September 24, 2021

Mr. Matthew King
NYSDEC Region 9
270 Michigan Avenue
Buffalo, New York 14203

Re: Interim Remedial Measures Addendum
Michigan-Best Development Site
BCP Site No. C915375
Buffalo, New York

Dear Mr. King:

On behalf of Michigan & Best LLC (M&B), TurnKey Environmental Restoration, LLC (TurnKey) began Remedial Investigation (RI) activities at the Michigan-Best Development Site (Site, see Figures 1 through 3), in accordance with the New York State Department of Environmental Conservation (NYSDEC) approved Remedial Investigation/Interim Remedial Measure/Alternatives Analysis Work Plan[1] (RI/IRM/AA WP) in August 2021. During the RI activities, waste characterization sampling was completed to facilitate landfill waste profile preparation for soil/fill excavation activities to be completed as part of the IRM. The goal of the IRM is to remove soil/fill present at the Site to achieve the 6NYCRR Part 375 Unrestricted Soil Cleanup Objectives (USCOs).

Ten (10) waste characterization samples (WC-1 through WC-10) were collected during the RI from soil/fill across the Site to be addressed as part of the IRM. The samples were submitted for waste characterization analysis which included: Toxicity Characteristic Leaching Procedure (TCLP) volatile organic compounds (VOCs), TCLP semi-volatile organic compounds (SVOCs), TCLP Metals, polychlorinated biphenyls (PCBs), ignitability, corrosivity and reactivity. Nine (9) of the ten (10) waste characterization samples collected indicated non-hazardous characteristics. One (1) sample, WC-4, had a detection of leachable lead of 467 mg/l, which exceeded the corresponding USEPA Hazardous Waste Threshold of 5 mg/L and, as such, would be a characteristic hazardous waste if generated for disposal. The waste characterization sample locations are shown on Figure 4, along with the results of the total lead concentrations detected at locations in the vicinity of TP-33, where WC-4 was collected. Table 1 is also a summary of the lead concentration in the vicinity of TP-33. The waste characterization laboratory reports are included in Attachment 1.

[1] "Remedial Investigation/Interim Remedial Measures/Alternatives Analysis Work Plan, Michigan-Best Development Site, Buffalo, New York". Prepared by TurnKey Environmental Restoration, LLC in association with Benchmark Civil/Environmental Engineering & Geology, PLLC" Revised August 2021.

M&B would like to delineate the extent of the soil/fill material exhibiting leachable lead above 5 mg/L and treat the soil/fill to render the material non-hazardous prior to excavating and disposing of the material as a solid waste. Portland cement is being proposed as the amendment to be added to stabilize and reduce the leachability of the soil/fill in the TP-33 area.

The scope of work to address the soil/fill exhibiting elevated lead leachability is provided below.

SOIL/FILL DELINEATION

To delineate the horizontal extent of the area that will require stabilization, test pits will be completed in the soil/fill around TP-33 to collect soil/fill samples for TCLP lead analysis. Figure 4 identifies the proposed locations of test pits to collect six (6) soil/fill samples. [WC-1 was collected from TP-30, approximately 20 feet southeast of TP-33 (WC-4), and the results indicated non-hazardous characteristics. Two (2) samples will also be collected from the sand or native clay soil underlying the TP-33 area and analyzed for TCLP lead to estimate the vertical extent of the area requiring treatment. Sample results less than 5 mg/l will be considered acceptable for defining the limit of the affected area. If a sample result is greater than 5 mg/l, additional samples will be collected and tested to define the limits to less than 5 mg/l.

The horizontal and vertical delineation will be used to determine the volume of soil/fill to be treated.

A test pit will also be completed in the immediate vicinity of TP-33 to collect soil/fill representative of WC-4 for the Bench-Scale Lead Stabilization Assessment to be completed, as discussed below. The soil/fill collected will be tested for TCLP lead to verify that the soil/fill contains leachable lead concentrations greater than 5 mg/l prior to completing the Bench-Scale Lead Stabilization Assessment. If soil/fill collected does not contain leachable lead concentrations greater than 5 mg/l, addition soil/fill will be collected and analyzed to verify elevated leachability prior to starting the Assessment.

BENCH-SCALE LEAD STABILIZATION ASSESSMENT

Soil/fill containing leachable lead concentrations greater than 5 mg/l will be used to complete the Bench-Scale Lead Stabilization Assessment (Assessment). A 5-gallon bucket of soil/fill from the Site will be collected to complete the Assessment. The soil/fill will be homogenized and three (3), 2.2-pound (lbs., 1 kilogram) treatment samples will be created, identified as Treatment Sample (TS)-1 through -3.

The TSs will be mixed with Portland Cement on a weight-by-weight basis, as follows:

Sample	Sample Weight (lbs.)	% Portland	Portland Weight (lbs.)
TS-1	2.2	3%	0.066
TS-2	2.2	5%	0.11
TS-3	2.2	10%	0.22

The appropriate weight of Portland Cement will be blended with the soil/fill. A representative sample will be collected from each TS and submitted to the laboratory for TCLP Lead analysis. TCLP lead results less than 5 mg/l will be the treatment/stabilization goal for the Assessment.

Results of the Assessment will be provided to NYSDEC in a letter report. The report will include the area and estimated volume/weight of the area to be treated, the Assessment results, and the proposed amount of Portland Cement to treat/stabilize the soil/fill exhibiting elevated lead leachability. Once approved by NYSDEC, the appropriate amount of Portland Cement will be ordered, and equipment will be mobilized as discussed below.

SOIL/FILL TREATMENT/STABILIZATION

The remedial work to address the lead area will be documented by an experienced TurnKey professional to the horizontal and vertical limits determined by the delineation work discussed above. The appropriate weight of Portland Cement determined by the Assessment, will be mechanically blended with the soil/fill in-place with an excavator to treat/stabilize the area. Water will be used as necessary to adequately homogenize the cement material within the soil/fill and for dust control. The treatment area will be divided into approximate 250-ton sectors for blending and confirmation testing purposes. [Treatment area is currently estimated at 40 ft by 40 ft by 5 ft, about 300 cubic yards, or 475 tons.] Confirmation analysis will consist of minimum of 1 sample per sector for TCLP lead, with a goal of less than 5 mg/l.

A Community Air Monitoring Plan (CAMP), which was included in the HASP of the RI/IRM/AA WP, will be implemented during in-place treatment activities. If community air monitoring indicates the need for additional dust suppression beyond that afforded by the water added during the blending operation, the contractor will apply a supplemental water spray across the treatment and surrounding areas, as necessary to mitigate airborne dust formation and migration. Potable water will either be obtained from a public hydrant or provided via a water truck/tank with water from an off-site source.

The treatment/stabilization work will be completed in Level C personal protective equipment (PPE), with field staff and operators wearing half or full-face respirators with P95 particulate filter cartridges. Care will be taken to minimize dust formation during in-place treatment, and water will be used as needed for dust suppression.

After blending, the post-treatment samples will be collected by TurnKey at a frequency of one (1) per 250 tons and analyzed for TCLP lead. In the event treated soil/fill sample result(s) is greater than of 5 mg/L TCLP lead, additional Portland cement will be added to the quadrant with the exceedance at the direction of TurnKey, and the soil/fill will be retested.

Once the soils meet the treatment criteria of less than 5 mg/L TCLP lead, the soil/fill will be excavated for off-site disposal as non-hazardous solid waste at a permitted landfill facility.

REPORTING REQUIREMENTS

The work described in this IRM Addendum will be documented in the RI/IRM/AA Report and the Final Engineering Report, which will include summary of the work completed, Portland Cement volumes, post-treatment analytical results, landfill waste profile approvals, non-hazardous disposal documentation, and appropriate tables and figures.

TurnKey has successfully employed this approach at other BCP and Superfund sites in Region 9. Please let us know if you require additional information or have any questions.

Sincerely,
TurnKey Environmental Restoration, LLC

Christopher Boron, P.G.
Sr. Project Manager

Thomas H. Forbes, P.E.
Certifying Engineer

Attachments:
Figures 1 through 4
Table 1 – Lead Concentrations
Attachment 1 – Waste Characterization Laboratory Reports

FIGURES

F:\CAD\TurnKey\Cedarland Development Group\Michigan & Best\IRM Addendum\Figure 1; Site Location and Vicinity Map.dwg, 9/22/2021 11:05:41 AM, DWG To PDF.pc3

FIGURE 1

2,000' 0' 2,000' 4,000'

SCALE: 1 INCH = 2,000 FEET
SCALE IN FEET
(approximate)

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QUADRANGLE LOCATION

SITE LOCATION AND VICINITY MAP

IRM ADDENDUM

MICHIGAN-BEST DEVELOPMENT

BUFFALO, NEW YORK

PREPARED FOR

MICHIGAN & BEST LLC

BENCHMARK IN ASSOCIATION WITH TURNKEY ENVIRONMENTAL RESTORATION, LLC

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

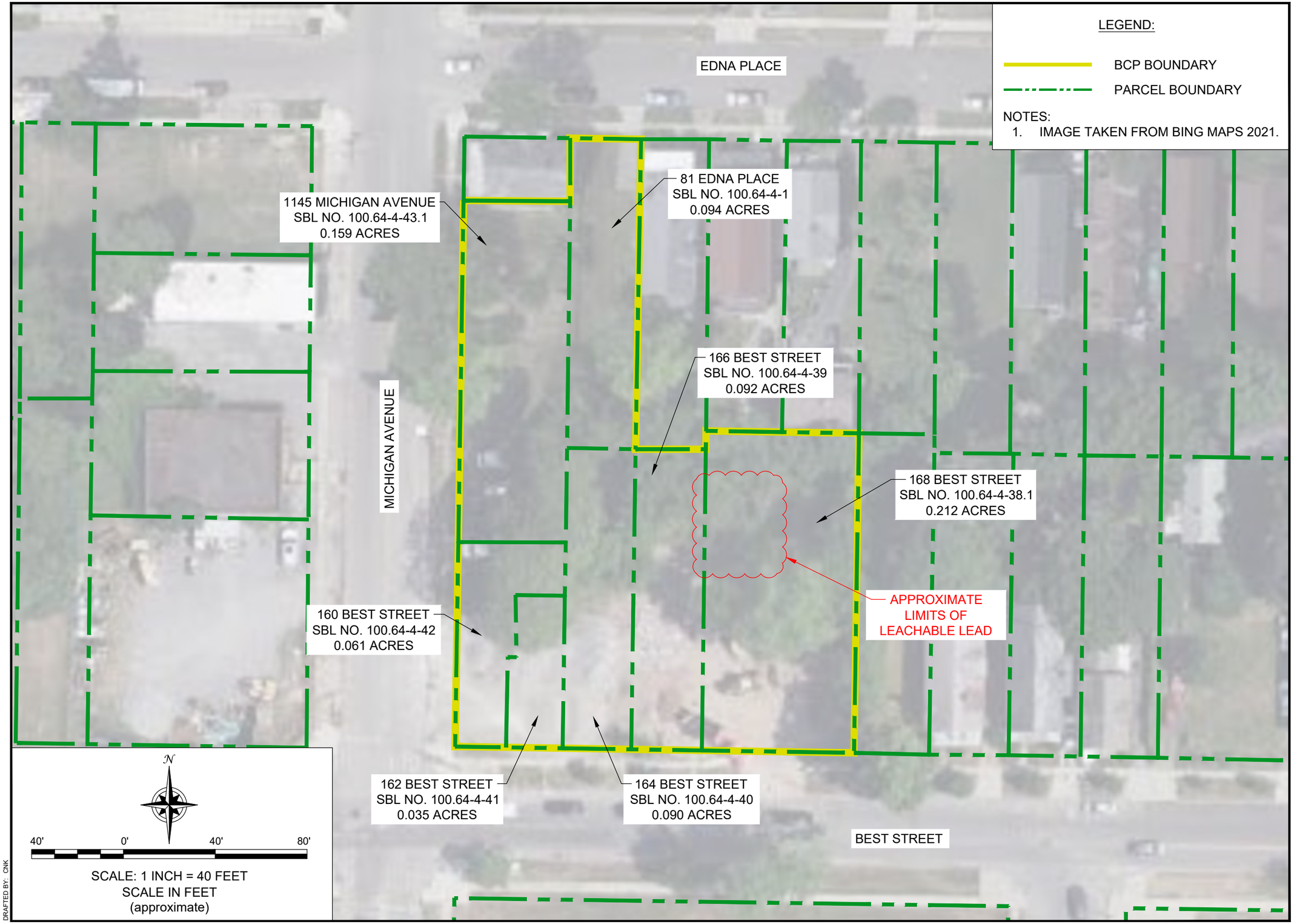
PROJECT NO.: T0569-021-001

DATE: SEPTEMBER 2021

DRAFTED BY: CNK

***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.*

F:\CAD\TurnKey\Cedarland Development Group\Michigan & Best\IRM Addendum\Figure 2- Site Plan (Aerial).dwg, 9/22/2021 11:06:53 AM, DWG To PDF.pc3



LEGEND:

BCP BOUNDARY

PARCEL BOUNDARY

NOTES:
1. IMAGE TAKEN FROM BING MAPS 2021.

N

40' 0' 40' 80'

SCALE: 1 INCH = 40 FEET
SCALE IN FEET
(approximate)

DATE: SEPTEMBER 2021
DRAFTED BY: CNK

TURNKEY ENVIRONMENTAL RESTORATION, LLC
IN ASSOCIATION WITH
BENCHMARK
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218.
(716) 856-0599

JOB NO.: T0569-020-001

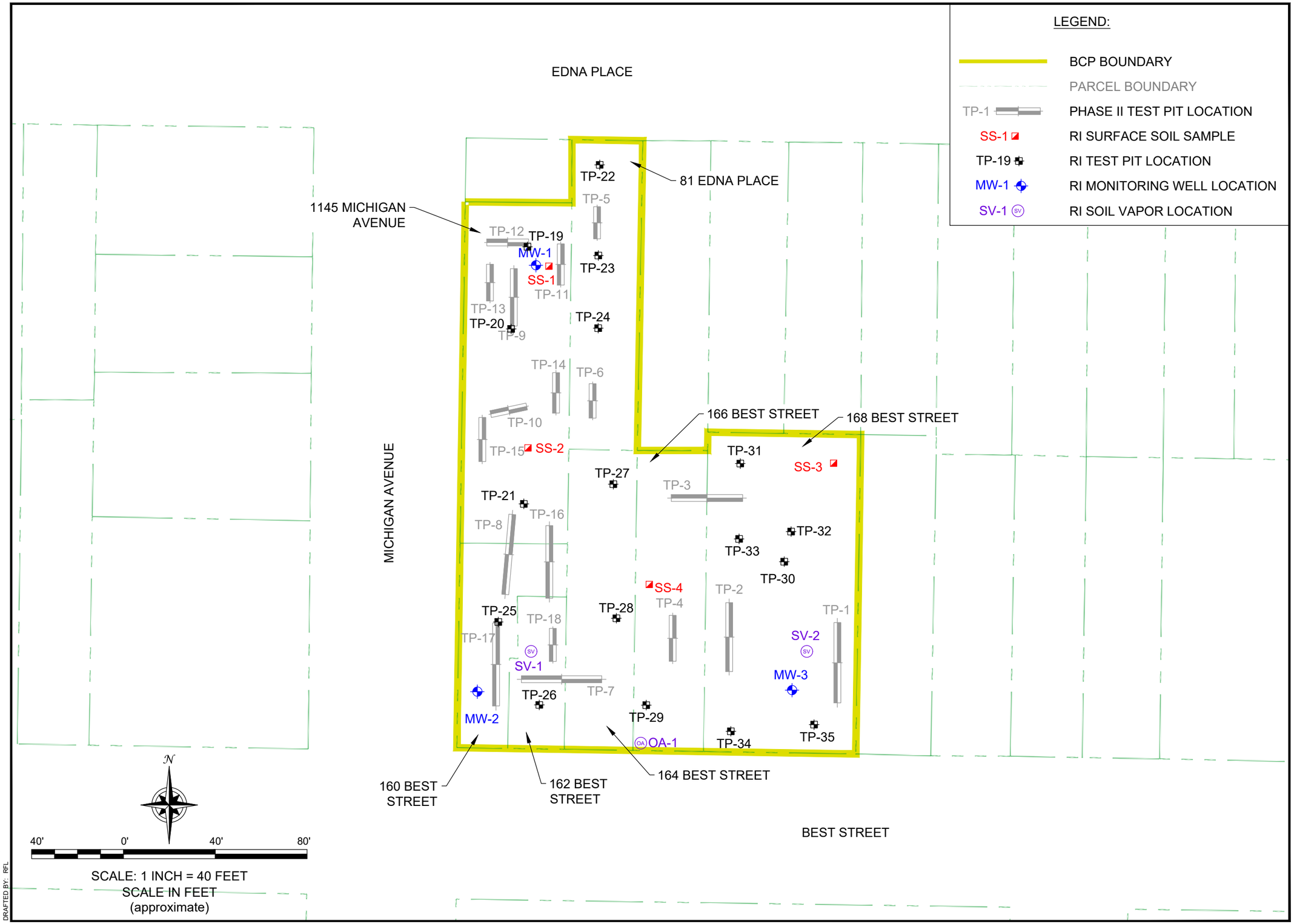
SITE PLAN (AERIAL)

IRM ADDENDUM
MICHIGAN-BEST DEVELOPMENT
BUFFALO, NEW YORK
PREPARED FOR
MICHIGAN & BEST LLC

FIGURE 2

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.*

F:\CAD\TurnKey\Cedarland Development Group\Michigan & Best\IRM Addendum\Figure 3; Remedial Investigation Locations.dwg, 9/22/2021 11:11:02 AM, DWG To PDF.pc3



DATE: SEPTEMBER 2021
DRAFTED BY: RFL

TURNKEY ENVIRONMENTAL RESTORATION, LLC
IN ASSOCIATION WITH
BENCHMARK
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218,
(716) 856-0599

JOB NO.: T0569-021-001

REMEDIAL INVESTIGATION LOCATIONS

IRM ADDENDUM
MICHIGAN-BEST DEVELOPMENT
BUFFALO, NEW YORK
PREPARED FOR
MICHIGAN & BEST LLC

FIGURE 3

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.*

F:\CAD\TurnKey\Cedarland Development Group\Michigan & Best\IRM Addendum\Figure 4, Summary of Lead Impacts and IRM Delineation Area.dwg, 10/4/2021 3:42:21 PM, DWG To PDF.pc3

EDNA PLACE

1145 MICHIGAN AVENUE

81 EDNA PLACE

MICHIGAN AVENUE

BEST STREET

164 BEST STREET

160 BEST STREET

162 BEST STREET

168 BEST STREET

166 BEST STREET

WC-6 NON-HAZARDOUS

WC-5 NON-HAZARDOUS

WC-7 NON-HAZARDOUS

WC-8 NON-HAZARDOUS

WC-9 NON-HAZARDOUS

WC-10 NON-HAZARDOUS

WC-3 NON-HAZARDOUS

WC-2 NON-HAZARDOUS

WC-4 LEACHABLE LEAD

WC-1 NON-HAZARDOUS

TP-1, TP-2, TP-3, TP-4, TP-5, TP-6, TP-7, TP-8, TP-9, TP-10, TP-11, TP-12, TP-13, TP-14, TP-15, TP-16, TP-17, TP-18, TP-19, TP-20, TP-21, TP-22, TP-23, TP-24, TP-25, TP-26, TP-27, TP-28, TP-29, TP-30, TP-31, TP-32, TP-33, TP-34, TP-35, TP-36, TP-37, TP-38, TP-39, TP-40, TP-41, TP-42

MW-1, MW-2, MW-3

SS-1, SS-2, SS-3, SS-4

SV-1, SV-2

OA-1

154 MG/KG

298 MG/KG

847 MG/KG

53,200 MG/KG

167 MG/KG

315 MG/KG

243 MG/KG

57,100 MG/KG

197 MG/KG

323 MG/KG

803 MG/KG

384 MG/KG

641 MG/KG

AREA OF LEAD-IMPACTED SOILS TO BE FURTHER DEFINED AND TREATED

LEGEND:

- BCP BOUNDARY
- PARCEL BOUNDARY
- TP-1 — PHASE II TEST PIT LOCATION
- SS-1 — RI SURFACE SOIL SAMPLE
- TP-19 — RI TEST PIT LOCATION
- MW-1 — RI MONITORING WELL LOCATION
- SV-1 — RI SOIL VAPOR LOCATION
- OA-1 — RI OUTDOOR AIR LOCATION
- 243 MG/KG — TOTAL LEAD CONCENTRATION
- TP-36 — PROPOSED DELINEATION TEST PIT SAMPLE LOCATION

N

40' 0' 40' 80'

SCALE: 1 INCH = 40 FEET
SCALE IN FEET
(approximate)

DATE: OCTOBER 2021
DRAFTED BY: RFL

TURNKEY ENVIRONMENTAL RESTORATION, LLC
IN ASSOCIATION WITH
BENCHMARK
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218,
(716) 856-0599

JOB NO.: T0569-021-001

SUMMARY OF LEAD IMPACTS AND IRM DELINEATION AREA

IRM ADDENDUM

MICHIGAN-BEST DEVELOPMENT

BUFFALO, NEW YORK

PREPARED FOR

MICHIGAN & BEST LLC

FIGURE 4

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.*

TABLES

TABLE 1
Lead Concetrations of Investigation Locations Surrounding Treatment Area

Test Pit Location	Lead Concentration mg/kg	Depth feet	Depositional Unit
SS-3	315	0.3	Fill
SS-4	298	0.3	Fill
TP-1	323	1-3	Fill
TP-2	384	2-5	Fill
TP-3 (166 Best)	847	1-4	Fill
TP-3 (168 Best)	53200	2-4	Fill
TP-27	366	0-1	Fill
	154	1-4	Sand
TP-28	803	0-4	Fill
	313	4-5	Sand
TP-29	641	3-5	Fill
	13.7	5-7	Sand
TP-30	197	2-3	Fill
	9.21	5-6	Sand
TP-31	167	2-4	Fill
	8.2	5-6	Sand
TP-32	243	2-4	Fill
	9.8	4-5.5	Sand
TP-33	57100	1.5-4	Fill
	10.8	5-6.5	Sand

Notes:
mg/kg = milligram per kilogram

Result exceeds Unrestricted SCOs
Result exceeds Restricted-Residential SCOs
Result exceeds Commercial SCOs
Result exceeds Industrial SCOs

ATTACHMENT 1

WASTE CHARACTERIZATION LABORATORY REPORTS

ANALYTICAL REPORT

Lab Number:	L2146681
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Chris Boron
Phone:	(716) 856-0599
Project Name:	MICHIGAN AND BEST
Project Number:	T0569-021-001-003
Report Date:	09/09/21

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: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2146681-01	WC#1	SOIL	BUFFALO, NY	08/30/21 08:30	08/31/21
L2146681-02	WC#2	SOIL	BUFFALO, NY	08/30/21 10:16	08/31/21
L2146681-03	WC#3	SOIL	BUFFALO, NY	08/30/21 12:02	08/31/21
L2146681-04	WC#4	SOIL	BUFFALO, NY	08/30/21 14:30	08/31/21

Project Name:	MICHIGAN AND BEST	**Lab Number:**	L2146681
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

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:	MICHIGAN AND BEST	**Lab Number:**	L2146681
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

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.

TCLP Semivolatiles

The WG1543169-2 LCS recovery, associated with L2146681-01 through -04, is below the acceptance criteria for pyridine (4%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

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: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 09/09/21

ORGANICS

VOLATILES

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-01
Client ID: WC#1
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 08:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/07/21 21:19
Analyst: NLK
Percent Solids: 80%
TCLP/SPLP Ext. Date: 09/04/21 06:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	2.5	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	96		70-130
dibromofluoromethane	111		70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-02
Client ID: WC#2
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 10:16
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/08/21 00:40
Analyst: NLK
Percent Solids: 84%
TCLP/SPLP Ext. Date: 09/04/21 06:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	2.9	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	99		70-130
dibromofluoromethane	117		70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-03
Client ID: WC#3
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 12:02
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/07/21 22:39
Analyst: NLK
Percent Solids: 75%
TCLP/SPLP Ext. Date: 09/04/21 06:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	3.2	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	100		70-130
dibromofluoromethane	115		70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-04
Client ID: WC#4
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 14:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/07/21 23:19
Analyst: NLK
Percent Solids: 86%
TCLP/SPLP Ext. Date: 09/04/21 06:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	3.2	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
dibromofluoromethane	117		70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/07/21 17:18
Analyst: NLK
TCLP/SPLP Extraction Date: 09/04/21 06:40

Extraction Date: 09/04/21 06:40

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01-04 Batch: WG1543997-5					
Chloroform	3.3	J	ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	102		70-130
dibromofluoromethane	110		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MICHIGAN AND BEST

Project Number: T0569-021-001-003

Lab Number: L2146681

Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01-04 Batch: WG1543997-3 WG1543997-4								
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	100		110		63-132	10		20
Tetrachloroethene	100		96		70-130	4		20
Chlorobenzene	100		100		75-130	0		25
1,2-Dichloroethane	110		110		70-130	0		20
Benzene	100		98		70-130	2		25
Vinyl chloride	92		99		55-140	7		20
1,1-Dichloroethene	120		130		61-145	8		25
Trichloroethene	94		96		70-130	2		25
1,4-Dichlorobenzene	97		97		70-130	0		20
2-Butanone	84		73		63-138	14		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		104		70-130
Toluene-d8	99		93		70-130
4-Bromofluorobenzene	101		103		70-130
dibromofluoromethane	101		104		70-130

SEMIVOLATILES

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-01
Client ID: WC#1
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 08:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/06/21 14:51
Analyst: CMM
Percent Solids: 80%
TCLP/SPLP Ext. Date: 09/01/21 15:12

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	89		21-120
Phenol-d6	84		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	100		15-120
2,4,6-Tribromophenol	112		10-120
4-Terphenyl-d14	**134**	Q	33-120

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-02
Client ID: WC#2
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 10:16
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/06/21 15:13
Analyst: CMM
Percent Solids: 84%
TCLP/SPLP Ext. Date: 09/01/21 15:12

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		21-120
Phenol-d6	71		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	106		33-120

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-03
Client ID: WC#3
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 12:02
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/06/21 15:35
Analyst: CMM
Percent Solids: 75%
TCLP/SPLP Ext. Date: 09/01/21 15:12

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		21-120
Phenol-d6	80		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	110		33-120

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-04
Client ID: WC#4
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 14:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/06/21 14:07
Analyst: CMM
Percent Solids: 86%
TCLP/SPLP Ext. Date: 09/01/21 15:12

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		21-120
Phenol-d6	81		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	113		33-120

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/06/21 11:52
Analyst: SLR
TCLP/SPLP Extraction Date: 09/01/21 15:12

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 08:49

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01-04 Batch: WG1543169-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		21-120
Phenol-d6	74		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	90		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01-04 Batch: WG1543169-2 WG1543169-3								
Hexachlorobenzene	95		89		40-140	7		30
2,4-Dinitrotoluene	96		91		40-132	5		30
Hexachlorobutadiene	86		80		28-111	7		30
Hexachloroethane	78		75		21-105	4		30
Nitrobenzene	91		89		40-140	2		30
2,4,6-Trichlorophenol	97		97		30-130	0		30
Pentachlorophenol	98		98		9-103	0		30
2-Methylphenol	92		88		30-130	4		30
3-Methylphenol/4-Methylphenol	92		88		30-130	4		30
2,4,5-Trichlorophenol	102		96		30-130	6		30
Pyridine	**4**	Q	13		10-66	**110**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	92		90		21-120
Phenol-d6	84		81		10-120
Nitrobenzene-d5	91		87		23-120
2-Fluorobiphenyl	88		80		15-120
2,4,6-Tribromophenol	105		99		10-120
4-Terphenyl-d14	89		81		33-120

PCBS

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-01
Client ID: WC#1
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 08:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/03/21 10:58
Analyst: JAW
Percent Solids: 80%

Extraction Method: EPA 3546
Extraction Date: 09/02/21 18:35
Cleanup Method: EPA 3665A
Cleanup Date: 09/03/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.2	3.49	1	A
Aroclor 1221	ND		ug/kg	39.2	3.93	1	A
Aroclor 1232	ND		ug/kg	39.2	8.32	1	A
Aroclor 1242	ND		ug/kg	39.2	5.29	1	A
Aroclor 1248	ND		ug/kg	39.2	5.89	1	A
Aroclor 1254	ND		ug/kg	39.2	4.29	1	A
Aroclor 1260	8.85	J	ug/kg	39.2	7.26	1	B
Aroclor 1262	ND		ug/kg	39.2	4.98	1	A
Aroclor 1268	ND		ug/kg	39.2	4.07	1	A
PCBs, Total	8.85	J	ug/kg	39.2	3.49	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-02
Client ID: WC#2
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 10:16
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/03/21 11:05
Analyst: JAW
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 09/02/21 18:35
Cleanup Method: EPA 3665A
Cleanup Date: 09/03/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.0	3.38	1	A
Aroclor 1221	ND		ug/kg	38.0	3.81	1	A
Aroclor 1232	ND		ug/kg	38.0	8.07	1	A
Aroclor 1242	ND		ug/kg	38.0	5.13	1	A
Aroclor 1248	ND		ug/kg	38.0	5.71	1	A
Aroclor 1254	ND		ug/kg	38.0	4.16	1	A
Aroclor 1260	ND		ug/kg	38.0	7.03	1	A
Aroclor 1262	ND		ug/kg	38.0	4.83	1	A
Aroclor 1268	ND		ug/kg	38.0	3.94	1	A
PCBs, Total	ND		ug/kg	38.0	3.38	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	47		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	46		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-03
Client ID: WC#3
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 12:02
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/03/21 11:13
Analyst: JAW
Percent Solids: 75%

Extraction Method: EPA 3546
Extraction Date: 09/02/21 18:35
Cleanup Method: EPA 3665A
Cleanup Date: 09/03/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	43.5	3.86	1	A
Aroclor 1221	ND		ug/kg	43.5	4.36	1	A
Aroclor 1232	ND		ug/kg	43.5	9.23	1	A
Aroclor 1242	ND		ug/kg	43.5	5.87	1	A
Aroclor 1248	ND		ug/kg	43.5	6.53	1	A
Aroclor 1254	ND		ug/kg	43.5	4.76	1	A
Aroclor 1260	14.6	J	ug/kg	43.5	8.04	1	A
Aroclor 1262	ND		ug/kg	43.5	5.53	1	A
Aroclor 1268	ND		ug/kg	43.5	4.51	1	A
PCBs, Total	14.6	J	ug/kg	43.5	3.86	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	57		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-04
Client ID: WC#4
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 14:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/03/21 11:20
Analyst: JAW
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 09/02/21 18:35
Cleanup Method: EPA 3665A
Cleanup Date: 09/03/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.7	3.35	1	A
Aroclor 1221	ND		ug/kg	37.7	3.78	1	A
Aroclor 1232	ND		ug/kg	37.7	7.99	1	A
Aroclor 1242	ND		ug/kg	37.7	5.08	1	A
Aroclor 1248	ND		ug/kg	37.7	5.66	1	A
Aroclor 1254	ND		ug/kg	37.7	4.12	1	A
Aroclor 1260	ND		ug/kg	37.7	6.97	1	A
Aroclor 1262	ND		ug/kg	37.7	4.79	1	A
Aroclor 1268	ND		ug/kg	37.7	3.90	1	A
PCBs, Total	ND		ug/kg	37.7	3.35	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	51		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/02/21 18:08
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 09/01/21 20:45
Cleanup Method: EPA 3665A
Cleanup Date: 09/02/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/02/21

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-04 Batch: WG1541961-1						
Aroclor 1016	ND		ug/kg	31.4	2.79	A
Aroclor 1221	ND		ug/kg	31.4	3.15	A
Aroclor 1232	ND		ug/kg	31.4	6.66	A
Aroclor 1242	ND		ug/kg	31.4	4.24	A
Aroclor 1248	ND		ug/kg	31.4	4.71	A
Aroclor 1254	ND		ug/kg	31.4	3.44	A
Aroclor 1260	ND		ug/kg	31.4	5.81	A
Aroclor 1262	ND		ug/kg	31.4	3.99	A
Aroclor 1268	ND		ug/kg	31.4	3.26	A
PCBs, Total	ND		ug/kg	31.4	2.79	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	39		30-150	A
Decachlorobiphenyl	36		30-150	A
2,4,5,6-Tetrachloro-m-xylene	38		30-150	B
Decachlorobiphenyl	39		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MICHIGAN AND BEST

Project Number: T0569-021-001-003

Lab Number: L2146681

Report Date: 09/09/21

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: WG1541961-2 WG1541961-3									
Aroclor 1016	74		73		40-140	1		50	A
Aroclor 1260	68		69		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		70		30-150	A
Decachlorobiphenyl	67		66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		72		30-150	B
Decachlorobiphenyl	80		69		30-150	B

METALS

Project Name: MICHIGAN AND BEST
Lab Number: L2146681
Project Number: T0569-021-001-003
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-01
Client ID: WC#1
Sample Location: BUFFALO, NY
Date Collected: 08/30/21 08:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 80%
TCLP/SPLP Ext. Date: 09/01/21 15:12

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	09/07/21 10:48	09/08/21 19:27	EPA 3015	1,6010D	SV
Barium, TCLP	0.726		mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 19:27	EPA 3015	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 19:27	EPA 3015	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 19:27	EPA 3015	1,6010D	SV
Lead, TCLP	1.02		mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 19:27	EPA 3015	1,6010D	SV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:19	EPA 7470A	1,7470A	OU
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 19:27	EPA 3015	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 19:27	EPA 3015	1,6010D	SV

Project Name: MICHIGAN AND BEST
Lab Number: L2146681
Project Number: T0569-021-001-003
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-02
Client ID: WC#2
Sample Location: BUFFALO, NY
Date Collected: 08/30/21 10:16
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 84%
TCLP/SPLP Ext. Date: 09/01/21 15:12

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	09/07/21 10:48	09/08/21 20:04	EPA 3015	1,6010D	SV
Barium, TCLP	0.676		mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 20:04	EPA 3015	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 20:04	EPA 3015	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 20:04	EPA 3015	1,6010D	SV
Lead, TCLP	0.030	J	mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 20:04	EPA 3015	1,6010D	SV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:36	EPA 7470A	1,7470A	OU
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 20:04	EPA 3015	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 20:04	EPA 3015	1,6010D	SV

Project Name: MICHIGAN AND BEST
Lab Number: L2146681
Project Number: T0569-021-001-003
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-03
Client ID: WC#3
Sample Location: BUFFALO, NY
Date Collected: 08/30/21 12:02
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 75%
TCLP/SPLP Ext. Date: 09/01/21 15:12

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	09/07/21 10:48	09/08/21 20:08	EPA 3015	1,6010D	SV
Barium, TCLP	0.404	J	mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 20:08	EPA 3015	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 20:08	EPA 3015	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 20:08	EPA 3015	1,6010D	SV
Lead, TCLP	0.088	J	mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 20:08	EPA 3015	1,6010D	SV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:39	EPA 7470A	1,7470A	OU
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 20:08	EPA 3015	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 20:08	EPA 3015	1,6010D	SV

Project Name: MICHIGAN AND BEST
Lab Number: L2146681
Project Number: T0569-021-001-003
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-04
Client ID: WC#4
Sample Location: BUFFALO, NY
Date Collected: 08/30/21 14:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 86%
TCLP/SPLP Ext. Date: 09/01/21 15:12

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	09/07/21 10:48	09/08/21 20:12	EPA 3015	1,6010D	SV
Barium, TCLP	0.486	J	mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 20:12	EPA 3015	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 20:12	EPA 3015	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 20:12	EPA 3015	1,6010D	SV
Lead, TCLP	467		mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 20:12	EPA 3015	1,6010D	SV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:42	EPA 7470A	1,7470A	OU
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 20:12	EPA 3015	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 20:12	EPA 3015	1,6010D	SV

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

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): 01-04 Batch: WG1542789-1										
Arsenic, TCLP	0.019	J	mg/l	1.00	0.019	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Barium, TCLP	ND		mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Lead, TCLP	ND		mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV

Prep Information

Digestion Method: EPA 3015
TCLP/SPLP Extraction Date: 09/01/21 05:37

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): 01-04 Batch: WG1542790-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:12	1,7470A	OU

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 09/01/21 05:37

Lab Control Sample Analysis

Batch Quality Control

Project Name: MICHIGAN AND BEST

Project Number: T0569-021-001-003

Lab Number: L2146681

Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-04 Batch: WG1542789-2								
Arsenic, TCLP	110		-		75-125	-		20
Barium, TCLP	98		-		75-125	-		20
Cadmium, TCLP	98		-		75-125	-		20
Chromium, TCLP	104		-		75-125	-		20
Lead, TCLP	95		-		75-125	-		20
Selenium, TCLP	108		-		75-125	-		20
Silver, TCLP	106		-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-04 Batch: WG1542790-2								
Mercury, TCLP	114		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1542789-3 QC Sample: L2146681-01 Client ID: WC#1												
Arsenic, TCLP	ND	1.2	1.27	106		-	-		75-125	-		20
Barium, TCLP	0.726	20	19.6	94		-	-		75-125	-		20
Cadmium, TCLP	ND	0.53	0.505	95		-	-		75-125	-		20
Chromium, TCLP	ND	2	1.98	99		-	-		75-125	-		20
Lead, TCLP	1.02	5.3	5.86	91		-	-		75-125	-		20
Selenium, TCLP	ND	1.2	1.25	104		-	-		75-125	-		20
Silver, TCLP	ND	0.5	0.500	100		-	-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1542790-3 QC Sample: L2146681-01 Client ID: WC#1												
Mercury, TCLP	ND	0.025	0.0248	99		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1542789-4 QC Sample: L2146681-01 Client ID: WC#1						
Arsenic, TCLP	ND	0.029J	mg/l	NC		20
Barium, TCLP	0.726	0.725	mg/l	0		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	1.02	1.02	mg/l	0		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1542790-4 QC Sample: L2146681-01 Client ID: WC#1						
Mercury, TCLP	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-01
Client ID: WC#1
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 08:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/21 20:50	1,1030	MD

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-02
Client ID: WC#2
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 08/30/21 10:16
Date Received: 08/31/21
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/21 20:50	1,1030	MD

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-03
Client ID: WC#3
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 12:02
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/21 20:50	1,1030	MD

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-04
Client ID: WC#4
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 14:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Dry Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/21 20:50	1,1030	MD

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-01
Client ID: WC#1
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 08:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.2		%	0.100	NA	1	-	09/01/21 11:44	121,2540G	RI
pH (H)	7.7		SU	-	NA	1	-	09/01/21 18:12	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 09:00	09/03/21 11:58	125,7.3	AW
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 09:00	09/03/21 11:15	125,7.3	AW

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-02
Client ID: WC#2
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 10:16
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.4		%	0.100	NA	1	-	09/01/21 11:44	121,2540G	RI
pH (H)	8.0		SU	-	NA	1	-	09/01/21 18:12	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 09:00	09/03/21 11:58	125,7.3	AW
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 09:00	09/03/21 11:16	125,7.3	AW

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-03
Client ID: WC#3
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 12:02
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	74.6		%	0.100	NA	1	-	09/01/21 11:44	121,2540G	RI
pH (H)	7.5		SU	-	NA	1	-	09/01/21 18:12	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 09:00	09/03/21 11:59	125,7.3	AW
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 09:00	09/03/21 11:16	125,7.3	AW

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146681-04
Client ID: WC#4
Sample Location: BUFFALO, NY

Date Collected: 08/30/21 14:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.4		%	0.100	NA	1	-	09/01/21 11:44	121,2540G	RI
pH (H)	7.3		SU	-	NA	1	-	09/01/21 18:12	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 09:00	09/03/21 12:01	125,7.3	AW
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 09:00	09/03/21 11:18	125,7.3	AW

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146681
Report Date: 09/09/21

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: WG1542350-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 09:00	09/03/21 11:09	125,7.3	AW
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1542353-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 09:00	09/03/21 11:53	125,7.3	AW

Lab Control Sample Analysis

Batch Quality Control

Project Name: MICHIGAN AND BEST

Project Number: T0569-021-001-003

Lab Number: L2146681

Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1541907-1								
pH	101		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1542350-2								
Sulfide, Reactive	102		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1542353-2								
Cyanide, Reactive	77		-		30-125	-		40

Lab Duplicate Analysis
Batch Quality Control

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1541690-1 QC Sample: L2146681-01 Client ID: WC#1						
Solids, Total	80.2	77.8	%	3		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1541907-2 QC Sample: L2146788-01 Client ID: DUP Sample						
pH	7.1	7.2	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1542350-3 QC Sample: L2146686-01 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1542353-3 QC Sample: L2146686-01 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/kg	NC		40

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
D	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2146681-01A	Plastic 2oz unpreserved for TS	D	NA		3.1	Y	Absent		TS(7)
L2146681-01B	Vial Large Septa unpreserved (4oz)	D	NA		3.1	Y	Absent		TCLP-EXT-ZHE(14)
L2146681-01C	Glass 120ml/4oz unpreserved	D	NA		3.1	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2146681-01D	Glass 500ml/16oz unpreserved	D	NA		3.1	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2146681-01W	Amber 1000ml unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-8270(14)
L2146681-01X	Plastic 120ml HNO3 preserved Extracts	D	NA		3.1	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2146681-01X9	Tumble Vessel	D	NA		3.1	Y	Absent		-
L2146681-01Y	Vial unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-VOA(14)
L2146681-01Z	Vial unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-VOA(14)
L2146681-02A	Plastic 2oz unpreserved for TS	D	NA		3.1	Y	Absent		TS(7)
L2146681-02B	Vial Large Septa unpreserved (4oz)	D	NA		3.1	Y	Absent		TCLP-EXT-ZHE(14)
L2146681-02C	Glass 120ml/4oz unpreserved	D	NA		3.1	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146681-02D	Glass 500ml/16oz unpreserved	D	NA		3.1	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146681-02W	Amber 1000ml unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-8270(14)
L2146681-02X	Plastic 120ml HNO3 preserved Extracts	D	NA		3.1	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2146681-02X9	Tumble Vessel	D	NA		3.1	Y	Absent		-
L2146681-02Y	Vial unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-VOA(14)
L2146681-02Z	Vial unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-VOA(14)
L2146681-03A	Plastic 2oz unpreserved for TS	D	NA		3.1	Y	Absent		TS(7)
L2146681-03B	Vial Large Septa unpreserved (4oz)	D	NA		3.1	Y	Absent		TCLP-EXT-ZHE(14)

*Values in parentheses indicate holding time in days

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146681
Report Date: 09/09/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2146681-03C	Glass 60mL/2oz unpreserved	D	NA		3.1	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146681-03D	Glass 500ml/16oz unpreserved	D	NA		3.1	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146681-03W	Amber 1000ml unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-8270(14)
L2146681-03X	Plastic 120ml HNO3 preserved Extracts	D	NA		3.1	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2146681-03X9	Tumble Vessel	D	NA		3.1	Y	Absent		-
L2146681-03Y	Vial unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-VOA(14)
L2146681-03Z	Vial unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-VOA(14)
L2146681-04A	Plastic 2oz unpreserved for TS	D	NA		3.1	Y	Absent		TS(7)
L2146681-04B	Vial Large Septa unpreserved (4oz)	D	NA		3.1	Y	Absent		TCLP-EXT-ZHE(14)
L2146681-04C	Glass 120ml/4oz unpreserved	D	NA		3.1	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2146681-04D	Glass 500ml/16oz unpreserved	D	NA		3.1	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2146681-04W	Amber 1000ml unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-8270(14)
L2146681-04X	Plastic 120ml HNO3 preserved Extracts	D	NA		3.1	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2146681-04X9	Tumble Vessel	D	NA		3.1	Y	Absent		-
L2146681-04Y	Vial unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-VOA(14)
L2146681-04Z	Vial unpreserved Extracts	D	NA		3.1	Y	Absent		TCLP-VOA(14)

*Values in parentheses indicate holding time in days

Project Name:	MICHIGAN AND BEST	**Lab Number:**	L2146681
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

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:	MICHIGAN AND BEST	**Lab Number:**	L2146681
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

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:	MICHIGAN AND BEST	**Lab Number:**	L2146681
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

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.

Project Name:	MICHIGAN AND BEST	**Lab Number:**	L2146681
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

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, SM4500Cl-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, 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.

ALPHA ANALYTICAL

NEW YORK CHAIN OF CUSTODY

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

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: 09/01/21

ALPHA Job #: L2146684

Client Information
Client: Turnkey Environmental
Address: 2558 Hamburg Turnpike Lackawanna NY
Phone: 716 828-8358
Fax: 716 856-0583
Email: TBehrendt@Turnkey.com

Project Information
Project Name: Michigan and Babcock
Project Location: Buffalo NY
Project #: T0569-021-001-003-003
(Use Project name as Project #): ☒
Project Manager: Chris Boron
ALPHAQuote #:

Turn-Around Time
Standard: ☒ Due Date:
Rush (only if pre approved): ☐ # of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCLP VOCs	TCLP SVOCs	TCLP METALS	PCBs	Ignitability	Corrosivity	Reactivity	Sample Specific Comments	Total Bottle
46681-01	WC #1	8/30/21	830	SO,I	TAB	X	X	X	X	X	X	X		3
-02	WC #2		1016			X	X	X	X	X	X	X		3
-03	WC #3		1202			X	X	X	X	X	X	X		3
-04	WC #4		1430			X	X	X	X	X	X	X		3

Container Type	A	A	A	A	A	A	A	
Preservative	A	A	A	A	A	A	A	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
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

Relinquished By:	Date/Time	Received By:	Date/Time
	8/31/21 1040		8/31/21 1040
ADL	8/31/21 1716	ADL	9/1/21 00:45

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.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L2146868
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Chris Boron
Phone:	(716) 856-0599
Project Name:	MICHIGAN AND BEST
Project Number:	T0569-021-001-003
Report Date:	09/09/21

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508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2146868-01	WC#5	SOIL	BUFFALO, NY	08/31/21 08:39	08/31/21
L2146868-02	WC#6	SOIL	BUFFALO, NY	08/31/21 09:03	08/31/21
L2146868-03	WC#7	SOIL	BUFFALO, NY	08/31/21 09:37	08/31/21
L2146868-04	WC#8	SOIL	BUFFALO, NY	08/31/21 10:30	08/31/21
L2146868-05	WC#9	SOIL	BUFFALO, NY	08/31/21 11:10	08/31/21
L2146868-06	WC#10	SOIL	BUFFALO, NY	08/31/21 12:12	08/31/21
L2146868-07	WC#11	SOIL	BUFFALO, NY	08/31/21 12:55	08/31/21

Project Name:	MICHIGAN AND BEST	**Lab Number:**	L2146868
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

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:	MICHIGAN AND BEST	**Lab Number:**	L2146868
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

Case Narrative (continued)

Report Submission

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

Sample Receipt

L2146868-01: The sample identified as "WC#5" on the chain of custody was identified as "WC#6" on the container label. At the client's request, the sample is reported as "WC#5".

TCLP Semivolatiles

The WG1543169-2 LCS recovery, associated with L2146868-01 through -06, is below the acceptance criteria for pyridine (4%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

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: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 09/09/21

ORGANICS

VOLATILES

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-01
Client ID: WC#5
Sample Location: BUFFALO, NY
Date Collected: 08/31/21 08:39
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/08/21 00:00
Analyst: NLK
Percent Solids: 84%
TCLP/SPLP Ext. Date: 09/04/21 06:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	4.2	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	102		70-130
dibromofluoromethane	**134**	Q	70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-02
Client ID: WC#6
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 09:03
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/07/21 21:59
Analyst: NLK
Percent Solids: 89%
TCLP/SPLP Ext. Date: 09/04/21 06:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	3.5	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	97		70-130
dibromofluoromethane	114		70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-03
Client ID: WC#7
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 09:37
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/07/21 10:20
Analyst: NLK
Percent Solids: 85%
TCLP/SPLP Ext. Date: 09/04/21 14:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	2.7	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	108		70-130
dibromofluoromethane	114		70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-04
Client ID: WC#8
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 10:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/07/21 10:51
Analyst: NLK
Percent Solids: 77%
TCLP/SPLP Ext. Date: 09/04/21 14:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	2.5	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	108		70-130
dibromofluoromethane	112		70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-05
Client ID: WC#9
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 11:10
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/07/21 11:22
Analyst: NLK
Percent Solids: 86%
TCLP/SPLP Ext. Date: 09/04/21 14:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	2.6	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	110		70-130
dibromofluoromethane	116		70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-06
Client ID: WC#10
Sample Location: BUFFALO, NY
Date Collected: 08/31/21 12:12
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/07/21 11:51
Analyst: NLK
Percent Solids: 89%
TCLP/SPLP Ext. Date: 09/04/21 14:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	2.4	J	ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	109		70-130
dibromofluoromethane	115		70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/07/21 09:49
Analyst: NLK
TCLP/SPLP Extraction Date: 09/04/21 14:08

Extraction Date: 09/04/21 14:08

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 03-06 Batch: WG1543621-5					
Chloroform	2.7	J	ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	106		70-130
dibromofluoromethane	111		70-130

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/07/21 17:18
Analyst: NLK
TCLP/SPLP Extraction Date: 09/04/21 06:40

Extraction Date: 09/04/21 06:40

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01-02 Batch: WG1543997-5					
Chloroform	3.3	J	ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	102		70-130
dibromofluoromethane	110		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MICHIGAN AND BEST

Project Number: T0569-021-001-003

Lab Number: L2146868

Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 03-06 Batch: WG1543621-3 WG1543621-4								
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	120		120		63-132	0		20
Tetrachloroethene	100		94		70-130	6		20
Chlorobenzene	92		86		75-130	7		25
1,2-Dichloroethane	110		110		70-130	0		20
Benzene	100		100		70-130	0		25
Vinyl chloride	83		88		55-140	6		20
1,1-Dichloroethene	110		100		61-145	10		25
Trichloroethene	100		100		70-130	0		25
1,4-Dichlorobenzene	85		80		70-130	6		20
2-Butanone	64		64		63-138	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		110		70-130
Toluene-d8	95		94		70-130
4-Bromofluorobenzene	111		105		70-130
dibromofluoromethane	107		111		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MICHIGAN AND BEST

Project Number: T0569-021-001-003

Lab Number: L2146868

Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01-02 Batch: WG1543997-3 WG1543997-4								
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	100		110		63-132	10		20
Tetrachloroethene	100		96		70-130	4		20
Chlorobenzene	100		100		75-130	0		25
1,2-Dichloroethane	110		110		70-130	0		20
Benzene	100		98		70-130	2		25
Vinyl chloride	92		99		55-140	7		20
1,1-Dichloroethene	120		130		61-145	8		25
Trichloroethene	94		96		70-130	2		25
1,4-Dichlorobenzene	97		97		70-130	0		20
2-Butanone	84		73		63-138	14		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		104		70-130
Toluene-d8	99		93		70-130
4-Bromofluorobenzene	101		103		70-130
dibromofluoromethane	101		104		70-130

SEMIVOLATILES

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-01
Client ID: WC#5
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 08:39
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/06/21 13:49
Analyst: SLR
Percent Solids: 84%
TCLP/SPLP Ext. Date: 09/02/31 03:50

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		21-120
Phenol-d6	75		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	84		33-120

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-02
Client ID: WC#6
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 09:03
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/06/21 14:12
Analyst: SLR
Percent Solids: 89%
TCLP/SPLP Ext. Date: 09/02/31 03:50

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		21-120
Phenol-d6	69		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	78		33-120

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-03
Client ID: WC#7
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 09:37
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/06/21 14:36
Analyst: SLR
Percent Solids: 85%
TCLP/SPLP Ext. Date: 09/02/31 03:50

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		21-120
Phenol-d6	64		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	84		10-120
4-Terphenyl-d14	76		33-120

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-04
Client ID: WC#8
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 10:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/06/21 14:59
Analyst: SLR
Percent Solids: 77%
TCLP/SPLP Ext. Date: 09/02/31 03:50

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 08:49

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	96		21-120
Phenol-d6	83		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	93		15-120
2,4,6-Tribromophenol	110		10-120
4-Terphenyl-d14	96		33-120

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-05
Client ID: WC#9
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 11:10
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/06/21 15:22
Analyst: SLR
Percent Solids: 86%
TCLP/SPLP Ext. Date: 09/02/31 03:50

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 09:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		21-120
Phenol-d6	79		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	83		33-120

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-06
Client ID: WC#10
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 12:12
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/06/21 15:46
Analyst: SLR
Percent Solids: 89%
TCLP/SPLP Ext. Date: 09/02/31 03:50

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 09:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	3.4	1
2,4-Dinitrotoluene	ND		ug/l	25	1.9	1
Hexachlorobutadiene	ND		ug/l	10	3.0	1
Hexachloroethane	ND		ug/l	10	2.2	1
Nitrobenzene	ND		ug/l	10	3.3	1
2,4,6-Trichlorophenol	ND		ug/l	25	2.5	1
Pentachlorophenol	ND		ug/l	50	9.8	1
2-Methylphenol	ND		ug/l	25	5.5	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8	1
2,4,5-Trichlorophenol	ND		ug/l	25	1.9	1
Pyridine	ND		ug/l	18	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	99		21-120
Phenol-d6	90		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	103		10-120
4-Terphenyl-d14	94		33-120

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/06/21 11:52
Analyst: SLR
TCLP/SPLP Extraction Date: 09/01/21 15:12

Extraction Method: EPA 3510C
Extraction Date: 09/05/21 08:49

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01-06 Batch: WG1543169-1					
Hexachlorobenzene	ND		ug/l	10	3.4
2,4-Dinitrotoluene	ND		ug/l	25	1.9
Hexachlorobutadiene	ND		ug/l	10	3.0
Hexachloroethane	ND		ug/l	10	2.2
Nitrobenzene	ND		ug/l	10	3.3
2,4,6-Trichlorophenol	ND		ug/l	25	2.5
Pentachlorophenol	ND		ug/l	50	9.8
2-Methylphenol	ND		ug/l	25	5.5
3-Methylphenol/4-Methylphenol	ND		ug/l	25	2.8
2,4,5-Trichlorophenol	ND		ug/l	25	1.9
Pyridine	ND		ug/l	18	4.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		21-120
Phenol-d6	74		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	90		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01-06 Batch: WG1543169-2 WG1543169-3								
Hexachlorobenzene	95		89		40-140	7		30
2,4-Dinitrotoluene	96		91		40-132	5		30
Hexachlorobutadiene	86		80		28-111	7		30
Hexachloroethane	78		75		21-105	4		30
Nitrobenzene	91		89		40-140	2		30
2,4,6-Trichlorophenol	97		97		30-130	0		30
Pentachlorophenol	98		98		9-103	0		30
2-Methylphenol	92		88		30-130	4		30
3-Methylphenol/4-Methylphenol	92		88		30-130	4		30
2,4,5-Trichlorophenol	102		96		30-130	6		30
Pyridine	**4**	Q	13		10-66	**110**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	92		90		21-120
Phenol-d6	84		81		10-120
Nitrobenzene-d5	91		87		23-120
2-Fluorobiphenyl	88		80		15-120
2,4,6-Tribromophenol	105		99		10-120
4-Terphenyl-d14	89		81		33-120

PCBS

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-01
Client ID: WC#5
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 08:39
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/03/21 11:27
Analyst: JAW
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 09/02/21 18:35
Cleanup Method: EPA 3665A
Cleanup Date: 09/03/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.3	3.40	1	A
Aroclor 1221	ND		ug/kg	38.3	3.84	1	A
Aroclor 1232	ND		ug/kg	38.3	8.12	1	A
Aroclor 1242	ND		ug/kg	38.3	5.16	1	A
Aroclor 1248	ND		ug/kg	38.3	5.74	1	A
Aroclor 1254	43.0		ug/kg	38.3	4.19	1	B
Aroclor 1260	34.6	J	ug/kg	38.3	7.07	1	A
Aroclor 1262	ND		ug/kg	38.3	4.86	1	A
Aroclor 1268	ND		ug/kg	38.3	3.96	1	A
PCBs, Total	77.6	J	ug/kg	38.3	3.40	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	50		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-02
Client ID: WC#6
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 09:03
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/03/21 11:34
Analyst: JAW
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 09/02/21 18:35
Cleanup Method: EPA 3665A
Cleanup Date: 09/03/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.3	3.13	1	A
Aroclor 1221	ND		ug/kg	35.3	3.54	1	A
Aroclor 1232	ND		ug/kg	35.3	7.48	1	A
Aroclor 1242	ND		ug/kg	35.3	4.76	1	A
Aroclor 1248	ND		ug/kg	35.3	5.29	1	A
Aroclor 1254	ND		ug/kg	35.3	3.86	1	A
Aroclor 1260	ND		ug/kg	35.3	6.52	1	A
Aroclor 1262	ND		ug/kg	35.3	4.48	1	A
Aroclor 1268	ND		ug/kg	35.3	3.66	1	A
PCBs, Total	ND		ug/kg	35.3	3.13	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	55		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	57		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-03
Client ID: WC#7
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 09:37
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/03/21 11:41
Analyst: JAW
Percent Solids: 85%

Extraction Method: EPA 3546
Extraction Date: 09/02/21 18:35
Cleanup Method: EPA 3665A
Cleanup Date: 09/03/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.8	3.44	1	A
Aroclor 1221	ND		ug/kg	38.8	3.88	1	A
Aroclor 1232	ND		ug/kg	38.8	8.22	1	A
Aroclor 1242	ND		ug/kg	38.8	5.22	1	A
Aroclor 1248	ND		ug/kg	38.8	5.82	1	A
Aroclor 1254	ND		ug/kg	38.8	4.24	1	A
Aroclor 1260	ND		ug/kg	38.8	7.16	1	A
Aroclor 1262	ND		ug/kg	38.8	4.92	1	A
Aroclor 1268	ND		ug/kg	38.8	4.02	1	A
PCBs, Total	ND		ug/kg	38.8	3.44	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	54		30-150	A
2,4,5,6-Tetrachloro-m-xylene	51		30-150	B
Decachlorobiphenyl	49		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-04
Client ID: WC#8
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 10:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/03/21 11:48
Analyst: JAW
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 09/02/21 18:35
Cleanup Method: EPA 3665A
Cleanup Date: 09/03/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	41.4	3.67	1	A
Aroclor 1221	ND		ug/kg	41.4	4.15	1	A
Aroclor 1232	ND		ug/kg	41.4	8.77	1	A
Aroclor 1242	ND		ug/kg	41.4	5.58	1	A
Aroclor 1248	ND		ug/kg	41.4	6.21	1	A
Aroclor 1254	ND		ug/kg	41.4	4.53	1	A
Aroclor 1260	ND		ug/kg	41.4	7.65	1	A
Aroclor 1262	ND		ug/kg	41.4	5.26	1	A
Aroclor 1268	ND		ug/kg	41.4	4.29	1	A
PCBs, Total	ND		ug/kg	41.4	3.67	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-05
Client ID: WC#9
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 11:10
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/03/21 11:55
Analyst: JAW
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 09/02/21 18:35
Cleanup Method: EPA 3665A
Cleanup Date: 09/03/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.4	3.41	1	A
Aroclor 1221	ND		ug/kg	38.4	3.85	1	A
Aroclor 1232	ND		ug/kg	38.4	8.15	1	A
Aroclor 1242	ND		ug/kg	38.4	5.18	1	A
Aroclor 1248	ND		ug/kg	38.4	5.77	1	A
Aroclor 1254	ND		ug/kg	38.4	4.21	1	A
Aroclor 1260	ND		ug/kg	38.4	7.11	1	A
Aroclor 1262	ND		ug/kg	38.4	4.88	1	A
Aroclor 1268	ND		ug/kg	38.4	3.98	1	A
PCBs, Total	ND		ug/kg	38.4	3.41	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	47		30-150	A
2,4,5,6-Tetrachloro-m-xylene	48		30-150	B
Decachlorobiphenyl	47		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-06 D
Client ID: WC#10
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 12:12
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/03/21 21:13
Analyst: AD
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 09/02/21 18:46
Cleanup Method: EPA 3665A
Cleanup Date: 09/03/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	185	16.4	5	A
Aroclor 1221	ND		ug/kg	185	18.5	5	A
Aroclor 1232	ND		ug/kg	185	39.2	5	A
Aroclor 1242	ND		ug/kg	185	24.9	5	A
Aroclor 1248	ND		ug/kg	185	27.7	5	A
Aroclor 1254	1450		ug/kg	185	20.2	5	A
Aroclor 1260	ND		ug/kg	185	34.1	5	A
Aroclor 1262	ND		ug/kg	185	23.4	5	A
Aroclor 1268	ND		ug/kg	185	19.1	5	A
PCBs, Total	1450		ug/kg	185	16.4	5	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	90		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/02/21 18:08
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 09/01/21 20:45
Cleanup Method: EPA 3665A
Cleanup Date: 09/02/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/02/21

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-05 Batch: WG1541961-1						
Aroclor 1016	ND		ug/kg	31.4	2.79	A
Aroclor 1221	ND		ug/kg	31.4	3.15	A
Aroclor 1232	ND		ug/kg	31.4	6.66	A
Aroclor 1242	ND		ug/kg	31.4	4.24	A
Aroclor 1248	ND		ug/kg	31.4	4.71	A
Aroclor 1254	ND		ug/kg	31.4	3.44	A
Aroclor 1260	ND		ug/kg	31.4	5.81	A
Aroclor 1262	ND		ug/kg	31.4	3.99	A
Aroclor 1268	ND		ug/kg	31.4	3.26	A
PCBs, Total	ND		ug/kg	31.4	2.79	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	39		30-150	A
Decachlorobiphenyl	36		30-150	A
2,4,5,6-Tetrachloro-m-xylene	38		30-150	B
Decachlorobiphenyl	39		30-150	B

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/03/21 10:08
Analyst: JM

Extraction Method: EPA 3546
Extraction Date: 09/02/21 13:47
Cleanup Method: EPA 3665A
Cleanup Date: 09/02/21
Cleanup Method: EPA 3660B
Cleanup Date: 09/03/21

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 06 Batch: WG1542320-1						
Aroclor 1016	ND		ug/kg	32.6	2.90	A
Aroclor 1221	ND		ug/kg	32.6	3.27	A
Aroclor 1232	ND		ug/kg	32.6	6.92	A
Aroclor 1242	ND		ug/kg	32.6	4.40	A
Aroclor 1248	ND		ug/kg	32.6	4.90	A
Aroclor 1254	ND		ug/kg	32.6	3.57	A
Aroclor 1260	ND		ug/kg	32.6	6.03	A
Aroclor 1262	ND		ug/kg	32.6	4.14	A
Aroclor 1268	ND		ug/kg	32.6	3.38	A
PCBs, Total	ND		ug/kg	32.6	2.90	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	83		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-05 Batch: WG1541961-2 WG1541961-3									
Aroclor 1016	74		73		40-140	1		50	A
Aroclor 1260	68		69		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		70		30-150	A
Decachlorobiphenyl	67		66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		72		30-150	B
Decachlorobiphenyl	80		69		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MICHIGAN AND BEST

Project Number: T0569-021-001-003

Lab Number: L2146868

Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 06 Batch: WG1542320-2 WG1542320-3									
Aroclor 1016	64		65		40-140	2		50	A
Aroclor 1260	62		62		40-140	0		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		74		30-150	A
Decachlorobiphenyl	71		70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		74		30-150	B
Decachlorobiphenyl	75		77		30-150	B

METALS

Project Name: MICHIGAN AND BEST
Lab Number: L2146868
Project Number: T0569-021-001-003
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-01
Client ID: WC#5
Sample Location: BUFFALO, NY
Date Collected: 08/31/21 08:39
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 84%
TCLP/SPLP Ext. Date: 09/02/21 03:50

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	0.037	J	mg/l	1.00	0.019	1	09/07/21 10:48	09/08/21 20:16	EPA 3015	1,6010D	SV
Barium, TCLP	0.760		mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 20:16	EPA 3015	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 20:16	EPA 3015	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 20:16	EPA 3015	1,6010D	SV
Lead, TCLP	0.336	J	mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 20:16	EPA 3015	1,6010D	SV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:46	EPA 7470A	1,7470A	OU
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 20:16	EPA 3015	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 20:16	EPA 3015	1,6010D	SV

Project Name: MICHIGAN AND BEST
Lab Number: L2146868
Project Number: T0569-021-001-003
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-02
Client ID: WC#6
Sample Location: BUFFALO, NY
Date Collected: 08/31/21 09:03
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 89%
TCLP/SPLP Ext. Date: 09/02/21 03:50

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	0.019	J	mg/l	1.00	0.019	1	09/07/21 10:48	09/08/21 20:21	EPA 3015	1,6010D	SV
Barium, TCLP	0.715		mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 20:21	EPA 3015	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 20:21	EPA 3015	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 20:21	EPA 3015	1,6010D	SV
Lead, TCLP	0.075	J	mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 20:21	EPA 3015	1,6010D	SV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:49	EPA 7470A	1,7470A	OU
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 20:21	EPA 3015	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 20:21	EPA 3015	1,6010D	SV

Project Name: MICHIGAN AND BEST
Lab Number: L2146868
Project Number: T0569-021-001-003
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-03
Client ID: WC#7
Sample Location: BUFFALO, NY
Date Collected: 08/31/21 09:37
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 85%
TCLP/SPLP Ext. Date: 09/02/21 03:50

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	0.019	J	mg/l	1.00	0.019	1	09/07/21 10:48	09/08/21 20:25	EPA 3015	1,6010D	SV
Barium, TCLP	0.656		mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 20:25	EPA 3015	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 20:25	EPA 3015	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 20:25	EPA 3015	1,6010D	SV
Lead, TCLP	0.126	J	mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 20:25	EPA 3015	1,6010D	SV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:52	EPA 7470A	1,7470A	OU
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 20:25	EPA 3015	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 20:25	EPA 3015	1,6010D	SV

Project Name: MICHIGAN AND BEST
Lab Number: L2146868
Project Number: T0569-021-001-003
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-04
Client ID: WC#8
Sample Location: BUFFALO, NY
Date Collected: 08/31/21 10:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 77%
TCLP/SPLP Ext. Date: 09/02/21 03:50

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	09/07/21 10:48	09/08/21 20:29	EPA 3015	1,6010D	SV
Barium, TCLP	1.09		mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 20:29	EPA 3015	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 20:29	EPA 3015	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 20:29	EPA 3015	1,6010D	SV
Lead, TCLP	0.027	J	mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 20:29	EPA 3015	1,6010D	SV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:56	EPA 7470A	1,7470A	OU
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 20:29	EPA 3015	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 20:29	EPA 3015	1,6010D	SV

Project Name: MICHIGAN AND BEST
Lab Number: L2146868
Project Number: T0569-021-001-003
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-05
Client ID: WC#9
Sample Location: BUFFALO, NY
Date Collected: 08/31/21 11:10
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 86%
TCLP/SPLP Ext. Date: 09/02/21 03:50

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	0.077	J	mg/l	1.00	0.019	1	09/07/21 10:48	09/08/21 20:33	EPA 3015	1,6010D	SV
Barium, TCLP	1.10		mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 20:33	EPA 3015	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 20:33	EPA 3015	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 20:33	EPA 3015	1,6010D	SV
Lead, TCLP	ND		mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 20:33	EPA 3015	1,6010D	SV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:59	EPA 7470A	1,7470A	OU
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 20:33	EPA 3015	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 20:33	EPA 3015	1,6010D	SV

Project Name: MICHIGAN AND BEST
Lab Number: L2146868
Project Number: T0569-021-001-003
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-06
Client ID: WC#10
Sample Location: BUFFALO, NY
Date Collected: 08/31/21 12:12
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 89%
TCLP/SPLP Ext. Date: 09/02/21 03:50

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	0.020	J	mg/l	1.00	0.019	1	09/07/21 10:48	09/08/21 21:10	EPA 3015	1,6010D	SV
Barium, TCLP	0.539		mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 21:10	EPA 3015	1,6010D	SV
Cadmium, TCLP	0.019	J	mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 21:10	EPA 3015	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 21:10	EPA 3015	1,6010D	SV
Lead, TCLP	1.40		mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 21:10	EPA 3015	1,6010D	SV
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 12:02	EPA 7470A	1,7470A	OU
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 21:10	EPA 3015	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 21:10	EPA 3015	1,6010D	SV

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

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): 01-06 Batch: WG1542789-1										
Arsenic, TCLP	0.019	J	mg/l	1.00	0.019	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Barium, TCLP	ND		mg/l	0.500	0.021	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Chromium, TCLP	ND		mg/l	0.200	0.021	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Lead, TCLP	ND		mg/l	0.500	0.027	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Selenium, TCLP	ND		mg/l	0.500	0.035	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV
Silver, TCLP	ND		mg/l	0.100	0.028	1	09/07/21 10:48	09/08/21 19:06	1,6010D	SV

Prep Information

Digestion Method: EPA 3015
TCLP/SPLP Extraction Date: 09/01/21 05:37

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: WG1542790-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	09/07/21 10:50	09/08/21 11:12	1,7470A	OU

Prep Information

Digestion Method: EPA 7470A
TCLP/SPLP Extraction Date: 09/01/21 05:37

Lab Control Sample Analysis

Batch Quality Control

Project Name: MICHIGAN AND BEST

Project Number: T0569-021-001-003

Lab Number: L2146868

Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 Batch: WG1542789-2								
Arsenic, TCLP	110		-		75-125	-		20
Barium, TCLP	98		-		75-125	-		20
Cadmium, TCLP	98		-		75-125	-		20
Chromium, TCLP	104		-		75-125	-		20
Lead, TCLP	95		-		75-125	-		20
Selenium, TCLP	108		-		75-125	-		20
Silver, TCLP	106		-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 Batch: WG1542790-2								
Mercury, TCLP	114		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1542789-3 QC Sample: L2146681-01 Client ID: MS Sample												
Arsenic, TCLP	ND	1.2	1.27	106		-	-		75-125	-		20
Barium, TCLP	0.726	20	19.6	94		-	-		75-125	-		20
Cadmium, TCLP	ND	0.53	0.505	95		-	-		75-125	-		20
Chromium, TCLP	ND	2	1.98	99		-	-		75-125	-		20
Lead, TCLP	1.02	5.3	5.86	91		-	-		75-125	-		20
Selenium, TCLP	ND	1.2	1.25	104		-	-		75-125	-		20
Silver, TCLP	ND	0.5	0.500	100		-	-		75-125	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1542790-3 QC Sample: L2146681-01 Client ID: MS Sample												
Mercury, TCLP	ND	0.025	0.0248	99		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

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: WG1542789-4 QC Sample: L2146681-01 Client ID: DUP Sample						
Arsenic, TCLP	ND	0.029J	mg/l	NC		20
Barium, TCLP	0.726	0.725	mg/l	0		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	1.02	1.02	mg/l	0		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1542790-4 QC Sample: L2146681-01 Client ID: DUP Sample						
Mercury, TCLP	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-01
Client ID: WC#5
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 08:39
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Fine
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/21 18:00	1,1030	MD

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-02
Client ID: WC#6
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 09:03
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/21 18:00	1,1030	MD

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-03
Client ID: WC#7
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 08/31/21 09:37
Date Received: 08/31/21
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Fine
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/21 18:00	1,1030	MD

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-04
Client ID: WC#8
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 08/31/21 10:30
Date Received: 08/31/21
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/21 18:00	1,1030	MD

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-05
Client ID: WC#9
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 08/31/21 11:10
Date Received: 08/31/21
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Dry Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/21 18:00	1,1030	MD

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-06
Client ID: WC#10
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 08/31/21 12:12
Date Received: 08/31/21
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Dry Soil
Particle Size:	Fine
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	09/07/21 18:00	1,1030	MD

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-01
Client ID: WC#5
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 08:39
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.0		%	0.100	NA	1	-	09/01/21 22:30	121,2540G	KL
pH (H)	7.7		SU	-	NA	1	-	09/02/21 20:21	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:31	125,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:38	125,7.3	TL

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-02
Client ID: WC#6
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 09:03
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.1		%	0.100	NA	1	-	09/01/21 22:30	121,2540G	KL
pH (H)	7.6		SU	-	NA	1	-	09/02/21 20:21	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:31	125,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:38	125,7.3	TL

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-03
Client ID: WC#7
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 09:37
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.3		%	0.100	NA	1	-	09/01/21 22:30	121,2540G	KL
pH (H)	7.3		SU	-	NA	1	-	09/02/21 20:21	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:31	125,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:38	125,7.3	TL

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-04
Client ID: WC#8
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 10:30
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.4		%	0.100	NA	1	-	09/01/21 22:30	121,2540G	KL
pH (H)	7.6		SU	-	NA	1	-	09/02/21 20:21	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:31	125,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:38	125,7.3	TL

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-05
Client ID: WC#9
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 11:10
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.6		%	0.100	NA	1	-	09/01/21 22:30	121,2540G	KL
pH (H)	7.7		SU	-	NA	1	-	09/02/21 20:21	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:32	125,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:39	125,7.3	TL

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2146868-06
Client ID: WC#10
Sample Location: BUFFALO, NY

Date Collected: 08/31/21 12:12
Date Received: 08/31/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	09/01/21 22:30	121,2540G	KL
pH (H)	7.6		SU	-	NA	1	-	09/02/21 20:21	1,9045D	AS
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:32	125,7.3	TL
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:39	125,7.3	TL

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003
Lab Number: L2146868
Report Date: 09/09/21

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): 01-06 Batch: WG1542731-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:37	125,7.3	TL
General Chemistry - Westborough Lab for sample(s): 01-06 Batch: WG1542735-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	09/03/21 18:40	09/03/21 20:30	125,7.3	TL

Lab Control Sample Analysis

Batch Quality Control

Project Name: MICHIGAN AND BEST

Project Number: T0569-021-001-003

Lab Number: L2146868

Report Date: 09/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG1542452-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG1542731-2								
Sulfide, Reactive	77		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG1542735-2								
Cyanide, Reactive	98		-		30-125	-		40

Lab Duplicate Analysis
Batch Quality Control

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1541980-1 QC Sample: L2146754-01 Client ID: DUP Sample						
Solids, Total	85.4	84.8	%	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1542452-2 QC Sample: L2147047-02 Client ID: DUP Sample						
pH	7.7	7.9	SU	3		5
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1542731-3 QC Sample: L2147383-01 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1542735-3 QC Sample: L2147383-01 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/kg	NC		40

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2146868-01A	Plastic 2oz unpreserved for TS	B	NA		2.5	Y	Absent		TS(7)
L2146868-01B	Vial Large Septa unpreserved (4oz)	B	NA		2.5	Y	Absent		TCLP-EXT-ZHE(14)
L2146868-01C	Glass 120ml/4oz unpreserved	B	NA		2.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2146868-01D	Glass 500ml/16oz unpreserved	B	NA		2.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2146868-01W	Amber 1000ml unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-8270(14)
L2146868-01X	Plastic 120ml HNO3 preserved Extracts	B	NA		2.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2146868-01X9	Tumble Vessel	B	NA		2.5	Y	Absent		-
L2146868-01Y	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-01Z	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-02A	Plastic 2oz unpreserved for TS	B	NA		2.5	Y	Absent		TS(7)
L2146868-02B	Vial Large Septa unpreserved (4oz)	B	NA		2.5	Y	Absent		TCLP-EXT-ZHE(14)
L2146868-02C	Tumble Vessel	B	NA		2.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146868-02D	Tumble Vessel	B	NA		2.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146868-02W	Amber 1000ml unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-8270(14)
L2146868-02X	Plastic 120ml HNO3 preserved Extracts	B	NA		2.5	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2146868-02X9	Tumble Vessel	B	NA		2.5	Y	Absent		-
L2146868-02Y	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-02Z	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-03A	Plastic 2oz unpreserved for TS	B	NA		2.5	Y	Absent		TS(7)
L2146868-03B	Vial Large Septa unpreserved (4oz)	B	NA		2.5	Y	Absent		TCLP-EXT-ZHE(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(*)
L2146868-03C	Tumble Vessel	B	NA		2.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146868-03D	Tumble Vessel	B	NA		2.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146868-03F	Glass 120ml/4oz unpreserved	B	NA		2.5	Y	Absent		-
L2146868-03W	Amber 1000ml unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-8270(14)
L2146868-03X	Plastic 120ml HNO3 preserved Extracts	B	NA		2.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2146868-03X9	Tumble Vessel	B	NA		2.5	Y	Absent		-
L2146868-03Y	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-03Z	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-04A	Plastic 2oz unpreserved for TS	B	NA		2.5	Y	Absent		TS(7)
L2146868-04B	Vial Large Septa unpreserved (4oz)	B	NA		2.5	Y	Absent		TCLP-EXT-ZHE(14)
L2146868-04C	Tumble Vessel	B	NA		2.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146868-04D	Tumble Vessel	B	NA		2.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146868-04F	Glass 120ml/4oz unpreserved	B	NA		2.5	Y	Absent		-
L2146868-04W	Amber 1000ml unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-8270(14)
L2146868-04X	Plastic 120ml HNO3 preserved Extracts	B	NA		2.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
L2146868-04X9	Tumble Vessel	B	NA		2.5	Y	Absent		-
L2146868-04Y	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-04Z	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-05A	Plastic 2oz unpreserved for TS	B	NA		2.5	Y	Absent		TS(7)
L2146868-05B	Vial Large Septa unpreserved (4oz)	B	NA		2.5	Y	Absent		TCLP-EXT-ZHE(14)
L2146868-05C	Tumble Vessel	B	NA		2.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146868-05D	Tumble Vessel	B	NA		2.5	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),NYTCL-8082(365),REACTCN(14)
L2146868-05F	Glass 120ml/4oz unpreserved	B	NA		2.5	Y	Absent		-
L2146868-05W	Amber 1000ml unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-8270(14)

*Values in parentheses indicate holding time in days

Project Name: MICHIGAN AND BEST
Project Number: T0569-021-001-003

Lab Number: L2146868
Report Date: 09/09/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2146868-05X	Plastic 120ml HNO3 preserved Extracts	B	NA		2.5	Y	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2146868-05X9	Tumble Vessel	B	NA		2.5	Y	Absent		-
L2146868-05Y	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-05Z	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-06A	Plastic 2oz unpreserved for TS	B	NA		2.5	Y	Absent		TS(7)
L2146868-06B	Vial Large Septa unpreserved (4oz)	B	NA		2.5	Y	Absent		TCLP-EXT-ZHE(14)
L2146868-06C	Tumble Vessel	B	NA		2.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2146868-06D	Tumble Vessel	B	NA		2.5	Y	Absent		REACTS(14),IGNIT-1030(14),PH-9045(1),REACTCN(14),NYTCL-8082(365)
L2146868-06F	Glass 120ml/4oz unpreserved	B	NA		2.5	Y	Absent		-
L2146868-06W	Amber 1000ml unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-8270(14)
L2146868-06X	Plastic 120ml HNO3 preserved Extracts	B	NA		2.5	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2146868-06X9	Tumble Vessel	B	NA		2.5	Y	Absent		-
L2146868-06Y	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-06Z	Vial unpreserved Extracts	B	NA		2.5	Y	Absent		TCLP-VOA(14)
L2146868-07A	Plastic 2oz unpreserved for TS	B	NA		2.5	Y	Absent		HOLD-WETCHEM()
L2146868-07B	Vial Large Septa unpreserved (4oz)	B	NA		2.5	Y	Absent		HOLD-8260(14)
L2146868-07C	Vial Large Septa unpreserved (4oz)	B	NA		2.5	Y	Absent		HOLD-METAL(180)
L2146868-07D	Glass 500ml/16oz unpreserved	B	NA		2.5	Y	Absent		HOLD-8270(14),HOLD-8082(14)

*Values in parentheses indicate holding time in days

Project Name:	MICHIGAN AND BEST	**Lab Number:**	L2146868
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

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:	MICHIGAN AND BEST	**Lab Number:**	L2146868
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

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:	MICHIGAN AND BEST	**Lab Number:**	L2146868
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

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.

Project Name:	MICHIGAN AND BEST	**Lab Number:**	L2146868
Project Number:	T0569-021-001-003	**Report Date:**	09/09/21

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

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, SM4500Cl-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, 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

ALPHA ANALYTICAL

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TEL: 508-898-9220
FAX: 508-898-9193

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: 09/01/21 ~~L2146865~~

ALPHA Job #: L2146868

Client Information
Client: Turnkey Environmental
Address: 2558 Hamburg Turnpike Lackawanna NY
Phone: 716 818-8358
Fax: 716 856 0583
Email: TBehrendt@TurnkeyEnv.com

Project Information
Project Name: Michigan and Best
Project Location: Buffalo NY
Project #: T0569-021-001-003-003
(Use Project name as Project #): X
Project Manager: Chris Boron
ALPHAQuote #:

Turn-Around Time
Standard: X
Rush (only if pre approved): ☐
Due Date:
# of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCLP VOC	TCLP METALS	TCLP SVOC	PCB	Ignitability	Corrosivity	Reactivity	T. Solids	Sample Specific Comments	Total Bottle
46868-01	WC #5	8/31/21	839	50:1	TAB	X	X	X	X	X	X	X	X		4
-02	WC #6		903			X	X	X	X	X	X	X	X		4
-03	WC #7		937			X	X	X	X	X	X	X	X		4
-04	WC #8		1030			X	X	X	X	X	X	X	X		4
-05	WC #9		1110			X	X	X	X	X	X	X	X		4
-06	WC #10		1212			X	X	X	X	X	X	X	X		4
-07	WC #11		1255			X	X	X	X	X	X	X	X	Hold	4

Container Type: A A A A A A A P
Preservative: A A A A A A A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
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

Relinquished By:	Date/Time	Received By:	Date/Time
Thomas A Behrendt	8/31/21 1607		8/31/21 1607
	8/31/21 1700		9/1/21 00:36

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.)

Form No: 01-25 HC (rev. 30-Sept-2013)