



September 23, 2019

Mr. Frank Chinnici
Legacy Development
250 Ramsdell Avenue
Buffalo, NY 14216

Re: Phase II Environmental Investigation
8 St. Louis Place
Buffalo, New York

Dear Mr. Chinnici:

TurnKey Environmental Restoration, LLC (TurnKey) has prepared this report to present the results of a Phase II Environmental Investigation performed at 8 St. Louis Place in the City of Buffalo, New York (Site). A Site Location and Vicinity Map is provided as Figure 1.

BACKGROUND

TurnKey completed a Phase I Environmental Site Assessment (ESA) at the Site in April 2018. Historically, the Site was developed with multiple residential structures until after 1986, when the buildings were demolished, and the Site was converted into an asphalt parking lot. The Phase I ESA noted that urban fill was likely present at the Site in the area of the former residential structures to fill the former building foundations to grade after demolition. Elevated levels of metals and polycyclic aromatic hydrocarbons (PAHs) are commonly found in urban fill material; therefore, a Phase II Environmental Investigation was completed to confirm the presence of urban fill and any associated contamination on-Site.

INVESTIGATION ACTIVITIES

On September 11, 2019, three (3) shallow test pits identified as TP-1, TP-2, and TP-3, were completed to approximately 2 feet below ground surface (fbgs) using a mini-excavator on the west, middle, and east end of the Site, respectively. Three (3) additional deeper test pits, identified as TP-4, TP-5, and TP-6, were completed using a mini-excavator to approximately 7 fbgs to further characterize the fill material in the on September 17, 2019. Test pit locations are shown on Figure 2. One (1) sample was collected from the fill material within each test pit; samples TP-1 through TP-3 were collected from 0.5 to 2.0 fbgs and samples TP-4 through TP-6 were collected from 0.5 to 6.0 fbgs. The soil/fill samples were screened for volatile organics using a MiniRae 3000 photoionization detector (PID), visual characteristics for each sample were classified using the ASTM D2488 Visual-Manual Procedure Description, and olfactory observations, if any, were noted.

The soil/fill samples were submitted to the laboratory for analysis of Environmental Protection Agency (EPA) Method 8270D PAHs and Resource Conservation and Recovery

Act (RCRA) 8 Metals (EPA Method 6010D and 7471B). All samples were collected in laboratory provided sample bottles and were cooled to 4⁰ C prior to transport.

FIELD OBSERVATIONS AND FINDINGS

In general, urban fill consisting of fine brick pieces, asphalt, stone, and metal was observed from the ground surface or below asphalt to approximately 6 fbgs. Native soil, consisting of dry brown medium to coarse sand, was observed underlying the urban fill. At one location (TP-2) a concrete slab was observed overlying the fill material. See the table below for a summary of the investigation locations.

No elevated PID readings or olfactory concerns were noted during the work. Photographs taken during the work are included in Appendix A.

Investigation Location ID	Description	Sample Depth
TP-1	0-2' - Fill Material	0.5-2.0 fbgs
TP-2	0-0.5' - Asphalt 0.5-1'- Concrete slab 1-2' - Fill Material	0.5-2.0 fbgs
TP-3	0-0.5' - Asphalt 0.5-2' - Fill Material	0.5-2.0 fbgs
TP-4	0-0.5' - Asphalt 0.5-6' - Fill Material 6-7' - Native brown, dry, medium to coarse sand	0.5-6.0 fbgs
TP-5	0-0.5' - Asphalt 0.5-6' - Fill Material 6-7' - Native brown, dry, medium to coarse sand	0.5-6.0 fbgs
TP-6	0-0.5' - Asphalt 0.5-6' - Fill Material 6-7' - Native brown, dry, medium to coarse sand	0.5-6.0 fbgs

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results were provided by Alpha Analytical in two reports dated September 13, 2019, and September 20, 2019. Both analytical reports are provided in Appendix B. Analytical results were compared to 6 NYCRR Part 375 Unrestricted use Soil Cleanup Objectives (USCOs) and Restricted-Residential use Soil Cleanup Objectives (RRSCOs).

As summarized on Table 1, PAHs including Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, and Indeno(1,2,3-cd)pyrene were detected above their respective USCOs and/or RRSCOs at five (5) test pit locations (TP-1, TP-2, TP-4, TP-5, and TP-6). Lead was detected above its RRSCO at three (3) test pits (TP-2, TP-4, and TP-6), and above its USCO at two locations (TP-3 and

TP-5). Mercury was detected above its USCO at four test pit locations (TP-2, TP-3, TP-5, and TP-6).

CONCLUSIONS

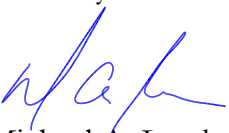
We understand the subject property is being considered for redevelopment in a residential re-use scenario. The least restrictive applicable SCOs to attain would be RRSCOs, based on the planned use of the Site. Based on the findings detailed above, the Site is a potential candidate for the New York State Brownfield Cleanup Program (BCP). Regardless of whether the BCP is pursued, PAHs- and metals-impacted 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

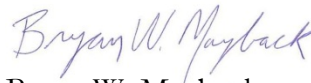
This report has been prepared for the exclusive use of Legacy Development. The contents of this report are limited to information available at the time of the subject site investigation. Data provided by others as referenced herein is assumed to be accurate and reliable. The findings herein may be relied upon only at the discretion of Legacy Development 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 SOIL/FILL ANALYTICAL DATA

8 SAINT LOUIS PLACE
BUFFALO, NEW YORK

PARAMETER ¹	Unrestricted Use SCOs ²	Restricted Residential Use SCOs ²	Sample Location					
			TP-1 (0.5-2.0 fbgs)	TP-2 (0.5-2.0 fbgs)	TP-3 (0.5-2.0 fbgs)	TP-4 (0.5-6.0 fbgs)	TP-5 (0.5-6.0 fbgs)	TP-6 (0.5-6.0 fbgs)
			9/11/2019	9/11/2019	9/11/2019	9/17/2019	9/17/2019	9/17/2019
Polycyclic Aromatic Hydrocarbons (PAHs) - mg/Kg ³								
Acenaphthene	20	100	1.1	0.23	0.023 J	0.28 J	0.34 J	0.1 J
Acenaphthylene	100	100	ND	0.14	0.037 J	0.28 J	ND	0.21 J
Anthracene	100	100	2.8	0.42	0.063 J	0.68	0.5	0.35
Benzo(a)anthracene	1	1	6.7	2.4	0.32	3.1	2.5	0.98
Benzo(a)pyrene	1	1	7.3	2.7	0.35	3.5	2.4	0.91
Benzo(b)fluoranthene	1	1	9.4	3.7	0.5	4.8	3.7	1.3
Benzo(ghi)perylene	100	100	5.4	2.1	0.28	2.8	1.6	0.64
Benzo(k)fluoranthene	0.8	3.9	3.2	1.3	0.17	1.6	1	0.34
Chrysene	1	3.9	6.7	2.5	0.35	3.1	2.6	0.92
Dibenzo(a,h)anthracene	0.33	0.33	1.1	0.48	0.074 J	0.61	0.44	0.14 J
Fluoranthene	100	100	17	4.6	0.67	6.4	5.5	2.1
Fluorene	30	100	1.2	0.14 J	0.023 J	0.22 J	0.22 J	0.11 J
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.7	2.2	0.28	2.7	1.6	0.64
Naphthalene	12	100	0.5 J	0.059 J	0.022 J	0.11 J	0.066 J	0.081 J
Phenanthrene	100	100	12	2.1	0.38	3	2.8	1.2
Pyrene	100	100	14	3.9	0.55	5.2	4.3	1.8
Metals - mg/Kg								
Arsenic	13	16	6.22	7.62	4.95	5.88	3.34	10.7
Barium	350	400	165	155	57.3	142	36.3	139
Cadmium	2.5	4.3	0.29 J	0.66 J	0.638	0.654 J	0.165 J	0.099 J
Chromium	30	180	6.35	7.56	7.31	5.87	4.33	5.79
Lead	63	400	29.2	459	186	680	105	528
Mercury	0.18	0.81	0.097	0.307	0.318	0.17	0.278	0.483
Selenium	3.9	180	2.82 J	1.51 J	0.186 J	0.23 J	ND	0.513 J
Silver	2	180	ND	ND	ND	ND	ND	0.125 J

Notes:

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

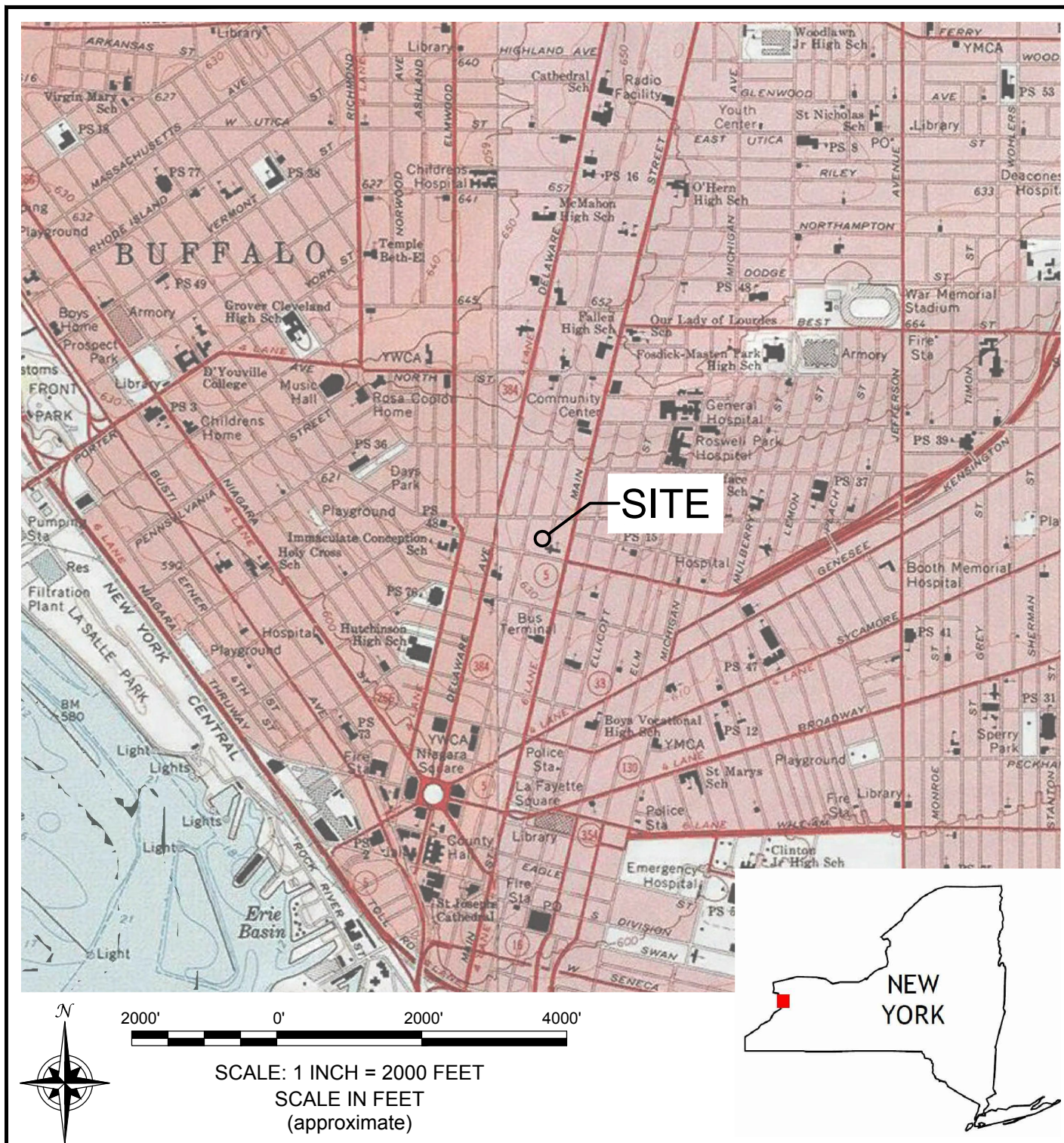
Definitions:

ND = Parameter not detected above laboratory detection limit.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.

FIGURES

FIGURE 1



SITE LOCATION AND VICINITY MAP

PHASE II ENVIRONMENTAL INVESTIGATION

8 SAINT LOUIS PLACE
BUFFALO, NEW YORK

PREPARED FOR
LEGACY DEVELOPMENT



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

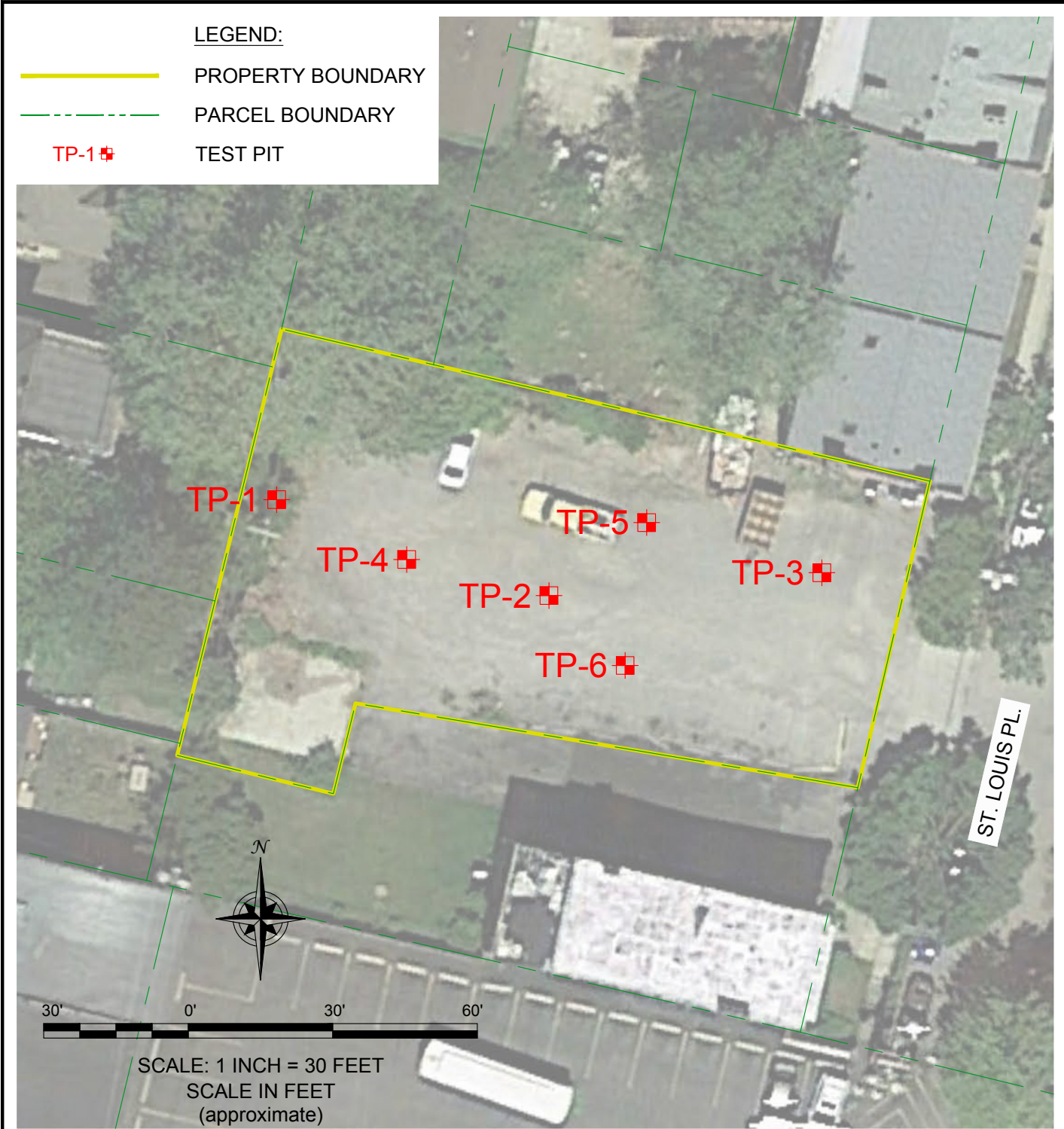
PROJECT NO.: T0395-018-001

DATE: SEPTEMBER 2019

DRAFTED BY: CEH

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

FIGURE 2



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

PROJECT NO.: T0395-018-001

DATE: SEPTEMBER 2019

DRAFTED BY: CEH

SITE PLAN WITH TEST PIT LOCATIONS

PHASE II ENVIRONMENTAL INVESTIGATION

8 SAINT LOUIS PLACE
BUFFALO, NEW YORK

PREPARED FOR
LEGACY DEVELOPMENT

DISCLAIMER:

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

APPENDIX A

PHOTO LOG

SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: View of test pit excavation facing north.

Photo 2: View of the excavated fill.

Photo 3: View of TP-4 facing west.

Photo 4: View of the urban fill in sample TP-4

8 Saint Louis Place
Buffalo, New York

Photo Date: 9/17/19



APPENDIX B

LABORATORY ANALYTICAL REPORTS



ANALYTICAL REPORT

Lab Number:	L1941419
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Mike Lesakowski
Phone:	(716) 856-0599
Project Name:	LEGACY DEVELOPMENT
Project Number:	T0105-019-014
Report Date:	09/13/19

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

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

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



Project Name: LEGACY DEVELOPMENT
Project Number: T0105-019-014

Lab Number: L1941419
Report Date: 09/13/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1941419-01	TP-1	SOIL	8 ST. LOUIS PLACE	09/11/19 10:00	09/11/19
L1941419-02	TP-2	SOIL	8 ST. LOUIS PLACE	09/11/19 10:05	09/11/19
L1941419-03	TP-3	SOIL	8 ST. LOUIS PLACE	09/11/19 10:10	09/11/19

Project Name: LEGACY DEVELOPMENT
Project Number: T0105-019-014

Lab Number: L1941419
Report Date: 09/13/19

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: LEGACY DEVELOPMENT
Project Number: T0105-019-014

Lab Number: L1941419
Report Date: 09/13/19

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.

Total Metals

L1941419-01 and -02: 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 WG1283663-3 MS recovery, performed on L1941419-01, is outside the acceptance criteria for chromium (74%). A post digestion spike was performed and was within acceptance criteria.

The WG1283663-3 MS recovery, performed on L1941419-01, is outside the acceptance criteria for arsenic (65%). A post digestion spike was performed and yielded an unacceptable recovery for arsenic (124%). The serial dilution recovery was not applicable; therefore, this element fails the matrix test and the result reported in the native sample should be considered estimated.

The WG1283654-3 MS recovery, performed on L1941419-01, is outside the acceptance criteria for mercury (62%). A post digestion spike was performed and was within acceptance criteria.

The WG1283663-4 Laboratory Duplicate RPD for arsenic (52%), performed on L1941419-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

The WG1283654-4 Laboratory Duplicate RPD for mercury (35%), performed on L1941419-01, is outside the acceptance criteria. The elevated RPD has 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: 09/13/19

ORGANICS

SEMIVOLATILES

Project Name: LEGACY DEVELOPMENT
Project Number: T0105-019-014

Lab Number: L1941419
Report Date: 09/13/19

SAMPLE RESULTS

Lab ID: L1941419-01 D
Client ID: TP-1
Sample Location: 8 ST. LOUIS PLACE

Date Collected: 09/11/19 10:00
Date Received: 09/11/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/13/19 16:20
Analyst: JG
Percent Solids: 94%

Extraction Method: EPA 3546
Extraction Date: 09/12/19 17:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1100		ug/kg	710	92.	5
Fluoranthene	17000		ug/kg	530	100	5
Naphthalene	500	J	ug/kg	890	110	5
Benzo(a)anthracene	6700		ug/kg	530	100	5
Benzo(a)pyrene	7300		ug/kg	710	220	5
Benzo(b)fluoranthene	9400		ug/kg	530	150	5
Benzo(k)fluoranthene	3200		ug/kg	530	140	5
Chrysene	6700		ug/kg	530	92.	5
Acenaphthylene	ND		ug/kg	710	140	5
Anthracene	2800		ug/kg	530	170	5
Benzo(ghi)perylene	5400		ug/kg	710	100	5
Fluorene	1200		ug/kg	890	86.	5
Phenanthrene	12000		ug/kg	530	110	5
Dibenzo(a,h)anthracene	1100		ug/kg	530	100	5
Indeno(1,2,3-cd)pyrene	5700		ug/kg	710	120	5
Pyrene	14000		ug/kg	530	88.	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	28		23-120
2-Fluorobiphenyl	25	Q	30-120
4-Terphenyl-d14	23		18-120

Project Name: LEGACY DEVELOPMENT
Project Number: T0105-019-014

Lab Number: L1941419
Report Date: 09/13/19

SAMPLE RESULTS

Lab ID: L1941419-02
Client ID: TP-2
Sample Location: 8 ST. LOUIS PLACE

Date Collected: 09/11/19 10:05
Date Received: 09/11/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/13/19 11:55
Analyst: IM
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 09/12/19 17:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	230		ug/kg	140	19.	1
Fluoranthene	4600		ug/kg	110	21.	1
Naphthalene	59	J	ug/kg	180	22.	1
Benzo(a)anthracene	2400		ug/kg	110	20.	1
Benzo(a)pyrene	2700		ug/kg	140	44.	1
Benzo(b)fluoranthene	3700		ug/kg	110	30.	1
Benzo(k)fluoranthene	1300		ug/kg	110	29.	1
Chrysene	2500		ug/kg	110	19.	1
Acenaphthylene	140		ug/kg	140	28.	1
Anthracene	420		ug/kg	110	35.	1
Benzo(ghi)perylene	2100		ug/kg	140	21.	1
Fluorene	140	J	ug/kg	180	18.	1
Phenanthrene	2100		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	480		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	2200		ug/kg	140	25.	1
Pyrene	3900		ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	58		30-120
4-Terphenyl-d14	52		18-120

Project Name: LEGACY DEVELOPMENT
Project Number: T0105-019-014

Lab Number: L1941419
Report Date: 09/13/19

SAMPLE RESULTS

Lab ID: L1941419-03
Client ID: TP-3
Sample Location: 8 ST. LOUIS PLACE

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

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/13/19 12:19
Analyst: IM
Percent Solids: 91%

Extraction Method: EPA 3546
Extraction Date: 09/12/19 17:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	23	J	ug/kg	140	19.	1
Fluoranthene	670		ug/kg	110	21.	1
Naphthalene	22	J	ug/kg	180	22.	1
Benzo(a)anthracene	320		ug/kg	110	20.	1
Benzo(a)pyrene	350		ug/kg	140	44.	1
Benzo(b)fluoranthene	500		ug/kg	110	30.	1
Benzo(k)fluoranthene	170		ug/kg	110	29.	1
Chrysene	350		ug/kg	110	19.	1
Acenaphthylene	37	J	ug/kg	140	28.	1
Anthracene	63	J	ug/kg	110	35.	1
Benzo(ghi)perylene	280		ug/kg	140	21.	1
Fluorene	23	J	ug/kg	180	18.	1
Phenanthrene	380		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	74	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	280		ug/kg	140	25.	1
Pyrene	550		ug/kg	110	18.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	37		23-120
2-Fluorobiphenyl	35		30-120
4-Terphenyl-d14	30		18-120

Project Name: LEGACY DEVELOPMENT
Project Number: T0105-019-014

Lab Number: L1941419
Report Date: 09/13/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/13/19 11:05
Analyst: JG

Extraction Method: EPA 3546
Extraction Date: 09/12/19 11:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1283334-1					
Acenaphthene	ND		ug/kg	130	17.
Fluoranthene	ND		ug/kg	97	18.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	39.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	31.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	22.
Pyrene	ND		ug/kg	97	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	60		30-120
2,4,6-Tribromophenol	62		10-136
4-Terphenyl-d14	63		18-120

Lab Control Sample Analysis Batch Quality Control

Project Name: LEGACY DEVELOPMENT

Project Number: T0105-019-014

Lab Number: L1941419

Report Date: 09/13/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1283334-2 WG1283334-3								
Acenaphthene	66		56		31-137	16		50
Fluoranthene	70		60		40-140	15		50
Naphthalene	66		57		40-140	15		50
Benzo(a)anthracene	69		60		40-140	14		50
Benzo(a)pyrene	64		53		40-140	19		50
Benzo(b)fluoranthene	71		58		40-140	20		50
Benzo(k)fluoranthene	64		56		40-140	13		50
Chrysene	68		55		40-140	21		50
Acenaphthylene	67		56		40-140	18		50
Anthracene	73		61		40-140	18		50
Benzo(ghi)perylene	71		59		40-140	18		50
Fluorene	69		57		40-140	19		50
Phenanthrene	68		57		40-140	18		50
Dibenzo(a,h)anthracene	74		62		40-140	18		50
Indeno(1,2,3-cd)pyrene	73		61		40-140	18		50
Pyrene	67		58		35-142	14		50

Lab Control Sample Analysis**Batch Quality Control****Project Name:** LEGACY DEVELOPMENT**Lab Number:** L1941419**Project Number:** T0105-019-014**Report Date:** 09/13/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1283334-2 WG1283334-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	75		61		25-120
Phenol-d6	78		64		10-120
Nitrobenzene-d5	71		61		23-120
2-Fluorobiphenyl	59		51		30-120
2,4,6-Tribromophenol	69		57		10-136
4-Terphenyl-d14	62		51		18-120

METALS

Project Name: LEGACY DEVELOPMENT**Lab Number:** L1941419**Project Number:** T0105-019-014**Report Date:** 09/13/19**SAMPLE RESULTS**

Lab ID: L1941419-01

Date Collected: 09/11/19 10:00

Client ID: TP-1

Date Received: 09/11/19

Sample Location: 8 ST. LOUIS PLACE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	6.22		mg/kg	2.07	0.431	5	09/13/19 08:30	09/13/19 12:07	EPA 3050B	1,6010D	LC
Barium, Total	165		mg/kg	2.07	0.361	5	09/13/19 08:30	09/13/19 12:07	EPA 3050B	1,6010D	LC
Cadmium, Total	0.290	J	mg/kg	2.07	0.203	5	09/13/19 08:30	09/13/19 12:07	EPA 3050B	1,6010D	LC
Chromium, Total	6.35		mg/kg	2.07	0.199	5	09/13/19 08:30	09/13/19 12:07	EPA 3050B	1,6010D	LC
Lead, Total	29.2		mg/kg	10.4	0.556	5	09/13/19 08:30	09/13/19 12:07	EPA 3050B	1,6010D	LC
Mercury, Total	0.097		mg/kg	0.067	0.044	1	09/13/19 07:30	09/13/19 10:27	EPA 7471B	1,7471B	GD
Selenium, Total	2.82	J	mg/kg	4.15	0.535	5	09/13/19 08:30	09/13/19 12:07	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	2.07	0.587	5	09/13/19 08:30	09/13/19 12:07	EPA 3050B	1,6010D	LC



Project Name: LEGACY DEVELOPMENT**Lab Number:** L1941419**Project Number:** T0105-019-014**Report Date:** 09/13/19**SAMPLE RESULTS**

Lab ID: L1941419-02

Date Collected: 09/11/19 10:05

Client ID: TP-2

Date Received: 09/11/19

Sample Location: 8 ST. LOUIS PLACE

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	7.62		mg/kg	2.13	0.443	5	09/13/19 08:30	09/13/19 12:25	EPA 3050B	1,6010D	LC
Barium, Total	155		mg/kg	2.13	0.370	5	09/13/19 08:30	09/13/19 12:25	EPA 3050B	1,6010D	LC
Cadmium, Total	0.660	J	mg/kg	2.13	0.209	5	09/13/19 08:30	09/13/19 12:25	EPA 3050B	1,6010D	LC
Chromium, Total	7.56		mg/kg	2.13	0.204	5	09/13/19 08:30	09/13/19 12:25	EPA 3050B	1,6010D	LC
Lead, Total	459		mg/kg	10.6	0.571	5	09/13/19 08:30	09/13/19 12:25	EPA 3050B	1,6010D	LC
Mercury, Total	0.307		mg/kg	0.070	0.045	1	09/13/19 07:30	09/13/19 10:40	EPA 7471B	1,7471B	GD
Selenium, Total	1.51	J	mg/kg	4.26	0.549	5	09/13/19 08:30	09/13/19 12:25	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	2.13	0.603	5	09/13/19 08:30	09/13/19 12:25	EPA 3050B	1,6010D	LC



Project Name: LEGACY DEVELOPMENT**Lab Number:** L1941419**Project Number:** T0105-019-014**Report Date:** 09/13/19**SAMPLE RESULTS**

Lab ID: L1941419-03

Date Collected: 09/11/19 10:10

Client ID: TP-3

Date Received: 09/11/19

Sample Location: 8 ST. LOUIS PLACE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	4.95		mg/kg	0.423	0.088	1	09/13/19 08:30	09/13/19 11:33	EPA 3050B	1,6010D	LC
Barium, Total	57.3		mg/kg	0.423	0.074	1	09/13/19 08:30	09/13/19 11:33	EPA 3050B	1,6010D	LC
Cadmium, Total	0.638		mg/kg	0.423	0.041	1	09/13/19 08:30	09/13/19 11:33	EPA 3050B	1,6010D	LC
Chromium, Total	7.31		mg/kg	0.423	0.041	1	09/13/19 08:30	09/13/19 11:33	EPA 3050B	1,6010D	LC
Lead, Total	186		mg/kg	2.11	0.113	1	09/13/19 08:30	09/13/19 11:33	EPA 3050B	1,6010D	LC
Mercury, Total	0.318		mg/kg	0.069	0.045	1	09/13/19 07:30	09/13/19 10:44	EPA 7471B	1,7471B	GD
Selenium, Total	0.186	J	mg/kg	0.846	0.109	1	09/13/19 08:30	09/13/19 11:33	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.423	0.120	1	09/13/19 08:30	09/13/19 11:33	EPA 3050B	1,6010D	LC



Project Name: LEGACY DEVELOPMENT

Lab Number: L1941419

Project Number: T0105-019-014

Report Date: 09/13/19

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): 01-03 Batch: WG1283654-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	09/13/19 07:30	09/13/19 10:20	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): 01-03 Batch: WG1283663-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	09/13/19 08:30	09/13/19 10:51	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	09/13/19 08:30	09/13/19 10:51	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	09/13/19 08:30	09/13/19 10:51	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	09/13/19 08:30	09/13/19 10:51	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	09/13/19 08:30	09/13/19 10:51	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	09/13/19 08:30	09/13/19 10:51	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	09/13/19 08:30	09/13/19 10:51	1,6010D	LC

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY DEVELOPMENT

Project Number: T0105-019-014

Lab Number: L1941419

Report Date: 09/13/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1283654-2 SRM Lot Number: D105-540								
Mercury, Total	84		-		60-141	-		
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1283663-2 SRM Lot Number: D105-540								
Arsenic, Total	90		-		70-130	-		
Barium, Total	84		-		75-125	-		
Cadmium, Total	90		-		75-125	-		
Chromium, Total	82		-		70-130	-		
Lead, Total	82		-		71-128	-		
Selenium, Total	87		-		63-137	-		
Silver, Total	82		-		69-131	-		

Matrix Spike Analysis Batch Quality Control

Project Name: LEGACY DEVELOPMENT

Project Number: T0105-019-014

Lab Number: L1941419

Report Date: 09/13/19

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): 01-03			QC Batch ID: WG1283654-3			QC Sample: L1941419-01			Client ID: TP-1			
Mercury, Total	0.097	0.136	0.181	62	Q	-	-		80-120	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-03			QC Batch ID: WG1283663-3			QC Sample: L1941419-01			Client ID: TP-1			
Arsenic, Total	6.22	10	12.7	65	Q	-	-		75-125	-		20
Barium, Total	165	167	316	90		-	-		75-125	-		20
Cadmium, Total	0.290J	4.25	3.54	83		-	-		75-125	-		20
Chromium, Total	6.35	16.7	18.7	74	Q	-	-		75-125	-		20
Lead, Total	29.2	42.5	67.5	90		-	-		75-125	-		20
Selenium, Total	2.82J	10	11.0	110		-	-		75-125	-		20
Silver, Total	ND	25	22.1	88		-	-		75-125	-		20

Project Name: LEGACY DEVELOPMENT
Project Number: T0105-019-014

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1941419
Report Date: 09/13/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1283654-4 QC Sample: L1941419-01 Client ID: TP-1						
Mercury, Total	0.097	0.068	mg/kg	35	Q	20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1283663-4 QC Sample: L1941419-01 Client ID: TP-1						
Arsenic, Total	6.22	3.65	mg/kg	52	Q	20
Barium, Total	165	171	mg/kg	4		20
Cadmium, Total	0.290J	0.284J	mg/kg	NC		20
Chromium, Total	6.35	6.50	mg/kg	2		20
Lead, Total	29.2	34.9	mg/kg	18		20
Selenium, Total	2.82J	2.61J	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20

INORGANICS & MISCELLANEOUS

Project Name: LEGACY DEVELOPMENT**Project Number:** T0105-019-014**Lab Number:** L1941419**Report Date:** 09/13/19**SAMPLE RESULTS****Lab ID:** L1941419-01**Client ID:** TP-1**Sample Location:** 8 ST. LOUIS PLACE**Date Collected:** 09/11/19 10:00**Date Received:** 09/11/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.5		%	0.100	NA	1	-	09/12/19 13:31	121,2540G	RI



Project Name: LEGACY DEVELOPMENT**Project Number:** T0105-019-014**Lab Number:** L1941419**Report Date:** 09/13/19**SAMPLE RESULTS****Lab ID:** L1941419-02**Client ID:** TP-2**Sample Location:** 8 ST. LOUIS PLACE**Date Collected:** 09/11/19 10:05**Date Received:** 09/11/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.3		%	0.100	NA	1	-	09/12/19 13:31	121,2540G	RI



Project Name: LEGACY DEVELOPMENT**Project Number:** T0105-019-014**Lab Number:** L1941419**Report Date:** 09/13/19**SAMPLE RESULTS****Lab ID:** L1941419-03**Client ID:** TP-3**Sample Location:** 8 ST. LOUIS PLACE**Date Collected:** 09/11/19 10:10**Date Received:** 09/11/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.6		%	0.100	NA	1	-	09/12/19 13:31	121,2540G	RI



Lab Duplicate Analysis
*Batch Quality Control***Project Name:** LEGACY DEVELOPMENT**Project Number:** T0105-019-014**Lab Number:** L1941419**Report Date:** 09/13/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1283342-1 QC Sample: L1941473-01 Client ID: DUP Sample						
Solids, Total	96.4	95.6	%	1		20

Project Name: LEGACY DEVELOPMENT
Project Number: T0105-019-014

Serial_No:09131918:48
Lab Number: L1941419
Report Date: 09/13/19

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(*)
L1941419-01A	Vial Large Septa unpreserved (4oz)	A	NA		5.3	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)
L1941419-01B	Vial Large Septa unpreserved (4oz)	A	NA		5.3	Y	Absent		NYCP51-PAH(14),TS(7)
L1941419-02A	Vial Large Septa unpreserved (4oz)	A	NA		5.3	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)
L1941419-02B	Vial Large Septa unpreserved (4oz)	A	NA		5.3	Y	Absent		NYCP51-PAH(14),TS(7)
L1941419-03A	Vial Large Septa unpreserved (4oz)	A	NA		5.3	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)
L1941419-03B	Vial Large Septa unpreserved (4oz)	A	NA		5.3	Y	Absent		NYCP51-PAH(14),TS(7)

Project Name: LEGACY DEVELOPMENT**Lab Number:** L1941419**Project Number:** T0105-019-014**Report Date:** 09/13/19

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: LEGACY DEVELOPMENT**Lab Number:** L1941419**Project Number:** T0105-019-014**Report Date:** 09/13/19

- 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: LEGACY DEVELOPMENT
Project Number: T0105-019-014

Lab Number: L1941419
Report Date: 09/13/19

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.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 15

Published Date: 8/15/2019 9:53:42 AM

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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.



ANALYTICAL REPORT

Lab Number:	L1942912
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Mike Lesakowski
Phone:	(716) 856-0599
Project Name:	LEGACY DEVELOPMENT
Project Number:	T0395-018-001
Report Date:	09/20/19

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

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

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



Project Name: LEGACY DEVELOPMENT
Project Number: T0395-018-001

Lab Number: L1942912
Report Date: 09/20/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1942912-01	TP-4	SOIL	8 ST., LOUIS PLACE	09/17/19 11:10	09/18/19
L1942912-02	TP-5	SOIL	8 ST., LOUIS PLACE	09/17/19 11:20	09/18/19
L1942912-03	TP-6	SOIL	8 ST., LOUIS PLACE	09/17/19 11:00	09/18/19

Project Name: LEGACY DEVELOPMENT
Project Number: T0395-018-001

Lab Number: L1942912
Report Date: 09/20/19

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: LEGACY DEVELOPMENT
Project Number: T0395-018-001

Lab Number: L1942912
Report Date: 09/20/19

Case Narrative (continued)

Report Submission

The project number was provided by the client.

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

Semivolatile Organics

L1942912-01, -02, and -03: The sample has elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

Total Metals

L1942912-01: 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.

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:



Cristin Walker

Title: Technical Director/Representative

Date: 09/20/19

ORGANICS

SEMIVOLATILES

Project Name: LEGACY DEVELOPMENT
Project Number: T0395-018-001

Lab Number: L1942912
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1942912-01
Client ID: TP-4
Sample Location: 8 ST., LOUIS PLACE

Date Collected: 09/17/19 11:10
Date Received: 09/18/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/20/19 08:26
Analyst: IM
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 09/19/19 09:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	280	J	ug/kg	450	58.	1
Fluoranthene	6400		ug/kg	340	64.	1
Naphthalene	110	J	ug/kg	560	68.	1
Benzo(a)anthracene	3100		ug/kg	340	63.	1
Benzo(a)pyrene	3500		ug/kg	450	140	1
Benzo(b)fluoranthene	4800		ug/kg	340	94.	1
Benzo(k)fluoranthene	1600		ug/kg	340	90.	1
Chrysene	3100		ug/kg	340	58.	1
Acenaphthylene	280	J	ug/kg	450	87.	1
Anthracene	680		ug/kg	340	110	1
Benzo(ghi)perylene	2800		ug/kg	450	66.	1
Fluorene	220	J	ug/kg	560	54.	1
Phenanthrene	3000		ug/kg	340	68.	1
Dibenzo(a,h)anthracene	610		ug/kg	340	65.	1
Indeno(1,2,3-cd)pyrene	2700		ug/kg	450	78.	1
Pyrene	5200		ug/kg	340	56.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	78		30-120
4-Terphenyl-d14	74		18-120

Project Name: LEGACY DEVELOPMENT
Project Number: T0395-018-001

Lab Number: L1942912
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1942912-02
Client ID: TP-5
Sample Location: 8 ST., LOUIS PLACE

Date Collected: 09/17/19 11:20
Date Received: 09/18/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/20/19 08:49
Analyst: IM
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 09/19/19 06:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	340	J	ug/kg	430	55.	1
Fluoranthene	5500		ug/kg	320	61.	1
Naphthalene	66	J	ug/kg	530	65.	1
Benzo(a)anthracene	2500		ug/kg	320	60.	1
Benzo(a)pyrene	2400		ug/kg	430	130	1
Benzo(b)fluoranthene	3700		ug/kg	320	90.	1
Benzo(k)fluoranthene	1000		ug/kg	320	85.	1
Chrysene	2600		ug/kg	320	55.	1
Acenaphthylene	ND		ug/kg	430	82.	1
Anthracene	500		ug/kg	320	100	1
Benzo(ghi)perylene	1600		ug/kg	430	63.	1
Fluorene	220	J	ug/kg	530	52.	1
Phenanthrene	2800		ug/kg	320	65.	1
Dibenzo(a,h)anthracene	440		ug/kg	320	62.	1
Indeno(1,2,3-cd)pyrene	1600		ug/kg	430	74.	1
Pyrene	4300		ug/kg	320	53.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	85		30-120
4-Terphenyl-d14	70		18-120

Project Name: LEGACY DEVELOPMENT
Project Number: T0395-018-001

Lab Number: L1942912
Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1942912-03
Client ID: TP-6
Sample Location: 8 ST., LOUIS PLACE

Date Collected: 09/17/19 11:00
Date Received: 09/18/19
Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/20/19 09:12
Analyst: IM
Percent Solids: 89%

Extraction Method: EPA 3546
Extraction Date: 09/19/19 06:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	100	J	ug/kg	440	57.	1
Fluoranthene	2100		ug/kg	330	63.	1
Naphthalene	81	J	ug/kg	550	67.	1
Benzo(a)anthracene	980		ug/kg	330	62.	1
Benzo(a)pyrene	910		ug/kg	440	130	1
Benzo(b)fluoranthene	1300		ug/kg	330	92.	1
Benzo(k)fluoranthene	340		ug/kg	330	88.	1
Chrysene	920		ug/kg	330	57.	1
Acenaphthylene	210	J	ug/kg	440	84.	1
Anthracene	350		ug/kg	330	110	1
Benzo(ghi)perylene	640		ug/kg	440	64.	1
Fluorene	110	J	ug/kg	550	53.	1
Phenanthrene	1200		ug/kg	330	66.	1
Dibenzo(a,h)anthracene	140	J	ug/kg	330	63.	1
Indeno(1,2,3-cd)pyrene	640		ug/kg	440	76.	1
Pyrene	1800		ug/kg	330	54.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	59		30-120
4-Terphenyl-d14	60		18-120

Project Name: LEGACY DEVELOPMENT
Project Number: T0395-018-001

Lab Number: L1942912
Report Date: 09/20/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/19/19 23:40
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 09/19/19 06:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1285950-1					
Acenaphthene	ND		ug/kg	130	17.
Fluoranthene	ND		ug/kg	100	19.
Naphthalene	ND		ug/kg	160	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	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
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	61		30-120
4-Terphenyl-d14	68		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY DEVELOPMENT

Project Number: T0395-018-001

Lab Number: L1942912

Report Date: 09/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1285950-2 WG1285950-3								
Acenaphthene	75		68		31-137	10		50
Fluoranthene	82		71		40-140	14		50
Naphthalene	74		66		40-140	11		50
Benzo(a)anthracene	77		67		40-140	14		50
Benzo(a)pyrene	76		63		40-140	19		50
Benzo(b)fluoranthene	79		69		40-140	14		50
Benzo(k)fluoranthene	81		68		40-140	17		50
Chrysene	76		64		40-140	17		50
Acenaphthylene	82		75		40-140	9		50
Anthracene	79		69		40-140	14		50
Benzo(ghi)perylene	80		68		40-140	16		50
Fluorene	79		70		40-140	12		50
Phenanthrene	74		65		40-140	13		50
Dibenzo(a,h)anthracene	81		69		40-140	16		50
Indeno(1,2,3-cd)pyrene	82		70		40-140	16		50
Pyrene	81		70		35-142	15		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	62		56		23-120
2-Fluorobiphenyl	66		60		30-120
4-Terphenyl-d14	69		59		18-120

METALS

Project Name: LEGACY DEVELOPMENT**Lab Number:** L1942912**Project Number:** T0395-018-001**Report Date:** 09/20/19**SAMPLE RESULTS**

Lab ID: L1942912-01

Date Collected: 09/17/19 11:10

Client ID: TP-4

Date Received: 09/18/19

Sample Location: 8 ST., LOUIS PLACE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	5.88		mg/kg	0.884	0.184	2	09/19/19 08:45	09/19/19 17:50	EPA 3050B	1,6010D	AB
Barium, Total	142		mg/kg	0.884	0.154	2	09/19/19 08:45	09/19/19 16:19	EPA 3050B	1,6010D	AB
Cadmium, Total	0.654	J	mg/kg	0.884	0.087	2	09/19/19 08:45	09/19/19 16:19	EPA 3050B	1,6010D	AB
Chromium, Total	5.87		mg/kg	0.884	0.085	2	09/19/19 08:45	09/19/19 16:19	EPA 3050B	1,6010D	AB
Lead, Total	680		mg/kg	4.42	0.237	2	09/19/19 08:45	09/19/19 16:19	EPA 3050B	1,6010D	AB
Mercury, Total	0.170		mg/kg	0.072	0.047	1	09/19/19 09:00	09/19/19 12:50	EPA 7471B	1,7471B	GD
Selenium, Total	0.230	J	mg/kg	1.77	0.228	2	09/19/19 08:45	09/19/19 16:19	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.884	0.250	2	09/19/19 08:45	09/19/19 16:19	EPA 3050B	1,6010D	AB



Project Name: LEGACY DEVELOPMENT**Lab Number:** L1942912**Project Number:** T0395-018-001**Report Date:** 09/20/19**SAMPLE RESULTS**

Lab ID: L1942912-02

Date Collected: 09/17/19 11:20

Client ID: TP-5

Date Received: 09/18/19

Sample Location: 8 ST., LOUIS PLACE

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	3.34		mg/kg	0.423	0.088	1	09/19/19 08:45	09/19/19 12:45	EPA 3050B	1,6010D	LC
Barium, Total	36.3		mg/kg	0.423	0.074	1	09/19/19 08:45	09/19/19 12:45	EPA 3050B	1,6010D	LC
Cadmium, Total	0.165	J	mg/kg	0.423	0.042	1	09/19/19 08:45	09/19/19 12:45	EPA 3050B	1,6010D	LC
Chromium, Total	4.33		mg/kg	0.423	0.041	1	09/19/19 08:45	09/19/19 12:45	EPA 3050B	1,6010D	LC
Lead, Total	105		mg/kg	2.12	0.113	1	09/19/19 08:45	09/19/19 12:45	EPA 3050B	1,6010D	LC
Mercury, Total	0.278		mg/kg	0.069	0.045	1	09/19/19 09:00	09/19/19 12:52	EPA 7471B	1,7471B	GD
Selenium, Total	ND		mg/kg	0.846	0.109	1	09/19/19 08:45	09/19/19 12:45	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.423	0.120	1	09/19/19 08:45	09/19/19 12:45	EPA 3050B	1,6010D	LC



Project Name: LEGACY DEVELOPMENT**Lab Number:** L1942912**Project Number:** T0395-018-001**Report Date:** 09/20/19**SAMPLE RESULTS**

Lab ID: L1942912-03

Date Collected: 09/17/19 11:00

Client ID: TP-6

Date Received: 09/18/19

Sample Location: 8 ST., LOUIS PLACE

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	10.7		mg/kg	0.431	0.090	1	09/19/19 08:45	09/19/19 12:50	EPA 3050B	1,6010D	LC
Barium, Total	139		mg/kg	0.431	0.075	1	09/19/19 08:45	09/19/19 12:50	EPA 3050B	1,6010D	LC
Cadmium, Total	0.099	J	mg/kg	0.431	0.042	1	09/19/19 08:45	09/19/19 12:50	EPA 3050B	1,6010D	LC
Chromium, Total	5.79		mg/kg	0.431	0.041	1	09/19/19 08:45	09/19/19 12:50	EPA 3050B	1,6010D	LC
Lead, Total	528		mg/kg	2.15	0.115	1	09/19/19 08:45	09/19/19 12:50	EPA 3050B	1,6010D	LC
Mercury, Total	0.483		mg/kg	0.071	0.046	1	09/19/19 09:00	09/19/19 12:54	EPA 7471B	1,7471B	GD
Selenium, Total	0.513	J	mg/kg	0.862	0.111	1	09/19/19 08:45	09/19/19 12:50	EPA 3050B	1,6010D	LC
Silver, Total	0.125	J	mg/kg	0.431	0.122	1	09/19/19 08:45	09/19/19 12:50	EPA 3050B	1,6010D	LC



Project Name: LEGACY DEVELOPMENT

Lab Number: L1942912

Project Number: T0395-018-001

Report Date: 09/20/19

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): 01-03 Batch: WG1285973-1										
Arsenic, Total	ND		mg/kg	0.400	0.083	1	09/19/19 08:45	09/19/19 11:30	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	09/19/19 08:45	09/19/19 11:30	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	09/19/19 08:45	09/19/19 11:30	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	09/19/19 08:45	09/19/19 11:30	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	09/19/19 08:45	09/19/19 11:30	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	09/19/19 08:45	09/19/19 11:30	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	09/19/19 08:45	09/19/19 11:30	1,6010D	LC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1285979-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	09/19/19 09:00	09/19/19 12:32	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: LEGACY DEVELOPMENT

Project Number: T0395-018-001

Lab Number: L1942912

Report Date: 09/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1285973-2 SRM Lot Number: D105-540								
Arsenic, Total	112		-		70-130	-		
Barium, Total	92		-		75-125	-		
Cadmium, Total	98		-		75-125	-		
Chromium, Total	95		-		70-130	-		
Lead, Total	101		-		71-128	-		
Selenium, Total	107		-		63-137	-		
Silver, Total	100		-		69-131	-		
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1285979-2 SRM Lot Number: D105-540								
Mercury, Total	91		-		60-141	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: LEGACY DEVELOPMENT
Project Number: T0395-018-001

Lab Number: L1942912
Report Date: 09/20/19

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): 01-03 QC Batch ID: WG1285973-3 QC Sample: L1942986-01 Client ID: MS Sample												
Arsenic, Total	0.784	9.82	10.5	99		-	-		75-125	-		20
Barium, Total	29.1	164	178	91		-	-		75-125	-		20
Cadmium, Total	ND	4.17	3.67	88		-	-		75-125	-		20
Chromium, Total	4.86	16.4	19.7	91		-	-		75-125	-		20
Lead, Total	2.68	41.7	37.6	84		-	-		75-125	-		20
Selenium, Total	ND	9.82	8.92	91		-	-		75-125	-		20
Silver, Total	ND	24.5	21.6	88		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1285979-3 QC Sample: L1942870-01 Client ID: MS Sample												
Mercury, Total	ND	0.133	0.128	96		-	-		80-120	-		20

Project Name: LEGACY DEVELOPMENT
Project Number: T0395-018-001

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1942912
Report Date: 09/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1285979-4 QC Sample: L1942870-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/kg	NC		20

INORGANICS & MISCELLANEOUS

Project Name: LEGACY DEVELOPMENT**Project Number:** T0395-018-001**Lab Number:** L1942912**Report Date:** 09/20/19**SAMPLE RESULTS****Lab ID:** L1942912-01**Client ID:** TP-4**Sample Location:** 8 ST., LOUIS PLACE**Date Collected:** 09/17/19 11:10**Date Received:** 09/18/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.6		%	0.100	NA	1	-	09/19/19 07:56	121,2540G	RI



Project Name: LEGACY DEVELOPMENT

Project Number: T0395-018-001

Lab Number: L1942912

Report Date: 09/20/19

SAMPLE RESULTS

Lab ID: L1942912-02

Client ID: TP-5

Sample Location: 8 ST., LOUIS PLACE

Date Collected: 09/17/19 11:20

Date Received: 09/18/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.3		%	0.100	NA	1	-	09/19/19 07:56	121,2540G	RI



Project Name: LEGACY DEVELOPMENT**Project Number:** T0395-018-001**Lab Number:** L1942912**Report Date:** 09/20/19**SAMPLE RESULTS****Lab ID:** L1942912-03**Client ID:** TP-6**Sample Location:** 8 ST., LOUIS PLACE**Date Collected:** 09/17/19 11:00**Date Received:** 09/18/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.2		%	0.100	NA	1	-	09/19/19 07:56	121,2540G	RI



Lab Duplicate Analysis
*Batch Quality Control***Project Name:** LEGACY DEVELOPMENT**Project Number:** T0395-018-001**Lab Number:** L1942912**Report Date:** 09/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1285980-1 QC Sample: L1942912-01 Client ID: TP-4						
Solids, Total	87.6	88.9	%	1		20

Project Name: LEGACY DEVELOPMENT**Lab Number:** L1942912**Project Number:** T0395-018-001**Report Date:** 09/20/19**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(*)
L1942912-01A	Glass 120ml/4oz unpreserved	A	NA		3.9	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)
L1942912-01B	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYCP51-PAH(14),TS(7)
L1942912-02A	Glass 120ml/4oz unpreserved	A	NA		3.9	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)
L1942912-02B	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYCP51-PAH(14),TS(7)
L1942912-03A	Glass 120ml/4oz unpreserved	A	NA		3.9	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)
L1942912-03B	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		NYCP51-PAH(14),TS(7)

Project Name: LEGACY DEVELOPMENT**Lab Number:** L1942912**Project Number:** T0395-018-001**Report Date:** 09/20/19

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: LEGACY DEVELOPMENT**Lab Number:** L1942912**Project Number:** T0395-018-001**Report Date:** 09/20/19

- 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.

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: LEGACY DEVELOPMENT
Project Number: T0395-018-001

Lab Number: L1942912
Report Date: 09/20/19

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.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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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.

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