



November 29, 2022

Mr. John Hood
Chief Environmental Compliance Specialist
Erie County, Environment & Planning
95 Franklin Street
Buffalo NY 14202

**Re: Site II-8 Tecumseh Phase II Business Park
8 Dona Street
Lackawanna, Erie County
BCP Site No.: C915198H**

RE: Site Cap Restoration Summary

Dear Mr. Hood,

On behalf of our client, Uniland Construction Corporation (Uniland), Benchmark Civil/Environmental Engineering & Geology, PLLC (Benchmark) is herein providing a summary of the 12" cap restoration work to the Bethlehem Shoreline Trail property that is adjacent to Uniland's 8 Dona Street property.

February 6, 2022 – To install storm manhole #1 which is located at the property line near the southeastern corner of the site, the site contractor excavated outside of the property line and into Erie County's property. The over excavation into the county's property measured approximately 20' x 10' x 10' deep. All soil excavated from this area was stockpiled to be used as backfill. Once the contractor installed manhole #1, the soil was placed back into the ground, compacted and left approximately 12" – 15" below the surrounding grade. New orange demarcation fabric was installed on top of the subgrade material then BCP approved topsoil was placed down to restore the 12" topsoil cap. On 10/31/22 the contractor installed hydroseed in this area to aid in the germination of vegetative growth.

Please see the attached Appendix A for:

- Site Picture
- Community Air Monitoring Program (CAMP) Data for intrusive work completed on 02.06.22.
- NYSDEC Import Request Approval for the topsoil that was used as cap material.

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2558 Hamburg Turnpike, Suite 300 | Buffalo, NY 14218
phone: (716) 856-0599 | fax: (716) 856-0583

July 27, 2022 thru July 29, 2022 – per the approved storm water drainage plan, the contractor excavated through the county's property, including removing a small portion of the bike path to connect the onsite drainage system to the main storm system running along the western side of Route 5. The existing 12" of topsoil that was in the excavation area which was approximately 60' long x 10' wide was removed and placed to the side for later use. The subgrade soil that was beneath the topsoil and demarcation fabric was removed down to proper elevation for the storm pipe installation and placed on plastic sheeting along the excavation. After the contractor installed the storm pipe and completed the connection to the storm sewer main pipe, the subgrade soil was placed back into the excavation, compacted and left approximately 12"-15" below surrounding grade. New orange demarcation fabric was installed on top of the subgrade material then the original topsoil that was stripped off was placed back down to restore the 12" topsoil cap. New asphalt was also installed in the area of the bike path that was excavated through. On 10/31/22 the contractor installed hydroseed in this area to aid in the germination of vegetative growth. The extra subgrade soil and original asphalt material from the bike path that was not placed back into the excavation as backfill was later transported offsite and disposed of at an approved landfill facility under the same waste profile as the Uniland project.

Please see the attached Appendix B for:

- Site Picture
- Community Air Monitoring Program (CAMP) Data for intrusive work completed on 07.27.22 thru 07.29.2022.
- Waste Manifest which extra subgrade soil and asphalt material was disposed of offsite at an approved landfill facility.

Please contact us with any additional comments or questions.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC



Thomas H. Forbes, PE
President



Eric A. Warren
Project Manager



APPENDIX A

Work Completed on 02.06.22

SITE PICTURE
CAMP DATA
NYSDEC IMPORT REQUEST APPROVAL



APPENDIX A

SITE PICTURE



APPENDIX A

CAMP DATA

Wed, 16th of Feb 2022, 7:00:00 – 17:00:00
(GMT-05:00) Eastern Time (US & Canada)



Mass Conc. Total (AVG 15m) mg/m³

DustTrak-8530
RS232(C)

MIN	AVG	MAX
0.0227	0.0313	0.0489

VOC ppm AVG 15m ppm

miniRAE 3000
RS232(A)

MIN	AVG	MAX
0	0	0

Name CAMP Station #4
S/N 0B052904
Description CAMP Station #4
Location 2424 Hamburg Turnpike, Buffalo, NY 14218, USA

APPENDIX A

NYSDEC IMPORT REQUEST APPROVAL

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, NY 14203-2915
P: (716) 851-7220 | F: (716) 851-7226
www.dec.ny.gov

March 10, 2022

Eric Warren
TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218

**Soil Import Request
Site II-8 Tecumseh Phase II Business Park
Site No. C915198H
Lackawanna, NY**

Dear Eric Warren:

The Department has reviewed the request dated March 8, 2022 to import 3,000 cubic yards of soil from 11668 Broadway, Alden NY. Based on the information provided, the request is hereby approved.

The proposed fill material meets the Commercial soil cleanup objectives (SCOs) (Appendix 5 of DER-10). Therefore, this material may be placed below the demarcation layer or above the demarcation layer as part of final site cover.

Should you have any questions or would like to discuss the matter in further detail, feel free to contact me at andrew.zwack@dec.ny.gov or (716) 851-7220.

Sincerely,

Andrew Zwack
Assistant Engineer

cc:
Ben McPherson – NYSDEC
Tom Forbes - Benchmark
Michael Montante – Uniland



NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION



Request to Import/Reuse Fill or Soil

This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.

SECTION 1 – SITE BACKGROUND

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

SECTION 2 – MATERIAL OTHER THAN SOIL

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 80 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

SECTION 3 - SAMPLING

Provide a brief description of the number and type of samples collected in the space below:

Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.

If the material meets requirements of DER-10 section 5.4(e)5 (other material), no chemical testing needed.

SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.

If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.

SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Location where fill was obtained:

Identification of any state or local approvals as a fill source:

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Provide a list of supporting documentation included with this request:

The information provided on this form is accurate and complete.

Eric A. Warren

Signature

Date

Print Name

Firm



TABLE 1
SUMMARY OF TOPSOIL ANALYTICAL RESULTS
11663 Broadway
Alden, New York



PARAMETER ¹	Unrestricted Use ²	Residential Use ²	Restricted Residential Use ²	Commercial or Industrial Use ²	Comp #1	Comp #2	Comp #3	Comp #4	Grab #1	Grab #2	Grab #3	Grab #4	Grab #5	Grab #6	Grab #7	Grab #8	Grab #9	Grab #10	Grab #11
					2/16/2022														
Volatile Organic Compounds (VOCs) - mg/Kg³																			
Ethylbenzene	1	1	1	1	--	--	--	--	ND	ND	0.0015	0.00018 J	ND	ND	ND	ND	ND	ND	
p-Isopropyltoluene	10	10	10	10	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	0.00039 J	ND	ND	
Total Xylenes	0.26	1.6	1.6	1.6	--	--	--	--	ND	ND	0.0113	0.00132 J	0.00085 J	ND	ND	ND	ND	ND	
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg³																			
Anthracene	100	100	100	500	ND	ND	0.057 J	0.130 J	--	--	--	--	--	--	--	--	--	--	
Acenaphthene	20	100	100	500	ND	ND	0.032 J	--	--	--	--	--	--	--	--	--	--	--	
Acenaphthylene	100	100	100	500	ND	ND	0.061 J	--	--	--	--	--	--	--	--	--	--	--	
Benz(a)anthracene	1	1	1	5.6	0.049 J	0.036 J	0.280	0.460	--	--	--	--	--	--	--	--	--	--	
Benz(b)fluoranthene	1	1	1	5.6	0.075 J	0.051 J	0.370	0.60	--	--	--	--	--	--	--	--	--	--	
Benz(k)fluoranthene	0.8	1	3.9	56	ND	ND	0.130	0.220	--	--	--	--	--	--	--	--	--	--	
Indeno(1,2,3-cd)pyrene	0.5	0.5	0.5	5.6	0.040 J	ND	0.190	0.30	--	--	--	--	--	--	--	--	--	--	
Benzo(ghi)perylene	100	100	100	500	0.033 J	ND	0.150 J	0.220	--	--	--	--	--	--	--	--	--	--	
Benzo(a)pyrene	1	1	1	1	0.055 J	ND	0.300	0.470	--	--	--	--	--	--	--	--	--	--	
Carbazole	--	--	--	--	ND	ND	0.033 J	0.100 J	--	--	--	--	--	--	--	--	--	--	
Chrysene	1	1	1	1	0.052 J	0.039 J	0.260	0.460	--	--	--	--	--	--	--	--	--	--	
Dibenz(a,h)anthracene	0.33	0.33	0.33	0.56	ND	ND	0.040 J	0.065 J	--	--	--	--	--	--	--	--	--	--	
Dibenzofuran	7	59	59	350	ND	ND	0.044 J	--	--	--	--	--	--	--	--	--	--	--	
Fluorene	30	100	100	500	ND	ND	ND	0.120 J	--	--	--	--	--	--	--	--	--	--	
3-Methylphenol/4-Methylphenol	--	--	--	--	ND	ND	ND	0.048 J	--	--	--	--	--	--	--	--	--	--	
Fluoranthene	100	100	100	500	0.110 J	0.078 J	0.630	1.20	--	--	--	--	--	--	--	--	--	--	
Phenanthrene	100	100	100	500	0.061 J	0.042 J	0.220	0.880	--	--	--	--	--	--	--	--	--	--	
Pyrene	100	100	100	500	0.083 J	0.058 J	0.490	0.810	--	--	--	--	--	--	--	--	--	--	
Total Metals - mg/Kg																			
Arsenic	13	16	16	16	4.65	4.38	4.0	5.9	--	--	--	--	--	--	--	--	--	--	
Barium	350	350	400	400	30.2	30	34.8	57.2	--	--	--	--	--	--	--	--	--	--	
Beryllium	7.2	14	47	47	0.246	0.213 J	0.26	0.301	--	--	--	--	--	--	--	--	--	--	
Cadmium	2.5	2.5	4.3	7.5	0.491	0.493 J	0.521	0.771	--	--	--	--	--	--	--	--	--	--	
Chromium, Trivalent	30	36	180	1500	6.2	5.7	7.34	8.24	--	--	--	--	--	--	--	--	--	--	
Copper	50	270	270	270	8.13	12.6	14.7	24.7	--	--	--	--	--	--	--	--	--	--	
Lead	63	400	400	450	28.6	40.1	24.8	58.3	--	--	--	--	--	--	--	--	--	--	
Manganese	1600	2000	2000	2000	95.3	118	209	554	--	--	--	--	--	--	--	--	--	--	
Mercury	0.18	0.73	0.73	0.73	0.074 J	0.091 J	0.082 J	0.104	--	--	--	--	--	--	--	--	--	--	
Nickel	30	130	130	130	7.08	7.08	9.79	10.8	--	--	--	--	--	--	--	--	--	--	
Selenium	3.9	4	4	4	0.437 J	0.315 J	0.234 J	0.206 J	--	--	--	--	--	--	--	--	--	--	
Silver	2	8.3	8.3	8.3	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	
Zinc	109	2200	2480	2480	43.4	54.3	59.4	77.3	--	--	--	--	--	--	--	--	--	--	
Polychlorinated biphenyls (PCBs) - mg/Kg																			
Total PCBs	0.1	1	1	1	ND	ND	0.0592	ND	--	--	--	--	--	--	--	--	--	--	
Pesticides and Herbicides - mg/Kg³																			
4,4'-DDE	0.0033	1.8	8.9	62	0.00795	0.0262	0.0629	0.0678	--	--	--	--	--	--	--	--	--	--	
4,4'-DDD	0.0033	2.6	13.0	92	ND	8.72E-4 JIP	0.00307	0.0214	--	--	--	--	--	--	--	--	--	--	
4,4'-DDT	0.0033	1.7	7.9	47	0.00572	0.0128	0.0124	0.0395	--	--	--	--	--	--	--	--	--	--	
cis-Chlordane	0.0940	0.91	4.2	24	ND	1.05E-3 J	ND	ND	--	--	--	--	--	--	--	--	--	--	
Perfluorinated Alkyl Acids- ug/kg⁴																			
Perfluorobutanoic Acid (PFBA)	--	--	--	--	0.067 J	0.064 J	0.127 J	0.085 J	--	--	--	--	--	--	--	--	--	--	
Perfluorohexanoic Acid (PFHxA)	--	--	--	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	
Perfluoropentanoic Acid (PFPeA)	--	--	--	--	ND	ND	0.061 J	ND	--	--	--	--	--	--	--	--	--	--	
Perfluorooctanoic Acid (PFOA)	0.66	6.6	33	500/600	0.169 J	0.161 J	0.203 J	0.203 J	--	--	--	--	--	--	--	--	--	--	
Perfluorooctanesulfonic Acid (PFOS)	--	--	--	--	0.480	0.492	0.491	0.998	--	--	--	--	--	--	--	--	--	--	
PFOA/PFOS, Total	--	--	--	--	0.649 J	0.653 J	0.694 J	1.20 J	--	--	--	--	--	--	--	--	--	--	

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; other compounds were reported as non-detect.

2. Values per NYSDCC DER-10 Appendix 5 Allowable Constituent Levels for Imported Fill or Soil.

3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOS.

4. Values per NYSDCC Part 375 Sampling, Analysis and Assessment of Per-And Polyfluoroalkyl Substances (PFAS) October 2020.

Definitions:

-- = Parameter not detected above laboratory detection limit.

-- = No value available for the parameter; Parameter not analyzed for.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.



ANALYTICAL REPORT

Lab Number:	L2208221
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Eric Warren
Phone:	(716) 856-0599
Project Name:	1168 BROADWAY TOPSOIL
Project Number:	T0006-022-002
Report Date:	03/04/22

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: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2208221-01	COMP 1	SOIL	BROADWAY & TWO RED RD	02/16/22 08:50	02/16/22
L2208221-02	COMP 2	SOIL	BROADWAY & TWO RED RD	02/16/22 09:00	02/16/22
L2208221-03	COMP 3	SOIL	BROADWAY & TWO RED RD	02/16/22 09:10	02/16/22
L2208221-04	COMP 4	SOIL	BROADWAY & TWO RED RD	02/16/22 09:20	02/16/22
L2208221-05	GRAB 1	SOIL	BROADWAY & TWO RED RD	02/16/22 07:50	02/16/22
L2208221-06	GRAB 2	SOIL	BROADWAY & TWO RED RD	02/16/22 07:55	02/16/22
L2208221-07	GRAB 3	SOIL	BROADWAY & TWO RED RD	02/16/22 08:00	02/16/22
L2208221-08	GRAB 4	SOIL	BROADWAY & TWO RED RD	02/16/22 08:05	02/16/22
L2208221-09	GRAB 5	SOIL	BROADWAY & TWO RED RD	02/16/22 08:10	02/16/22
L2208221-10	GRAB 6	SOIL	BROADWAY & TWO RED RD	02/16/22 08:15	02/16/22
L2208221-11	GRAB 7	SOIL	BROADWAY & TWO RED RD	02/16/22 08:20	02/16/22
L2208221-12	GRAB 8	SOIL	BROADWAY & TWO RED RD	02/16/22 08:25	02/16/22
L2208221-13	GRAB 9	SOIL	BROADWAY & TWO RED RD	02/16/22 08:30	02/16/22
L2208221-14	GRAB 10	SOIL	BROADWAY & TWO RED RD	02/16/22 08:35	02/16/22
L2208221-15	GRAB 11	SOIL	BROADWAY & TWO RED RD	02/16/22 08:40	02/16/22

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

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.

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

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.

Volatile Organics

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.

Perfluorinated Alkyl Acids by Isotope Dilution

L2208221-01: The MeOH fraction of the extraction is reported for perfluorooctanesulfonamide (fosa) due to better extraction efficiency of the perfluoro[13c8]octanesulfonamide (m8fosa) Extracted Internal Standard.

L2208221-01, -03, -04, WG1606408-1, and WG1606408-2: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

PCBs

L2208221-03: The surrogate recoveries are outside the acceptance criteria for decachlorobiphenyl (265%,299%); however, the sample was not re-extracted due to coelution with Aroclor 1268.

Total Metals

The WG1607434-3 MS recovery, performed on L2208221-01, is outside the acceptance criteria for mercury (127%). A post digestion spike was performed and was within acceptance criteria.

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

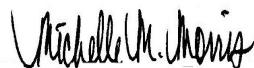
Case Narrative (continued)

Hexavalent Chromium

The WG1609028-4 Insoluble MS recovery for chromium, hexavalent (57%), performed on L2208221-02, is outside the acceptance criteria. The Soluble MS recovery for chromium, hexavalent (32%) was also outside criteria. This has been attributed to matrix interference. A post-spike was performed with a recovery of 104%.

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

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 03/04/22

ORGANICS



VOLATILES



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-05
 Client ID: GRAB 1
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 07:50
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/27/22 14:34
 Analyst: AJK
 Percent Solids: 71%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.9	3.2	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.1	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.32	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.37	1
Tetrachloroethene	ND		ug/kg	0.69	0.27	1
Chlorobenzene	ND		ug/kg	0.69	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.96	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.69	0.23	1
Bromodichloromethane	ND		ug/kg	0.69	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.38	1
cis-1,3-Dichloropropene	ND		ug/kg	0.69	0.22	1
Bromoform	ND		ug/kg	5.5	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.69	0.23	1
Benzene	ND		ug/kg	0.69	0.23	1
Toluene	ND		ug/kg	1.4	0.75	1
Ethylbenzene	ND		ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.5	1.3	1
Bromomethane	ND		ug/kg	2.8	0.80	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.8	0.62	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.19	1
Trichloroethene	ND		ug/kg	0.69	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-05	Date Collected:	02/16/22 07:50
Client ID:	GRAB 1	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.8	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.28	1
p/m-Xylene	ND		ug/kg	2.8	0.77	1
o-Xylene	ND		ug/kg	1.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	ND		ug/kg	14	6.6	1
Carbon disulfide	ND		ug/kg	14	6.3	1
2-Butanone	ND		ug/kg	14	3.1	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.8	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.38	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	0.27	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	0.46	1
Methyl Acetate	ND		ug/kg	5.5	1.3	1
Cyclohexane	ND		ug/kg	14	0.75	1
1,4-Dioxane	ND		ug/kg	110	48.	1
Freon-113	ND		ug/kg	5.5	0.96	1
Methyl cyclohexane	ND		ug/kg	5.5	0.83	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	113		70-130



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-06
 Client ID: GRAB 2
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 07:55
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/27/22 15:00
 Analyst: AJK
 Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.4	3.0	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.19	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.30	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene	ND		ug/kg	0.64	0.25	1
Chlorobenzene	ND		ug/kg	0.64	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.90	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.33	1
1,1,1-Trichloroethane	ND		ug/kg	0.64	0.22	1
Bromodichloromethane	ND		ug/kg	0.64	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.35	1
cis-1,3-Dichloropropene	ND		ug/kg	0.64	0.20	1
Bromoform	ND		ug/kg	5.2	0.32	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.64	0.21	1
Benzene	ND		ug/kg	0.64	0.21	1
Toluene	ND		ug/kg	1.3	0.70	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.2	1.2	1
Bromomethane	ND		ug/kg	2.6	0.75	1
Vinyl chloride	ND		ug/kg	1.3	0.43	1
Chloroethane	ND		ug/kg	2.6	0.58	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.18	1
Trichloroethene	ND		ug/kg	0.64	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.6	0.18	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-06	Date Collected:	02/16/22 07:55
Client ID:	GRAB 2	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.6	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.6	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.6	0.26	1
p/m-Xylene	ND		ug/kg	2.6	0.72	1
o-Xylene	ND		ug/kg	1.3	0.38	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
Styrene	ND		ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.2	1
Carbon disulfide	ND		ug/kg	13	5.9	1
2-Butanone	ND		ug/kg	13	2.9	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.6	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.36	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.19	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.9	1.3	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
n-Propylbenzene	ND		ug/kg	1.3	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.6	0.42	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.6	0.35	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.6	0.25	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.6	0.43	1
Methyl Acetate	ND		ug/kg	5.2	1.2	1
Cyclohexane	ND		ug/kg	13	0.70	1
1,4-Dioxane	ND		ug/kg	100	45.	1
Freon-113	ND		ug/kg	5.2	0.89	1
Methyl cyclohexane	ND		ug/kg	5.2	0.78	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	113		70-130



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-07
 Client ID: GRAB 3
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:00
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/27/22 15:25
 Analyst: AJK
 Percent Solids: 74%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.4	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene	ND		ug/kg	0.64	0.25	1
Chlorobenzene	ND		ug/kg	0.64	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.1	0.88	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.33	1
1,1,1-Trichloroethane	ND		ug/kg	0.64	0.21	1
Bromodichloromethane	ND		ug/kg	0.64	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.35	1
cis-1,3-Dichloropropene	ND		ug/kg	0.64	0.20	1
Bromoform	ND		ug/kg	5.1	0.31	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.64	0.21	1
Benzene	ND		ug/kg	0.64	0.21	1
Toluene	ND		ug/kg	1.3	0.69	1
Ethylbenzene	1.5		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.1	1.2	1
Bromomethane	ND		ug/kg	2.5	0.74	1
Vinyl chloride	ND		ug/kg	1.3	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1
Trichloroethene	ND		ug/kg	0.64	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-07	Date Collected:	02/16/22 08:00
Client ID:	GRAB 3	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.26	1
p/m-Xylene	8.0		ug/kg	2.5	0.71	1
o-Xylene	3.3		ug/kg	1.3	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
Styrene	ND		ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.1	1
Carbon disulfide	ND		ug/kg	13	5.8	1
2-Butanone	ND		ug/kg	13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.35	1
n-Butylbenzene	ND		ug/kg	1.3	0.21	1
sec-Butylbenzene	ND		ug/kg	1.3	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.3	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
n-Propylbenzene	ND		ug/kg	1.3	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.41	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
Methyl Acetate	ND		ug/kg	5.1	1.2	1
Cyclohexane	ND		ug/kg	13	0.69	1
1,4-Dioxane	ND		ug/kg	100	45.	1
Freon-113	ND		ug/kg	5.1	0.88	1
Methyl cyclohexane	ND		ug/kg	5.1	0.77	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	111		70-130



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-08
 Client ID: GRAB 4
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:05
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/27/22 15:50
 Analyst: AJK
 Percent Solids: 79%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.1	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.61	0.24	1
Chlorobenzene	ND		ug/kg	0.61	0.16	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.85	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.61	0.20	1
Bromodichloromethane	ND		ug/kg	0.61	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.61	0.19	1
Bromoform	ND		ug/kg	4.9	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	0.20	1
Benzene	ND		ug/kg	0.61	0.20	1
Toluene	ND		ug/kg	1.2	0.66	1
Ethylbenzene	0.18	J	ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.9	1.1	1
Bromomethane	ND		ug/kg	2.4	0.71	1
Vinyl chloride	ND		ug/kg	1.2	0.41	1
Chloroethane	ND		ug/kg	2.4	0.55	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.17	1
Trichloroethene	ND		ug/kg	0.61	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.18	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-08	Date Collected:	02/16/22 08:05
Client ID:	GRAB 4	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.25	1
p/m-Xylene	0.90	J	ug/kg	2.4	0.69	1
o-Xylene	0.42	J	ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.9	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.41	1
Methyl Acetate	ND		ug/kg	4.9	1.2	1
Cyclohexane	ND		ug/kg	12	0.67	1
1,4-Dioxane	ND		ug/kg	98	43.	1
Freon-113	ND		ug/kg	4.9	0.85	1
Methyl cyclohexane	ND		ug/kg	4.9	0.74	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	113		70-130



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-09
 Client ID: GRAB 5
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:10
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/27/22 16:15
 Analyst: AJK
 Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.7	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.20	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.3	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.17	1
Dibromochloromethane	ND		ug/kg	1.3	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.36	1
Tetrachloroethene	ND		ug/kg	0.67	0.26	1
Chlorobenzene	ND		ug/kg	0.67	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.94	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.34	1
1,1,1-Trichloroethane	ND		ug/kg	0.67	0.22	1
Bromodichloromethane	ND		ug/kg	0.67	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.37	1
cis-1,3-Dichloropropene	ND		ug/kg	0.67	0.21	1
Bromoform	ND		ug/kg	5.4	0.33	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.67	0.22	1
Benzene	ND		ug/kg	0.67	0.22	1
Toluene	ND		ug/kg	1.3	0.73	1
Ethylbenzene	ND		ug/kg	1.3	0.19	1
Chloromethane	ND		ug/kg	5.4	1.2	1
Bromomethane	ND		ug/kg	2.7	0.78	1
Vinyl chloride	ND		ug/kg	1.3	0.45	1
Chloroethane	ND		ug/kg	2.7	0.61	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.18	1
Trichloroethene	ND		ug/kg	0.67	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.19	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-09	Date Collected:	02/16/22 08:10
Client ID:	GRAB 5	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	0.85	J	ug/kg	2.7	0.75	1
o-Xylene	ND		ug/kg	1.3	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.24	1
Styrene	ND		ug/kg	1.3	0.26	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.5	1
Carbon disulfide	ND		ug/kg	13	6.1	1
2-Butanone	ND		ug/kg	13	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.7	1
2-Hexanone	ND		ug/kg	13	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.38	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	1.3	1
Isopropylbenzene	ND		ug/kg	1.3	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.15	1
n-Propylbenzene	ND		ug/kg	1.3	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.43	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.36	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.7	0.45	1
Methyl Acetate	ND		ug/kg	5.4	1.3	1
Cyclohexane	ND		ug/kg	13	0.73	1
1,4-Dioxane	ND		ug/kg	110	47.	1
Freon-113	ND		ug/kg	5.4	0.93	1
Methyl cyclohexane	ND		ug/kg	5.4	0.81	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	114		70-130



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-10
 Client ID: GRAB 6
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:15
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/27/22 16:40
 Analyst: AJK
 Percent Solids: 70%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.8	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.36	1
Tetrachloroethene	ND		ug/kg	0.68	0.27	1
Chlorobenzene	ND		ug/kg	0.68	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.95	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.68	0.23	1
Bromodichloromethane	ND		ug/kg	0.68	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.37	1
cis-1,3-Dichloropropene	ND		ug/kg	0.68	0.22	1
Bromoform	ND		ug/kg	5.5	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.68	0.23	1
Benzene	ND		ug/kg	0.68	0.23	1
Toluene	ND		ug/kg	1.4	0.74	1
Ethylbenzene	ND		ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.5	1.3	1
Bromomethane	ND		ug/kg	2.7	0.79	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.7	0.62	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.19	1
Trichloroethene	ND		ug/kg	0.68	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.20	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-10	Date Collected:	02/16/22 08:15
Client ID:	GRAB 6	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.76	1
o-Xylene	ND		ug/kg	1.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.2	1
Acetone	ND		ug/kg	14	6.6	1
Carbon disulfide	ND		ug/kg	14	6.2	1
2-Butanone	ND		ug/kg	14	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.7	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
n-Propylbenzene	ND		ug/kg	1.4	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.37	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.7	0.46	1
Methyl Acetate	ND		ug/kg	5.5	1.3	1
Cyclohexane	ND		ug/kg	14	0.74	1
1,4-Dioxane	ND		ug/kg	110	48.	1
Freon-113	ND		ug/kg	5.5	0.95	1
Methyl cyclohexane	ND		ug/kg	5.5	0.82	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	113		70-130



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-11
 Client ID: GRAB 7
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:20
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/27/22 17:05
 Analyst: AJK
 Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.3	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene	ND		ug/kg	0.63	0.25	1
Chlorobenzene	ND		ug/kg	0.63	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.1	0.88	1
1,2-Dichloroethane	ND		ug/kg	1.3	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	1.3	0.35	1
cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
Bromoform	ND		ug/kg	5.1	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	1.3	0.69	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.1	1.2	1
Bromomethane	ND		ug/kg	2.5	0.74	1
Vinyl chloride	ND		ug/kg	1.3	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1
Trichloroethene	ND		ug/kg	0.63	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-11	Date Collected:	02/16/22 08:20
Client ID:	GRAB 7	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.71	1
o-Xylene	ND		ug/kg	1.3	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
Styrene	ND		ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.1	1
Carbon disulfide	ND		ug/kg	13	5.8	1
2-Butanone	ND		ug/kg	13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.35	1
n-Butylbenzene	ND		ug/kg	1.3	0.21	1
sec-Butylbenzene	ND		ug/kg	1.3	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.3	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
n-Propylbenzene	ND		ug/kg	1.3	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.41	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
Methyl Acetate	ND		ug/kg	5.1	1.2	1
Cyclohexane	ND		ug/kg	13	0.69	1
1,4-Dioxane	ND		ug/kg	100	44.	1
Freon-113	ND		ug/kg	5.1	0.88	1
Methyl cyclohexane	ND		ug/kg	5.1	0.76	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	112		70-130



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-12
 Client ID: GRAB 8
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:25
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 03/01/22 16:04
 Analyst: NLK
 Percent Solids: 78%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.3	2.9	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.18	1
Chloroform	ND		ug/kg	1.9	0.18	1
Carbon tetrachloride	ND		ug/kg	1.3	0.29	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.16	1
Dibromochloromethane	ND		ug/kg	1.3	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.34	1
Tetrachloroethene	ND		ug/kg	0.63	0.25	1
Chlorobenzene	ND		ug/kg	0.63	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.1	0.88	1
1,2-Dichloroethane	ND		ug/kg	1.3	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	1.3	0.35	1
cis-1,3-Dichloropropene	ND		ug/kg	0.63	0.20	1
Bromoform	ND		ug/kg	5.1	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	1.3	0.69	1
Ethylbenzene	ND		ug/kg	1.3	0.18	1
Chloromethane	ND		ug/kg	5.1	1.2	1
Bromomethane	ND		ug/kg	2.5	0.74	1
Vinyl chloride	ND		ug/kg	1.3	0.42	1
Chloroethane	ND		ug/kg	2.5	0.57	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.17	1
Trichloroethene	ND		ug/kg	0.63	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-12	Date Collected:	02/16/22 08:25
Client ID:	GRAB 8	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.22	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.71	1
o-Xylene	ND		ug/kg	1.3	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
Styrene	ND		ug/kg	1.3	0.25	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.1	1
Carbon disulfide	ND		ug/kg	13	5.8	1
2-Butanone	ND		ug/kg	13	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.6	1
2-Hexanone	ND		ug/kg	13	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.26	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.35	1
n-Butylbenzene	ND		ug/kg	1.3	0.21	1
sec-Butylbenzene	ND		ug/kg	1.3	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.8	1.3	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	0.39	J	ug/kg	1.3	0.14	1
n-Propylbenzene	ND		ug/kg	1.3	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.41	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.42	1
Methyl Acetate	ND		ug/kg	5.1	1.2	1
Cyclohexane	ND		ug/kg	13	0.69	1
1,4-Dioxane	ND		ug/kg	100	44.	1
Freon-113	ND		ug/kg	5.1	0.88	1
Methyl cyclohexane	ND		ug/kg	5.1	0.76	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	89		70-130



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-13
 Client ID: GRAB 9
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:30
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/27/22 17:30
 Analyst: AJK
 Percent Solids: 74%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.7	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.19	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.3	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.17	1
Dibromochloromethane	ND		ug/kg	1.3	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.36	1
Tetrachloroethene	ND		ug/kg	0.67	0.26	1
Chlorobenzene	ND		ug/kg	0.67	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.93	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.34	1
1,1,1-Trichloroethane	ND		ug/kg	0.67	0.22	1
Bromodichloromethane	ND		ug/kg	0.67	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.37	1
cis-1,3-Dichloropropene	ND		ug/kg	0.67	0.21	1
Bromoform	ND		ug/kg	5.4	0.33	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.67	0.22	1
Benzene	ND		ug/kg	0.67	0.22	1
Toluene	ND		ug/kg	1.3	0.73	1
Ethylbenzene	ND		ug/kg	1.3	0.19	1
Chloromethane	ND		ug/kg	5.4	1.2	1
Bromomethane	ND		ug/kg	2.7	0.78	1
Vinyl chloride	ND		ug/kg	1.3	0.45	1
Chloroethane	ND		ug/kg	2.7	0.61	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.18	1
Trichloroethene	ND		ug/kg	0.67	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.19	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-13	Date Collected:	02/16/22 08:30
Client ID:	GRAB 9	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.75	1
o-Xylene	ND		ug/kg	1.3	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.23	1
Styrene	ND		ug/kg	1.3	0.26	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.4	1
Carbon disulfide	ND		ug/kg	13	6.1	1
2-Butanone	ND		ug/kg	13	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.7	1
2-Hexanone	ND		ug/kg	13	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.37	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	1.3	1
Isopropylbenzene	ND		ug/kg	1.3	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.15	1
n-Propylbenzene	ND		ug/kg	1.3	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.43	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.36	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.7	0.45	1
Methyl Acetate	ND		ug/kg	5.4	1.3	1
Cyclohexane	ND		ug/kg	13	0.73	1
1,4-Dioxane	ND		ug/kg	110	47.	1
Freon-113	ND		ug/kg	5.4	0.93	1
Methyl cyclohexane	ND		ug/kg	5.4	0.81	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	111		70-130



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-14
 Client ID: GRAB 10
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:35
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/27/22 17:55
 Analyst: AJK
 Percent Solids: 74%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.7	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.19	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.3	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.17	1
Dibromochloromethane	ND		ug/kg	1.3	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.36	1
Tetrachloroethene	ND		ug/kg	0.67	0.26	1
Chlorobenzene	ND		ug/kg	0.67	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.3	0.93	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.34	1
1,1,1-Trichloroethane	ND		ug/kg	0.67	0.22	1
Bromodichloromethane	ND		ug/kg	0.67	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.36	1
cis-1,3-Dichloropropene	ND		ug/kg	0.67	0.21	1
Bromoform	ND		ug/kg	5.3	0.33	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.67	0.22	1
Benzene	ND		ug/kg	0.67	0.22	1
Toluene	ND		ug/kg	1.3	0.73	1
Ethylbenzene	ND		ug/kg	1.3	0.19	1
Chloromethane	ND		ug/kg	5.3	1.2	1
Bromomethane	ND		ug/kg	2.7	0.78	1
Vinyl chloride	ND		ug/kg	1.3	0.45	1
Chloroethane	ND		ug/kg	2.7	0.60	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.18	1
Trichloroethene	ND		ug/kg	0.67	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.19	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-14	Date Collected:	02/16/22 08:35
Client ID:	GRAB 10	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.75	1
o-Xylene	ND		ug/kg	1.3	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.23	1
Styrene	ND		ug/kg	1.3	0.26	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.4	1
Carbon disulfide	ND		ug/kg	13	6.1	1
2-Butanone	ND		ug/kg	13	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.7	1
2-Hexanone	ND		ug/kg	13	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.27	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.37	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	1.3	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
n-Propylbenzene	ND		ug/kg	1.3	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.43	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.36	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.7	0.45	1
Methyl Acetate	ND		ug/kg	5.3	1.3	1
Cyclohexane	ND		ug/kg	13	0.73	1
1,4-Dioxane	ND		ug/kg	110	47.	1
Freon-113	ND		ug/kg	5.3	0.93	1
Methyl cyclohexane	ND		ug/kg	5.3	0.81	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	111		70-130



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-15
 Client ID: GRAB 11
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:40
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 02/27/22 18:20
 Analyst: AJK
 Percent Solids: 71%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.8	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.36	1
Tetrachloroethene	ND		ug/kg	0.68	0.27	1
Chlorobenzene	ND		ug/kg	0.68	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.94	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.35	1
1,1,1-Trichloroethane	ND		ug/kg	0.68	0.23	1
Bromodichloromethane	ND		ug/kg	0.68	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.37	1
cis-1,3-Dichloropropene	ND		ug/kg	0.68	0.21	1
Bromoform	ND		ug/kg	5.4	0.33	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.68	0.22	1
Benzene	ND		ug/kg	0.68	0.22	1
Toluene	ND		ug/kg	1.4	0.74	1
Ethylbenzene	ND		ug/kg	1.4	0.19	1
Chloromethane	ND		ug/kg	5.4	1.3	1
Bromomethane	ND		ug/kg	2.7	0.79	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.7	0.61	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.19	1
Trichloroethene	ND		ug/kg	0.68	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.20	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-15	Date Collected:	02/16/22 08:40
Client ID:	GRAB 11	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.76	1
o-Xylene	ND		ug/kg	1.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.2	1
Acetone	50		ug/kg	14	6.5	1
Carbon disulfide	ND		ug/kg	14	6.2	1
2-Butanone	ND		ug/kg	14	3.0	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.7	1
2-Hexanone	ND		ug/kg	14	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.28	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.38	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	1.4	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	0.51	J	ug/kg	1.4	0.15	1
n-Propylbenzene	ND		ug/kg	1.4	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.44	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.37	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.7	0.45	1
Methyl Acetate	ND		ug/kg	5.4	1.3	1
Cyclohexane	ND		ug/kg	14	0.74	1
1,4-Dioxane	ND		ug/kg	110	48.	1
Freon-113	ND		ug/kg	5.4	0.94	1
Methyl cyclohexane	ND		ug/kg	5.4	0.82	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	111		70-130



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/27/22 13:45
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	05-11,13-15		Batch:	WG1609940-5	
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		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	1.4	J	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: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/27/22 13:45
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-11,13-15 Batch: WG1609940-5					
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	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		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
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
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



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/27/22 13:45
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-11,13-15				Batch: WG1609940-5	

Surrogate	%Recovery	Acceptance Criteria	
		Qualifier	
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	107		70-130

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 03/01/22 15:43
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	12		Batch:	WG1610741-5	
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		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	0.64	J	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: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 03/01/22 15:43
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	12		Batch:	WG1610741-5	
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	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		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
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
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



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 03/01/22 15:43
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s):	12	Batch:	WG1610741-5		

Surrogate	%Recovery	Acceptance Criteria	
		Qualifier	
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	91		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-11,13-15 Batch: WG1609940-3 WG1609940-4								
Methylene chloride	79		78		70-130	1		30
1,1-Dichloroethane	93		92		70-130	1		30
Chloroform	79		78		70-130	1		30
Carbon tetrachloride	91		91		70-130	0		30
1,2-Dichloropropane	100		99		70-130	1		30
Dibromochloromethane	87		87		70-130	0		30
1,1,2-Trichloroethane	81		79		70-130	3		30
Tetrachloroethene	87		86		70-130	1		30
Chlorobenzene	89		87		70-130	2		30
Trichlorofluoromethane	91		90		70-139	1		30
1,2-Dichloroethane	95		96		70-130	1		30
1,1,1-Trichloroethane	82		81		70-130	1		30
Bromodichloromethane	81		80		70-130	1		30
trans-1,3-Dichloropropene	87		86		70-130	1		30
cis-1,3-Dichloropropene	89		88		70-130	1		30
Bromoform	81		79		70-130	3		30
1,1,2,2-Tetrachloroethane	85		83		70-130	2		30
Benzene	82		81		70-130	1		30
Toluene	84		82		70-130	2		30
Ethylbenzene	85		83		70-130	2		30
Chloromethane	71		71		52-130	0		30
Bromomethane	90		90		57-147	0		30
Vinyl chloride	77		76		67-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-11,13-15 Batch: WG1609940-3 WG1609940-4								
Chloroethane	86		85		50-151	1		30
1,1-Dichloroethene	81		79		65-135	3		30
trans-1,2-Dichloroethene	81		81		70-130	0		30
Trichloroethene	85		84		70-130	1		30
1,2-Dichlorobenzene	91		90		70-130	1		30
1,3-Dichlorobenzene	93		91		70-130	2		30
1,4-Dichlorobenzene	91		91		70-130	0		30
Methyl tert butyl ether	81		80		66-130	1		30
p/m-Xylene	91		89		70-130	2		30
o-Xylene	90		89		70-130	1		30
cis-1,2-Dichloroethene	80		80		70-130	0		30
Styrene	87		85		70-130	2		30
Dichlorodifluoromethane	34		34		30-146	0		30
Acetone	118		117		54-140	1		30
Carbon disulfide	66		65		59-130	2		30
2-Butanone	102		95		70-130	7		30
4-Methyl-2-pentanone	111		110		70-130	1		30
2-Hexanone	102		103		70-130	1		30
Bromochloromethane	84		85		70-130	1		30
1,2-Dibromoethane	92		90		70-130	2		30
n-Butylbenzene	96		95		70-130	1		30
sec-Butylbenzene	97		96		70-130	1		30
1,2-Dibromo-3-chloropropane	84		86		68-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-11,13-15 Batch: WG1609940-3 WG1609940-4								
Isopropylbenzene	96		94		70-130	2		30
p-Isopropyltoluene	97		95		70-130	2		30
n-Propylbenzene	94		91		70-130	3		30
1,2,3-Trichlorobenzene	84		85		70-130	1		30
1,2,4-Trichlorobenzene	89		89		70-130	0		30
1,3,5-Trimethylbenzene	93		91		70-130	2		30
1,2,4-Trimethylbenzene	93		91		70-130	2		30
Methyl Acetate	96		97		51-146	1		30
Cyclohexane	116		114		59-142	2		30
1,4-Dioxane	100		101		65-136	1		30
Freon-113	97		96		50-139	1		30
Methyl cyclohexane	92		90		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103		102		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	104		103		70-130
Dibromofluoromethane	98		101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1610741-3 WG1610741-4								
Methylene chloride	113		111		70-130	2		30
1,1-Dichloroethane	101		98		70-130	3		30
Chloroform	96		95		70-130	1		30
Carbon tetrachloride	93		88		70-130	6		30
1,2-Dichloropropane	103		101		70-130	2		30
Dibromochloromethane	97		97		70-130	0		30
1,1,2-Trichloroethane	98		96		70-130	2		30
Tetrachloroethene	102		100		70-130	2		30
Chlorobenzene	103		101		70-130	2		30
Trichlorofluoromethane	98		92		70-139	6		30
1,2-Dichloroethane	94		92		70-130	2		30
1,1,1-Trichloroethane	98		93		70-130	5		30
Bromodichloromethane	94		94		70-130	0		30
trans-1,3-Dichloropropene	105		102		70-130	3		30
cis-1,3-Dichloropropene	103		103		70-130	0		30
Bromoform	81		81		70-130	0		30
1,1,2,2-Tetrachloroethane	102		102		70-130	0		30
Benzene	104		100		70-130	4		30
Toluene	100		96		70-130	4		30
Ethylbenzene	105		101		70-130	4		30
Chloromethane	118		110		52-130	7		30
Bromomethane	111		103		57-147	7		30
Vinyl chloride	116		109		67-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1610741-3 WG1610741-4								
Chloroethane	107		100		50-151	7		30
1,1-Dichloroethene	103		102		65-135	1		30
trans-1,2-Dichloroethene	110		104		70-130	6		30
Trichloroethene	99		97		70-130	2		30
1,2-Dichlorobenzene	105		103		70-130	2		30
1,3-Dichlorobenzene	106		103		70-130	3		30
1,4-Dichlorobenzene	106		103		70-130	3		30
Methyl tert butyl ether	126		114		66-130	10		30
p/m-Xylene	106		101		70-130	5		30
o-Xylene	105		102		70-130	3		30
cis-1,2-Dichloroethene	104		97		70-130	7		30
Styrene	108		104		70-130	4		30
Dichlorodifluoromethane	104		99		30-146	5		30
Acetone	70		70		54-140	0		30
Carbon disulfide	104		99		59-130	5		30
2-Butanone	114		113		70-130	1		30
4-Methyl-2-pentanone	111		109		70-130	2		30
2-Hexanone	98		101		70-130	3		30
Bromochloromethane	97		94		70-130	3		30
1,2-Dibromoethane	100		98		70-130	2		30
n-Butylbenzene	115		110		70-130	4		30
sec-Butylbenzene	108		105		70-130	3		30
1,2-Dibromo-3-chloropropane	99		91		68-130	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 12 Batch: WG1610741-3 WG1610741-4								
Isopropylbenzene	105		103		70-130	2		30
p-Isopropyltoluene	110		107		70-130	3		30
n-Propylbenzene	109		104		70-130	5		30
1,2,3-Trichlorobenzene	104		103		70-130	1		30
1,2,4-Trichlorobenzene	109		107		70-130	2		30
1,3,5-Trimethylbenzene	106		102		70-130	4		30
1,2,4-Trimethylbenzene	108		106		70-130	2		30
Methyl Acetate	120		119		51-146	1		30
Cyclohexane	96		93		59-142	3		30
1,4-Dioxane	99		106		65-136	7		30
Freon-113	101		97		50-139	4		30
Methyl cyclohexane	102		99		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		93		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	91		94		70-130
Dibromofluoromethane	92		93		70-130

SEMIVOLATILES



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-01
 Client ID: COMP 1
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:50
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/28/22 05:17
 Analyst: JRW
 Percent Solids: 78%

Extraction Method: EPA 3546
 Extraction Date: 02/27/22 08:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	170	22.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	210	21.	1
3,3'-Dichlorobenzidine	ND		ug/kg	210	57.	1
2,4-Dinitrotoluene	ND		ug/kg	210	42.	1
2,6-Dinitrotoluene	ND		ug/kg	210	36.	1
Fluoranthene	110	J	ug/kg	130	24.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	210	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	210	32.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	36.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	21.	1
Hexachlorobutadiene	ND		ug/kg	210	31.	1
Hexachlorocyclopentadiene	ND		ug/kg	610	190	1
Hexachloroethane	ND		ug/kg	170	34.	1
Isophorone	ND		ug/kg	190	28.	1
Naphthalene	ND		ug/kg	210	26.	1
Nitrobenzene	ND		ug/kg	190	32.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	210	33.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	210	74.	1
Butyl benzyl phthalate	ND		ug/kg	210	54.	1
Di-n-butylphthalate	ND		ug/kg	210	40.	1
Di-n-octylphthalate	ND		ug/kg	210	72.	1
Diethyl phthalate	ND		ug/kg	210	20.	1
Dimethyl phthalate	ND		ug/kg	210	45.	1
Benzo(a)anthracene	49	J	ug/kg	130	24.	1
Benzo(a)pyrene	55	J	ug/kg	170	52.	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-01	Date Collected:	02/16/22 08:50
Client ID:	COMP 1	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	75	J	ug/kg	130	36.	1
Benzo(k)fluoranthene	ND		ug/kg	130	34.	1
Chrysene	52	J	ug/kg	130	22.	1
Acenaphthylene	ND		ug/kg	170	33.	1
Anthracene	ND		ug/kg	130	42.	1
Benzo(ghi)perylene	33	J	ug/kg	170	25.	1
Fluorene	ND		ug/kg	210	21.	1
Phenanthrene	61	J	ug/kg	130	26.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	40	J	ug/kg	170	30.	1
Pyrene	83	J	ug/kg	130	21.	1
Biphenyl	ND		ug/kg	480	28.	1
4-Chloroaniline	ND		ug/kg	210	39.	1
2-Nitroaniline	ND		ug/kg	210	41.	1
3-Nitroaniline	ND		ug/kg	210	40.	1
4-Nitroaniline	ND		ug/kg	210	88.	1
Dibenzofuran	ND		ug/kg	210	20.	1
2-Methylnaphthalene	ND		ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	210	22.	1
Acetophenone	ND		ug/kg	210	26.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	40.	1
p-Chloro-m-cresol	ND		ug/kg	210	32.	1
2-Chlorophenol	ND		ug/kg	210	25.	1
2,4-Dichlorophenol	ND		ug/kg	190	34.	1
2,4-Dimethylphenol	ND		ug/kg	210	70.	1
2-Nitrophenol	ND		ug/kg	460	80.	1
4-Nitrophenol	ND		ug/kg	300	87.	1
2,4-Dinitrophenol	ND		ug/kg	1000	99.	1
4,6-Dinitro-o-cresol	ND		ug/kg	550	100	1
Pentachlorophenol	ND		ug/kg	170	47.	1
Phenol	ND		ug/kg	210	32.	1
2-Methylphenol	ND		ug/kg	210	33.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	310	33.	1
2,4,5-Trichlorophenol	ND		ug/kg	210	41.	1
Carbazole	ND		ug/kg	210	21.	1
Atrazine	ND		ug/kg	170	74.	1
Benzaldehyde	ND		ug/kg	280	57.	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-01
 Client ID: COMP 1
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:50
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	210	65.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	210	43.	1
1,4-Dioxane	ND		ug/kg	32	9.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	62		30-120
2,4,6-Tribromophenol	86		10-136
4-Terphenyl-d14	57		18-120

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-01
 Client ID: COMP 1
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:50
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 02/23/22 02:07
 Analyst: RS
 Percent Solids: 78%

Extraction Method: ALPHA 23528
 Extraction Date: 02/18/22 08:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.067	J	ng/g	0.576	0.026	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.576	0.053	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.288	0.045	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.576	0.061	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.288	0.052	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.288	0.070	1
Perfluoroctanoic Acid (PFOA)	0.169	J	ng/g	0.288	0.048	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.576	0.207	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.576	0.157	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.288	0.086	1
Perfluorooctanesulfonic Acid (PFOS)	0.480		ng/g	0.288	0.150	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.288	0.077	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.576	0.330	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.576	0.232	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.576	0.054	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.576	0.176	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.576	0.097	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.576	0.081	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.576	0.236	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.576	0.062	1
PFOA/PFOS, Total	0.649	J	ng/g	0.288	0.048	1

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-01
 Client ID: COMP 1
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:50
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			98		61-135	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			101		58-150	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			95		74-139	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			86		66-128	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			98		71-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			93		78-139	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			89		75-130	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			58		20-154	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)		71		Q	72-140	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			93		79-136	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			95		75-130	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			56		19-175	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			44		31-134	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			104		61-155	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			36		34-137	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			109		54-150	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			40		24-159	

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-01
 Client ID: COMP 1
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:50
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 02/23/22 14:32
 Analyst: RS
 Percent Solids: 78%

Extraction Method: ALPHA 23528
 Extraction Date: 02/18/22 08:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.576	0.113	1
Surrogate (Extracted Internal Standard)						
Perfluoro[13C8]Octanesulfonamide (M8FOSA)		% Recovery	Qualifer		Acceptance Criteria	
		95			10-117	

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-02
 Client ID: COMP 2
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:00
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/28/22 04:53
 Analyst: JRW
 Percent Solids: 74%

Extraction Method: EPA 3546
 Extraction Date: 02/27/22 07:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	170	22.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	29.	1
2-Chloronaphthalene	ND		ug/kg	220	22.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	58.	1
2,4-Dinitrotoluene	ND		ug/kg	220	43.	1
2,6-Dinitrotoluene	ND		ug/kg	220	37.	1
Fluoranthene	78	J	ug/kg	130	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	33.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	37.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	22.	1
Hexachlorobutadiene	ND		ug/kg	220	32.	1
Hexachlorocyclopentadiene	ND		ug/kg	620	200	1
Hexachloroethane	ND		ug/kg	170	35.	1
Isophorone	ND		ug/kg	200	28.	1
Naphthalene	ND		ug/kg	220	26.	1
Nitrobenzene	ND		ug/kg	200	32.	1
NDPA/DPA	ND		ug/kg	170	25.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	34.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	75.	1
Butyl benzyl phthalate	ND		ug/kg	220	55.	1
Di-n-butylphthalate	ND		ug/kg	220	41.	1
Di-n-octylphthalate	ND		ug/kg	220	74.	1
Diethyl phthalate	ND		ug/kg	220	20.	1
Dimethyl phthalate	ND		ug/kg	220	46.	1
Benzo(a)anthracene	36	J	ug/kg	130	24.	1
Benzo(a)pyrene	ND		ug/kg	170	53.	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-02	Date Collected:	02/16/22 09:00
Client ID:	COMP 2	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	51	J	ug/kg	130	37.	1
Benzo(k)fluoranthene	ND		ug/kg	130	35.	1
Chrysene	39	J	ug/kg	130	23.	1
Acenaphthylene	ND		ug/kg	170	34.	1
Anthracene	ND		ug/kg	130	42.	1
Benzo(ghi)perylene	ND		ug/kg	170	26.	1
Fluorene	ND		ug/kg	220	21.	1
Phenanthrene	42	J	ug/kg	130	26.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	170	30.	1
Pyrene	58	J	ug/kg	130	22.	1
Biphenyl	ND		ug/kg	500	28.	1
4-Chloroaniline	ND		ug/kg	220	40.	1
2-Nitroaniline	ND		ug/kg	220	42.	1
3-Nitroaniline	ND		ug/kg	220	41.	1
4-Nitroaniline	ND		ug/kg	220	90.	1
Dibenzofuran	ND		ug/kg	220	20.	1
2-Methylnaphthalene	ND		ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
Acetophenone	ND		ug/kg	220	27.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	41.	1
p-Chloro-m-cresol	ND		ug/kg	220	32.	1
2-Chlorophenol	ND		ug/kg	220	26.	1
2,4-Dichlorophenol	ND		ug/kg	200	35.	1
2,4-Dimethylphenol	ND		ug/kg	220	72.	1
2-Nitrophenol	ND		ug/kg	470	82.	1
4-Nitrophenol	ND		ug/kg	300	89.	1
2,4-Dinitrophenol	ND		ug/kg	1000	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	560	100	1
Pentachlorophenol	ND		ug/kg	170	48.	1
Phenol	ND		ug/kg	220	33.	1
2-Methylphenol	ND		ug/kg	220	34.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	310	34.	1
2,4,5-Trichlorophenol	ND		ug/kg	220	42.	1
Carbazole	ND		ug/kg	220	21.	1
Atrazine	ND		ug/kg	170	76.	1
Benzaldehyde	ND		ug/kg	290	59.	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-02	Date Collected:	02/16/22 09:00
Client ID:	COMP 2	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	220	66.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	220	44.	1
1,4-Dioxane	ND		ug/kg	33	10.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	62		18-120

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-02
 Client ID: COMP 2
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:00
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 02/23/22 02:24
 Analyst: RS
 Percent Solids: 74%

Extraction Method: ALPHA 23528
 Extraction Date: 02/18/22 08:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.064	J	ng/g	0.605	0.028	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.605	0.056	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.303	0.047	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.605	0.064	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.303	0.055	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.303	0.073	1
Perfluoroctanoic Acid (PFOA)	0.161	J	ng/g	0.303	0.051	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.605	0.217	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.605	0.165	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.303	0.091	1
Perfluorooctanesulfonic Acid (PFOS)	0.492		ng/g	0.303	0.157	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.303	0.081	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.605	0.348	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.605	0.244	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.605	0.057	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.605	0.185	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.605	0.119	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.605	0.102	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.605	0.085	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.605	0.248	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.605	0.065	1
PFOA/PFOS, Total	0.653	J	ng/g	0.303	0.051	1

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-02
 Client ID: COMP 2
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:00
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			98		61-135	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			100		58-150	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			92		74-139	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			91		66-128	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			103		71-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			95		78-139	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			92		75-130	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			59		20-154	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			74		72-140	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			92		79-136	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			94		75-130	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			64		19-175	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			59		31-134	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			101		61-155	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			38		10-117	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			55		34-137	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			115		54-150	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			65		24-159	

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-03
 Client ID: COMP 3
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:10
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/28/22 05:41
 Analyst: JRW
 Percent Solids: 74%

Extraction Method: EPA 3546
 Extraction Date: 02/27/22 07:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND	ug/kg	180	23.	1	
Hexachlorobenzene	ND	ug/kg	130	25.	1	
Bis(2-chloroethyl)ether	ND	ug/kg	200	30.	1	
2-Chloronaphthalene	ND	ug/kg	220	22.	1	
3,3'-Dichlorobenzidine	ND	ug/kg	220	59.	1	
2,4-Dinitrotoluene	ND	ug/kg	220	44.	1	
2,6-Dinitrotoluene	ND	ug/kg	220	38.	1	
Fluoranthene	630	ug/kg	130	26.	1	
4-Chlorophenyl phenyl ether	ND	ug/kg	220	24.	1	
4-Bromophenyl phenyl ether	ND	ug/kg	220	34.	1	
Bis(2-chloroisopropyl)ether	ND	ug/kg	270	38.	1	
Bis(2-chloroethoxy)methane	ND	ug/kg	240	22.	1	
Hexachlorobutadiene	ND	ug/kg	220	33.	1	
Hexachlorocyclopentadiene	ND	ug/kg	640	200	1	
Hexachloroethane	ND	ug/kg	180	36.	1	
Isophorone	ND	ug/kg	200	29.	1	
Naphthalene	ND	ug/kg	220	27.	1	
Nitrobenzene	ND	ug/kg	200	33.	1	
NDPA/DPA	ND	ug/kg	180	25.	1	
n-Nitrosodi-n-propylamine	ND	ug/kg	220	34.	1	
Bis(2-ethylhexyl)phthalate	ND	ug/kg	220	77.	1	
Butyl benzyl phthalate	ND	ug/kg	220	56.	1	
Di-n-butylphthalate	ND	ug/kg	220	42.	1	
Di-n-octylphthalate	ND	ug/kg	220	76.	1	
Diethyl phthalate	ND	ug/kg	220	21.	1	
Dimethyl phthalate	ND	ug/kg	220	47.	1	
Benzo(a)anthracene	280	ug/kg	130	25.	1	
Benzo(a)pyrene	300	ug/kg	180	54.	1	



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-03	Date Collected:	02/16/22 09:10
Client ID:	COMP 3	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	370		ug/kg	130	38.	1
Benzo(k)fluoranthene	130		ug/kg	130	36.	1
Chrysene	260		ug/kg	130	23.	1
Acenaphthylene	ND		ug/kg	180	34.	1
Anthracene	57	J	ug/kg	130	43.	1
Benzo(ghi)perylene	150	J	ug/kg	180	26.	1
Fluorene	ND		ug/kg	220	22.	1
Phenanthrene	220		ug/kg	130	27.	1
Dibenzo(a,h)anthracene	40	J	ug/kg	130	26.	1
Indeno(1,2,3-cd)pyrene	190		ug/kg	180	31.	1
Pyrene	490		ug/kg	130	22.	1
Biphenyl	ND		ug/kg	510	29.	1
4-Chloroaniline	ND		ug/kg	220	40.	1
2-Nitroaniline	ND		ug/kg	220	43.	1
3-Nitroaniline	ND		ug/kg	220	42.	1
4-Nitroaniline	ND		ug/kg	220	92.	1
Dibenzofuran	ND		ug/kg	220	21.	1
2-Methylnaphthalene	ND		ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
Acetophenone	ND		ug/kg	220	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	42.	1
p-Chloro-m-cresol	ND		ug/kg	220	33.	1
2-Chlorophenol	ND		ug/kg	220	26.	1
2,4-Dichlorophenol	ND		ug/kg	200	36.	1
2,4-Dimethylphenol	ND		ug/kg	220	74.	1
2-Nitrophenol	ND		ug/kg	480	84.	1
4-Nitrophenol	ND		ug/kg	310	91.	1
2,4-Dinitrophenol	ND		ug/kg	1100	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	580	110	1
Pentachlorophenol	ND		ug/kg	180	49.	1
Phenol	ND		ug/kg	220	34.	1
2-Methylphenol	ND		ug/kg	220	34.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	320	35.	1
2,4,5-Trichlorophenol	ND		ug/kg	220	43.	1
Carbazole	33	J	ug/kg	220	22.	1
Atrazine	ND		ug/kg	180	78.	1
Benzaldehyde	ND		ug/kg	290	60.	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-03	Date Collected:	02/16/22 09:10
Client ID:	COMP 3	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	220	68.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	220	45.	1
1,4-Dioxane	ND		ug/kg	33	10.	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
2-Fluorophenol		74		25-120		
Phenol-d6		73		10-120		
Nitrobenzene-d5		96		23-120		
2-Fluorobiphenyl		70		30-120		
2,4,6-Tribromophenol		88		10-136		
4-Terphenyl-d14		69		18-120		

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-03
 Client ID: COMP 3
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:10
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 02/23/22 02:40
 Analyst: RS
 Percent Solids: 74%

Extraction Method: ALPHA 23528
 Extraction Date: 02/18/22 08:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.127	J	ng/g	0.637	0.029	1
Perfluoropentanoic Acid (PFPeA)	0.061	J	ng/g	0.637	0.059	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.319	0.050	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.637	0.067	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.319	0.058	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.319	0.077	1
Perfluoroctanoic Acid (PFOA)	0.203	J	ng/g	0.319	0.053	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.637	0.229	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.637	0.174	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.319	0.096	1
Perfluorooctanesulfonic Acid (PFOS)	0.491		ng/g	0.319	0.166	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.319	0.085	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.637	0.366	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.637	0.257	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.637	0.060	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.637	0.195	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.637	0.125	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.637	0.108	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.637	0.089	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.637	0.261	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.637	0.069	1
PFOA/PFOS, Total	0.694	J	ng/g	0.319	0.053	1

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-03
 Client ID: COMP 3
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:10
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			93		61-135	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			97		58-150	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			89		74-139	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			83		66-128	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			97		71-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			89		78-139	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			88		75-130	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			58		20-154	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)		71		Q	72-140	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			85		79-136	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			89		75-130	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			59		19-175	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			46		31-134	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			100		61-155	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			33		10-117	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			42		34-137	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			104		54-150	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			33		24-159	

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-04
 Client ID: COMP 4
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:20
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 02/28/22 06:04
 Analyst: JRW
 Percent Solids: 72%

Extraction Method: EPA 3546
 Extraction Date: 02/27/22 09:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	32	J	ug/kg	180	24.	1
Hexachlorobenzene	ND		ug/kg	140	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	31.	1
2-Chloronaphthalene	ND		ug/kg	230	22.	1
3,3'-Dichlorobenzidine	ND		ug/kg	230	60.	1
2,4-Dinitrotoluene	ND		ug/kg	230	46.	1
2,6-Dinitrotoluene	ND		ug/kg	230	39.	1
Fluoranthene	1200		ug/kg	140	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	230	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	230	35.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	39.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	23.	1
Hexachlorobutadiene	ND		ug/kg	230	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	650	210	1
Hexachloroethane	ND		ug/kg	180	37.	1
Isophorone	ND		ug/kg	200	30.	1
Naphthalene	ND		ug/kg	230	28.	1
Nitrobenzene	ND		ug/kg	200	34.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	230	35.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	230	79.	1
Butyl benzyl phthalate	ND		ug/kg	230	57.	1
Di-n-butylphthalate	ND		ug/kg	230	43.	1
Di-n-octylphthalate	ND		ug/kg	230	77.	1
Diethyl phthalate	ND		ug/kg	230	21.	1
Dimethyl phthalate	ND		ug/kg	230	48.	1
Benzo(a)anthracene	460		ug/kg	140	26.	1
Benzo(a)pyrene	470		ug/kg	180	56.	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-04	Date Collected:	02/16/22 09:20
Client ID:	COMP 4	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	600		ug/kg	140	38.	1
Benzo(k)fluoranthene	220		ug/kg	140	36.	1
Chrysene	460		ug/kg	140	24.	1
Acenaphthylene	61	J	ug/kg	180	35.	1
Anthracene	130	J	ug/kg	140	44.	1
Benzo(ghi)perylene	220		ug/kg	180	27.	1
Fluorene	120	J	ug/kg	230	22.	1
Phenanthrene	880		ug/kg	140	28.	1
Dibenzo(a,h)anthracene	65	J	ug/kg	140	26.	1
Indeno(1,2,3-cd)pyrene	300		ug/kg	180	32.	1
Pyrene	810		ug/kg	140	23.	1
Biphenyl	ND		ug/kg	520	30.	1
4-Chloroaniline	ND		ug/kg	230	41.	1
2-Nitroaniline	ND		ug/kg	230	44.	1
3-Nitroaniline	ND		ug/kg	230	43.	1
4-Nitroaniline	ND		ug/kg	230	94.	1
Dibenzofuran	44	J	ug/kg	230	22.	1
2-Methylnaphthalene	ND		ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	230	24.	1
Acetophenone	ND		ug/kg	230	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	43.	1
p-Chloro-m-cresol	ND		ug/kg	230	34.	1
2-Chlorophenol	ND		ug/kg	230	27.	1
2,4-Dichlorophenol	ND		ug/kg	200	37.	1
2,4-Dimethylphenol	ND		ug/kg	230	75.	1
2-Nitrophenol	ND		ug/kg	490	86.	1
4-Nitrophenol	ND		ug/kg	320	93.	1
2,4-Dinitrophenol	ND		ug/kg	1100	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	590	110	1
Pentachlorophenol	ND		ug/kg	180	50.	1
Phenol	ND		ug/kg	230	34.	1
2-Methylphenol	ND		ug/kg	230	35.	1
3-Methylphenol/4-Methylphenol	48	J	ug/kg	330	36.	1
2,4,5-Trichlorophenol	ND		ug/kg	230	44.	1
Carbazole	100	J	ug/kg	230	22.	1
Atrazine	ND		ug/kg	180	80.	1
Benzaldehyde	ND		ug/kg	300	61.	1



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-04	Date Collected:	02/16/22 09:20
Client ID:	COMP 4	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	230	69.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	230	46.	1
1,4-Dioxane	ND		ug/kg	34	10.	1
Surrogate		% Recovery	Qualifier	Acceptance Criteria		
2-Fluorophenol		72		25-120		
Phenol-d6		73		10-120		
Nitrobenzene-d5		91		23-120		
2-Fluorobiphenyl		66		30-120		
2,4,6-Tribromophenol		87		10-136		
4-Terphenyl-d14		61		18-120		

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-04
 Client ID: COMP 4
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:20
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 134,LCMSMS-ID
 Analytical Date: 02/23/22 02:57
 Analyst: RS
 Percent Solids: 72%

Extraction Method: ALPHA 23528
 Extraction Date: 02/18/22 08:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.085	J	ng/g	0.626	0.028	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.626	0.058	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.313	0.049	1
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.626	0.066	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.313	0.057	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/g	0.313	0.076	1
Perfluoroctanoic Acid (PFOA)	0.203	J	ng/g	0.313	0.053	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.626	0.225	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.626	0.171	1
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.313	0.094	1
Perfluorooctanesulfonic Acid (PFOS)	0.998		ng/g	0.313	0.163	1
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.313	0.084	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.626	0.359	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.626	0.252	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.626	0.059	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.626	0.192	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.626	0.123	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.626	0.106	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.626	0.088	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.626	0.256	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.626	0.068	1
PFOA/PFOS, Total	1.20	J	ng/g	0.313	0.053	1

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-04
 Client ID: COMP 4
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:20
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Surrogate (Extracted Internal Standard)			% Recovery	Qualifier	Acceptance Criteria	
Perfluoro[13C4]Butanoic Acid (MPFBA)			90		61-135	
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			92		58-150	
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			90		74-139	
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			80		66-128	
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)			91		71-129	
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			94		78-139	
Perfluoro[13C8]Octanoic Acid (M8PFOA)			81		75-130	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			57		20-154	
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	64	Q			72-140	
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			87		79-136	
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			86		75-130	
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			57		19-175	
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			44		31-134	
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)			91		61-155	
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			24		10-117	
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	33	Q			34-137	
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDCA)			93		54-150	
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	20	Q			24-159	

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 02/22/22 20:20
Analyst: RS

Extraction Method: ALPHA 23528
Extraction Date: 02/18/22 08:38

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s):	01-04			Batch:	WG1606408-1
Perfluorobutanoic Acid (PFBA)	ND		ng/g	0.500	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ng/g	0.500	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/g	0.250	0.039
Perfluorohexanoic Acid (PFHxA)	ND		ng/g	0.500	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ng/g	0.250	0.045
Perfluorohexamersulfonic Acid (PFHxS)	ND		ng/g	0.250	0.061
Perfluorooctanoic Acid (PFOA)	ND		ng/g	0.250	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/g	0.500	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/g	0.500	0.136
Perfluorononanoic Acid (PFNA)	ND		ng/g	0.250	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/g	0.250	0.130
Perfluorodecanoic Acid (PFDA)	ND		ng/g	0.250	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/g	0.500	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/g	0.500	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ng/g	0.500	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/g	0.500	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.500	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/g	0.500	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ng/g	0.500	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/g	0.500	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ng/g	0.500	0.054
PFOA/PFOS, Total	ND		ng/g	0.250	0.042

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 02/22/22 20:20
Analyst: RS

Extraction Method: ALPHA 23528
Extraction Date: 02/18/22 08:38

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-04				Batch: WG1606408-1	

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	98		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	102		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	99		74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	106		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	94		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	59		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	78		72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	102		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	98		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	62		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	82		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	111		61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	14		10-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	87		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	129		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	133		24-159

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 134,LCMSMS-ID
Analytical Date: 02/23/22 13:20
Analyst: RS

Extraction Method: ALPHA 23528
Extraction Date: 02/18/22 08:38

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 01-04				Batch:	WG1606408-1
Perfluorooctanesulfonamide (FOSA)	ND		ng/g	0.500	0.098

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance
			Criteria
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	138	Q	10-117

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/27/22 23:48
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 02/27/22 07:14

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04				Batch:	WG1609453-1
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/27/22 23:48
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 02/27/22 07:14

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-04		Batch:	WG1609453-1	
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	21.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 02/27/22 23:48
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 02/27/22 07:14

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04				Batch: WG1609453-1	
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
1,4-Dioxane	ND		ug/kg	24	7.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	77		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-04 Batch: WG1606408-2								
Perfluorobutanoic Acid (PFBA)	101		-		71-135	-		30
Perfluoropentanoic Acid (PFPeA)	109		-		69-132	-		30
Perfluorobutanesulfonic Acid (PFBS)	90		-		72-128	-		30
Perfluorohexanoic Acid (PFHxA)	94		-		70-132	-		30
Perfluoroheptanoic Acid (PFHpA)	91		-		71-131	-		30
Perfluorohexanesulfonic Acid (PFHxS)	103		-		67-130	-		30
Perfluorooctanoic Acid (PFOA)	97		-		69-133	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	100		-		64-140	-		30
Perfluoroheptanesulfonic Acid (PFHpS)	83		-		70-132	-		30
Perfluorononanoic Acid (PFNA)	129		-		72-129	-		30
Perfluorooctanesulfonic Acid (PFOS)	100		-		68-136	-		30
Perfluorodecanoic Acid (PFDA)	98		-		69-133	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	97		-		65-137	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	103		-		63-144	-		30
Perfluoroundecanoic Acid (PFUnA)	91		-		64-136	-		30
Perfluorodecanesulfonic Acid (PFDS)	90		-		59-134	-		30
Perfluorooctanesulfonamide (FOSA)	96		-		67-137	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	94		-		61-139	-		30
Perfluorododecanoic Acid (PFDoA)	90		-		69-135	-		30
Perfluorotridecanoic Acid (PFTrDA)	92		-		66-139	-		30
Perfluorotetradecanoic Acid (PFTA)	80		-		69-133	-		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	<i>LCS</i> %Recovery	Qual	<i>LCSD</i> %Recovery	Qual	%Recovery Limits	RPD	Qual	<i>RPD</i> Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-04 Batch: WG1606408-2								
<i>Surrogate (Extracted Internal Standard)</i>			<i>LCS</i> %Recovery	Qual	<i>LCSD</i> %Recovery	Qual		<i>Acceptance Criteria</i>
Perfluoro[13C4]Butanoic Acid (MPFBA)			98					61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)			101					58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)			98					74-139
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)			95					66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)			107					71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)			100					78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)			98					75-130
1H,1H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)			63					20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)			80					72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)			100					79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)			100					75-130
1H,1H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)			62					19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)			80					31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFDA)			110					61-155
Perfluoro[13C8]Octanesulfonamide (M8FOSA)			13					10-117
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)			91					34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)			131					54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)			130					24-159

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-04 Batch: WG1606408-2								
Perfluorooctanesulfonamide (FOSA)	107	-	-	-	67-137	-	-	30

Surrogate (Extracted Internal Standard)	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	Acceptance Criteria
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	151	Q	-	-	10-117

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1609453-2 WG1609453-3								
Acenaphthene	82		77		31-137	6		50
Hexachlorobenzene	83		81		40-140	2		50
Bis(2-chloroethyl)ether	72		67		40-140	7		50
2-Choronaphthalene	77		72		40-140	7		50
3,3'-Dichlorobenzidine	55		54		40-140	2		50
2,4-Dinitrotoluene	101		98		40-132	3		50
2,6-Dinitrotoluene	93		88		40-140	6		50
Fluoranthene	85		81		40-140	5		50
4-Chlorophenyl phenyl ether	79		76		40-140	4		50
4-Bromophenyl phenyl ether	84		82		40-140	2		50
Bis(2-chloroisopropyl)ether	57		52		40-140	9		50
Bis(2-chloroethoxy)methane	80		74		40-117	8		50
Hexachlorobutadiene	70		63		40-140	11		50
Hexachlorocyclopentadiene	84		78		40-140	7		50
Hexachloroethane	76		70		40-140	8		50
Isophorone	79		73		40-140	8		50
Naphthalene	76		70		40-140	8		50
Nitrobenzene	88		81		40-140	8		50
NDPA/DPA	86		83		36-157	4		50
n-Nitrosodi-n-propylamine	76		71		32-121	7		50
Bis(2-ethylhexyl)phthalate	100		95		40-140	5		50
Butyl benzyl phthalate	100		94		40-140	6		50
Di-n-butylphthalate	95		90		40-140	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1609453-2 WG1609453-3								
Di-n-octylphthalate	101		96		40-140	5		50
Diethyl phthalate	88		85		40-140	3		50
Dimethyl phthalate	81		76		40-140	6		50
Benzo(a)anthracene	78		76		40-140	3		50
Benzo(a)pyrene	86		84		40-140	2		50
Benzo(b)fluoranthene	86		84		40-140	2		50
Benzo(k)fluoranthene	81		79		40-140	3		50
Chrysene	78		75		40-140	4		50
Acenaphthylene	83		77		40-140	8		50
Anthracene	84		80		40-140	5		50
Benzo(ghi)perylene	80		78		40-140	3		50
Fluorene	86		82		40-140	5		50
Phenanthrene	81		78		40-140	4		50
Dibenzo(a,h)anthracene	76		75		40-140	1		50
Indeno(1,2,3-cd)pyrene	88		86		40-140	2		50
Pyrene	84		80		35-142	5		50
Biphenyl	80		75		37-127	6		50
4-Chloroaniline	75		68		40-140	10		50
2-Nitroaniline	115		108		47-134	6		50
3-Nitroaniline	84		84		26-129	0		50
4-Nitroaniline	105		101		41-125	4		50
Dibenzofuran	80		76		40-140	5		50
2-Methylnaphthalene	82		74		40-140	10		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1609453-2 WG1609453-3								
1,2,4,5-Tetrachlorobenzene	78		73		40-117	7		50
Acetophenone	78		73		14-144	7		50
2,4,6-Trichlorophenol	89		83		30-130	7		50
p-Chloro-m-cresol	93		86		26-103	8		50
2-Chlorophenol	86		79		25-102	8		50
2,4-Dichlorophenol	89		84		30-130	6		50
2,4-Dimethylphenol	88		82		30-130	7		50
2-Nitrophenol	122		112		30-130	9		50
4-Nitrophenol	121	Q	116	Q	11-114	4		50
2,4-Dinitrophenol	47		48		4-130	2		50
4,6-Dinitro-o-cresol	111		110		10-130	1		50
Pentachlorophenol	94		90		17-109	4		50
Phenol	75		69		26-90	8		50
2-Methylphenol	84		77		30-130.	9		50
3-Methylphenol/4-Methylphenol	92		86		30-130	7		50
2,4,5-Trichlorophenol	91		86		30-130	6		50
Carbazole	88		84		54-128	5		50
Atrazine	84		80		40-140	5		50
Benzaldehyde	72		66		40-140	9		50
Caprolactam	81		76		15-130	6		50
2,3,4,6-Tetrachlorophenol	95		94		40-140	1		50
1,4-Dioxane	46		43		40-140	7		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1609453-2 WG1609453-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	78		72		25-120
Phenol-d6	80		74		10-120
Nitrobenzene-d5	94		86		23-120
2-Fluorobiphenyl	73		68		30-120
2,4,6-Tribromophenol	96		93		10-136
4-Terphenyl-d14	79		76		18-120

Matrix Spike Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Recovery Qual	Limits	RPD	RPD Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1606408-3 QC Sample: L2207938-03 Client ID: MS Sample												
Perfluorobutanoic Acid (PFBA)	0.024J	5.3	5.36	101		-	-		71-135	-		30
Perfluoropentanoic Acid (PFPeA)	0.088J	5.3	5.83	108		-	-		69-132	-		30
Perfluorobutanesulfonic Acid (PFBS)	ND	4.7	4.24	90		-	-		72-128	-		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	4.96	4.88	98		-	-		62-145	-		30
Perfluorohexanoic Acid (PFHxA)	0.092J	5.3	5.11	95		-	-		70-132	-		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	4.98	4.52	91		-	-		73-123	-		30
Perfluoroheptanoic Acid (PFHpA)	0.060J	5.3	4.79	89		-	-		71-131	-		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	4.84	5.05	104		-	-		67-130	-		30
Perfluorooctanoic Acid (PFOA)	0.216J	5.3	5.29	96		-	-		69-133	-		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	5.04	4.87	97		-	-		64-140	-		30
Perfluoroheptanesulfonic Acid (PFHps)	ND	5.04	4.40	87		-	-		70-132	-		30
Perfluorononanoic Acid (PFNA)	0.114J	5.3	6.96	129		-	-		72-129	-		30
Perfluorooctanesulfonic Acid (PFOS)	0.802	4.92	5.90	104		-	-		68-136	-		30
Perfluorodecanoic Acid (PFDA)	0.105J	5.3	5.08	94		-	-		69-133	-		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	5.09	4.08	80		-	-		65-137	-		30
Perfluorononanesulfonic Acid (PFNS)	ND	5.1	4.51	89		-	-		69-125	-		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	5.3	5.10	96		-	-		63-144	-		30
Perfluoroundecanoic Acid (PFUnA)	ND	5.3	4.72	89		-	-		64-136	-		30
Perfluorodecanesulfonic Acid (PFDS)	ND	5.11	4.49	88		-	-		59-134	-		30
Perfluorooctanesulfonamide (FOSA)	ND	5.3	4.83	91		-	-		67-137	-		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	5.3	5.90	111		-	-		61-139	-		30
Perfluorododecanoic Acid (PFDoA)	ND	5.3	4.86	92		-	-		69-135	-		30

Matrix Spike Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab				Associated sample(s): 01-04		QC Batch ID: WG1606408-3		QC Sample: L2207938-03		Client ID: MS		
Perfluorotridecanoic Acid (PFTrDA)	ND	5.3	4.63	87		-	-	-	66-139	-	-	30
Perfluorotetradecanoic Acid (PFTA)	ND	5.3	4.32	82		-	-	-	69-133	-	-	30

Surrogate (Extracted Internal Standard)	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	64				19-175
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	57				14-167
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	59				20-154
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	48				34-137
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	48				31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	96				61-155
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85				75-130
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	78				66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	90				71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	89				78-139
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	106				54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	77				24-159
Perfluoro[13C4]Butanoic Acid (MPFBA)	86				61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	87				58-150
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	87				10-117
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	87				79-136
Perfluoro[13C8]Octanoic Acid (M8PFOA)	82				75-130
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	66	Q			72-140
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	86				74-139

Lab Duplicate Analysis
Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1606408-4 QC Sample: L2207938-04 Client ID: DUP Sample						
Perfluorobutanoic Acid (PFBA)	0.038J	0.029J	ng/g	NC		30
Perfluoropentanoic Acid (PFPeA)	0.243J	0.246J	ng/g	NC		30
Perfluorobutanesulfonic Acid (PFBS)	ND	ND	ng/g	NC		30
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND	ND	ng/g	NC		30
Perfluorohexanoic Acid (PFHxA)	0.209J	0.184J	ng/g	NC		30
Perfluoropentanesulfonic Acid (PFPeS)	ND	ND	ng/g	NC		30
Perfluoroheptanoic Acid (PFHpA)	0.129J	0.119J	ng/g	NC		30
Perfluorohexanesulfonic Acid (PFHxS)	ND	ND	ng/g	NC		30
Perfluorooctanoic Acid (PFOA)	0.520	0.473	ng/g	9		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND	ND	ng/g	NC		30
Perfluoroheptanesulfonic Acid (PFHpS)	ND	ND	ng/g	NC		30
Perfluorononanoic Acid (PFNA)	0.184J	0.163J	ng/g	NC		30
Perfluorooctanesulfonic Acid (PFOS)	0.458	0.383	ng/g	18		30
Perfluorodecanoic Acid (PFDA)	0.416	0.334	ng/g	22		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND	ND	ng/g	NC		30
Perfluoronananesulfonic Acid (PFNS)	ND	ND	ng/g	NC		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ng/g	NC		30
Perfluoroundecanoic Acid (PFUnA)	ND	ND	ng/g	NC		30
Perfluorodecanesulfonic Acid (PFDS)	ND	ND	ng/g	NC		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ng/g	NC		30

Lab Duplicate Analysis
Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1606408-4 QC Sample: L2207938-04 Client ID: DUP Sample						
Perfluorododecanoic Acid (PFDoA)	ND	ND	ng/g	NC		30
Perfluorotridecanoic Acid (PFTrDA)	ND	ND	ng/g	NC		30
Perfluorotetradecanoic Acid (PFTA)	ND	ND	ng/g	NC		30

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	89		87		61-135
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	94		91		58-150
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	95		90		74-139
1H,1H,2H,2H-Perfluoro[1,2-13C2]Hexanesulfonic Acid (M2-4:2FTS)	55		53		14-167
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	84		81		66-128
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHxA)	98		93		71-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	99		93		78-139
Perfluoro[13C8]Octanoic Acid (M8PFOA)	88		85		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	61		57		20-154
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	73		70	Q	72-140
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		92		79-136
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	97		92		75-130
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	67		60		19-175
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	60		53		31-134
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFDA)	108		102		61-155
N-Deuteroethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	70		62		34-137
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	123		114		54-150
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	112		100		24-159

PCBS



Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-01
 Client ID: COMP 1
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:50
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 03/01/22 14:31
 Analyst: JM
 Percent Solids: 78%

Extraction Method: EPA 3546
 Extraction Date: 03/01/22 02:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 03/01/22
 Cleanup Method: EPA 3660B
 Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	42.4	3.76	1	A
Aroclor 1221	ND		ug/kg	42.4	4.24	1	A
Aroclor 1232	ND		ug/kg	42.4	8.98	1	A
Aroclor 1242	ND		ug/kg	42.4	5.71	1	A
Aroclor 1248	ND		ug/kg	42.4	6.35	1	A
Aroclor 1254	ND		ug/kg	42.4	4.63	1	A
Aroclor 1260	ND		ug/kg	42.4	7.83	1	A
Aroclor 1262	ND		ug/kg	42.4	5.38	1	A
Aroclor 1268	ND		ug/kg	42.4	4.39	1	A
PCBs, Total	ND		ug/kg	42.4	3.76	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-02
 Client ID: COMP 2
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:00
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 03/01/22 17:38
 Analyst: AWS
 Percent Solids: 74%

Extraction Method: EPA 3546
 Extraction Date: 03/01/22 02:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 03/01/22
 Cleanup Method: EPA 3660B
 Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	42.7	3.79	1	A
Aroclor 1221	ND		ug/kg	42.7	4.28	1	A
Aroclor 1232	ND		ug/kg	42.7	9.06	1	A
Aroclor 1242	ND		ug/kg	42.7	5.76	1	A
Aroclor 1248	ND		ug/kg	42.7	6.41	1	A
Aroclor 1254	ND		ug/kg	42.7	4.67	1	A
Aroclor 1260	ND		ug/kg	42.7	7.90	1	A
Aroclor 1262	ND		ug/kg	42.7	5.42	1	A
Aroclor 1268	ND		ug/kg	42.7	4.43	1	A
PCBs, Total	ND		ug/kg	42.7	3.79	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	83		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	100		30-150	B

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-03
 Client ID: COMP 3
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:10
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 03/01/22 17:46
 Analyst: AWS
 Percent Solids: 74%

Extraction Method: EPA 3546
 Extraction Date: 03/01/22 02:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 03/01/22
 Cleanup Method: EPA 3660B
 Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	43.6	3.87	1	A
Aroclor 1221	ND		ug/kg	43.6	4.36	1	A
Aroclor 1232	ND		ug/kg	43.6	9.23	1	A
Aroclor 1242	ND		ug/kg	43.6	5.87	1	A
Aroclor 1248	ND		ug/kg	43.6	6.53	1	A
Aroclor 1254	ND		ug/kg	43.6	4.76	1	A
Aroclor 1260	ND		ug/kg	43.6	8.05	1	A
Aroclor 1262	ND		ug/kg	43.6	5.53	1	A
Aroclor 1268	59.2		ug/kg	43.6	4.51	1	B
PCBs, Total	59.2		ug/kg	43.6	3.87	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	265	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	299	Q	30-150	B

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-04
 Client ID: COMP 4
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:20
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 03/01/22 17:55
 Analyst: AWS
 Percent Solids: 72%

Extraction Method: EPA 3546
 Extraction Date: 03/01/22 02:16
 Cleanup Method: EPA 3665A
 Cleanup Date: 03/01/22
 Cleanup Method: EPA 3660B
 Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	45.6	4.05	1	A
Aroclor 1221	ND		ug/kg	45.6	4.57	1	A
Aroclor 1232	ND		ug/kg	45.6	9.66	1	A
Aroclor 1242	ND		ug/kg	45.6	6.14	1	A
Aroclor 1248	ND		ug/kg	45.6	6.84	1	A
Aroclor 1254	ND		ug/kg	45.6	4.99	1	A
Aroclor 1260	ND		ug/kg	45.6	8.42	1	A
Aroclor 1262	ND		ug/kg	45.6	5.79	1	A
Aroclor 1268	ND		ug/kg	45.6	4.72	1	A
PCBs, Total	ND		ug/kg	45.6	4.05	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	116		30-150	B

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 03/01/22 11:35
Analyst: AWS

Extraction Method: EPA 3546
Extraction Date: 03/01/22 02:16
Cleanup Method: EPA 3665A
Cleanup Date: 03/01/22
Cleanup Method: EPA 3660B
Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s):	01-04		Batch:	WG1609962-1		
Aroclor 1016	ND		ug/kg	32.6	2.89	A
Aroclor 1221	ND		ug/kg	32.6	3.26	A
Aroclor 1232	ND		ug/kg	32.6	6.90	A
Aroclor 1242	ND		ug/kg	32.6	4.39	A
Aroclor 1248	ND		ug/kg	32.6	4.88	A
Aroclor 1254	ND		ug/kg	32.6	3.56	A
Aroclor 1260	ND		ug/kg	32.6	6.02	A
Aroclor 1262	ND		ug/kg	32.6	4.13	A
Aroclor 1268	ND		ug/kg	32.6	3.37	A
PCBs, Total	ND		ug/kg	32.6	2.89	A

Surrogate	%Recovery	Acceptance		
		Qualifier	Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	71		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1609962-2 WG1609962-3									
Aroclor 1016	68		70		40-140	3		50	A
Aroclor 1260	66		68		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		73		30-150	A
Decachlorobiphenyl	75		77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		77		30-150	B
Decachlorobiphenyl	72		79		30-150	B

PESTICIDES



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-01
Client ID: COMP 1
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:50
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 03/02/22 16:18
Analyst: MSF
Percent Solids: 78%

Extraction Method: EPA 3546
Extraction Date: 02/28/22 12:11
Cleanup Method: EPA 3620B
Cleanup Date: 03/01/22
Cleanup Method: EPA 3660B
Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.97	0.386	1	A
Lindane	ND		ug/kg	0.821	0.367	1	A
Alpha-BHC	ND		ug/kg	0.821	0.233	1	A
Beta-BHC	ND		ug/kg	1.97	0.747	1	A
Heptachlor	ND		ug/kg	0.985	0.442	1	A
Aldrin	ND		ug/kg	1.97	0.694	1	A
Heptachlor epoxide	ND		ug/kg	3.69	1.11	1	A
Endrin	ND		ug/kg	0.821	0.336	1	A
Endrin aldehyde	ND		ug/kg	2.46	0.862	1	A
Endrin ketone	ND		ug/kg	1.97	0.507	1	A
Dieldrin	ND		ug/kg	1.23	0.616	1	A
4,4'-DDE	7.95		ug/kg	1.97	0.456	1	B
4,4'-DDD	ND		ug/kg	1.97	0.702	1	A
4,4'-DDT	5.72		ug/kg	3.69	1.58	1	B
Endosulfan I	ND		ug/kg	1.97	0.465	1	A
Endosulfan II	ND		ug/kg	1.97	0.658	1	A
Endosulfan sulfate	ND		ug/kg	0.821	0.391	1	A
Methoxychlor	ND		ug/kg	3.69	1.15	1	A
Toxaphene	ND		ug/kg	36.9	10.3	1	A
cis-Chlordane	ND		ug/kg	2.46	0.686	1	A
trans-Chlordane	ND		ug/kg	2.46	0.650	1	A
Chlordane	ND		ug/kg	16.4	6.52	1	A

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-01	Date Collected:	02/16/22 08:50
Client ID:	COMP 1	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	73		30-150	B

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-01
 Client ID: COMP 1
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:50
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 03/01/22 14:55
 Analyst: EJL
 Percent Solids: 78%
 Methylation Date: 03/01/22 05:56

Extraction Method: EPA 8151A
 Extraction Date: 02/28/22 07:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4,5-TP (Silvex)	ND		ug/kg	213	5.68	1	A
Surrogate		% Recovery	Qualifier	Acceptance Criteria		Column	
DCAA		86		30-150		A	
DCAA		68		30-150		B	

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-02
Client ID: COMP 2
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:00
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 03/03/22 16:35
Analyst: AR
Percent Solids: 74%

Extraction Method: EPA 3546
Extraction Date: 02/28/22 12:11
Cleanup Method: EPA 3620B
Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.10	0.412	1	A
Lindane	ND		ug/kg	0.876	0.392	1	A
Alpha-BHC	ND		ug/kg	0.876	0.249	1	A
Beta-BHC	ND		ug/kg	2.10	0.797	1	A
Heptachlor	ND		ug/kg	1.05	0.471	1	A
Aldrin	ND		ug/kg	2.10	0.740	1	A
Heptachlor epoxide	ND		ug/kg	3.94	1.18	1	A
Endrin	ND		ug/kg	0.876	0.359	1	A
Endrin aldehyde	ND		ug/kg	2.63	0.920	1	A
Endrin ketone	ND		ug/kg	2.10	0.541	1	A
Dieldrin	ND		ug/kg	1.31	0.657	1	A
4,4'-DDE	26.2		ug/kg	2.10	0.486	1	B
4,4'-DDD	0.872	JIP	ug/kg	2.10	0.750	1	B
4,4'-DDT	12.8		ug/kg	3.94	1.69	1	B
Endosulfan I	ND		ug/kg	2.10	0.497	1	A
Endosulfan II	ND		ug/kg	2.10	0.703	1	A
Endosulfan sulfate	ND		ug/kg	0.876	0.417	1	A
Methoxychlor	ND		ug/kg	3.94	1.23	1	A
Toxaphene	ND		ug/kg	39.4	11.0	1	A
cis-Chlordane	1.05	J	ug/kg	2.63	0.732	1	B
trans-Chlordane	ND	IP	ug/kg	2.63	0.694	1	B
Chlordane	ND		ug/kg	17.5	6.96	1	A

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-02	Date Collected:	02/16/22 09:00
Client ID:	COMP 2	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	41		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	46		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-02
 Client ID: COMP 2
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:00
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 03/01/22 11:16
 Analyst: EJL
 Percent Solids: 74%
 Methylation Date: 03/01/22 05:56

Extraction Method: EPA 8151A
 Extraction Date: 02/28/22 07:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4,5-TP (Silvex)	ND		ug/kg	224	5.95	1	A
Surrogate		% Recovery	Qualifier	Acceptance Criteria		Column	
DCAA		95		30-150		A	
DCAA		75		30-150		B	

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-03
Client ID: COMP 3
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:10
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 03/02/22 16:29
Analyst: MSF
Percent Solids: 74%

Extraction Method: EPA 3546
Extraction Date: 02/28/22 06:47
Cleanup Method: EPA 3620B
Cleanup Date: 03/01/22
Cleanup Method: EPA 3660B
Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.08	0.407	1	A
Lindane	ND		ug/kg	0.866	0.387	1	A
Alpha-BHC	ND		ug/kg	0.866	0.246	1	A
Beta-BHC	ND		ug/kg	2.08	0.788	1	A
Heptachlor	ND		ug/kg	1.04	0.466	1	A
Aldrin	ND		ug/kg	2.08	0.732	1	A
Heptachlor epoxide	ND		ug/kg	3.90	1.17	1	A
Endrin	ND		ug/kg	0.866	0.355	1	A
Endrin aldehyde	ND		ug/kg	2.60	0.909	1	A
Endrin ketone	ND		ug/kg	2.08	0.535	1	A
Dieldrin	ND		ug/kg	1.30	0.650	1	A
4,4'-DDE	62.9		ug/kg	2.08	0.481	1	B
4,4'-DDD	3.07		ug/kg	2.08	0.741	1	B
4,4'-DDT	12.4		ug/kg	3.90	1.67	1	B
Endosulfan I	ND		ug/kg	2.08	0.491	1	A
Endosulfan II	ND		ug/kg	2.08	0.694	1	A
Endosulfan sulfate	ND		ug/kg	0.866	0.412	1	A
Methoxychlor	ND		ug/kg	3.90	1.21	1	A
Toxaphene	ND		ug/kg	39.0	10.9	1	A
cis-Chlordane	ND		ug/kg	2.60	0.724	1	A
trans-Chlordane	ND		ug/kg	2.60	0.686	1	A
Chlordane	ND		ug/kg	17.3	6.88	1	A

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-03	Date Collected:	02/16/22 09:10
Client ID:	COMP 3	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	79		30-150	B

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-03
 Client ID: COMP 3
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:10
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 03/01/22 11:34
 Analyst: EJL
 Percent Solids: 74%
 Methylation Date: 03/01/22 05:56

Extraction Method: EPA 8151A
 Extraction Date: 02/28/22 07:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4,5-TP (Silvex)	ND		ug/kg	222	5.89	1	A
Surrogate		% Recovery	Qualifier	Acceptance Criteria		Column	
DCAA		94		30-150		A	
DCAA		80		30-150		B	

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-04
Client ID: COMP 4
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:20
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 03/02/22 16:40
Analyst: MSF
Percent Solids: 72%

Extraction Method: EPA 3546
Extraction Date: 02/28/22 06:47
Cleanup Method: EPA 3620B
Cleanup Date: 03/01/22
Cleanup Method: EPA 3660B
Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	2.14	0.418	1	A
Lindane	ND		ug/kg	0.890	0.398	1	A
Alpha-BHC	ND		ug/kg	0.890	0.253	1	A
Beta-BHC	ND		ug/kg	2.14	0.810	1	A
Heptachlor	ND		ug/kg	1.07	0.479	1	A
Aldrin	ND		ug/kg	2.14	0.752	1	A
Heptachlor epoxide	ND		ug/kg	4.00	1.20	1	A
Endrin	ND		ug/kg	0.890	0.365	1	A
Endrin aldehyde	ND		ug/kg	2.67	0.935	1	A
Endrin ketone	ND		ug/kg	2.14	0.550	1	A
Dieldrin	ND		ug/kg	1.34	0.668	1	A
4,4'-DDE	67.8		ug/kg	2.14	0.494	1	A
4,4'-DDD	21.4		ug/kg	2.14	0.762	1	B
4,4'-DDT	39.5		ug/kg	4.00	1.72	1	B
Endosulfan I	ND		ug/kg	2.14	0.505	1	A
Endosulfan II	ND		ug/kg	2.14	0.714	1	A
Endosulfan sulfate	ND		ug/kg	0.890	0.424	1	A
Methoxychlor	ND		ug/kg	4.00	1.25	1	A
Toxaphene	ND		ug/kg	40.0	11.2	1	A
cis-Chlordane	ND		ug/kg	2.67	0.744	1	A
trans-Chlordane	ND		ug/kg	2.67	0.705	1	A
Chlordane	ND		ug/kg	17.8	7.08	1	A

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-04	Date Collected:	02/16/22 09:20
Client ID:	COMP 4	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: 1168 BROADWAY TOPSOIL

Lab Number: L2208221

Project Number: T0006-022-002

Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-04
 Client ID: COMP 4
 Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:20
 Date Received: 02/16/22
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8151A
 Analytical Date: 03/01/22 11:52
 Analyst: EJL
 Percent Solids: 72%
 Methylation Date: 03/01/22 05:56

Extraction Method: EPA 8151A
 Extraction Date: 02/28/22 07:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4,5-TP (Silvex)	ND		ug/kg	229	6.10	1	A
Surrogate		% Recovery	Qualifier	Acceptance Criteria		Column	
DCAA		82		30-150		A	
DCAA		66		30-150		B	

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 03/02/22 13:28
Analyst: MSF

Extraction Method: EPA 3546
Extraction Date: 02/28/22 06:47
Cleanup Method: EPA 3620B
Cleanup Date: 03/01/22
Cleanup Method: EPA 3660B
Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s):	01-04			Batch:	WG1609587-1	
Delta-BHC	ND		ug/kg	1.53	0.300	A
Lindane	ND		ug/kg	0.637	0.285	A
Alpha-BHC	ND		ug/kg	0.637	0.181	A
Beta-BHC	ND		ug/kg	1.53	0.580	A
Heptachlor	ND		ug/kg	0.765	0.343	A
Aldrin	ND		ug/kg	1.53	0.538	A
Heptachlor epoxide	ND		ug/kg	2.87	0.860	A
Endrin	ND		ug/kg	0.637	0.261	A
Endrin aldehyde	ND		ug/kg	1.91	0.669	A
Endrin ketone	ND		ug/kg	1.53	0.394	A
Dieldrin	ND		ug/kg	0.956	0.478	A
4,4'-DDE	ND		ug/kg	1.53	0.354	A
4,4'-DDD	ND		ug/kg	1.53	0.546	A
4,4'-DDT	ND		ug/kg	2.87	1.23	A
Endosulfan I	ND		ug/kg	1.53	0.361	A
Endosulfan II	ND		ug/kg	1.53	0.511	A
Endosulfan sulfate	ND		ug/kg	0.637	0.303	A
Methoxychlor	ND		ug/kg	2.87	0.892	A
Toxaphene	ND		ug/kg	28.7	8.03	A
cis-Chlordane	ND		ug/kg	1.91	0.533	A
trans-Chlordane	ND		ug/kg	1.91	0.505	A
Chlordane	ND		ug/kg	12.7	5.07	A

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 03/02/22 13:28
Analyst: MSF

Extraction Method: EPA 3546
Extraction Date: 02/28/22 06:47
Cleanup Method: EPA 3620B
Cleanup Date: 03/01/22
Cleanup Method: EPA 3660B
Cleanup Date: 03/01/22

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s):	01-04			Batch:	WG1609587-1	

Surrogate	%Recovery	Acceptance Criteria			Column
		Qualifier	Criteria		
2,4,5,6-Tetrachloro-m-xylene	53		30-150		A
Decachlorobiphenyl	57		30-150		A
2,4,5,6-Tetrachloro-m-xylene	53		30-150		B
Decachlorobiphenyl	56		30-150		B

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 03/01/22 08:31
Analyst: EJL

Methylation Date: 03/01/22 05:56

Extraction Method: EPA 8151A
Extraction Date: 02/28/22 07:41

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s):	01-04	Batch:	WG1609606-1			
2,4,5-TP (Silvex)	ND		ug/kg	164	4.36	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria		Column
			Criteria	Column	
DCAA	100		30-150		A
DCAA	80		30-150		B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1609587-2 WG1609587-3									
Delta-BHC	58		80		30-150	32	Q	30	A
Lindane	72		94		30-150	27		30	A
Alpha-BHC	79		103		30-150	26		30	A
Beta-BHC	79		93		30-150	16		30	A
Heptachlor	77		98		30-150	24		30	A
Aldrin	74		96		30-150	26		30	A
Heptachlor epoxide	66		87		30-150	27		30	A
Endrin	76		100		30-150	27		30	A
Endrin aldehyde	54		74		30-150	31	Q	30	A
Endrin ketone	65		88		30-150	30		30	A
Dieldrin	79		104		30-150	27		30	A
4,4'-DDE	68		91		30-150	29		30	A
4,4'-DDD	84		111		30-150	28		30	A
4,4'-DDT	74		99		30-150	29		30	A
Endosulfan I	71		92		30-150	26		30	A
Endosulfan II	75		98		30-150	27		30	A
Endosulfan sulfate	60		81		30-150	30		30	A
Methoxychlor	74		96		30-150	26		30	A
cis-Chlordane	58		73		30-150	23		30	A
trans-Chlordane	78		103		30-150	28		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1609587-2 WG1609587-3								
Surrogate	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i>	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	70		94				30-150	A
Decachlorobiphenyl	80		112				30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		91				30-150	B
Decachlorobiphenyl	77		107				30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>	<i>Column</i>
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1609606-2 WG1609606-3									
2,4,5-TP (Silvex)	89		85		30-150	5		30	A

Surrogate	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>	<i>Column</i>
DCAA	99		99		30-150	A
DCAA	91		90		30-150	B

METALS



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-01	Date Collected:	02/16/22 08:50
Client ID:	COMP 1	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 78%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	4.65		mg/kg	0.491	0.102	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Barium, Total	30.2		mg/kg	0.491	0.086	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Beryllium, Total	0.246		mg/kg	0.246	0.016	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Cadmium, Total	0.491		mg/kg	0.491	0.048	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Chromium, Total	6.17		mg/kg	0.491	0.047	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Copper, Total	8.13		mg/kg	0.491	0.127	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Lead, Total	28.6		mg/kg	2.46	0.132	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Manganese, Total	95.3		mg/kg	0.491	0.078	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Mercury, Total	0.074	J	mg/kg	0.089	0.058	1	02/22/22 16:20 03/02/22 14:09	EPA 7471B	1,7471B	AC	
Nickel, Total	7.08		mg/kg	1.23	0.119	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Selenium, Total	0.437	J	mg/kg	0.982	0.127	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Silver, Total	ND		mg/kg	0.491	0.139	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
Zinc, Total	43.4		mg/kg	2.46	0.144	1	02/22/22 16:02 03/04/22 00:16	EPA 3050B	1,6010D	BV	
General Chemistry - Mansfield Lab											
Chromium, Trivalent	6.2		mg/kg	1.0	1.0	1		03/04/22 00:16	NA	107,-	



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-02	Date Collected:	02/16/22 09:00
Client ID:	COMP 2	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 74%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	4.38		mg/kg	0.508	0.106	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Barium, Total	30.0		mg/kg	0.508	0.088	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Beryllium, Total	0.213	J	mg/kg	0.254	0.017	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Cadmium, Total	0.493	J	mg/kg	0.508	0.050	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Chromium, Total	5.71		mg/kg	0.508	0.049	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Copper, Total	12.6		mg/kg	0.508	0.131	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Lead, Total	40.1		mg/kg	2.54	0.136	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Manganese, Total	118		mg/kg	0.508	0.081	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Mercury, Total	0.091	J	mg/kg	0.100	0.065	1	02/22/22 16:20 03/02/22 15:02	EPA 7471B	1,7471B	AC	
Nickel, Total	7.08		mg/kg	1.27	0.123	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Selenium, Total	0.315	J	mg/kg	1.02	0.131	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Silver, Total	ND		mg/kg	0.508	0.144	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
Zinc, Total	54.3		mg/kg	2.54	0.149	1	02/22/22 16:02 03/04/22 00:11	EPA 3050B	1,6010D	BV	
General Chemistry - Mansfield Lab											
Chromium, Trivalent	5.7		mg/kg	1.1	1.1	1		03/04/22 00:11	NA	107,-	



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-03	Date Collected:	02/16/22 09:10
Client ID:	COMP 3	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 74%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	4.00		mg/kg	0.521	0.108	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Barium, Total	34.8		mg/kg	0.521	0.091	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Beryllium, Total	0.260		mg/kg	0.260	0.017	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Cadmium, Total	0.521		mg/kg	0.521	0.051	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Chromium, Total	7.34		mg/kg	0.521	0.050	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Copper, Total	14.7		mg/kg	0.521	0.134	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Lead, Total	24.8		mg/kg	2.60	0.140	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Manganese, Total	209		mg/kg	0.521	0.083	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Mercury, Total	0.082	J	mg/kg	0.091	0.059	1	02/22/22 16:20 03/02/22 15:05	EPA 7471B	1,7471B	AC	
Nickel, Total	9.79		mg/kg	1.30	0.126	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Selenium, Total	0.234	J	mg/kg	1.04	0.134	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Silver, Total	ND		mg/kg	0.521	0.147	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
Zinc, Total	59.4		mg/kg	2.60	0.153	1	02/22/22 16:02 03/04/22 00:49	EPA 3050B	1,6010D	BV	
General Chemistry - Mansfield Lab											
Chromium, Trivalent	7.3		mg/kg	1.1	1.1	1		03/04/22 00:49	NA	107,-	



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID:	L2208221-04	Date Collected:	02/16/22 09:20
Client ID:	COMP 4	Date Received:	02/16/22
Sample Location:	BROADWAY & TWO RED RD	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	5.90		mg/kg	0.528	0.110	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Barium, Total	57.2		mg/kg	0.528	0.092	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Beryllium, Total	0.301		mg/kg	0.264	0.017	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Cadmium, Total	0.771		mg/kg	0.528	0.052	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Chromium, Total	8.24		mg/kg	0.528	0.051	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Copper, Total	24.7		mg/kg	0.528	0.136	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Lead, Total	58.3		mg/kg	2.64	0.142	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Manganese, Total	554		mg/kg	0.528	0.084	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Mercury, Total	0.104		mg/kg	0.104	0.068	1	02/22/22 16:20 03/02/22 15:09	EPA 7471B	1,7471B	AC	
Nickel, Total	10.8		mg/kg	1.32	0.128	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Selenium, Total	0.206	J	mg/kg	1.06	0.136	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Silver, Total	ND		mg/kg	0.528	0.149	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
Zinc, Total	77.3		mg/kg	2.64	0.155	1	02/22/22 16:02 03/04/22 00:53	EPA 3050B	1,6010D	BV	
General Chemistry - Mansfield Lab											
Chromium, Trivalent	8.2		mg/kg	1.1	1.1	1		03/04/22 00:53	NA	107,-	



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1607432-1									
Arsenic, Total	ND	mg/kg	0.400	0.083	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Barium, Total	ND	mg/kg	0.400	0.070	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Beryllium, Total	ND	mg/kg	0.200	0.013	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Cadmium, Total	ND	mg/kg	0.400	0.039	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Chromium, Total	ND	mg/kg	0.400	0.038	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Copper, Total	ND	mg/kg	0.400	0.103	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Lead, Total	ND	mg/kg	2.00	0.107	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Manganese, Total	ND	mg/kg	0.400	0.064	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Nickel, Total	ND	mg/kg	1.00	0.097	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Selenium, Total	ND	mg/kg	0.800	0.103	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Silver, Total	ND	mg/kg	0.400	0.113	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV
Zinc, Total	ND	mg/kg	2.00	0.117	1	02/22/22 16:02	03/03/22 22:55	1,6010D	BV

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1607434-1									
Mercury, Total	ND	mg/kg	0.083	0.054	1	02/22/22 16:20	03/02/22 14:03	1,7471B	AC

Prep Information

Digestion Method: EPA 7471B



Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1607432-2 SRM Lot Number: D113-540								
Arsenic, Total	99	-	-	-	70-130	-	-	-
Barium, Total	94	-	-	-	75-125	-	-	-
Beryllium, Total	101	-	-	-	75-125	-	-	-
Cadmium, Total	99	-	-	-	75-125	-	-	-
Chromium, Total	98	-	-	-	70-130	-	-	-
Copper, Total	96	-	-	-	75-125	-	-	-
Lead, Total	97	-	-	-	72-128	-	-	-
Manganese, Total	97	-	-	-	77-123	-	-	-
Nickel, Total	99	-	-	-	70-130	-	-	-
Selenium, Total	99	-	-	-	66-134	-	-	-
Silver, Total	99	-	-	-	70-131	-	-	-
Zinc, Total	97	-	-	-	70-130	-	-	-
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1607434-2 SRM Lot Number: D113-540								
Mercury, Total	103	-	-	-	60-140	-	-	-

Matrix Spike Analysis
Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1607432-3 QC Sample: L2208221-01 Client ID: COMP 1												
Arsenic, Total	4.65	11.8	14.8	86		-	-	-	75-125	-	-	20
Barium, Total	30.2	196	206	89		-	-	-	75-125	-	-	20
Beryllium, Total	0.246	4.91	4.59	93		-	-	-	75-125	-	-	20
Cadmium, Total	0.491	5.21	4.70	90		-	-	-	75-125	-	-	20
Chromium, Total	6.17	19.6	22.1	81		-	-	-	75-125	-	-	20
Copper, Total	8.13	24.6	29.0	85		-	-	-	75-125	-	-	20
Lead, Total	28.6	52.1	67.7	75		-	-	-	75-125	-	-	20
Manganese, Total	95.3	49.1	152	115		-	-	-	75-125	-	-	20
Nickel, Total	7.08	49.1	45.8	79		-	-	-	75-125	-	-	20
Selenium, Total	0.437J	11.8	10.4	88		-	-	-	75-125	-	-	20
Silver, Total	ND	29.5	25.7	87		-	-	-	75-125	-	-	20
Zinc, Total	43.4	49.1	86.2	87		-	-	-	75-125	-	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1607434-3 QC Sample: L2208221-01 Client ID: COMP 1												
Mercury, Total	0.074J	0.17	0.217	127	Q	-	-	-	80-120	-	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1607432-4 QC Sample: L2208221-01 Client ID: COMP 1						
Arsenic, Total	4.65	4.63	mg/kg	0		20
Barium, Total	30.2	29.6	mg/kg	2		20
Beryllium, Total	0.246	0.238J	mg/kg	NC		20
Cadmium, Total	0.491	0.505	mg/kg	3		20
Chromium, Total	6.17	6.08	mg/kg	1		20
Copper, Total	8.13	8.48	mg/kg	4		20
Lead, Total	28.6	30.5	mg/kg	6		20
Manganese, Total	95.3	104	mg/kg	9		20
Nickel, Total	7.08	6.98	mg/kg	1		20
Selenium, Total	0.437J	0.447J	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Zinc, Total	43.4	44.3	mg/kg	2		20
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1607434-4 QC Sample: L2208221-01 Client ID: COMP 1						
Mercury, Total	0.074J	0.076J	mg/kg	NC		20

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

**Lab Serial Dilution
Analysis
Batch Quality Control**

Lab Number: L2208221
Report Date: 03/04/22

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1607432-6 QC Sample: L2208221-01 Client ID: COMP 1						
Barium, Total	30.2	34.8	mg/kg	15		20
Manganese, Total	95.3	112	mg/kg	18		20

INORGANICS & MISCELLANEOUS



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-01
Client ID: COMP 1
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:50
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.7	%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI	
Cyanide, Total	ND	mg/kg	1.2	0.25	1	02/18/22 04:10	02/18/22 09:34	1,9010C/9012B	CS	
Chromium, Hexavalent	ND	mg/kg	1.03	0.206	1	02/25/22 17:53	03/01/22 10:23	1,7196A	PB	

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-02 Date Collected: 02/16/22 09:00
Client ID: COMP 2 Date Received: 02/16/22
Sample Location: BROADWAY & TWO RED RD Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	74.4	%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI	
Cyanide, Total	ND	mg/kg	1.3	0.27	1	02/18/22 04:10	02/18/22 09:35	1,9010C/9012B	CS	
Chromium, Hexavalent	ND	mg/kg	1.08	0.215	1	02/25/22 17:53	03/01/22 10:23	1,7196A	PB	



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-03
Client ID: COMP 3
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:10
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	73.5	%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI	
Cyanide, Total	ND	mg/kg	1.3	0.27	1	02/18/22 04:10	02/18/22 09:46	1,9010C/9012B	CS	
Chromium, Hexavalent	ND	mg/kg	1.09	0.218	1	02/25/22 17:53	03/01/22 10:23	1,7196A	PB	



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-04
Client ID: COMP 4
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 09:20
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	71.6	%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI	
Cyanide, Total	ND	mg/kg	1.4	0.30	1	02/18/22 04:10	02/18/22 09:47	1,9010C/9012B	CS	
Chromium, Hexavalent	ND	mg/kg	1.12	0.223	1	02/25/22 17:53	03/01/22 10:23	1,7196A	PB	

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-05
Client ID: GRAB 1
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 07:50
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	71.2		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-06
Client ID: GRAB 2
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 07:55
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.2		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-07
Client ID: GRAB 3
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:00
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	74.1		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-08
Client ID: GRAB 4
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:05
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	78.6		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-09
Client ID: GRAB 5
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:10
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	72.3		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-10
Client ID: GRAB 6
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:15
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	70.4		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-11
Client ID: GRAB 7
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:20
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76.9		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-12
Client ID: GRAB 8
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:25
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.6		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-13
Client ID: GRAB 9
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:30
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	74.2		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-14
Client ID: GRAB 10
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:35
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	73.6		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

SAMPLE RESULTS

Lab ID: L2208221-15
Client ID: GRAB 11
Sample Location: BROADWAY & TWO RED RD

Date Collected: 02/16/22 08:40
Date Received: 02/16/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	71.2		%	0.100	NA	1	-	02/17/22 12:04	121,2540G	RI

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Method Blank Analysis
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1606371-1									
Cyanide, Total	ND	mg/kg	0.87	0.18	1	02/18/22 04:10	02/18/22 09:08	1,9010C/9012B	CS
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1609028-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	02/25/22 17:53	03/01/22 10:23	1,7196A	PB



Lab Control Sample Analysis

Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1606371-2 WG1606371-3								
Cyanide, Total	96		87		80-120	3		35
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1609028-2								
Chromium, Hexavalent	85		-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1606371-4 WG1606371-5 QC Sample: L2208346-02 Client ID: MS Sample												
Cyanide, Total	ND	11	11	100		11	100		75-125	0		35
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1609028-4 QC Sample: L2208221-02 Client ID: COMP 2												
Chromium, Hexavalent	ND	1190	681	57	Q	-	-	-	75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-15 QC Batch ID: WG1606026-1 QC Sample: L2208221-01 Client ID: COMP 1						
Solids, Total	77.7	76.4	%	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1609028-6 QC Sample: L2208221-02 Client ID: COMP 2						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2208221-01A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-01B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),CR-TI(180),PB-TI(180),CU-TI(180),SE-TI(180),ZN-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2208221-01C	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-01D	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-01E	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-01F	Plastic 8oz unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2208221-02A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-02B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),SE-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2208221-02C	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-02D	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-02E	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-02F	Plastic 8oz unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2208221-03A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-03B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),SE-TI(180),HG-T(28),MN-TI(180),CD-TI(180)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2208221-03C	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-03D	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-03E	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-03F	Plastic 8oz unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2208221-04A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-04B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),CU-TI(180),SE-TI(180),PB-TI(180),ZN-TI(180),MN-TI(180),HG-T(28),CD-TI(180)
L2208221-04C	Glass 120ml/4oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-04D	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-04E	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		NYTCL-8270(14),TCN-9010(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(365),HEXCR-7196(30)
L2208221-04F	Plastic 8oz unpreserved	A	NA		3.5	Y	Absent		A2-NY-537-ISOTOPE(14)
L2208221-05A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-05B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-05X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-05Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-05Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-06A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-06B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-06X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-06Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-06Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-07A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-07B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2208221-07X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-07Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-07Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-08A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-08B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-08X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-08Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-08Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-09A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-09B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-09X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-09Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-09Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-10A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-10B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-10X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-10Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-10Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-11A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-11B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-11X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-11Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-11Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-12A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-12B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-12X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-12Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-12Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2208221-13A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-13B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-13X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-13Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-13Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-14A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-14B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-14X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-14Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-14Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-15A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		TS(7)
L2208221-15B	Vial Large Septa unpreserved (4oz)	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-15X	Vial MeOH preserved split	A	NA		3.5	Y	Absent		NYTCL-8260-R2(14)
L2208221-15Y	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)
L2208221-15Z	Vial Water preserved split	A	NA		3.5	Y	Absent	22-FEB-22 07:30	NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Serial_No:03042215:35
Lab Number: L2208221
Report Date: 03/04/22

PFAS PARAMETER SUMMARY

Parameter	Acronym	CAS Number
PERFLUOROALKYL CARBOXYLIC ACIDS (PFCAs)		
Perfluorooctadecanoic Acid	PFODA	16517-11-6
Perfluorohexadecanoic Acid	PFHxDA	67905-19-5
Perfluorotetradecanoic Acid	PFTA	376-06-7
Perfluorotridecanoic Acid	PFTrDA	72629-94-8
Perfluorododecanoic Acid	PFDoA	307-55-1
Perfluoroundecanoic Acid	PFUnA	2058-94-8
Perfluorodecanoic Acid	PFDA	335-76-2
Perfluorononanoic Acid	PFNA	375-95-1
Perfluoroctanoic Acid	PFOA	335-67-1
Perfluoroheptanoic Acid	PFHpA	375-85-9
Perfluorohexanoic Acid	PFHxA	307-24-4
Perfluoropentanoic Acid	PPPeA	2706-90-3
Perfluorobutanoic Acid	PFBA	375-22-4
PERFLUOROALKYL SULFONIC ACIDS (PFSAs)		
Perfluorododecanesulfonic Acid	PFDoDS	79780-39-5
Perfluorodecanesulfonic Acid	PFDS	335-77-3
Perfluorononanesulfonic Acid	PFNS	68259-12-1
Perfluoroctanesulfonic Acid	PFOS	1763-23-1
Perfluoroheptanesulfonic Acid	PFHpS	375-92-8
Perfluorohexanesulfonic Acid	PFHxS	355-46-4
Perfluoropentanesulfonic Acid	PPPeS	2706-91-4
Perfluorobutanesulfonic Acid	PFBS	375-73-5
FLUOROTELOMERS		
1H,1H,2H,2H-Perfluorododecanesulfonic Acid	10:2FTS	120226-60-0
1H,1H,2H,2H-Perfluorodecanesulfonic Acid	8:2FTS	39108-34-4
1H,1H,2H,2H-Perfluoroctanesulfonic Acid	6:2FTS	27619-97-2
1H,1H,2H,2H-Perfluorohexanesulfonic Acid	4:2FTS	757124-72-4
PERFLUOROALKANE SULFONAMIDES (FASAs)		
Perfluoroctanesulfonamide	FOSA	754-91-6
N-Ethyl Perfluoroctane Sulfonamide	NEtFOSA	4151-50-2
N-Methyl Perfluoroctane Sulfonamide	NMeFOSA	31506-32-8
PERFLUOROALKANE SULFONYL SUBSTANCES		
N-Ethyl Perfluoroctanesulfonamido Ethanol	NEtFOSE	1691-99-2
N-Methyl Perfluoroctanesulfonamido Ethanol	NMeFOSE	24448-09-7
N-Ethyl Perfluoroctanesulfonamidoacetic Acid	NEtFOSAA	2991-50-6
N-Methyl Perfluoroctanesulfonamidoacetic Acid	NMeFOSAA	2355-31-9
PER- and POLYFLUOROALKYL ETHER CARBOXYLIC ACIDS		
2,3,3,3-Tetrafluoro-2-[1,1,2,2,3,3,3-Heptafluoropropoxy]-Propanoic Acid	HFPO-DA	13252-13-6
4,8-Dioxa-3h-Perfluorononanoic Acid	ADONA	919005-14-4
CHLORO-PERFLUOROALKYL SULFONIC ACIDS		
11-Chloroeicosfluoro-3-Oxaundecane-1-Sulfonic Acid	11CI-PF3OUdS	763051-92-9
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid	9CI-PF3ONS	756426-58-1
PERFLUORETHER SULFONIC ACIDS (PFESAs)		
Perfluoro(2-Ethoxyethane)Sulfonic Acid	PFEESA	113507-82-7
PERFLUORETHER/POLYETHER CARBOXYLIC ACIDS (PFPCAs)		
Perfluoro-3-Methoxypropanoic Acid	PFMPA	377-73-1
Perfluoro-4-Methoxybutanoic Acid	PFMBA	863090-89-5
Nonafuoro-3,6-Dioxaheptanoic Acid	NFDHA	151772-58-6

Project Name: 1168 BROADWAY TOPSOIL
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GLOSSARY

Acronyms

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

Report Format: DU Report with 'J' Qualifiers



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Project Number: T0006-022-002

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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 Fluoranthrenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

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

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

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Project Name: 1168 BROADWAY TOPSOIL
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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.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: 1168 BROADWAY TOPSOIL
Project Number: T0006-022-002

Lab Number: L2208221
Report Date: 03/04/22

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 107 Alpha Analytical - In-house calculation method.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- 134 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS) using Isotope Dilution. Alpha SOP 23528.

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 its 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.



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 625/625.1: alpha-Terpineol

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

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; 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.

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 I, 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**, **SM9222D**.

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**, **EPA 537.1**.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, V, Zn.

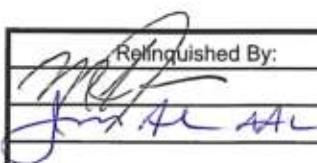
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

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

 NEW YORK CHAIN OF CUSTODY		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page <u>1</u> of <u>2</u>	Date Rec'd in Lab <u>2/17/22</u>	ALPHA Job # <u>L110822</u>
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-8300 FAX: 508-822-3288		Project Information Project Name: <u>11688 Broadway Tresail</u> Project Location: <u>Broadway & Two Rod Rd</u> Project # <u>T000C-022-COS</u>		
Client Information Client: <u>Benchmark Turnkey</u> Address: <u>2558 Hembury Turnpike</u> <u>Buffalo, NY 14213</u> Phone: <u>716 856 0635</u> Fax: <u>716 856 0583</u> Email: <u>EWarren@BM-TK.com</u>		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		Billing Information <input type="checkbox"/> Same as Client Info PO #		
				Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		
				Disposal Site Information Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:		
These samples have been previously analyzed by Alpha <input type="checkbox"/>		ANALYSIS		Sample Filtration Total <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)		
Other project specific requirements/comments: Please specify Metals or TAL.				Sample Specific Comments Total		
<u>08221-01</u> <u>-02</u> <u>-03</u> <u>-04</u> <u>-05</u> <u>-06</u> <u>-07</u> <u>-08</u> <u>-09</u> <u>-10</u>	<u>Comp 1</u> <u>Comp 2</u> <u>Comp 3</u> <u>Comp 4</u> <u>Grab 1</u> <u>Grab 2</u> <u>Grab 3</u> <u>Grab 4</u> <u>Grab 5</u> <u>Grab 6</u>	Collection Date Time		Sample Matrix <u>Soil</u>	Sampler's Initials <u>MJ</u>	NY PFRAA's via LCMSMS Isotope Dilution <u>EPA 8081 B</u> <u>EPA 8082 A</u> NY Part 375 Total Metal List <u>TS</u> <u>NYTCL-8260</u>
		<u>2/16/22</u>	<u>8:50 A</u>			
			<u>9:00 A</u>			
			<u>9:10 A</u>			
			<u>9:20 A</u>			
			<u>7:50 A</u>			
			<u>7:55 A</u>			
			<u>8:00 A</u>			
			<u>8:05 A</u>			
			<u>8:10 A</u>			
	<u>8:15 A</u>					
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		
				Container Type Preservative		
<u>JM</u> <u>JM AC AAC</u>		<u>2/16/22 10:00 A</u> <u>2/16/22 15:50</u>		<u>JM AL AAC</u> <u>JM</u> <u>2/17/22 00:20</u>		
Form No: 01-25 HC (rev. 30-Sept-2013)				Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not 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.)		

NEW YORK CHAIN OF CUSTODY		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page <u>2</u> of <u>2</u>	Date Rec'd in Lab <u>2/17/22</u>	ALPHA Job # <u>L220822</u>		
Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193		Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-8300 FAX: 508-822-3288		Project Information		Billing Information		
Client Information		Project Name: <u>116-88 Broadway</u> Project Location: <u>Broadway & Twin Rod Rd</u> Project # <u>T0006-022-002</u>		Deliverables <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other				
Client: <u>Benchmark Turnkey</u> Address: <u>2558 Hamburg Turnpike</u> <u>Buffalo, NY 14218</u> Phone: <u>716 856 0635</u> Fax: <u>716 856 0583</u> Email: <u>EWarren@BM-TK.com</u>		(Use Project name as Project #) <input type="checkbox"/>		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information		
Turn-Around Time		Standard <input checked="" type="checkbox"/>	Due Date:			Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other		
Rush (only if pre approved) <input type="checkbox"/>		# of Days:						
These samples have been previously analyzed by Alpha <input type="checkbox"/>				ANALYSIS		Sample Filtration		
Other project specific requirements/comments:						<input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do <i>(Please Specify below)</i>		
Please specify Metals or TAL.						<input type="checkbox"/> Total <input type="checkbox"/> Bottom <input type="checkbox"/> Sample Specific Comments		
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	<u>T3</u> <u>NYTCL-820</u>		
		Date	Time					
<u>08221-11</u>	Grab 7	<u>2/16/22</u>	<u>8:20 A</u>	Soil	MJ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>-12</u>	Grab 8		<u>8:25 A</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>-13</u>	Grab 9		<u>8:30 A</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>-14</u>	Grab 10		<u>8:35 A</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>-15</u>	Grab 11		<u>8:40 A</u>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Preservative Code: A = None B = HCl C = HNO ₃ D = H ₂ SO ₄ E = NaOH F = MeOH G = NaHSO ₄ H = Na ₂ S ₂ O ₃ K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not 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.)
				Preservative				
		Relinquished By: <u>Jill AC AAC</u>	Date/Time: <u>2/16/22 10:01 AM</u>	Received By: <u>Jill AC AAC</u>	Date/Time: <u>2/16/22 14:05</u>			
			<u>2/16/22 15:50</u>	<u>J. J.</u>	<u>2/17/22 00:27</u>			
Form No: 01-25 HC (rev. 30-Sept-2013)								

APPENDIX B

Work Completed on 07.27.22 – 07.29.22

SITE PICTURE
CAMP DATA
WASTE MANIFEST

APPENDIX B

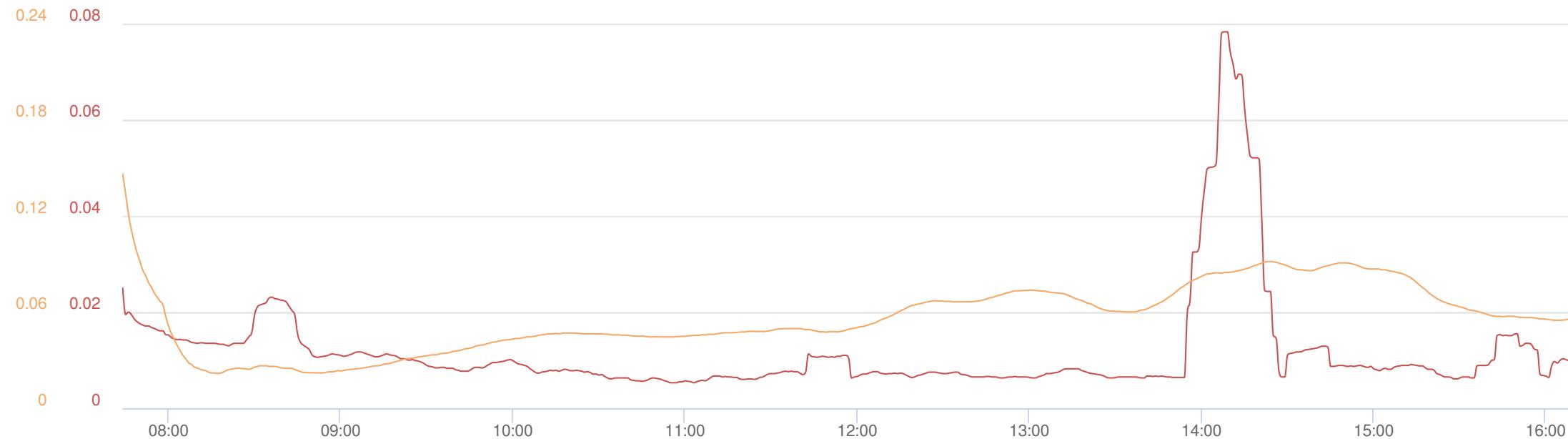
SITE PICTURE



APPENDIX B

CAMP DATA

Wed, 27th of Jul 2022, 0:00:00 – 23:59:00
(GMT-05:00) Eastern Time (US & Canada)



Mass Conc. Total mg/m³ AVG 15m

mg/m³
DustTrak-8530
RS232(C)

MIN	AVG	MAX
0.0053	0.0119	0.0783

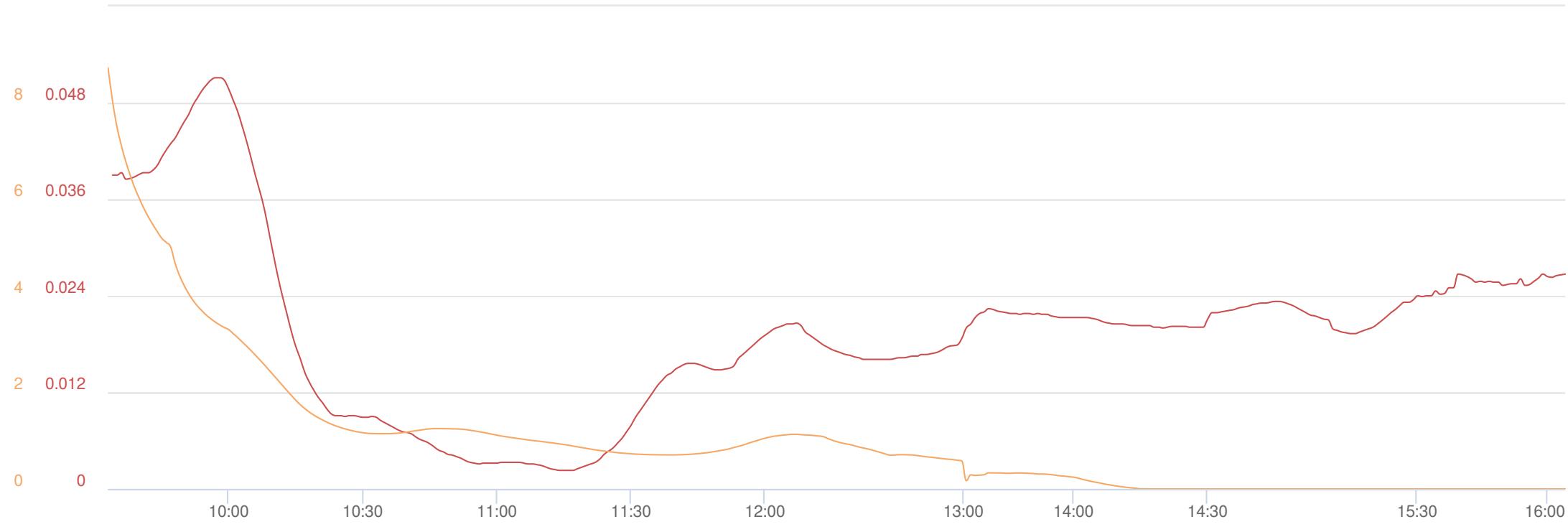
VOC ppm AVG 15m ppm

miniRAE 3000
RS232(A)

MIN	AVG	MAX
0.0217	0.0561	0.146

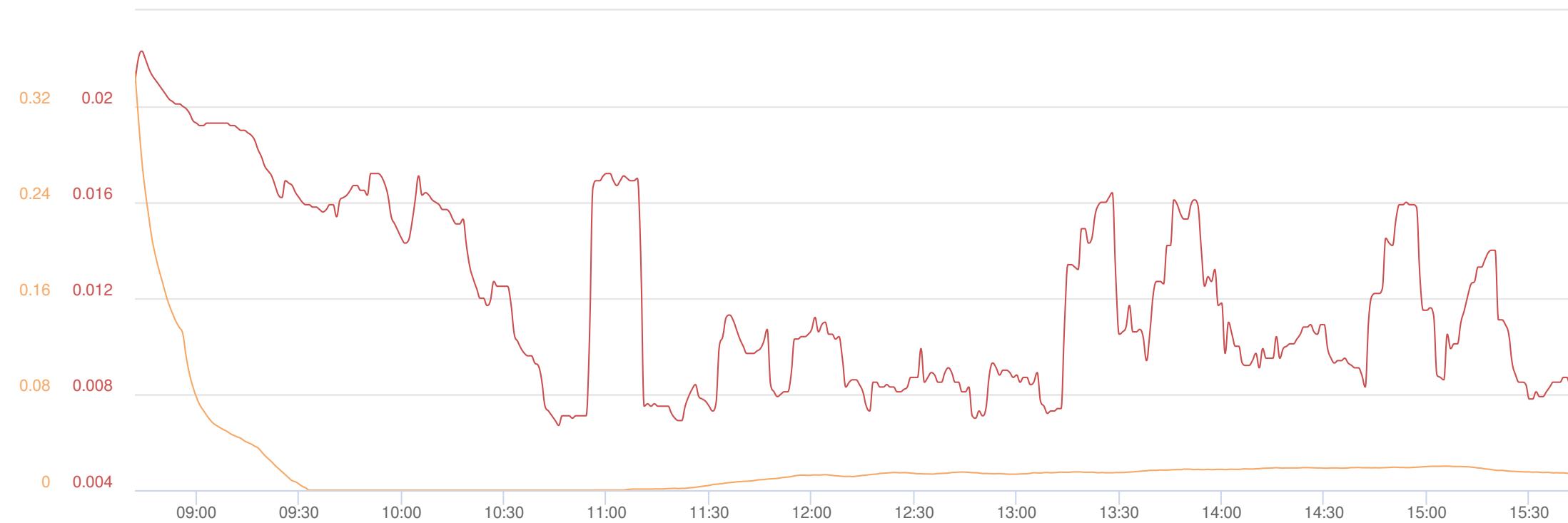
Name CAMP Station #3
S/N 0B466411
Description CAMP Station #3
Location 2424 Hamburg Turnpike, Buffalo, NY 14218, USA

Thu, 28th of Jul 2022, 0:00:00 – 23:59:00
(GMT-05:00) Eastern Time (US & Canada)



Name CAMP Station #3
S/N 0B466411
Description CAMP Station #3
Location 2424 Hamburg
Turnpike, Buffalo, NY
14218, USA

Fri, 29th of Jul 2022, 0:00:00 – 23:59:00
(GMT-05:00) Eastern Time (US & Canada)



Mass Conc. Total mg/m³ AVG 15m

mg/m³

DustTrak-8530
RS232(C)

MIN	AVG	MAX
0.0067	0.0121	0.0223

VOC ppm AVG 15m ppm

miniRAE 3000

RS232(A)

MIN	AVG	MAX
0	0.02	0.349

Name CAMP Station #3

S/N 0B466411

Description CAMP Station #3

Location 2424 Hamburg
Turnpike, Buffalo, NY
14218, USA

APPENDIX B

WASTE MANIFEST



NON-HAZARDOUS MANIFEST

NON-HAZARDOUS MANIFEST	1. Generator's US EPA ID No.	Manifest Doc No.	2. Page 1 of	
3. Generator's Mailing Address: Uniland Construction Corporation ATTN: Jeff Benderson 100 Corporate Parkway, Suite 500 Amherst, NY 14226		Generator's Site Address (If different than mailing): 8 DONA STREET LACKAWANNA, NY 14218		A. Manifest Number WMNA
				B. State Generator's ID 11554119
4. Generator's Phone 716-242-9255				
5. Transporter 1 Company Name <i>Zodadz Construction</i>		6. US EPA ID Number		C. State Transporter's ID 9A 499
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone
9. Designated Facility Name and Site Address Waste Management of NY, LLC – Chaffee Landfill 10860 Olean Road Chaffee, NY 14030		10. US EPA ID Number		E. State Transporter's ID F. Transporter's Phone
				G. State Facility ID H. State Facility Phone 716-492-3420
11. Description of Waste Materials a. NON HAZARDOUS SOIL WM Profile # 125173NY		12. Containers No. 1 Type cm est	13. Total Quantity 20 ton	I. Misc. Comments
b. WM Profile #				
c. WM Profile #				
d. WM Profile #				
J. Additional Descriptions for Materials Listed Above		K. Disposal Location Cell Grid		
15. Special Handling Instructions and Additional Information				
Purchase Order #		EMERGENCY CONTACT / PHONE NO.:		
16. GENERATOR'S CERTIFICATE: I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.				
Printed Name		Signature "On behalf of"		Month Day Year
17. Transporter 1 Acknowledgement of Receipt of Materials Printed Name <i>Cheryl Chapman</i> Signature <i>Cheryl Chapman</i> Month Day Year				
18. Transporter 2 Acknowledgement of Receipt of Materials Printed Name <i>Charles Ellis</i> Signature <i>charles ellis</i> Month Day Year				
19. Certificate of Final Treatment/Disposal I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.				
20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest. Printed Name <i>M-Baker</i> Signature <i>M-Baker</i> Month Day Year				

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY

Pink- FACILITY USE ONLY

Blue- GENERATOR #2 COPY

Gold- TRANSPORTER #1 COPY

Yellow- GENERATOR #1 COPY

8 22 22