 09-12-2025 Drawn By CPS Scale AS NOTED	day DAY ENVIRONMENTAL, INC. Environmental Consultants Rochester, New York 14606	Project Title SITE #3 – 565 CULVER RD ROCHESTER, NEW YORK SOIL SAMPLING AND ANALYSIS PLAN Drawing Title Project Locus Map	Project No. 6254S-25 FIGURE 3-1
---	---	--	--





Soil Pile B
Volume: 6,192 cu.ft., 229 cu.yds.



Soil Pile A
Volume: 10,016 cu.ft., 371 cu.yds.

Legend

- Test pit location
- Contour line
- Primary contour line



Project Title	SITE #3 – 565 CULVER RD ROCHESTER, NEW YORK	
	SOIL SAMPLING AND ANALYSIS PLAN	
Drawing Title	Soil Pile Test Locations	
Project No.	6254R-25	
FIGURE 3-3		

PROJECT MANAGER	JAD	DATE	09-2025
	CPS	DATE DRAWN	09-2025
SCALE	AS NOTED	DATE ISSUED	09-15-2025

DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606

ATTACHMENT A

Analytical Laboratory Report for Previous Composite Samples



PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For
City of Rochester

For Lab Project ID
251473

Referencing
Park Ave Recon. Urban Fill

Prepared
Thursday, April 17, 2025

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below:

Portions of the enclosed report reflects analysis that has been subcontracted and are presented in their original form.

A handwritten signature in blue ink that reads "Emily Farmer".

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Lab Project ID: 251473

Client: City of Rochester

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #3

Lab Sample ID: 251473-01

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Ignitability

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Ignitability	No Burn	mm / sec		4/14/2025

Method Reference(s): EPA 1030

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	0.0328	mg/Kg		4/14/2025 12:05

Method Reference(s): EPA 7471B

Preparation Date: 4/11/2025

Data File: Hg250414A

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Arsenic	2.64	mg/Kg		4/15/2025 09:47
Barium	42.3	mg/Kg		4/15/2025 09:47
Cadmium	< 0.271	mg/Kg		4/15/2025 09:47
Chromium	4.49	mg/Kg		4/15/2025 09:47
Lead	69.0	mg/Kg		4/15/2025 09:47
Selenium	< 1.08	mg/Kg		4/15/2025 09:47
Silver	< 0.542	mg/Kg		4/15/2025 09:47

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 4/14/2025

Data File: 250415A

pH

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
pH	8.70 @ 21.2 C	S.U.		4/15/2025 12:50

Method Reference(s): EPA 9045D

Lab Project ID: 251473
Client: City of Rochester
Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #3

Lab Sample ID: 251473-01

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 6.68	ug/Kg		4/17/2025 11:48
1,1,2,2-Tetrachloroethane	< 6.68	ug/Kg		4/17/2025 11:48
1,1,2-Trichloroethane	< 6.68	ug/Kg		4/17/2025 11:48
1,1-Dichloroethane	< 6.68	ug/Kg		4/17/2025 11:48
1,1-Dichloroethene	< 6.68	ug/Kg		4/17/2025 11:48
1,2,3-Trichlorobenzene	< 16.7	ug/Kg		4/17/2025 11:48
1,2,4-Trichlorobenzene	< 16.7	ug/Kg		4/17/2025 11:48
1,2-Dibromo-3-Chloropropane	< 33.4	ug/Kg		4/17/2025 11:48
1,2-Dibromoethane	< 6.68	ug/Kg		4/17/2025 11:48
1,2-Dichlorobenzene	< 6.68	ug/Kg		4/17/2025 11:48
1,2-Dichloroethane	< 6.68	ug/Kg		4/17/2025 11:48
1,2-Dichloropropane	< 6.68	ug/Kg		4/17/2025 11:48
1,3-Dichlorobenzene	< 6.68	ug/Kg		4/17/2025 11:48
1,4-Dichlorobenzene	< 6.68	ug/Kg		4/17/2025 11:48
1,4-Dioxane	< 33.4	ug/Kg		4/17/2025 11:48
2-Butanone	< 33.4	ug/Kg		4/17/2025 11:48
2-Hexanone	< 16.7	ug/Kg		4/17/2025 11:48
4-Methyl-2-pentanone	< 16.7	ug/Kg		4/17/2025 11:48
Acetone	115	ug/Kg		4/17/2025 11:48
Benzene	< 6.68	ug/Kg		4/17/2025 11:48
Bromochloromethane	< 16.7	ug/Kg		4/17/2025 11:48
Bromodichloromethane	< 6.68	ug/Kg		4/17/2025 11:48
Bromoform	< 16.7	ug/Kg		4/17/2025 11:48
Bromomethane	< 6.68	ug/Kg		4/17/2025 11:48
Carbon disulfide	< 6.68	ug/Kg		4/17/2025 11:48
Carbon Tetrachloride	< 6.68	ug/Kg		4/17/2025 11:48
Chlorobenzene	< 6.68	ug/Kg		4/17/2025 11:48
Chloroethane	< 6.68	ug/Kg		4/17/2025 11:48

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Lab Project ID: 251473

Client: City of Rochester

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #3

Lab Sample ID: 251473-01

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Chloroform	< 6.68	ug/Kg	4/17/2025 11:48
Chloromethane	< 6.68	ug/Kg	4/17/2025 11:48
cis-1,2-Dichloroethene	< 6.68	ug/Kg	4/17/2025 11:48
cis-1,3-Dichloropropene	< 6.68	ug/Kg	4/17/2025 11:48
Cyclohexane	< 33.4	ug/Kg	4/17/2025 11:48
Dibromochloromethane	< 6.68	ug/Kg	4/17/2025 11:48
Dichlorodifluoromethane	< 6.68	ug/Kg	4/17/2025 11:48
Ethylbenzene	< 6.68	ug/Kg	4/17/2025 11:48
Freon 113	< 6.68	ug/Kg	4/17/2025 11:48
Isopropylbenzene	< 6.68	ug/Kg	4/17/2025 11:48
m,p-Xylene	< 6.68	ug/Kg	4/17/2025 11:48
Methyl acetate	< 6.68	ug/Kg	4/17/2025 11:48
Methyl tert-butyl Ether	< 6.68	ug/Kg	4/17/2025 11:48
Methylcyclohexane	< 6.68	ug/Kg	4/17/2025 11:48
Methylene chloride	< 16.7	ug/Kg	4/17/2025 11:48
o-Xylene	< 6.68	ug/Kg	4/17/2025 11:48
Styrene	< 16.7	ug/Kg	4/17/2025 11:48
Tetrachloroethene	< 6.68	ug/Kg	4/17/2025 11:48
Toluene	< 6.68	ug/Kg	4/17/2025 11:48
trans-1,2-Dichloroethene	< 6.68	ug/Kg	4/17/2025 11:48
trans-1,3-Dichloropropene	< 6.68	ug/Kg	4/17/2025 11:48
Trichloroethene	< 6.68	ug/Kg	4/17/2025 11:48
Trichlorofluoromethane	< 6.68	ug/Kg	4/17/2025 11:48
Vinyl chloride	< 6.68	ug/Kg	4/17/2025 11:48

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 17, 2025

Page 4 of 79



Lab Project ID: 251473

Client: City of Rochester

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #3

Lab Sample ID: 251473-01

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	105	80.9 - 124		4/17/2025	11:48
4-Bromofluorobenzene	86.2	75.8 - 116		4/17/2025	11:48
Pentafluorobenzene	89.2	90.7 - 109	*	4/17/2025	11:48
Toluene-D8	94.4	90.1 - 109		4/17/2025	11:48

Method Reference(s): EPA 8260C
EPA 5035A - L
Data File: z30543.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Lab Project ID: 251473

Client: **City of Rochester**

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #3

Lab Sample ID: 251473-01A

Date Sampled: 4/10/2025 14:02

Matrix: TCLP Extract

Date Received 4/10/2025

TCLP Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Lead	< 0.500	mg/L	5		4/14/2025 08:43
Method Reference(s): EPA 6010C EPA 1311 / 3005A					
Preparation Date: 4/11/2025					
Data File: 250414A					



Lab Project ID: 251473

Client: City of Rochester

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #4

Lab Sample ID: 251473-02

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Ignitability

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Ignitability	No Burn	mm / sec		4/14/2025

Method Reference(s): EPA 1030

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	0.0384	mg/Kg		4/14/2025 12:07

Method Reference(s): EPA 7471B

Preparation Date: 4/11/2025

Data File: Hg250414A

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Arsenic	2.91	mg/Kg		4/15/2025 09:58
Barium	44.6	mg/Kg		4/15/2025 09:58
Cadmium	< 0.276	mg/Kg		4/15/2025 09:58
Chromium	5.55	mg/Kg		4/15/2025 09:58
Lead	81.8	mg/Kg		4/15/2025 09:58
Selenium	< 1.10	mg/Kg		4/15/2025 09:58
Silver	< 0.552	mg/Kg		4/15/2025 09:58

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 4/14/2025

Data File: 250415A

pH

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
pH	8.75 @ 21.2 C	S.U.		4/15/2025 12:52

Method Reference(s): EPA 9045D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 17, 2025

Page 7 of 79

Lab Project ID: 251473
Client: City of Rochester
Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #4

Lab Sample ID: 251473-02

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 6.47	ug/Kg		4/17/2025 12:08
1,1,2,2-Tetrachloroethane	< 6.47	ug/Kg		4/17/2025 12:08
1,1,2-Trichloroethane	< 6.47	ug/Kg		4/17/2025 12:08
1,1-Dichloroethane	< 6.47	ug/Kg		4/17/2025 12:08
1,1-Dichloroethene	< 6.47	ug/Kg		4/17/2025 12:08
1,2,3-Trichlorobenzene	< 16.2	ug/Kg		4/17/2025 12:08
1,2,4-Trichlorobenzene	< 16.2	ug/Kg		4/17/2025 12:08
1,2-Dibromo-3-Chloropropane	< 32.4	ug/Kg		4/17/2025 12:08
1,2-Dibromoethane	< 6.47	ug/Kg		4/17/2025 12:08
1,2-Dichlorobenzene	< 6.47	ug/Kg		4/17/2025 12:08
1,2-Dichloroethane	< 6.47	ug/Kg		4/17/2025 12:08
1,2-Dichloropropane	< 6.47	ug/Kg		4/17/2025 12:08
1,3-Dichlorobenzene	< 6.47	ug/Kg		4/17/2025 12:08
1,4-Dichlorobenzene	< 6.47	ug/Kg		4/17/2025 12:08
1,4-Dioxane	< 32.4	ug/Kg		4/17/2025 12:08
2-Butanone	< 32.4	ug/Kg		4/17/2025 12:08
2-Hexanone	< 16.2	ug/Kg		4/17/2025 12:08
4-Methyl-2-pentanone	< 16.2	ug/Kg		4/17/2025 12:08
Acetone	51.6	ug/Kg		4/17/2025 12:08
Benzene	< 6.47	ug/Kg		4/17/2025 12:08
Bromochloromethane	< 16.2	ug/Kg		4/17/2025 12:08
Bromodichloromethane	< 6.47	ug/Kg		4/17/2025 12:08
Bromoform	< 16.2	ug/Kg		4/17/2025 12:08
Bromomethane	< 6.47	ug/Kg		4/17/2025 12:08
Carbon disulfide	< 6.47	ug/Kg		4/17/2025 12:08
Carbon Tetrachloride	< 6.47	ug/Kg		4/17/2025 12:08
Chlorobenzene	< 6.47	ug/Kg		4/17/2025 12:08
Chloroethane	< 6.47	ug/Kg		4/17/2025 12:08

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Lab Project ID: 251473

Client: City of Rochester

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #4

Lab Sample ID: 251473-02

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Chloroform	< 6.47	ug/Kg	4/17/2025 12:08
Chloromethane	< 6.47	ug/Kg	4/17/2025 12:08
cis-1,2-Dichloroethene	< 6.47	ug/Kg	4/17/2025 12:08
cis-1,3-Dichloropropene	< 6.47	ug/Kg	4/17/2025 12:08
Cyclohexane	< 32.4	ug/Kg	4/17/2025 12:08
Dibromochloromethane	< 6.47	ug/Kg	4/17/2025 12:08
Dichlorodifluoromethane	< 6.47	ug/Kg	4/17/2025 12:08
Ethylbenzene	< 6.47	ug/Kg	4/17/2025 12:08
Freon 113	< 6.47	ug/Kg	4/17/2025 12:08
Isopropylbenzene	< 6.47	ug/Kg	4/17/2025 12:08
m,p-Xylene	< 6.47	ug/Kg	4/17/2025 12:08
Methyl acetate	< 6.47	ug/Kg	4/17/2025 12:08
Methyl tert-butyl Ether	< 6.47	ug/Kg	4/17/2025 12:08
Methylcyclohexane	< 6.47	ug/Kg	4/17/2025 12:08
Methylene chloride	< 16.2	ug/Kg	4/17/2025 12:08
o-Xylene	< 6.47	ug/Kg	4/17/2025 12:08
Styrene	< 16.2	ug/Kg	4/17/2025 12:08
Tetrachloroethene	< 6.47	ug/Kg	4/17/2025 12:08
Toluene	< 6.47	ug/Kg	4/17/2025 12:08
trans-1,2-Dichloroethene	< 6.47	ug/Kg	4/17/2025 12:08
trans-1,3-Dichloropropene	< 6.47	ug/Kg	4/17/2025 12:08
Trichloroethene	< 6.47	ug/Kg	4/17/2025 12:08
Trichlorofluoromethane	< 6.47	ug/Kg	4/17/2025 12:08
Vinyl chloride	< 6.47	ug/Kg	4/17/2025 12:08

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 17, 2025

Page 9 of 79



Lab Project ID: 251473

Client: City of Rochester

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #4

Lab Sample ID: 251473-02

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	104	80.9 - 124		4/17/2025	12:08
4-Bromofluorobenzene	84.4	75.8 - 116		4/17/2025	12:08
Pentafluorobenzene	88.7	90.7 - 109	*	4/17/2025	12:08
Toluene-D8	92.5	90.1 - 109		4/17/2025	12:08

Method Reference(s): EPA 8260C
EPA 5035A - L
Data File: z30544.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Lab Project ID: 251473

Client: **City of Rochester**

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #4

Lab Sample ID: 251473-02A

Date Sampled: 4/10/2025 14:02

Matrix: TCLP Extract

Date Received 4/10/2025

TCLP Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Lead	< 0.500	mg/L	5		4/14/2025 08:46
Method Reference(s): EPA 6010C EPA 1311 / 3005A					
Preparation Date: 4/11/2025					
Data File: 250414A					



Lab Project ID: 251473

Client: City of Rochester

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #5

Lab Sample ID: 251473-03

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Ignitability

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Ignitability	No Burn	mm / sec		4/14/2025

Method Reference(s): EPA 1030

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	0.0364	mg/Kg		4/14/2025 12:09

Method Reference(s): EPA 7471B

Preparation Date: 4/11/2025

Data File: Hg250414A

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Arsenic	2.42	mg/Kg		4/15/2025 10:01
Barium	50.2	mg/Kg		4/15/2025 10:01
Cadmium	< 0.267	mg/Kg		4/15/2025 10:01
Chromium	4.55	mg/Kg		4/15/2025 10:01
Lead	51.2	mg/Kg		4/15/2025 10:01
Selenium	< 1.07	mg/Kg		4/15/2025 10:01
Silver	< 0.534	mg/Kg		4/15/2025 10:01

Method Reference(s): EPA 6010C

EPA 3050B

Preparation Date: 4/14/2025

Data File: 250415A

pH

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
pH	8.58 @ 20.7 C	S.U.		4/15/2025 12:53

Method Reference(s): EPA 9045D

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 17, 2025

Page 12 of 79

Lab Project ID: 251473
Client: City of Rochester
Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #5

Lab Sample ID: 251473-03

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 6.90	ug/Kg		4/17/2025 12:27
1,1,2,2-Tetrachloroethane	< 6.90	ug/Kg		4/17/2025 12:27
1,1,2-Trichloroethane	< 6.90	ug/Kg		4/17/2025 12:27
1,1-Dichloroethane	< 6.90	ug/Kg		4/17/2025 12:27
1,1-Dichloroethene	< 6.90	ug/Kg		4/17/2025 12:27
1,2,3-Trichlorobenzene	< 17.2	ug/Kg		4/17/2025 12:27
1,2,4-Trichlorobenzene	< 17.2	ug/Kg		4/17/2025 12:27
1,2-Dibromo-3-Chloropropane	< 34.5	ug/Kg		4/17/2025 12:27
1,2-Dibromoethane	< 6.90	ug/Kg		4/17/2025 12:27
1,2-Dichlorobenzene	< 6.90	ug/Kg		4/17/2025 12:27
1,2-Dichloroethane	< 6.90	ug/Kg		4/17/2025 12:27
1,2-Dichloropropane	< 6.90	ug/Kg		4/17/2025 12:27
1,3-Dichlorobenzene	< 6.90	ug/Kg		4/17/2025 12:27
1,4-Dichlorobenzene	< 6.90	ug/Kg		4/17/2025 12:27
1,4-Dioxane	< 34.5	ug/Kg		4/17/2025 12:27
2-Butanone	< 34.5	ug/Kg		4/17/2025 12:27
2-Hexanone	< 17.2	ug/Kg		4/17/2025 12:27
4-Methyl-2-pentanone	< 17.2	ug/Kg		4/17/2025 12:27
Acetone	49.9	ug/Kg		4/17/2025 12:27
Benzene	< 6.90	ug/Kg		4/17/2025 12:27
Bromochloromethane	< 17.2	ug/Kg		4/17/2025 12:27
Bromodichloromethane	< 6.90	ug/Kg		4/17/2025 12:27
Bromoform	< 17.2	ug/Kg		4/17/2025 12:27
Bromomethane	< 6.90	ug/Kg		4/17/2025 12:27
Carbon disulfide	< 6.90	ug/Kg		4/17/2025 12:27
Carbon Tetrachloride	< 6.90	ug/Kg		4/17/2025 12:27
Chlorobenzene	< 6.90	ug/Kg		4/17/2025 12:27
Chloroethane	< 6.90	ug/Kg		4/17/2025 12:27

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Lab Project ID: 251473

Client: City of Rochester

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #5

Lab Sample ID: 251473-03

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

Chloroform	< 6.90	ug/Kg	4/17/2025 12:27
Chloromethane	< 6.90	ug/Kg	4/17/2025 12:27
cis-1,2-Dichloroethene	< 6.90	ug/Kg	4/17/2025 12:27
cis-1,3-Dichloropropene	< 6.90	ug/Kg	4/17/2025 12:27
Cyclohexane	< 34.5	ug/Kg	4/17/2025 12:27
Dibromochloromethane	< 6.90	ug/Kg	4/17/2025 12:27
Dichlorodifluoromethane	< 6.90	ug/Kg	4/17/2025 12:27
Ethylbenzene	< 6.90	ug/Kg	4/17/2025 12:27
Freon 113	< 6.90	ug/Kg	4/17/2025 12:27
Isopropylbenzene	< 6.90	ug/Kg	4/17/2025 12:27
m,p-Xylene	< 6.90	ug/Kg	4/17/2025 12:27
Methyl acetate	< 6.90	ug/Kg	4/17/2025 12:27
Methyl tert-butyl Ether	< 6.90	ug/Kg	4/17/2025 12:27
Methylcyclohexane	< 6.90	ug/Kg	4/17/2025 12:27
Methylene chloride	< 17.2	ug/Kg	4/17/2025 12:27
o-Xylene	< 6.90	ug/Kg	4/17/2025 12:27
Styrene	< 17.2	ug/Kg	4/17/2025 12:27
Tetrachloroethene	< 6.90	ug/Kg	4/17/2025 12:27
Toluene	< 6.90	ug/Kg	4/17/2025 12:27
trans-1,2-Dichloroethene	< 6.90	ug/Kg	4/17/2025 12:27
trans-1,3-Dichloropropene	< 6.90	ug/Kg	4/17/2025 12:27
Trichloroethene	< 6.90	ug/Kg	4/17/2025 12:27
Trichlorofluoromethane	< 6.90	ug/Kg	4/17/2025 12:27
Vinyl chloride	< 6.90	ug/Kg	4/17/2025 12:27

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, April 17, 2025

Page 14 of 79



Lab Project ID: 251473

Client: City of Rochester

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #5

Lab Sample ID: 251473-03

Date Sampled: 4/10/2025 14:02

Matrix: Soil

Date Received 4/10/2025

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
1,2-Dichloroethane-d4	106	80.9 - 124		4/17/2025 12:27
4-Bromofluorobenzene	88.5	75.8 - 116		4/17/2025 12:27
Pentafluorobenzene	93.3	90.7 - 109		4/17/2025 12:27
Toluene-D8	96.8	90.1 - 109		4/17/2025 12:27

Method Reference(s): EPA 8260C
EPA 5035A - L

Data File: z30545.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.



Lab Project ID: 251473

Client: **City of Rochester**

Project Reference: Park Ave Recon. Urban Fill

Sample Identifier: Soil Pile #5

Lab Sample ID: 251473-03A

Date Sampled: 4/10/2025 14:02

Matrix: TCLP Extract

Date Received 4/10/2025

TCLP Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Lead	< 0.500	mg/L	5		4/14/2025 08:49
Method Reference(s): EPA 6010C EPA 1311 / 3005A					
Preparation Date: 4/11/2025					
Data File: 250414A					



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"H" = Denotes a parameter analyzed outside of holding time.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.

"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*

"(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

GENERAL TERMS AND CONDITIONS

LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.

Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation.

LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB will use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices.

Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability.

In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure.

Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling.

Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on the final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility.

LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment.

LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure.

LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law.

This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

142

LAB PROJECT ID

25/14/20

Quotation #:	
Email:	

1

SO - Soil SL - Sludge	SD - Solid PT - Paint	WP - Wipe CK - Caulk	OL - Oil AR - Air
--------------------------	--------------------------	-------------------------	----------------------

[illegible]

MARKS	SAMPLE
-------	--------

10/25	10/25
-------	-------

03	
----	--

--	--

[illegible]

100

100

[illegible]

Page 19 of 79

2 of 2



Chain of Custody Supplement

Client: City of Rochester
Lab Project ID: 251473

Completed by: [Signature]
Date: 4/10/2015

Sample Condition Requirements Per NELAC/ELAP 210/241/242/243/244

NELAC compliance with the sample condition requirements upon receipt			
Condition	Yes	No	N/A
Container Type	☒	☒ 5035	☐
Comments			
Transferred to method-compliant container	☒ 93292 (Subout)	☐	☐
Headspace (<1 mL)	☐	☒ VOA	☒
Comments			
Preservation	☐	☐	☒
Comments			
Chlorine Absent (<0.10 ppm per test strip)	☐	☐	☒
Comments			
Holding Time	☒	☐	☐
Comments			
Temperature	☐	☒	☒ meta (except Hg)
Comments	17°C		
Compliant Sample Quantity/Type	☒	☐	☐
Comments			



ANALYTICAL REPORT

Lab Number:	L2522084
Client:	Paradigm Environmental Services 179 Lake Avenue Rochester, NY 14608
ATTN:	Steve DeVito
Phone:	(585) 647-2530
Project Name:	251473
Project Number:	251473
Report Date:	04/17/25

The original project report/data package is held by Pace Analytical Services. This report/data package is paginated and should be reproduced only in its entirety. Pace Analytical Services holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Lab		Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
Sample ID						
L2522084-01		SOIL PILE #3 251473-01	SOIL	Not Specified	04/10/25 14:02	04/10/25
L2522084-02		SOIL PILE #4 251473-02	SOIL	Not Specified	04/10/25 14:02	04/10/25
L2522084-03		SOIL PILE #5 251473-03	SOIL	Not Specified	04/10/25 14:02	04/10/25



Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Semivolatile Organics

L2522084-01 and -02: The sample has elevated detection limits due to limited sample volume available for analysis.

Herbicides

L2522084-01 and -02: The sample has elevated detection limits due to limited sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Caitlin Walukevich

Title: Technical Director/Representative

Date: 04/17/25

ORGANICS

SEMIVOLATILES

Project Name: 251473**Lab Number:** L2522084**Project Number:** 251473**Report Date:** 04/17/25**SAMPLE RESULTS**

Lab ID: L2522084-01
 Client ID: SOIL PILE #3 251473-01
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 04/15/25 12:42
 Analyst: RMP
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 01:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	37	J	ug/kg	290	37.	1
1,2,4-Trichlorobenzene	ND		ug/kg	360	41.	1
Hexachlorobenzene	ND		ug/kg	210	40.	1
Bis(2-chloroethyl)ether	ND		ug/kg	320	48.	1
2-Chloronaphthalene	ND		ug/kg	360	35.	1
1,2-Dichlorobenzene	ND		ug/kg	360	64.	1
1,3-Dichlorobenzene	ND		ug/kg	360	62.	1
1,4-Dichlorobenzene	ND		ug/kg	360	62.	1
3,3'-Dichlorobenzidine	ND		ug/kg	360	95.	1
2,4-Dinitrotoluene	ND		ug/kg	360	72.	1
2,6-Dinitrotoluene	ND		ug/kg	360	61.	1
Fluoranthene	1200		ug/kg	210	41.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	360	38.	1
4-Bromophenyl phenyl ether	ND		ug/kg	360	54.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	430	61.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	390	36.	1
Hexachlorobutadiene	ND		ug/kg	360	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	1000	320	1
Hexachloroethane	ND		ug/kg	290	58.	1
Isophorone	ND		ug/kg	320	46.	1
Naphthalene	120	J	ug/kg	360	44.	1
Nitrobenzene	ND		ug/kg	320	53.	1
NDPA/DPA	ND		ug/kg	290	41.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	360	55.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	360	120	1
Butyl benzyl phthalate	ND		ug/kg	360	90.	1
Di-n-butylphthalate	ND		ug/kg	360	68.	1
Di-n-octylphthalate	ND		ug/kg	360	120	1

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-01
 Client ID: SOIL PILE #3 251473-01
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	360	33.	1
Dimethyl phthalate	ND		ug/kg	360	75.	1
Benzo(a)anthracene	710		ug/kg	210	40.	1
Benzo(a)pyrene	810		ug/kg	290	87.	1
Benzo(b)fluoranthene	890		ug/kg	210	60.	1
Benzo(k)fluoranthene	400		ug/kg	210	57.	1
Chrysene	670		ug/kg	210	37.	1
Acenaphthylene	110	J	ug/kg	290	55.	1
Anthracene	190	J	ug/kg	210	70.	1
Benzo(ghi)perylene	590		ug/kg	290	42.	1
Fluorene	54	J	ug/kg	360	35.	1
Phenanthrene	520		ug/kg	210	43.	1
Dibenzo(a,h)anthracene	100	J	ug/kg	210	41.	1
Indeno(1,2,3-cd)pyrene	410		ug/kg	290	50.	1
Pyrene	1100		ug/kg	210	36.	1
Biphenyl	ND		ug/kg	820	46.	1
4-Chloroaniline	ND		ug/kg	360	65.	1
2-Nitroaniline	ND		ug/kg	360	69.	1
3-Nitroaniline	ND		ug/kg	360	67.	1
4-Nitroaniline	ND		ug/kg	360	150	1
Dibenzofuran	47	J	ug/kg	360	34.	1
2-Methylnaphthalene	94	J	ug/kg	430	43.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	360	37.	1
Acetophenone	ND		ug/kg	360	44.	1
2,4,6-Trichlorophenol	ND		ug/kg	210	68.	1
p-Chloro-m-cresol	ND		ug/kg	360	53.	1
2-Chlorophenol	ND		ug/kg	360	42.	1
2,4-Dichlorophenol	ND		ug/kg	320	58.	1
2,4-Dimethylphenol	ND		ug/kg	360	120	1
2-Nitrophenol	ND		ug/kg	770	130	1
4-Nitrophenol	ND		ug/kg	500	140	1
2,4-Dinitrophenol	ND		ug/kg	1700	170	1
4,6-Dinitro-o-cresol	ND		ug/kg	930	170	1
Pentachlorophenol	ND		ug/kg	290	79.	1
Phenol	ND		ug/kg	360	54.	1
2-Methylphenol	ND		ug/kg	360	55.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	520	56.	1



Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-01
 Client ID: SOIL PILE #3 251473-01
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	360	68.	1
Benzoic Acid	ND		ug/kg	1200	360	1
Benzyl Alcohol	ND		ug/kg	360	110	1
Carbazole	39	J	ug/kg	360	35.	1
1,4-Dioxane	ND		ug/kg	54	16.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	86		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	96		30-120
2,4,6-Tribromophenol	77		10-136
4-Terphenyl-d14	88		18-120

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-02
 Client ID: SOIL PILE #4 251473-02
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 04/15/25 13:00
 Analyst: RMP
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 01:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	69	J	ug/kg	290	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	360	41.	1
Hexachlorobenzene	ND		ug/kg	220	40.	1
Bis(2-chloroethyl)ether	ND		ug/kg	330	49.	1
2-Chloronaphthalene	ND		ug/kg	360	36.	1
1,2-Dichlorobenzene	ND		ug/kg	360	65.	1
1,3-Dichlorobenzene	ND		ug/kg	360	62.	1
1,4-Dichlorobenzene	ND		ug/kg	360	63.	1
3,3'-Dichlorobenzidine	ND		ug/kg	360	96.	1
2,4-Dinitrotoluene	ND		ug/kg	360	72.	1
2,6-Dinitrotoluene	ND		ug/kg	360	62.	1
Fluoranthene	1500		ug/kg	220	42.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	360	39.	1
4-Bromophenyl phenyl ether	ND		ug/kg	360	55.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	430	62.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	390	36.	1
Hexachlorobutadiene	ND		ug/kg	360	53.	1
Hexachlorocyclopentadiene	ND		ug/kg	1000	330	1
Hexachloroethane	ND		ug/kg	290	59.	1
Isophorone	ND		ug/kg	330	47.	1
Naphthalene	79	J	ug/kg	360	44.	1
Nitrobenzene	ND		ug/kg	330	54.	1
NDPA/DPA	ND		ug/kg	290	41.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	360	56.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	360	120	1
Butyl benzyl phthalate	ND		ug/kg	360	91.	1
Di-n-butylphthalate	ND		ug/kg	360	69.	1
Di-n-octylphthalate	ND		ug/kg	360	120	1

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-02
 Client ID: SOIL PILE #4 251473-02
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	360	34.	1
Dimethyl phthalate	ND		ug/kg	360	76.	1
Benzo(a)anthracene	840		ug/kg	220	41.	1
Benzo(a)pyrene	920		ug/kg	290	88.	1
Benzo(b)fluoranthene	1200		ug/kg	220	61.	1
Benzo(k)fluoranthene	320		ug/kg	220	58.	1
Chrysene	850		ug/kg	220	38.	1
Acenaphthylene	130	J	ug/kg	290	56.	1
Anthracene	290		ug/kg	220	71.	1
Benzo(ghi)perylene	610		ug/kg	290	43.	1
Fluorene	89	J	ug/kg	360	35.	1
Phenanthrene	830		ug/kg	220	44.	1
Dibenzo(a,h)anthracene	120	J	ug/kg	220	42.	1
Indeno(1,2,3-cd)pyrene	410		ug/kg	290	50.	1
Pyrene	1300		ug/kg	220	36.	1
Biphenyl	ND		ug/kg	830	47.	1
4-Chloroaniline	ND		ug/kg	360	66.	1
2-Nitroaniline	ND		ug/kg	360	70.	1
3-Nitroaniline	ND		ug/kg	360	68.	1
4-Nitroaniline	ND		ug/kg	360	150	1
Dibenzofuran	78	J	ug/kg	360	34.	1
2-Methylnaphthalene	76	J	ug/kg	430	44.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	360	38.	1
Acetophenone	ND		ug/kg	360	45.	1
2,4,6-Trichlorophenol	ND		ug/kg	220	69.	1
p-Chloro-m-cresol	ND		ug/kg	360	54.	1
2-Chlorophenol	ND		ug/kg	360	43.	1
2,4-Dichlorophenol	ND		ug/kg	330	58.	1
2,4-Dimethylphenol	ND		ug/kg	360	120	1
2-Nitrophenol	ND		ug/kg	780	140	1
4-Nitrophenol	ND		ug/kg	510	150	1
2,4-Dinitrophenol	ND		ug/kg	1700	170	1
4,6-Dinitro-o-cresol	ND		ug/kg	940	170	1
Pentachlorophenol	ND		ug/kg	290	80.	1
Phenol	ND		ug/kg	360	55.	1
2-Methylphenol	ND		ug/kg	360	56.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	520	57.	1

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-02
 Client ID: SOIL PILE #4 251473-02
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	360	69.	1
Benzoic Acid	ND		ug/kg	1200	370	1
Benzyl Alcohol	ND		ug/kg	360	110	1
Carbazole	66	J	ug/kg	360	35.	1
1,4-Dioxane	ND		ug/kg	54	17.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	91		25-120
Phenol-d6	90		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	99		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	87		18-120

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-03
 Client ID: SOIL PILE #5 251473-03
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 04/16/25 09:45
 Analyst: SLR
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 01:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	37	J	ug/kg	150	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	22.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
1,2-Dichlorobenzene	ND		ug/kg	190	34.	1
1,3-Dichlorobenzene	ND		ug/kg	190	32.	1
1,4-Dichlorobenzene	ND		ug/kg	190	33.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1200		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	74	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1



Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-03
 Client ID: SOIL PILE #5 251473-03
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	750		ug/kg	110	21.	1
Benzo(a)pyrene	830		ug/kg	150	46.	1
Benzo(b)fluoranthene	900		ug/kg	110	32.	1
Benzo(k)fluoranthene	460		ug/kg	110	30.	1
Chrysene	730		ug/kg	110	20.	1
Acenaphthylene	130	J	ug/kg	150	29.	1
Anthracene	200		ug/kg	110	37.	1
Benzo(ghi)perylene	640		ug/kg	150	22.	1
Fluorene	63	J	ug/kg	190	18.	1
Phenanthrene	570		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	130		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	450		ug/kg	150	26.	1
Pyrene	1100		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	24.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	52	J	ug/kg	190	18.	1
2-Methylnaphthalene	66	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1



Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-03
 Client ID: SOIL PILE #5 251473-03
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	610	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	63	J	ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	28	8.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	53		10-136
4-Terphenyl-d14	65		18-120

Project Name: 251473

Project Number: 251473

Lab Number: L2522084

Report Date: 04/17/25

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
 Analytical Date: 04/14/25 01:23
 Analyst: SLR

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 01:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG2053067-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: 251473

Project Number: 251473

Lab Number: L2522084

Report Date: 04/17/25

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
 Analytical Date: 04/14/25 01:23
 Analyst: SLR

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 01:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG2053067-1					
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	21.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.

Project Name: 251473

Project Number: 251473

Lab Number: L2522084

Report Date: 04/17/25

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270E
 Analytical Date: 04/14/25 01:23
 Analyst: SLR

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 01:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG2053067-1					
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	530	170
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	76		10-136
4-Terphenyl-d14	75		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Parameter	LCS		LCS D		%Recovery		RPD
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG2053067-2 WG2053067-3

Acenaphthene	87		70		31-137	22		50
1,2,4-Trichlorobenzene	78		63		38-107	21		50
Hexachlorobenzene	89		69		40-140	25		50
Bis(2-chloroethyl)ether	78		62		40-140	23		50
2-Chloronaphthalene	80		64		40-140	22		50
1,2-Dichlorobenzene	80		67		40-140	18		50
1,3-Dichlorobenzene	80		67		40-140	18		50
1,4-Dichlorobenzene	80		66		28-104	19		50
3,3'-Dichlorobenzidine	76		60		40-140	24		50
2,4-Dinitrotoluene	110		86		40-132	24		50
2,6-Dinitrotoluene	96		75		40-140	25		50
Fluoranthene	88		68		40-140	26		50
4-Chlorophenyl phenyl ether	83		66		40-140	23		50
4-Bromophenyl phenyl ether	84		65		40-140	26		50
Bis(2-chloroisopropyl)ether	57		46		40-140	21		50
Bis(2-chloroethoxy)methane	81		66		40-117	20		50
Hexachlorobutadiene	75		60		40-140	22		50
Hexachlorocyclopentadiene	89		71		40-140	23		50
Hexachloroethane	84		68		40-140	21		50
Isophorone	81		64		40-140	23		50
Naphthalene	88		71		40-140	21		50
Nitrobenzene	83		67		40-140	21		50
NDPA/DPA	86		68		36-157	23		50



Lab Control Sample Analysis
Batch Quality Control

Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Parameter	LCS		LCSD		%Recovery		RPD	Qual	RPD	Limits
	%Recovery	Qual	%Recovery	Qual	Limits					

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG2053067-2 WG2053067-3

n-Nitrosodi-n-propylamine	76		63		32-121	19		50
Bis(2-ethylhexyl)phthalate	126		93		40-140	30		50
Butyl benzyl phthalate	110		83		40-140	28		50
Di-n-butylphthalate	106		82		40-140	26		50
Di-n-octylphthalate	124		89		40-140	33		50
Diethyl phthalate	92		73		40-140	23		50
Dimethyl phthalate	82		65		40-140	23		50
Benzo(a)anthracene	92		67		40-140	31		50
Benzo(a)pyrene	104		78		40-140	29		50
Benzo(b)fluoranthene	90		66		40-140	31		50
Benzo(k)fluoranthene	106		80		40-140	28		50
Chrysene	93		69		40-140	30		50
Acenaphthylene	90		71		40-140	24		50
Anthracene	94		70		40-140	29		50
Benzo(ghi)perylene	97		72		40-140	30		50
Fluorene	88		70		40-140	23		50
Phenanthrene	90		69		40-140	26		50
Dibenzo(a,h)anthracene	90		67		40-140	29		50
Indeno(1,2,3-cd)pyrene	91		69		40-140	28		50
Pyrene	86		66		35-142	26		50
Biphenyl	85		69		37-127	21		50
4-Chloroaniline	72		58		40-140	22		50
2-Nitroaniline	111		89		47-134	22		50



Lab Control Sample Analysis
Batch Quality Control

Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Parameter	LCS		LCSD		%Recovery		RPD
	%Recovery	Qual	%Recovery	Qual	Limits	Qual	Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG2053067-2 WG2053067-3

3-Nitroaniline	90		74		26-129	20		50
4-Nitroaniline	107		83		41-125	25		50
Dibenzofuran	85		68		40-140	22		50
2-Methylnaphthalene	81		64		40-140	23		50
1,2,4,5-Tetrachlorobenzene	76		61		40-117	22		50
Acetophenone	88		71		14-144	21		50
2,4,6-Trichlorophenol	87		69		30-130	23		50
p-Chloro-m-cresol	98		78		26-103	23		50
2-Chlorophenol	94		76		25-102	21		50
2,4-Dichlorophenol	90		71		30-130	24		50
2,4-Dimethylphenol	101		82		30-130	21		50
2-Nitrophenol	113		91		30-130	22		50
4-Nitrophenol	103		78		11-114	28		50
2,4-Dinitrophenol	106		82		4-130	26		50
4,6-Dinitro-o-cresol	121		94		10-130	25		50
Pentachlorophenol	80		66		17-109	19		50
Phenol	86		68		26-90	23		50
2-Methylphenol	94		74		30-130.	24		50
3-Methylphenol/4-Methylphenol	99		78		30-130	24		50
2,4,5-Trichlorophenol	88		70		30-130	23		50
Benzoic Acid	58		41		10-110	34		50
Benzyl Alcohol	88		71		40-140	21		50
Carbazole	97		73		54-128	28		50



Lab Control Sample Analysis
Batch Quality Control

Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Parameter	LCS		LCSD		%Recovery Limits		RPD	
	%Recovery	Qual	%Recovery	Qual			RPD	Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG2053067-2 WG2053067-3

1,4-Dioxane	62		52		40-140		18	50
-------------	----	--	----	--	--------	--	----	----

Surrogate	LCS		LCSD		%Recovery Limits		RPD	
	%Recovery	Qual	%Recovery	Qual			RPD	Acceptance Criteria
2-Fluorophenol				94			75	25-120
Phenol-d6				88			69	10-120
Nitrobenzene-d5				91			71	23-120
2-Fluorobiphenyl				79			62	30-120
2,4,6-Tribromophenol				99			77	10-136
4-Terphenyl-d14				87			65	18-120



PCBS

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-01
 Client ID: SOIL PILE #3 251473-01
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 04/13/25 12:28
 Analyst: MEO
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 00:05
 Cleanup Method: EPA 3665A
 Cleanup Date: 04/13/25
 Cleanup Method: EPA 3660B
 Cleanup Date: 04/13/25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	53.8	4.78	1	A
Aroclor 1221	ND		ug/kg	53.8	5.39	1	A
Aroclor 1232	ND		ug/kg	53.8	11.4	1	A
Aroclor 1242	ND		ug/kg	53.8	7.26	1	A
Aroclor 1248	ND		ug/kg	53.8	8.07	1	A
Aroclor 1254	ND		ug/kg	53.8	5.89	1	A
Aroclor 1260	ND		ug/kg	53.8	9.95	1	A
Aroclor 1262	ND		ug/kg	53.8	6.84	1	A
Aroclor 1268	ND		ug/kg	53.8	5.58	1	A
PCBs, Total	ND		ug/kg	53.8	4.78	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	82		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	94		30-150	B

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-02
 Client ID: SOIL PILE #4 251473-02
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 04/13/25 12:35
 Analyst: MEO
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 00:05
 Cleanup Method: EPA 3665A
 Cleanup Date: 04/13/25
 Cleanup Method: EPA 3660B
 Cleanup Date: 04/13/25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	53.7	4.77	1	A
Aroclor 1221	ND		ug/kg	53.7	5.38	1	A
Aroclor 1232	ND		ug/kg	53.7	11.4	1	A
Aroclor 1242	ND		ug/kg	53.7	7.24	1	A
Aroclor 1248	ND		ug/kg	53.7	8.05	1	A
Aroclor 1254	ND		ug/kg	53.7	5.87	1	A
Aroclor 1260	ND		ug/kg	53.7	9.92	1	A
Aroclor 1262	ND		ug/kg	53.7	6.82	1	A
Aroclor 1268	ND		ug/kg	53.7	5.56	1	A
PCBs, Total	ND		ug/kg	53.7	4.77	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	103		30-150	B

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-03
 Client ID: SOIL PILE #5 251473-03
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 04/13/25 12:43
 Analyst: MEO
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 00:05
 Cleanup Method: EPA 3665A
 Cleanup Date: 04/13/25
 Cleanup Method: EPA 3660B
 Cleanup Date: 04/13/25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	56.7	5.03	1	A
Aroclor 1221	ND		ug/kg	56.7	5.68	1	A
Aroclor 1232	ND		ug/kg	56.7	12.0	1	A
Aroclor 1242	ND		ug/kg	56.7	7.64	1	A
Aroclor 1248	ND		ug/kg	56.7	8.50	1	A
Aroclor 1254	ND		ug/kg	56.7	6.20	1	A
Aroclor 1260	ND		ug/kg	56.7	10.5	1	A
Aroclor 1262	ND		ug/kg	56.7	7.20	1	A
Aroclor 1268	ND		ug/kg	56.7	5.87	1	A
PCBs, Total	ND		ug/kg	56.7	5.03	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	87		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		30-150	B
Decachlorobiphenyl	101		30-150	B

Project Name: 251473

Project Number: 251473

Lab Number: L2522084

Report Date: 04/17/25

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
 Analytical Date: 04/13/25 11:50
 Analyst: MEO

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 00:05
 Cleanup Method: EPA 3665A
 Cleanup Date: 04/13/25
 Cleanup Method: EPA 3660B
 Cleanup Date: 04/13/25

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-03 Batch: WG2053064-1						
Aroclor 1016	ND		ug/kg	48.0	4.26	A
Aroclor 1221	ND		ug/kg	48.0	4.81	A
Aroclor 1232	ND		ug/kg	48.0	10.2	A
Aroclor 1242	ND		ug/kg	48.0	6.47	A
Aroclor 1248	ND		ug/kg	48.0	7.20	A
Aroclor 1254	ND		ug/kg	48.0	5.25	A
Aroclor 1260	ND		ug/kg	48.0	8.88	A
Aroclor 1262	ND		ug/kg	48.0	6.10	A
Aroclor 1268	ND		ug/kg	48.0	4.98	A
PCBs, Total	ND		ug/kg	48.0	4.26	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	124		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	129		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits

Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WGG2053064-2 WGG2053064-3

Aroclor 1016	114		115		40-140	1		50	A
Aroclor 1260	111		113		40-140	2		50	A

Surrogate	LCS		LCSD		Acceptance	
	%Recovery	Qual	%Recovery	Qual	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		84		30-150	A
Decachlorobiphenyl	127		130		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		84		30-150	B
Decachlorobiphenyl	131		132		30-150	B



PESTICIDES

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-01
 Client ID: SOIL PILE #3 251473-01
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 04/14/25 10:22
 Analyst: JAG
 Percent Solids: 90%

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 02:49
 Cleanup Method: EPA 3620B
 Cleanup Date: 04/13/25
 Cleanup Method: EPA 3660B
 Cleanup Date: 04/13/25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.70	0.332	1	A
Lindane	ND		ug/kg	0.706	0.316	1	A
Alpha-BHC	ND		ug/kg	0.706	0.200	1	A
Beta-BHC	ND		ug/kg	1.70	0.643	1	A
Heptachlor	ND		ug/kg	0.848	0.380	1	A
Aldrin	ND		ug/kg	1.70	0.597	1	A
Heptachlor epoxide	ND		ug/kg	3.18	0.953	1	A
Endrin	ND		ug/kg	0.706	0.290	1	A
Endrin aldehyde	ND		ug/kg	2.12	0.742	1	A
Endrin ketone	ND		ug/kg	1.70	0.436	1	A
Dieldrin	ND		ug/kg	1.06	0.530	1	A
4,4'-DDE	1.77		ug/kg	1.70	0.392	1	B
4,4'-DDD	ND		ug/kg	1.70	0.604	1	A
4,4'-DDT	ND		ug/kg	1.70	1.36	1	A
Endosulfan I	ND		ug/kg	1.70	0.400	1	A
Endosulfan II	ND		ug/kg	1.70	0.566	1	A
Endosulfan sulfate	ND		ug/kg	0.706	0.336	1	A
Methoxychlor	ND		ug/kg	3.18	0.989	1	A
Toxaphene	ND		ug/kg	31.8	8.90	1	A
cis-Chlordane	0.624	J	ug/kg	2.12	0.590	1	B
trans-Chlordane	0.660	J	ug/kg	2.12	0.559	1	B
Chlordane	ND		ug/kg	14.1	5.61	1	A

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-01
 Client ID: SOIL PILE #3 251473-01
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
-----------	--------	-----------	-------	----	-----	-----------------	--------

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	74		30-150	B

Project Name: 251473**Lab Number:** L2522084**Project Number:** 251473**Report Date:** 04/17/25**SAMPLE RESULTS**

Lab ID: L2522084-01
 Client ID: SOIL PILE #3 251473-01
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 04/16/25 22:02
 Analyst: DLP
 Percent Solids: 90%
 Methylation Date: 04/16/25 17:21

Extraction Method: EPA 8151A
 Extraction Date: 04/15/25 09:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	520	32.7	1	A
2,4,5-T	ND		ug/kg	520	16.1	1	A
2,4,5-TP (Silvex)	ND		ug/kg	520	13.8	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	70		30-150	A
DCAA	69		30-150	B

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-02
 Client ID: SOIL PILE #4 251473-02
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 04/14/25 10:33
 Analyst: JAG
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 02:49
 Cleanup Method: EPA 3620B
 Cleanup Date: 04/13/25
 Cleanup Method: EPA 3660B
 Cleanup Date: 04/13/25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.70	0.334	1	A
Lindane	ND		ug/kg	0.710	0.317	1	A
Alpha-BHC	ND		ug/kg	0.710	0.202	1	A
Beta-BHC	ND		ug/kg	1.70	0.646	1	A
Heptachlor	ND		ug/kg	0.852	0.382	1	A
Aldrin	ND		ug/kg	1.70	0.600	1	A
Heptachlor epoxide	ND		ug/kg	3.19	0.958	1	A
Endrin	ND		ug/kg	0.710	0.291	1	A
Endrin aldehyde	ND		ug/kg	2.13	0.745	1	A
Endrin ketone	ND		ug/kg	1.70	0.439	1	A
Dieldrin	ND		ug/kg	1.06	0.532	1	A
4,4'-DDE	1.89		ug/kg	1.70	0.394	1	B
4,4'-DDD	ND		ug/kg	1.70	0.608	1	A
4,4'-DDT	ND		ug/kg	1.70	1.37	1	A
Endosulfan I	ND		ug/kg	1.70	0.402	1	A
Endosulfan II	ND		ug/kg	1.70	0.569	1	A
Endosulfan sulfate	ND		ug/kg	0.710	0.338	1	A
Methoxychlor	ND		ug/kg	3.19	0.994	1	A
Toxaphene	ND		ug/kg	31.9	8.94	1	A
cis-Chlordane	0.623	J	ug/kg	2.13	0.593	1	B
trans-Chlordane	0.600	J	ug/kg	2.13	0.562	1	B
Chlordane	ND		ug/kg	14.2	5.64	1	A

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-02

Date Collected: 04/10/25 14:02

Client ID: SOIL PILE #4 251473-02

Date Received: 04/10/25

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		30-150	A
Decachlorobiphenyl	52		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	77		30-150	B

Project Name: 251473**Lab Number:** L2522084**Project Number:** 251473**Report Date:** 04/17/25**SAMPLE RESULTS**

Lab ID: L2522084-02
 Client ID: SOIL PILE #4 251473-02
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 04/16/25 22:39
 Analyst: DLP
 Percent Solids: 89%
 Methylation Date: 04/16/25 17:21

Extraction Method: EPA 8151A
 Extraction Date: 04/15/25 09:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	519	32.7	1	A
2,4,5-T	ND		ug/kg	519	16.1	1	A
2,4,5-TP (Silvex)	ND		ug/kg	519	13.8	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	76		30-150	A
DCAA	72		30-150	B

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-03
 Client ID: SOIL PILE #5 251473-03
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8081B
 Analytical Date: 04/14/25 10:44
 Analyst: JAG
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 04/13/25 02:49
 Cleanup Method: EPA 3620B
 Cleanup Date: 04/13/25
 Cleanup Method: EPA 3660B
 Cleanup Date: 04/13/25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.347	1	A
Lindane	ND		ug/kg	0.739	0.330	1	A
Alpha-BHC	ND		ug/kg	0.739	0.210	1	A
Beta-BHC	ND		ug/kg	1.77	0.673	1	A
Heptachlor	ND		ug/kg	0.887	0.398	1	A
Aldrin	ND		ug/kg	1.77	0.624	1	A
Heptachlor epoxide	ND		ug/kg	3.33	0.998	1	A
Endrin	ND		ug/kg	0.739	0.303	1	A
Endrin aldehyde	ND		ug/kg	2.22	0.776	1	A
Endrin ketone	ND		ug/kg	1.77	0.457	1	A
Dieldrin	ND		ug/kg	1.11	0.554	1	A
4,4'-DDE	1.76	J	ug/kg	1.77	0.410	1	B
4,4'-DDD	ND		ug/kg	1.77	0.633	1	A
4,4'-DDT	ND		ug/kg	1.77	1.43	1	A
Endosulfan I	ND		ug/kg	1.77	0.419	1	A
Endosulfan II	ND		ug/kg	1.77	0.593	1	A
Endosulfan sulfate	ND		ug/kg	0.739	0.352	1	A
Methoxychlor	ND		ug/kg	3.33	1.03	1	A
Toxaphene	ND		ug/kg	33.3	9.31	1	A
cis-Chlordane	0.622	J	ug/kg	2.22	0.618	1	A
trans-Chlordane	ND		ug/kg	2.22	0.585	1	B
Chlordane	ND		ug/kg	14.8	5.88	1	A

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-03
 Client ID: SOIL PILE #5 251473-03
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
-----------	--------	-----------	-------	----	-----	-----------------	--------

Organochlorine Pesticides by GC - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	46		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: 251473**Lab Number:** L2522084**Project Number:** 251473**Report Date:** 04/17/25**SAMPLE RESULTS**

Lab ID: L2522084-03
 Client ID: SOIL PILE #5 251473-03
 Sample Location: Not Specified

Date Collected: 04/10/25 14:02
 Date Received: 04/10/25
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 04/16/25 22:57
 Analyst: DLP
 Percent Solids: 87%
 Methylation Date: 04/16/25 17:21

Extraction Method: EPA 8151A
 Extraction Date: 04/15/25 09:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	187	11.8	1	A
2,4,5-T	ND		ug/kg	187	5.81	1	A
2,4,5-TP (Silvex)	ND		ug/kg	187	4.98	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	72		30-150	A
DCAA	67		30-150	B

Project Name: 251473

Project Number: 251473

Lab Number: L2522084

Report Date: 04/17/25

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 04/14/25 08:35
 Analyst: AKM

Extraction Method: EPA 3546
 Extraction Date: 04/12/25 13:49
 Cleanup Method: EPA 3620B
 Cleanup Date: 04/13/25
 Cleanup Method: EPA 3660B
 Cleanup Date: 04/13/25

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG2053011-1						
Delta-BHC	ND		ug/kg	1.55	0.303	A
Lindane	ND		ug/kg	0.646	0.288	A
Alpha-BHC	ND		ug/kg	0.646	0.183	A
Beta-BHC	ND		ug/kg	1.55	0.587	A
Heptachlor	ND		ug/kg	0.775	0.347	A
Aldrin	ND		ug/kg	1.55	0.546	A
Heptachlor epoxide	ND		ug/kg	2.90	0.872	A
Endrin	ND		ug/kg	0.646	0.265	A
Endrin aldehyde	ND		ug/kg	1.94	0.678	A
Endrin ketone	ND		ug/kg	1.55	0.399	A
Dieldrin	ND		ug/kg	0.968	0.484	A
4,4'-DDE	ND		ug/kg	1.55	0.358	A
4,4'-DDD	ND		ug/kg	1.55	0.553	A
4,4'-DDT	ND		ug/kg	1.55	1.24	A
Endosulfan I	ND		ug/kg	1.55	0.366	A
Endosulfan II	ND		ug/kg	1.55	0.518	A
Endosulfan sulfate	ND		ug/kg	0.646	0.307	A
Methoxychlor	ND		ug/kg	2.90	0.904	A
Toxaphene	ND		ug/kg	29.0	8.13	A
cis-Chlordane	ND		ug/kg	1.94	0.540	A
trans-Chlordane	ND		ug/kg	1.94	0.511	A
Chlordane	ND		ug/kg	12.9	5.13	A

Project Name: 251473

Project Number: 251473

Lab Number: L2522084

Report Date: 04/17/25

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
 Analytical Date: 04/14/25 08:35
 Analyst: AKM

Extraction Method: EPA 3546
 Extraction Date: 04/12/25 13:49
 Cleanup Method: EPA 3620B
 Cleanup Date: 04/13/25
 Cleanup Method: EPA 3660B
 Cleanup Date: 04/13/25

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG2053011-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: 251473

Project Number: 251473

Lab Number: L2522084

Report Date: 04/17/25

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8151A
 Analytical Date: 04/16/25 20:30
 Analyst: JAG

Extraction Method: EPA 8151A
 Extraction Date: 04/15/25 09:00

Methylation Date: 04/16/25 17:21

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-03 Batch: WG2053942-1						
2,4-D	ND		ug/kg	165	10.4	A
2,4,5-T	ND		ug/kg	165	5.12	A
2,4,5-TP (Silvex)	ND		ug/kg	165	4.39	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	72		30-150	A
DCAA	77		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits		Qual	Limits	Column

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG2053011-2 WG2053011-3

Delta-BHC	84		85		30-150	1		30	A
Lindane	92		95		30-150	3		30	A
Alpha-BHC	78		80		30-150	3		30	A
Beta-BHC	84		87		30-150	4		30	A
Heptachlor	87		90		30-150	3		30	A
Aldrin	90		94		30-150	4		30	A
Heptachlor epoxide	53		54		30-150	2		30	A
Endrin	87		90		30-150	3		30	A
Endrin aldehyde	60		65		30-150	8		30	A
Endrin ketone	80		84		30-150	5		30	A
Dieldrin	90		94		30-150	4		30	A
4,4'-DDE	89		91		30-150	2		30	A
4,4'-DDD	93		97		30-150	4		30	A
4,4'-DDT	90		94		30-150	4		30	A
Endosulfan I	83		85		30-150	2		30	A
Endosulfan II	82		86		30-150	5		30	A
Endosulfan sulfate	70		73		30-150	4		30	A
Methoxychlor	79		82		30-150	4		30	A
cis-Chlordane	76		79		30-150	4		30	A
trans-Chlordane	88		91		30-150	3		30	A



Lab Control Sample Analysis
Batch Quality Control

Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Parameter	LCS		LCSD		%Recovery Limits	RPD		RPD Limits
	%Recovery	Qual	%Recovery	Qual		RPD	Qual	

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG2053011-2 WG2053011-3

Surrogate	LCS		LCSD		Acceptance Criteria		Column
	%Recovery	Qual	%Recovery	Qual			
2,4,5,6-Tetrachloro-m-xylene	67		68		30-150		A
Decachlorobiphenyl	56		54		30-150		A
2,4,5,6-Tetrachloro-m-xylene	81		85		30-150		B
Decachlorobiphenyl	76		78		30-150		B



Lab Control Sample Analysis

Batch Quality Control

Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits		RPD	Limits	Column

Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG2053942-2 WG2053942-3

2,4-D	71		79		30-150		11		30	A
2,4,5-T	73		81		30-150		10		30	A
2,4,5-TP (Silvex)	77		84		30-150		9		30	A

Surrogate	LCS		LCSD		Acceptance	
	%Recovery	Qual	%Recovery	Qual	Criteria	Column
DCAA	73		80		30-150	A
DCAA	83		89		30-150	B



INORGANICS & MISCELLANEOUS

Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-01

Date Collected: 04/10/25 14:02

Client ID: SOIL PILE #3 251473-01

Date Received: 04/10/25

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.5		%	0.100	NA	1	-	04/11/25 11:33	121,2540G	ROI
Cyanide, Reactive	ND		mg/kg	10	10.	1	04/15/25 18:15	04/15/25 20:02	125,7.3	TLH
Sulfide, Reactive	ND		mg/kg	10	10.	1	04/15/25 18:15	04/15/25 19:55	125,7.3	TLH



Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-02

Date Collected: 04/10/25 14:02

Client ID: SOIL PILE #4 251473-02

Date Received: 04/10/25

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.4		%	0.100	NA	1	-	04/11/25 11:33	121,2540G	ROI
Cyanide, Reactive	ND		mg/kg	10	10.	1	04/15/25 18:15	04/15/25 20:02	125,7.3	TLH
Sulfide, Reactive	ND		mg/kg	10	10.	1	04/15/25 18:15	04/15/25 19:55	125,7.3	TLH



Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

SAMPLE RESULTS

Lab ID: L2522084-03

Date Collected: 04/10/25 14:02

Client ID: SOIL PILE #5 251473-03

Date Received: 04/10/25

Sample Location: Not Specified

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.4		%	0.100	NA	1	-	04/11/25 11:33	121,2540G	ROI
Cyanide, Reactive	ND		mg/kg	10	10.	1	04/15/25 18:15	04/15/25 20:02	125,7.3	TLH
Sulfide, Reactive	ND		mg/kg	10	10.	1	04/15/25 18:15	04/15/25 19:55	125,7.3	TLH



Project Name: 251473

Lab Number: L2522084

Project Number: 251473

Report Date: 04/17/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2054250-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	04/15/25 18:15	04/15/25 19:53	125,7.3	TLH
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG2054255-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	04/15/25 18:15	04/15/25 20:01	125,7.3	TLH



Lab Control Sample Analysis
Batch Quality Control

Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Parameter	LCS		LCSD		%Recovery Limits	RPD		RPD Limits
	%Recovery	Qual	%Recovery	Qual		RPD	Qual	
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2054250-2								
Sulfide, Reactive	74		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG2054255-2								
Cyanide, Reactive	83		-		30-125	-		40



Lab Duplicate Analysis
Batch Quality Control

Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2052535-1 QC Sample: L2522073-01 Client ID: DUP Sample						
Solids, Total	87.3	87.4	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2054250-3 QC Sample: L2522507-01 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG2054255-3 QC Sample: L2522507-01 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/kg	NC		40



Project Name: 251473
Project Number: 251473

Serial_No:04172512:31
Lab Number: L2522084
Report Date: 04/17/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information
Cooler **Custody Seal**
A Absent

Container Information		Initial	Final	Temp	Pres	Seal	Frozen	Analysis(*)
Container ID	Container Type	Cooler	pH	pH	deg C	Pres	Seal	Date/Time
L2522084-01A	Glass 120ml/4oz unpreserved	A	NA	3.1	Y	Absent		NYTCL-8270(14),REACTS(14),HERB-APA(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)
L2522084-02A	Glass 120ml/4oz unpreserved	A	NA	3.1	Y	Absent		REACTS(14),NYTCL-8270(14),HERB-APA(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)
L2522084-03A	Glass 120ml/4oz unpreserved	A	NA	3.1	Y	Absent		NYTCL-8270(14),REACTS(14),HERB-APA(14),TS(7),NYTCL-8081(14),NYTCL-8082(365),REACTCN(14)

*Values in parentheses indicate holding time in days



Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: 251473
Project Number: 251473

Lab Number: L2522084
Report Date: 04/17/25

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: 251473**Lab Number:** L2522084**Project Number:** 251473**Report Date:** 04/17/25**Data Qualifiers**

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: 251473**Lab Number:** L2522084**Project Number:** 251473**Report Date:** 04/17/25

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Pace Analytical Services LLCFacility: **Northeast**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**Revision **27**Published Date: **01/24/2025**Page **1** of **2****Certification Information****The following analytes are not included in our Primary NELAP Scope of Accreditation:****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

MADEP-APH.**Nonpotable Water:** **EPA RSK-175 Dissolved Gases****Biological Tissue Matrix:** EPA 3050B**Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048****EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Nonpotable Water: **EPA RSK-175 Dissolved Gases****The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)****The following analytes are included in our Massachusetts DEP Scope of Accreditation****Westborough Facility – 8 Walkup Dr. Westborough, MA 01581****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables).**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

Pace Analytical Services LLCID No.:**17873**Facility: **Northeast**

Revision 27

Department: **Quality Assurance**

Published Date: 01/24/2025

Title: **Certificate/Approval Program Summary**

Page 2 of 2

Certification IDs:**Westborough Facility – 8 Walkup Dr. Westborough, MA 01581**

CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048

ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.



CHAIN OF CUSTODY

NEC (SVOA, PCB)

1.F.1

L2522084

PARADIGM



REPORT TO:

INVOICE TO:

COMPANY:	Paradigm Environmental	COMPANY:	Same
ADDRESS:	179 Lake Avenue	ADDRESS:	
CITY:	Rochester	CITY:	
STATE:	NY	STATE:	
ZIP:	14608	ZIP:	
PHONE:		PHONE:	
FAX:		FAX:	
ATTN:	Reporting	ATTN:	Accounts Payable

DATE DUE: Standard

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

REQUESTED ANALYSIS

DATE	TIME	C O M P O S I T E	G R A B	SAMPLE LOCATION/FIELD ID	M A T R I X	C O N T A M I N A T I O N	REMARKS	PARADIGM LAB SAMPLE NUMBER
4/10/25	14:02	x		Soil Pile #3	Soil	1	Reactivity	251473-01
2	↓			Soil Pile #4	↓	↓	Pesticides	-02
3	↓			Soil Pile #5	↓	↓	Herbicides	-03
4							PCB	
5							TCV SVOA	
6								
7								
8								
9								
10								

** AB USE ONLY BELOW THIS LINE **

Sample Condition: Per NELAC/CLAP 210/241/242/243/244

Receipt Parameter

NELAC Compliance

Container Type:

Y ☐ N ☐

Preservation:

Y ☐ N ☐

Holding Time:

Y ☐ N ☐

Temperature:

Y ☐ N ☐

Client

Sampled By:

Date/Time

Total Cost:

Relinquished By:

Date/Time

Received By:

Date/Time

P.L.F.

Received By:

Date/Time

Received @ Lab By:

Date/Time