November 22, 2019

Mr. Frederic LoFaso
Shylo Group Inc.
356 Hertel Avenue
Buffalo, NY 14207

Re: Phase II Environmental Investigation
356 Hertel Avenue and 42 Foundry Street
Buffalo, New York

Dear Mr. LoFaso:

TurnKey Environmental Restoration, LLC (TurnKey) has prepared this report to present the results of a Phase II Environmental Investigation performed at 356 Hertel Avenue and 42 Foundry Street in the City of Buffalo, New York (Site). A Site Location and Vicinity Map is provided as Figure 1.

BACKGROUND

Based on TurnKey's review of historical documents, including Sanborn Fire Insurance Maps (see Appendix A), the Site was used industrially and included railroad tracks from at least 1916 through at least 1950. Specifically, John Kam Malting Co., a malting operation with a malt house, a kiln house, water tempering, grain elevators/tanks and a warehouse occupied the Site from at least 1890 through at least 1916. Black Rock Milling Corporation/Park & Pollard Co., which was also a malting operation, occupied the Site in at least 1950. An additional historic occupant was identified as Buffalo Insulation Distributors/Multi-glass Products from at least 1965 through at least 1986.

A 1961 survey map of the Site indicates railroad tracks throughout the western portion of the Site. Additional railroad tracks are depicted on the eastern portion of the Site.

A Limited and Focused Subsurface Investigation was completed on-Site at the 356 Hertel Avenue Parcel by Lender Consulting Services, Inc. (LCS) for Shylo Group, Inc. and Valley National Bank, dated November 13, 2002. The purpose of the assessment was to investigate an underground storage tank (UST) fill port in the parking lot, south of the existing building. According to LCS, one 1,000-gallon gasoline UST was installed at the Site in 1962 and this tank was replaced with a 4,000-gallon gasoline UST in 1969 that was "slushed" (i.e., filled with water or concrete) in 1986. Municipal records reportedly indicated the presence of the USTs proximate to the fill port observed by LCS in the parking lot.

Seven soil borings, BH1 through BH7, were completed by LCS south of the building in the tank area using a direct-push drill rig to a target depth of 12 feet below ground surface (fbgs) or equipment refusal at 4.5 fbgs to 5 fbgs, which was identified by LCS as being the top of the

UST. Subsurface lithology was described by LCS as fill material up to approximately five fbgs underlain by gravelly clay or clay. Photoionization detector (PID) readings reportedly ranged between 0.1 parts per million (ppm) to over 2,000 ppm. The highest PID readings of over 2,000 ppm were identified at BH1 (6-8 fbgs) and BH7 (4-8 fbgs), where LCS also identified petroleum odors. Laboratory analytical results associated with soil samples collected from BH1 (6-8 fbgs) and BH7 6-8 fbgs) indicate volatile organic compounds (VOCs) at concentrations above New York State Department of Environmental Conservation (NYSDEC) Commissioner Policy 51 (CP-51) Soil Cleanup Levels (SCLs).

Due to the Phase II findings, the NYSDEC was notified and Spill No. 0208304 was assigned to 356 Hertel Avenue.

Information relative to Spill No. 0208304 provided to TurnKey by the NYSDEC included a portion of UST/Petroleum Contaminated Soils Removal Report prepared by Nature's Way Environmental Consultants and Contractors, Inc. (Nature's Way), dated January 10, 2003; this report indicates that one 4,000-gallon UST was removed from the Site in December 2002. Approximately 460 tons of petroleum-impacted soil encountered during the tank removal work were reportedly disposed of off-site at the Modern Landfill in Model City, New York.

The NYSDEC reclassified Spill No. 0208304 as "closed" on January 29, 2003.

TurnKey's Phase II Environmental Investigation was completed to further assess subsurface conditions across the Site. Additional information relative to the work completed by TurnKey is provided below.

INVESTIGATION ACTIVITIES

On October 29, 2019, ten test pits identified as TP-1 through TP-10 were completed using an excavator; the majority of the test pits were completed to a target depth of approximately ten fbgs; however, shallow equipment refusal due to concrete was encountered at TP-3 at approximately one fbgs. Test pit locations are shown on Figure 2. Subsurface soil samples were collected from the soil/fill layer at TP-1 (0-1 fbgs), TP-2 (0-2 fbgs), TP-4 (0-1 fbgs), TP-5 (0-1 fbgs), TP-6 (1-2 fbgs),TP-7 (4-6 fbgs), TP-8 (7-8 fbgs), and TP-10 (0-2 fbgs). Two surface soil sample (S-1, S-2) were collected from a soil/fill disturbance area within the existing building footprint (see Figure 2). The soil/fill samples were screened for volatile organics using a MiniRae 3000 PID, visual characteristics for each sample were classified using the ASTM D2488 Visual-Manual Procedure Description, and olfactory observations, if any, were noted. Additional information is provided in the table below.

Eight subsurface soil/fill samples and two surface soil samples from within the existing building footprint were submitted to the laboratory for analysis of polycyclic aromatic hydrocarbons (PAHs) and Resource Conservation and Recovery Act (RCRA) Metals. Due to the presence of recycled building materials noted within the building at the surface soil sample locations, both surface soil/fill samples were also analyzed for polychlorinated biphenyls

(PCBs). All samples were collected in laboratory provided sample bottles and were cooled to 4^0 C prior to transport.

FIELD OBSERVATIONS AND FINDINGS

In general, urban fill consisting of black fines mixed with cinders, ash, brick and concrete was observed from the ground surface to depths ranging between approximately two to nine fbgs. Intermingled slag was noted at certain test pits (TP-4, TP-6 and TP-7). Native sandy lean clay was observed underling the fill materials across the Site.

No elevated PID readings above background (0.0 ppm) were noted during the work.

Photographs taken during the work are included in Appendix B. Additional information relative to lithology and field observations is provided below:

Investigation Location ID	Description	Sample Depth
TP-1	0-2 ft – Fill- Black, moist, mostly black fines with ash, brick, cinders and some well sorted gravel, no odors 2-8 ft – Sandy lean clay: Reddish brown, moist, mostly medium plasticity fines, some fine sand, little sub rounded gravel, stiff, massive, no odors	0-1 fbgs
TP-2	0-1 ft – Fill- Black, moist, mostly black fines with ash, brick, cinders, some well sorted gravel, no odors 1-2 ft – Ash layer 2-8 ft – Sandy lean clay: Reddish brown, moist, mostly medium plasticity fines, some fine sand, little sub rounded gravel, stiff, massive, no odors	0-2 fbgs
TP-3	0-1 ft – Sub rounded gravel and sand: Brown, moist, mostly sub rounded gravel, little fine sand, no odors Refusal at 1 fbgs. concrete	No Sample
TP-4	0-2 ft – Fill- Black, moist to wet (2'), mostly black fines with ash, brick, slag, wood, concrete, some well sorted gravel, no odors 2-8 ft – Sandy lean clay: Reddish brown, moist, mostly medium plasticity fines, some fine sand, little sub rounded gravel, stiff, massive, no odors	0-1 fbgs
TP-5	0-1 ft – Fill- Black, moist, mostly black fines with ash, brick, cinders, some well sorted gravel, no odors 1-2 ft – Ash layer 2-8 ft – Sandy lean clay: Reddish brown, moist, mostly medium plasticity fines, some fine sand, little sub rounded gravel, stiff, massive, no odors	0-1 fbgs

Investigation Location ID	Description	Sample Depth
TP-6	0-1 Subangular gravel 1-1.5 ft – Fill- Black, moist to wet (2'), mostly black fines with ash, brick, slag, wood, concrete cinders, some well sorted gravel, no odors 1.5- 4 ft- Fill- Brown, moist, mostly silty sand with brick, concrete, wires, no odors 4-9 ft – Sandy lean clay: Reddish brown, moist, mostly medium plasticity fines, some fine sand, little sub rounded gravel, stiff, massive, no odors	1-2 fbgs
TP-7	0-0.5 ft – Fill: Brown/black, moist, mostly silty sand, no odors 0.5-4 ft –Fine sand- Tan, moist, mostly fine sand, no odors 4-6 ft – Fill- Black, moist, mostly black fines with slag, metal, concrete, piping, metal, former railroad ties, brick, no odors 6-8 ft – Brick Fill 8-9 ft – as above, Black Fill 9-10 ft- Sandy Lean clay- Reddish brown, moist, mostly medium plasticity fines, some fine sand, stiff, no odors	4-6 fbgs
TP-8	0-2 ft – Reworked soil/fill: Brown, moist, mostly medium plasticity fines, some fine sand, some silt, reworked soils, no odors 2-7 ft – Fill- Black, moist, mostly black fines with brick, cinders, ash, no odors 7-8 ft – Ash layer 8-9 ft – Sandy Lean clay- Reddish brown, moist, mostly medium plasticity fines, some fine sand, stiff, no odors	7-8 fbgs
TP-9	0-4 ft – Reworked soil/fill: Brown, moist, mostly medium plasticity fines, some fine sand, some silt, some fill, reworked soils, no odors 4-7 ft – Fill- Black, moist, mostly black fines with brick, cinders, ash, metal, no odors 7-9 ft – Sandy Lean clay- Reddish brown, moist, mostly medium plasticity fines, some fine sand, stiff, no odors	No Sample
TP-10	0-3 ft – Fill- Black, moist, mostly black fines with ash, brick, cinders, some well sorted gravel, no odors ash layer surrounding brick structure in test pit 3-10 ft – Sandy lean clay: Reddish brown, moist, mostly medium plasticity fines, some fine sand, little sub rounded gravel, stiff, massive, no odors	0-2 fbgs
S-1	0-0.5 – Fill with silty sand, brick fragments, subangular gravel and recycled building materials.	0-0.5 fbgs
S-2		0-0.5 fbgs

LABORATORY ANALYTICAL RESULTS

Laboratory analytical reports are provided in Appendix C. Analytical results were compared to 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (USCOs), Restricted-Residential Use Soil Cleanup Objectives (RRSCOs), Commercial Use SCOs (CSCOs) and Industrial Use SCOs (ISCOs).

As summarized on Table 1, PAHs were identified at concentrations exceeding USCOs, RRSCOs, CSCOs and ISCOs at five of the eight exterior subsurface investigation locations at TP-1, TP-4, TP-6, TP-7 and TP-8 and at both surface soil sample locations within the building at S-1 and S-2. Regarding metals, arsenic was detected at a concentration exceeding its ISCO at TP-1 (25.8 milligrams per kilogram, mg/kg), TP-6 (34.1 mg/kg), TP-7 (18.2 mg/kg) and at S-2 (23.9 mg/kg). Cadmium was detected above its RRSCO at S-2. Lead was detected above its USCO at five locations at TP-1, TP-6, TP-7, S-1, and S-2 and mercury exceeded its USCO at two locations at TP-6 and S-2. PCBs were detected above laboratory detection limits at S-1 and S-2; however, concentrations do not exceed USCOs.

CONCLUSIONS

The Site soil/fill is impacted by PAHs and metals with concentrations exceeding Part 375 USCOs, RRSCOs, CSCOs and ISCOs. Based on evidence of urban fill observed at all investigation locations, it is likely that PAH- and/or metals-impacted soil/fill is present across the Site.

We understand the Site is being considered for redevelopment in a mixed-use residential and commercial re-use scenario. The least restrictive applicable SCOs to attain would be RRSCOs, based on the planned use of the Site. Based on the findings detailed above, the Site is a potential candidate for the New York State Brownfield Cleanup Program (BCP). Regardless of whether the BCP is pursued, PAHs- and metals-impacted soil/fill materials present on-Site will require exposure control, remediation, and/or proper soil management either prior to or during the redevelopment project.

DECLARATIONS/LIMITATIONS

This report has been prepared for the exclusive use of Shylo Group Inc. The contents of this report are limited to information available at the time of the subject site investigation. Data provided by others as referenced herein is assumed to be accurate and reliable. The findings herein may be relied upon only at the discretion of Shylo Group Inc. and are limited to the terms and conditions identified in the agreement between TurnKey and its client. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC.

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

Sincerely,
TurnKey Environmental Restoration, LLC

Michael A. Lesakowski
Principal

Bryan W. Mayback
Sr. Project Scientist

TABLE

TABLE 1
SUMMARY OF SUBSURFACE SOIL/FILL SAMPLE ANALYTICAL RESULTS
PHASE II ENVIRONMENTAL INVESTIGATION
356 HERTEL AND 42 FOUNDRY SITE
BUFFALO, NEW YORK

PARAMETER	Unrestricted Use SCOs[1]	Restricted Residential Use SCOs [2]	Commercial Use SCOs[3]	Industrial Use SCOs[4]	TEST PIT SAMPLE LOCATION									
					TP-1 0-1 ft	TP-2 0-2 ft	TP-4 0-1 ft	TP-5 0-1 ft	TP-6 1-2 ft	TP-7 4-6 ft	TP-8 7-8 ft	TP-10 0-2 ft	S-1	S-2
					10/30/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019	10/30/2019
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [5]														
Acenaphthene	**20**	**100**	**500**	**1000**	0.44	0.036 J	0.032 J	0.05 J	0.072 J	0.32	0.28	ND	0.75	8.7
Acenaphthylene	**100**	**100**	**500**	**1000**	0.36	ND	0.55	ND	0.68	0.69	0.11 J	ND	0.15	0.62 J
Anthracene	**100**	**100**	**500**	**1000**	0.7	0.06 J	0.4	0.094 J	0.51	1.2	0.73	ND	0.99	12
Benzo(a)anthracene	**1**	**1**	**5.6**	**11**	**3.5**	0.3	**1.8**	0.36	**2**	**3.4**	**1.6**	0.13	**3.7**	**36**
Benzo(a)pyrene	**1**	**1**	**1**	**1.1**	**2.6**	0.7	**1.4**	0.23	**1.7**	**2.8**	**1.2**	0.1 J	**3.3**	**35**
Benzo(b)fluoranthene	**1**	**1**	**5.6**	**11**	**4.4**	0.37	**2.9**	0.32	**2.8**	**4**	**1.7**	0.17	**4.9**	**49**
Benzo(ghi)perylene	**100**	**100**	**500**	**1000**	1.9	0.18	1.1	0.17 J	1.1	1.8	0.73	0.079 J	2.9	19
Benzo(k)fluoranthene	**0.8**	**3.9**	**56**	**110**	**1.3**	0.11 J	0.71	0.1 J	0.62	**0.98**	0.39	0.039 J	**1.6**	**17**
Chrysene	**1**	**3.9**	**56**	**110**	**3.7**	0.26	**1.8**	0.41	**1.8**	**2.8**	**1.3**	0.12 J	**3.4**	**35**
Dibenzo (a,h)anthracene	**0.33**	**0.33**	**0.56**	**1.1**	**0.81**	0.043 J	**0.49**	0.046 J	**0.36 J**	**0.56**	0.22	ND	**0.8**	**5.3**
Fluoranthene	**100**	**100**	**500**	**1000**	4.4	0.5	1.8	0.48	2.5	5.2	2.8	0.21	5.9	63
Fluorene	**30**	**100**	**500**	**1000**	0.27	0.027 J	0.076 J	0.091 J	0.11 J	0.39	0.36	ND	0.46	6.3
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	**11**	**2.4**	0.19	**1.4**	0.16 J	**1.3**	**2**	**0.81**	0.085 J	**3.3**	**23**
Naphthalene	**12**	**100**	**500**	**1000**	--	0.047 J	--	0.95	0.88	1.2	0.31	0.041 J	0.25	3.5 J
Phenanthrene	**100**	**100**	**500**	**1000**	2.6	0.33	0.68	1.1	1.3	4	2.8	0.14	4.1	48
Pyrene	**100**	**100**	**500**	**1000**	4	0.43	1.6	0.49	2.3	4.3	2.4	0.17	4.5	50
Total PCBs - mg/Kg [5]														
Aroclor 1242	**0.1**	**1**	**1**	**25**	--	--	--	--	--	--	--	--	0.022 J	ND
Aroclor 1254	**0.1**	**1**	**1**	**25**	--	--	**--**	**--**	**--**	**--**	**--**	**--**	0.0247 J	0.0559
Aroclor 1260	**0.1**	**1**	**1**	**25**	--	--	**--**	**--**	**--**	**--**	**--**	**--**	0.017 J	0.035 JP
Total PCBs	**0.1**	**1**	**1**	**25**	--	--	**--**	**--**	**--**	**--**	**--**	**--**	0.0637 J	0.0909 J
Total Metals - mg/Kg														
Arsenic	**13**	**16**	**16**	**16**	**25.8**	2.8	7.8	9.62	**34.1**	**18.2**	2.31	4.64	7.24	**23.9**
Barium	**350**	**400**	**400**	**10000**	84.1	24.4	64	72.8	111	149	18.1	48.3	92.3	92.1
Cadmium	**2.5**	**4.3**	**9.3**	**60**	2.42	0.135 J	2.15	ND	ND	0.254 J	ND	ND	0.601	**8.54**
Chromium	**30**	**180**	**1500**	**6800**	11.4	3.44	9.25	4.14	28.2	22.5	3.54	5.83	15.4	21.2
Lead	**63**	**400**	**1000**	**3900**	**117**	8.18	52.4	51.1	**188**	**212**	2.99	44.8	**162**	**206**
Mercury	**0.18**	**0.81**	**2.8**	**5.7**	0.081	ND	ND	ND	**0.266**	0.127	ND	0.159	ND	**0.195**
Selenium	**30**	**180**	**1500**	**10000**	3.14	0.368 J	1.32	1.08 J	2.11	1.44	0.331 J	0.518 J	0.879 J	3.54
Silver	**2**	**180**	**1500**	**6800**	ND	ND	ND	ND	ND	0.163 J	ND	ND	0.188 J	0.506 J

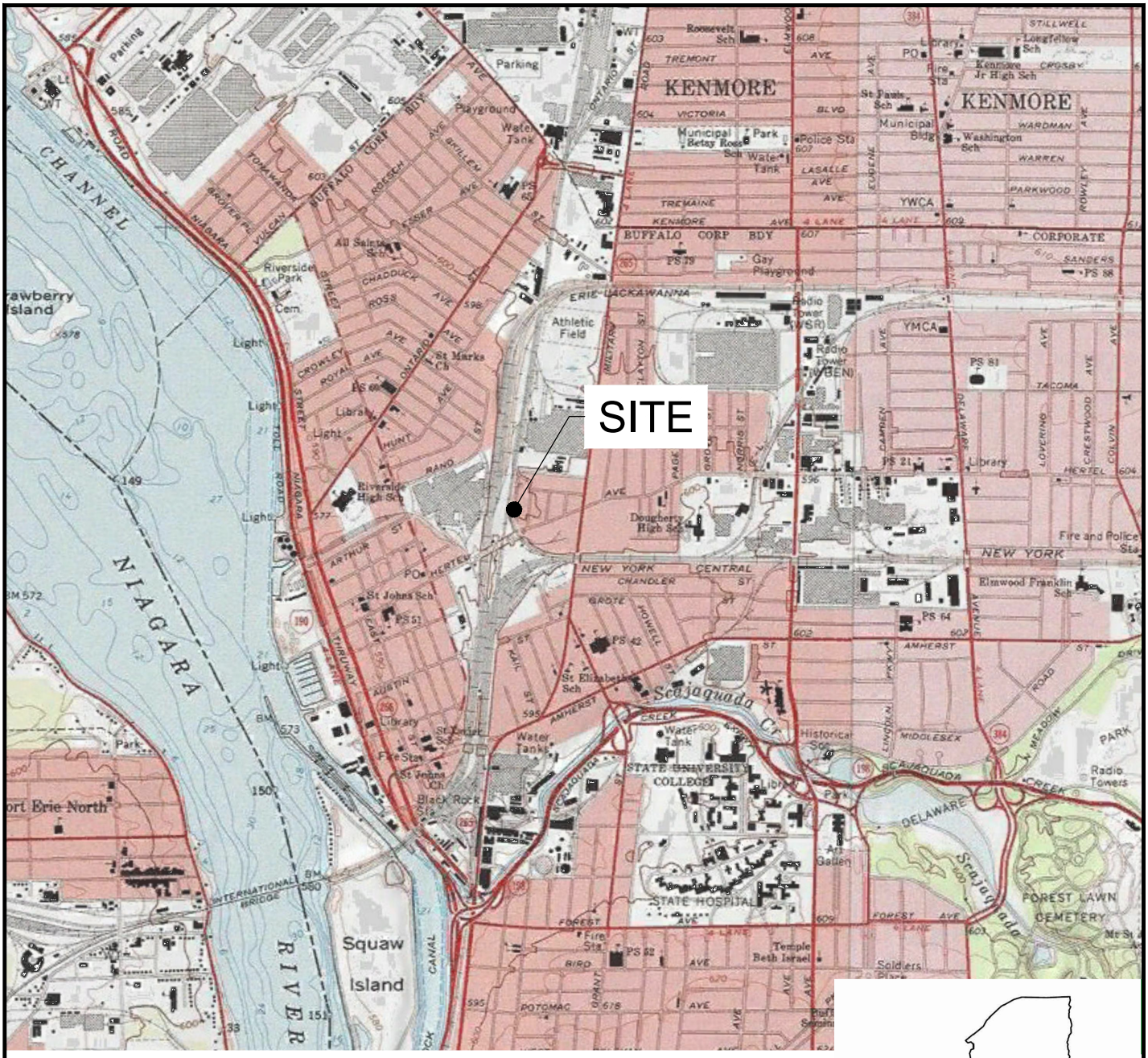
Notes:
1. Values per 6NYCRR Part 375 Unrestricted Soil Cleanup Objectives (SCOs), Table 375-6(a).
2. Values per 6NYCRR Part 375 Residential Use Soil Cleanup Objectives (SCOs), Table 375-6.8(b).
3. Values per 6NYCRR Part 375 Commercial Use Soil Cleanup Objectives (SCOs), Table 375-6.8(b).
4. Values per 6NYCRR Part 375Industrial Use Soil Cleanup Objectives (SCOs), Table 375-6.8(b).
5. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs

Definitions:
ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter, or the parameter was not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
DL = indicates a dilution.

BOLD	= Exceeds Unrestricted SCOs or CP-51 SCLs
BOLD	= Exceeds Restricted Residential SCOs
BOLD	= Exceeds Commercial SCOs
BOLD	= Exceeds Industrial SCOs

FIGURES

FIGURE 1



TURNKEY ENVIRONMENTAL RESTORATION, LLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: 0508-019-001

DATE: NOVEMBER 2019

DRAFTED BY: CEH

SITE LOCATION AND VICINITY MAP

PHASE II ENVIRONMENTAL INVESTIGATION

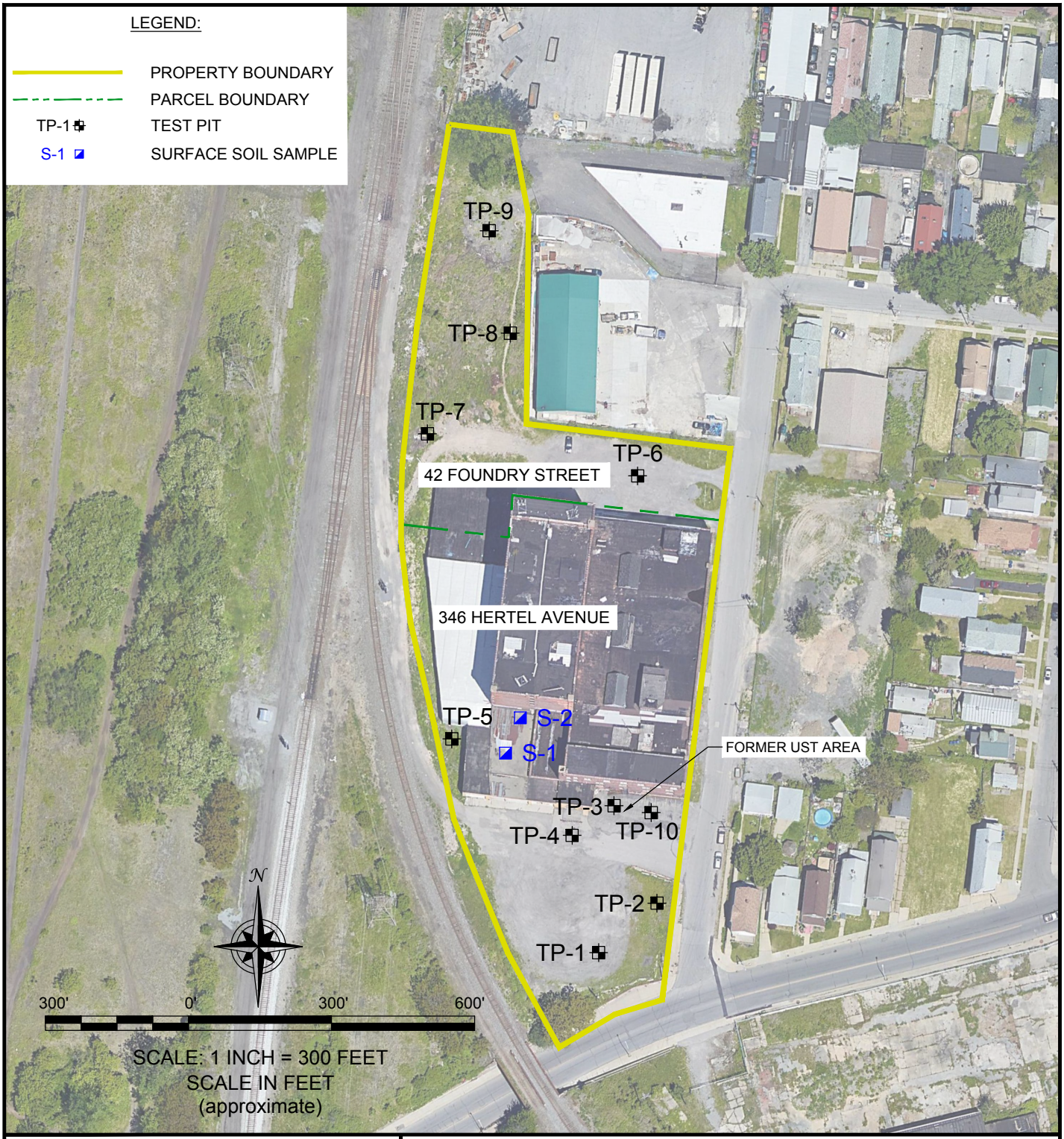
356 HERTEL AVENUE / 42 FOUNDRY STREET

BUFFALO, NEW YORK

PREPARED FOR

SHYLO GROUP INC.

FIGURE 2



TurnKey Environmental Restoration, LLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0635

PROJECT NO.: 0508-019-001

DATE: NOVEMBER 2019

DRAFTED BY: CEH

SITE PLAN (AERIAL) AND INVESTIGATION LOCATIONS

PHASE II ENVIRONMENTAL INVESTIGATION

356 HERTEL AVENUE / 42 FOUNDRY STREET

BUFFALO, NEW YORK

PREPARED FOR

SHYLO GROUP INC.

APPENDIX A

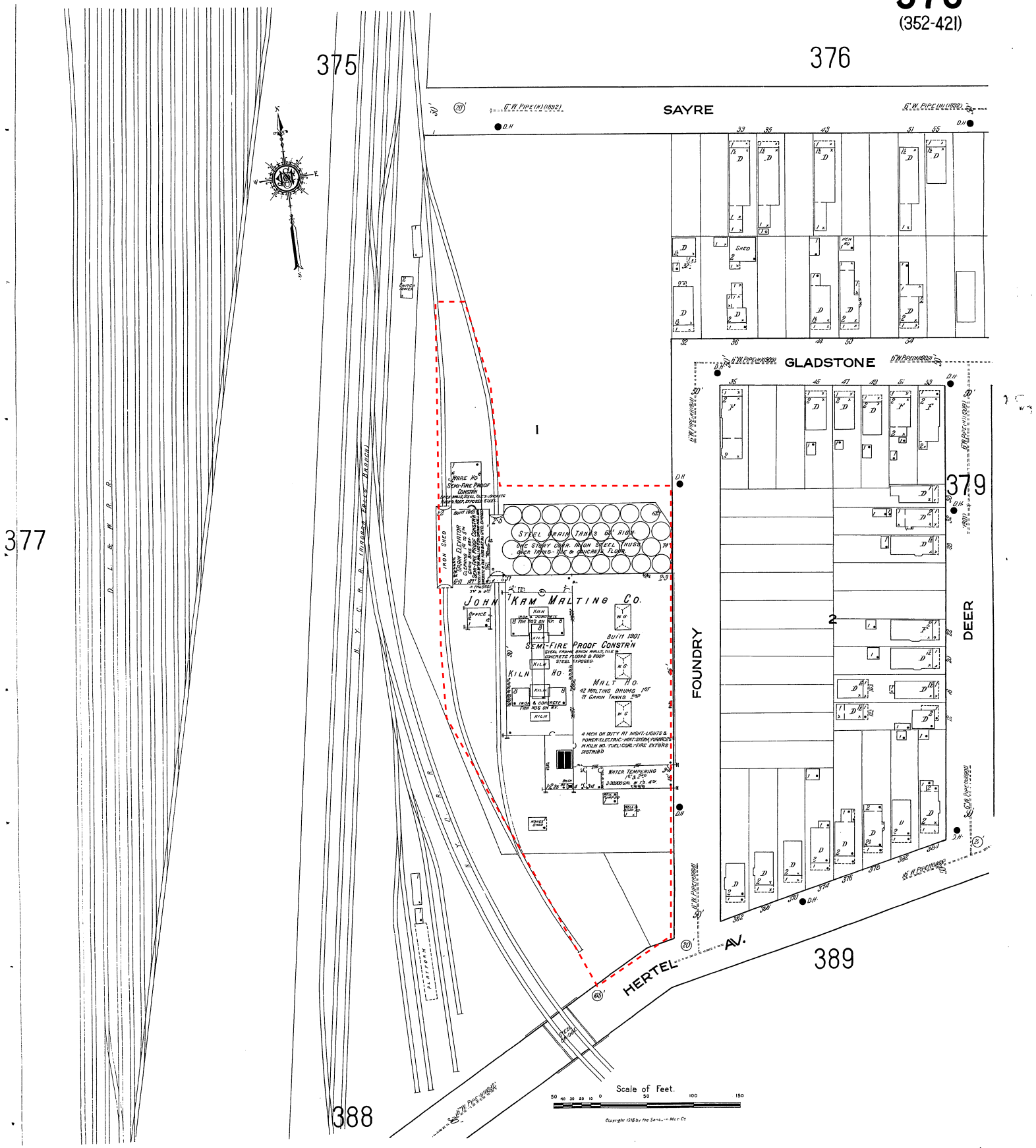
HISTORIC SANBORN MAPS

1916

BUFFALO, N.Y. VOL. 4

378

(352-421)



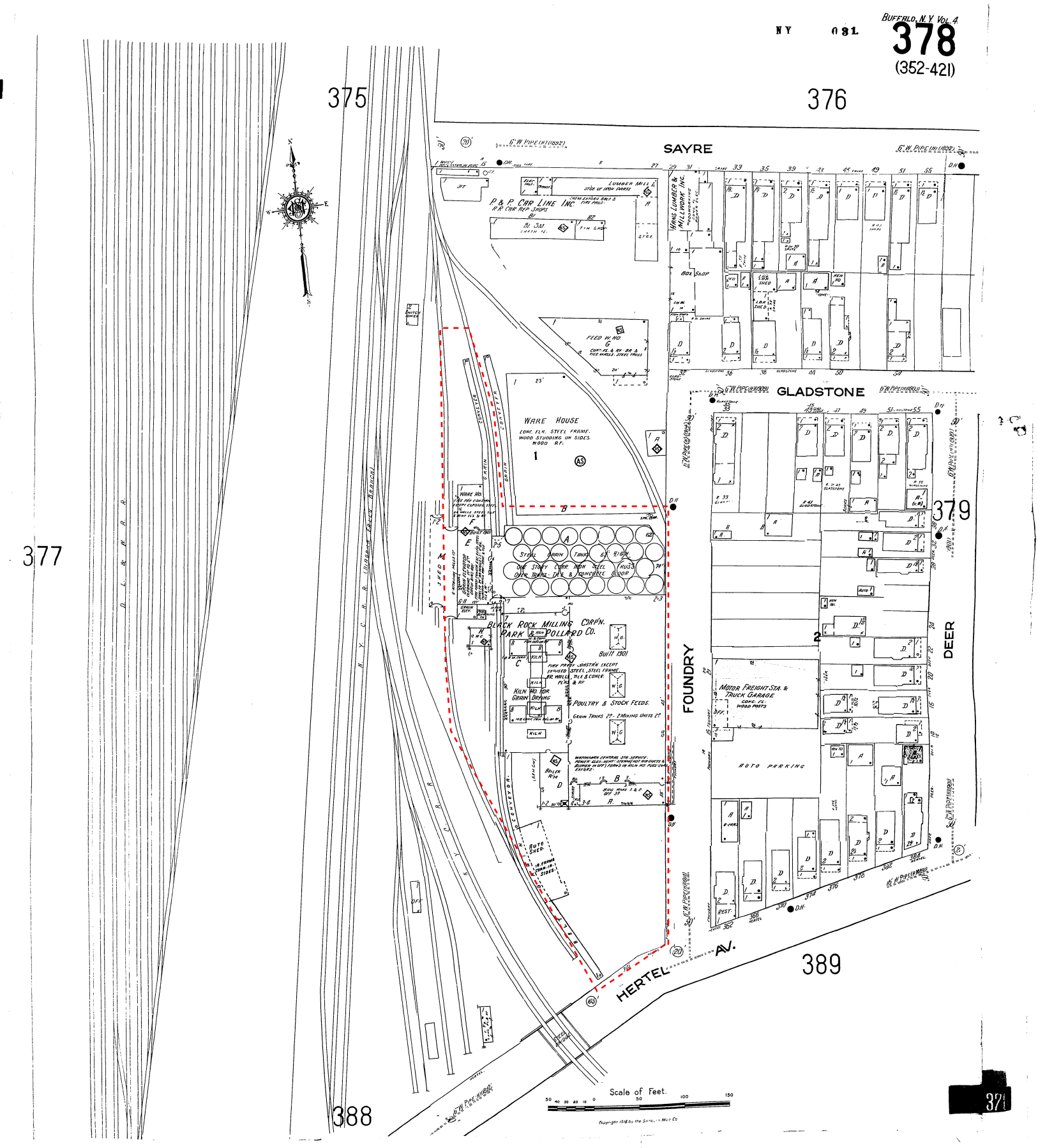
1950

NY 081

BUFFALO, N.Y. VOL. 4

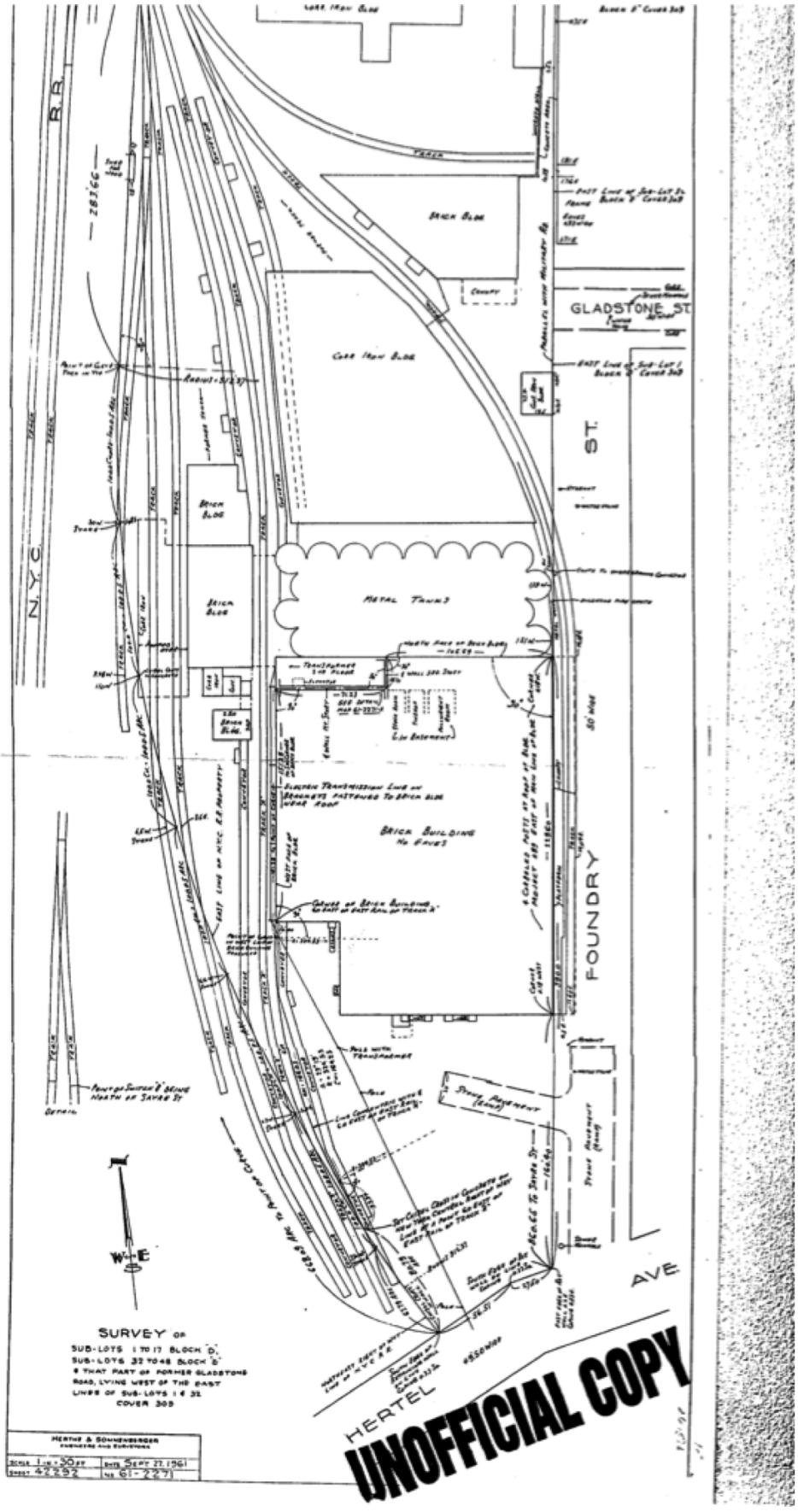
378

(352-421)



371

1961 Survey


R.R.
N.Y.C.
GLADSTONE ST.
FOUNDRY
AVE
HERTEL
BRICK BLDG
METAL TANKS
BRICK BUILDING
SURVEY OF
SUB-LOTS 1 TO 17 BLOCK 'D'
SUB-LOTS 32 TO 48 BLOCK 'B'
& THAT PART OF FORMER GLADSTONE
ROAD, LYING WEST OF THE EAST
LINES OF SUB-LOTS 1 & 32
COVER 303
HERTHE & SONNENBERGER
SCALE 1 in = 50 ft
SHEET 47292
DATE SEPT 27 1961
JOB 61-2271
UNOFFICIAL COPY

APPENDIX B

PHOTO LOG

SITE PHOTOGRAPHS

Photo 1:

Photo 2:

Photo 3:

Photo 4:

Photo 1: Fill material at TP-2.

Photo 2: Fill material within the building footprint at S-1 and S-2.

Photos 3 and 4: Typical fill material noted across the Site.

APPENDIX C

LABORATORY ANALYTICAL REPORT

ANALYTICAL REPORT

Lab Number:	L1951915
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Bryan Mayback
Phone:	(716) 856-0599
Project Name:	356 HERTEL & 42 FOUNDRY
Project Number:	T0508-019-001
Report Date:	11/08/19

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: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1951915
Report Date: 11/08/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1951915-01	TP-1 0-1FT	SOIL	BUFFALO, NY	10/30/19 08:45	11/01/19
L1951915-02	TP-2 0-2FT	SOIL	BUFFALO, NY	10/30/19 09:30	11/01/19
L1951915-03	TP-4 0-1FT	SOIL	BUFFALO, NY	10/30/19 11:00	11/01/19
L1951915-04	TP-5 0-1FT	SOIL	BUFFALO, NY	10/30/19 12:00	11/01/19
L1951915-05	TP-6 1-2FT	SOIL	BUFFALO, NY	10/30/19 13:00	11/01/19
L1951915-06	TP-7 4-6FT	SOIL	BUFFALO, NY	10/30/19 13:45	11/01/19
L1951915-07	TP-8 7-8FT	SOIL	BUFFALO, NY	10/30/19 14:30	11/01/19
L1951915-08	TP-10 0-2FT	SOIL	BUFFALO, NY	10/30/19 15:00	11/01/19
L1951915-09	S-1	SOIL	BUFFALO, NY	10/30/19 15:30	11/01/19
L1951915-10	S-2	SOIL	BUFFALO, NY	10/30/19 16:00	11/01/19

Project Name:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1951915
Project Number:	T0508-019-001	**Report Date:**	11/08/19

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:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1951915
Project Number:	T0508-019-001	**Report Date:**	11/08/19

Case Narrative (continued)

Report Submission

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

Semivolatile Organics

L1951915-05: The sample has elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

L1951915-10: The sample has elevated detection limits due to the dilution required by the sample matrix.

L1951915-10: The surrogate recoveries are below the acceptance criteria for nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%) and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

Total Metals

L1951915-10: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1304953-4 Laboratory Duplicate RPDs for arsenic (30%), barium (54%) and chromium (30%), performed on L1951915-02, are outside the acceptance criteria. The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

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

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 11/08/19

ORGANICS

SEMIVOLATILES

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-02
Client ID: TP-2 0-2FT
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 09:30
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/08/19 03:12
Analyst: RC
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 11/04/19 04:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	36	J	ug/kg	160	21.	1
Fluoranthene	500		ug/kg	120	23.	1
Naphthalene	47	J	ug/kg	200	24.	1
Benzo(a)anthracene	300		ug/kg	120	22.	1
Benzo(a)pyrene	270		ug/kg	160	49.	1
Benzo(b)fluoranthene	370		ug/kg	120	34.	1
Benzo(k)fluoranthene	110	J	ug/kg	120	32.	1
Chrysene	260		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	60	J	ug/kg	120	39.	1
Benzo(ghi)perylene	180		ug/kg	160	24.	1
Fluorene	27	J	ug/kg	200	20.	1
Phenanthrene	330		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	43	J	ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	190		ug/kg	160	28.	1
Pyrene	430		ug/kg	120	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	65		30-120
4-Terphenyl-d14	52		18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-04
Client ID: TP-5 0-1FT
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 12:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/08/19 04:19
Analyst: RC
Percent Solids: 62%

Extraction Method: EPA 3546
Extraction Date: 11/04/19 04:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	50	J	ug/kg	210	28.	1
Fluoranthene	480		ug/kg	160	31.	1
Naphthalene	950		ug/kg	270	32.	1
Benzo(a)anthracene	360		ug/kg	160	30.	1
Benzo(a)pyrene	230		ug/kg	210	65.	1
Benzo(b)fluoranthene	320		ug/kg	160	45.	1
Benzo(k)fluoranthene	100	J	ug/kg	160	43.	1
Chrysene	410		ug/kg	160	28.	1
Acenaphthylene	ND		ug/kg	210	41.	1
Anthracene	94	J	ug/kg	160	52.	1
Benzo(ghi)perylene	170	J	ug/kg	210	31.	1
Fluorene	91	J	ug/kg	270	26.	1
Phenanthrene	1100		ug/kg	160	32.	1
Dibenzo(a,h)anthracene	46	J	ug/kg	160	31.	1
Indeno(1,2,3-cd)pyrene	160	J	ug/kg	210	37.	1
Pyrene	490		ug/kg	160	26.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	69		30-120
4-Terphenyl-d14	63		18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-05
Client ID: TP-6 1-2FT
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 13:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/08/19 06:12
Analyst: RC
Percent Solids: 78%

Extraction Method: EPA 3546
Extraction Date: 11/04/19 14:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	72	J	ug/kg	520	67.	1
Fluoranthene	2500		ug/kg	390	74.	1
Naphthalene	880		ug/kg	640	78.	1
Benzo(a)anthracene	2000		ug/kg	390	72.	1
Benzo(a)pyrene	1700		ug/kg	520	160	1
Benzo(b)fluoranthene	2800		ug/kg	390	110	1
Benzo(k)fluoranthene	620		ug/kg	390	100	1
Chrysene	1800		ug/kg	390	67.	1
Acenaphthylene	680		ug/kg	520	99.	1
Anthracene	510		ug/kg	390	120	1
Benzo(ghi)perylene	1100		ug/kg	520	76.	1
Fluorene	110	J	ug/kg	640	63.	1
Phenanthrene	1300		ug/kg	390	78.	1
Dibenzo(a,h)anthracene	360	J	ug/kg	390	74.	1
Indeno(1,2,3-cd)pyrene	1300		ug/kg	520	90.	1
Pyrene	2300		ug/kg	390	64.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	66		30-120
4-Terphenyl-d14	59		18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-06
Client ID: TP-7 4-6FT
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 13:45
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/08/19 08:49
Analyst: RC
Percent Solids: 83%

Extraction Method: EPA 3546
Extraction Date: 11/04/19 04:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	320		ug/kg	160	20.	1
Fluoranthene	5200		ug/kg	120	22.	1
Naphthalene	1200		ug/kg	190	24.	1
Benzo(a)anthracene	3400		ug/kg	120	22.	1
Benzo(a)pyrene	2800		ug/kg	160	47.	1
Benzo(b)fluoranthene	4000		ug/kg	120	33.	1
Benzo(k)fluoranthene	980		ug/kg	120	31.	1
Chrysene	2800		ug/kg	120	20.	1
Acenaphthylene	690		ug/kg	160	30.	1
Anthracene	1200		ug/kg	120	38.	1
Benzo(ghi)perylene	1800		ug/kg	160	23.	1
Fluorene	390		ug/kg	190	19.	1
Phenanthrene	4000		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	560		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	2000		ug/kg	160	27.	1
Pyrene	4300		ug/kg	120	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	63		30-120
4-Terphenyl-d14	71		18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-07
Client ID: TP-8 7-8FT
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 14:30
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/08/19 05:04
Analyst: RC
Percent Solids: 70%

Extraction Method: EPA 3546
Extraction Date: 11/04/19 04:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	280		ug/kg	190	24.	1
Fluoranthene	2800		ug/kg	140	27.	1
Naphthalene	310		ug/kg	230	28.	1
Benzo(a)anthracene	1600		ug/kg	140	26.	1
Benzo(a)pyrene	1200		ug/kg	190	57.	1
Benzo(b)fluoranthene	1700		ug/kg	140	39.	1
Benzo(k)fluoranthene	390		ug/kg	140	37.	1
Chrysene	1300		ug/kg	140	24.	1
Acenaphthylene	110	J	ug/kg	190	36.	1
Anthracene	730		ug/kg	140	46.	1
Benzo(ghi)perylene	730		ug/kg	190	28.	1
Fluorene	360		ug/kg	230	23.	1
Phenanthrene	2800		ug/kg	140	28.	1
Dibenzo(a,h)anthracene	220		ug/kg	140	27.	1
Indeno(1,2,3-cd)pyrene	810		ug/kg	190	33.	1
Pyrene	2400		ug/kg	140	23.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	64		30-120
4-Terphenyl-d14	55		18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-08
Client ID: TP-10 0-2FT
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 15:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/08/19 05:49
Analyst: RC
Percent Solids: 77%

Extraction Method: EPA 3546
Extraction Date: 11/04/19 04:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	170	22.	1
Fluoranthene	210		ug/kg	130	24.	1
Naphthalene	41	J	ug/kg	210	26.	1
Benzo(a)anthracene	130		ug/kg	130	24.	1
Benzo(a)pyrene	100	J	ug/kg	170	52.	1
Benzo(b)fluoranthene	170		ug/kg	130	36.	1
Benzo(k)fluoranthene	39	J	ug/kg	130	34.	1
Chrysene	120	J	ug/kg	130	22.	1
Acenaphthylene	ND		ug/kg	170	33.	1
Anthracene	ND		ug/kg	130	42.	1
Benzo(ghi)perylene	79	J	ug/kg	170	25.	1
Fluorene	ND		ug/kg	210	21.	1
Phenanthrene	140		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	85	J	ug/kg	170	30.	1
Pyrene	170		ug/kg	130	21.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	69		30-120
4-Terphenyl-d14	68		18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-09
Client ID: S-1
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 15:30
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/08/19 09:34
Analyst: RC
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 11/04/19 04:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	750		ug/kg	150	20.	1
Fluoranthene	5900		ug/kg	120	22.	1
Naphthalene	250		ug/kg	190	23.	1
Benzo(a)anthracene	3700		ug/kg	120	22.	1
Benzo(a)pyrene	3300		ug/kg	150	47.	1
Benzo(b)fluoranthene	4900		ug/kg	120	32.	1
Benzo(k)fluoranthene	1600		ug/kg	120	31.	1
Chrysene	3400		ug/kg	120	20.	1
Acenaphthylene	150		ug/kg	150	30.	1
Anthracene	990		ug/kg	120	37.	1
Benzo(ghi)perylene	2900		ug/kg	150	22.	1
Fluorene	460		ug/kg	190	19.	1
Phenanthrene	4100		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	800		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	3300		ug/kg	150	27.	1
Pyrene	4500		ug/kg	120	19.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	56		30-120
4-Terphenyl-d14	53		18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-10 D
Client ID: S-2
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 16:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/08/19 15:04
Analyst: JG
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 11/04/19 04:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	8700		ug/kg	2900	380	20
Fluoranthene	63000		ug/kg	2200	420	20
Naphthalene	3500	J	ug/kg	3700	450	20
Benzo(a)anthracene	36000		ug/kg	2200	410	20
Benzo(a)pyrene	35000		ug/kg	2900	890	20
Benzo(b)fluoranthene	49000		ug/kg	2200	620	20
Benzo(k)fluoranthene	17000		ug/kg	2200	590	20
Chrysene	35000		ug/kg	2200	380	20
Acenaphthylene	620	J	ug/kg	2900	560	20
Anthracene	12000		ug/kg	2200	710	20
Benzo(ghi)perylene	19000		ug/kg	2900	430	20
Fluorene	6300		ug/kg	3700	360	20
Phenanthrene	48000		ug/kg	2200	440	20
Dibenzo(a,h)anthracene	5300		ug/kg	2200	420	20
Indeno(1,2,3-cd)pyrene	23000		ug/kg	2900	510	20
Pyrene	50000		ug/kg	2200	360	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	**0**	Q	23-120
2-Fluorobiphenyl	**0**	Q	30-120
4-Terphenyl-d14	**0**	Q	18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/07/19 23:08
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 11/04/19 04:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,04,06-10 Batch: WG1304099-1					
Acenaphthene	ND		ug/kg	130	17.
Fluoranthene	ND		ug/kg	99	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	91		10-136
4-Terphenyl-d14	68		18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/05/19 17:09
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 11/04/19 09:44

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05 Batch: WG1304175-1					
Acenaphthene	ND		ug/kg	130	17.
Fluoranthene	ND		ug/kg	100	19.
Naphthalene	ND		ug/kg	170	20.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	27.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	170	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	58		30-120
2,4,6-Tribromophenol	86		10-136
4-Terphenyl-d14	61		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1951915
Report Date: 11/08/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04,06-10 Batch: WG1304099-2 WG1304099-3								
Acenaphthene	76		77		31-137	1		50
Fluoranthene	79		81		40-140	3		50
Naphthalene	75		72		40-140	4		50
Benzo(a)anthracene	80		81		40-140	1		50
Benzo(a)pyrene	80		83		40-140	4		50
Benzo(b)fluoranthene	82		83		40-140	1		50
Benzo(k)fluoranthene	82		85		40-140	4		50
Chrysene	77		78		40-140	1		50
Acenaphthylene	78		80		40-140	3		50
Anthracene	78		79		40-140	1		50
Benzo(ghi)perylene	84		84		40-140	0		50
Fluorene	76		78		40-140	3		50
Phenanthrene	75		77		40-140	3		50
Dibenzo(a,h)anthracene	83		84		40-140	1		50
Indeno(1,2,3-cd)pyrene	83		84		40-140	1		50
Pyrene	78		81		35-142	4		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY

Project Number: T0508-019-001

Lab Number: L1951915

Report Date: 11/08/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,04,06-10 Batch: WG1304099-2 WG1304099-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	86		77		25-120
Phenol-d6	86		80		10-120
Nitrobenzene-d5	68		62		23-120
2-Fluorobiphenyl	65		62		30-120
2,4,6-Tribromophenol	95		95		10-136
4-Terphenyl-d14	66		65		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1951915
Report Date: 11/08/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1304175-2 WG1304175-3								
Acenaphthene	81		84		31-137	4		50
Fluoranthene	79		86		40-140	8		50
Naphthalene	78		82		40-140	5		50
Benzo(a)anthracene	83		90		40-140	8		50
Benzo(a)pyrene	83		88		40-140	6		50
Benzo(b)fluoranthene	87		91		40-140	4		50
Benzo(k)fluoranthene	86		93		40-140	8		50
Chrysene	82		90		40-140	9		50
Acenaphthylene	82		87		40-140	6		50
Anthracene	79		86		40-140	8		50
Benzo(ghi)perylene	83		90		40-140	8		50
Fluorene	81		88		40-140	8		50
Phenanthrene	77		84		40-140	9		50
Dibenzo(a,h)anthracene	81		88		40-140	8		50
Indeno(1,2,3-cd)pyrene	82		88		40-140	7		50
Pyrene	78		84		35-142	7		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1951915
Report Date: 11/08/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05 Batch: WG1304175-2 WG1304175-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	79		88		25-120
Phenol-d6	78		85		10-120
Nitrobenzene-d5	57		63		23-120
2-Fluorobiphenyl	64		68		30-120
2,4,6-Tribromophenol	92		97		10-136
4-Terphenyl-d14	64		68		18-120

PCBS

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-09
Client ID: S-1
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 15:30
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 11/05/19 23:01
Analyst: AWS
Percent Solids: 86%

Extraction Method: EPA 3546
Extraction Date: 11/04/19 05:45
Cleanup Method: EPA 3665A
Cleanup Date: 11/05/19
Cleanup Method: EPA 3660B
Cleanup Date: 11/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.7	3.26	1	A
Aroclor 1221	ND		ug/kg	36.7	3.67	1	A
Aroclor 1232	ND		ug/kg	36.7	7.77	1	A
Aroclor 1242	22.0	J	ug/kg	36.7	4.94	1	B
Aroclor 1248	ND		ug/kg	36.7	5.50	1	A
Aroclor 1254	24.7	J	ug/kg	36.7	4.01	1	A
Aroclor 1260	17.0	J	ug/kg	36.7	6.78	1	B
Aroclor 1262	ND		ug/kg	36.7	4.66	1	A
Aroclor 1268	ND		ug/kg	36.7	3.80	1	A
PCBs, Total	63.7	J	ug/kg	36.7	3.26	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	41		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	51		30-150	B

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-10
Client ID: S-2
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 16:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 11/05/19 23:13
Analyst: AWS
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 11/04/19 05:45
Cleanup Method: EPA 3665A
Cleanup Date: 11/05/19
Cleanup Method: EPA 3660B
Cleanup Date: 11/05/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.6	3.25	1	A
Aroclor 1221	ND		ug/kg	36.6	3.67	1	A
Aroclor 1232	ND		ug/kg	36.6	7.77	1	A
Aroclor 1242	ND		ug/kg	36.6	4.94	1	A
Aroclor 1248	ND		ug/kg	36.6	5.50	1	A
Aroclor 1254	55.9		ug/kg	36.6	4.01	1	B
Aroclor 1260	35.0	JP	ug/kg	36.6	6.77	1	B
Aroclor 1262	ND		ug/kg	36.6	4.65	1	A
Aroclor 1268	ND		ug/kg	36.6	3.80	1	A
PCBs, Total	90.9	J	ug/kg	36.6	3.25	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	60		30-150	B

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 11/05/19 22:17
Analyst: KB

Extraction Method: EPA 3546
Extraction Date: 11/03/19 19:03
Cleanup Method: EPA 3665A
Cleanup Date: 11/04/19
Cleanup Method: EPA 3660B
Cleanup Date: 11/04/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 09-10 Batch: WG1304045-1						
Aroclor 1016	ND		ug/kg	31.5	2.80	A
Aroclor 1221	ND		ug/kg	31.5	3.16	A
Aroclor 1232	ND		ug/kg	31.5	6.68	A
Aroclor 1242	ND		ug/kg	31.5	4.25	A
Aroclor 1248	ND		ug/kg	31.5	4.72	A
Aroclor 1254	ND		ug/kg	31.5	3.45	A
Aroclor 1260	ND		ug/kg	31.5	5.82	A
Aroclor 1262	ND		ug/kg	31.5	4.00	A
Aroclor 1268	ND		ug/kg	31.5	3.26	A
PCBs, Total	ND		ug/kg	31.5	2.80	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	75		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1951915
Report Date: 11/08/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 09-10 Batch: WG1304045-2 WG1304045-3									
Aroclor 1016	69		65		40-140	6		50	A
Aroclor 1260	67		65		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		63		30-150	A
Decachlorobiphenyl	64		62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		64		30-150	B
Decachlorobiphenyl	78		72		30-150	B

METALS

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-02
Client ID: TP-2 0-2FT
Sample Location: BUFFALO, NY
Date Collected: 10/30/19 09:30
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	2.80		mg/kg	0.466	0.097	1	11/05/19 21:37	11/07/19 20:42	EPA 3050B	1,6010D	MC
Barium, Total	24.4		mg/kg	0.466	0.081	1	11/05/19 21:37	11/07/19 20:42	EPA 3050B	1,6010D	MC
Cadmium, Total	0.135	J	mg/kg	0.466	0.046	1	11/05/19 21:37	11/07/19 20:42	EPA 3050B	1,6010D	MC
Chromium, Total	3.44		mg/kg	0.466	0.045	1	11/05/19 21:37	11/07/19 20:42	EPA 3050B	1,6010D	MC
Lead, Total	8.18		mg/kg	2.33	0.125	1	11/05/19 21:37	11/07/19 20:42	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.098	0.064	1	11/04/19 20:25	11/05/19 15:58	EPA 7471B	1,7471B	GD
Selenium, Total	0.368	J	mg/kg	0.932	0.120	1	11/05/19 21:37	11/07/19 20:42	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.466	0.132	1	11/05/19 21:37	11/07/19 20:42	EPA 3050B	1,6010D	MC

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-04
Client ID: TP-5 0-1FT
Sample Location: BUFFALO, NY
Date Collected: 10/30/19 12:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 62%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	9.62		mg/kg	0.624	0.130	1	11/05/19 21:37	11/07/19 21:08	EPA 3050B	1,6010D	MC
Barium, Total	72.8		mg/kg	0.624	0.109	1	11/05/19 21:37	11/07/19 21:08	EPA 3050B	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.624	0.061	1	11/05/19 21:37	11/07/19 21:08	EPA 3050B	1,6010D	MC
Chromium, Total	4.14		mg/kg	0.624	0.060	1	11/05/19 21:37	11/07/19 21:08	EPA 3050B	1,6010D	MC
Lead, Total	51.1		mg/kg	3.12	0.167	1	11/05/19 21:37	11/07/19 21:08	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.108	0.071	1	11/04/19 20:25	11/05/19 16:01	EPA 7471B	1,7471B	GD
Selenium, Total	1.08	J	mg/kg	1.25	0.161	1	11/05/19 21:37	11/07/19 21:08	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.624	0.177	1	11/05/19 21:37	11/07/19 21:08	EPA 3050B	1,6010D	MC

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-05
Client ID: TP-6 1-2FT
Sample Location: BUFFALO, NY
Date Collected: 10/30/19 13:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 78%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	34.1		mg/kg	0.515	0.107	1	11/05/19 21:37	11/07/19 21:25	EPA 3050B	1,6010D	MC
Barium, Total	111		mg/kg	0.515	0.090	1	11/05/19 21:37	11/07/19 21:25	EPA 3050B	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.515	0.051	1	11/05/19 21:37	11/07/19 21:25	EPA 3050B	1,6010D	MC
Chromium, Total	28.2		mg/kg	0.515	0.050	1	11/05/19 21:37	11/07/19 21:25	EPA 3050B	1,6010D	MC
Lead, Total	188		mg/kg	2.58	0.138	1	11/05/19 21:37	11/07/19 21:25	EPA 3050B	1,6010D	MC
Mercury, Total	0.266		mg/kg	0.098	0.064	1	11/04/19 20:25	11/05/19 16:11	EPA 7471B	1,7471B	GD
Selenium, Total	2.11		mg/kg	1.03	0.133	1	11/05/19 21:37	11/07/19 21:25	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.515	0.146	1	11/05/19 21:37	11/07/19 21:25	EPA 3050B	1,6010D	MC

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-06
Client ID: TP-7 4-6FT
Sample Location: BUFFALO, NY
Date Collected: 10/30/19 13:45
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	18.2		mg/kg	0.480	0.100	1	11/05/19 21:37	11/07/19 21:30	EPA 3050B	1,6010D	MC
Barium, Total	149		mg/kg	0.480	0.084	1	11/05/19 21:37	11/07/19 21:30	EPA 3050B	1,6010D	MC
Cadmium, Total	0.254	J	mg/kg	0.480	0.047	1	11/05/19 21:37	11/07/19 21:30	EPA 3050B	1,6010D	MC
Chromium, Total	22.5		mg/kg	0.480	0.046	1	11/05/19 21:37	11/07/19 21:30	EPA 3050B	1,6010D	MC
Lead, Total	212		mg/kg	2.40	0.129	1	11/05/19 21:37	11/07/19 21:30	EPA 3050B	1,6010D	MC
Mercury, Total	0.127		mg/kg	0.092	0.060	1	11/04/19 20:25	11/05/19 16:15	EPA 7471B	1,7471B	GD
Selenium, Total	1.44		mg/kg	0.960	0.124	1	11/05/19 21:37	11/07/19 21:30	EPA 3050B	1,6010D	MC
Silver, Total	0.163	J	mg/kg	0.480	0.136	1	11/05/19 21:37	11/07/19 21:30	EPA 3050B	1,6010D	MC

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-07
Client ID: TP-8 7-8FT
Sample Location: BUFFALO, NY
Date Collected: 10/30/19 14:30
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 70%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	2.31		mg/kg	0.552	0.115	1	11/05/19 21:37	11/07/19 21:34	EPA 3050B	1,6010D	MC
Barium, Total	18.1		mg/kg	0.552	0.096	1	11/05/19 21:37	11/07/19 21:34	EPA 3050B	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.552	0.054	1	11/05/19 21:37	11/07/19 21:34	EPA 3050B	1,6010D	MC
Chromium, Total	3.54		mg/kg	0.552	0.053	1	11/05/19 21:37	11/07/19 21:34	EPA 3050B	1,6010D	MC
Lead, Total	2.99		mg/kg	2.76	0.148	1	11/05/19 21:37	11/07/19 21:34	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.098	0.064	1	11/04/19 20:25	11/05/19 16:18	EPA 7471B	1,7471B	GD
Selenium, Total	0.331	J	mg/kg	1.10	0.142	1	11/05/19 21:37	11/07/19 21:34	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.552	0.156	1	11/05/19 21:37	11/07/19 21:34	EPA 3050B	1,6010D	MC

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-08
Client ID: TP-10 0-2FT
Sample Location: BUFFALO, NY
Date Collected: 10/30/19 15:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	4.64		mg/kg	0.513	0.107	1	11/05/19 21:37	11/07/19 21:38	EPA 3050B	1,6010D	MC
Barium, Total	48.3		mg/kg	0.513	0.089	1	11/05/19 21:37	11/07/19 21:38	EPA 3050B	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.513	0.050	1	11/05/19 21:37	11/07/19 21:38	EPA 3050B	1,6010D	MC
Chromium, Total	5.83		mg/kg	0.513	0.049	1	11/05/19 21:37	11/07/19 21:38	EPA 3050B	1,6010D	MC
Lead, Total	44.8		mg/kg	2.56	0.137	1	11/05/19 21:37	11/07/19 21:38	EPA 3050B	1,6010D	MC
Mercury, Total	0.159		mg/kg	0.085	0.055	1	11/04/19 20:25	11/05/19 16:21	EPA 7471B	1,7471B	GD
Selenium, Total	0.518	J	mg/kg	1.02	0.132	1	11/05/19 21:37	11/07/19 21:38	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.513	0.145	1	11/05/19 21:37	11/07/19 21:38	EPA 3050B	1,6010D	MC

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-09
Client ID: S-1
Sample Location: BUFFALO, NY
Date Collected: 10/30/19 15:30
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	7.24		mg/kg	0.448	0.093	1	11/05/19 21:37	11/07/19 21:43	EPA 3050B	1,6010D	MC
Barium, Total	92.3		mg/kg	0.448	0.078	1	11/05/19 21:37	11/07/19 21:43	EPA 3050B	1,6010D	MC
Cadmium, Total	0.601		mg/kg	0.448	0.044	1	11/05/19 21:37	11/07/19 21:43	EPA 3050B	1,6010D	MC
Chromium, Total	15.4		mg/kg	0.448	0.043	1	11/05/19 21:37	11/07/19 21:43	EPA 3050B	1,6010D	MC
Lead, Total	162		mg/kg	2.24	0.120	1	11/05/19 21:37	11/07/19 21:43	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.084	0.055	1	11/04/19 23:31	11/05/19 18:04	EPA 7471B	1,7471B	AL
Selenium, Total	0.879	J	mg/kg	0.896	0.116	1	11/05/19 21:37	11/07/19 21:43	EPA 3050B	1,6010D	MC
Silver, Total	0.188	J	mg/kg	0.448	0.127	1	11/05/19 21:37	11/07/19 21:43	EPA 3050B	1,6010D	MC

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1951915
Project Number: T0508-019-001
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-10
Client ID: S-2
Sample Location: BUFFALO, NY
Date Collected: 10/30/19 16:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	23.9		mg/kg	0.873	0.182	2	11/05/19 21:37	11/07/19 21:48	EPA 3050B	1,6010D	MC
Barium, Total	92.1		mg/kg	0.873	0.152	2	11/05/19 21:37	11/07/19 21:48	EPA 3050B	1,6010D	MC
Cadmium, Total	8.54		mg/kg	0.873	0.086	2	11/05/19 21:37	11/07/19 21:48	EPA 3050B	1,6010D	MC
Chromium, Total	21.2		mg/kg	0.873	0.084	2	11/05/19 21:37	11/07/19 21:48	EPA 3050B	1,6010D	MC
Lead, Total	206		mg/kg	4.36	0.234	2	11/05/19 21:37	11/07/19 21:48	EPA 3050B	1,6010D	MC
Mercury, Total	0.195		mg/kg	0.083	0.054	1	11/04/19 23:31	11/05/19 18:06	EPA 7471B	1,7471B	AL
Selenium, Total	3.54		mg/kg	1.74	0.225	2	11/05/19 21:37	11/07/19 21:48	EPA 3050B	1,6010D	MC
Silver, Total	0.506	J	mg/kg	0.873	0.247	2	11/05/19 21:37	11/07/19 21:48	EPA 3050B	1,6010D	MC

Project Name: 356 HERTEL & 42 FOUNDRY **Lab Number:** L1951915

Project Number: T0508-019-001 **Report Date:** 11/08/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02,04-08 Batch: WG1304439-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	11/04/19 20:25	11/05/19 14:42	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 09-10 Batch: WG1304443-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	11/04/19 23:31	11/05/19 17:54	1,7471B	AL

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02,04-10 Batch: WG1304953-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	11/05/19 21:37	11/07/19 20:33	1,6010D	MC
Barium, Total	ND		mg/kg	0.400	0.070	1	11/05/19 21:37	11/07/19 20:33	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	11/05/19 21:37	11/07/19 20:33	1,6010D	MC
Chromium, Total	ND		mg/kg	0.400	0.038	1	11/05/19 21:37	11/07/19 20:33	1,6010D	MC
Lead, Total	ND		mg/kg	2.00	0.107	1	11/05/19 21:37	11/07/19 20:33	1,6010D	MC
Selenium, Total	0.128	J	mg/kg	0.800	0.103	1	11/05/19 21:37	11/07/19 20:33	1,6010D	MC
Silver, Total	ND		mg/kg	0.400	0.113	1	11/05/19 21:37	11/07/19 20:33	1,6010D	MC

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY

Project Number: T0508-019-001

Lab Number: L1951915

Report Date: 11/08/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02,04-08 Batch: WG1304439-2 SRM Lot Number: D105-540								
Mercury, Total	83		-		60-141	-		
Total Metals - Mansfield Lab Associated sample(s): 09-10 Batch: WG1304443-2 SRM Lot Number: D105-540								
Mercury, Total	97		-		60-141	-		
Total Metals - Mansfield Lab Associated sample(s): 02,04-10 Batch: WG1304953-2 SRM Lot Number: D105-540								
Arsenic, Total	106		-		70-130	-		
Barium, Total	92		-		75-125	-		
Cadmium, Total	96		-		75-125	-		
Chromium, Total	94		-		70-130	-		
Lead, Total	99		-		71-128	-		
Selenium, Total	104		-		63-137	-		
Silver, Total	98		-		69-131	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1951915
Report Date: 11/08/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02,04-08 QC Batch ID: WG1304439-3 QC Sample: L1951899-01 Client ID: MS Sample												
Mercury, Total	ND	0.176	0.240	**137**	Q	-	-		80-120	-		20
Total Metals - Mansfield Lab Associated sample(s): 09-10 QC Batch ID: WG1304443-3 WG1304443-4 QC Sample: L1951926-06 Client ID: MS Sample												
Mercury, Total	ND	0.17	0.239	**140**	Q	0.209	107		80-120	13		20
Total Metals - Mansfield Lab Associated sample(s): 02,04-10 QC Batch ID: WG1304953-3 QC Sample: L1951915-02 Client ID: TP-2 0-2FT												
Arsenic, Total	2.80	11.6	15.1	106		-	-		75-125	-		20
Barium, Total	24.4	194	218	100		-	-		75-125	-		20
Cadmium, Total	0.135J	4.94	4.70	95		-	-		75-125	-		20
Chromium, Total	3.44	19.4	21.1	91		-	-		75-125	-		20
Lead, Total	8.18	49.4	56.3	97		-	-		75-125	-		20
Selenium, Total	0.368J	11.6	11.4	98		-	-		75-125	-		20
Silver, Total	ND	29.1	28.7	99		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY

Project Number: T0508-019-001

Lab Number: L1951915

Report Date: 11/08/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02,04-08 QC Batch ID: WG1304439-4 QC Sample: L1951899-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20
Total Metals - Mansfield Lab Associated sample(s): 02,04-10 QC Batch ID: WG1304953-4 QC Sample: L1951915-02 Client ID: TP-2 0-2FT						
Arsenic, Total	2.80	3.79	mg/kg	**30**	Q	20
Barium, Total	24.4	42.6	mg/kg	**54**	Q	20
Cadmium, Total	0.135J	0.410J	mg/kg	NC		20
Chromium, Total	3.44	4.66	mg/kg	**30**	Q	20
Lead, Total	8.18	8.30	mg/kg	1		20
Selenium, Total	0.368J	0.406J	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-02
Client ID: TP-2 0-2FT
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 10/30/19 09:30
Date Received: 11/01/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.5		%	0.100	NA	1	-	11/05/19 03:12	121,2540G	YA

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-04
Client ID: TP-5 0-1FT
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil
Date Collected: 10/30/19 12:00
Date Received: 11/01/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	62.1		%	0.100	NA	1	-	11/05/19 03:12	121,2540G	YA

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-05
Client ID: TP-6 1-2FT
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil
Date Collected: 10/30/19 13:00
Date Received: 11/01/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.6		%	0.100	NA	1	-	11/05/19 03:12	121,2540G	YA

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-06
Client ID: TP-7 4-6FT
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil
Date Collected: 10/30/19 13:45
Date Received: 11/01/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.3		%	0.100	NA	1	-	11/05/19 03:12	121,2540G	YA

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-07
Client ID: TP-8 7-8FT
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil
Date Collected: 10/30/19 14:30
Date Received: 11/01/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	70.2		%	0.100	NA	1	-	11/05/19 03:12	121,2540G	YA

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-08
Client ID: TP-10 0-2FT
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil
Date Collected: 10/30/19 15:00
Date Received: 11/01/19
Field Prep: Not Specified

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	-	11/05/19 03:12	121,2540G	YA

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-09
Client ID: S-1
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil
Date Collected: 10/30/19 15:30
Date Received: 11/01/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.8		%	0.100	NA	1	-	11/05/19 03:12	121,2540G	YA

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1951915
Report Date: 11/08/19

SAMPLE RESULTS

Lab ID: L1951915-10
Client ID: S-2
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil
Date Collected: 10/30/19 16:00
Date Received: 11/01/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.5		%	0.100	NA	1	-	11/05/19 03:12	121,2540G	YA

Lab Duplicate Analysis

Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY

Project Number: T0508-019-001

Lab Number: L1951915

Report Date: 11/08/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02,04-10 QC Batch ID: WG1304503-1 QC Sample: L1951783-02 Client ID: DUP Sample						
Solids, Total	85.9	86.1	%	0		20

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1951915
Report Date: 11/08/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1951915-01A	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		HOLD()
L1951915-01B	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		HOLD()
L1951915-02A	Glass 120ml/4oz unpreserved	A	NA		3.8	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L1951915-02B	Glass 120ml/4oz unpreserved	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)
L1951915-02C	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)
L1951915-03A	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		HOLD()
L1951915-03B	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		HOLD()
L1951915-04A	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L1951915-04B	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)
L1951915-05A	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L1951915-05B	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)
L1951915-06A	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L1951915-06B	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)
L1951915-07A	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L1951915-07B	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)
L1951915-07C	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)
L1951915-08A	Glass 120ml/4oz unpreserved	A	NA		3.8	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L1951915-08B	Glass 120ml/4oz unpreserved	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)

*Values in parentheses indicate holding time in days

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1951915
Report Date: 11/08/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1951915-09A	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L1951915-09B	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7),NYTCL-8082(14)
L1951915-10A	Glass 120ml/4oz unpreserved	A	NA		3.8	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L1951915-10B	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)
L1951915-10C	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYTCL-8082(14)

*Values in parentheses indicate holding time in days

Project Name:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1951915
Project Number:	T0508-019-001	**Report Date:**	11/08/19

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.

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.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1951915
Project Number:	T0508-019-001	**Report Date:**	11/08/19

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.

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. If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

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

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

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.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1951915
Project Number:	T0508-019-001	**Report Date:**	11/08/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
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.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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: 11/2/19

ALPHA Job #: L1951915

Project Information
Project Name: 356 Hertel & 42 Foundry
Project Location: Buffalo, NY
Project #: T0508-014-001
(Use Project name as Project #) ☐
Project Manager: Brian Maybach / Graham Fox
ALPHAQuote #:

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

Client Information
Client: Turnkey Env. Restoration
Address: 2558 Hamburg Tpke
Buffalo, NY, 14218
Phone: 716-713-3437
Fax:
Email: BMaybach@TurnkeyLLC.com

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.

ANALYSIS

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	PAH's	RCRA Metals	PCB's	Total Bottle	Sample Specific Comments
51913 -01	TP-1 0-1 Ft	10/30/19	8:45	Soil	MS				2	On Hold
-02	TP-2 0-2 Ft		9:30			X	X		2	
-03	TP-4 0-1 Ft		11:00						2	On Hold
-04	TP-5 0-1 Ft		12:00			X	X		2	
-05	TP-6 1-2 Ft		13:00			X	X		2	
-06	TP-7 4-6 Ft		13:45			X	X		2	
-07	TP-8 7-8 Ft		14:30			X	X		2	
-08	TP-10 0-2 Ft		15:00			X	X		2	
-09	S-1		15:30			X	X	X	2	
-10	S-2		16:00			X	X	X	3	

Container Type: A A A
Preservative: 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
	11/1/19 11:45	AM AAC	11/01/19 14:55
AM AAC	11/01/19 16:35		11/2/19 01:00

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:	L1954193
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Bryan Mayback
Phone:	(716) 856-0599
Project Name:	356 HERTEL & 42 FOUNDRY
Project Number:	T0508-019-001
Report Date:	11/20/19

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: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1954193
Report Date: 11/20/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1954193-01	TP-1 0-1FT	SOIL	BUFFALO, NY	10/30/19 08:45	11/01/19
L1954193-02	TP-4 0-1FT	SOIL	BUFFALO, NY	10/30/19 11:00	11/01/19

Project Name:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1954193
Project Number:	T0508-019-001	**Report Date:**	11/20/19

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:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1954193
Project Number:	T0508-019-001	**Report Date:**	11/20/19

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 11/20/19

ORGANICS

SEMIVOLATILES

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1954193
Project Number: T0508-019-001
Report Date: 11/20/19

SAMPLE RESULTS

Lab ID: L1954193-01
Client ID: TP-1 0-1FT
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 08:45
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/14/19 09:44
Analyst: JRW
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 11/13/19 18:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	440		ug/kg	160	20.	1
Fluoranthene	4400		ug/kg	120	23.	1
Benzo(a)anthracene	3500		ug/kg	120	22.	1
Benzo(a)pyrene	2600		ug/kg	160	48.	1
Benzo(b)fluoranthene	4400		ug/kg	120	33.	1
Benzo(k)fluoranthene	1300		ug/kg	120	32.	1
Chrysene	3700		ug/kg	120	20.	1
Acenaphthylene	360		ug/kg	160	30.	1
Anthracene	700		ug/kg	120	38.	1
Benzo(ghi)perylene	1900		ug/kg	160	23.	1
Fluorene	270		ug/kg	200	19.	1
Phenanthrene	2600		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	810		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	2400		ug/kg	160	28.	1
Pyrene	4000		ug/kg	120	20.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	57		30-120
4-Terphenyl-d14	61		18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1954193
Project Number: T0508-019-001
Report Date: 11/20/19

SAMPLE RESULTS

Lab ID: L1954193-02
Client ID: TP-4 0-1FT
Sample Location: BUFFALO, NY

Date Collected: 10/30/19 11:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/14/19 10:06
Analyst: IM
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 11/13/19 18:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	32	J	ug/kg	150	19.	1
Fluoranthene	1800		ug/kg	110	21.	1
Benzo(a)anthracene	1800		ug/kg	110	21.	1
Benzo(a)pyrene	1400		ug/kg	150	45.	1
Benzo(b)fluoranthene	2900		ug/kg	110	31.	1
Benzo(k)fluoranthene	710		ug/kg	110	30.	1
Chrysene	1800		ug/kg	110	19.	1
Acenaphthylene	550		ug/kg	150	28.	1
Anthracene	400		ug/kg	110	36.	1
Benzo(ghi)perylene	1100		ug/kg	150	22.	1
Fluorene	76	J	ug/kg	180	18.	1
Phenanthrene	680		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	490		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	1400		ug/kg	150	26.	1
Pyrene	1600		ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	52		30-120
4-Terphenyl-d14	56		18-120

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1954193
Report Date: 11/20/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/13/19 22:07
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 11/13/19 08:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1308038-1					
Acenaphthene	ND		ug/kg	130	17.
Fluoranthene	ND		ug/kg	100	19.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	55		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	62		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY

Project Number: T0508-019-001

Lab Number: L1954193

Report Date: 11/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1308038-2 WG1308038-3								
Acenaphthene	64		71		31-137	10		50
Fluoranthene	74		78		40-140	5		50
Benzo(a)anthracene	72		76		40-140	5		50
Benzo(a)pyrene	78		82		40-140	5		50
Benzo(b)fluoranthene	77		80		40-140	4		50
Benzo(k)fluoranthene	82		83		40-140	1		50
Chrysene	72		73		40-140	1		50
Acenaphthylene	75		82		40-140	9		50
Anthracene	71		75		40-140	5		50
Benzo(ghi)perylene	70		72		40-140	3		50
Fluorene	69		75		40-140	8		50
Phenanthrene	64		68		40-140	6		50
Dibenzo(a,h)anthracene	76		80		40-140	5		50
Indeno(1,2,3-cd)pyrene	64		67		40-140	5		50
Pyrene	71		75		35-142	5		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	66		76		25-120
Phenol-d6	69		78		10-120
Nitrobenzene-d5	55		61		23-120
2-Fluorobiphenyl	54		60		30-120
2,4,6-Tribromophenol	86		92		10-136
4-Terphenyl-d14	58		61		18-120

METALS

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1954193
Project Number: T0508-019-001
Report Date: 11/20/19

SAMPLE RESULTS

Lab ID: L1954193-01
Client ID: TP-1 0-1FT
Sample Location: BUFFALO, NY
Date Collected: 10/30/19 08:45
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	25.8		mg/kg	0.453	0.094	1	11/14/19 22:55	11/19/19 13:00	EPA 3050B	1,6010D	LC
Barium, Total	84.1		mg/kg	0.453	0.079	1	11/14/19 22:55	11/19/19 15:45	EPA 3050B	1,6010D	LC
Cadmium, Total	2.42		mg/kg	0.453	0.044	1	11/14/19 22:55	11/19/19 13:00	EPA 3050B	1,6010D	LC
Chromium, Total	11.4		mg/kg	0.453	0.044	1	11/14/19 22:55	11/19/19 13:00	EPA 3050B	1,6010D	LC
Lead, Total	117		mg/kg	2.26	0.121	1	11/14/19 22:55	11/19/19 13:00	EPA 3050B	1,6010D	LC
Mercury, Total	0.081		mg/kg	0.075	0.049	1	11/14/19 05:45	11/14/19 17:41	EPA 7471B	1,7471B	GD
Selenium, Total	3.14		mg/kg	0.906	0.117	1	11/14/19 22:55	11/19/19 13:00	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.453	0.128	1	11/14/19 22:55	11/19/19 13:00	EPA 3050B	1,6010D	LC

Project Name: 356 HERTEL & 42 FOUNDRY
Lab Number: L1954193
Project Number: T0508-019-001
Report Date: 11/20/19

SAMPLE RESULTS

Lab ID: L1954193-02
Client ID: TP-4 0-1FT
Sample Location: BUFFALO, NY
Date Collected: 10/30/19 11:00
Date Received: 11/01/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	7.80		mg/kg	0.426	0.089	1	11/14/19 22:55	11/19/19 13:04	EPA 3050B	1,6010D	LC
Barium, Total	64.0		mg/kg	0.426	0.074	1	11/14/19 22:55	11/19/19 15:49	EPA 3050B	1,6010D	LC
Cadmium, Total	2.15		mg/kg	0.426	0.042	1	11/14/19 22:55	11/19/19 13:04	EPA 3050B	1,6010D	LC
Chromium, Total	9.25		mg/kg	0.426	0.041	1	11/14/19 22:55	11/19/19 13:04	EPA 3050B	1,6010D	LC
Lead, Total	52.4		mg/kg	2.13	0.114	1	11/14/19 22:55	11/19/19 13:04	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.071	0.046	1	11/14/19 05:45	11/14/19 17:44	EPA 7471B	1,7471B	GD
Selenium, Total	1.32		mg/kg	0.852	0.110	1	11/14/19 22:55	11/19/19 13:04	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.426	0.120	1	11/14/19 22:55	11/19/19 13:04	EPA 3050B	1,6010D	LC

Project Name: 356 HERTEL & 42 FOUNDRY **Lab Number:** L1954193

Project Number: T0508-019-001 **Report Date:** 11/20/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1308522-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	11/14/19 05:45	11/14/19 16:15	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1308987-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	11/14/19 22:55	11/19/19 11:35	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	11/14/19 22:55	11/19/19 11:35	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	11/14/19 22:55	11/19/19 11:35	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	11/14/19 22:55	11/19/19 11:35	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	11/14/19 22:55	11/19/19 11:35	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	11/14/19 22:55	11/19/19 11:35	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	11/14/19 22:55	11/19/19 11:35	1,6010D	LC

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY

Project Number: T0508-019-001

Lab Number: L1954193

Report Date: 11/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1308522-2 SRM Lot Number: D105-540								
Mercury, Total	104		-		60-141	-		
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1308987-2 SRM Lot Number: D105-540								
Arsenic, Total	126		-		70-130	-		
Barium, Total	110		-		75-125	-		
Cadmium, Total	116		-		75-125	-		
Chromium, Total	115		-		70-130	-		
Lead, Total	119		-		71-128	-		
Selenium, Total	124		-		63-137	-		
Silver, Total	117		-		69-131	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1954193
Report Date: 11/20/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1308522-3 QC Sample: L1949614-62 Client ID: MS Sample												
Mercury, Total	ND	0.143	0.151	105		-	-		80-120	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1308987-3 WG1308987-4 QC Sample: L1954190-11 Client ID: MS Sample												
Arsenic, Total	1.53	9.61	9.14	79		9.18	79		75-125	0		20
Barium, Total	34.3	160	152	**73**	Q	151	**72**	Q	75-125	1		20
Cadmium, Total	0.339J	4.08	3.65	89		3.61	88		75-125	1		20
Chromium, Total	13.7	16	24.5	**67**	Q	25.2	**71**	Q	75-125	3		20
Lead, Total	4.35	40.8	37.6	81		36.9	79		75-125	2		20
Selenium, Total	ND	9.61	7.76	81		7.80	80		75-125	1		20
Silver, Total	ND	24	18.6	77		18.8	78		75-125	1		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY

Project Number: T0508-019-001

Lab Number: L1954193

Report Date: 11/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1308522-4 QC Sample: L1949614-62 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1954193
Report Date: 11/20/19

SAMPLE RESULTS

Lab ID: L1954193-01
Client ID: TP-1 0-1FT
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil
Date Collected: 10/30/19 08:45
Date Received: 11/01/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.3		%	0.100	NA	1	-	11/14/19 09:37	121,2540G	RI

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001
Lab Number: L1954193
Report Date: 11/20/19

SAMPLE RESULTS

Lab ID: L1954193-02
Client ID: TP-4 0-1FT
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 10/30/19 11:00
Date Received: 11/01/19
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.9		%	0.100	NA	1	-	11/14/19 09:37	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: 356 HERTEL & 42 FOUNDRY

Project Number: T0508-019-001

Lab Number: L1954193

Report Date: 11/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1308589-1 QC Sample: L1954314-01 Client ID: DUP Sample						
Solids, Total	81.4	82.2	%	1		20

Project Name: 356 HERTEL & 42 FOUNDRY
Project Number: T0508-019-001

Lab Number: L1954193
Report Date: 11/20/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1954193-01A	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)
L1954193-01B	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L1954193-02A	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		NYCP51-PAH(14),TS(7)
L1954193-02B	Vial Large Septa unpreserved (4oz)	A	NA		3.8	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)

*Values in parentheses indicate holding time in days

Project Name:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1954193
Project Number:	T0508-019-001	**Report Date:**	11/20/19

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.

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.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1954193
Project Number:	T0508-019-001	**Report Date:**	11/20/19

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. If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

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

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

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.

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.)

Report Format: DU Report with 'J' Qualifiers

Project Name:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1954193
Project Number:	T0508-019-001	**Report Date:**	11/20/19

Data Qualifiers

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	356 HERTEL & 42 FOUNDRY	**Lab Number:**	L1954193
Project Number:	T0508-019-001	**Report Date:**	11/20/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
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.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

NEW YORK CHAIN OF CUSTODY

ALPHA

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: 11/2/19

ALPHA Job #: ~~L1951915~~

Project Information
Project Name: 356 Hertel : 42 Foundry
Project Location: Buffalo, NY
Project #: T0508-014-001
(Use Project name as Project #) ☐
Project Manager: Bryan Mayback / Cassidy Fox
ALPHAQuote #:

Client Information
Client: Turnkey Env. Restoration
Address: 2558 Hamburg Tpke, Buffalo, NY, 14218
Phone: 716-713-3437
Fax:
Email: BMayback@TurnkeyLLC.com

Turn-Around Time
Standard ☒
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.

ANALYSIS: PAH's | RCRA Metals | PCB's | NYCP51-PAH, TRCRA8

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	PAH's	RCRA Metals	PCB's	NYCP51-PAH, TRCRA8	Sample Specific Comments	Total Bottles
~~51915~~ -01	TP-1 0-1 Ft	10/30/19	8:45	Soil	NTS				X	On Hold	2
-02	TP-2 0-2 Ft		9:30			X	X				2
54193-02 -03	TP-4 0-1 Ft		11:00						X	On Hold	2
-04	TP-5 0-1 Ft		12:00			X	X				2
-05	TP-6 1-2 Ft		13:00			X	X				2
-06	TP-7 4-6 Ft		13:45			X	X				2
-07	TP-8 7-8 Ft		14:30			X	X				2
-08	TP-10 0-2 Ft		15:00			X	X				2
-09	S-1		15:30			X	X	X			2
-10	S-2		16:00			X	X	X			3

Container Type: A | A | A
Preservative: 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
[signature]	11/1/19 11:45	Am AAC AAC	11/01/19 14:55
Am AAC AAC	11/01/19 16:35	[signature]	11/2/19 01:00

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)