SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT

PARCELS LOCATED AT 1984 ELMWOOD AVENUE AND 33-35 NORRIS AVENUE BUFFALO, NEW YORK

March 2021 T0564-021-001

Prepared for:

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1.0 Introduction

1.1 Background and Site Description

Benchmark Environmental Engineering and Science, PLLC (Benchmark) performed a Supplemental Phase II Environmental Investigation on behalf of Uniland Development Company (Uniland) at two (2) parcels addressed as 1984 Elmwood Avenue (±6.942-acres) and 33-35 Norris Avenue (±4.45-acres) in the City of Buffalo, New York (Site, see Figures 1 and 2).

The Site is in a highly developed residential, commercial, and industrial area in the City of Buffalo in the vicinity of the intersection of Elmwood Avenue and Hertel Avenue. The majority of the two (2) parcels, totaling ± 11.4 -acres, are vacant. There is a garage/warehouse located on northwestern portion of the 1984 Elmwood Avenue parcel, and two (2) structures located on the southern end of 33-35 Norris Avenue (see Figure 2).

1.2 Previous Study

Some previous investigations^{1,2} have been completed at the Site by others on behalf of Uniland. Historically, the 1984 Elmwood Avenue parcel was used as a steel foundry, for general warehousing; and a railroad spur was present. The steel foundry was demolished in the 1980s. An approximate $\pm 3,100$ square foot 1-story building is present on the northwestern portion of 1984 Elmwood Avenue and the remainder of the northern parcel is vacant.

On the 33-35 Norris Avenue parcel, the southern portion of the Site, an approximate $\pm 14,400$ square foot 2-story building is present with associated asphalt parking lot on the southern end adjacent to an approximate $\pm 4,500$ square foot 2-story building present along Hertel Avenue. The remainder of the southern portion of the Site is vacant.

The 2017 investigation completed by LCS Inc. (LCS) extended across the Site and was intended to assess Recognized Environmental Conditions (RECs) identified in their June 9, 2017 Phase I Environmental Site Assessment (ESA). The LCS investigation identified fill

² "Draft Phase II Environmental Subsurface Investigation, Prospective YMCA North Buffalo Facility Development, Uniland Site, Buffalo, New York". Prepared by Haley & Aldrich of New York. September 2020.



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¹ "Limited and Focused Geophysical Survey and Limited and Focused Subsurface Soil & Groundwater Investigation Report for the Property Identified as: Mixed-Use Property 1984 Elmwood Avenue, 15, 19, 33, 35, 107, and 125 Norris Street, and 742 Hertel Avenue, Buffalo, New York 14207". Prepared by LCS Inc. November 2017.

material across the Site at depths ranging from 0.5 to 12 feet below ground surface (fbgs). Analytical testing identified polyaromatic hydrocarbons (PAHs) at two (2) locations (TP-1 and TP-4) on the southern portion of the 33-35 Norris Avenue parcel that exceed corresponding Restricted Residential SCOs (RRSCOs) per 6NYCRR Part 375. In addition, benzo(b) fluoranthene (also a PAH) was detected in a groundwater sample collected at TPMW1 from the southern portion 33-35 Norris Avenue along Hertel Avenue above its respective NYSDEC groundwater quality standard.

The previous investigation completed by Haley & Aldrich of New York (H&A) was focused on the northern portion of the Site (1984 Elmwood Avenue parcel) and was intended to assess soil quality related to potential acquisition of the properties and earthwork planning for potential construction.

Similar to LCS, the H&A investigation also identified fill material across the northern parcel of the Site at depths ranging from about 3 to 10 fbgs. According to their Phase II report fill materials generally consisted of silts, sands and gravels containing miscellaneous debris, including concrete, brick, slag, ash, cinders, metal, plastic, rubber, asphalt, and wood. The analytical sampling completed by H&A was done at soil boring locations also used for the geotechnical evaluation. No samples were collected from the test pits completed. In reviewing the test pit logs, a chemical-like odor and a creosote-like odor were noted at TP-2 and TP-3, respectively, in the upper 2 feet at both locations, but again no analytical samples were collected.

The H&A Phase II analytical testing identified a few PAHs above their respective RRSCOs and commercial soil cleanup objectives (CSCOs), and/or Industrial soil cleanup objectives (ISCOs) and various metal analytes (chromium, copper, arsenic, nickel, and manganese) above their respective RRSCOs, CSCOs, and/or ISCOs on 1984 Elmwood Avenue.

The analytical results from the previous investigations which have Part 375 soil cleanup objective (SCO) exceedances are shown on Figure 3, along with Benchmark's Supplemental Phase II results.



2.0 SUPPLEMENTAL SITE INVESTIGATION ACTIVITIES

2.1 Test Pit Investigation

The supplemental investigation consisted of test pit excavation with a mini track-mounted excavator to assess subsurface conditions at the Site. Fifteen (15) test pits designated as BMTP-1 through BMTP-18 were completed at the Site (see Figure 2). The test pits were advanced to depths varying from approximately 3 to 6 fbgs into the underlying the Site.

The soil/fill samples were retrieved from the test pit locations to allow for field characterization of the subsurface lithology and collection of soil/fill samples by Benchmark's geologist. The physical characteristics of the subsurface soil/fill at the test pit locations were classified using the ASTM D2488 Visual-Manual Procedure Description. Soil/fill from each test pit was field screened using a MiniRae 3000 Photoionization Detector (PID). Visual and/or olfactory observations were also noted, if observed. Field observations, including lithology, depths, PID field screen results, etc., at the test pit locations are summarized in the Summary of Subsurface Field Observations provided in Table 1. Photographs taken during the work are included in Appendix A.

Twelve (12) soil/fill samples were selected for laboratory analysis and were transported under chain-of custody command to Alpha Analytical (Alpha) in Westborough, Massachusetts (see Table 2). Sample analysis included USEPA Target Compound List (TCL) volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) using the TCL base-neutral list or CP-51 list, and Resource Conservation and Recovery Act (RCRA) 8 metals. Samples were collected in laboratory provided sample bottles, cooled to 4° C in the field, and transported to the laboratory for analysis.



3.0 INVESTIGATION FINDINGS

3.1 Site Geology

The surface of the Site generally consisted of a mixed vegetative cover (grass, brush, and trees) throughout most of the Site except where buildings or asphalt parking lots were not present.

The subsurface conditions of the Site consisted of varying types of fill materials ranging in depth from 1 to greater than 6 fbgs. Fill depths appeared to be shallower on the western portion of the Site (TP-1, -2, -13, and -15) and deepest in the central portion of the Site (TP-5, TP-7, -8).

Native soil was encountered some test pit locations and consisted of reddish brown sandy lean clay, typical of this area.

Field observations, including lithology, depths, PID scan results, etc., at the test pit locations are summarized in the Summary of Subsurface Field Observations Table provided in Table 1.

3.2 Field Observations

Soil/fill samples from the test pit investigation were observed and field screened for total volatile organics using a PID. No elevated PID readings identified at the test pit locations.

Fill materials or reworked soils were identified at the 15 test pit locations which contained various amounts of dark brown/black fines (silts and sands) and/or clay-like soil with brick, concrete debris, slag, cinders, metal, and ash.

In various locations throughout the Site there is evidence of building debris present, but in larger quantities in the central portion of 33-35 Norris Avenue where vegetated debris mounds of concrete and block potentially from the demolition of the previous foundry building that was present.

3.3 Soil Analytical Results

Table 2 is summary of the analytical samples collected for analysis and the analytical testing assigned. Table 3 presents a summary of the analytical results from the twelve (12)



soil/fill samples that were analyzed. For comparative purposes, Table 3 includes the Part 375 SCOs.

Part 375 SCOs are specific to the intended reuse of a site and are typically employed for comparison at other investigation or remediation sites with NYSDEC oversight, such as Brownfield sites. Based upon current zoning and the anticipated future use of the Site the Restricted Residential SCOs are considered applicable comparative criteria.

Figure 2 identifies the test pits investigation locations discussed below, completed by Benchmark, and Figure 3 identifies Benchmark's along with previous investigation location and associated analytical data identified above their respective Part 375 SCOs.

A copy of the laboratory analytical data report is included in Appendix B.

Volatile Organic Compounds

Two (2) VOCs, acetone and tetrachloroethene, were detected above method detection limits (MDLs) in the one (1) sample analyzed for VOCs during the Supplemental Phase II. The detected concentrations were below their respective Unrestricted soil cleanup objectives (USCOs).

Semi-Volatile Organic Compounds

SVOCs were detected above MDLs in the ten (10) samples analyzed for SVOCs. SVOCs, specifically, polycyclic aromatic hydrocarbons (PAHs) were detected above their respective Part 375 RRSCOs or ISCOs at one (1) investigation location, BMTP-4.

Metal Analytes

Metal analytes were detected above MDLs in the twelve (12) samples analyzed for metals. Metal analytes were detected above their respective Part 375 RRSCO at TP-9, 1 to 2.5 ft (chromium) and ISCO at TP-2, 1.5 to 3 ft (arsenic).



4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the Supplemental Phase II Investigation at the Site, Benchmark offers the following conclusions and recommendations:

- The subsurface conditions consisted of varying types of fill materials ranging in depth from 1 to greater than 6 fbgs. Fill depths appeared to be shallower on the western portion of the Site (TP-1, -2, -13, and -15) and deepest in the central portion of the Site (TP-5, TP-7, -8). Fill materials contained various amounts of dark brown/black fines (silts and sands), and/or clay-like soils with brick, concrete debris, slag, cinders, metal, and ash.
- Native soil was encountered at some test pit locations and consisted of reddish brown sandy lean clay, typical of this area.
- SVOCs, specifically PAHs were detected above MDLs in the ten (10) samples analyzed. PAHs were detected above their respective RRSCOs or ISCOs at TP-4, 1 to 3 ft.
- Metals were detected above MDLs in the twelve (12) samples analyzed. Arsenic was
 detected above its ISCO at TP-2, 1.5 to 3 ft (1984 Elmwood Avenue) and
 chromium was detected above its RRSCO at TP-9, 1 to 2.5 ft (33-35 Norris
 Avenue).

The analytical results of the Supplemental Phase II coupled with the analytical results of the previous investigations indicate that both the 1984 Elmwood Avenue and 33-35 Norris Avenue parcels have environmental impacts and may be attributed historic Site usage and/or filling activities. SVOCs and metals were detected at concentrations above their respective RRSCOs, which are applicable for the intended reuse of the Site (multi-family residential development at 33-35 Norris Avenue and athletic facility with an outdoor recreation area at 1984 Elmwood Avenue). There were also some samples exceeding their CSCOs and ISCOs. The contaminated fill material and any other solid waste material generated during the redevelopment project will require proper management and landfill disposal.



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Based on the existing data, the two (2) parcels are candidates for the BCP. The Site meets the definition of a BCP site per the current BCP law which states a "brownfield site or site shall mean any real property where a contaminant is present at levels exceeding the soil cleanup objectives or other health-based or environmental standards, criteria, or guidance adopted by the department that are applicable based on the reasonably anticipated use of the property, in accordance with applicable regulations."



5.0 LIMITATIONS

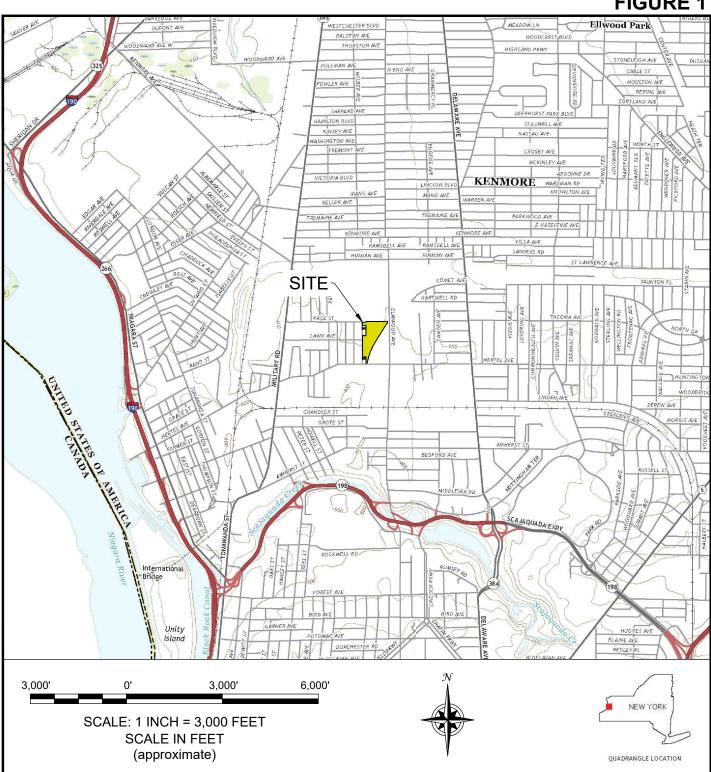
This report has been prepared for the exclusive use of Uniland. The contents of this report are limited to information available at the time of the Supplemental Phase II Environmental Investigation activities and to data referenced herein; and assume all referenced historic information sources to be true and accurate. The findings herein may be relied upon only at the discretion of Uniland. Use of or reliance on this report or its findings by any other person or entity is prohibited without written permission of Benchmark Environmental Engineering and Science, PLLC.



FIGURES



FIGURE 1





2558 HAMBURG TURNPIKE SUITE 300 BUFFALO, NY 14218 (716) 856-0599

PROJECT NO.: B0564-021-001

DATE: MARCH 2021 DRAFTED BY: CNK

SITE LOCATION AND VICINITY MAP

SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT

PARCELS LOCATED AT 1984 ELMWOOD AVENUE AND 33-35 NORRIS AVENUE **BUFFALO, NEW YORK** PREPARED FOR

UNILAND DEVELOPMENT COMPANY

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IGURE

SITE PLAN (AERIAL) WITH INVESTIGATION LOCATIONS

SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT PARCELS LOCATED AT 1984 ELMWOOD AVENUE AND 33-35 NORRIS AVENUE BUFFALO, NEW YORK

PREPARED FOR

UNILAND DEVELOPMENT COMPANY



SUITE 300 BUFFALO, NY 14218 (716) 856-0599

JOB NO.: B0564-021-001



BENZO(B)FLUORANTHENE

CHRYSENE

INDENO(1,2,3-CD)PYRENE

22

1.6

1.2

323

0.208

PARAMETER LEAD 64.6 **ARSENIC** 17.2 BM TP-4 (1-3 FT) 1/21/2021 LEAD 182 **PARAMETER** MG/KG LCS BH1/TPMW1 BENZO(A)ANTHRACENE 1.4 HERTEL AVENUE LCS BH2 (2-4 FT) 10/24/2017 BENZO(A)PYRENE 1.7

LEAD **MERCURY PREVIOUS INVESTIGATION**

MG/KG

0.118

SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT PARCELS LOCATED AT 1984 ELMWOOD AVENUE AND 33-35 NORRIS AVENUE **BUFFALO, NEW YORK**

LOCATIONS AND EXCEEDANCES

PREPARED FOR UNILAND DEVELOPMENT COMPANY



IMAGE TAKEN FROM BING MAPS 2021.

6 NYCRR PART 375 SOIL CLEANUP

OBJECTIVES (SCOs)

SOIL ANALYTICAL RESULTS COMPARED TO

SCALE: 1 INCH = 125 FEET

SCALE IN FEET

(approximate)

2558 HAMBURG TURNPIKE SUITE 300 BUFFALO, NY 14218 (716) 856-0599

125

250'

JOB NO.: B0564-021-001

GURE

PARAMETER

ACETONE

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SUMMARY OF SUBSURFACE FIELD OBSERVATIONS SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT 1984 ELMWOOD AVENUE AND 33-35 NORIIS AVENUE BUFFALO, NEW YORK

Location	Thickness of Fill (ft)	Water Present	Depth of Test Pit (fbgs)	Length of Test Pits (ft)	Test Pit Width (ft)	PID Readings (ppm)	Sample Depth (ft)	Depth (fbgs) and Soil Description			
						0		0 to 0.3 ft: ASPHALT - Dark brown/Black, mostly fines, with some fine sand, some fine sand, mixed with concrete, brick, metal debris, ash and partial burnt material.			
TP-1	2.5	No	3.5	6	2.5	0		0.3 to 1 ft: STONE SUB-BASE - Grey, limstone subase, loose.			
11 -1	2.5	INO	0.0		2.0	0	1 to 2.5 ft	1 to 2.5 ft: FILL - Dark brown/black, moist, mostly clay mixed with cinders, brick, metal debris.			
						0		2.5 to 3.5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, with some fine sand, very stiff, rootletts.			
						0		0 to 0.5 ft: RE-WORKED CLAY - Reddish brown, mostly clay with some fine sand, mixed with pieces of ashphalt, stone and brick.			
TP-2	3	Yes	4	7	3	0	1.5 to 3 ft	0.5 to 3.0 ft: FILL - Dark brown/black, moist to wet (2.5 fbgs), mostly fine sand and gravel, large pieces of concrete, brick, metl debris, sheen on perched water, no odors			
						0		3 to 4 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, with some fine sand, very stiff, rootletts.			
TP-3	>3	No	3	12	3	0		0 to 3 ft: RE-WORKED CLAY - Reddish brown, mostly clay with some fine sand, mixed with pieces of ashphalt, stone and brick.			
TP-4	>3	No	3	8	3	0		0 to 3 ft. FILL - Black/dark brown, mostly fine sand with silt fines, orange brick, cinders and concrete. Metal debris, refusal on concrete.			
TP-5	>3	No	3	8	4	0		0 to 3 ft. FILL - Dark brown/Black, mostly silt fines with some fine sand, orange brick, large concrete debris, metal debris and plastic debris, refusal on brick floor.			
TP-6	>4	No	4	8	4	0	0 - 0.5 ft 1 - 3 ft	0 to 4 ft. FILL - Dark brown/Black, mostly silt fines with some fine sand, orange brick, large concrete and asphalt debris, metal debris, refusal on lage slag pieces at 4 fbgs.			
						0		0 to 1 ft: FILL - Dark brown/black, mostly silt and fine sand, with orange brick and concrete.			
TP-7	>6	Yes	6	12	3	0		1 to 3 ft: FILL - Reb Brown, moist, mostly fine sand, with pieces of sand stone, concrete and brick.			
						0		3 to 6 ft: FILL - Dark brown/ black, mostly fine sand and silt, with concrete, brick and metal debris, perched water at 5.5 fbgs.			
TD 0		No		40	2.5	0	0 - 0.5 ft	0 to 4 ft: FILL - Brown/black, mostly fines with some fine sand, with concrete, orange brick, large peicies of slag.			
TP-8	>6	No	6	10	2.5	0		4 to 6 ft: Fill - As above with ash, no slag.			

SUMMARY OF SUBSURFACE FIELD OBSERVATIONS SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT 1984 ELMWOOD AVENUE AND 33-35 NORIIS AVENUE BUFFALO, NEW YORK

Location	Thickness of Fill (ft)	Water Present	Depth of Test Pit (fbgs)	Length of Test Pits (ft)	Test Pit Width (ft)	PID Readings (ppm)	Sample Depth (ft)	Depth (fbgs) and Soil Description			
TP-9	>3	Ma	2.5	6	2	0		0 to 1 ft: FILL - Brown/dark brown, mostly fines with some fine sand, with orange brick and slag.			
117-9	>3	No	2.5	6	3	0	1 - 2.5 ft	1 to 3 ft FILL - light grey/light brown, mostly slag pieces fused together.			
TP-10	4.5	Yes	5	8	4	0	2 - 4.5 ft	0 to 4.5 ft: FILL- Brown/dark brown, mostly silt and clay, with large pieces of asphalt and concrete, brick and slag, perced water at 4 fbgs			
11 - 10	4.0	103	3	0	7	0		4.5 to 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.			
TP-11	3	Yes	4	8	2.5	0	0 - 0.5 ft	0 to 3 ft: FILL- Dark brown, moist, mostly silt and sand, brick, slag, concrete, perched water at 2.5 fbgs			
1P-11	3	res	4	8	2.5	0		3 to 4 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.			
TP-12	3	Yes	4	15	2.5	0		0 to 3 ft: FILL- Dark brown, moist, mostly silt and sand, brick, slag, concrete, wood, perched water 2.0 fbgs.			
11 -12	3	163	7	19	2.0	0		3 to 4 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.			
						0		0 to 0.5 ft: STONE- grey, moist, mostly crushed limestone.			
TP-13	P-13 1 No		3	10	2.5	0		0.5 to 1 ft: RE-WORKED CLAY - Dark grey/black, mostly clay with some fine sand, mixed with pieces, stone.			
						0		1 to 3 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.			
TD 44	0	NI-	4	0	0.5	0		0 to 2 ft: FILL- Dark brown, moist, mostly silt and fine sand, large concrete and metal debris, brick.			
TP-14	2	No	4	8	2.5	0		2 to 4 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.			
TP-15	2	No	3	8	2.5	0	0.5 - 2 ft	0 to 2 ft: FILL- Dark brown/black, moist, mostly silt and fine sand, with slag and brick.			
11 - 13	۷	INO	3	ŏ 	2.5	0		2 to 5 ft: SANDY LEAN CLAY - Reddish brown, moist, mostly clay, some fine sand, stiff.			

Definitions:

fbgs = feet below ground surface



SUMMARY OF SAMPLING AND ANALYSIS PROGRAM SUPPLEMENTAL PHASE II INVESTIGATION 1984 ELMWOOD AVENUE AND 33-35 NORRIS AVENUE BUFFALO, NEW YORK

				Analysis				
Sample Location	Sample Depth (fbgs)	Soil Type	Parcel Address	TCL VOCs	CP-51 List SVOCs	RCRA 8 Metals		
Subsurfac	e Soil/Fill San	nples						
TP-1	1 to 2.5 ft	Fill	33-35 Norris		Х	Х		
TP-2	1.5 to 3 ft	Fill	33-35 Norris	Х	Х	Х		
TP-4	0 to 0.5 ft	Fill	33-35 Norris		X	X		
TP-4	1 to 3	Fill	33-35 Norris		X	X		
TP-5	0 to 0.5 ft	Fill	33-35 Norris			Х		
TP-5	1 to 3 ft	Fill	33-35 Norris			Х		
TP-6	0 to 0.5 ft	Fill	1984 Elmwood		Х	Х		
TP-8	0 to 0.5 ft	Fill	1984 Elmwood		Х	Х		
TP-9	1 to 2.5 ft	Fill	1984 Elmwood		Х	Х		
TP-10	2 to 4.5 ft	Fill	1984 Elmwood		Х	Х		
TP-11	0 to 0.5 ft	Fill	1984 Elmwood		Х	Х		
TP-15	0.5 to 2	Fill	1984 Elmwood	_	Χ	Χ		

Notes:

fbgs - feet below ground surface.

TCL VOC - Total Compound List, Volatile Organic Compounds

CP-51 List SVOCs - Commissioner's Policy 51 List of Semi-volatile Organic Compounds.

RCRA - Resource Conservation & Recovery Act.



SUMMARY OF SOIL/FILL SAMPLE ANALYTICAL RESULTS SUPPLEMENTAL PHASE II INVESTIGATION 1984 ELMWOOD AVENUE AND 33-35 NORRIS AVENUE **BUFFALO, NEW YORK**

										SAMPLE I	LOCATIONS					
PARAMETER ¹	Unrestricted Use SCOs ²	Restricted Residential Use SCOs ³	Commercial Use SCOs ³	Industrial Use SCOs ³	TP-1 1-2.5 FT	TP-2 1.5-3 FT	TP-4 0-0.5 FT	TP-4 1-3 FT	TP-5 0-0.5 FT	TP-5 1-3 FT	TP-6 0-0.5 FT	TP-8 0-0.5 FT	TP-9 1-2.5 FT	TP-10 2-4.5 FT	TP-11 0-0.5 FT	TP-15 0.5-2 FT
Volatile Organic Compounds (VOCs) - mg/Kg ⁴									172	172021					
Acetone	0.05	100	500	1000		0.018										-
Tetrachloroethene	1.3	19	150	300		0.00057 J										
Semi-Volatile Organic Compounds (iemi-Volatile Organic Compounds (SVOCs) - mg/Kg ⁴															
Acenaphthene	20	100	500	1000	ND	0.088 J	0.043 J	0.17		-	0.048 J	0.024 J	ND	0.089 J	0.028 J	ND
Acenaphthylene	100	100	500	1000	ND	ND	0.06 J	0.25		-	ND	ND	ND	ND	ND	ND
Anthracene	100	100	500	1000	ND	0.21	0.1 J	0.61			0.044 J	0.05 J	ND	0.18	0.053 J	0.063 J
Benzo(a)anthracene	1	1	5.6	11	0.11	0.58	0.47	1.4			0.15	0.19	0.067 J	0.35	0.22	0.29
Benzo(a)pyrene	1	1	1	1.1	0.088 J	0.6	0.56	1.7			0.14 J	0.22	0.048 J	0.41	0.26	0.3
Benzo(b)fluoranthene	1	1	5.6	11	0.12	0.75	0.72	2.2			0.19	0.3	0.066 J	0.5	0.34	0.36
Benzo(ghi)perylene	100	100	500	1000	0.047 J	0.3	0.32	1.2			0.093 J	0.12 J	0.029 J	0.22	0.13 J	0.15
Benzo(k)fluoranthene	0.8	3.9	56	110	ND	0.18	0.21	0.71			0.061 J	0.077 J	ND	0.14	0.095 J	0.12
Chrysene	1	3.9	56	110	0.18	0.52	0.53	1.6			0.15	0.19	0.05 J	0.33	0.22	0.26
Dibenzo (a,h)anthracene	0.33	0.33	0.56	1.1	ND	0.08 J	0.08 J	0.29			ND	0.031 J	ND	0.06 J	0.035 J	0.042 J
Fluoranthene	100	100	500	1000	0.16	1.1	0.89	2.6			0.32	0.36	0.13	0.69	0.44	0.53
Fluorene	30	100	500	1000	0.056 J	0.087 J	0.049 J	0.17 J			0.037 J	0.021 J	ND	0.094 J	0.022 J	0.023 J
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	11	0.035 J	0.34	0.34	1.2			0.099 J	0.13 J	0.031 J	0.25	0.15 J	0.17
Naphthalene	12	100	500	1000	0.76	0.14 J	0.22	0.35			0.23	0.033 J	ND	0.041 J	ND	0.027 J
Phenanthrene	100	100	500	1000	0.7	0.82	0.7	1.9			0.23	0.23	0.13	0.65	0.24	0.26
Pyrene	100	100	500	1000	0.14	0.86	0.77	2.6			0.27	0.28	0.1 J	0.56	0.35	0.44
Total Metals - mg/Kg																
Arsenic	13	16	16	16	5.12	17.2	4.11	7.96	5.56	4.31	3.19	1.83	1.89	1.44	3.44	4.7
Barium	350	400	400	10000	59.3	117	85	84.5	66.2	36.4	81.4	85.2	58.9	9.28	47.8	33.6
Cadmium	2.5	4.3	9.3	60	0.365 J	1.49	1.32	1.32	0.853	1.05	1.37	1.01	0.608	0.262 J	0.514 J	0.712
Chromium	30	180	1500	6800	19.1	18.4	23.7	18.8	8.24	14.1	73.4	73.9	209	3.21	9.02	10.6
Lead	63	400	1000	3900	13.3	182	64.6	323	86.9	79.3	67.5	59.8	24.1	8.63	30.1	44.9
Mercury	0.18	0.81	2.8	5.7	0.075	ND	0.097	0.208	0.121	0.07 J	0.082 J	ND	ND	ND	ND	ND
Selenium	3.9	180	1500	6800	ND	0.256 J	0.345 J	1.58	1.81	1.26	0.495 J	0.767 J	0.539 J	ND	0.306 J	0.455 J
Silver	2	180	1500	6800	ND	ND	ND	0.323 J	ND	0.211 J	0.237 J	0.358 J	0.954	ND	ND	ND

- Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
 Values per 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs), Table 375-6.8(a).
 Values per 6NYCRR Part 375 Restricted Residential Use Soil Cleanup Objectives (SCOs), Table 375-6.8(b).
 Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

- Definitions:

 ND = Parameter not detected above laboratory detection limit.

 "--" = No value available for the parameter, or the parameter was not analyzed for.
- J = Estimated value; result is less than the sample quantitation limit but greater than zero.

BOLD	= Exceeds USCOs
BOLD	= Exceeds RRSCOs
BOLD	= Exceeds CSCOs
BOLD	= Exceeds ISCOs

APPENDIX A

PHOTOGRAPHIC LOG



Photo 1:



Photo 3



Photo 2:



Photo 4:



Photo 1: Debris pile on eastern portion of 35 Norris Ave. – Facing east.

Photo 2: Concrete debris located on eastern portion of 35 Norris Ave. – Facing east.

Photo 3: Scattered construction debris on western portion of 35 Norris Ave.

Photo 4: Construction debris located on southern portion of 35 Norris Ave. – Looking south.

1984 Elmwood Avenue and 15, 19, 33-35, 107 & 125 Norris Avenue



Photo 5:





Photo 6:



Photo 8:



Photo 5: Advancement of TP-1, located on 19 Norris Ave. – Facing east.

Photo 6: Typical urban fill material encountered throughout the Site.

Photo 7: Advancement of TP-2, located on 15 Norris Ave. – Facing east.

Photo 8: Sheen on perched water at TP-2 location.

1984 Elmwood Avenue and 15, 19, 33-35, 107 & 125 Norris Avenue



Photo 9:



Photo 11:



Photo 10:



Photo 12:



Photo 9: Fill materials, TP-5, located on southern portion of 35 Norris Ave. – Looking east.

Photo 10: Fill material in TP-6, located on western portion of 35 Norris Ave. – Looking west.

Photo 11: Fill material in TP-7, located on northwestern portion of 35 Norris Ave. – Looking west.

Photo 12: Slag/fill material in TP-9, located on northern portion of 35 Norris Ave.

1984 Elmwood Avenue and 15, 19, 33-35, 107 & 125 Norris Avenue



Photo 13:





Photo 15:



Photo 16:



Fill debris in TP-10, located in southern corner of 1984 Elmwood – Facing South. Photo 13:

Soil/fill debris in TP-14, located in southeastern corner of 125 Norris Ave. – Facing South. Photo 14:

Photo 15: Advancing TP-15, located on 107 Norris Ave. – Facing west.

Photo 16: Soil/fill with slag in TP-15. - Facing west.

1984 Elmwood Avenue and 15, 19, 33-35, 107 & 125 Norris Avenue



APPENDIX B

LABORATORY ANALYTICAL DATA REPORTS





ANALYTICAL REPORT

Lab Number: L2103685

Client: Benchmark & Turnkey Companies

2558 Hamburg Turnpike

Suite 300

Buffalo, NY 14218

ATTN: Chris Boron
Phone: (716) 856-0599

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Report Date: 02/08/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical 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-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

 Lab Number:
 L2103685

 Report Date:
 02/08/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2103685-01	TP-2 1.5-3 FT	SOIL	BUFFALO, NY	01/21/21 08:32	01/22/21
L2103685-02	TP-4 1-3 FT	SOIL	BUFFALO, NY	01/21/21 09:31	01/22/21
L2103685-03	TP-5 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 10:12	01/22/21
L2103685-04	TP-5 1-3 FT	SOIL	BUFFALO, NY	01/21/21 10:15	01/22/21
L2103685-05	TP-6 3-4 FT	SOIL	BUFFALO, NY	01/21/21 11:06	01/22/21
L2103685-06	TP-7 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 11:51	01/22/21
L2103685-07	TP-8 4-6 FT	SOIL	BUFFALO, NY	01/21/21 12:40	01/22/21
L2103685-08	TP-9 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 12:55	01/22/21
L2103685-09	TP-10 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 13:25	01/22/21
L2103685-10	TP-11 1-3 FT	SOIL	BUFFALO, NY	01/21/21 14:09	01/22/21
L2103685-11	TP-12 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 14:20	01/22/21
L2103685-12	TP-12 0.5-3 FT	SOIL	BUFFALO, NY	01/21/21 14:23	01/22/21
L2103685-13	TP-13 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 14:56	01/22/21
L2103685-14	TP-13 0.5-1.0 FT	SOIL	BUFFALO, NY	01/21/21 15:01	01/22/21
L2103685-15	TP-14 0.5-2.0 FT	SOIL	BUFFALO, NY	01/21/21 15:15	01/22/21
L2103685-16	TP-15 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 15:45	01/22/21
L2103685-17	TP-10 2-4.5 FT	SOIL	BUFFALO, NY	01/21/21 13:23	01/22/21
L2103685-18	TP-9 1-2.5 FT	SOIL	BUFFALO, NY	01/21/21 13:00	01/22/21
L2103685-19	TP-15 0.5-2 FT	SOIL	BUFFALO, NY	01/21/21 15:48	01/22/21
L2103685-20	TP-7 1-3 FT	SOIL	BUFFALO, NY	01/21/21 11:45	01/22/21



Project Name:ELMWOOD+HERTELLab Number:L2103685Project Number:B0564-021-001Report Date:02/08/21

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 Alpha 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, solids and tissues are reported on a dry 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, Alpha'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 Alpha Project Manager and made arrangements for Alpha 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.	



Serial_No:02082112:32

Project Name:ELMWOOD+HERTELLab Number:L2103685Project Number:B0564-021-001Report Date:02/08/21

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.

Sample Receipt

The analyses performed were specified by the client.

L2103685-02: The container for the NY CP-51 PAHs - EPA 8270D analysis was received damaged (cap was broken); however, there was adequate sample remaining to perform the requested 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.

Nachelle M. Morris

Authorized Signature:

Title: Technical Director/Representative Date: 02/08/21

ALPHA

ORGANICS



SEMIVOLATILES



Serial_No:02082112:32

Project Name: ELMWOOD+HERTEL Lab Number: L2103685

Project Number: B0564-021-001 **Report Date:** 02/08/21

SAMPLE RESULTS

Lab ID: Date Collected: 01/21/21 09:31

Client ID: TP-4 1-3 FT Date Received: 01/22/21 Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1.8270D Extraction Date: 02/04/21 07:57

Analytical Method: 1,8270D Extraction Date: 02/04/21 07:57

Analytical Date: 02/05/21 14:38

Analyst: WR Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor					
Semivolatile Organics by GC/MS - Westborough Lab											
Acenaphthene	170		ug/kg	160	20.	1					
Fluoranthene	2600		ug/kg	120	22.	1					
Naphthalene	350		ug/kg	190	24.	1					
Benzo(a)anthracene	1400		ug/kg	120	22.	1					
Benzo(a)pyrene	1700		ug/kg	160	47.	1					
Benzo(b)fluoranthene	2200		ug/kg	120	33.	1					
Benzo(k)fluoranthene	710		ug/kg	120	31.	1					
Chrysene	1600		ug/kg	120	20.	1					
Acenaphthylene	250		ug/kg	160	30.	1					
Anthracene	610		ug/kg	120	38.	1					
Benzo(ghi)perylene	1200		ug/kg	160	23.	1					
Fluorene	170	J	ug/kg	190	19.	1					
Phenanthrene	1900		ug/kg	120	24.	1					
Dibenzo(a,h)anthracene	290		ug/kg	120	22.	1					
Indeno(1,2,3-cd)pyrene	1200		ug/kg	160	27.	1					
Pyrene	2600		ug/kg	120	19.	1					

Surrogate	% Recovery	Accep Qualifier Crit	
Nitrobenzene-d5	59	23	-120
2-Fluorobiphenyl	54	30	-120
4-Terphenyl-d14	52	18	-120



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103685

Report Date: 02/08/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 02/04/21 22:24

Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 02/04/21 07:57

Parameter	Result	Qualifier U	Jnits		RL	MDL	
Semivolatile Organics by GC/MS	- Westborough	n Lab for san	nple(s):	02	Batch:	WG1461574-1	
Acenaphthene	ND	ı	ug/kg		130	17.	
Fluoranthene	ND		ug/kg		99	19.	
Naphthalene	ND	I	ug/kg		160	20.	
Benzo(a)anthracene	ND	ı	ug/kg		99	18.	
Benzo(a)pyrene	ND	l	ug/kg		130	40.	
Benzo(b)fluoranthene	ND	l	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	ı	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	ı	ug/kg		130	23.	
Pyrene	ND		ug/kg		99	16.	

Surrogate	%Recovery Q	Acceptance ualifier Criteria
2-Fluorophenol	74	25-120
Phenol-d6	75	10-120
Nitrobenzene-d5	91	23-120
2-Fluorobiphenyl	76	30-120
2,4,6-Tribromophenol	89	10-136
4-Terphenyl-d14	77	18-120



Lab Control Sample Analysis Batch Quality Control

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103685

Report Date:

02/08/21

arameter	LCS %Recovery	Qual	LCSD %Recovery	% Qual	%Recovery Limits	RPD	Qual	RPD Limits
emivolatile Organics by GC/MS - W	estborough Lab Associa	ated sample(s):	02 Batch:	WG1461574-2	WG1461574-3			
Acenaphthene	64		66		31-137	3		50
Fluoranthene	66		68		40-140	3		50
Naphthalene	61		60		40-140	2		50
Benzo(a)anthracene	64		64		40-140	0		50
Benzo(a)pyrene	66		66		40-140	0		50
Benzo(b)fluoranthene	60		68		40-140	13		50
Benzo(k)fluoranthene	70		62		40-140	12		50
Chrysene	62		62		40-140	0		50
Acenaphthylene	65		65		40-140	0		50
Anthracene	67		68		40-140	1		50
Benzo(ghi)perylene	64		66		40-140	3		50
Fluorene	65		66		40-140	2		50
Phenanthrene	62		64		40-140	3		50
Dibenzo(a,h)anthracene	66		67		40-140	2		50
Indeno(1,2,3-cd)pyrene	66		65		40-140	2		50
Pyrene	65		67		35-142	3		50

Lab Control Sample Analysis

ELMWOOD+HERTEL Batch Quality Control

Lab Number: L2103685

Project Number: B0564-021-001 **Report Date:** 02/08/21

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

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1461574-2 WG1461574-3

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qua	Acceptance Criteria
2-Fluorophenol	62	62	25-120
Phenol-d6	63	63	10-120
Nitrobenzene-d5	74	75	23-120
2-Fluorobiphenyl	61	63	30-120
2,4,6-Tribromophenol	73	78	10-136
4-Terphenyl-d14	61	64	18-120



Project Name:

METALS



044401 5 050111 70

•

SAMPLE RESULTS

Lab ID:L2103685-01Date Collected:01/21/21 08:32Client ID:TP-2 1.5-3 FTDate Received:01/22/21Sample Location:BUFFALO, NYField Prep:Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 75%

Dilution Date Date Prep Analytical Method **Parameter** Result Qualifier Units Factor **Prepared** Analyzed Method RLMDL Analyst Total Metals - Mansfield Lab Arsenic, Total 17.2 mg/kg 0.511 0.106 1 02/04/21 07:10 02/05/21 19:08 EPA 3050B 1,6010D BV Barium, Total 117 mg/kg 0.511 0.089 1 02/04/21 07:10 02/05/21 19:08 EPA 3050B 1,6010D ΒV 1 Cadmium, Total 1.49 mg/kg 0.511 0.050 02/04/21 07:10 02/05/21 19:08 EPA 3050B 1,6010D BV 1 Chromium, Total 18.4 mg/kg 0.511 0.049 02/04/21 07:10 02/05/21 19:08 EPA 3050B 1,6010D ΒV ΒV 182 2.56 0.137 02/04/21 07:10 02/05/21 19:08 EPA 3050B 1,6010D Lead, Total mg/kg 1 ND 1,7471B Mercury, Total 0.084 0.055 1 02/04/21 06:30 02/04/21 20:53 EPA 7471B NΒ mg/kg J Selenium, Total 0.256 mg/kg 1.02 0.132 1 02/04/21 07:10 02/05/21 19:08 EPA 3050B 1,6010D ΒV Silver, Total ND 0.511 0.145 1 02/04/21 07:10 02/05/21 19:08 EPA 3050B 1,6010D ΒV mg/kg



D0004 021 001

Epolit Date. 02/06/

SAMPLE RESULTS

Lab ID:L2103685-02Date Collected:01/21/21 09:31Client ID:TP-4 1-3 FTDate Received:01/22/21Sample Location:BUFFALO, NYField Prep:Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 84%

Dilution Date Date Prep Analytical Method **Parameter** Qualifier Units Factor **Prepared** Analyzed Method Result RLMDL Analyst Total Metals - Mansfield Lab Arsenic, Total 7.96 mg/kg 0.454 0.095 1 02/03/21 21:35 02/05/21 15:17 EPA 3050B 1,6010D BV Barium, Total 84.5 mg/kg 0.454 0.079 1 02/03/21 21:35 02/05/21 15:17 EPA 3050B 1,6010D ΒV 1 Cadmium, Total 1.32 mg/kg 0.454 0.045 02/03/21 21:35 02/05/21 15:17 EPA 3050B 1,6010D BV 1 Chromium, Total 18.8 mg/kg 0.454 0.044 02/03/21 21:35 02/05/21 15:17 EPA 3050B 1,6010D ΒV 2.27 ΒV 323 0.122 02/03/21 21:35 02/05/21 15:17 EPA 3050B 1,6010D Lead, Total mg/kg 1 1,7471B Mercury, Total 0.208 0.078 0.051 1 02/03/21 22:30 02/04/21 19:54 EPA 7471B NΒ mg/kg Selenium, Total 1.58 mg/kg 0.909 0.117 1 02/03/21 21:35 02/05/21 15:17 EPA 3050B 1,6010D ΒV Silver, Total 0.323 J 0.454 0.128 1 02/03/21 21:35 02/05/21 15:17 EPA 3050B 1,6010D ΒV mg/kg



SAMPLE RESULTS

 Lab ID:
 L2103685-03
 Date Collected:
 01/21/21 10:12

 Client ID:
 TP-5 0-0.5 FT
 Date Received:
 01/22/21

 Sample Location:
 BUFFALO, NY
 Field Prep:
 Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 66%

Percent Solids:	00 /0					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	sfield Lab										
Arsenic, Total	5.65		mg/kg	0.592	0.123	1	02/03/21 21:35	02/05/21 15:22	EPA 3050B	1,6010D	BV
Barium, Total	66.2		mg/kg	0.592	0.103	1	02/03/21 21:35	02/05/21 15:22	EPA 3050B	1,6010D	BV
Cadmium, Total	0.853		mg/kg	0.592	0.058	1	02/03/21 21:35	5 02/05/21 15:22	EPA 3050B	1,6010D	BV
Chromium, Total	8.24		mg/kg	0.592	0.057	1	02/03/21 21:35	02/05/21 15:22	EPA 3050B	1,6010D	BV
Lead, Total	86.9		mg/kg	2.96	0.159	1	02/03/21 21:35	02/05/21 15:22	EPA 3050B	1,6010D	BV
Mercury, Total	0.121		mg/kg	0.099	0.065	1	02/03/21 22:30	02/04/21 19:57	EPA 7471B	1,7471B	NB
Selenium, Total	1.81		mg/kg	1.18	0.153	1	02/03/21 21:35	5 02/05/21 15:22	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.592	0.168	1	02/03/21 21:35	5 02/05/21 15:22	EPA 3050B	1,6010D	BV



SAMPLE RESULTS

 Lab ID:
 L2103685-04
 Date Collected:
 01/21/21 10:15

 Client ID:
 TP-5 1-3 FT
 Date Received:
 01/22/21

Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 87%

Dilution Date Date Prep Analytical Method **Parameter** Qualifier Units Factor **Prepared** Analyzed Method Result RLMDL Analyst Total Metals - Mansfield Lab Arsenic, Total 4.31 mg/kg 0.450 0.094 1 02/03/21 21:35 02/05/21 15:26 EPA 3050B 1,6010D BV Barium, Total 36.4 mg/kg 0.450 0.078 1 02/03/21 21:35 02/05/21 15:26 EPA 3050B 1,6010D ΒV 1 Cadmium, Total 1.05 mg/kg 0.450 0.044 02/03/21 21:35 02/05/21 15:26 EPA 3050B 1,6010D BV 1 Chromium, Total 14.1 mg/kg 0.450 0.043 02/03/21 21:35 02/05/21 15:26 EPA 3050B 1,6010D ΒV ΒV 79.3 2.25 0.120 02/03/21 21:35 02/05/21 15:26 EPA 3050B 1,6010D Lead, Total mg/kg 1 J 1,7471B Mercury, Total 0.070 0.081 0.053 1 02/03/21 22:30 02/04/21 20:01 EPA 7471B NΒ mg/kg Selenium, Total 1.26 mg/kg 0.899 0.116 1 02/03/21 21:35 02/05/21 15:26 EPA 3050B 1,6010D ΒV Silver, Total 0.211 J 0.450 0.127 1 02/03/21 21:35 02/05/21 15:26 EPA 3050B 1,6010D ΒV mg/kg



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number:

L2103685

Report Date: 02/08/21

Method Blank Analysis Batch Quality Control

Parameter	Result Q	ualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield	Lab for sa	mple(s):	02-04 B	atch: Wo	314613	00-1				
Arsenic, Total	ND		mg/kg	0.400	0.083	1	02/03/21 21:35	02/05/21 12:07	1,6010D	GD
Barium, Total	ND		mg/kg	0.400	0.070	1	02/03/21 21:35	02/05/21 12:07	1,6010D	GD
Cadmium, Total	ND		mg/kg	0.400	0.039	1	02/03/21 21:35	02/05/21 12:07	1,6010D	GD
Chromium, Total	0.060	J	mg/kg	0.400	0.038	1	02/03/21 21:35	02/05/21 12:07	1,6010D	GD
Lead, Total	ND		mg/kg	2.00	0.107	1	02/03/21 21:35	02/05/21 12:07	1,6010D	GD
Selenium, Total	0.196	J	mg/kg	0.800	0.103	1	02/03/21 21:35	02/05/21 12:07	1,6010D	GD
Silver, Total	ND		mg/kg	0.400	0.113	1	02/03/21 21:35	02/05/21 12:07	7 1,6010D	GD

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mansf	ield Lab for sample(s):	02-04 B	atch: W	G14613	01-1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	02/03/21 22:30	02/04/21 19:34	1,7471B	NB

Prep Information

Digestion Method: EPA 7471B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfiel	ld Lab for sample(s):	01 Batch	n: WG14	461515-	1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	02/04/21 06:30	02/04/21 20:27	7 1,7471B	NB

Prep Information

Digestion Method: EPA 7471B



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number:

L2103685

Report Date: 02/08/21

Method Blank Analysis Batch Quality Control

Parameter	Result (Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfiel	d Lab for sa	ample(s):	01 Batch	n: WG14	461534-	1				
Arsenic, Total	ND		mg/kg	0.400	0.083	1	02/04/21 07:10	02/05/21 08:47	1,6010D	GD
Barium, Total	ND		mg/kg	0.400	0.070	1	02/04/21 07:10	02/05/21 08:47	1,6010D	GD
Cadmium, Total	ND		mg/kg	0.400	0.039	1	02/04/21 07:10	02/05/21 08:47	1,6010D	GD
Chromium, Total	0.116	J	mg/kg	0.400	0.038	1	02/04/21 07:10	02/05/21 08:47	1,6010D	GD
Lead, Total	ND		mg/kg	2.00	0.107	1	02/04/21 07:10	02/05/21 08:47	1,6010D	GD
Selenium, Total	ND		mg/kg	0.800	0.103	1	02/04/21 07:10	02/05/21 08:47	1,6010D	GD
Silver, Total	ND		mg/kg	0.400	0.113	1	02/04/21 07:10	02/05/21 08:47	1,6010D	GD

Prep Information

Digestion Method: EPA 3050B



Lab Control Sample Analysis Batch Quality Control

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103685

Parameter	LCS %Recover	y Qual	LCSI %Reco		%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample	(s): 02-04 E	Batch: WG14	61300-2	SRM Lot Numb	er: D109-540			
Arsenic, Total	103		-		70-130	-		
Barium, Total	92		-		75-125	-		
Cadmium, Total	97		-		75-125	-		
Chromium, Total	95		-		70-130	-		
Lead, Total	96		-		72-128	-		
Selenium, Total	104		-		68-132	-		
Silver, Total	100		-		68-131	-		
Total Metals - Mansfield Lab Associated sample	(s): 02-04 E	Batch: WG14	61301-2	SRM Lot Numb	er: D109-540			
Mercury, Total	75		-		60-140	-		
Total Metals - Mansfield Lab Associated sample	(s): 01 Bato	ch: WG14615	515-2 SRI	M Lot Number:	D109-540			
Mercury, Total	100		-		60-140	-		



Lab Control Sample Analysis Batch Quality Control

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103685

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated samp	ole(s): 01 Batch: WG14	161534-2 SRM Lot Number	r: D109-540		
Arsenic, Total	102	-	70-130	-	
Barium, Total	97	-	75-125	-	
Cadmium, Total	101	-	75-125	-	
Chromium, Total	101	-	70-130	-	
Lead, Total	95	-	72-128	-	
Selenium, Total	100	-	68-132	-	
Silver, Total	104	-	68-131	-	



Matrix Spike Analysis Batch Quality Control

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103685

ırameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery Qu	Recovery al Limits	RPD Qual	RPD Limits
otal Metals - Mansfield L	ab Associated san	nple(s): 02-0	4 QC Bate	ch ID: WG146	1300-3	QC Sam	nple: L2105060-02	Client ID: MS	Sample	
Arsenic, Total	26.2	56.5	84.8	104		-	-	75-125	-	20
Barium, Total	75.6	942	1010	99		-	-	75-125	-	20
Cadmium, Total	12.4	24	37.2	103		-	-	75-125	-	20
Chromium, Total	49.8	94.2	136	91		-	-	75-125	-	20
Lead, Total	153	240	394	100		-	-	75-125	-	20
Selenium, Total	6.21	56.5	67.2	108		-	-	75-125	-	20
Silver, Total	12.8	141	161	105		-	-	75-125	-	20
otal Metals - Mansfield L	ab Associated san	nple(s): 02-0	4 QC Bate	ch ID: WG146	1301-3	QC Sam	nple: L2105060-02	Client ID: MS	Sample	
Mercury, Total	ND	0.858	0.695	81		-	-	80-120	-	20
otal Metals - Mansfield L	ab Associated san	nple(s): 01	QC Batch I	D: WG146151	5-3	QC Sample	e: L2100009-205	Client ID: MS S	Sample	
Mercury, Total	1.08	1.27	0.786	0	Q	-	-	80-120	-	20
otal Metals - Mansfield L	ab Associated sam	nple(s): 01	QC Batch I	D: WG146153	34-3 (QC Sample	e: L2105208-01 Cl	ient ID: MS Sa	ample	
Arsenic, Total	8.81	11.5	18.3	82		-	-	75-125	-	20
Barium, Total	123	192	265	74	Q	-	-	75-125	-	20
Cadmium, Total	0.625	4.88	4.41	77		-	-	75-125	-	20
Chromium, Total	10.3	19.2	24.7	75		-	-	75-125	-	20
	10.0	10.2	=							
Lead, Total	13.2	48.8	45.5	66	Q	-	-	75-125	-	20
Lead, Total Selenium, Total				66 75	Q	-	-	75-125 75-125	-	20



Lab Duplicate Analysis Batch Quality Control

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number:

L2103685

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s):	02-04 QC Batch ID: WG1	1461300-4 QC Sample:	: L2105060-02	Client ID:	DUP San	nple
Arsenic, Total	26.2	28.0	mg/kg	7		20
Barium, Total	75.6	84.8	mg/kg	11		20
Cadmium, Total	12.4	13.5	mg/kg	8		20
Chromium, Total	49.8	59.3	mg/kg	17		20
Lead, Total	153	220	mg/kg	36	Q	20
Selenium, Total	6.21	7.72	mg/kg	22	Q	20
Silver, Total	12.8	12.8	mg/kg	0		20
Total Metals - Mansfield Lab Associated sample(s):	02-04 QC Batch ID: WG1	1461301-4 QC Sample:	: L2105060-02	Client ID:	DUP San	nple
Mercury, Total	ND	ND	mg/kg	NC		20
Total Metals - Mansfield Lab Associated sample(s):	01 QC Batch ID: WG146	1515-4 QC Sample: L2	2100009-205 C	Client ID: D	OUP Samp	le
Mercury, Total	1.08	0.616	mg/kg	55	Q	20
Fotal Metals - Mansfield Lab Associated sample(s):	01 QC Batch ID: WG146	1534-4 QC Sample: L2	2105208-01 CI	ient ID: Dl	JP Sample	9
Arsenic, Total	8.81	10.3	mg/kg	16		20



INORGANICS & MISCELLANEOUS



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001 Lab Number:

L2103685

Report Date: 02/08/21

SAMPLE RESULTS

Lab ID: L2103685-01

Client ID: TP-2 1.5-3 FT Sample Location: BUFFALO, NY Date Collected:

01/21/21 08:32

Date Received:

01/22/21

Not Specified Field Prep:

Sample Depth:

Matrix:

Soil

Paramete	r Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Ch	emistry - Mansfield Lab									
Solids, Total	75.0		%	0.100	0.100	1	-	02/03/21 12:09	121,2540G	AL



Project Name: ELMWOOD+HERTEL

Lab Number: L2103685 B0564-021-001

Report Date: 02/08/21

SAMPLE RESULTS

Lab ID: Date Collected: L2103685-02 01/21/21 09:31

Client ID: TP-4 1-3 FT Date Received: 01/22/21 Not Specified Sample Location: BUFFALO, NY Field Prep:

Sample Depth:

Project Number:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	Vestborough Lab)								
Solids, Total	84.0		%	0.100	NA	1	-	02/03/21 10:54	121,2540G	RI



Project Name: ELMWOOD+HERTEL

Lab Number:

L2103685

Project Number: B0564-021-001 Report Date:

02/08/21

SAMPLE RESULTS

Lab ID: L2103685-03

TP-5 0-0.5 FT

Date Collected:

01/21/21 10:12

Client ID: Sample Location: BUFFALO, NY Date Received: Field Prep:

01/22/21 Not Specified

Sample Depth:

Matrix:

Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	estborough Lab)								
Solids, Total	66.3		%	0.100	NA	1	-	02/03/21 10:54	121,2540G	RI



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number:

L2103685

Report Date: 02/08/21

SAMPLE RESULTS

Lab ID: L2103685-04

Client ID: TP-5 1-3 FT Sample Location: BUFFALO, NY

Date Collected:

01/21/21 10:15

1P-5 1-3 F I

Date Received:

01/22/21

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 - W	estborough Lab)								
Solids, Total	86.6		%	0.100	NA	1	-	02/03/21 10:54	121,2540G	RI



Lab Duplicate Analysis Batch Quality Control

ELMWOOD+HERTEL Batch Quality C

Lab Number:

L2103685

Project Number: B0564-021-001

Project Name:

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual RPD Lir	nits
General Chemistry - Westborough Lab Associated sample	e(s): 02-04 QC Batc	h ID: WG1461276-1	QC Sample: L	.2103685-02	Client ID: TP-4 1-3	FT
Solids, Total	84.0	85.0	%	1	20	
General Chemistry - Mansfield Lab Associated sample(s)	: 01 QC Batch ID: V	VG1461303-1 QC Sar	mple: L21050	12-04 Client	ID: DUP Sample	
Solids, Total	92.2	91.9	%	0	10	



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103685 Report Date: 02/08/21

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Custody Seal Cooler

Α Absent В Absent

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	pН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2103685-01A	Metals Only-Glass 60mL/2oz unpreserved	В	NA		2.1	Υ	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR- TI(180),A2-TS(7),PB-TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L2103685-02A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		TS(7)
L2103685-02B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR- TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD- TI(180)
L2103685-02C	Glass 120ml/4oz unpreserved	Α	NA		3.6	Υ	Absent		NYCP51-PAH(14)
L2103685-02D	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8260(14)
L2103685-03A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		TS(7)
L2103685-03B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR- TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD- TI(180)
L2103685-03C	Glass 120ml/4oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-04A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		TS(7)
L2103685-04B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR- TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD- TI(180)
L2103685-04C	Glass 120ml/4oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-04D	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8260(14)
L2103685-05A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-05B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-05C	Glass 120ml/4oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-05D	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8260(14)
L2103685-06A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-06B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)



Lab Number: L2103685

Report Date: 02/08/21

Project Name: ELMWOOD+HERTEL

Project Number: P0564 004 004

Project Number: B0564-021-001

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН		Pres	Seal	Date/Time	Analysis(*)
L2103685-06C	Glass 120ml/4oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-07A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-07B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-07C	Glass 120ml/4oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-07D	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8260(14)
L2103685-08A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-08B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-08C	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-09A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-09B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-09C	Glass 120ml/4oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-10A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-10B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-10C	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-10D	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8260(14)
L2103685-11A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-11B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-11C	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-12A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-12B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-12C	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-12D	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8260(14)
L2103685-13A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-13B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-13C	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-14A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-14B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-14C	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8270(14)



Lab Number: L2103685

Report Date: 02/08/21

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Container Info	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2103685-14D	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8260(14)
L2103685-15A	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-15B	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM(),HOLD-8270(14)
L2103685-15C	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8260(14)
L2103685-16A	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-16B	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM(),HOLD-8270(14)
L2103685-17A	Vial Large Septa unpreserved (4oz)	В	NA		2.1	Υ	Absent		HOLD-8260(14),HOLD-WETCHEM()
L2103685-18A	Vial Large Septa unpreserved (4oz)	В	NA		2.1	Υ	Absent		HOLD-WETCHEM(),HOLD-8260(14)
L2103685-19A	Vial Large Septa unpreserved (4oz)	В	NA		2.1	Υ	Absent		HOLD-8260(14),HOLD-WETCHEM()
L2103685-20A	Plastic 2oz unpreserved for TS	Α	NA		3.6	Υ	Absent		HOLD-WETCHEM()
L2103685-20B	Metals Only-Glass 60mL/2oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-METAL(180),HOLD-HG(28)
L2103685-20C	Glass 120ml/4oz unpreserved	Α	NA		3.6	Υ	Absent		HOLD-8270(14)
L2103685-20D	Vial Large Septa unpreserved (4oz)	Α	NA		3.6	Υ	Absent		HOLD-8260(14)



GLOSSARY

Acronyms

EDL

EPA

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.)

- Fertimated Dataction Limit: This value represents the level to which target analyte concentrations are

 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).

Of I Arts using Solid-I hase interoextraction (SI ML).

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.

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.

Environmental Protection Agency.

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

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



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.

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'. 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 at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a "Total' result is requested, the results of its individual components will also be reported.

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.)

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.
- 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).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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.
- 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 Identified Compounds (TICs).
- 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.

Report Format: DU Report with 'J' Qualifiers



Data Qualifiers

- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name:ELMWOOD+HERTELLab Number:L2103685Project Number:B0564-021-001Report Date:02/08/21

REFERENCES

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.

LIMITATION OF LIABILITIES

Alpha Analytical 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 Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical 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 Alpha Analytical.

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.



ID No.:17873

Revision 17

Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Published Date: 4/28/2020 9:42:21 AM Title: Certificate/Approval Program Summary Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

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.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; 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 II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

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.

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

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

Document Type: Form

Pre-Qualtrax Document ID: 08-113

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-08	TP-9 0-	6.5 4		1255			X	V	X						3
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ANALYTICAL REPORT

Lab Number: L2103699

Client: Benchmark & Turnkey Companies

2558 Hamburg Turnpike

Suite 300

Buffalo, NY 14218

ATTN: Chris Boron
Phone: (716) 856-0599

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Report Date: 01/29/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical 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-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

 Lab Number:
 L2103699

 Report Date:
 01/29/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2103699-01	TP-1 1-2.5 FT	SOIL	BUFFALO, NY	01/21/21 08:07	01/22/21
L2103699-02	TP-2 1.5-3 FT	SOIL	BUFFALO, NY	01/21/21 08:32	01/22/21
L2103699-03	TP-4 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 09:27	01/22/21
L2103699-04	TP-6 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 11:02	01/22/21
L2103699-05	TP-8 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 12:48	01/22/21
L2103699-06	TP-9 1-2.5 FT	SOIL	BUFFALO, NY	01/21/21 13:00	01/22/21
L2103699-07	TP-10 2-4.5 FT	SOIL	BUFFALO, NY	01/21/21 13:22	01/22/21
L2103699-08	TP-11 0-0.5 FT	SOIL	BUFFALO, NY	01/21/21 14:04	01/22/21
L2103699-09	TP-15 0.5-2.0 FT	SOIL	BUFFALO, NY	01/21/21 15:48	01/22/21



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 Alpha 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, solids and tissues are reported on a dry 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, Alpha'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 Alpha Project Manager and made arrangements for Alpha 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.	



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.

Sample Receipt

L2103699-02: The sample identified as "TP-2 1.5-3 FT" on the chain of custody was identified as "TP-2 1.5-2 FT" on the container label. At the client's request, the sample is reported as "TP-2 1.5-3 FT".

Volatile Organics

L2103699-02: Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

Total Metals

The WG1458390-4 Laboratory Duplicate RPDs for arsenic (33%), barium (36%), chromium (31%) and lead (24%), performed on L2103699-01, are outside the acceptance criteria. The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

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.

1 2 A Jennifer L Clements

Authorized Signature:

Title: Technical Director/Representative

Date: 01/29/21

ORGANICS



VOLATILES



Serial_No:01292112:08

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

SAMPLE RESULTS

Lab Number: L2103699

Report Date: 01/29/21

Lab ID: L2103699-02

Client ID: TP-2 1.5-3 FT Sample Location: BUFFALO, NY Date Received: 01/22/21 Not Specified

01/21/21 08:32

Field Prep:

Date Collected:

Sample Depth:

Matrix: Soil Analytical Method: 1,8260C Analytical Date: 01/26/21 15:24

Analyst: MKS 71% Percent Solids:

Volatile Organics by GC/MS - Westborough Lab Methylene chloride ND ug/kg 6.3 2.9 1 1,1-Dichloroethane ND ug/kg 1.2 0.18 1 Chloroform ND ug/kg 1.9 0.18 1 Carbon tetrachloride ND ug/kg 1.2 0.29 1 Carbon tetrachloropropane ND ug/kg 1.2 0.16 1 Dibromochloromethane ND ug/kg 1.2 0.18 1 1,1,2-Trichloropethane ND ug/kg 1.2 0.18 1 1,1,1-Trichloroethane ND ug/kg 1.2 0.18 1 1,1,1-Trichloroethane ND ug/kg 0.63 0.24 1 1,1,1-Trichloroethane ND ug/kg 0.0 0.87 1 1,1,1-Trichloroethane ND ug/kg 0.63 0.21 1 1,1,1-Trichloroethane ND ug/kg 0.63 0.21 1 <t< th=""><th>Parameter</th><th>Result</th><th>Qualifier</th><th>Units</th><th>RL</th><th>MDL</th><th>Dilution Factor</th></t<>	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,1-Dichloroethane ND ug/kg 1,2 0.18 1 Chloroform ND ug/kg 1,9 0.18 1 Carbon eterachloride ND ug/kg 1,2 0.29 1 1,2-Dichloropropane ND ug/kg 1,2 0.16 1 Dibromochloromethane ND ug/kg 1,2 0.16 1 Dibromochloromethane ND ug/kg 1,2 0.18 1 1,1,2-Trichloroethane ND ug/kg 1,2 0.33 1 Tetrachloroethane ND ug/kg 0.63 0.24 1 Chlorobenzene ND ug/kg 0.63 0.16 1 Trichloroethane ND ug/kg 0.63 0.16 1 1,1,2-Dichloroethane ND ug/kg 0.63 0.14 1 Bromodichloromethane ND ug/kg 0.63 0.14 1 Bromoform ND ug/kg 0.63 0.21	Volatile Organics by GC/MS - Westb	orough Lab					
Chloroform ND ug/kg 1.9 0.18 1 Carbon tetrachloride ND ug/kg 1.2 0.29 1 1,2-Dichloropropane ND ug/kg 1.2 0.16 1 Dibromochloromethane ND ug/kg 1.2 0.18 1 1,1,2-Trichloroethane ND ug/kg 1.2 0.18 1 1,1,2-Trichloroethane ND ug/kg 1.2 0.33 1 1-trachloroethane ND ug/kg 0.63 0.24 1 1-trichloroethane ND ug/kg 5.0 0.87 1 1,2-Dichloroethane ND ug/kg 0.63 0.21 1 1,1-Trichloroethane ND ug/kg 0.63 0.21 1 Bromochromethane ND ug/kg 0.63 0.21 1 Bromochromethane ND ug/kg 0.63 0.21 1 Bromochromethane ND ug/kg 0.63 0	Methylene chloride	ND		ug/kg	6.3	2.9	1
Carbon tetrachloride ND ug/kg 1.2 0.29 1 1,2-Dichloropropane ND ug/kg 1.2 0.16 1 Dibromochloromethane ND ug/kg 1.2 0.18 1 1,1,2-Trichloroethane ND ug/kg 1.2 0.33 1 Tetrachloroethene 0.57 J ug/kg 0.63 0.24 1 Chlorobenzene ND ug/kg 0.63 0.16 1 Trichlorofluoromethane ND ug/kg 0.63 0.16 1 1,1,1-Trichloroethane ND ug/kg 0.63 0.21 1 Bromodichloromethane ND ug/kg 0.63 0.21 1 Bromodichloropropene ND ug/kg 0.63 0.21 1 Bromoform ND ug/kg 0.63 0.20 1 Bromoform ND ug/kg 0.63 0.21 1 1,1,2,2-Tetrachloroethane ND ug/kg	1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
1,2-Dichloropropane ND ug/kg 1,2 0.16 1 Dibromochloromethane ND ug/kg 1,2 0.18 1 1,1,2-Trichloroethane ND ug/kg 1,2 0.33 1 Tetrachloroethane 0.57 J ug/kg 0.63 0.24 1 Chlorobenzene ND ug/kg 0.63 0.16 1 Trichlorofluoromethane ND ug/kg 5.0 0.87 1 1,1-1-Trichloroethane ND ug/kg 0.63 0.21 1 1,1,1-Trichloroethane ND ug/kg 0.63 0.21 1 Bromodichloromethane ND ug/kg 0.63 0.21 1 Bromodichloropropene ND ug/kg 0.63 0.21 1 sis-1,3-Dichloropropene ND ug/kg 0.63 0.21 1 Bromoform ND ug/kg 0.63 0.21 1 1,1,2,2-Tetrachloroethane ND u	Chloroform	ND		ug/kg	1.9	0.18	1
Dibromochloromethane ND ug/kg 1.2 0.18 1 1,1,2-Trichloroethane ND ug/kg 1.2 0.33 1 Tetrachloroethane 0.57 J ug/kg 0.63 0.24 1 Chlorobenzene ND ug/kg 0.63 0.16 1 Trichlorofluoromethane ND ug/kg 5.0 0.87 1 1,2-Dichloroethane ND ug/kg 1.2 0.32 1 1,1-Trichloroethane ND ug/kg 0.63 0.21 1 Bromodichloromethane ND ug/kg 0.63 0.21 1 Bromodichloromethane ND ug/kg 0.63 0.21 1 Bromoform ND ug/kg 0.63 0.21 1 Usis-1,3-Dichloropropene ND ug/kg 0.63 0.21 1 Bromoform ND ug/kg 0.63 0.21 1 Interpretable openate ND ug/kg	Carbon tetrachloride	ND		ug/kg	1.2	0.29	1
1,1,2-Trichloroethane ND ug/kg 1.2 0.33 1 Tetrachloroethane 0.57 J ug/kg 0.63 0.24 1 Chlorobenzene ND ug/kg 0.63 0.16 1 Trichlorofluoromethane ND ug/kg 5.0 0.87 1 1,2-Dichloroethane ND ug/kg 1.2 0.32 1 1,1,1-Trichloroethane ND ug/kg 0.63 0.21 1 Bromodichloromethane ND ug/kg 0.63 0.21 1 Bromodichloropropene ND ug/kg 0.63 0.21 1 trans-1,3-Dichloropropene ND ug/kg 0.63 0.20 1 Bromoform ND ug/kg 0.63 0.21 1 Bromoform ND ug/kg 0.63 0.21 1 Tollene ND ug/kg 0.63 0.21 1 Tollene ND ug/kg 1.2 <t< td=""><td>1,2-Dichloropropane</td><td>ND</td><td></td><td>ug/kg</td><td>1.2</td><td>0.16</td><td>1</td></t<>	1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Tetrachloroethene 0.57 J ug/kg 0.63 0.24 1 Chlorobenzene ND ug/kg 0.63 0.16 1 Trichlorofluoromethane ND ug/kg 5.0 0.87 1 1,2-Dichloroethane ND ug/kg 1.2 0.32 1 1,1,1-Trichloroethane ND ug/kg 0.63 0.21 1 Bromodichloromethane ND ug/kg 0.63 0.14 1 Bromodichloropropene ND ug/kg 0.63 0.14 1 cis-1,3-Dichloropropene ND ug/kg 0.63 0.20 1 Bromoform ND ug/kg 0.63 0.20 1 Bromoform ND ug/kg 0.63 0.21 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.63 0.21 1 Benzene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 1.2	Dibromochloromethane	ND		ug/kg	1.2	0.18	1
Chlorobenzene ND ug/kg 0.63 0.16 1 Trichlorofluoromethane ND ug/kg 5.0 0.87 1 1,2-Dichloroethane ND ug/kg 1.2 0.32 1 1,1,1-Trichloroethane ND ug/kg 0.63 0.21 1 Bromodichloromethane ND ug/kg 0.63 0.14 1 trans-1,3-Dichloropropene ND ug/kg 0.63 0.20 1 bromoform ND ug/kg 0.63 0.20 1 Bromoform ND ug/kg 5.0 0.31 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.63 0.21 1 Benzene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 0.63 0.21 1 Ethylbenzene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 5.0 1.2 1	1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Trichlorofluoromethane ND ug/kg 5.0 0.87 1 1,2-Dichloroethane ND ug/kg 1.2 0.32 1 1,1,1-Trichloroethane ND ug/kg 0.63 0.21 1 Bromodichloromethane ND ug/kg 0.63 0.14 1 trans-1,3-Dichloropropene ND ug/kg 1.2 0.34 1 sci-1,3-Dichloropropene ND ug/kg 0.63 0.20 1 Bromoform ND ug/kg 5.0 0.31 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.63 0.21 1 Benzene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 0.63 0.21 1 Ethylbenzene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 5.0 1.2 1 Chloromethane ND ug/kg 2.5 0.73	Tetrachloroethene	0.57	J	ug/kg	0.63	0.24	1
1,2-Dichloroethane ND ug/kg 1.2 0.32 1 1,1,1-Trichloroethane ND ug/kg 0.63 0.21 1 Bromodichloromethane ND ug/kg 0.63 0.14 1 Bromodichloropropene ND ug/kg 1.2 0.34 1 cis-1,3-Dichloropropene ND ug/kg 0.63 0.20 1 Bromoform ND ug/kg 5.0 0.31 1 Bromoform ND ug/kg 5.0 0.31 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.63 0.21 1 Benzene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 1.2 0.18 1 Chloromethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 2.5 0.73 1 <td>Chlorobenzene</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>0.63</td> <td>0.16</td> <td>1</td>	Chlorobenzene	ND		ug/kg	0.63	0.16	1
1,1,1-Trichloroethane ND	Trichlorofluoromethane	ND		ug/kg	5.0	0.87	1
Bromodichloromethane ND ug/kg 0.63 0.14 1 trans-1,3-Dichloropropene ND ug/kg 1.2 0.34 1 cis-1,3-Dichloropropene ND ug/kg 0.63 0.20 1 Bromoform ND ug/kg 5.0 0.31 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.63 0.21 1 Benzene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 1.2 0.18 1 Chloromethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 2.5 0.73 1 Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 1.2 0.30 1 1,1-Dichloroethene ND ug/kg 1.9 0.17 1 <td>1,2-Dichloroethane</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>1.2</td> <td>0.32</td> <td>1</td>	1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
trans-1,3-Dichloropropene ND ug/kg 1.2 0.34 1 cis-1,3-Dichloropropene ND ug/kg 0.63 0.20 1 Bromoform ND ug/kg 5.0 0.31 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.63 0.21 1 Benzene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 1.2 0.18 1 Chloromethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 5.0 1.2 1 Chloroethane ND ug/kg 2.5 0.73 1 Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 1.2 0.42 1 Thildloroethane ND ug/kg 1.2 0.30 1 Trichloroethene ND ug/kg 1.2 0.30 1 Trichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 1.9 0.17 1	1,1,1-Trichloroethane	ND		ug/kg	0.63	0.21	1
cis-1,3-Dichloropropene ND ug/kg 0.63 0.20 1 Bromoform ND ug/kg 5.0 0.31 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.63 0.21 1 Benzene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 1.2 0.18 1 Chloromethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 2.5 0.73 1 Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 2.5 0.57 1 1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1 <td>Bromodichloromethane</td> <td>ND</td> <td></td> <td>ug/kg</td> <td>0.63</td> <td>0.14</td> <td>1</td>	Bromodichloromethane	ND		ug/kg	0.63	0.14	1
Bromoform ND ug/kg 5.0 0.31 1 1,1,2,2-Tetrachloroethane ND ug/kg 0.63 0.21 1 Benzene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 1.2 0.18 1 Chloromethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 2.5 0.73 1 Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 2.5 0.57 1 1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
1,1,2,2-Tetrachloroethane ND ug/kg 0.63 0.21 1 Benzene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 1.2 0.18 1 Chloromethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 2.5 0.73 1 Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 2.5 0.57 1 1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
Benzene ND ug/kg 0.63 0.21 1 Toluene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 1.2 0.18 1 Chloromethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 2.5 0.73 1 Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 2.5 0.57 1 1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	Bromoform	ND		ug/kg	5.0	0.31	1
Toluene ND ug/kg 1.2 0.68 1 Ethylbenzene ND ug/kg 1.2 0.18 1 Chloromethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 2.5 0.73 1 Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 2.5 0.57 1 1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	1,1,2,2-Tetrachloroethane	ND		ug/kg	0.63	0.21	1
Ethylbenzene ND ug/kg 1.2 0.18 1 Chloromethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 2.5 0.73 1 Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 2.5 0.57 1 1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	Benzene	ND		ug/kg	0.63	0.21	1
Chloromethane ND ug/kg 5.0 1.2 1 Bromomethane ND ug/kg 2.5 0.73 1 Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 2.5 0.57 1 1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	Toluene	ND		ug/kg	1.2	0.68	1
Bromomethane ND ug/kg 2.5 0.73 1 Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 2.5 0.57 1 1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	Ethylbenzene	ND		ug/kg	1.2	0.18	1
Vinyl chloride ND ug/kg 1.2 0.42 1 Chloroethane ND ug/kg 2.5 0.57 1 1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	Chloromethane	ND		ug/kg	5.0	1.2	1
Chloroethane ND ug/kg 2.5 0.57 1 1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	Bromomethane	ND		ug/kg	2.5	0.73	1
1,1-Dichloroethene ND ug/kg 1.2 0.30 1 trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	Vinyl chloride	ND		ug/kg	1.2	0.42	1
trans-1,2-Dichloroethene ND ug/kg 1.9 0.17 1 Trichloroethene ND ug/kg 0.63 0.17 1	Chloroethane	ND		ug/kg	2.5	0.57	1
Trichloroethene ND ug/kg 0.63 0.17 1	1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
	trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1
1.2-Dichlorobenzene ND ug/kg 2.5 0.18 1	Trichloroethene	ND		ug/kg	0.63	0.17	1
TAB USING 2.0 0.10 I	1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1



Serial_No:01292112:08

Project Name: ELMWOOD+HERTEL Lab Number: L2103699

Project Number: B0564-021-001 **Report Date:** 01/29/21

SAMPLE RESULTS

Lab ID: L2103699-02 Date Collected: 01/21/21 08:32

Client ID: TP-2 1.5-3 FT Date Received: 01/22/21 Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboroug	gh Lab					
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.70	1
o-Xylene	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	18		ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.7	1
2-Butanone	ND		ug/kg	12	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.2	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
Methyl Acetate	ND		ug/kg	5.0	1.2	1
Cyclohexane	ND		ug/kg	12	0.68	1
1,4-Dioxane	ND		ug/kg	100	44.	1
Freon-113	ND		ug/kg	5.0	0.87	1
Methyl cyclohexane	ND		ug/kg	5.0	0.76	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	93	70-130	
Toluene-d8	104	70-130	
4-Bromofluorobenzene	107	70-130	
Dibromofluoromethane	89	70-130	



Project Name: ELMWOOD+HERTEL Lab Number: L2103699

Project Number: B0564-021-001 **Report Date:** 01/29/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/26/21 08:09

Analyst: MV

arameter	Result	Qualifier	Units	RL		MDL
olatile Organics by EPA 5035 Low	- Westboro	ugh Lab fo	r sample(s):	02	Batch:	WG1458869-5
Methylene chloride	ND		ug/kg	5.0		2.3
1,1-Dichloroethane	ND		ug/kg	1.0		0.14
Chloroform	0.19	J	ug/kg	1.5		0.14
Carbon tetrachloride	ND		ug/kg	1.0		0.23
1,2-Dichloropropane	ND		ug/kg	1.0		0.12
Dibromochloromethane	ND		ug/kg	1.0		0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0		0.27
Tetrachloroethene	ND		ug/kg	0.50		0.20
Chlorobenzene	ND		ug/kg	0.50		0.13
Trichlorofluoromethane	ND		ug/kg	4.0		0.70
1,2-Dichloroethane	ND		ug/kg	1.0		0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50		0.17
Bromodichloromethane	ND		ug/kg	0.50		0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0		0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50		0.16
Bromoform	ND		ug/kg	4.0		0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50		0.17
Benzene	ND		ug/kg	0.50		0.17
Toluene	ND		ug/kg	1.0		0.54
Ethylbenzene	ND		ug/kg	1.0		0.14
Chloromethane	ND		ug/kg	4.0		0.93
Bromomethane	ND		ug/kg	2.0		0.58
Vinyl chloride	ND		ug/kg	1.0		0.34
Chloroethane	ND		ug/kg	2.0		0.45
1,1-Dichloroethene	ND		ug/kg	1.0		0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5		0.14
Trichloroethene	ND		ug/kg	0.50		0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0		0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0		0.15



Project Name: ELMWOOD+HERTEL Lab Number: L2103699

Project Number: B0564-021-001 **Report Date:** 01/29/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/26/21 08:09

Analyst: MV

Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02 Batch: WG1458869-5 1,4-Dichlorobenzene ND ug/kg 2.0 0.17 Methyl tert butyl ether ND ug/kg 2.0 0.20 p/m-Xylene ND ug/kg 2.0 0.56 o-Xylene ND ug/kg 1.0 0.29 cis-1,2-Dichloroethene ND ug/kg 1.0 0.29 cis-1,2-Dichloroethene ND ug/kg 1.0 0.20 Dichlorodfluoromethane ND ug/kg 1.0 0.20 Dichlorodfluoromethane ND ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone 2.3 J ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 1.0 0.28 1,2-Dibromo-3-chloropropane ND ug/kg 1.0 0.11 1soprop	arameter	Result	Qualifier	Units	RL		MDL
Methyl tert butyl ether ND ug/kg 2.0 0.20 p/m-Xylene ND ug/kg 2.0 0.56 o-Xylene ND ug/kg 1.0 0.29 cis-1,2-Dichloroethene ND ug/kg 1.0 0.20 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone 8.7 J ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone 2.3 J ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND	olatile Organics by EPA 5035 Low	- Westboro	ugh Lab fo	r sample(s):	02	Batch:	WG1458869-5
p/m-Xylene ND ug/kg 2.0 0.56 o-Xylene ND ug/kg 1.0 0.29 cis-1,2-Dichloroethene ND ug/kg 1.0 0.18 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone 8.7 J ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone 2.3 J ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromo-3-chloropropane ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND <t< td=""><td>1,4-Dichlorobenzene</td><td>ND</td><td></td><td>ug/kg</td><td>2.0</td><td></td><td>0.17</td></t<>	1,4-Dichlorobenzene	ND		ug/kg	2.0		0.17
o-Xylene ND ug/kg 1.0 0.29 cis-1,2-Dichloroethene ND ug/kg 1.0 0.18 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone 8.7 J ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone 2.3 J ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/k	Methyl tert butyl ether	ND		ug/kg	2.0		0.20
cis-1,2-Dichloroethene ND ug/kg 1.0 0.18 Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone 8.7 J ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone 2.3 J ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND	p/m-Xylene	ND		ug/kg	2.0		0.56
Styrene ND ug/kg 1.0 0.20 Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone 8.7 J ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone 2.3 J ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 4.0 0.95 Occlohexane ND u	o-Xylene	ND		ug/kg	1.0		0.29
Dichlorodifluoromethane ND ug/kg 10 0.92 Acetone 8.7 J ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone 2.3 J ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 80 35.	cis-1,2-Dichloroethene	ND		ug/kg	1.0		0.18
Acetone 8.7 J ug/kg 10 4.8 Carbon disulfide ND ug/kg 10 4.6 2-Butanone 2.3 J ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 2.0 0.31 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 80 35.	Styrene	ND		ug/kg	1.0		0.20
Carbon disulfide ND ug/kg 10 4.6 2-Butanone 2.3 J ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	Dichlorodifluoromethane	ND		ug/kg	10		0.92
2-Butanone 2.3 J ug/kg 10 2.2 4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35	Acetone	8.7	J	ug/kg	10		4.8
4-Methyl-2-pentanone ND ug/kg 10 1.3 2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	Carbon disulfide	ND		ug/kg	10		4.6
2-Hexanone ND ug/kg 10 1.2 Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	2-Butanone	2.3	J	ug/kg	10		2.2
Bromochloromethane ND ug/kg 2.0 0.20 1,2-Dibromoethane ND ug/kg 1.0 0.28 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	4-Methyl-2-pentanone	ND		ug/kg	10		1.3
1,2-Dibromoethane ND ug/kg 1.0 0.28 1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	2-Hexanone	ND		ug/kg	10		1.2
1,2-Dibromo-3-chloropropane ND ug/kg 3.0 1.0 Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	Bromochloromethane	ND		ug/kg	2.0		0.20
Isopropylbenzene ND ug/kg 1.0 0.11 1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	1,2-Dibromoethane	ND		ug/kg	1.0		0.28
1,2,3-Trichlorobenzene ND ug/kg 2.0 0.32 1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0		1.0
1,2,4-Trichlorobenzene ND ug/kg 2.0 0.27 Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	Isopropylbenzene	ND		ug/kg	1.0		0.11
Methyl Acetate ND ug/kg 4.0 0.95 Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	1,2,3-Trichlorobenzene	ND		ug/kg	2.0		0.32
Cyclohexane ND ug/kg 10 0.54 1,4-Dioxane ND ug/kg 80 35.	1,2,4-Trichlorobenzene	ND		ug/kg	2.0		0.27
1,4-Dioxane ND ug/kg 80 35.	Methyl Acetate	ND		ug/kg	4.0		0.95
,	Cyclohexane	ND		ug/kg	10		0.54
Freon-113 ND ug/kg 4.0 0.69	1,4-Dioxane	ND		ug/kg	80		35.
	Freon-113	ND		ug/kg	4.0		0.69
Methyl cyclohexane ND ug/kg 4.0 0.60	Methyl cyclohexane	ND		ug/kg	4.0		0.60



Project Name: ELMWOOD+HERTEL Lab Number: L2103699

Project Number: B0564-021-001 **Report Date:** 01/29/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/26/21 08:09

Analyst: MV

Parameter Result Qualifier Units RL MDL

Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 02 Batch: WG1458869-5

			Acceptance
Surrogate	%Recovery	Qualifier	Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	87		70-130



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103699

Report Date: 01/29/21

Parameter	LCS %Recovery	Qual	LCSI %Recov		Qual	%Recovery Limits	RPD	RPD Limits
olatile Organics by EPA 5035 Low - Westb	orough Lab Ass	ociated sample(s	s): 02	Batch:	WG145886	69-3 WG14588	69-4	
Methylene chloride	82		81			70-130	1	30
1,1-Dichloroethane	88		86			70-130	2	30
Chloroform	86		87			70-130	1	30
Carbon tetrachloride	88		91			70-130	3	30
1,2-Dichloropropane	87		89			70-130	2	30
Dibromochloromethane	86		89			70-130	3	30
1,1,2-Trichloroethane	98		98			70-130	0	30
Tetrachloroethene	95		94			70-130	1	30
Chlorobenzene	98		97			70-130	1	30
Trichlorofluoromethane	85		85			70-139	0	30
1,2-Dichloroethane	93		94			70-130	1	30
1,1,1-Trichloroethane	89		90			70-130	1	30
Bromodichloromethane	90		93			70-130	3	30
trans-1,3-Dichloropropene	100		100			70-130	0	30
cis-1,3-Dichloropropene	91		92			70-130	1	30
Bromoform	91		96			70-130	5	30
1,1,2,2-Tetrachloroethane	108		107			70-130	1	30
Benzene	89		88			70-130	1	30
Toluene	95		93			70-130	2	30
Ethylbenzene	98		97			70-130	1	30
Chloromethane	57		58			52-130	2	30
Bromomethane	50	Q	56		Q	57-147	11	30
Vinyl chloride	93		91			67-130	2	30



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103699

Report Date: 01/29/21

arameter	%Recovery	LCSI Qual %Reco	,	-	RPD Qual Limits
platile Organics by EPA 5035 Low - Westb	orough Lab Ass	ociated sample(s): 02	Batch: WG1458869-3 V	VG1458869-4	
Chloroethane	85	84	50-1	51 1	30
1,1-Dichloroethene	82	81	65-1	35 1	30
trans-1,2-Dichloroethene	85	83	70-1	30 2	30
Trichloroethene	90	89	70-1	30 1	30
1,2-Dichlorobenzene	100	100	70-1	30 0	30
1,3-Dichlorobenzene	101	101	70-1	30 0	30
1,4-Dichlorobenzene	102	102	? 70-1	30 0	30
Methyl tert butyl ether	87	87	66-1	30 0	30
p/m-Xylene	101	100	70-1	30 1	30
o-Xylene	103	102	? 70-1	30 1	30
cis-1,2-Dichloroethene	85	84	70-1	30 1	30
Styrene	105	105	70-1	30 0	30
Dichlorodifluoromethane	68	67	30-1	46 1	30
Acetone	118	114	54-1	40 3	30
Carbon disulfide	88	86	59-1	30 2	30
2-Butanone	96	94	70-1	30 2	30
4-Methyl-2-pentanone	110	108	70-1	30 2	30
2-Hexanone	104	104	70-1	30 0	30
Bromochloromethane	87	90	70-1	30 3	30
1,2-Dibromoethane	102	102	? 70-1	30 0	30
1,2-Dibromo-3-chloropropane	89	89	68-1	30 0	30
Isopropylbenzene	101	99	70-1	30 2	30
1,2,3-Trichlorobenzene	104	104	70-1	30 0	30



Project Name: ELMWOOD+HERTEL

Lab Number:

L2103699

Project Number: B0564-021-001

Report Date:

01/29/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westbor	ough Lab Asso	ciated sample	(s): 02 Batch	: WG14588	69-3 WG145886	9-4		
1,2,4-Trichlorobenzene	106		103		70-130	3		30
Methyl Acetate	83		84		51-146	1		30
Cyclohexane	85		85		59-142	0		30
1,4-Dioxane	100		97		65-136	3		30
Freon-113	83		83		50-139	0		30
Methyl cyclohexane	86		84		70-130	2		30

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	91	91	70-130
Toluene-d8	91	90	70-130
4-Bromofluorobenzene	88	86	70-130
Dibromofluoromethane	85	87	70-130

SEMIVOLATILES



Project Name: ELMWOOD+HERTEL Lab Number: L2103699

Project Number: B0564-021-001 **Report Date:** 01/29/21

SAMPLE RESULTS

Lab ID: L2103699-01 Date Collected: 01/21/21 08:07

Client ID: TP-1 1-2.5 FT Date Received: 01/22/21 Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Percent Solids:

85%

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 01/25/21 18:15

Analytical Date: 01/27/21 09:08
Analyst: ALS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	estborough Lab					
Acenaphthene	ND		ug/kg	150	20.	1
Fluoranthene	160		ug/kg	110	22.	1
Naphthalene	760		ug/kg	190	23.	1
Benzo(a)anthracene	110		ug/kg	110	21.	1
Benzo(a)pyrene	88	J	ug/kg	150	46.	1
Benzo(b)fluoranthene	120		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	180		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	47	J	ug/kg	150	22.	1
Fluorene	56	J	ug/kg	190	18.	1
Phenanthrene	700		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	35	J	ug/kg	150	26.	1
Pyrene	140		ug/kg	110	19.	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
Nitrobenzene-d5	89	23-120	
2-Fluorobiphenyl	70	30-120	
4-Terphenyl-d14	69	18-120	



Project Name: ELMWOOD+HERTEL Lab Number: L2103699

Project Number: B0564-021-001 **Report Date:** 01/29/21

SAMPLE RESULTS

Lab ID: L2103699-02 Date Collected: 01/21/21 08:32

Client ID: TP-2 1.5-3 FT Date Received: 01/22/21 Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 01/25/21 18:15

Analytical Date: 01/27/21 12:18

Analyst: ALS Percent Solids: 71%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	estborough Lab						
Acenaphthene	88	J	ug/kg	190	24.	1	
Fluoranthene	1100		ug/kg	140	27.	1	
Naphthalene	140	J	ug/kg	230	28.	1	
Benzo(a)anthracene	580		ug/kg	140	26.	1	
Benzo(a)pyrene	600		ug/kg	190	57.	1	
Benzo(b)fluoranthene	750		ug/kg	140	39.	1	
Benzo(k)fluoranthene	180		ug/kg	140	37.	1	
Chrysene	520		ug/kg	140	24.	1	
Acenaphthylene	ND		ug/kg	190	36.	1	
Anthracene	210		ug/kg	140	45.	1	
Benzo(ghi)perylene	300		ug/kg	190	27.	1	
Fluorene	87	J	ug/kg	230	23.	1	
Phenanthrene	820		ug/kg	140	28.	1	
Dibenzo(a,h)anthracene	80	J	ug/kg	140	27.	1	
Indeno(1,2,3-cd)pyrene	340		ug/kg	190	32.	1	
Pyrene	860		ug/kg	140	23.	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	83		23-120	
2-Fluorobiphenyl	66		30-120	
4-Terphenyl-d14	61		18-120	



Project Name: ELMWOOD+HERTEL Lab Number: L2103699

Project Number: B0564-021-001 **Report Date:** 01/29/21

SAMPLE RESULTS

Lab ID: L2103699-03 Date Collected: 01/21/21 09:27

Client ID: TP-4 0-0.5 FT Date Received: 01/22/21 Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 01/25/21 18:15

Analytical Date: 01/27/21 11:54

Analyst: ALS Percent Solids: 73%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - Wes	stborough Lab						
Acenaphthene	43	J	ug/kg	180	23.	1	
Fluoranthene	890		ug/kg	130	26.	1	
Naphthalene	220		ug/kg	220	27.	1	
Benzo(a)anthracene	470		ug/kg	130	25.	1	
Benzo(a)pyrene	560		ug/kg	180	54.	1	
Benzo(b)fluoranthene	720		ug/kg	130	37.	1	
Benzo(k)fluoranthene	210		ug/kg	130	36.	1	
Chrysene	530		ug/kg	130	23.	1	
Acenaphthylene	60	J	ug/kg	180	34.	1	
Anthracene	100	J	ug/kg	130	43.	1	
Benzo(ghi)perylene	320		ug/kg	180	26.	1	
Fluorene	49	J	ug/kg	220	22.	1	
Phenanthrene	700		ug/kg	130	27.	1	
Dibenzo(a,h)anthracene	80	J	ug/kg	130	26.	1	
Indeno(1,2,3-cd)pyrene	340		ug/kg	180	31.	1	
Pyrene	770		ug/kg	130	22.	1	

Surrogate	% Recovery	Ao Qualifier	cceptance Criteria
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	68		30-120
4-Terphenyl-d14	62		18-120



L2103699

Project Name: Lab Number: **ELMWOOD+HERTEL**

Project Number: Report Date: B0564-021-001 01/29/21

SAMPLE RESULTS

Lab ID: L2103699-04 Date Collected: 01/21/21 11:02

Date Received: 01/22/21 Client ID: TP-6 0-0.5 FT Sample Location: Field Prep: BUFFALO, NY Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil **Extraction Date:** 01/25/21 18:15 Analytical Method: 1,8270D

Analytical Date: 01/27/21 14:01

Analyst: JG 75% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - We	estborough Lab						
Acenaphthene	48	J	ug/kg	180	23.	1	
Fluoranthene	320		ug/kg	130	25.	1	
Naphthalene	230		ug/kg	220	27.	1	
Benzo(a)anthracene	150		ug/kg	130	25.	1	
Benzo(a)pyrene	140	J	ug/kg	180	54.	1	
Benzo(b)fluoranthene	190		ug/kg	130	37.	1	
Benzo(k)fluoranthene	61	J	ug/kg	130	35.	1	
Chrysene	150		ug/kg	130	23.	1	
Acenaphthylene	ND		ug/kg	180	34.	1	
Anthracene	44	J	ug/kg	130	43.	1	
Benzo(ghi)perylene	93	J	ug/kg	180	26.	1	
Fluorene	37	J	ug/kg	220	21.	1	
Phenanthrene	230		ug/kg	130	27.	1	
Dibenzo(a,h)anthracene	ND		ug/kg	130	25.	1	
Indeno(1,2,3-cd)pyrene	99	J	ug/kg	180	31.	1	
Pyrene	270		ug/kg	130	22.	1	

Surrogate	% Recovery	Qualifier A	Acceptance Criteria	
Nitrobenzene-d5	78		23-120	
2-Fluorobiphenyl	80		30-120	
4-Terphenyl-d14	73		18-120	



L2103699

Lab Number:

Project Name: ELMWOOD+HERTEL

Project Number: Report Date: B0564-021-001

01/29/21

SAMPLE RESULTS

Lab ID: Date Collected: 01/21/21 12:48 L2103699-05

Date Received: Client ID: TP-8 0-0.5 FT 01/22/21 Sample Location: Field Prep: BUFFALO, NY Not Specified

Sample Depth:

Extraction Method: EPA 3546 Matrix: Soil **Extraction Date:** 01/25/21 18:15 Analytical Method: 1,8270D

Analytical Date: 01/27/21 08:45

Analyst: **ALS** 81% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westbo	rough Lab					
Acenaphthene	24	J	ug/kg	160	21.	1
Fluoranthene	360		ug/kg	120	23.	1
Naphthalene	33	J	ug/kg	200	25.	1
Benzo(a)anthracene	190		ug/kg	120	23.	1
Benzo(a)pyrene	220		ug/kg	160	50.	1
Benzo(b)fluoranthene	300		ug/kg	120	34.	1
Benzo(k)fluoranthene	77	J	ug/kg	120	33.	1
Chrysene	190		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	32.	1
Anthracene	50	J	ug/kg	120	40.	1
Benzo(ghi)perylene	120	J	ug/kg	160	24.	1
Fluorene	21	J	ug/kg	200	20.	1
Phenanthrene	230		ug/kg	120	25.	1
Dibenzo(a,h)anthracene	31	J	ug/kg	120	24.	1
Indeno(1,2,3-cd)pyrene	130	J	ug/kg	160	28.	1
Pyrene	280		ug/kg	120	20.	1

Surrogate	% Recovery	eptance criteria
Nitrobenzene-d5	94	23-120
2-Fluorobiphenyl	68	30-120
4-Terphenyl-d14	60	18-120



Project Name: ELMWOOD+HERTEL Lab Number: L2103699

Project Number: B0564-021-001 **Report Date:** 01/29/21

SAMPLE RESULTS

Lab ID: L2103699-06 Date Collected: 01/21/21 13:00

Client ID: TP-9 1-2.5 FT Date Received: 01/22/21 Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 01/26/21 12:18

Analytical Date: 01/27/21 12:24

Analyst: JG Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - Wes	tborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1	
Fluoranthene	130		ug/kg	120	22.	1	
Naphthalene	ND		ug/kg	200	24.	1	
Benzo(a)anthracene	67	J	ug/kg	120	22.	1	
Benzo(a)pyrene	48	J	ug/kg	160	48.	1	
Benzo(b)fluoranthene	66	J	ug/kg	120	33.	1	
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1	
Chrysene	50	J	ug/kg	120	20.	1	
Acenaphthylene	ND		ug/kg	160	30.	1	
Anthracene	ND		ug/kg	120	38.	1	
Benzo(ghi)perylene	29	J	ug/kg	160	23.	1	
Fluorene	ND		ug/kg	200	19.	1	
Phenanthrene	130		ug/kg	120	24.	1	
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1	
Indeno(1,2,3-cd)pyrene	31	J	ug/kg	160	27.	1	
Pyrene	100	J	ug/kg	120	20.	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
Nitrobenzene-d5	49	23-120	
2-Fluorobiphenyl	57	30-120	
4-Terphenyl-d14	57	18-120	



L2103699

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

SAMPLE RESULTS

Date Collected: 01/21/21 13:22

Report Date: 01/29/21

Lab Number:

Lab ID: L2103699-07 Client ID: TP-10 2-4.5 FT

Sample Location: BUFFALO, NY

Date Received: 01/22/21
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/27/21 10:43

Analyst: ALS Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 01/25/21 18:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - W	estborough Lab						
Acenaphthene	89	J	ug/kg	150	19.	1	
Fluoranthene	690		ug/kg	110	21.	1	
Naphthalene	41	J	ug/kg	180	22.	1	
Benzo(a)anthracene	350		ug/kg	110	21.	1	
Benzo(a)pyrene	410		ug/kg	150	45.	1	
Benzo(b)fluoranthene	500		ug/kg	110	31.	1	
Benzo(k)fluoranthene	140		ug/kg	110	30.	1	
Chrysene	330		ug/kg	110	19.	1	
Acenaphthylene	ND		ug/kg	150	28.	1	
Anthracene	180		ug/kg	110	36.	1	
Benzo(ghi)perylene	220		ug/kg	150	22.	1	
Fluorene	94	J	ug/kg	180	18.	1	
Phenanthrene	650		ug/kg	110	22.	1	
Dibenzo(a,h)anthracene	60	J	ug/kg	110	21.	1	
Indeno(1,2,3-cd)pyrene	250		ug/kg	150	26.	1	
Pyrene	560		ug/kg	110	18.	1	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
Nitrobenzene-d5	81	23-120	
2-Fluorobiphenyl	59	30-120	
4-Terphenyl-d14	50	18-120	



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

SAMPLE RESULTS

Report Date:

01/29/21

Lab ID: L2103699-08

Client ID: TP-11 0-0.5 FT Sample Location: BUFFALO, NY

Date Collected: 01/21/21 14:04 Date Received: 01/22/21

Field Prep:

Lab Number:

Not Specified

L2103699

Sample Depth:

Matrix: Soil Analytical Method: 1,8270D Analytical Date: 01/27/21 09:56

Analyst: **ALS** 74% Percent Solids:

Extraction Method: EPA 3546 **Extraction Date:** 01/25/21 18:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westbo	rough Lab					
Acenaphthene	28	J	ug/kg	180	23.	1
Fluoranthene	440	<u> </u>	ug/kg	130	26.	1
Naphthalene	ND		ug/kg	220	27.	1
Benzo(a)anthracene	220		ug/kg	130	25.	1
Benzo(a)pyrene	260		ug/kg	180	54.	1
Benzo(b)fluoranthene	340		ug/kg	130	37.	1
Benzo(k)fluoranthene	95	J	ug/kg	130	36.	1
Chrysene	220		ug/kg	130	23.	1
Acenaphthylene	ND		ug/kg	180	34.	1
Anthracene	53	J	ug/kg	130	43.	1
Benzo(ghi)perylene	130	J	ug/kg	180	26.	1
Fluorene	22	J	ug/kg	220	22.	1
Phenanthrene	240		ug/kg	130	27.	1
Dibenzo(a,h)anthracene	35	J	ug/kg	130	26.	1
Indeno(1,2,3-cd)pyrene	150	J	ug/kg	180	31.	1
Pyrene	350		ug/kg	130	22.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	79		23-120	
2-Fluorobiphenyl	56		30-120	
4-Terphenyl-d14	41		18-120	



L2103699

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

SAMPLE RESULTS

Date Collected: 01/21/21 15:48

Report Date: 01/29/21

Lab Number:

Lab ID: L2103699-09
Client ID: TP-15 0.5-2.0 FT
Sample Location: BUFFALO, NY

Date Received: 01/22/21
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/27/21 10:19

Analyst: ALS
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 01/25/21 18:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - V	Vestborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1	
Fluoranthene	530		ug/kg	110	22.	1	
Naphthalene	27	J	ug/kg	190	23.	1	
Benzo(a)anthracene	290		ug/kg	110	21.	1	
Benzo(a)pyrene	300		ug/kg	150	46.	1	
Benzo(b)fluoranthene	360		ug/kg	110	32.	1	
Benzo(k)fluoranthene	120		ug/kg	110	30.	1	
Chrysene	260		ug/kg	110	20.	1	
Acenaphthylene	ND		ug/kg	150	29.	1	
Anthracene	63	J	ug/kg	110	37.	1	
Benzo(ghi)perylene	150		ug/kg	150	22.	1	
Fluorene	23	J	ug/kg	190	18.	1	
Phenanthrene	260		ug/kg	110	23.	1	
Dibenzo(a,h)anthracene	42	J	ug/kg	110	22.	1	
Indeno(1,2,3-cd)pyrene	170		ug/kg	150	26.	1	
Pyrene	440		ug/kg	110	19.	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	103		23-120	
2-Fluorobiphenyl	73		30-120	
4-Terphenyl-d14	61		18-120	



L2103699

Lab Number:

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001 **Report Date:** 01/29/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Extraction Method: EPA 3546
Analytical Date: 01/26/21 03:24 Extraction Date: 01/25/21 18:15

Analyst: WR

Parameter	Result	Qualifier	Units	RL	MDL	
Semivolatile Organics by GC/MS	S - Westboroug	h Lab for s	ample(s):	01-05,07-09	Batch:	WG1458466-1
Acenaphthene	ND		ug/kg	130	17.	
Fluoranthene	ND		ug/kg	99	19.	
Naphthalene	ND		ug/kg	160	20.	
Benzo(a)anthracene	ND		ug/kg	99	19.	
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	26.	
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.	

Surrogate	%Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	78	25-120
Phenol-d6	81	10-120
Nitrobenzene-d5	78	23-120
2-Fluorobiphenyl	84	30-120
2,4,6-Tribromophenol	93	10-136
4-Terphenyl-d14	84	18-120



L2103699

Project Name: ELMWOOD+HERTEL

Project Number: Report Date: B0564-021-001

01/29/21

Lab Number:

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 01/27/21 13:30

Analyst: IM Extraction Method: EPA 3546 01/26/21 12:18 **Extraction Date:**

Qualifier RL MDL **Parameter** Result Units Batch: WG1458752-1 Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06 Acenaphthene ND ug/kg 130 17. Fluoranthene ND ug/kg 99 19. ND Naphthalene ug/kg 160 20. Benzo(a)anthracene ND ug/kg 99 19. ND 40. Benzo(a)pyrene 130 ug/kg ND Benzo(b)fluoranthene ug/kg 99 28. Benzo(k)fluoranthene ND ug/kg 99 26. Chrysene ND ug/kg 99 17. Acenaphthylene ND 130 26. ug/kg ND 99 32. Anthracene ug/kg Benzo(ghi)perylene 19. ND ug/kg 130 Fluorene ND ug/kg 160 16. Phenanthrene ND ug/kg 99 20. Dibenzo(a,h)anthracene ND 99 ug/kg 19. ND Indeno(1,2,3-cd)pyrene 23. ug/kg 130 ND Pyrene ug/kg 99 16.

		Acceptance
Surrogate	%Recovery Q	ualifier Criteria
2-Fluorophenol	80	25-120
·		
Phenol-d6	88	10-120
Nitrobenzene-d5	87	23-120
2-Fluorobiphenyl	83	30-120
2,4,6-Tribromophenol	89	10-136
4-Terphenyl-d14	72	18-120



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103699

Report Date: 01/29/21

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
emivolatile Organics by GC/MS - Westborou	ıgh Lab Associ	ated sample(s):	01-05,07-09	Batch:	WG1458466-2	WG1458466-3		
Acenaphthene	70		72		31-137	3		50
Fluoranthene	77		78		40-140	1		50
Naphthalene	66		71		40-140	7		50
Benzo(a)anthracene	78		82		40-140	5		50
Benzo(a)pyrene	80		83		40-140	4		50
Benzo(b)fluoranthene	84		88		40-140	5		50
Benzo(k)fluoranthene	69		70		40-140	1		50
Chrysene	70		74		40-140	6		50
Acenaphthylene	75		78		40-140	4		50
Anthracene	71		74		40-140	4		50
Benzo(ghi)perylene	77		77		40-140	0		50
Fluorene	76		82		40-140	8		50
Phenanthrene	74		76		40-140	3		50
Dibenzo(a,h)anthracene	75		74		40-140	1		50
Indeno(1,2,3-cd)pyrene	82		82		40-140	0		50
Pyrene	75		77		35-142	3		50

Project Name: ELMWOOD+HERTEL

Lab Number:

L2103699

Project Number: B0564-021-001

Report Date:

01/29/21

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

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05,07-09 Batch: WG1458466-2 WG1458466-3

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
2-Fluorophenol	67	78	25-120
Phenol-d6	78	82	10-120
Nitrobenzene-d5	72	79	23-120
2-Fluorobiphenyl	75	79	30-120
2,4,6-Tribromophenol	86	91	10-136
4-Terphenyl-d14	76	79	18-120



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103699

Report Date: 01/29/21

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
emivolatile Organics by GC/MS - Westboro	ugh Lab Associ	iated sample(s):	06 Batch:	WG1458752-2	2 WG1458752-3			
Acenaphthene	71		80		31-137	12	ı	50
Fluoranthene	74		88		40-140	17		50
Naphthalene	69		81		40-140	16		50
Benzo(a)anthracene	80		92		40-140	14		50
Benzo(a)pyrene	96		94		40-140	2		50
Benzo(b)fluoranthene	78		100		40-140	25		50
Benzo(k)fluoranthene	65		77		40-140	17		50
Chrysene	70		81		40-140	15		50
Acenaphthylene	77		88		40-140	13		50
Anthracene	70		81		40-140	15		50
Benzo(ghi)perylene	77		87		40-140	12		50
Fluorene	77		89		40-140	14		50
Phenanthrene	74		84		40-140	13		50
Dibenzo(a,h)anthracene	75		85		40-140	13		50
Indeno(1,2,3-cd)pyrene	84		96		40-140	13		50
Pyrene	73		86		35-142	16		50

Lab Number: L2103699

Project Number: B0564-021-001

ELMWOOD+HERTEL

Project Name:

Report Date:

01/29/21

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

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06 Batch: WG1458752-2 WG1458752-3

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
2-Fluorophenol	75	84	25-120
Phenol-d6	80	96	10-120
Nitrobenzene-d5	75	90	23-120
2-Fluorobiphenyl	78	87	30-120
2,4,6-Tribromophenol	88	104	10-136
4-Terphenyl-d14	72	86	18-120



METALS



Project Name:ELMWOOD+HERTELLab Number:L2103699Project Number:B0564-021-001Report Date:01/29/21

SAMPLE RESULTS

 Lab ID:
 L2103699-01
 Date Collected:
 01/21/21 08:07

 Client ID:
 TP-1 1-2.5 FT
 Date Received:
 01/22/21

Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 85%

Prep Dilution Date Date Analytical Method **Parameter** Qualifier Units Factor **Prepared** Analyzed Method Result RLMDL Analyst Total Metals - Mansfield Lab Arsenic, Total 5.12 mg/kg 0.456 0.095 1 01/26/21 05:20 01/28/21 17:10 EPA 3050B 1,6010D BV Barium, Total 59.3 mg/kg 0.456 0.079 1 01/26/21 05:20 01/28/21 17:10 EPA 3050B 1,6010D ΒV J 1 Cadmium, Total 0.365 mg/kg 0.456 0.045 01/26/21 05:20 01/28/21 17:10 EPA 3050B 1,6010D BV 1 Chromium, Total 19.1 mg/kg 0.456 0.044 01/26/21 05:20 01/28/21 17:10 EPA 3050B 1,6010D ΒV 13.3 2.28 0.122 01/26/21 05:20 01/28/21 17:10 EPA 3050B 1,6010D BV Lead, Total mg/kg 1 1,7471B Mercury, Total 0.075 0.073 0.048 1 01/26/21 08:35 01/27/21 13:33 EPA 7471B ΕW mg/kg Selenium, Total ND mg/kg 0.912 0.118 1 01/26/21 05:20 01/28/21 17:10 EPA 3050B 1,6010D ΒV Silver, Total ND 0.456 0.129 1 01/26/21 05:20 01/28/21 17:10 EPA 3050B 1,6010D ΒV mg/kg



Project Name: Lab Number: **ELMWOOD+HERTEL** L2103699 **Project Number:** B0564-021-001

0.531

mg/kg

Report Date: 01/29/21

SAMPLE RESULTS

Lab ID: L2103699-03 Client ID: TP-4 0-0.5 FT

Sample Location: BUFFALO, NY

ND

Date Collected: 01/21/21 09:27 Date Received: 01/22/21

Field Prep: Not Specified

01/26/21 05:20 01/28/21 18:15 EPA 3050B

Sample Depth:

Silver, Total

Matrix: Soil 73% Percent Solids:

Prep Dilution Date Date Analytical Method **Parameter** Qualifier Units Factor **Prepared** Analyzed Method Result RLMDL Analyst Total Metals - Mansfield Lab Arsenic, Total 4.11 mg/kg 0.531 0.110 1 01/26/21 05:20 01/28/21 18:15 EPA 3050B 1,6010D BV Barium, Total 85.0 mg/kg 0.531 0.092 1 01/26/21 05:20 01/28/21 18:15 EPA 3050B 1,6010D ΒV 1 Cadmium, Total 1.32 mg/kg 0.531 0.052 01/26/21 05:20 01/28/21 18:15 EPA 3050B 1,6010D BV 1 Chromium, Total 23.7 mg/kg 0.531 0.051 01/26/21 05:20 01/28/21 18:15 EPA 3050B 1,6010D ΒV 64.6 2.65 0.142 01/26/21 05:20 01/28/21 18:15 EPA 3050B 1,6010D BV Lead, Total mg/kg 1 1,7471B Mercury, Total 0.097 0.086 0.056 1 01/26/21 08:35 01/27/21 13:36 EPA 7471B ΕW mg/kg J Selenium, Total 0.345 mg/kg 1.06 0.137 1 01/26/21 05:20 01/28/21 18:15 EPA 3050B 1,6010D ΒV

0.150

1



1,6010D

ΒV

 Project Name:
 ELMWOOD+HERTEL
 Lab Number:
 L2103699

 Project Number:
 B0564-021-001
 Report Date:
 01/29/21

SAMPLE RESULTS

Lab ID:L2103699-04Date Collected:01/21/21 11:02Client ID:TP-6 0-0.5 FTDate Received:01/22/21Sample Location:BUFFALO, NYField Prep:Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 75%

Percent Solids:	1370					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	sfield Lab										
Arsenic, Total	3.19		mg/kg	0.516	0.107	1	01/26/21 05:20	01/28/21 18:20	EPA 3050B	1,6010D	BV
Barium, Total	81.4		mg/kg	0.516	0.090	1	01/26/21 05:20	01/28/21 18:20	EPA 3050B	1,6010D	BV
Cadmium, Total	1.37		mg/kg	0.516	0.051	1	01/26/21 05:20	01/28/21 18:20	EPA 3050B	1,6010D	BV
Chromium, Total	73.4		mg/kg	0.516	0.050	1	01/26/21 05:20	01/28/21 18:20	EPA 3050B	1,6010D	BV
Lead, Total	67.5		mg/kg	2.58	0.138	1	01/26/21 05:20	01/28/21 18:20	EPA 3050B	1,6010D	BV
Mercury, Total	0.082	J	mg/kg	0.084	0.055	1	01/26/21 08:35	5 01/27/21 13:39	EPA 7471B	1,7471B	EW
Selenium, Total	0.495	J	mg/kg	1.03	0.133	1	01/26/21 05:20	01/28/21 18:20	EPA 3050B	1,6010D	BV
Silver, Total	0.237	J	mg/kg	0.516	0.146	1	01/26/21 05:20	01/28/21 18:20	EPA 3050B	1,6010D	BV



 Project Name:
 ELMWOOD+HERTEL
 Lab Number:
 L2103699

 Project Number:
 B0564-021-001
 Report Date:
 01/29/21

SAMPLE RESULTS

Lab ID:L2103699-05Date Collected:01/21/21 12:48Client ID:TP-8 0-0.5 FTDate Received:01/22/21Sample Location:BUFFALO, NYField Prep:Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 81%

Percent Solids.	0170					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	efield Lah										
Total Metals - Mail	Sileiu Lab										
Arsenic, Total	1.83		mg/kg	0.465	0.097	1	01/26/21 05:20	0 01/28/21 18:25	EPA 3050B	1,6010D	BV
Barium, Total	85.2		mg/kg	0.465	0.081	1	01/26/21 05:20	0 01/28/21 18:25	EPA 3050B	1,6010D	BV
Cadmium, Total	1.01		mg/kg	0.465	0.046	1	01/26/21 05:20	0 01/28/21 18:25	EPA 3050B	1,6010D	BV
Chromium, Total	73.9		mg/kg	0.465	0.045	1	01/26/21 05:20	0 01/28/21 18:25	EPA 3050B	1,6010D	BV
Lead, Total	59.8		mg/kg	2.32	0.124	1	01/26/21 05:20	0 01/28/21 18:25	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.077	0.050	1	01/26/21 08:35	5 01/27/21 13:49	EPA 7471B	1,7471B	EW
Selenium, Total	0.767	J	mg/kg	0.929	0.120	1	01/26/21 05:20	01/28/21 18:25	EPA 3050B	1,6010D	BV
Silver, Total	0.358	J	mg/kg	0.465	0.131	1	01/26/21 05:20	0 01/28/21 18:25	EPA 3050B	1,6010D	BV



Project Name:ELMWOOD+HERTELLab Number:L2103699Project Number:B0564-021-001Report Date:01/29/21

SAMPLE RESULTS

 Lab ID:
 L2103699-06
 Date Collected:
 01/21/21 13:00

 Client ID:
 TP-9 1-2.5 FT
 Date Received:
 01/22/21

 Sample Location:
 BUFFALO, NY
 Field Prep:
 Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 85%

Percent Solids:	05/6					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Tatal Martala Mara	- C - L - L - L										
Total Metals - Man	stield Lab										
Arsenic, Total	1.89		mg/kg	0.461	0.096	1	01/26/21 05:20	01/28/21 18:29	EPA 3050B	1,6010D	BV
Barium, Total	58.9		mg/kg	0.461	0.080	1	01/26/21 05:20	01/28/21 18:29	EPA 3050B	1,6010D	BV
Cadmium, Total	0.608		mg/kg	0.461	0.045	1	01/26/21 05:20	01/28/21 18:29	EPA 3050B	1,6010D	BV
Chromium, Total	209		mg/kg	0.461	0.044	1	01/26/21 05:20	01/28/21 18:29	EPA 3050B	1,6010D	BV
Lead, Total	24.1		mg/kg	2.30	0.124	1	01/26/21 05:20	01/28/21 18:29	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.074	0.049	1	01/26/21 08:35	5 01/27/21 13:53	EPA 7471B	1,7471B	EW
Selenium, Total	0.539	J	mg/kg	0.922	0.119	1	01/26/21 05:20	01/28/21 18:29	EPA 3050B	1,6010D	BV
Silver, Total	0.954		mg/kg	0.461	0.130	1	01/26/21 05:20	01/28/21 18:29	EPA 3050B	1,6010D	BV



 Project Name:
 ELMWOOD+HERTEL
 Lab Number:
 L2103699

 Project Number:
 B0564-021-001
 Report Date:
 01/29/21

SAMPLE RESULTS

 Lab ID:
 L2103699-07
 Date Collected:
 01/21/21 13:22

 Client ID:
 TP-10 2-4.5 FT
 Date Received:
 01/22/21

 Sample Location:
 BUFFALO, NY
 Field Prep:
 Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 89%

reident Solids.	0370					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Matala, Man	ماد المادة										
Total Metals - Man	Sileid Lab										
Arsenic, Total	1.44		mg/kg	0.438	0.091	1	01/26/21 05:20	01/28/21 21:15	EPA 3050B	1,6010D	BV
Barium, Total	9.28		mg/kg	0.438	0.076	1	01/26/21 05:20	01/28/21 21:15	EPA 3050B	1,6010D	BV
Cadmium, Total	0.262	J	mg/kg	0.438	0.043	1	01/26/21 05:20	01/28/21 21:15	EPA 3050B	1,6010D	BV
Chromium, Total	3.21		mg/kg	0.438	0.042	1	01/26/21 05:20	01/28/21 21:15	EPA 3050B	1,6010D	BV
Lead, Total	8.63		mg/kg	2.19	0.117	1	01/26/21 05:20	01/28/21 21:15	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.070	0.046	1	01/26/21 08:35	5 01/27/21 13:56	EPA 7471B	1,7471B	EW
Selenium, Total	ND		mg/kg	0.875	0.113	1	01/26/21 05:20	01/28/21 21:15	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.438	0.124	1	01/26/21 05:20	01/28/21 21:15	EPA 3050B	1,6010D	BV



 Project Name:
 ELMWOOD+HERTEL
 Lab Number:
 L2103699

 Project Number:
 B0564-021-001
 Report Date:
 01/29/21

SAMPLE RESULTS

Lab ID:L2103699-08Date Collected:01/21/21 14:04Client ID:TP-11 0-0.5 FTDate Received:01/22/21Sample Location:BUFFALO, NYField Prep:Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 74%

Percent Solids:	74%					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	sfield Lab										
Arsenic, Total	3.44		mg/kg	0.520	0.108	1	01/26/21 05:20	01/28/21 21:20	EPA 3050B	1,6010D	BV
Barium, Total	47.8		mg/kg	0.520	0.090	1	01/26/21 05:20	01/28/21 21:20	EPA 3050B	1,6010D	BV
Cadmium, Total	0.514	J	mg/kg	0.520	0.051	1	01/26/21 05:20	01/28/21 21:20	EPA 3050B	1,6010D	BV
Chromium, Total	9.02		mg/kg	0.520	0.050	1	01/26/21 05:20	01/28/21 21:20	EPA 3050B	1,6010D	BV
Lead, Total	30.1		mg/kg	2.60	0.139	1	01/26/21 05:20	01/28/21 21:20	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.085	0.056	1	01/26/21 08:35	5 01/27/21 13:59	EPA 7471B	1,7471B	EW
Selenium, Total	0.306	J	mg/kg	1.04	0.134	1	01/26/21 05:20	01/28/21 21:20	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.520	0.147	1	01/26/21 05:20	01/28/21 21:20	EPA 3050B	1,6010D	BV



Project Name: Lab Number: **ELMWOOD+HERTEL** L2103699 **Project Number: Report Date:** B0564-021-001

01/29/21

SAMPLE RESULTS

Lab ID: L2103699-09 Client ID: TP-15 0.5-2.0 FT Date Collected: Date Received: 01/21/21 15:48

Sample Location: BUFFALO, NY

01/22/21 Field Prep: Not Specified

Sample Depth:

Matrix:

Soil

86% Percent Solids:

Percent Solius.	0070					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
T	<i>c</i>										
Total Metals - Man	sfield Lab										
Arsenic, Total	4.70		mg/kg	0.450	0.094	1	01/26/21 05:20	01/28/21 21:24	EPA 3050B	1,6010D	BV
Barium, Total	33.6		mg/kg	0.450	0.078	1	01/26/21 05:20	01/28/21 21:24	EPA 3050B	1,6010D	BV
Cadmium, Total	0.712		mg/kg	0.450	0.044	1	01/26/21 05:20	01/28/21 21:24	EPA 3050B	1,6010D	BV
Chromium, Total	10.6		mg/kg	0.450	0.043	1	01/26/21 05:20	01/28/21 21:24	EPA 3050B	1,6010D	BV
Lead, Total	44.9		mg/kg	2.25	0.121	1	01/26/21 05:20	01/28/21 21:24	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.073	0.048	1	01/26/21 08:35	01/27/21 14:03	EPA 7471B	1,7471B	EW
Selenium, Total	0.455	J	mg/kg	0.901	0.116	1	01/26/21 05:20	01/28/21 21:24	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.450	0.127	1	01/26/21 05:20	01/28/21 21:24	EPA 3050B	1,6010D	BV



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number:

L2103699

Report Date: 01/29/21

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfiel	ld Lab for sample(s):	01,03-09	Batch:	WG145	58390-1				
Arsenic, Total	ND	mg/kg	0.400	0.083	1	01/26/21 05:20	01/28/21 17:01	1,6010D	BV
Barium, Total	ND	mg/kg	0.400	0.070	1	01/26/21 05:20	01/28/21 17:01	1,6010D	BV
Cadmium, Total	ND	mg/kg	0.400	0.039	1	01/26/21 05:20	01/28/21 17:01	1,6010D	BV
Chromium, Total	ND	mg/kg	0.400	0.038	1	01/26/21 05:20	01/28/21 17:01	1,6010D	BV
Lead, Total	ND	mg/kg	2.00	0.107	1	01/26/21 05:20	01/28/21 17:01	1,6010D	BV
Selenium, Total	ND	mg/kg	0.800	0.103	1	01/26/21 05:20	01/28/21 17:01	1,6010D	BV
Silver, Total	ND	mg/kg	0.400	0.113	1	01/26/21 05:20	01/28/21 17:01	1,6010D	BV

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Mans	sfield Lab for sample(s):	01,03-09	Batch:	WG145	58392-1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	01/26/21 08:35	01/27/21 08:58	3 1,7471B	EW

Prep Information

Digestion Method: EPA 7471B



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number:

L2103699

Report Date:

01/29/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated	sample(s): 01,03-09	Batch: WG	31458390-2 SF	RM Lot Numb	er: D109-540			
Arsenic, Total	102		-		70-130	-		
Barium, Total	94		-		75-125	-		
Cadmium, Total	93		-		75-125	-		
Chromium, Total	94		-		70-130	-		
Lead, Total	98		-		72-128	-		
Selenium, Total	106		-		68-132	-		
Silver, Total	97		-		68-131	-		
otal Metals - Mansfield Lab Associated	sample(s): 01,03-09	Batch: WG	S1458392-2 SF	RM Lot Numb	er: D109-540			
Mercury, Total	95		-		60-140	-		



Matrix Spike Analysis Batch Quality Control

Project Name: ELMWOOD+HERTEL

Project Number:

B0564-021-001

Lab Number: L2103699

Report Date: 01/29/21

arameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery Qual	Recovery Limits	RPD Qual	RPD Limits
otal Metals - Mansfield Lab	Associated sam	nple(s): 01,03	3-09 QC	Batch ID: WG1	458390-	3 QCS	ample: L2103699-01	Client ID:	TP-1 1-2.5 F	Γ
Arsenic, Total	5.12	10.8	18.0	119		-	-	75-125	-	20
Barium, Total	59.3	180	228	94		-	-	75-125	-	20
Cadmium, Total	0.365J	4.59	4.69	102		-	-	75-125	-	20
Chromium, Total	19.1	18	39.8	115		-	-	75-125	-	20
Lead, Total	13.3	45.9	48.7	77		-	-	75-125	-	20
Selenium, Total	ND	10.8	10.1	94		-	-	75-125	-	20
Silver, Total	ND	27	24.8	92		-	-	75-125	-	20
otal Metals - Mansfield Lab	Associated sam	nple(s): 01,03	3-09 QC	Batch ID: WG1	458392-	3 QCS	ample: L2103786-01	Client ID:	MS Sample	
Mercury, Total	ND	0.219	0.229	104		-	-	80-120	-	20

Lab Duplicate Analysis Batch Quality Control

Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number:

L2103699

Report Date: 01/29/21

Parameter N	lative Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01,03-	09 QC Batch ID:	WG1458390-4 QC Samp	ole: L2103699-	01 Client	ID: TP-1	1-2.5 FT
Arsenic, Total	5.12	7.15	mg/kg	33	Q	20
Barium, Total	59.3	84.9	mg/kg	36	Q	20
Cadmium, Total	0.365J	0.416J	mg/kg	NC		20
Chromium, Total	19.1	26.1	mg/kg	31	Q	20
Lead, Total	13.3	10.4	mg/kg	24	Q	20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
otal Metals - Mansfield Lab Associated sample(s): 01,03-	09 QC Batch ID:	WG1458392-4 QC Samp	le: L2103786-	01 Client	ID: DUP	Sample
Mercury, Total	ND	ND	mg/kg	NC		20

INORGANICS & MISCELLANEOUS



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001 Lab Number:

L2103699

Report Date:

01/29/21

SAMPLE RESULTS

Lab ID: L2103699-01

Client ID: TP-1 1-2.5 FT Sample Location: BUFFALO, NY Date Collected:

01/21/21 08:07

Date Received:

01/22/21

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 - V	Westborough Lab)								
Solids, Total	85.4		%	0.100	NA	1	-	01/23/21 12:09	121,2540G	RI



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001 Lab Number:

L2103699

Report Date: 01/29/21

SAMPLE RESULTS

Lab ID: L2103699-02

Client ID: TP-2 1.5-3 FT Sample Location: BUFFALO, NY Date Collected:

01/21/21 08:32

Date Received:

01/22/21

Field Prep:

Not Specified

Sample Depth:

Matrix:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	stborough Lab)								
Solids, Total	70.7		%	0.100	NA	1	-	01/23/21 12:09	121,2540G	RI



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001 Lab Number:

L2103699

Report Date: 01/29/21

SAMPLE RESULTS

Lab ID: L2103699-03

Client ID: TP-4 0-0.5 FT Sample Location: BUFFALO, NY Date Collected:

01/21/21 09:27

Date Received: Field Prep:

01/22/21 Not Specified

Sample Depth:

Matrix:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	- Westborough Lab)								
Solids, Total	73.4		%	0.100	NA	1	-	01/23/21 12:09	121,2540G	RI



Project Name: ELMWOOD+HERTEL

L2103699 Report Date: Project Number: B0564-021-001

01/29/21

Lab Number:

SAMPLE RESULTS

Lab ID: Date Collected: L2103699-04 01/21/21 11:02

TP-6 0-0.5 FT Client ID: Date Received: 01/22/21 Not Specified Sample Location: BUFFALO, NY Field Prep:

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Westborough Lab									
Solids, Total	75.1		%	0.100	NA	1	-	01/23/21 12:09	121,2540G	RI



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number:

L2103699

Report Date: 0

01/29/21

SAMPLE RESULTS

Lab ID: L2103699-05

Client ID: TP-8 0-0.5 FT

Date Collected:

01/21/21 12:48

Sample Location: BUFFALO, NY

Date Received: Field Prep:

01/22/21 Not Specified

Sample Depth:

Matrix:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - We	estborough Lab									
Solids, Total	81.4		%	0.100	NA	1	-	01/23/21 12:09	121,2540G	RI



Project Name: ELMWOOD+HERTEL

Lab Number:

L2103699

Project Number: B0564-021-001 Report Date:

01/29/21

SAMPLE RESULTS

Lab ID: L2103699-06

TP-9 1-2.5 FT Client ID:

Date Collected:

01/21/21 13:00

Sample Location: BUFFALO, NY

Date Received:

01/22/21

Not Specified Field Prep:

Sample Depth:

Matrix:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - V	Vestborough Lab)								
Solids, Total	84.5		%	0.100	NA	1	-	01/23/21 12:09	121,2540G	RI



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001 Lab Number:

L2103699

Report Date:

01/29/21

SAMPLE RESULTS

Lab ID: L2103699-07

Client ID: TP-10 2-4.5 FT Date Collected:

01/21/21 13:22

Sample Location: BUFFALO, NY

Date Received:

01/22/21

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 - V	Westborough Lab									
Solids, Total	89.2		%	0.100	NA	1	-	01/23/21 12:09	121,2540G	RI



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number:

L2103699

Report Date: 01/29/21

SAMPLE RESULTS

Lab ID: L2103699-08

Client ID: TP-11 0-0.5 FT Sample Location: BUFFALO, NY

Date Collected:

01/21/21 14:04

Date Received: Field Prep:

01/22/21

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	73.9		%	0.100	NA	1	-	01/23/21 12:09	121,2540G	RI



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number:

L2103699

Report Date:

01/29/21

SAMPLE RESULTS

Lab ID: L2103699-09

Client ID: TP-15 0.5-2.0 FT Sample Location: BUFFALO, NY

Date Collected:

01/21/21 15:48

5 0.5-2.0 FT Date Received: FALO, NY Field Prep:

ed: 01/22/21 Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - W	Vestborough Lab)								
Solids, Total	86.2		%	0.100	NA	1	-	01/23/21 12:09	121,2540G	RI



Lab Duplicate Analysis

Batch Quality Control

Lab Number: **Project Name:** ELMWOOD+HERTEL L2103699

Project Number: Report Date: 01/29/21 B0564-021-001

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Asso	ociated sample(s): 01-09 QC B	atch ID: WG1457991-1	QC Sample:	L2103699-01	Client ID:	TP-1 1-2.5 FT
Solids, Total	85.4	84.9	%	1		20



Project Name: ELMWOOD+HERTEL

Project Number: B0564-021-001

Lab Number: L2103699
Report Date: 01/29/21

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler Custody Seal

B Absent

Container Information			Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2103699-01A	Plastic 2oz unpreserved for TS	В	NA		2.1	Υ	Absent		TS(7)
L2103699-01B	Metals Only-Glass 60mL/2oz unpreserved	В	NA		2.1	Υ	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR- TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD- TI(180)
L2103699-01C	Glass 120ml/4oz unpreserved	В	NA		2.1	Υ	Absent		NYCP51-PAH(14)
L2103699-02A	Plastic 2oz unpreserved for TS	В	NA		2.1	Υ	Absent		TS(7)
L2103699-02B	Glass 120ml/4oz unpreserved	В	NA		2.1	Υ	Absent		NYCP51-PAH(14)
L2103699-02C	Vial Large Septa unpreserved (4oz)	В	NA		2.1	Υ	Absent		NYTCL-8260-R2(14)
L2103699-02X	Vial MeOH preserved split	В	NA		2.1	Υ	Absent		NYTCL-8260-R2(14)
L2103699-02Y	Vial Water preserved split	В	NA		2.1	Υ	Absent	26-JAN-21 01:37	NYTCL-8260-R2(14)
L2103699-02Z	Vial Water preserved split	В	NA		2.1	Υ	Absent	26-JAN-21 01:37	NYTCL-8260-R2(14)
L2103699-03A	Plastic 2oz unpreserved for TS	В	NA		2.1	Υ	Absent		TS(7)
L2103699-03B	Metals Only-Glass 60mL/2oz unpreserved	В	NA		2.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR- TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD- TI(180)
L2103699-03C	Glass 120ml/4oz unpreserved	В	NA		2.1	Υ	Absent		NYCP51-PAH(14)
L2103699-04A	Plastic 2oz unpreserved for TS	В	NA		2.1	Υ	Absent		TS(7)
L2103699-04B	Metals Only-Glass 60mL/2oz unpreserved	В	NA		2.1	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR- TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD- TI(180)
L2103699-04C	Glass 120ml/4oz unpreserved	В	NA		2.1	Υ	Absent		NYCP51-PAH(14)
L2103699-05A	Plastic 2oz unpreserved for TS	В	NA		2.1	Υ	Absent		TS(7)
L2103699-05B	Metals Only-Glass 60mL/2oz unpreserved	В	NA		2.1	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR- TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD- TI(180)
L2103699-05C	Glass 120ml/4oz unpreserved	В	NA		2.1	Υ	Absent		NYCP51-PAH(14)
L2103699-06A	Plastic 2oz unpreserved for TS	В	NA		2.1	Υ	Absent		TS(7)



Lab Number: L2103699

Report Date: 01/29/21

Container Info	Container Information			Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	рН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2103699-06B	Metals Only-Glass 60mL/2oz unpreserved	В	NA		2.1	Υ	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR- TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD- TI(180)
L2103699-06C	Vial Large Septa unpreserved (4oz)	В	NA		2.1	Υ	Absent		NYCP51-PAH(14)
L2103699-07A	Plastic 2oz unpreserved for TS	В	NA		2.1	Υ	Absent		TS(7)
L2103699-07B	Metals Only-Glass 60mL/2oz unpreserved	В	NA		2.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR- TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD- TI(180)
L2103699-07C	Glass 120ml/4oz unpreserved	В	NA		2.1	Υ	Absent		NYCP51-PAH(14)
L2103699-08A	Plastic 2oz unpreserved for TS	В	NA		2.1	Υ	Absent		TS(7)
L2103699-08B	Metals Only-Glass 60mL/2oz unpreserved	В	NA		2.1	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR- TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD- TI(180)
L2103699-08C	Vial Large Septa unpreserved (4oz)	В	NA		2.1	Υ	Absent		NYCP51-PAH(14)
L2103699-09A	Vial Large Septa unpreserved (4oz)	В	NA		2.1	Υ	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR- TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD- TI(180)
L2103699-09B	Vial Large Septa unpreserved (4oz)	В	NA		2.1	Υ	Absent		NYCP51-PAH(14),TS(7)



Project Name:

Project Number: B0564-021-001

ELMWOOD+HERTEL

Project Name: Lab Number: **ELMWOOD+HERTEL** L2103699 **Project Number:** B0564-021-001 **Report Date:** 01/29/21

GLOSSARY

Acronyms

LOD

LOQ

MS

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**

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.

Environmental Protection Agency.

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.

- 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.)

- 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

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

MDI - 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.

> - 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.

- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile NR

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.

TEO - 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:ELMWOOD+HERTELLab Number:L2103699Project Number:B0564-021-001Report Date:01/29/21

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.

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'. 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 at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a "Total' result is requested, the results of its individual components will also be reported.

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.)

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.
- 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).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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.
- 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 Identified Compounds (TICs).
- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name:ELMWOOD+HERTELLab Number:L2103699Project Number:B0564-021-001Report Date:01/29/21

Data Qualifiers

- 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.

Report Format: DU Report with 'J' Qualifiers



Project Name:ELMWOOD+HERTELLab Number:L2103699Project Number:B0564-021-001Report Date:01/29/21

REFERENCES

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.

LIMITATION OF LIABILITIES

Alpha Analytical 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 Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical 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 Alpha Analytical.

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.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873

Revision 17

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Published Date: 4/28/2020 9:42:21 AM

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

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.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; 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 II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

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.

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

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

Document Type: Form

Pre-Qualtrax Document ID: 08-113

Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300	Service Centers Mahwah, NJ 07430: 35 Whitney Albany, NY 12205: 14 Walker W Tonawanda, NY 14150: 275 Cod Project Information Project Name:	lay	(PART)	Page						23	THE REAL	ALPHA Job # L2\63(49) Billing Information Same as Client Info
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-63		0.5 ft		927			X	X	X				3
-04		0,5 ft		1102			X	X	X				3
-05		5 4		1248			X	X	X				3
-06	TP-9 1-3			1300			×	×	X				3
-07		4.5 4		1323		1	X	X	×				3
-08		0.5 (+		1404			X	X	X				3
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Preservative Code: A = None B = HCI C = HNO ₃ D = H ₂ SO ₄ F = NaOH	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup	Westboro: Certification N Mansfield: Certification N				tainer Type	A	A	A	4			Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not
G = NaHSO ₄ H = Na ₂ S ₂ O ₃	C = Cube O = Other E = Encore D = BOD Bottle	Relinquished I	By: AM	Date/ 1/22/24 (/53/3/	1300 1340	So	Recei		y: 334C	-/,	1/23/2	/Time /3/0 / 00/50	start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)