

June 30, 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: Addendum to the Remedial Action Work Plan and Cover System Modification Plan Sites II-9 (C915198I) & II-10 (C915198J) Tecumseh Phase II Business Park, (November 2019)

Dear Mr. Zwack:

On behalf of Time Release Properties, LLC (TRP), Benchmark Environmental Engineering & Science, PLLC (Benchmark) is herein providing our scope of work to address petroleum-impacted soil/fill on Brownfield Cleanup Program (BCP) Site II-9 (see Figure 1). This document in intended to constitute an Addendum to the Remedial Action Work Plan and Cover System Modification Plan that was submitted to the Department for Sites II-9 (C915198I) and II-10 (C915198J) of the Tecumseh Phase II Business Park located in Lackawanna, NY. This Work Plan was submitted on November 10, 2019 and was accepted by the Department on January 9, 2020

### **BACKGROUND**

TRP owns and is redeveloping Tecumseh Phase II Business Park Site II-9 and a portion of Site II-10 for TRS Packaging, a subsidiary of TMP Technologies dedicated to producing custom consumer components including the Mr. Clean Magic Eraser® product line for Procter & Gamble. Redevelopment is underway to accommodate an approximate 280,000-square foot (SF) manufacturing facility; 8,000-SF office building, and related infrastructure and site improvements, including utility services, access drives, parking, storm water detention, and landscaping.

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. No elevated photoionization detector (PID) readings were observed. 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" (see Figure 2). During a Site visit on June 5, 2020, Benchmark proposed

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biotreatment as a remedy for the impacted soils to the New York State Department of Environmental Conservation (NYSDEC).

#### **SCOPE OF WORK**

### **Excavation**

Impacted soil observed in the vicinity of the South Loading Dock and foundation piles E-6 and E-10 was excavated to depths of 8 feet below ground surface (fbgs), 14 fbgs, and 10 fbgs, respectively, as shown on Figure 2. Approximately 150 cubic yards of impacted soils are currently staged on poly sheeting on the northern portion of Site II-10 (see Figure 2). Additional petroleum-impacted soil/fill is being removed from the South Loading Dock area and will continue until the visual and olfactory impacts are removed, as it was for the E-6 and E-10 areas. This material will be transported and stockpiled on Site II-10 but is not expected to significantly add to the impacted volume currently staged for treatment. Impacted groundwater from each of the areas was pumped into an on-site Frac tank for off-site transport by Environmental Service Group (ESG) for disposal at American Recyclers, located in Tonawanda, New York.

The impacted soil/fill from foundation piles E-6 and E-10 were originally characterized for off-site disposal purposes (see Attachment 1). However, the additional volume from the loading dock makes off-site disposal substantially less economical than on-site treatment. As indicated in Attachment 1, the materials fall well below hazardous waste levels, with no chlorinated substances identified or polychlorinated biphenyls (PCBs) detected above unrestricted use Soil Cleanup Objectives (SCOs) per 6NYCRR Part 375-6. Although the South Loading Dock soils were not independently tested, oily water present at that location was sampled and found to contain no volatile organic compounds (VOCs) or PCBs (see Attachment 2). This is consistent with visual and olfactory observations that suggest weathered petroleum impacts.

### **Ex-Situ Biotreatment**

Benchmark proposes to construct a biotreatment pad on the northern portion of Site II-10 (see Figure 2). An approximate 6" wood mulch layer will be placed over poly sheeting, and a silt sock will be installed around the perimeter of the biotreatment pad to mitigate surface erosion. The petroleum-impacted soil/fill will be transported to the pad using a front-end loader or excavator and spread across the pad to an average thickness of 1 foot. Periodic monitoring of the biotreatment area soil/fill will be carried out to track system performance, with tilling, and moisture addition occurring as needed to promote expeditious treatment. Qualitative assessment of treatment performance will be made based on field assessment of visual and olfactory conditions, with the goal of eliminating gross impact. Once the soil/fill is considered treated, a confirmatory sample will be collected at a frequency of no less than 1 per 1,000 cubic yards of treated soil/ fill. The sample will be analyzed for NYSDEC CP-51 List VOCs and semi-volatile organic compounds (SVOCs) and compared to the lower value of NYSDEC Part 375 Protection of Groundwater or Restricted Use Commercial SCOs for VOCs and site specific action level of 500 ppm for SVOCs. Once the samples meet these



remedial objectives, the results will be provided to NYSDEC. Upon NYSDEC approval, the soil/fill will be transported back to the original excavated area.

If soils or any portion thereof cannot be treated to meet the remedial objectives they will be characterized for off-site disposal and transported to a permitted sanitary landfill under an approved waste profile. Disposal receipts for any such materials will be retained and included in the Final Engineering Report for Site II-9.

### **Backfilling and Regrading**

Once the biotreated soil/fill passes confirmatory sampling, it will be placed and compacted as subgrade in Sites II-9 and II-10 in an area designated for cover.

### Community Air Monitoring Program

The CAMP action levels included Appendix B of the November 2019 Remedial Action Work Plan shall apply to all work onsite. However, during any physical disturbance of the subject impacted materials (i.e., during relocation to the biotreatment pad, biotilling. and removal activities) a metering station with continuous VOC and particulate monitoring capability as prescribed in the referenced-CAMP will be located no greater than 50 feet of the downwind perimeter of the disturbance. This will assure CAMP action levels are enforced well over 100 feet of from the adjacent properties in all directions.

#### **PROPOSED SCHEDULE**

Benchmark is prepared to begin work immediately upon NYSDEC approval of this Work Plan. We anticipate this remedial work to be completed within 4-6 weeks. The work will be documented in the Final Engineering Report.

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. Sara Bogardus (NYSDOH)

Ms. Megan Kuczka (NYSDEC) Mr. Robert Laughlin (TMP)

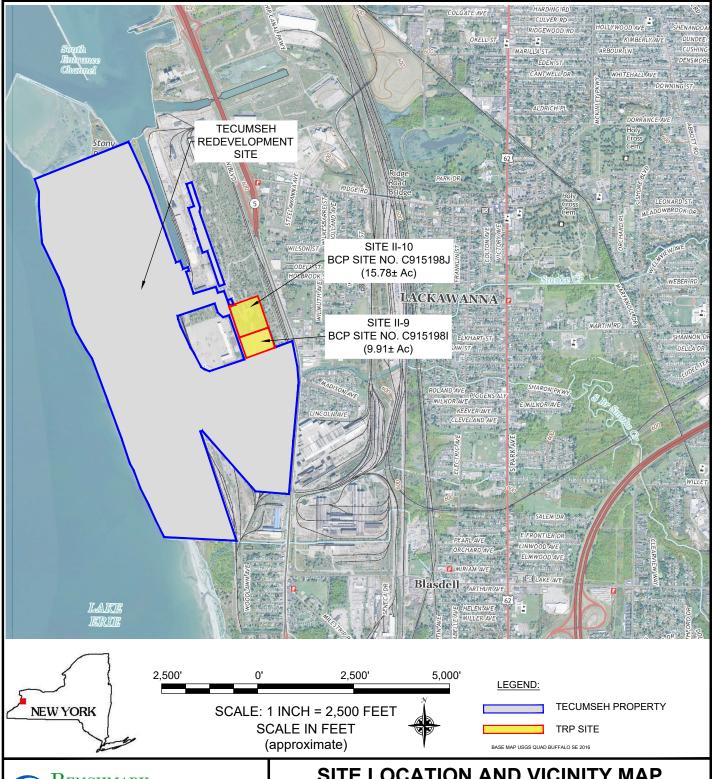
Mr. Luke Stewart (TMP)



## **FIGURES**



### FIGURE 1





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

PROJECT NO.: 0489-019-002

DATE: JUNE 2020

DRAFTED BY: CCB

## SITE LOCATION AND VICINITY MAP

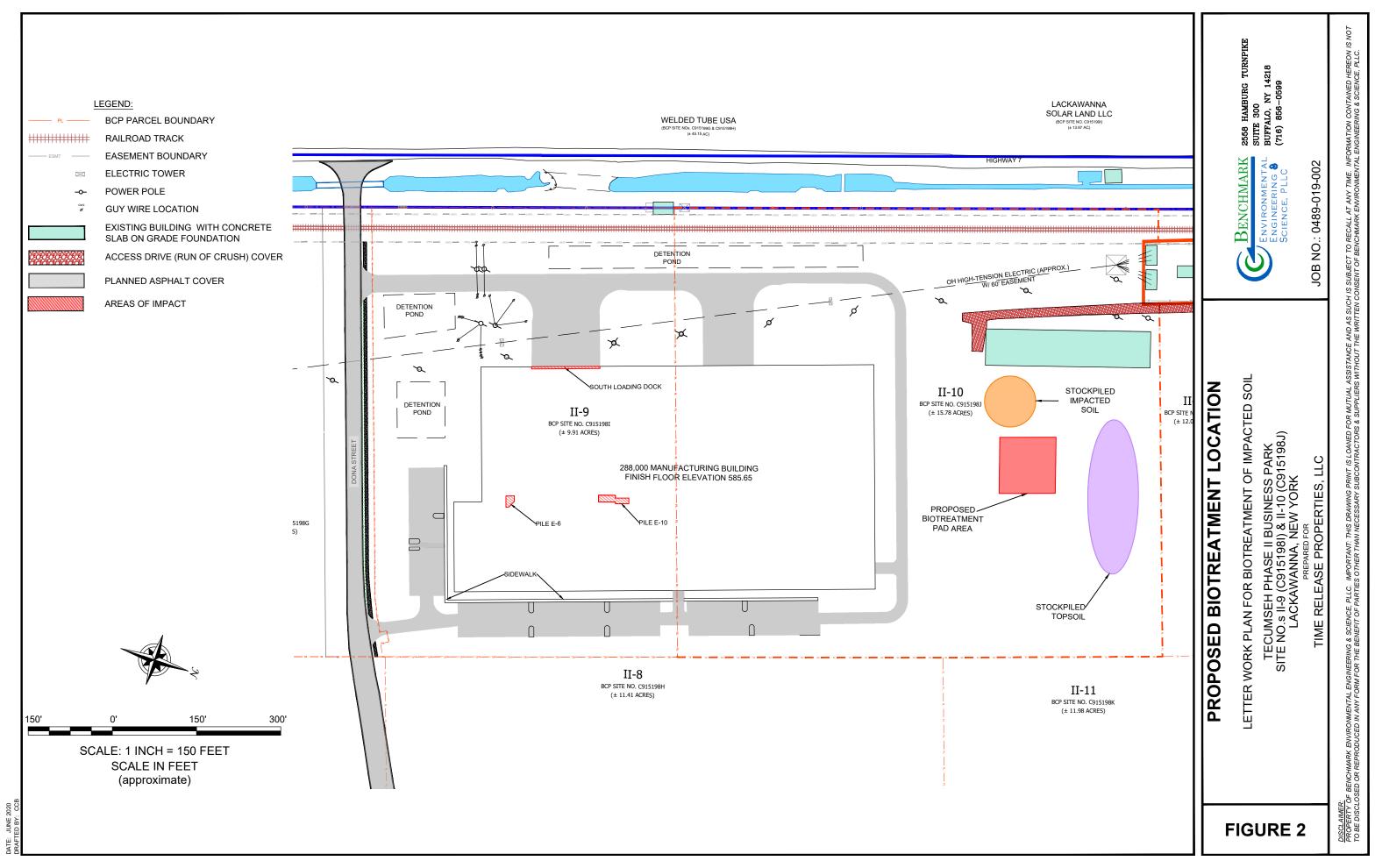
LETTER WORK PLAN FOR BIOTREATMENT OF IMPACTED SOIL

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

PREPARED FOR

TIME RELEASE PROPERTIES, LLC

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## **ATTACHMENT 1**

SOIL WASTE CHARACTERIZATION DATA





#### ANALYTICAL REPORT

Lab Number: L2013641

Client: Benchmark & Turnkey Companies

2558 Hamburg Turnpike

Suite 300

Buffalo, NY 14218

ATTN: Tom Forbes
Phone: (716) 856-0599

Project Name: TMP

Project Number: B0489-019-002-001

Report Date: 04/03/20

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

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

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



Project Name: TMP

**Project Number:** B0489-019-002-001

Lab Number:

L2013641

Report Date:

04/03/20

Alpha Sample ID Client ID Matrix Sample Location Collection Date/Time Receive Date

L2013641-01 PILE DRIVE EXCAVATION SOIL 2303 HAMBURG TURNPIKE, LACKAWANA, NY 03/27/20 10:00 03/27/20



Project Name: TMP Lab Number: L2013641

#### **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: L2013641

Project Number: B0489-019-002-001 Report Date: 04/03/20

### **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.

Sample Receipt

L2013641-01: The sample identified as "PILE DRIVE EXCAVATION" on the chain of custody was identified as "BETHLEHEM STEEL AREA DEBRIS" on the container label. At the client's request, the sample is reported as "PILE DRIVE EXCAVATION".

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:

Title: Technical Director/Representative Date: 04/03/20

Melissa Sturgis Melissa Sturgis

ANALYTICAL

# **ORGANICS**



## **VOLATILES**



Project Name: TMP Lab Number: L2013641

**Project Number:** B0489-019-002-001 **Report Date:** 04/03/20

**SAMPLE RESULTS** 

Lab ID: L2013641-01 Date Collected: 03/27/20 10:00

Client ID: PILE DRIVE EXCAVATION Date Received: 03/27/20 Sample Location: 2303 HAMBURG TURNPIKE, LACKAWANA, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 03/30/20 09:50

Analyst: MM Percent Solids: 81%

TCLP/SPLP Ext. Date: 03/28/20 15:44

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

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	123	70-130	
Toluene-d8	92	70-130	
4-Bromofluorobenzene	93	70-130	
dibromofluoromethane	109	70-130	



L2013641

Project Name: TMP Lab Number:

**Project Number:** B0489-019-002-001 **Report Date:** 04/03/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C

Analytical Date: 03/30/20 05:16 Extraction Date: 03/28/20 15:44

Analyst: MM

TCLP/SPLP Extraction Date: 03/28/20 15:44

Parameter	Result Q	ualifier Units	RL	MDL
TCLP Volatiles by EPA 131	1 - Westborough Lab fo	or sample(s): 01	Batch:	WG1356360-5
Chloroform	ND	ug/l	7.5	2.2
Carbon tetrachloride	ND	ug/l	5.0	1.3
Tetrachloroethene	ND	ug/l	5.0	1.8
Chlorobenzene	ND	ug/l	5.0	1.8
1,2-Dichloroethane	ND	ug/l	5.0	1.3
Benzene	ND	ug/l	5.0	1.6
Vinyl chloride	ND	ug/l	10	0.71
1,1-Dichloroethene	ND	ug/l	5.0	1.7
Trichloroethene	ND	ug/l	5.0	1.8
1,4-Dichlorobenzene	ND	ug/l	25	1.9
2-Butanone	ND	ug/l	50	19.

Company	0/ Danassams - Os	Acceptance
Surrogate	%Recovery Qu	alifier Criteria
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	91	70-130
4-Bromofluorobenzene	89	70-130
dibromofluoromethane	109	70-130



# Lab Control Sample Analysis Batch Quality Control

**Project Name:** TMP

**Project Number:** 

B0489-019-002-001

Lab Number:

L2013641

Report Date:

arameter	LCS %Recovery	Qual	LCSD %Recove		%Recovery Limits	RPD	Qual	RPD Limits
CLP Volatiles by EPA 1311 - Westborough	Lab Associated	sample(s): 0	1 Batch:	WG1356360-3	WG1356360-4			
Chloroform	100		99		70-130	1		20
Carbon tetrachloride	110		100		63-132	10		20
Tetrachloroethene	86		83		70-130	4		20
Chlorobenzene	87		83		75-130	5		25
1,2-Dichloroethane	110		110		70-130	0		20
Benzene	99		95		70-130	4		25
Vinyl chloride	81		79		55-140	3		20
1,1-Dichloroethene	100		100		61-145	0		25
Trichloroethene	100		98		70-130	2		25
1,4-Dichlorobenzene	89		85		70-130	5		20
2-Butanone	110		100		63-138	10		20

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	117	117	70-130
Toluene-d8	92	91	70-130
4-Bromofluorobenzene	82	82	70-130
dibromofluoromethane	106	108	70-130



## **SEMIVOLATILES**



**Project Name:** Lab Number: **TMP** L2013641

**Project Number:** B0489-019-002-001 Report Date: 04/03/20

**SAMPLE RESULTS** 

Lab ID: Date Collected: 03/27/20 10:00 L2013641-01

Client ID: PILE DRIVE EXCAVATION Date Received: 03/27/20 Sample Location: 2303 HAMBURG TURNPIKE, LACKAWANA, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3510C Matrix: Soil **Extraction Date:** 03/30/20 16:37 Analytical Method: 1,8270D

Analytical Date: 04/03/20 02:45

Analyst: WR 81% Percent Solids:

TCLP/SPLP Ext. Date: 03/28/20 21:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
TCLP Semivolatiles by EPA 1311 - Westborough Lab								
Hexachlorobenzene	ND		ug/l	10	2.9	11		
2,4-Dinitrotoluene	ND		ug/l	25	4.2	1		
Hexachlorobutadiene	ND		ug/l	10	3.6	1		
Hexachloroethane	ND		ug/l	10	3.4	1		
Nitrobenzene	ND		ug/l	10	3.8	1		
2,4,6-Trichlorophenol	ND		ug/l	25	3.4	1		
Pentachlorophenol	ND		ug/l	50	17.	1		
2-Methylphenol	ND		ug/l	25	5.1	1		
3-Methylphenol/4-Methylphenol	ND		ug/l	25	5.6	1		
2,4,5-Trichlorophenol	ND		ug/l	25	3.6	1		
Pyridine	ND		ug/l	18	9.4	1		

Surrogate	% Recovery	Acceptance Qualifier Criteria	
2-Fluorophenol	91	21-120	
Phenol-d6	87	10-120	
Nitrobenzene-d5	97	23-120	
2-Fluorobiphenyl	95	15-120	
2,4,6-Tribromophenol	104	10-120	
4-Terphenyl-d14	108	33-120	



L2013641

Lab Number:

Project Name: TMP

**Project Number:** B0489-019-002-001 **Report Date:** 04/03/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 04/02/20 23:06

Analyst: WR

TCLP/SPLP Extraction Date: 03/28/20 21:05

Extraction Method: EPA 3510C Extraction Date: 03/30/20 16:37

Parameter	Result	Qualifier	Units	RL		MDL	
TCLP Semivolatiles by EPA 1311 -	Westborough	h Lab for sa	ample(s):	01 B	atch: V	NG1356534-	1
Hexachlorobenzene	ND		ug/l	10		2.9	
2,4-Dinitrotoluene	ND		ug/l	25		4.2	
Hexachlorobutadiene	ND		ug/l	10		3.6	
Hexachloroethane	ND		ug/l	10		3.4	
Nitrobenzene	ND		ug/l	10		3.8	
2,4,6-Trichlorophenol	ND		ug/l	25		3.4	
Pentachlorophenol	ND		ug/l	50		17.	
2-Methylphenol	ND		ug/l	25		5.1	
3-Methylphenol/4-Methylphenol	ND		ug/l	25		5.6	
2,4,5-Trichlorophenol	ND		ug/l	25		3.6	
Pyridine	ND		ug/l	18		9.4	

Surrogate	%Recovery	Acceptance Qualifier Criteria
2-Fluorophenol	83	21-120
Phenol-d6	81	10-120
Nitrobenzene-d5	89	23-120
2-Fluorobiphenyl	90	15-120
2,4,6-Tribromophenol	90	10-120
4-Terphenyl-d14	104	33-120



# Lab Control Sample Analysis Batch Quality Control

**Project Name:** TMP

**Project Number:** 

B0489-019-002-001

Lab Number:

L2013641

Report Date:

arameter	LCS %Recovery		LCSD Recovery	9/ Qual	Recovery Limits	RPD	Qual	RPD Limits
CLP Semivolatiles by EPA 1311 - Westboro	ugh Lab Assoc	ciated sample(s): 0	1 Batch:	WG1356534-2	2 WG1356534-3			
Hexachlorobenzene	74		82		40-140	10		30
2,4-Dinitrotoluene	82		92		40-132	11		30
Hexachlorobutadiene	74		81		28-111	9		30
Hexachloroethane	69		78		21-105	12		30
Nitrobenzene	75		85		40-140	13		30
2,4,6-Trichlorophenol	75		84		30-130	11		30
Pentachlorophenol	62		69		9-103	11		30
2-Methylphenol	68		76		30-130	11		30
3-Methylphenol/4-Methylphenol	75		83		30-130	10		30
2,4,5-Trichlorophenol	78		87		30-130	11		30
Pyridine	64		46		10-66	33	Q	30

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
2-Fluorophenol	65	72	21-120
Phenol-d6	63	69	10-120
Nitrobenzene-d5	75	82	23-120
2-Fluorobiphenyl	68	76	15-120
2,4,6-Tribromophenol	77	86	10-120
4-Terphenyl-d14	75	84	33-120



## **PCBS**



04/02/20

Cleanup Date:

Project Name: TMP Lab Number: L2013641

**Project Number:** B0489-019-002-001 **Report Date:** 04/03/20

**SAMPLE RESULTS** 

Lab ID: L2013641-01 Date Collected: 03/27/20 10:00

Client ID: PILE DRIVE EXCAVATION Date Received: 03/27/20 Sample Location: 2303 HAMBURG TURNPIKE, LACKAWANA, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8082A Extraction Date: 03/31/20 17:53
Analytical Date: 04/03/20 09:53 Cleanup Method: EPA 3665A

Analytical Date: 04/03/20 09:53

Analyst: JM

Percent Solids: 81%

Cleanup Method: EPA 3665A

Cleanup Date: 04/01/20

Cleanup Method: EPA 3660B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - West	tborough Lab						
Aroclor 1016	ND		ug/kg	39.5	3.51	1	Α
Aroclor 1221	ND		ug/kg	39.5	3.96	1	A
Aroclor 1232	ND		ug/kg	39.5	8.37	1	Α
Aroclor 1242	29.4	J	ug/kg	39.5	5.32	1	В
Aroclor 1248	ND		ug/kg	39.5	5.92	1	Α
Aroclor 1254	ND		ug/kg	39.5	4.32	1	А
Aroclor 1260	ND		ug/kg	39.5	7.30	1	Α
Aroclor 1262	ND		ug/kg	39.5	5.02	1	Α
Aroclor 1268	27.8	J	ug/kg	39.5	4.09	1	В
PCBs, Total	57.2	J	ug/kg	39.5	3.51	1	В

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	Α
Decachlorobiphenyl	78		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	78		30-150	В
Decachlorobiphenyl	78		30-150	В



Project Name: TMP

**Project Number:** B0489-019-002-001

Lab Number: L2013641

**Report Date:** 04/03/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 03/31/20 12:28

Analyst: AWS

Extraction Method: EPA 3546
Extraction Date: 03/31/20 05:22
Cleanup Method: EPA 3665A
Cleanup Date: 03/31/20
Cleanup Method: EPA 3660B
Cleanup Date: 03/31/20

Parameter	Result	Qualifier Units	RL	MDL	Column
Polychlorinated Biphenyls by GC -	Westborough	Lab for sample(s):	01 Batch:	WG135664	6-1
Aroclor 1016	ND	ug/kg	32.4	2.88	А
Aroclor 1221	ND	ug/kg	32.4	3.24	Α
Aroclor 1232	ND	ug/kg	32.4	6.86	A
Aroclor 1242	ND	ug/kg	32.4	4.36	Α
Aroclor 1248	ND	ug/kg	32.4	4.86	Α
Aroclor 1254	ND	ug/kg	32.4	3.54	А
Aroclor 1260	ND	ug/kg	32.4	5.98	А
Aroclor 1262	ND	ug/kg	32.4	4.11	Α
Aroclor 1268	ND	ug/kg	32.4	3.35	Α
PCBs, Total	ND	ug/kg	32.4	2.88	Α

Decachlorobiphenyl 2,4,5,6-Tetrachloro-m-xylene		Acceptance	e
Surrogate	%Recovery Qualifie	r Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102	30-150	Α
Decachlorobiphenyl	92	30-150	Α
2,4,5,6-Tetrachloro-m-xylene	102	30-150	В
Decachlorobiphenyl	87	30-150	В



# Lab Control Sample Analysis Batch Quality Control

**Project Name:** 

**Project Number:** 

TMP

B0489-019-002-001

Lab Number:

L2013641

Report Date:

	LC	s		LCSD	%	Recovery			RPD	
Parameter	%Reco	overy Q	Qual %F	Recovery	Qual	Limits	RPD	Qual	Limits	Column
Polychlorinated Biphenyls	by GC - Westborough Lab	Associated	sample(s): 0	1 Batch:	WG1356646-2	WG1356646-3				
Aroclor 1016	8	8		88		40-140	0		50	Α
Aroclor 1260	8	1		79		40-140	3		50	А

Surrogate	LCS %Recovery Qu	LCSD ual %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	86	87	30-150 A
Decachlorobiphenyl	76	76	30-150 A
2,4,5,6-Tetrachloro-m-xylene	86	84	30-150 B
Decachlorobiphenyl	77	72	30-150 B



## **METALS**



Project Name: TMP Lab Number: L2013641

**Project Number:** B0489-019-002-001 **Report Date:** 04/03/20

**SAMPLE RESULTS** 

Lab ID: L2013641-01 Date Collected: 03/27/20 10:00

Client ID: PILE DRIVE EXCAVATION Date Received: 03/27/20 Sample Location: 2303 HAMBURG TURNPIKE, LACKAWANA, NY Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 03/28/20 21:05

Matrix: Soil
Percent Solids: 81%

Percent Solids:	81%					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
TOLD M ( )   F	24.404.4	N4 (* 111									
TCLP Metals by EF	PA 1311 -	Mansfield	Lab								
Arsenic, TCLP	ND		mg/l	1.00	0.019	1	03/31/20 17:01	04/01/20 22:27	EPA 3015	1,6010D	LC
Barium, TCLP	0.199	J	mg/l	0.500	0.021	1	03/31/20 17:01	04/01/20 22:27	EPA 3015	1,6010D	LC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	03/31/20 17:01	04/01/20 22:27	EPA 3015	1,6010D	LC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	03/31/20 17:01	04/01/20 22:27	EPA 3015	1,6010D	LC
Lead, TCLP	0.037	J	mg/l	0.500	0.027	1	03/31/20 17:01	04/01/20 22:27	EPA 3015	1,6010D	LC
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	03/31/20 17:29	9 04/01/20 12:27	EPA 7470A	1,7470A	GD
Selenium, TCLP	ND		mg/l	0.500	0.035	1	03/31/20 17:01	04/01/20 22:27	EPA 3015	1,6010D	LC
Silver, TCLP	ND		mg/l	0.100	0.028	1	03/31/20 17:01	04/01/20 22:27	EPA 3015	1,6010D	LC



**Project Name: TMP** 

Project Number: B0489-019-002-001

Lab Number:

L2013641

**Report Date:** 04/03/20

## **Method Blank Analysis Batch Quality Control**

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA	1311 - Mansfield Lab	for sample	e(s): 01	Batch:	WG13567	71-1			
Arsenic, TCLP	ND	mg/l	1.00	0.019	1	03/31/20 17:01	04/01/20 21:08	1,6010D	LC
Barium, TCLP	ND	mg/l	0.500	0.021	1	03/31/20 17:01	04/01/20 21:08	1,6010D	LC
Cadmium, TCLP	ND	mg/l	0.100	0.010	1	03/31/20 17:01	04/01/20 21:08	1,6010D	LC
Chromium, TCLP	ND	mg/l	0.200	0.021	1	03/31/20 17:01	04/01/20 21:08	1,6010D	LC
Lead, TCLP	ND	mg/l	0.500	0.027	1	03/31/20 17:01	04/01/20 21:08	1,6010D	LC
Selenium, TCLP	ND	mg/l	0.500	0.035	1	03/31/20 17:01	04/01/20 21:08	1,6010D	LC
Silver, TCLP	ND	mg/l	0.100	0.028	1	03/31/20 17:01	04/01/20 21:08	1,6010D	LC

### **Prep Information**

Digestion Method:

EPA 3015

TCLP/SPLP Extraction Date: 03/28/20 05:45

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	
TCLP Metals by EPA	1311 - Mansfield Lab	for sample	e(s): 01	Batch:	WG13567	74-1			
Mercury, TCLP	ND	mg/l	0.0010	0.0005	1	03/31/20 17:29	04/01/20 11:52	1,7470A	GD

### **Prep Information**

Digestion Method: EPA 7470A

TCLP/SPLP Extraction Date: 03/28/20 05:45



# Lab Control Sample Analysis Batch Quality Control

**Project Name:** 

**Project Number:** 

TMP

B0489-019-002-001

Lab Number:

L2013641

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Ass	sociated sample(s	): 01 B	atch: WG1356771-2					
Arsenic, TCLP	108		-		75-125	-		20
Barium, TCLP	98		-		75-125	-		20
Cadmium, TCLP	101		-		75-125	-		20
Chromium, TCLP	102		-		75-125	-		20
Lead, TCLP	101		-		75-125	-		20
Selenium, TCLP	108		-		75-125	-		20
Silver, TCLP	97		-		75-125	-		20
CLP Metals by EPA 1311 - Mansfield Lab Ass	sociated sample(s	): 01 B	atch: WG1356774-2					
Mercury, TCLP	108		-		80-120	-		

## Matrix Spike Analysis Batch Quality Control

Project Name: TMP

**Project Number:** B0489-019-002-001

Lab Number:

L2013641

Report Date:

arameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual Found	MSD %Recovery	Recove Qual Limits	•	RPD Qual Limits
CLP Metals by EPA 1311 -	Mansfield Lab	Associated	sample(s): 01	QC Batch	ID: WG1356771-	3 QC Sample	: L2000004-17	Client ID:	MS Sample
Arsenic, TCLP	ND	1.2	1.27	106	-	-	75-125	-	20
Barium, TCLP	0.151J	20	19.4	97	-	-	75-125	-	20
Cadmium, TCLP	ND	0.51	0.502	98	-	-	75-125	-	20
Chromium, TCLP	0.451	2	2.39	97	-	-	75-125	-	20
Lead, TCLP	ND	5.1	5.02	98	-	-	75-125	-	20
Selenium, TCLP	ND	1.2	1.28	107	-	-	75-125	-	20
Silver, TCLP	ND	0.5	0.460	92	-	-	75-125	-	20
CLP Metals by EPA 1311 -	Mansfield Lab	Associated :	sample(s): 01	QC Batch	ID: WG1356774-	3 QC Sample	: L2000004-08	Client ID:	MS Sample
Mercury, TCLP	ND	0.025	0.0261	104	-	-	80-120	-	20

# Lab Duplicate Analysis Batch Quality Control

Project Name: TMP

Project Number:

B0489-019-002-001

Lab Number:

L2013641

Report Date:

arameter	Native Sam	ole Duplicate Sample	Units	RPD	Qual	RPD Limits
CLP Metals by EPA 1311 - Mansfield I	_ab Associated sample(s): 01	QC Batch ID: WG1356771-4	QC Sample:	L2000004-17	Client ID:	DUP Sample
Arsenic, TCLP	ND	ND	mg/l	NC		20
Barium, TCLP	0.151J	0.143J	mg/l	NC		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	0.451	0.454	mg/l	1		20
Lead, TCLP	ND	0.040J	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20
CLP Metals by EPA 1311 - Mansfield I	_ab Associated sample(s): 01	QC Batch ID: WG1356774-4	QC Sample:	L2000004-08	Client ID:	DUP Sample
Mercury, TCLP	ND	ND	mg/l	NC		20



# INORGANICS & MISCELLANEOUS



Project Name: TMP Lab Number: L2013641

**Project Number:** B0489-019-002-001 **Report Date:** 04/03/20

**SAMPLE RESULTS** 

Lab ID: L2013641-01 Date Collected: 03/27/20 10:00

Client ID: PILE DRIVE EXCAVATION Date Received: 03/27/20 Sample Location: 2303 HAMBURG TURNPIKE, LACKAWANA, NY 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 - W	estborough Lab									
Solids, Total	80.9		%	0.100	NA	1	-	03/28/20 10:42	121,2540G	RI
Flash Point	>150		deg F	70	NA	1	-	03/29/20 14:45	1,1010A	AG
Cyanide, Reactive	ND		mg/kg	10	10.	1	03/29/20 17:04	03/29/20 18:17	125,7.3	KF
Sulfide, Reactive	ND		mg/kg	10	10.	1	03/29/20 17:04	03/29/20 18:12	125,7.3	KF



Project Name:TMPLab Number:L2013641

**Project Number:** B0489-019-002-001 **Report Date:** 04/03/20

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifie	r Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - \	Westborough Lab for sa	mple(s): 01	Batch:	WG13	356240-1				
Sulfide, Reactive	ND	mg/kg	10	10.	1	03/29/20 17:04	03/29/20 18:11	125,7.3	KF
General Chemistry - V	Westborough Lab for sa	mple(s): 01	Batch:	WG13	356241-1				
Cyanide, Reactive	ND	mg/kg	10	10.	1	03/29/20 17:04	03/29/20 18:17	125,7.3	KF



# Lab Control Sample Analysis Batch Quality Control

**Project Name:** TMP

**Project Number:** 

B0489-019-002-001

Lab Number:

L2013641

Report Date:

Parameter	LCS %Recovery Qu	LCSD al %Recovery		Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab A	ssociated sample(s): 01	Batch: WG1356192-1					
Flash Point	100	-		96-104	-		
General Chemistry - Westborough Lab A	ssociated sample(s): 01	Batch: WG1356240-2					
Sulfide, Reactive	103	-		60-125	-		40
General Chemistry - Westborough Lab A	ssociated sample(s): 01	Batch: WG1356241-2					
Cyanide, Reactive	97	-	:	30-125	-		40



# Lab Duplicate Analysis Batch Quality Control

**Project Name:** 

TMP

Project Number: B0489-019-002-001 Lab Number:

L2013641

Report Date:

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associate	d sample(s): 01 QC Batch ID:	WG1356070-1 QC	Sample: L2013	720-30	Client ID:	DUP Sample
Solids, Total	87.0	86.7	%	0		20
General Chemistry - Westborough Lab Associate	d sample(s): 01 QC Batch ID:	WG1356192-2 QC	Sample: L2013	305-01	Client ID:	DUP Sample
Flash Point	141	143	deg F	1		
General Chemistry - Westborough Lab Associate	d sample(s): 01 QC Batch ID:	WG1356240-3 QC	Sample: L2013	708-06	Client ID:	DUP Sample
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associate	d sample(s): 01 QC Batch ID:	WG1356241-3 QC	Sample: L2013	708-06	Client ID:	DUP Sample
Cyanide, Reactive	ND	ND	mg/kg	NC		40

Project Name: TMP

YES

**Project Number:** B0489-019-002-001 **Report Date:** 04/03/20

### Sample Receipt and Container Information

Were project specific reporting limits specified?

**Cooler Information** 

Cooler Custody Seal

A Absent

Container Information			Initial	Final	Temp			Frozen		
	Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
	L2013641-01A	Vial Large Septa unpreserved (4oz)	Α	NA		3.0	Υ	Absent		TCLP-EXT-ZHE(14)
	L2013641-01B	Plastic 2oz unpreserved for TS	Α	NA		3.0	Υ	Absent		TS(7)
	L2013641-01C	Glass 500ml/16oz unpreserved	Α	NA		3.0	Υ	Absent		REACTS(14),FLASH(),REACTCN(14)
	L2013641-01D	Glass 500ml/16oz unpreserved	Α	NA		3.0	Υ	Absent		NYTCL-8082(14)
	L2013641-01Q	Plastic 120ml HNO3 preserved Extracts	A	NA		3.0	Υ	Absent		CD-CI(180),AS-CI(180),BA-CI(180),HG-C(28),PB-CI(180),CR-CI(180),SE-CI(180),AG-CI(180)
	L2013641-01W	Amber 1000ml unpreserved Extracts	Α	NA		3.0	Υ	Absent		TCLP-8270(14)
	L2013641-01X	Vial unpreserved Extracts	Α	NA		3.0	Υ	Absent		TCLP-VOA(14)
	L2013641-01Y	Vial unpreserved Extracts	Α	NA		3.0	Υ	Absent		TCLP-VOA(14)
	L2013641-01Z	Vial unpreserved Extracts	Α	NA		3.0	Υ	Absent		TCLP-VOA(14)



**Project Name:** Lab Number: **TMP** L2013641 **Project Number:** B0489-019-002-001 **Report Date:** 04/03/20

### GLOSSARY

### **Acronyms**

**EDL** 

LOQ

MS

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.)

- 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.)

- 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

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

MDI - 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.

- 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.

- Matrix Spike Sample Duplicate: Refer to MS. MSD

NA - Not Applicable.

- 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.

- Not Ignitable. NI

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.

- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the RPD 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.

- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEO - 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.

DU Report with 'J' Qualifiers



**Footnotes** 

Report Format:

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

#### **Terms**

1

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, Benza(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.
- 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).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
  of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- 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).
- $\label{eq:main_equation} \textbf{M} \qquad \text{-Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.}$
- 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.
- ${f P}$  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



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### Data Qualifiers

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.

 $\boldsymbol{RE} \quad$  - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.



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### REFERENCES

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

- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.
- Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

### **LIMITATION OF LIABILITIES**

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

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



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

Serial\_No:04032014:36

ID No.:17873 Revision 16

Published Date: 2/17/2020 10:46:05 AM

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### Certification Information

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

#### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, 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 II, 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.

Document Type: Form

St. 300 Buffer	lo by 14218	(Use Project name as Pr	Hay oper Ave, Suite 10  Hay burg T. 9-6/9-	Unpike L	Page of		Deliv	ASP- EQuil Other latory	si A S (1 Fi	ile)		ASP-	B S (4 F art 375	ile)	ALPHA Job # L 20\3 6 4/ Billing Information  Same as Client Info Po#  Disposal Site Information  Please identify below location of applicable disposal facilities.
Phone: 716-856 Fax: Email: elustren@l	bm-TK, com	Rush (only if pre approved	Standard Due Date: h (only if pre approved) # of Days:					NY Restricted Use Other NY Unrestricted Use NYC Sewer Discharge					Disposal Facility: NJ NY Other:		
These samples have been previously analyzed by Alpha  Other project specific requirements/comments:  ALSO copy 'forbes' & b.n - fk.com  Please specify Metals or TAL.				#	ive Cyanile SISA	Ve Sulfide	lp.	Me tals	P 1/0As	P SVOAs	5.	Sample Filtration  Done Lab to do Preservation Lab to do  (Please Specify below)			
ALPHA Lab ID (Lab Use Only)		imple ID	Date	ection	Sample Matrix	Sampler's Initials	FLAS	Reactive	Reactive	PCBs	724	724	724	K	Sample Specific Comments
13641-01	Pile Drive	- Excaution	3/27/20	10:00	Soil	EAW	×	×	X	X	×	X	X	×	
		×													
Preservative Code:  A = None  B = HCl  C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH  F = MeOH  G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore	Westboro: Certification N Mansfield: Certification N Relinquished I	o: MA015	Date()	Р	tainer Type	A	A A ved.By	A	AA	AA	A Date	A Time	PA	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
K/E = Zn Ac/NaOH O = Other  Form No: 01-25 HC (rev. 3)	D = BOD Bottle	7	AME	3/27/2		1	repe		200	3				) () ()	HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

### **ATTACHMENT 2**

### OILY WATER ANALYTICAL DATA





### ANALYTICAL REPORT

Lab Number: L2022249

Client: Benchmark & Turnkey Companies

2558 Hamburg Turnpike

Suite 300

Buffalo, NY 14218

ATTN: Tom Forbes
Phone: (716) 856-0599

Project Name: TMP

Project Number: B0489-019-002-001

Report Date: 06/01/20

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

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

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



Project Name: TMP

**Project Number:** B0489-019-002-001

Lab Number:

L2022249

Report Date:

06/01/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2022249-01	SOUTHWEST LOADING DOCK	OIL	6 DANA STREET, LACKAWANNA, NY	05/29/20 10:00	05/29/20
L2022249-02	SOUTHWEST LOADING DOCK	WATER	6 DANA STREET, LACKAWANNA, NY	05/29/20 10:05	05/29/20



**Project Number:** B0489-019-002-001 **Report Date:** 06/01/20

### **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.							



Serial\_No:06012013:25

Project Name: TMP Lab Number: L2022249

**Project Number:** B0489-019-002-001 **Report Date:** 06/01/20

### **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

L2022249-02: The sample has elevated detection limits due to the dilution required by the sample matrix (oily).

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.

Wallelle M. Morris

Authorized Signature:

Title: Technical Director/Representative

ALPHA

Date: 06/01/20

## **ORGANICS**



## **VOLATILES**



Serial\_No:06012013:25

Project Name: TMP Lab Number: L2022249

**Project Number:** B0489-019-002-001 **Report Date:** 06/01/20

**SAMPLE RESULTS** 

Lab ID: L2022249-02 D Date Collected: 05/29/20 10:05

Client ID: SOUTHWEST LOADING DOCK Date Received: 05/29/20 Sample Location: 6 DANA STREET, LACKAWANNA, NY Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/31/20 18:27

Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Wes	stborough Lab						
Methylene chloride	ND		ug/l	6.2	1.8	2.5	
1,1-Dichloroethane	ND		ug/l	6.2	1.8	2.5	
Chloroform	ND		ug/l	6.2	1.8	2.5	
Carbon tetrachloride	ND		ug/l	1.2	0.34	2.5	
1,2-Dichloropropane	ND		ug/l	2.5	0.34	2.5	
Dibromochloromethane	ND		ug/l	1.2	0.37	2.5	
1,1,2-Trichloroethane	ND		ug/l	3.8	1.2	2.5	
Tetrachloroethene	ND		ug/l	1.2	0.45	2.5	
Chlorobenzene	ND		ug/l	6.2	1.8	2.5	
Trichlorofluoromethane	ND		ug/l	6.2	1.8	2.5	
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5	
1,1,1-Trichloroethane	ND		ug/l	6.2	1.8	2.5	
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5	
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5	
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5	
Bromoform	ND		ug/l	5.0	1.6	2.5	
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	0.42	2.5	
Benzene	ND		ug/l	1.2	0.40	2.5	
Toluene	ND		ug/l	6.2	1.8	2.5	
Ethylbenzene	ND		ug/l	6.2	1.8	2.5	
Chloromethane	ND		ug/l	6.2	1.8	2.5	
Bromomethane	ND		ug/l	6.2	1.8	2.5	
Vinyl chloride	ND		ug/l	2.5	0.18	2.5	
Chloroethane	ND		ug/l	6.2	1.8	2.5	
1,1-Dichloroethene	ND		ug/l	1.2	0.42	2.5	
trans-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5	
Trichloroethene	ND		ug/l	1.2	0.44	2.5	
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5	



Serial\_No:06012013:25

**Project Name:** Lab Number: TMP L2022249

**Project Number:** Report Date: B0489-019-002-001 06/01/20

**SAMPLE RESULTS** 

Lab ID: D Date Collected: 05/29/20 10:05 L2022249-02

SOUTHWEST LOADING DOCK Date Received: Client ID: 05/29/20 Sample Location: 6 DANA STREET, LACKAWANNA, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	tborough Lab					
1,3-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	ND		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
cis-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5
Styrene	ND		ug/l	6.2	1.8	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5	2.5
Acetone	6.6	J	ug/l	12	3.6	2.5
Carbon disulfide	ND		ug/l	12	2.5	2.5
2-Butanone	ND		ug/l	12	4.8	2.5
4-Methyl-2-pentanone	ND		ug/l	12	2.5	2.5
2-Hexanone	ND		ug/l	12	2.5	2.5
Bromochloromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dibromoethane	ND		ug/l	5.0	1.6	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,3-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl Acetate	ND		ug/l	5.0	0.58	2.5
Cyclohexane	ND		ug/l	25	0.68	2.5
1,4-Dioxane	ND		ug/l	620	150	2.5
Freon-113	ND		ug/l	6.2	1.8	2.5
Methyl cyclohexane	ND		ug/l	25	0.99	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	111		70-130	
Toluene-d8	92		70-130	
4-Bromofluorobenzene	95		70-130	
Dibromofluoromethane	107		70-130	



**Project Number:** B0489-019-002-001 **Report Date:** 06/01/20

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 05/31/20 11:06

Analyst: KJD

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	02 Batch:	WG1376536-5
Methylene chloride	ND	ug/l	2.5	0.70
1,1-Dichloroethane	ND	ug/l	2.5	0.70
Chloroform	ND	ug/l	2.5	0.70
Carbon tetrachloride	ND	ug/l	0.50	0.13
1,2-Dichloropropane	ND	ug/l	1.0	0.14
Dibromochloromethane	ND	ug/l	0.50	0.15
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50
Tetrachloroethene	ND	ug/l	0.50	0.18
Chlorobenzene	ND	ug/l	2.5	0.70
Trichlorofluoromethane	ND	ug/l	2.5	0.70
1,2-Dichloroethane	ND	ug/l	0.50	0.13
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70
Bromodichloromethane	ND	ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14
Bromoform	ND	ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17
Benzene	ND	ug/l	0.50	0.16
Toluene	ND	ug/l	2.5	0.70
Ethylbenzene	ND	ug/l	2.5	0.70
Chloromethane	ND	ug/l	2.5	0.70
Bromomethane	ND	ug/l	2.5	0.70
Vinyl chloride	ND	ug/l	1.0	0.07
Chloroethane	ND	ug/l	2.5	0.70
1,1-Dichloroethene	ND	ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Trichloroethene	ND	ug/l	0.50	0.18
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70



**Project Number:** B0489-019-002-001 **Report Date:** 06/01/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 05/31/20 11:06

Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westb	orough Lab	for sampl	e(s): 02	Batch:	WG1376536-5
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40



**Project Number:** B0489-019-002-001 **Report Date:** 06/01/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 05/31/20 11:06

Analyst: KJD

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1376536-5

		Acceptance			
Surrogate	%Recovery 0	Qualifier Criteria			
1,2-Dichloroethane-d4	103	70-130			
Toluene-d8	95	70-130			
4-Bromofluorobenzene	96	70-130			
Dibromofluoromethane	104	70-130			



# Lab Control Sample Analysis Batch Quality Control

**Project Name:** 

**Project Number:** 

TMP

B0489-019-002-001

Lab Number: L2022249

Report Date:

06/01/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RF Qual Lin	PD nits
/olatile Organics by GC/MS - Westbor	ough Lab Associated	sample(s): 0	2 Batch: WG1	376536-3	WG1376536-4			
Methylene chloride	99		100		70-130	1	2	0
1,1-Dichloroethane	100		100		70-130	0	2	0
Chloroform	100		110		70-130	10	2	0
Carbon tetrachloride	120		120		63-132	0	2	0
1,2-Dichloropropane	99		99		70-130	0	2	.0
Dibromochloromethane	100		100		63-130	0	2	0
1,1,2-Trichloroethane	93		93		70-130	0	2	.0
Tetrachloroethene	100		100		70-130	0	2	0
Chlorobenzene	96		98		75-130	2	2	0
Trichlorofluoromethane	120		120		62-150	0	2	0
1,2-Dichloroethane	110		110		70-130	0	2	.0
1,1,1-Trichloroethane	110		110		67-130	0	2	.0
Bromodichloromethane	110		100		67-130	10	2	.0
trans-1,3-Dichloropropene	94		95		70-130	1	2	.0
cis-1,3-Dichloropropene	100		100		70-130	0	2	.0
Bromoform	99		100		54-136	1	2	.0
1,1,2,2-Tetrachloroethane	87		86		67-130	1	2	.0
Benzene	100		100		70-130	0		0
Toluene	94		95		70-130	1		0
Ethylbenzene	95		96		70-130	1		0
Chloromethane	90		89		64-130	1		20
Bromomethane	110		110		39-139	0		20
Vinyl chloride	98		97		55-140	1	2	20



06/01/20

# Lab Control Sample Analysis Batch Quality Control

Project Name: TMP

**Project Number:** 

B0489-019-002-001

Lab Number: L2022249

Report Date:

arameter	LCS %Recovery Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
platile Organics by GC/MS - Westbor	rough Lab Associated sample(s):	02 Batch: WG1	376536-3 WG1376536-4		
Chloroethane	110	100	55-138	10	20
1,1-Dichloroethene	110	110	61-145	0	20
trans-1,2-Dichloroethene	110	110	70-130	0	20
Trichloroethene	110	110	70-130	0	20
1,2-Dichlorobenzene	92	93	70-130	1	20
1,3-Dichlorobenzene	94	95	70-130	1	20
1,4-Dichlorobenzene	93	95	70-130	2	20
Methyl tert butyl ether	100	110	63-130	10	20
p/m-Xylene	100	100	70-130	0	20
o-Xylene	100	100	70-130	0	20
cis-1,2-Dichloroethene	110	110	70-130	0	20
Styrene	95	100	70-130	5	20
Dichlorodifluoromethane	110	110	36-147	0	20
Acetone	98	89	58-148	10	20
Carbon disulfide	100	100	51-130	0	20
2-Butanone	95	99	63-138	4	20
4-Methyl-2-pentanone	88	87	59-130	1	20
2-Hexanone	80	77	57-130	4	20
Bromochloromethane	110	120	70-130	9	20
1,2-Dibromoethane	99	98	70-130	1	20
1,2-Dibromo-3-chloropropane	94	100	41-144	6	20
Isopropylbenzene	93	93	70-130	0	20
1,2,3-Trichlorobenzene	95	96	70-130	1	20



# Lab Control Sample Analysis Batch Quality Control

Project Name: TMP

**Project Number:** 

B0489-019-002-001

Lab Number:

L2022249

Report Date:

06/01/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
raiametei	78Necovery	Quai	70NCCCVC1y	Quai	Lillits	KPD	Quai	Lillits	
Volatile Organics by GC/MS - Westborough La	ab Associated	sample(s): 02	Batch: WG	1376536-3	WG1376536-4				
4.0.4 Triable as harmon	00		07		70.400			00	
1,2,4-Trichlorobenzene	98		97		70-130	1		20	
Methyl Acetate	88		86		70-130	2		20	
Cyclohexane	99		99		70-130	0		20	
1,4-Dioxane	102		100		56-162	2		20	
Freon-113	110		110		70-130	0		20	
Methyl cyclohexane	110		110		70-130	0		20	

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103	103	70-130
Toluene-d8	93	93	70-130
4-Bromofluorobenzene	97	94	70-130
Dibromofluoromethane	105	107	70-130

## **PCBS**



Serial\_No:06012013:25

**Project Name: TMP** Lab Number: L2022249

**Project Number:** B0489-019-002-001 **Report Date:** 06/01/20

**SAMPLE RESULTS** 

Lab ID: Date Collected: L2022249-01 05/29/20 10:00

Client ID: SOUTHWEST LOADING DOCK Date Received: 05/29/20 Sample Location: 6 DANA STREET, LACKAWANNA, NY Field Prep: Not Specified

Sample Depth:

Extraction Method: EPA 3580A Matrix: Oil **Extraction Date:** 05/30/20 03:08 1,8082A Analytical Method: Cleanup Method: EPA 3665A Analytical Date: 05/30/20 12:12

Analyst: CW

Cleanup Date: 05/30/20 Cleanup Method: EPA 3660B Results reported on an 'AS RECEIVED' basis. Percent Solids:

Cleanup Date: 05/30/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by G	C - Westborough Lab						
Aroclor 1016	ND		mg/kg	2.00	0.341	1	А
Aroclor 1221	ND		mg/kg	2.00	0.341	1	Α
Aroclor 1232	ND		mg/kg	2.00	0.341	1	Α
Aroclor 1242	ND		mg/kg	2.00	0.341	1	Α
Aroclor 1248	ND		mg/kg	2.00	0.341	1	Α
Aroclor 1254	ND		mg/kg	2.00	0.341	1	Α
Aroclor 1260	ND		mg/kg	2.00	0.341	1	Α
Aroclor 1262	ND		mg/kg	2.00	0.341	1	Α
Aroclor 1268	ND		mg/kg	2.00	0.341	1	Α
PCBs, Total	ND		mg/kg	2.00	0.341	1	Α

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	Α
Decachlorobiphenyl	54		30-150	Α
2,4,5,6-Tetrachloro-m-xylene	54		30-150	В
Decachlorobiphenyl	51		30-150	В



L2022249

Project Name: TMP Lab Number:

**Project Number:** B0489-019-002-001 **Report Date:** 06/01/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A Analytical Date: 05/30/20 12:20

Analyst: CW

Extraction Method: EPA 3580A
Extraction Date: 05/30/20 03:08
Cleanup Method: EPA 3665A
Cleanup Date: 05/30/20
Cleanup Method: EPA 3660B
Cleanup Date: 05/30/20

Parameter	Result	Qualifier	Units		RL	MDL	Column
Polychlorinated Biphenyls by GC -	Westborougl	n Lab for s	ample(s):	01	Batch:	WG1376005	i-1
Aroclor 1016	ND		mg/kg	2	2.00	0.342	А
Aroclor 1221	ND		mg/kg	2	2.00	0.342	Α
Aroclor 1232	ND		mg/kg	2	2.00	0.342	Α
Aroclor 1242	ND		mg/kg	2	2.00	0.342	Α
Aroclor 1248	ND		mg/kg	2	2.00	0.342	Α
Aroclor 1254	ND		mg/kg	2	2.00	0.342	Α
Aroclor 1260	ND		mg/kg	2	2.00	0.342	Α
Aroclor 1262	ND		mg/kg	2	2.00	0.342	Α
Aroclor 1268	ND		mg/kg	2	2.00	0.342	Α
PCBs, Total	ND		mg/kg	2	2.00	0.342	Α

		Acceptano	ce
Surrogate	%Recovery Qualific	er Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	48	30-150	Α
Decachlorobiphenyl	57	30-150	Α
2,4,5,6-Tetrachloro-m-xylene	47	30-150	В
Decachlorobiphenyl	57	30-150	В



# Lab Control Sample Analysis Batch Quality Control

**Project Name:** 

**Project Number:** 

TMP

B0489-019-002-001

Lab Number:

L2022249

Report Date:

06/01/20

	LCS		LCSD	%	6Recovery			RPD	
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits	Column
Polychlorinated Biphenyls by GC - Westbor	ough Lab Associa	ated sample(s):	01 Batch:	WG1376005-2	WG1376005-3				
Aroclor 1016	48		49		40-140	2		50	Α
Aroclor 1260	44		45		40-140	2		50	Α

Surrogate	LCS %Recovery Qua	LCSD al %Recovery Qual	Acceptance Criteria Column
2,4,5,6-Tetrachloro-m-xylene	46	47	30-150 A
Decachlorobiphenyl	54	54	30-150 A
2,4,5,6-Tetrachloro-m-xylene	44	45	30-150 B
Decachlorobiphenyl	54	55	30-150 B

### **METALS**



Date Collected:

**Project Name:** Lab Number: **TMP** L2022249 **Project Number: Report Date:** B0489-019-002-001 06/01/20

**SAMPLE RESULTS** 

Lab ID: L2022249-01

05/29/20 10:00 Client ID: SOUTHWEST LOADING DOCK Date Received: 05/29/20 6 DANA STREET, LACKAWANNA, NY Field Prep: Sample Location: Not Specified

Sample Depth:

Matrix: Oil

Percent Solids: Results are reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mar	nsfield Lab										
Arsenic, Total	3.61		mg/kg	1.43	0.298	1	05/30/20 09:0	0 06/01/20 09:38	EPA 3050B	1,6010D	LC
Barium, Total	23.8		mg/kg	1.43	0.249	1	05/30/20 09:0	0 06/01/20 09:38	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	1.43	0.140	1	05/30/20 09:0	0 06/01/20 09:38	EPA 3050B	1,6010D	LC
Chromium, Total	1.42	J	mg/kg	1.43	0.138	1	05/30/20 09:0	0 06/01/20 09:38	EPA 3050B	1,6010D	LC
Lead, Total	576		mg/kg	7.16	0.384	1	05/30/20 09:0	0 06/01/20 09:38	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.063	0.041	1	05/30/20 09:3	5 05/30/20 13:17	EPA 7471B	1,7471B	AL
Selenium, Total	0.559	J	mg/kg	2.86	0.370	1	05/30/20 09:0	0 06/01/20 09:38	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	1.43	0.405	1	05/30/20 09:0	0 06/01/20 09:38	EPA 3050B	1,6010D	LC



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# Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	
Total Metals - Mansf	field Lab for sample(s):	01 Batch	n: WG13	376062-	1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	05/30/20 09:35	05/30/20 13:13	3 1,7471B	AL

**Prep Information** 

Digestion Method: EPA 7471B

Parameter	Result (	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	Analyst
Total Metals - Mansfie	ld Lab for sa	ample(s):	01 Batch	: WG1:	376067-	1				
Arsenic, Total	ND		mg/kg	1.67	0.347	1	05/30/20 09:00	06/01/20 09:02	1,6010D	LC
Barium, Total	0.350	J	mg/kg	1.67	0.290	1	05/30/20 09:00	06/01/20 09:02	1,6010D	LC
Cadmium, Total	ND		mg/kg	1.67	0.163	1	05/30/20 09:00	06/01/20 09:02	1,6010D	LC
Chromium, Total	0.183	J	mg/kg	1.67	0.160	1	05/30/20 09:00	06/01/20 09:02	1,6010D	LC
Lead, Total	ND		mg/kg	8.33	0.447	1	05/30/20 09:00	06/01/20 09:02	1,6010D	LC
Selenium, Total	ND		mg/kg	3.33	0.430	1	05/30/20 09:00	06/01/20 09:02	1,6010D	LC
Silver, Total	ND		mg/kg	1.67	0.472	1	05/30/20 09:00	06/01/20 09:02	1,6010D	LC

**Prep Information** 

Digestion Method: EPA 3050B



# Lab Control Sample Analysis Batch Quality Control

**Project Name:** 

**Project Number:** 

TMP

B0489-019-002-001

Lab Number:

L2022249

Report Date:

06/01/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample	e(s): 01 Batch:	WG137606	2-2					
Mercury, Total	90		-		72-128	-		
Total Metals - Mansfield Lab Associated sample	e(s): 01 Batch:	WG137606	7-2 WG137606	7-3				
Arsenic, Total	102		99		79-121	3		
Barium, Total	98		98		83-117	0		
Cadmium, Total	99		97		83-117	2		
Chromium, Total	100		99		80-120	1		
Lead, Total	99		97		81-117	2		
Selenium, Total	100		98		78-122	2		
Silver, Total	98		98		75-124	0		



### Matrix Spike Analysis Batch Quality Control

Project Name:

**Project Number:** 

TMP

B0489-019-002-001

Lab Number:

L2022249

Report Date:

06/01/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qua	MSD Found	MSD %Recovery	Recovery Qual Limits	RPD Q	RPD Rual Limits
Total Metals - Mansfield Lab	Associated sam	nple(s): 01	QC Batch	ID: WG137606	2-3	QC Sample:	L2022249-01	Client ID: SOUT	HWEST	LOADING DOCK
Mercury, Total	ND	0.134	0.113	84		-	-	80-120	-	20



L2022249

Lab Number:

Lab Duplicate Analysis

Batch Quality Control

Project Name: TMP Batch Quality Con

**Project Number:** B0489-019-002-001 **Report Date:** 06/01/20

Parameter	Native Sample	<b>Duplicate Sample</b>	Units	RPD	Qual RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01	QC Batch ID: WG13760	062-4 QC Sample:	L2022249-01	Client ID:	SOUTHWEST LOADING DOCK
Mercury, Total	ND	ND	mg/kg	NC	20



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Project Name: TMP Lab Number: L2022249 **Project Number:** B0489-019-002-001

Report Date: 06/01/20

### Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

**Cooler Information** 

**Custody Seal** Cooler

Α Absent

Container Information				Initial	Final	Temp			Frozen	
	Container ID	Container Type	Cooler	er pH pH deg C Pres Se		Seal	Date/Time	Analysis(*)		
	L2022249-01A	Amber 250ml unpreserved	Α	NA		3.7	Υ	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR- TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD- TI(180)
	L2022249-01B	Amber 250ml unpreserved	Α	NA		3.7	Υ	Absent		NYTCL-8082-2PPM(14)
	L2022249-02A	Vial unpreserved	Α	NA		3.7	Υ	Absent		NYTCL-8260-R2(7)
	L2022249-02B	Vial unpreserved	Α	NA		3.7	Υ	Absent		NYTCL-8260-R2(7)
	L2022249-02C	Vial unpreserved	Α	NA		3.7	Υ	Absent		NYTCL-8260-R2(7)



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### **GLOSSARY**

### **Acronyms**

LOQ

MS

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)

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.)

- 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.

- 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



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

#### Terms

1

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, Benza(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.
- 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 concentrations of the analyte at less than ten times (10x) the concentrations of the analyte was 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
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
  of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- 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).
- $\label{eq:main_equation} \textbf{M} \qquad \text{-Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.}$
- 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.
- ${f P}$  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



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### **Data Qualifiers**

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.



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### **REFERENCES**

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

### LIMITATION OF LIABILITIES

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

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



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

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### Certification Information

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

### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, 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 II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

### Mansfield Facility:

### **Drinking Water**

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

### Non-Potable Water

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

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

EPA 245.1 Hg.

SM2340B

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

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Westborough, MA 01581 8 Walkup Dr.	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd	Service Centers Mahwah, NJ 07430: 35 Whitne Albany, NY 12205: 14 Walker V Tonawanda, NY 14150: 275 Co Project Information	Way	5	Page			Date in t	WD II	5	30	120	ALPHA Job# 12012249 Billing Information
TEL: 508-898-9220 FAX: 508-898-9193 Client Information	TEL: 508-822-9300 FAX: 508-822-3288	Project Location: 6	7MP Dona S 39-019-	treet, 6	ackrun	re, NY	-	ASP- EQuit Other	S (1 Fil	e)	ASP	-B IS (4 File)	Same as Client Info
Address: 2538 Hay	Environmental aburg Turnpike	(Use Project name as P Project Manager:	roject #)					NY TO			NY P	art 375	Disposal Site Information  Please identify below location of
	6-0599 n-tkicem	Turn-Around Time  Standard   Due Date:  Rush (only if pre approved) # of Days: 24 Hours					AWQ Standards NY CP-51  NY Restricted Use Other  NY Unrestricted Use  NYC Sewer Discharge  ANALYSIS					applicable disposal facilities.  Disposal Facility:  NJ NY  Other:	
Other project specific	requirements/comm					c.Bs	CA Metols	Vocs				Sample Filtration  Done Lab to do Preservation Lab to do  (Please Specify below)	
ALPHA Lab ID (Lab Use Only)		mple ID	Date	rction Time	Sample Matrix	Sampler's Initials	B	RC	121				Sample Specific Comments e
> -02	Scathwest Li	ording Dock	5/29/20	10:05	water	EW	×	×	×				
	Container Code	Westboro: Certification N	lo: MA935				Λ		. ,				
B = HCI C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na-S-O <sub>2</sub>	P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube D = Other E = Encore D = BOD Bottle	Mansfield: Certification No: MA015  Refinquished By: Date/7				AAV				Spay	Time 10 (302	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.	