August 18, 2020

Mr. Andrew Zwack
Assistant Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2915

Re: Tecumseh Phase II Business Park, Lackawanna, NY
Site Nos. II-9 (C915198I) and II-10 (C915198J)
Letter Report for Biotreatment of Impacted Soil

Dear Mr. Zwack:

On behalf of Time Release Properties, LLC (TRP), Benchmark Environmental Engineering & Science, PLLC (Benchmark) is herein providing a summary of ex-situ biotreatment activities performed to address petroleum-impacted soil/fill on Brownfield Cleanup Program (BCP) Site II-9 (see Figure 1).

BACKGROUND

TRP owns and is redeveloping Tecumseh Phase II Business Park Site II-9 and a portion of Site II-10 for TRS Packaging. During building foundation construction activities, weathered petroleum impacts, evident by olfactory petroleum-like odors and oily sheen, were observed within limited areas of Site II-9. Specifically, petroleum-impacted saturated soil and shallow groundwater were identified on Site II-9 in the South Loading Dock area and in the vicinity of two building foundation pile locations deemed "E-6 and E-10". The impacted soil/fill materials were removed from the excavation until no further impacts were observed and staged on poly sheeting on the northern portion of Site II-10. An Addendum to the Remedial Action Work Plan and Cover System Modification Plan for the subject Sites proposed ex-situ biotreatment as a remedy for these impacted soils. The Addendum was approved on July 1, 2020; ex-situ biotreatment activities have since been completed as described below.

EX-SITU BIOTREATMENT

On July 6, 2020, Benchmark constructed a 100' by 50' biotreatment pad on the northern portion of Site II-10 (see Figure 2). The biotreatment pad is comprised of a 6"-12" wood mulch layer placed over 6 mL poly sheeting, and a 6" diameter silt sock installed around the perimeter of the biotreatment pad to mitigate surface erosion. On July 6, 2020, approximately

150 cubic yards of petroleum-impacted soil/fill was transported from the staging area to the biotreatment pad using a front-end loader and bulldozer and spread across the pad to an average thickness of approximately 10-12".

July 6 through July 21, 2020, Benchmark performed periodic monitoring of the biotreatment area soil/ fill to track system performance, with tilling occurring on July 14th to promote treatment. Community Air Monitoring was performed per the Addendum; no exceedances of CAMP VOC criteria occurred during movement or tilling of the materials (see Attachment 2). In addition, no visible dust was observed emanating from the materials, however due to a dust meter failure particulate concentration were not logged.

On July 21, 2020, Benchmark completed a qualitative assessment of the treatment performance based visual and olfactory conditions of the treated soil. No visual or olfactory impacts were identified and all photoionization detector (PID) readings were 0.0 parts per million (ppm) in the treated soil. Based on the results of the qualitative assessment, Benchmark collected one confirmatory composite sample from seven locations across the biotreatment pad. The sample was analyzed by Alpha Analytical for NYSDEC CP-51 List volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs).

Table 1 presents the analytical results with comparison to NYSDEC Part 375 Protection of Groundwater Soil Cleanup Objectives (SCOs) and Commercial SCOs for VOCs and the site-specific action limit of 500 mg/kg for total SVOCs. Attachment 1 contains the laboratory analytical data report. As indicated on Table 1, no VOC results were detected at concentrations exceeding Protection of Groundwater Soil Cleanup Objectives SCOs or Commercial SCOs. All VOC results were at concentrations below their respective laboratory detection limits. The total SVOC concentration (8.63 mg/kg) was below the site-specific action limit of 500 mg/kg.

Based upon the analytical results and absence of visual, olfactory and PID impacts, we request permission to remove the treated soil/fill and place/compact it as subgrade fill in Sites II-9 and II-10 in an area designated for cover.

Additional Petroleum Impacted Soil/Fill

On July 21, 2020, additional petroleum impacted soil/fill, evident by visual, olfactory and minor PID impacts, was identified in a layer approximately 6-8 feet below grade during storm sewer excavation work along the west side of the building in the planned loading dock area. The areas of impact was excavated laterally and vertically until no field evidence of impact remained. Approximately 30 cubic yards of petroleum impacted soil/fill was excavated and staged on poly sheeting on the northern portion of Site II-10 (see Figure 2). On July 21, 2020, Benchmark collected a pretreatment composite sample from the staged petroleum impacted soil/fill. The sample was analyzed by Alpha Analytical for USEPA Target Compound List (TCL) volatile organic compounds (VOCs) and base-neutral semi-volatile organic compounds (SVOCs) as well as PCBs. Attachment 2 contains the analytical report. Pretreatment analytical results indicate VOCs were either at concentrations below their respective laboratory detection

limits or below their respective Protection of Groundwater SCOs, with the exception of acetone detected at a concentration exceeding its respective Protection of Groundwater SCO (it is suspected that acetone is a laboratory artifact). Individual SVOC results were detected at concentrations above their respective laboratory detection limits, however the total SVOC concentration was below the site-specific action limit of 500 mg/kg (6.15 mg/kg). PCBs were detected at trace (j-flagged) concentrations but with a total concentration of 0.034 mg/Kg, well below the Unrestricted Use SCO. Upon NYSDEC approval, the additional petroleum impacted soil/fill will be moved to the cleared biopad and bioremediated in the same manner as the material described above. Based upon pre-characterization results we would propose to biotreat to remove visual, olfactory and PID evidence of impact and relocate the materials for use in the subgrade after inspection by the Department.

The work discussed herein and disposition of the biotreated soil/fill will be documented in the Final Engineering Report for Site II-9.

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

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

Thomas H. Forbes, P.E.
Principal Engineer

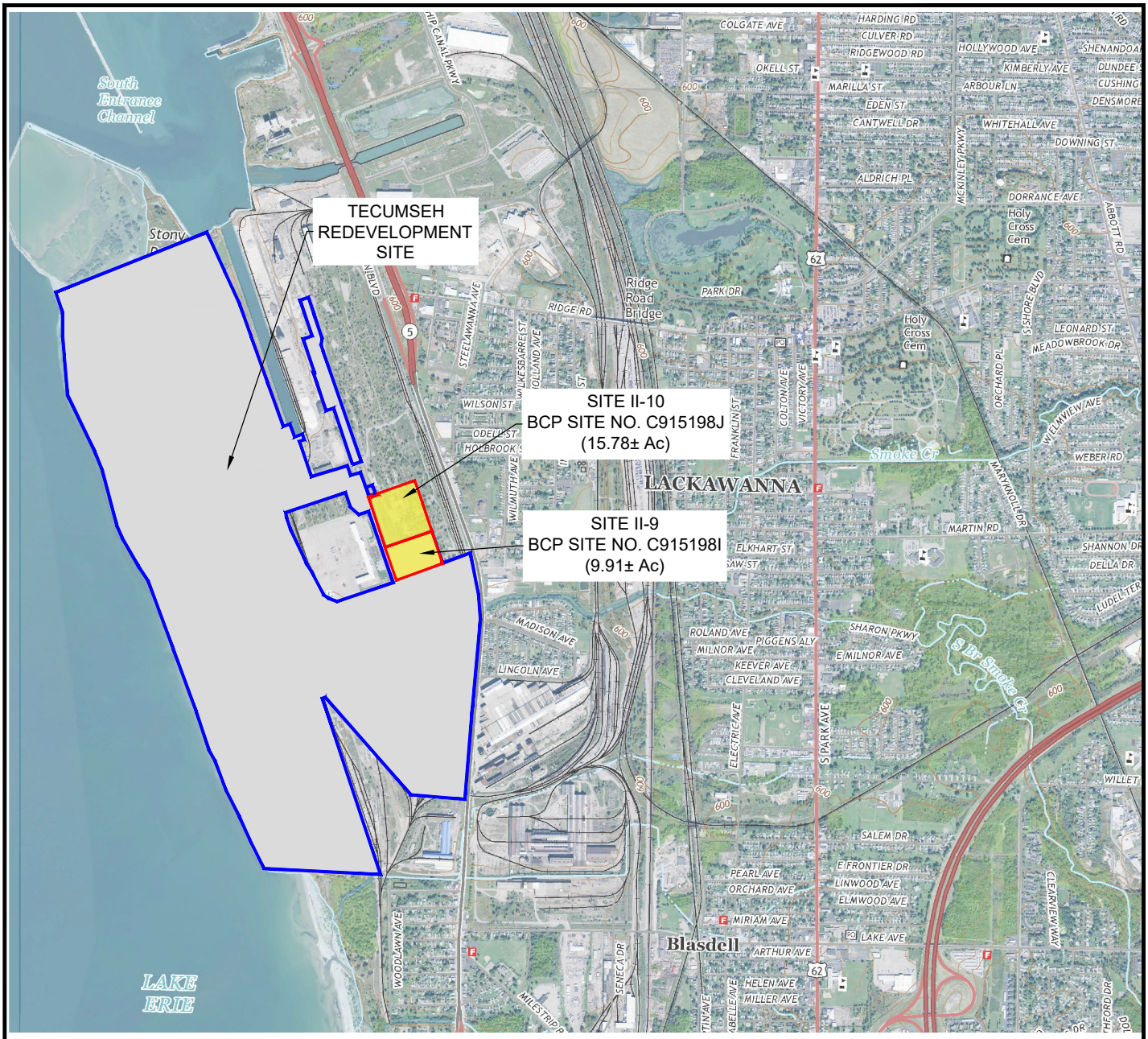
Att.

ec: Ms. Megan Kuczka (NYSDEC)
Mr. Robert Laughlin (TMP)
Mr. Luke Stewart (TMP)

FIGURES

F:\CAD\Benchmark\TMP\Biotreatment Letter Report\Figure 1; Site Location & Vicinity Map.dwg

FIGURE 1



2,500' 0' 2,500' 5,000'

SCALE: 1 INCH = 2,500 FEET
SCALE IN FEET
(approximate)

N

LEGEND:

TECUMSEH PROPERTY

TRP SITE

BASE MAP USGS QUAD BUFFALO SE 2016

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

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

PROJECT NO.: 0489-019-002

DATE: AUGUST 2020

DRAFTED BY: CCB

SITE LOCATION AND VICINITY MAP

LETTER REPORT FOR BIOTREATMENT OF IMPACTED SOIL

TECUMSEH PHASE II BUSINESS PARK
SITE NO.s II-9 (C915198I) & II-10 (C915198J)
LACKAWANNA, NEW YORK

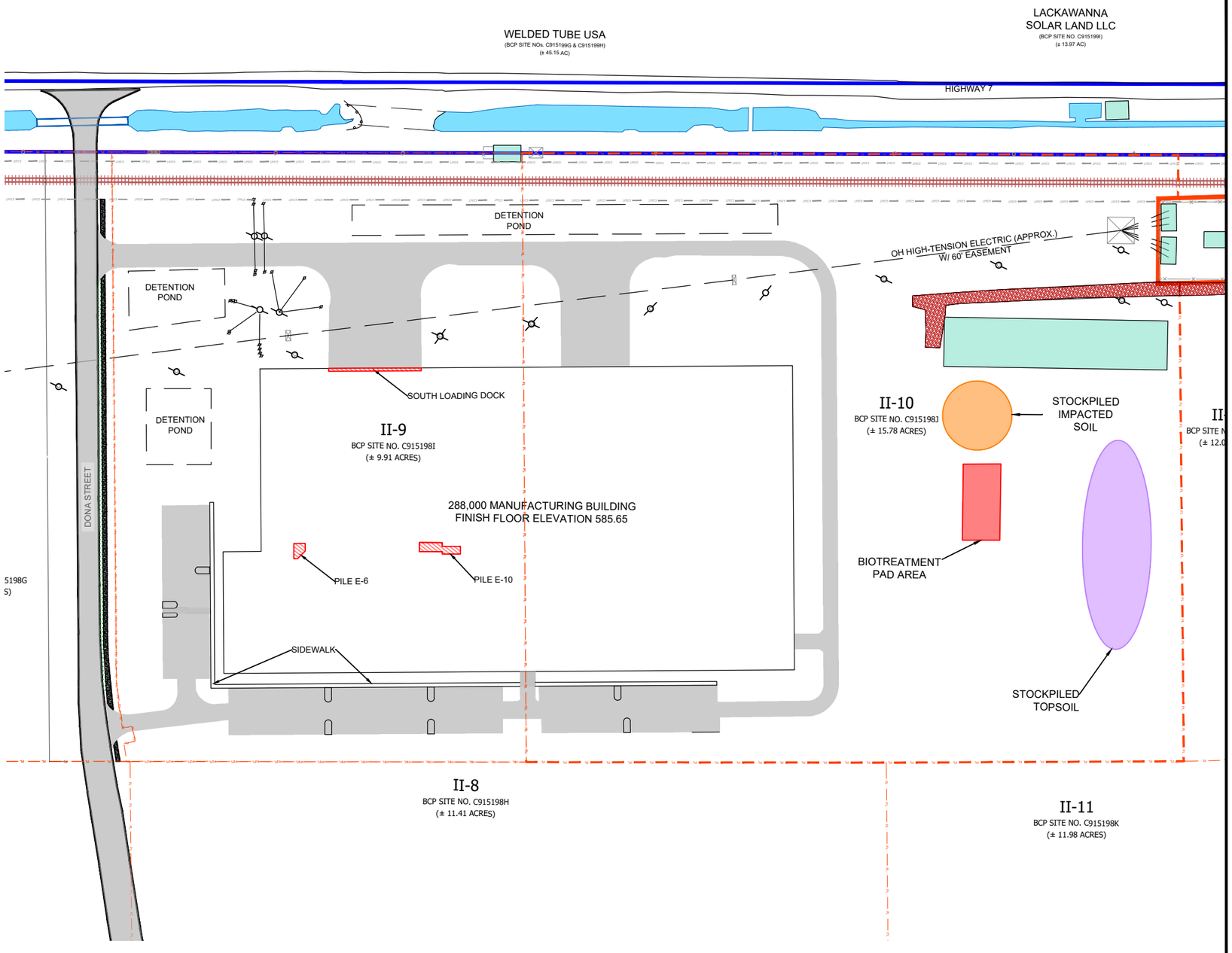
PREPARED FOR

TIME RELEASE PROPERTIES, LLC

F:\CAD\Benchmark\TMP\Biotreatment Letter Report\Figure 2; Biotreatment Location.dwg

LEGEND:

- BCP PARCEL BOUNDARY
- RAILROAD TRACK
- EASEMENT BOUNDARY
- ELECTRIC TOWER
- POWER POLE
- GUY WIRE LOCATION
- EXISTING BUILDING WITH CONCRETE SLAB ON GRADE FOUNDATION
- ACCESS DRIVE (RUN OF CRUSH) COVER
- PLANNED ASPHALT COVER
- AREAS OF IMPACT



N

150' 0' 150' 300'

SCALE: 1 INCH = 150 FEET
SCALE IN FEET
(approximate)

DATE: AUGUST 2020
DRAFTED BY: CCB

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

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

JOB NO.: 0489-019-002

BIOTREATMENT LOCATION

LETTER REPORT FOR BIOTREATMENT OF IMPACTED SOIL
TECUMSEH PHASE II BUSINESS PARK
SITE NO.s II-9 (C915198I) & II-10 (C915198J)
LACKAWANNA, NEW YORK

PREPARED FOR
TIME RELEASE PROPERTIES, LLC

FIGURE 2

TABLE

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1

SUMMARY OF BIOTREATED SOIL/FILL ANALYTICAL RESULTS

LETTER REPORT FOR BIOTREATMENT OF IMPACTED SOIL

TECUMSEH PHASE II BUSINESS PARK
SITE NOS. II-9 (C915198I) AND II-10 (C915198J)
LACKAWANNA, NEW YORK

PARAMETER[1]	Protection of Groundwater SCOs[2]	Commercial Use SCOs [2]	Site-Specific Action Limit [3]	SAMPLE LOCATION BIOTREATED POST EX 7/21/2020
Volatile Organic Compounds (VOCs) - mg/Kg [4]				
Total VOCs	--	--	--	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/kg [4]				
Acenaphthene	**98**	**500**	--	0.11 J
Acenaphthylene	**107**	**500**	--	0.12 J
Anthracene	**1000**	**500**	--	0.29
Benzo(a)anthracene	**1**	**5.6**	--	0.75
Benzo(a)pyrene	**22**	**1**	--	0.68
Benzo(b)fluoranthene	**1.7**	**5.6**	--	1
Benzo(ghi)perylene	**1000**	**500**	--	0.46
Benzo(k)fluoranthene	**1.7**	**56**	--	0.21
Chrysene	**1**	**56**	--	0.74
Dibenzo(a,h)anthracene	**1000**	**0.56**	--	0.11 J
Fluoranthene	**1000**	**500**	--	1.2
Fluorene	**386**	**500**	--	0.12 J
Indeno(1,2,3-cd)pyrene	**8.2**	**5.6**	--	0.46
Naphthalene	**12**	**500**	--	0.28
Phenanthrene	**1000**	**500**	--	1
Pyrene	**1000**	**500**	--	1.1
Total SVOCs	--	--	**500**	8.63 J

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; other compounds were reported as non-detect.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
3. Values per Site-Specific Action Limits
4. 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; Parameter not analyzed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold	= Result exceeds Protection of Groundwater SCOs.
Bold	= Result exceeds Commercial Use SCOs.
Bold	= Result exceeds Site-Specific Action Limit.

ATTACHMENT 1

POST-TREATMENT ANALYTICAL DATA

ANALYTICAL REPORT

Lab Number:	L2030807
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Tom Forbes
Phone:	(716) 856-0599
Project Name:	TMP
Project Number:	0489-019-001
Report Date:	08/10/20

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: TMP
Project Number: 0489-019-001

Lab Number: L2030807
Report Date: 08/10/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2030807-01	BIO TREATED POST EX	SOIL	BUFFALO, NY	07/21/20 12:00	07/21/20

Project Name:	TMP	**Lab Number:**	L2030807
Project Number:	0489-019-001	**Report Date:**	08/10/20

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: TMP
Project Number: 0489-019-001

Lab Number: L2030807
Report Date: 08/10/20

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.

Volatile Organics

L2030807-01: Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

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: 08/10/20

ORGANICS

VOLATILES

Project Name: TMP
Project Number: 0489-019-001
Lab Number: L2030807
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2030807-01
Client ID: BIO TREATED POST EX
Sample Location: BUFFALO, NY

Date Collected: 07/21/20 12:00
Date Received: 07/21/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 08/04/20 19:58
Analyst: MKS
Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/kg	0.46	0.15	1
Toluene	ND		ug/kg	0.93	0.50	1
Ethylbenzene	ND		ug/kg	0.93	0.13	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	ND		ug/kg	1.9	0.52	1
o-Xylene	ND		ug/kg	0.93	0.27	1
n-Butylbenzene	ND		ug/kg	0.93	0.16	1
sec-Butylbenzene	ND		ug/kg	0.93	0.14	1
tert-Butylbenzene	ND		ug/kg	1.9	0.11	1
Isopropylbenzene	ND		ug/kg	0.93	0.10	1
p-Isopropyltoluene	ND		ug/kg	0.93	0.10	1
n-Propylbenzene	ND		ug/kg	0.93	0.16	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.9	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.9	0.31	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	99		70-130

Project Name: TMP
Project Number: 0489-019-001
Lab Number: L2030807
Report Date: 08/10/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/04/20 18:18
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1395968-5					
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMP

Project Number: 0489-019-001

Lab Number: L2030807

Report Date: 08/10/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1395968-3 WG1395968-4								
Benzene	75		73		70-130	3		30
Toluene	86		84		70-130	2		30
Ethylbenzene	90		88		70-130	2		30
Methyl tert butyl ether	85		85		66-130	0		30
p/m-Xylene	92		90		70-130	2		30
o-Xylene	86		86		70-130	0		30
n-Butylbenzene	92		91		70-130	1		30
sec-Butylbenzene	92		89		70-130	3		30
tert-Butylbenzene	102		100		70-130	2		30
Isopropylbenzene	99		96		70-130	3		30
p-Isopropyltoluene	105		102		70-130	3		30
n-Propylbenzene	91		89		70-130	2		30
1,3,5-Trimethylbenzene	100		99		70-130	1		30
1,2,4-Trimethylbenzene	100		98		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		107		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	100		100		70-130

SEMIVOLATILES

Project Name: TMP
Project Number: 0489-019-001
Lab Number: L2030807
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2030807-01
Client ID: BIO TREATED POST EX
Sample Location: BUFFALO, NY

Date Collected: 07/21/20 12:00
Date Received: 07/21/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 08/01/20 15:38
Analyst: EK
Percent Solids: 75%

Extraction Method: EPA 3546
Extraction Date: 07/28/20 15:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	110	J	ug/kg	170	22.	1
Fluoranthene	1200		ug/kg	130	25.	1
Naphthalene	280		ug/kg	220	26.	1
Benzo(a)anthracene	750		ug/kg	130	24.	1
Benzo(a)pyrene	680		ug/kg	170	53.	1
Benzo(b)fluoranthene	1000		ug/kg	130	37.	1
Benzo(k)fluoranthene	210		ug/kg	130	35.	1
Chrysene	740		ug/kg	130	23.	1
Acenaphthylene	120	J	ug/kg	170	34.	1
Anthracene	290		ug/kg	130	42.	1
Benzo(ghi)perylene	460		ug/kg	170	26.	1
Fluorene	120	J	ug/kg	220	21.	1
Phenanthrene	1000		ug/kg	130	26.	1
Dibenzo(a,h)anthracene	110	J	ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	460		ug/kg	170	30.	1
Pyrene	1100		ug/kg	130	22.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	58		30-120
4-Terphenyl-d14	49		18-120

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030807
Report Date: 08/10/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/01/20 11:23
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 07/28/20 15:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1394441-1					
Acenaphthene	ND		ug/kg	130	17.
Fluoranthene	ND		ug/kg	98	19.
Naphthalene	ND		ug/kg	160	20.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	27.
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	80		10-136
4-Terphenyl-d14	80		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMP

Project Number: 0489-019-001

Lab Number: L2030807

Report Date: 08/10/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1394441-2 WG1394441-3								
Acenaphthene	69		74		31-137	7		50
Fluoranthene	66		74		40-140	11		50
Naphthalene	66		71		40-140	7		50
Benzo(a)anthracene	65		72		40-140	10		50
Benzo(a)pyrene	64		70		40-140	9		50
Benzo(b)fluoranthene	68		73		40-140	7		50
Benzo(k)fluoranthene	62		70		40-140	12		50
Chrysene	65		71		40-140	9		50
Acenaphthylene	77		82		40-140	6		50
Anthracene	70		77		40-140	10		50
Benzo(ghi)perylene	66		72		40-140	9		50
Fluorene	68		76		40-140	11		50
Phenanthrene	67		74		40-140	10		50
Dibenzo(a,h)anthracene	66		72		40-140	9		50
Indeno(1,2,3-cd)pyrene	65		70		40-140	7		50
Pyrene	68		75		35-142	10		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMP

Project Number: 0489-019-001

Lab Number: L2030807

Report Date: 08/10/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1394441-2 WG1394441-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	69		76		25-120
Phenol-d6	71		79		10-120
Nitrobenzene-d5	66		73		23-120
2-Fluorobiphenyl	74		79		30-120
2,4,6-Tribromophenol	83		89		10-136
4-Terphenyl-d14	77		85		18-120

INORGANICS
&
MISCELLANEOUS

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030807
Report Date: 08/10/20

SAMPLE RESULTS

Lab ID: L2030807-01
Client ID: BIO TREATED POST EX
Sample Location: BUFFALO, NY

Date Collected: 07/21/20 12:00
Date Received: 07/21/20
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	75.4		%	0.100	NA	1	-	08/06/20 12:48	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: TMP

Project Number: 0489-019-001

Lab Number: L2030807

Report Date: 08/10/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1396339-1 QC Sample: L2030800-12 Client ID: DUP Sample						
Solids, Total	88.2	88.5	%	0		20

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030807
Report Date: 08/10/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2030807-01A	Vial Large Septa unpreserved (4oz)	A	NA		3.2	Y	Absent		NYCP51-8260-G(14)
L2030807-01B	Vial Large Septa unpreserved (4oz)	A	NA		3.2	Y	Absent		NYCP51-PAH(14),TS(7)
L2030807-01X	Vial MeOH preserved split	A	NA		3.2	Y	Absent		NYCP51-8260-G(14)
L2030807-01Y	Vial Water preserved split	A	NA		3.2	Y	Absent		NYCP51-8260-G(14)
L2030807-01Z	Vial Water preserved split	A	NA		3.2	Y	Absent	**04-AUG-20 19:57**	NYCP51-8260-G(14)

*Values in parentheses indicate holding time in days

Project Name:	TMP	**Lab Number:**	L2030807
Project Number:	0489-019-001	**Report Date:**	08/10/20

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:	TMP	**Lab Number:**	L2030807
Project Number:	0489-019-001	**Report Date:**	08/10/20

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.

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

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. (DoD and NYSDEC Part 375 PFAS only.)

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TMP	**Lab Number:**	L2030807
Project Number:	0489-019-001	**Report Date:**	08/10/20

Data Qualifiers

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name:	TMP	**Lab Number:**	L2030807
Project Number:	0489-019-001	**Report Date:**	08/10/20

REFERENCES

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

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 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.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
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: 7/22/20

ALPHA Job #: L2036807

Client Information
Client: Benchmark Engineers
Address: 2558 Hamburg
Buffalo, NY 14218
Phone: (716) 697-3931
Fax:
Email: CDeVoll@bm-tk.com

Project Information
Project Name: TMP
Project Location: Buffalo, NY
Project #: 0489-019-001
(Use Project name as Project #) ☐
Project Manager: Tom Forbes
ALPHAQuote #:

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

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

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	CP51 VOC	CP51 SVOC							Sample Specific Comments	Total Bottle
3080701	BIO TREATED Post Ex	7-21-20	1200	S	CFD	X	X								7

Container Type: A A
Preservative: 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
	7/21/20 1300		7/21/20 1300
	7/21/20 1340		7/22/20 0130

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)

ATTACHMENT 2

CAMP VOC DATA

Mon, 6th of Jul 2020, 7:30:00 – 13:00:00
(GMT-05:00) Eastern Time (US & Canada)

Mass Conc. Total mg/m³
DustTrak-8530
RS232(C)

MIN	AVG	MAX
N/A	N/A	N/A

VOC ppm AVG 15m ppm
miniRAE 3000
RS232(A)

MIN	AVG	MAX
0.0545	0.0827	0.1277

Name	CAMP Station #1
S/N	0B466196
Description	CAMP Station #1
Location	2470 Hamburg Turnpike, Buffalo, NY 14218, USA

Tue, 14th of Jul 2020, 7:30:00 – 16:30:00
(GMT-05:00) Eastern Time (US & Canada)

Mass Conc. Total mg/m³
DustTrak-8530
RS232(C)

MIN	AVG	MAX
N/A	N/A	N/A

VOC ppm AVG 15m ppm
miniRAE 3000
RS232(A)

MIN	AVG	MAX
0.0741	0.1235	0.1643

Name	CAMP Station #1
S/N	0B466196
Description	CAMP Station #1
Location	2424 Hamburg Turnpike, Buffalo, NY 14218, USA

ATTACHMENT 3

PRE-TREATMENT ANALYTICAL DATA

ANALYTICAL REPORT

Lab Number:	L2030814
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Tom Forbes
Phone:	(716) 856-0599
Project Name:	TMP
Project Number:	0489-019-001
Report Date:	08/11/20

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: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2030814-01	LOADING DOCK SUMP	SOIL	BUFFALO, NY	07/21/20 11:30	08/02/20

Project Name:	TMP	**Lab Number:**	L2030814
Project Number:	0489-019-001	**Report Date:**	08/11/20

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:	TMP	**Lab Number:**	L2030814
Project Number:	0489-019-001	**Report Date:**	08/11/20

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.

Volatile Organics

L2030814-01: Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

PCBs

L2030814-01 was extracted with the method required holding time exceeded.

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

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative Date: 08/11/20

ORGANICS

VOLATILES

Project Name: TMP
Project Number: 0489-019-001
Lab Number: L2030814
Report Date: 08/11/20

SAMPLE RESULTS

Lab ID: L2030814-01
Client ID: LOADING DOCK SUMP
Sample Location: BUFFALO, NY

Date Collected: 07/21/20 11:30
Date Received: 08/02/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 08/04/20 20:23
Analyst: AJK
Percent Solids: 73%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.78	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Bromodichloromethane	ND		ug/kg	0.56	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.56	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.56	0.19	1
Benzene	ND		ug/kg	0.56	0.19	1
Toluene	ND		ug/kg	1.1	0.61	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.2	0.65	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.2	0.51	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1
Trichloroethene	ND		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1

Project Name: TMP **Lab Number:** L2030814

Project Number: 0489-019-001 **Report Date:** 08/11/20

SAMPLE RESULTS

Lab ID: L2030814-01 Date Collected: 07/21/20 11:30

Client ID: LOADING DOCK SUMP Date Received: 08/02/20

Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.23	1
p/m-Xylene	ND		ug/kg	2.2	0.63	1
o-Xylene	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	51		ug/kg	11	5.4	1
Carbon disulfide	ND		ug/kg	11	5.1	1
2-Butanone	5.6	J	ug/kg	11	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.31	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.31	1
Methyl Acetate	ND		ug/kg	4.5	1.1	1
Cyclohexane	ND		ug/kg	11	0.61	1
1,4-Dioxane	ND		ug/kg	90	40.	1
Freon-113	ND		ug/kg	4.5	0.78	1
Methyl cyclohexane	ND		ug/kg	4.5	0.68	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/04/20 18:18
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1395968-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name: TMP
Project Number: 0489-019-001
Lab Number: L2030814
Report Date: 08/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/04/20 18:18
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1395968-5					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Project Name: TMP
Project Number: 0489-019-001
Lab Number: L2030814
Report Date: 08/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 08/04/20 18:18
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1395968-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1395968-3 WG1395968-4								
Methylene chloride	82		79		70-130	4		30
1,1-Dichloroethane	88		85		70-130	3		30
Chloroform	84		85		70-130	1		30
Carbon tetrachloride	106		101		70-130	5		30
1,2-Dichloropropane	80		79		70-130	1		30
Dibromochloromethane	94		94		70-130	0		30
1,1,2-Trichloroethane	79		80		70-130	1		30
Tetrachloroethene	100		98		70-130	2		30
Chlorobenzene	82		81		70-130	1		30
Trichlorofluoromethane	107		103		70-139	4		30
1,2-Dichloroethane	89		88		70-130	1		30
1,1,1-Trichloroethane	97		94		70-130	3		30
Bromodichloromethane	80		79		70-130	1		30
trans-1,3-Dichloropropene	95		95		70-130	0		30
cis-1,3-Dichloropropene	85		84		70-130	1		30
Bromoform	96		99		70-130	3		30
1,1,2,2-Tetrachloroethane	71		72		70-130	1		30
Benzene	75		73		70-130	3		30
Toluene	86		84		70-130	2		30
Ethylbenzene	90		88		70-130	2		30
Chloromethane	86		82		52-130	5		30
Bromomethane	99		92		57-147	7		30
Vinyl chloride	88		84		67-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMP

Project Number: 0489-019-001

Lab Number: L2030814

Report Date: 08/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1395968-3 WG1395968-4								
Chloroethane	76		72		50-151	5		30
1,1-Dichloroethene	91		88		65-135	3		30
trans-1,2-Dichloroethene	83		78		70-130	6		30
Trichloroethene	86		83		70-130	4		30
1,2-Dichlorobenzene	88		88		70-130	0		30
1,3-Dichlorobenzene	91		89		70-130	2		30
1,4-Dichlorobenzene	92		88		70-130	4		30
Methyl tert butyl ether	85		85		66-130	0		30
p/m-Xylene	92		90		70-130	2		30
o-Xylene	86		86		70-130	0		30
cis-1,2-Dichloroethene	89		86		70-130	3		30
Styrene	90		88		70-130	2		30
Dichlorodifluoromethane	94		89		30-146	5		30
Acetone	89		85		54-140	5		30
Carbon disulfide	77		73		59-130	5		30
2-Butanone	80		82		70-130	2		30
4-Methyl-2-pentanone	88		92		70-130	4		30
2-Hexanone	80		82		70-130	2		30
Bromochloromethane	85		85		70-130	0		30
1,2-Dibromoethane	87		87		70-130	0		30
1,2-Dibromo-3-chloropropane	94		98		68-130	4		30
Isopropylbenzene	99		96		70-130	3		30
1,2,3-Trichlorobenzene	101		101		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMP

Project Number: 0489-019-001

Lab Number: L2030814

Report Date: 08/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1395968-3 WG1395968-4								
1,2,4-Trichlorobenzene	101		101		70-130	0		30
Methyl Acetate	70		74		51-146	6		30
Cyclohexane	102		99		59-142	3		30
1,4-Dioxane	112		111		65-136	1		30
Freon-113	100		96		50-139	4		30
Methyl cyclohexane	90		88		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		107		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	100		100		70-130

SEMIVOLATILES

Project Name: TMP
Project Number: 0489-019-001
Lab Number: L2030814
Report Date: 08/11/20

SAMPLE RESULTS

Lab ID: L2030814-01
Client ID: LOADING DOCK SUMP
Sample Location: BUFFALO, NY

Date Collected: 07/21/20 11:30
Date Received: 08/02/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 08/01/20 16:08
Analyst: EK
Percent Solids: 73%

Extraction Method: EPA 3546
Extraction Date: 07/28/20 15:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	46	J	ug/kg	180	24.	1
Hexachlorobenzene	ND		ug/kg	140	26.	1
Bis(2-chloroethyl)ether	ND		ug/kg	210	31.	1
2-Chloronaphthalene	ND		ug/kg	230	23.	1
3,3'-Dichlorobenzidine	ND		ug/kg	230	61.	1
2,4-Dinitrotoluene	ND		ug/kg	230	46.	1
2,6-Dinitrotoluene	ND		ug/kg	230	39.	1
Fluoranthene	960		ug/kg	140	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	230	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	230	35.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	280	39.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	250	23.	1
Hexachlorobutadiene	ND		ug/kg	230	34.	1
Hexachlorocyclopentadiene	ND		ug/kg	660	210	1
Hexachloroethane	ND		ug/kg	180	37.	1
Isophorone	ND		ug/kg	210	30.	1
Naphthalene	94	J	ug/kg	230	28.	1
Nitrobenzene	ND		ug/kg	210	34.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	230	35.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	230	79.	1
Butyl benzyl phthalate	ND		ug/kg	230	58.	1
Di-n-butylphthalate	ND		ug/kg	230	43.	1
Di-n-octylphthalate	ND		ug/kg	230	78.	1
Diethyl phthalate	ND		ug/kg	230	21.	1
Dimethyl phthalate	ND		ug/kg	230	48.	1
Benzo(a)anthracene	560		ug/kg	140	26.	1
Benzo(a)pyrene	490		ug/kg	180	56.	1

Project Name: TMP **Lab Number:** L2030814

Project Number: 0489-019-001 **Report Date:** 08/11/20

SAMPLE RESULTS

Lab ID: L2030814-01 Date Collected: 07/21/20 11:30

Client ID: LOADING DOCK SUMP Date Received: 08/02/20

Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	630		ug/kg	140	39.	1
Benzo(k)fluoranthene	180		ug/kg	140	37.	1
Chrysene	480		ug/kg	140	24.	1
Acenaphthylene	88	J	ug/kg	180	35.	1
Anthracene	180		ug/kg	140	45.	1
Benzo(ghi)perylene	300		ug/kg	180	27.	1
Fluorene	59	J	ug/kg	230	22.	1
Phenanthrene	670		ug/kg	140	28.	1
Dibenzo(a,h)anthracene	72	J	ug/kg	140	26.	1
Indeno(1,2,3-cd)pyrene	320		ug/kg	180	32.	1
Pyrene	900		ug/kg	140	23.	1
Biphenyl	ND		ug/kg	520	53.	1
4-Chloroaniline	ND		ug/kg	230	42.	1
2-Nitroaniline	ND		ug/kg	230	44.	1
3-Nitroaniline	ND		ug/kg	230	43.	1
4-Nitroaniline	ND		ug/kg	230	95.	1
Dibenzofuran	47	J	ug/kg	230	22.	1
2-Methylnaphthalene	68	J	ug/kg	280	28.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	230	24.	1
Acetophenone	ND		ug/kg	230	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	43.	1
p-Chloro-m-cresol	ND		ug/kg	230	34.	1
2-Chlorophenol	ND		ug/kg	230	27.	1
2,4-Dichlorophenol	ND		ug/kg	210	37.	1
2,4-Dimethylphenol	ND		ug/kg	230	76.	1
2-Nitrophenol	ND		ug/kg	500	86.	1
4-Nitrophenol	ND		ug/kg	320	94.	1
2,4-Dinitrophenol	ND		ug/kg	1100	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	600	110	1
Pentachlorophenol	ND		ug/kg	180	50.	1
Phenol	ND		ug/kg	230	35.	1
2-Methylphenol	ND		ug/kg	230	36.	1
3-Methylphenol/4-Methylphenol	67	J	ug/kg	330	36.	1
2,4,5-Trichlorophenol	ND		ug/kg	230	44.	1
Carbazole	72	J	ug/kg	230	22.	1
Atrazine	ND		ug/kg	180	80.	1
Benzaldehyde	ND		ug/kg	300	62.	1

Project Name: TMP **Lab Number:** L2030814

Project Number: 0489-019-001 **Report Date:** 08/11/20

SAMPLE RESULTS

Lab ID: L2030814-01 Date Collected: 07/21/20 11:30

Client ID: LOADING DOCK SUMP Date Received: 08/02/20

Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	230	70.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	230	46.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	71		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	86		10-136
4-Terphenyl-d14	54		18-120

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/01/20 11:23
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 07/28/20 15:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1394441-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	27.

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/01/20 11:23
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 07/28/20 15:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1394441-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 08/01/20 11:23
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 07/28/20 15:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1394441-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	80		10-136
4-Terphenyl-d14	80		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1394441-2 WG1394441-3								
Acenaphthene	69		74		31-137	7		50
Hexachlorobenzene	75		82		40-140	9		50
Bis(2-chloroethyl)ether	62		67		40-140	8		50
2-Chloronaphthalene	70		75		40-140	7		50
3,3'-Dichlorobenzidine	64		66		40-140	3		50
2,4-Dinitrotoluene	65		72		40-132	10		50
2,6-Dinitrotoluene	71		76		40-140	7		50
Fluoranthene	66		74		40-140	11		50
4-Chlorophenyl phenyl ether	70		75		40-140	7		50
4-Bromophenyl phenyl ether	72		78		40-140	8		50
Bis(2-chloroisopropyl)ether	44		48		40-140	9		50
Bis(2-chloroethoxy)methane	66		71		40-117	7		50
Hexachlorobutadiene	71		76		40-140	7		50
Hexachlorocyclopentadiene	46		56		40-140	20		50
Hexachloroethane	66		73		40-140	10		50
Isophorone	67		72		40-140	7		50
Naphthalene	66		71		40-140	7		50
Nitrobenzene	60		68		40-140	13		50
NDPA/DPA	69		76		36-157	10		50
n-Nitrosodi-n-propylamine	62		69		32-121	11		50
Bis(2-ethylhexyl)phthalate	71		79		40-140	11		50
Butyl benzyl phthalate	72		79		40-140	9		50
Di-n-butylphthalate	71		79		40-140	11		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1394441-2 WG1394441-3								
Di-n-octylphthalate	71		77		40-140	8		50
Diethyl phthalate	68		74		40-140	8		50
Dimethyl phthalate	72		77		40-140	7		50
Benzo(a)anthracene	65		72		40-140	10		50
Benzo(a)pyrene	64		70		40-140	9		50
Benzo(b)fluoranthene	68		73		40-140	7		50
Benzo(k)fluoranthene	62		70		40-140	12		50
Chrysene	65		71		40-140	9		50
Acenaphthylene	77		82		40-140	6		50
Anthracene	70		77		40-140	10		50
Benzo(ghi)perylene	66		72		40-140	9		50
Fluorene	68		76		40-140	11		50
Phenanthrene	67		74		40-140	10		50
Dibenzo(a,h)anthracene	66		72		40-140	9		50
Indeno(1,2,3-cd)pyrene	65		70		40-140	7		50
Pyrene	68		75		35-142	10		50
Biphenyl	70		73		37-127	4		50
4-Chloroaniline	47		64		40-140	31		50
2-Nitroaniline	73		78		47-134	7		50
3-Nitroaniline	61		61		26-129	0		50
4-Nitroaniline	55		54		41-125	2		50
Dibenzofuran	67		75		40-140	11		50
2-Methylnaphthalene	66		72		40-140	9		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1394441-2 WG1394441-3								
1,2,4,5-Tetrachlorobenzene	70		76		40-117	8		50
Acetophenone	64		69		14-144	8		50
2,4,6-Trichlorophenol	69		74		30-130	7		50
p-Chloro-m-cresol	74		80		26-103	8		50
2-Chlorophenol	68		75		25-102	10		50
2,4-Dichlorophenol	75		83		30-130	10		50
2,4-Dimethylphenol	76		83		30-130	9		50
2-Nitrophenol	66		74		30-130	11		50
4-Nitrophenol	53		58		11-114	9		50
2,4-Dinitrophenol	52		50		4-130	4		50
4,6-Dinitro-o-cresol	56		66		10-130	16		50
Pentachlorophenol	57		64		17-109	12		50
Phenol	61		66		26-90	8		50
2-Methylphenol	72		80		30-130.	11		50
3-Methylphenol/4-Methylphenol	76		83		30-130	9		50
2,4,5-Trichlorophenol	76		84		30-130	10		50
Carbazole	69		76		54-128	10		50
Atrazine	72		80		40-140	11		50
Benzaldehyde	59		65		40-140	10		50
Caprolactam	54		59		15-130	9		50
2,3,4,6-Tetrachlorophenol	71		79		40-140	11		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1394441-2 WG1394441-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	69		76		25-120
Phenol-d6	71		79		10-120
Nitrobenzene-d5	66		73		23-120
2-Fluorobiphenyl	74		79		30-120
2,4,6-Tribromophenol	83		89		10-136
4-Terphenyl-d14	77		85		18-120

PCBS

Project Name: TMP
Project Number: 0489-019-001
Lab Number: L2030814
Report Date: 08/11/20

SAMPLE RESULTS

Lab ID: L2030814-01
Client ID: LOADING DOCK SUMP
Sample Location: BUFFALO, NY

Date Collected: 07/21/20 11:30
Date Received: 08/02/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 08/06/20 23:58
Analyst: AWS
Percent Solids: 73%

Extraction Method: EPA 3546
Extraction Date: 08/06/20 16:11
Cleanup Method: EPA 3665A
Cleanup Date: 08/06/20
Cleanup Method: EPA 3660B
Cleanup Date: 08/06/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	44.7	3.97	1	A
Aroclor 1221	ND		ug/kg	44.7	4.48	1	A
Aroclor 1232	ND		ug/kg	44.7	9.48	1	A
Aroclor 1242	ND		ug/kg	44.7	6.03	1	A
Aroclor 1248	ND		ug/kg	44.7	6.71	1	A
Aroclor 1254	ND		ug/kg	44.7	4.89	1	A
Aroclor 1260	12.7	J	ug/kg	44.7	8.26	1	B
Aroclor 1262	ND		ug/kg	44.7	5.68	1	A
Aroclor 1268	21.2	J	ug/kg	44.7	4.63	1	B
PCBs, Total	33.9	J	ug/kg	44.7	3.97	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	40		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 08/06/20 22:55
Analyst: JAW

Extraction Method: EPA 3546
Extraction Date: 08/06/20 16:11
Cleanup Method: EPA 3665A
Cleanup Date: 08/06/20
Cleanup Method: EPA 3660B
Cleanup Date: 08/06/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1396479-1						
Aroclor 1016	ND		ug/kg	32.6	2.89	A
Aroclor 1221	ND		ug/kg	32.6	3.26	A
Aroclor 1232	ND		ug/kg	32.6	6.90	A
Aroclor 1242	ND		ug/kg	32.6	4.39	A
Aroclor 1248	ND		ug/kg	32.6	4.88	A
Aroclor 1254	ND		ug/kg	32.6	3.56	A
Aroclor 1260	ND		ug/kg	32.6	6.02	A
Aroclor 1262	ND		ug/kg	32.6	4.13	A
Aroclor 1268	ND		ug/kg	32.6	3.37	A
PCBs, Total	ND		ug/kg	32.6	2.89	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	102		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: TMP

Project Number: 0489-019-001

Lab Number: L2030814

Report Date: 08/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1396479-2 WG1396479-3									
Aroclor 1016	83		98		40-140	17		50	A
Aroclor 1260	74		85		40-140	14		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		83		30-150	A
Decachlorobiphenyl	69		79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		97		30-150	B
Decachlorobiphenyl	89		101		30-150	B

INORGANICS
&
MISCELLANEOUS

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

SAMPLE RESULTS

Lab ID: L2030814-01
Client ID: LOADING DOCK SUMP
Sample Location: BUFFALO, NY

Date Collected: 07/21/20 11:30
Date Received: 08/02/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	72.5		%	0.100	NA	1	-	08/06/20 12:48	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: TMP

Project Number: 0489-019-001

Lab Number: L2030814

Report Date: 08/11/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1396339-1 QC Sample: L2030800-12 Client ID: DUP Sample						
Solids, Total	88.2	88.5	%	0		20

Project Name: TMP
Project Number: 0489-019-001

Lab Number: L2030814
Report Date: 08/11/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2030814-01A	Vial Large Septa unpreserved (4oz)	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L2030814-01B	Vial Large Septa unpreserved (4oz)	A	NA		3.2	Y	Absent		NYTCL-8270(14),TS(7),NYTCL-8082(14)
L2030814-01C	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TS(7),NYTCL-8082(14)
L2030814-01X	Vial MeOH preserved split	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L2030814-01Y	Vial Water preserved split	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L2030814-01Z	Vial Water preserved split	A	NA		3.2	Y	Absent	**04-AUG-20 19:57**	NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	TMP	**Lab Number:**	L2030814
Project Number:	0489-019-001	**Report Date:**	08/11/20

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:	TMP	**Lab Number:**	L2030814
Project Number:	0489-019-001	**Report Date:**	08/11/20

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.

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

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

Data Qualifiers

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

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

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

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

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

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration. (DoD and NYSDEC Part 375 PFAS only.)

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	TMP	**Lab Number:**	L2030814
Project Number:	0489-019-001	**Report Date:**	08/11/20

Data Qualifiers

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name:	TMP	**Lab Number:**	L2030814
Project Number:	0489-019-001	**Report Date:**	08/11/20

REFERENCES

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

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 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.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
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

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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: 7/22/20

ALPHA Job #: L2030814

Project Information

Project Name: TMP
Project Location: Buffalo, NY
Project #: 0489-019-001
(Use Project name as Project #) ☐
Project Manager: Tom Forbes
ALPHAQuote #:

Turn-Around Time

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

Client Information

Client: Benchmark ~~Turnkey~~ Eng.
Address: 2558 Hamburg Tpk
Buffalo, NY 14218
Phone: (716) 697-5931
Fax:
Email: CDeubell@bm-tk.com

Deliverables

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

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

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

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOC	TCL SVOC (Base/Neutral)	Total PCB's						Sample Specific Comments	Total Bottles
30814-01	Loading Dock Sump	7-21-20	1130	S	CFD	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]	7-21-20 / 1300	[signature]	7/21/20 1300
[signature]	7/21/20 1340	[signature]	7/22/20 01:30

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)