



June 30, 2023

Mr. Benjamin McPherson, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
700 Delaware Avenue
Buffalo, New York 14209

Re: Building Concrete Masonry Unit (CMU) Assessment Results Summary
100 Botsford Place Site C915356
Buffalo, New York

Dear Mr. McPherson:

TurnKey Environmental Restoration, LLC (TurnKey) has prepared this summary report to present the results of the supplemental building concrete masonry unit (CMU) sampling completed at the 100 Botsford Place Site (C915356; Site). The sampling was completed on April 5, 2023, in accordance with the approved Addendum to the RI Work Plan (March 2023).

TurnKey personnel mobilized to the Site to assess noted green staining on the CMU in the production area of the building, collect samples to delineate previously identified hazardous CMU, and to collect additional samples to characterize green stained CMU in the production area of the building.

Previous Sampling – November 2021

The previous CMU sampling included collection of three (3) concrete samples from the CMU including non-stained (Block Non-Stained), light-green stained (Block Stained-1), and darker-green stained (Block Stained-2) areas of CMU and analyzed for Toxicity Characteristic Leaching Protocol (TCLP) metals. Laboratory analytical results indicated that the Block Non-Stained and Block Stained-1 samples were characteristically non-hazardous, and the Block Stained-2 sample result was elevated, exceeding the hazardous TCLP level for chromium. Results are included on Table 1.

2023 Building CMU Inspection

Inspection of the production area CMU identified green stained CMU walls were limited to the Block Stained-2 (BS-2 area), likely related to former production filtration unit present in front of sample location, and portions of the southern wall of the production room.

The BS-2 sample location was at an interior corner of the production area with standard man doors on either side (see Figure 1). Staining decreased in coloration and height across the CMU wall moving away from BS-2 toward the adjacent man doors in both directions.

Varying coloration of green staining was noted on portions of the southern wall. Based on the range of coloration, additional samples were collected spatially across the southern wall where

coloration and/or previous production equipment/piping was noted. Darker green staining was noted on the southern wall CMU adjacent to the pressure vessel opening, however, additional samples could not be collected at this location due to water depth present in the concrete sump at the time of sampling due to recent precipitation prior to sampling event. Additional sampling or assumed characterization as hazardous CMU of this area will be discussed with the Department.

All samples were collected using a stainless-steel concrete core drill bit to retrieve plugs of sufficient quantity, placed into individually labeled plastic bags, and pulverized to the laboratory sampling specification before being placed into laboratory provided sample bottles and cooled to 4°C prior to transport to the laboratory under chain-of-custody for analysis.

Photographs taken during the work are included in Appendix A. All concrete sampling data is summarized in Table 1, sample locations are provided on Figure 1, and laboratory packages are provided in Appendix B.

Delineation of Hazardous BS-2 Area

Two (2) delineation samples of the CMU, identified as BS-2 Delineation A and BS-2 Delineation B, were collected from either side of the original sample location proximate to the adjacent man doors. Green coloration was substantially less than the original sample location at the delineation locations (see attached photolog).

Delineation laboratory results were characteristically non-hazardous (see Table 1) at both delineation locations and will be used as endpoints for hazardous CMU removal and disposal for the BS-2 area.

Supplemental CMU Assessment

Four (4) additional CMU samples were collected across accessible areas of the southern wall, including SW Concrete-1 through SW Concrete-4. Locations are shown on Figure 1.

Laboratory analytical results for SW Concrete-1, SW Concrete-2, and SW Concrete-4 were characteristically non-hazardous, and the SW Concrete-3 sample location result was elevated exceeding the hazardous TCLP level for arsenic.

Therefore, the CMU block at the SW Concrete-3 location will be removed and disposed of as hazardous, using the SW Concrete-2 and SW Concrete-4 locations as endpoints for this area.

Conclusion

CMU block from the BS-2 area and SW Concrete-3 areas will be removed and handled in accordance with hazardous disposal requirements. Green staining adjacent to the pressure vessel, as noted above, will be discussed with the Department prior to removal and disposal.

A Contained-In Determination request will be prepared and submitted to the NYSDEC for characteristically non-hazardous CMU block with light green staining, represented by the Block Stained-1, SW Concrete-4, SW- Concrete-2, and SW Concrete-1 analytical results.

Non-stained CMU block will be handled as traditional concrete recycling and/or demolition debris. Copies of demolition, non-hazardous and hazardous disposal documentation will be provided to the Department.

Please contact us if you have any questions or require additional information.

Sincerely,
TurnKey Environmental Restoration, LLC



Nathan Munley
Sr. Project Manager

TABLE



TABLE 1
SUMMARY OF BUILDING INTERIOR CONCRETE BLOCK SAMPLE ANALYTICAL RESULTS
100 BOTSFORD PLACE
BCP SITE NO. C915356
BUFFALO, NEW YORK

PARAMETER ¹	Commercial Use SCOs ¹	RCRA TCLP Regulatory Limits ²	Sample Location								
			Block Non-Stained	Block Stained-1	Block Stained-2	BS-2 Delineation A	BS-2 Delineation B	SW Concrete-1	SW Concrete-2	SW Concrete-3	SW Concrete-4
			11/3/2021				4/5/2023				
Total Metals - mg/Kg											
Arsenic	16	--	--	--	--	--	--	124	372	1200	128
Chromium, trivalent	1500	--	--	--	--	--	--	96.3	218	389	107
Chromium, hexavalent	400	--	--	--	--	--	--	12.4	25.2	39.9	13.3
TCLP Metals - mg/L											
Arsenic, TCLP	--	5	ND	0.423 J	4.98	0.0266 J	0.346 J	0.829 J	3.06	10.1	0.968 J
Chromium, TCLP	--	5	ND	0.139 J	33.0	ND	0.035 J	0.0217 J	0.0519 J	0.0818 J	0.0282 J

Notes:
 1. Values per 6NYCRR Part 375 Commercial Use Soil Cleanup Objectives (SCOs).
 2. Values per the USEPA RCRA Regulations Title 40 CFR 261.24
 J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold	= Result exceeds Commercial Use SCOs.
Bold	= Result exceeds RCRA TCLP Regulatory limits.

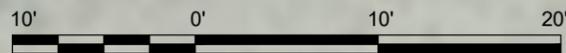
FIGURE

LEGEND:

- BCP BOUNDARY
- PARCEL BOUNDARY
- FENCE

NOTES:

1. BASE IMAGE GOOGLE EARTH 2018



SCALE: 1 INCH = 10 FEET
SCALE IN FEET
(approximate)

DATE: JUNE 2023
DRAFTED BY: EDS

SITE PLAN (AERIAL)

CMU ASSESSMENT RESULTS
100 BOTSFORD PLACE SITE
BCP SITE NO. C915356
BUFFALO, NEW YORK
PREPARED FOR
5001 GROUP, LLC



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

JOB NO.: 0136-018-004

FIGURE 1

DISCLAIMER: PROPERTY OF BENCHMARK CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC. & TURNKEY ENVIRONMENTAL RESTORATION, LLC IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK CIVIL/ENVIRONMENTAL ENGINEERING & GEOLOGY, PLLC & TURNKEY ENVIRONMENTAL RESTORATION, LLC.

APPENDIX A

PHOTO LOG

SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: Preparing to begin concrete sampling.

Photo 2: Concrete core drilling at BS-2 Delineation A location.

Photo 3: Concrete core drilling at BS-2 Delineation B location.

Photo 4: Completed concrete core drilling at Block Stained-2 delineation areas. BS-2 Delineation B is located on far side of door, right frame.

100 Botsford Place, Buffalo, NY 14216

BCP Site No. C915356
Photo Date: April 5, 2023



SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 7:



Photo 8:



- Photo 5: SW Concrete-1 (vertical row of cores) and SW Concrete-2 (horizontal row of cores) sample locations.
Photo 6: SW Concrete-1 concrete core sample location.
Photo 7: SW Concrete-1 concrete core sample.
Photo 8: SW Concrete-2 concrete core sample.

100 Botsford Place, Buffalo, NY 14216

BCP Site No. C915356
Photo Date: April 5, 2023



SITE PHOTOGRAPHS

Photo 9:



Photo 10:



Photo 11:



Photo 12:



Photo 9: SW Concrete-3 (bottom left group of concrete cores) and SW Concrete-4 (upper right group of concrete cores) sample locations.

Photo 10: SW Concrete-3 concrete core sample.

Photo 11: SW Concrete-3 concrete core sample (profile view).

Photo 12: SW Concrete-4 concrete core sample.

100 Botsford Place, Buffalo, NY 14216

BCP Site No. C915356
Photo Date: April 5, 2023



APPENDIX B

LABORATORY ANALYTICAL DATA



ANALYTICAL REPORT

Lab Number:	L2160409
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 225-3314
Project Name:	100 BOTSFORD PLACE SITE
Project Number:	0136-018-004
Report Date:	11/10/21

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2160409
Report Date: 11/10/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2160409-01	BLOCK NON-STAINED	SOLID	100 BOTSFORD PL., BUFFALO, NY	11/03/21 10:27	11/03/21
L2160409-02	BLOCK STAINED - 1	SOLID	100 BOTSFORD PL., BUFFALO, NY	11/03/21 10:48	11/03/21
L2160409-03	BLOCK STAINED - 2	SOLID	100 BOTSFORD PL., BUFFALO, NY	11/03/21 10:56	11/03/21

Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2160409
Report Date: 11/10/21

Case Narrative

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

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

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

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

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

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

Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2160409
Report Date: 11/10/21

Case Narrative (continued)

Report Submission

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

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

Authorized Signature:

 Caitlin Walukevich

Title: Technical Director/Representative

Date: 11/10/21

METALS

Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2160409**Project Number:** 0136-018-004**Report Date:** 11/10/21**SAMPLE RESULTS**

Lab ID: L2160409-01

Date Collected: 11/03/21 10:27

Client ID: BLOCK NON-STAINED

Date Received: 11/03/21

Sample Location: 100 BOTSFORD PL., BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 11/05/21 05:37

Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	11/09/21 12:53	11/10/21 00:56	EPA 3015	1,6010D	DL
Chromium, TCLP	ND		mg/l	0.200	0.021	1	11/09/21 12:53	11/10/21 00:56	EPA 3015	1,6010D	DL
Copper, TCLP	ND		mg/l	0.200	0.022	1	11/09/21 12:53	11/10/21 00:56	EPA 3015	1,6010D	DL



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2160409**Project Number:** 0136-018-004**Report Date:** 11/10/21**SAMPLE RESULTS**

Lab ID: L2160409-02

Date Collected: 11/03/21 10:48

Client ID: BLOCK STAINED - 1

Date Received: 11/03/21

Sample Location: 100 BOTSFORD PL., BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 11/05/21 05:37

Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.423	J	mg/l	1.00	0.019	1	11/09/21 12:53	11/10/21 01:31	EPA 3015	1,6010D	DL
Chromium, TCLP	0.139	J	mg/l	0.200	0.021	1	11/09/21 12:53	11/10/21 01:31	EPA 3015	1,6010D	DL
Copper, TCLP	ND		mg/l	0.200	0.022	1	11/09/21 12:53	11/10/21 01:31	EPA 3015	1,6010D	DL



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2160409**Project Number:** 0136-018-004**Report Date:** 11/10/21**SAMPLE RESULTS**

Lab ID: L2160409-03

Date Collected: 11/03/21 10:56

Client ID: BLOCK STAINED - 2

Date Received: 11/03/21

Sample Location: 100 BOTSFORD PL., BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 11/05/21 05:37

Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	4.98		mg/l	1.00	0.019	1	11/09/21 12:53	11/10/21 01:36	EPA 3015	1,6010D	DL
Chromium, TCLP	33.0		mg/l	0.200	0.021	1	11/09/21 12:53	11/10/21 01:36	EPA 3015	1,6010D	DL
Copper, TCLP	1.41		mg/l	0.200	0.022	1	11/09/21 12:53	11/10/21 01:36	EPA 3015	1,6010D	DL



Project Name: 100 BOTSFORD PLACE SITE

Lab Number: L2160409

Project Number: 0136-018-004

Report Date: 11/10/21

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01-03 Batch: WG1568540-1									
Arsenic, TCLP	ND	mg/l	1.00	0.019	1	11/09/21 12:53	11/10/21 00:30	1,6010D	DL
Chromium, TCLP	ND	mg/l	0.200	0.021	1	11/09/21 12:53	11/10/21 00:30	1,6010D	DL
Copper, TCLP	ND	mg/l	0.200	0.022	1	11/09/21 12:53	11/10/21 00:30	1,6010D	DL

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 11/05/21 05:37

Lab Control Sample Analysis Batch Quality Control

Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2160409
Report Date: 11/10/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-03 Batch: WG1568540-2								
Arsenic, TCLP	99		-		75-125	-		20
Chromium, TCLP	91		-		75-125	-		20
Copper, TCLP	92		-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 100 BOTSFORD PLACE SITE

Lab Number: L2160409

Project Number: 0136-018-004

Report Date: 11/10/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1568540-3 QC Sample: L2160409-01 Client ID: BLOCK NON-STAINED											
Arsenic, TCLP	ND	1.2	1.29	108		-	-		75-125	-	20
Chromium, TCLP	ND	2	1.87	94		-	-		75-125	-	20
Copper, TCLP	ND	2.5	2.38	95		-	-		75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 100 BOTSFORD PLACE SITE

Project Number: 0136-018-004

Lab Number: L2160409

Report Date: 11/10/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1568540-4 QC Sample: L2160409-01 Client ID: BLOCK NON-STAINED						
Arsenic, TCLP	ND	0.036J	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Copper, TCLP	ND	ND	mg/l	NC		20

Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2160409**Project Number:** 0136-018-004**Report Date:** 11/10/21**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(*)
L2160409-01A	Glass 250ml/8oz unpreserved	A	NA		3.2	Y	Absent		-
L2160409-01X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.2	Y	Absent		AS-CI(180),CU-CI(180),CR-CI(180)
L2160409-01X9	Tumble Vessel	A	NA		3.2	Y	Absent		-
L2160409-02A	Glass 250ml/8oz unpreserved	A	NA		3.2	Y	Absent		-
L2160409-02X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.2	Y	Absent		AS-CI(180),CU-CI(180),CR-CI(180)
L2160409-02X9	Tumble Vessel	A	NA		3.2	Y	Absent		-
L2160409-03A	Glass 250ml/8oz unpreserved	A	NA		3.2	Y	Absent		-
L2160409-03X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.2	Y	Absent		AS-CI(180),CU-CI(180),CR-CI(180)
L2160409-03X9	Tumble Vessel	A	NA		3.2	Y	Absent		-

Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2160409
Report Date: 11/10/21

GLOSSARY

Acronyms

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

Report Format: DU Report with 'J' Qualifiers



Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2160409
Report Date: 11/10/21

Footnotes

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

Terms

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

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

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

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

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

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

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results 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.

Report Format: DU Report with 'J' Qualifiers



Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2160409
Report Date: 11/10/21

Data Qualifiers

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

Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2160409
Report Date: 11/10/21

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

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

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



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, **LCHAT 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, TL, Ti, V, Zn.

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

EPA 245.1 Hg.

SM2340B

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



ANALYTICAL REPORT

Lab Number:	L2318071
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 856-0599
Project Name:	100 BOTSFORD PLACE SITE
Project Number:	0136-018-004
Report Date:	04/19/23

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: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2318071
Report Date: 04/19/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2318071-01	BS-2 DELINEATION A	SOLID	100 BOTSFORD PL, BUFFALO, NY	04/05/23 10:33	04/06/23
L2318071-02	BS-2 DELINEATION B	SOLID	100 BOTSFORD PL, BUFFALO, NY	04/05/23 10:39	04/06/23
L2318071-03	SW CONCRETE-1	CONCRETE	100 BOTSFORD PL, BUFFALO, NY	04/05/23 10:51	04/06/23
L2318071-04	SW CONCRETE-2	CONCRETE	100 BOTSFORD PL, BUFFALO, NY	04/05/23 11:00	04/06/23
L2318071-05	SW CONCRETE-3	CONCRETE	100 BOTSFORD PL, BUFFALO, NY	04/05/23 12:10	04/06/23
L2318071-06	SW CONCRETE-4	CONCRETE	100 BOTSFORD PL, BUFFALO, NY	04/05/23 12:30	04/06/23

Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2318071
Report Date: 04/19/23

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: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2318071
Report Date: 04/19/23

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.

Total Metals

The WG1767352-3 MS recoveries for arsenic (0%) and chromium (22%), performed on L2318071-03, do not apply because the sample concentrations are greater than four times the spike amounts added.

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: 04/19/23

METALS

Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**SAMPLE RESULTS**

Lab ID: L2318071-01

Date Collected: 04/05/23 10:33

Client ID: BS-2 DELINEATION A

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 04/09/23 14:00

Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.0266	J	mg/l	1.00	0.0190	1	04/16/23 13:01	04/17/23 23:54	EPA 3015	1,6010D	GCL
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	04/16/23 13:01	04/17/23 23:54	EPA 3015	1,6010D	GCL
Chromium, TCLP	ND		mg/l	0.200	0.0210	1	04/16/23 13:01	04/17/23 23:54	EPA 3015	1,6010D	GCL



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**SAMPLE RESULTS**

Lab ID: L2318071-02

Date Collected: 04/05/23 10:39

Client ID: BS-2 DELINEATION B

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 04/09/23 14:00

Matrix: Solid

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.346	J	mg/l	1.00	0.0190	1	04/16/23 13:01	04/17/23 23:39	EPA 3015	1,6010D	GCL
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	04/16/23 13:01	04/17/23 23:39	EPA 3015	1,6010D	GCL
Chromium, TCLP	0.0350	J	mg/l	0.200	0.0210	1	04/16/23 13:01	04/17/23 23:39	EPA 3015	1,6010D	GCL



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**SAMPLE RESULTS**

Lab ID: L2318071-03

Date Collected: 04/05/23 10:51

Client ID: SW CONCRETE-1

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 04/09/23 14:00

Matrix: Concrete

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.829	J	mg/l	1.00	0.0190	1	04/16/23 13:01	04/17/23 23:44	EPA 3015	1,6010D	GCL
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	04/16/23 13:01	04/17/23 23:44	EPA 3015	1,6010D	GCL
Chromium, TCLP	0.0217	J	mg/l	0.200	0.0210	1	04/16/23 13:01	04/17/23 23:44	EPA 3015	1,6010D	GCL



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**SAMPLE RESULTS**

Lab ID: L2318071-03

Date Collected: 04/05/23 10:51

Client ID: SW CONCRETE-1

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Concrete

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	124		mg/kg	0.423	0.088	1	04/17/23 22:17	04/18/23 20:13	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.061	J	mg/kg	0.423	0.042	1	04/17/23 22:17	04/18/23 20:13	EPA 3050B	1,6010D	DMB
Chromium, Total	96.3		mg/kg	0.423	0.041	1	04/17/23 22:17	04/18/23 20:13	EPA 3050B	1,6010D	DMB



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**SAMPLE RESULTS**

Lab ID: L2318071-04

Date Collected: 04/05/23 11:00

Client ID: SW CONCRETE-2

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 04/09/23 14:00

Matrix: Concrete

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	3.06		mg/l	1.00	0.0190	1	04/16/23 13:01	04/17/23 23:49	EPA 3015	1,6010D	GCL
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	04/16/23 13:01	04/17/23 23:49	EPA 3015	1,6010D	GCL
Chromium, TCLP	0.0519	J	mg/l	0.200	0.0210	1	04/16/23 13:01	04/17/23 23:49	EPA 3015	1,6010D	GCL



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**SAMPLE RESULTS**

Lab ID: L2318071-04

Date Collected: 04/05/23 11:00

Client ID: SW CONCRETE-2

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Concrete

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	372		mg/kg	0.425	0.088	1	04/17/23 22:17	04/18/23 19:56	EPA 3050B	1,6010D	DMB
Cadmium, Total	0.174	J	mg/kg	0.425	0.042	1	04/17/23 22:17	04/18/23 19:56	EPA 3050B	1,6010D	DMB
Chromium, Total	218		mg/kg	0.425	0.041	1	04/17/23 22:17	04/18/23 19:56	EPA 3050B	1,6010D	DMB



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**SAMPLE RESULTS**

Lab ID: L2318071-05

Date Collected: 04/05/23 12:10

Client ID: SW CONCRETE-3

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 04/09/23 14:00

Matrix: Concrete

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	10.1		mg/l	1.00	0.0190	1	04/16/23 13:01	04/18/23 00:28	EPA 3015	1,6010D	GCL
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	04/16/23 13:01	04/18/23 00:28	EPA 3015	1,6010D	GCL
Chromium, TCLP	0.0818	J	mg/l	0.200	0.0210	1	04/16/23 13:01	04/18/23 00:28	EPA 3015	1,6010D	GCL



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**SAMPLE RESULTS**

Lab ID: L2318071-05

Date Collected: 04/05/23 12:10

Client ID: SW CONCRETE-3

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Concrete

Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	1200		mg/kg	0.432	0.090	1	04/17/23 22:17	04/18/23 20:02	EPA 3050B	1,6010D	DMB
Cadmium, Total	ND		mg/kg	0.432	0.042	1	04/17/23 22:17	04/18/23 20:02	EPA 3050B	1,6010D	DMB
Chromium, Total	389		mg/kg	0.432	0.041	1	04/17/23 22:17	04/18/23 20:02	EPA 3050B	1,6010D	DMB



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**SAMPLE RESULTS**

Lab ID: L2318071-06

Date Collected: 04/05/23 12:30

Client ID: SW CONCRETE-4

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

TCLP/SPLP Ext. Date: 04/09/23 14:00

Matrix: Concrete

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.968	J	mg/l	1.00	0.0190	1	04/16/23 13:01	04/18/23 00:33	EPA 3015	1,6010D	GCL
Cadmium, TCLP	ND		mg/l	0.100	0.0100	1	04/16/23 13:01	04/18/23 00:33	EPA 3015	1,6010D	GCL
Chromium, TCLP	0.0282	J	mg/l	0.200	0.0210	1	04/16/23 13:01	04/18/23 00:33	EPA 3015	1,6010D	GCL



Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**SAMPLE RESULTS**

Lab ID: L2318071-06

Date Collected: 04/05/23 12:30

Client ID: SW CONCRETE-4

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Concrete

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	128		mg/kg	0.422	0.088	1	04/17/23 22:17	04/18/23 20:08	EPA 3050B	1,6010D	DMB
Cadmium, Total	ND		mg/kg	0.422	0.041	1	04/17/23 22:17	04/18/23 20:08	EPA 3050B	1,6010D	DMB
Chromium, Total	107		mg/kg	0.422	0.041	1	04/17/23 22:17	04/18/23 20:08	EPA 3050B	1,6010D	DMB



Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2318071
Report Date: 04/19/23

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01-06 Batch: WG1767346-1									
Arsenic, TCLP	ND	mg/l	1.00	0.0190	1	04/16/23 13:01	04/17/23 23:29	1,6010D	GCL
Cadmium, TCLP	ND	mg/l	0.100	0.0100	1	04/16/23 13:01	04/17/23 23:29	1,6010D	GCL
Chromium, TCLP	ND	mg/l	0.200	0.0210	1	04/16/23 13:01	04/17/23 23:29	1,6010D	GCL

Prep Information

Digestion Method: EPA 3015
TCLP/SPLP Extraction Date: 04/08/23 16:24

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 03-06 Batch: WG1767352-1									
Arsenic, Total	ND	mg/kg	0.400	0.083	1	04/17/23 22:17	04/18/23 19:47	1,6010D	DMB
Cadmium, Total	ND	mg/kg	0.400	0.039	1	04/17/23 22:17	04/18/23 19:47	1,6010D	DMB
Chromium, Total	ND	mg/kg	0.400	0.038	1	04/17/23 22:17	04/18/23 19:47	1,6010D	DMB

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 100 BOTSFORD PLACE SITE

Project Number: 0136-018-004

Lab Number: L2318071

Report Date: 04/19/23

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 Batch: WG1767346-2								
Arsenic, TCLP	110		-		75-125	-		20
Cadmium, TCLP	104		-		75-125	-		20
Chromium, TCLP	100		-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 03-06 Batch: WG1767352-2 SRM Lot Number: D116-540								
Arsenic, Total	101		-		82-119	-		
Cadmium, Total	102		-		82-118	-		
Chromium, Total	100		-		81-118	-		

Matrix Spike Analysis Batch Quality Control

Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2318071
Report Date: 04/19/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1767346-3 QC Sample: L2318071-01 Client ID: BS-2 DELINEATION A												
Arsenic, TCLP	0.0266J	1.2	1.35	112		-	-		75-125	-		20
Cadmium, TCLP	ND	0.53	0.555	105		-	-		75-125	-		20
Chromium, TCLP	ND	2	1.97	98		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 03-06 QC Batch ID: WG1767352-3 QC Sample: L2318071-03 Client ID: SW CONCRETE-1												
Arsenic, Total	124	10.1	119	0	Q	-	-		75-125	-		20
Cadmium, Total	0.061J	4.45	3.61	81		-	-		75-125	-		20
Chromium, Total	96.3	16.8	100	22	Q	-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 100 BOTSFORD PLACE SITE

Project Number: 0136-018-004

Lab Number: L2318071

Report Date: 04/19/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1767346-4 QC Sample: L2318071-01 Client ID: BS-2 DELINEATION A						
Arsenic, TCLP	0.0266J	ND	mg/l	NC		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 03-06 QC Batch ID: WG1767352-4 QC Sample: L2318071-03 Client ID: SW CONCRETE-1						
Arsenic, Total	124	112	mg/kg	10		20
Cadmium, Total	0.061J	0.097J	mg/kg	NC		20
Chromium, Total	96.3	93.0	mg/kg	3		20

Project Name: 100 BOTSFORD PLACE SITE

Project Number: 0136-018-004

**Lab Serial Dilution
Analysis
Batch Quality Control**

Lab Number: L2318071

Report Date: 04/19/23

Parameter	Native Sample	Serial Dilution	Units	% D	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 03-06 QC Batch ID: WG1767352-6 QC Sample: L2318071-03 Client ID: SW CONCRETE-1						
Arsenic, Total	124	124	mg/kg	0		20
Chromium, Total	96.3	107	mg/kg	11		20

INORGANICS & MISCELLANEOUS

Project Name: 100 BOTSFORD PLACE SITE

Lab Number: L2318071

Project Number: 0136-018-004

Report Date: 04/19/23

SAMPLE RESULTS

Lab ID: L2318071-03

Date Collected: 04/05/23 10:51

Client ID: SW CONCRETE-1

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Concrete

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.1		%	0.100	NA	1	-	04/08/23 12:38	121,2540G	ROI
Chromium, Hexavalent	12.4		mg/kg	4.30	0.859	5	04/17/23 11:50	04/18/23 00:10	1,7196A	WMT



Project Name: 100 BOTSFORD PLACE SITE

Lab Number: L2318071

Project Number: 0136-018-004

Report Date: 04/19/23

SAMPLE RESULTS

Lab ID: L2318071-04

Date Collected: 04/05/23 11:00

Client ID: SW CONCRETE-2

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Concrete

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	04/08/23 12:38	121,2540G	ROI
Chromium, Hexavalent	25.2		mg/kg	8.99	1.80	10	04/17/23 11:50	04/18/23 00:10	1,7196A	WMT



Project Name: 100 BOTSFORD PLACE SITE

Lab Number: L2318071

Project Number: 0136-018-004

Report Date: 04/19/23

SAMPLE RESULTS

Lab ID: L2318071-05

Date Collected: 04/05/23 12:10

Client ID: SW CONCRETE-3

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Concrete

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.1		%	0.100	NA	1	-	04/08/23 12:38	121,2540G	ROI
Chromium, Hexavalent	39.9		mg/kg	8.88	1.78	10	04/17/23 11:50	04/18/23 00:10	1,7196A	WMT



Project Name: 100 BOTSFORD PLACE SITE

Lab Number: L2318071

Project Number: 0136-018-004

Report Date: 04/19/23

SAMPLE RESULTS

Lab ID: L2318071-06

Date Collected: 04/05/23 12:30

Client ID: SW CONCRETE-4

Date Received: 04/06/23

Sample Location: 100 BOTSFORD PL, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Concrete

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	04/08/23 12:38	121,2540G	ROI
Chromium, Hexavalent	13.3		mg/kg	4.49	0.899	5	04/17/23 11:50	04/18/23 00:10	1,7196A	WMT



Project Name: 100 BOTSFORD PLACE SITE

Lab Number: L2318071

Project Number: 0136-018-004

Report Date: 04/19/23

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): 03-06 Batch: WG1767712-1									
Chromium, Hexavalent	ND	mg/kg	0.800	0.160	1	04/17/23 11:50	04/18/23 00:10	1,7196A	WMT

Lab Control Sample Analysis

Batch Quality Control

Project Name: 100 BOTSFORD PLACE SITE

Lab Number: L2318071

Project Number: 0136-018-004

Report Date: 04/19/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03-06 Batch: WG1767712-2								
Chromium, Hexavalent	90		-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: 100 BOTSFORD PLACE SITE

Lab Number: L2318071

Project Number: 0136-018-004

Report Date: 04/19/23

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03-06 QC Batch ID: WG1767712-4 QC Sample: L2318071-03 Client ID: SW CONCRETE-1												
Chromium, Hexavalent	12.4	1530	1520	98		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 100 BOTSFORD PLACE SITE

Project Number: 0136-018-004

Lab Number: L2318071

Report Date: 04/19/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 03-06 QC Batch ID: WG1764291-1 QC Sample: L2318071-03 Client ID: SW CONCRETE-1						
Solids, Total	93.1	92.7	%	0		20
General Chemistry - Westborough Lab Associated sample(s): 03-06 QC Batch ID: WG1767712-6 QC Sample: L2318071-03 Client ID: SW CONCRETE-1						
Chromium, Hexavalent	12.4	10.3	mg/kg	19		20

Project Name: 100 BOTSFORD PLACE SITE**Lab Number:** L2318071**Project Number:** 0136-018-004**Report Date:** 04/19/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2318071-01A	Glass 250ml/8oz unpreserved	A	NA		3.9	Y	Absent		-
L2318071-01X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.9	Y	Absent		CD-CI(180),AS-CI(180),CR-CI(180)
L2318071-01X9	Tumble Vessel	A	NA		3.9	Y	Absent		-
L2318071-02A	Glass 250ml/8oz unpreserved	A	NA		3.9	Y	Absent		-
L2318071-02X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.9	Y	Absent		CD-CI(180),AS-CI(180),CR-CI(180)
L2318071-02X9	Tumble Vessel	A	NA		3.9	Y	Absent		-
L2318071-03A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		AS-TI(180),CR-TI(180),CD-TI(180)
L2318071-03B	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		TS(7),HEXCR-7196(30)
L2318071-03C	Glass 250ml/8oz unpreserved	A	NA		3.9	Y	Absent		TS(7),HEXCR-7196(30)
L2318071-03X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.9	Y	Absent		CD-CI(180),AS-CI(180),CR-CI(180)
L2318071-03X9	Tumble Vessel	A	NA		3.9	Y	Absent		-
L2318071-04A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		AS-TI(180),CR-TI(180),CD-TI(180)
L2318071-04B	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		TS(7),HEXCR-7196(30)
L2318071-04C	Glass 250ml/8oz unpreserved	A	NA		3.9	Y	Absent		TS(7),HEXCR-7196(30)
L2318071-04X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.9	Y	Absent		CD-CI(180),AS-CI(180),CR-CI(180)
L2318071-04X9	Tumble Vessel	A	NA		3.9	Y	Absent		-
L2318071-05A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		AS-TI(180),CR-TI(180),CD-TI(180)
L2318071-05B	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		TS(7),HEXCR-7196(30)
L2318071-05C	Glass 250ml/8oz unpreserved	A	NA		3.9	Y	Absent		TS(7),HEXCR-7196(30)
L2318071-05X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.9	Y	Absent		CD-CI(180),AS-CI(180),CR-CI(180)
L2318071-05X9	Tumble Vessel	A	NA		3.9	Y	Absent		-
L2318071-06A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		AS-TI(180),CR-TI(180),CD-TI(180)

Project Name: 100 BOTSFORD PLACE SITE

Project Number: 0136-018-004

Serial_No:04192314:49

Lab Number: L2318071

Report Date: 04/19/23

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2318071-06B	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		TS(7),HEXCR-7196(30)
L2318071-06C	Glass 250ml/8oz unpreserved	A	NA		3.9	Y	Absent		TS(7),HEXCR-7196(30)
L2318071-06X	Plastic 120ml HNO3 preserved Extracts	A	NA		3.9	Y	Absent		CD-CI(180),AS-CI(180),CR-CI(180)
L2318071-06X9	Tumble Vessel	A	NA		3.9	Y	Absent		-

Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2318071
Report Date: 04/19/23

GLOSSARY

Acronyms

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

Report Format: DU Report with 'J' Qualifiers



Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2318071
Report Date: 04/19/23

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

Report Format: DU Report with 'J' Qualifiers



Project Name: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2318071
Report Date: 04/19/23

Data Qualifiers

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.
- 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: 100 BOTSFORD PLACE SITE
Project Number: 0136-018-004

Lab Number: L2318071
Report Date: 04/19/23

REFERENCES

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

LIMITATION OF LIABILITIES

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

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



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, **LCHAT 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

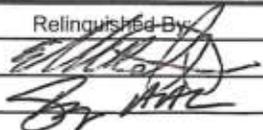
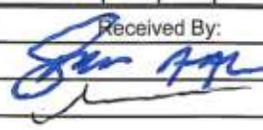
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

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

EPA 245.1 Hg.

SM2340B

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

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	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 1 of 1	Date Rec'd in Lab 4/7/13	ALPHA Job # L2318071																
		Project Information Project Name: 100 Botsford Place Site Project Location: 100 Betsford Pl., Buffalo, NY Project # 0136-018-004 (Use Project name as Project #) <input type="checkbox"/>		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 #															
Client Information Client: Benchmark and Tumble Companies Address: 2558 Hamburg Turnpike Suite 300 Buffalo, NY Phone: (716) 856-0599 Fax: Email: nmunley@bm-tk.com		Project Manager: Nate Munley ALPHAQuote #:		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																	
Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:		Other project specific requirements/comments: Please specify Metals or TAL.																	
ANALYSIS TLP Arsenic, cadmium, chromium (EPA 1311) Total Arsenic, cadmium, chromium (EPA 6010) Hexavalent chromium (HPL)																					
Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below) Sample Specific Comments																					
Total Bottles																					
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TLP Arsenic, cadmium, chromium (EPA 1311)	Total Arsenic, cadmium, chromium (EPA 6010)	Hexavalent chromium (HPL)													
18071-01	BS-2 Delineation A	4-5-23	1033	Solid	ETS	X															1
-02	BS-2 Delineation B	4-5-23	1039			X															1
-03	SW Concrete - 1	4-5-23	1051			X	X	X													3
-04	SW Concrete - 2	4-5-23	1100			X	X	X													3
-05	SW Concrete - 3	4-5-23	1210			X	X	X													3
-06	SW Concrete - 4	4-5-23	1230	V	V	X	X	X													3
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 A A A			Preservative A A A			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.)									
Relinquished By: 		Date/Time: 4/11/13 1629		Received By: 		Date/Time: 4/6/13 1000		Date/Time: 4/7/13 0055													