New York State Department of Environmental Conservation
Division of Materials Management
Albany, New York 12233-7253

2019

REGISTERED OR PERMITTED FACILITY ANNUAL REPORT

COMPOSTING

(DO NOT USE THIS FORM FOR BIOSOLIDS COMPOSTING)

6 NYCRR Part 361-3.2

This annual report is for the year of operation from January 01, 2019 to December 31, 2019

Annual Report Form Due: No Later than March 1, 2020

This form may be used for all composting facilities under section 361-3.2 of the Part 360 series except for biosolids composting. Biosolids composting requires the submission of a different annual report form. Forms for all solid waste management facilities can be found at http://www.dec.ny.gov/chemical/52706.html. If you have any questions on this form, please e-mail organicrecycling@dec.ny.gov.

Failure to provide the required information requested is a violation of Environmental Conservation Law. Timely submission of a properly completed form to the Department's Regional Office that has jurisdiction over your facility and to the Department's Central Office is required to meet the Annual Report requirements of 6 NYCRR Part 360 series.

Attach additional sheets if space on the pages is insufficient or supplementary information is required or appropriate.

FACILITY NAME: Troy Sand and Gravel - Kinderhook Mine

SW FACILITY ACTIVITY NUMBER(S): (Ex. 02P20099) 11P14401

COUNTY WHERE FACILITY IS LOCATED: Columbia County

DEC USE ONLY

Region: SWIMS:

MATRIX:

Date Reviewed:

Reviewed By:

Data Entered:

COMPOST FACILITY ANNUAL REPORT
SECTION 1 – FACILITY INFORMATION

FACILITY INFORMATION			
FACILITY NAME: Troy Sand & Gravel Co Inc Kinderhook Pit			
FACILITY LOCATION ADDRESS: Town of Kinderhook Rt 9	**FACILITY CITY:** Kinderhook	**STATE:** NY	**ZIP CODE:** 12106
FACILITY TOWN: Kinderhook	**FACILITY COUNTY:** Columbia	**FACILITY PHONE NUMBER:** (518) 423-1804	
NYSDEC REGION #: 4			
FACILITY CONTACT: Carl Clemente	**CONTACT PHONE NUMBER:** (518) 423-1804		
CONTACT EMAIL ADDRESS: carlc@bondedconcrete.com			
OWNER INFORMATION			
OWNER NAME: Troy Sand & Grave Co Inc	**OWNER PHONE NUMBER:** (518) 423-1804		
OWNER ADDRESS: PO Box 171	**OWNER CITY:** Watervliet	**STATE:** NY	**ZIP CODE:** 12189
OWNER CONTACT: Carl Clemente	**OWNER CONTACT EMAIL ADDRESS:** carlc@bondedconcrete.com		
OPERATOR INFORMATION			
OPERATOR NAME: ☑ *Same as owner*			
PREFERENCES			
Preferred address to receive correspondence: ○ *Facility location address* ◉ *Owner address* ○ *Other (provide):*			
Preferred email address: ○ *Facility Contact* ◉ *Owner Contact* ○ *Other (provide):*			
Preferred individual to receive correspondence: ○ *Facility Contact* ○ *Owner* ◉ *Owner Contact* ○ *Other (provide):*			

Did you operate in 2019? ◉ **Yes; Complete this form.**

○ **No; Complete and submit Sections 1, 12 and 13.** If you no longer plan to operate and wish to relinquish your permit/registration associated with this solid waste management activity, please notify the regional office of your intent. See attachment for Regional Office addresses and contacts.

SECTION 2 – QUANTITY OF MATERIAL RECEIVED

Please report quantities received from January 01, 2019 to December 31, 2019

	Inputs	Quantity	Unit	Source(s)
YARD WASTE	Leaves only		Choose Units	
	Grass Clippings		Choose Units	
	Mixture of Grass and Leaves	7,000	Cubic Yards	Town of Kinderhook
	Brush (Small branches and limbs, <4 inch diameter)		Choose Units	
SSO	Source Separated Organics (Food scraps, soiled paper products, etc.)		Choose Units	
	Food Processing Waste (brewery grains, grape pomace, etc.)		Choose Units	
OTHER	Crop Residues (Corn stalks, etc.)		Choose Units	
	Manure (including bedding)		Choose Units	
	Sawdust/Shavings		Choose Units	
	Animal Carcasses (road-kill, animal mortalities)		Choose Units	
	Paper Mill Residuals		Choose Units	
	Digestate		Choose Units	
	Other: _____		Choose Units	
BULKING AGENT	Woodchips		Choose Units	
	Sawdust		Choose Units	
	Other: _____		Choose Units	

SECTION 3 – COMPOST PRODUCTION

WHAT IS THE PROCESS DETENTION TIME? ***Note: Total time material is processed, not Including storage time***	90 **days**
COMPOST PRODUCED DURING THE YEAR:	7,000 **cubic yards *or*** **tons**
COMPOST DISTRIBUTED DURING THE YEAR:	4,000 **cubic yards *or*** **tons**
QUANTITY CURRENTLY STOCKPILED: ***Note: Finished product stockpiled***	3,000 **cubic yards *or*** **tons**
AGE OF OLDEST PRODUCT ON SITE:	3 **months**

SECTION 4 – COMPOST DISTRIBUTION

Quantity Distributed (cubic yards)	Use of Compost (landscaping, agriculture, highway, onsite, bagged, etc.)
4,000	Topsoil

If **PERMITTED SSO** composting facility, continue to Section #5
SSO – Source Separated Organics

ALL OTHER COMPOSTING FACILITIES, continue to Section #9

SECTION 5 – PATHOGEN AND VECTOR ATTRACTION REDUCTION

For permitted SSO composting facilities only. Check one method for each:

Pathogen Reduction 361-3.7(a)

- (●) Windrow Composting
- ( ) Aerated Static Pile Composting
- ( ) In-vessel Composting
- ( ) Other (specify): _____

Vector Attraction Reduction 361-3.7(b)

- ( ) 38 % Volatile Solids Reduction
- ( ) SOUR
- ( ) Aerobic Process 14 days, ≥40C, ≥45 C avg.

Attach operating and monitoring data to show compliance with methods chosen. Temperature data records should indicate when a pile was created, pile was moved, additional material was added and/or pile was turned.

SECTION 6 – FINISHED COMPOST ANALYSIS

For permitted SSOW composting facilities only. Please attach sampling analyses and laboratory reports as required under Part 360 or your permit. Copies of original laboratory results must be attached. All results, except pH and Total Solids, must be on a dry weight basis. See 361-3.9 Table 6 for pollutant limits and Table 5 for annual product testing frequency 361-3.9 Table 5.

Summarize data in table below or attached document. Print additional pages as needed.

Analysis Date =====>					Max. Conc. (mg/kg)
Arsenic (mg/kg)					41
Cadmium (mg/kg)					10
Chromium (mg/kg)					1,000
Copper (mg/kg)					1,500
Lead (mg/kg)					300
Mercury (mg/kg)					10
Molybdenum (mg/kg)					40
Nickel (mg/kg)					200
Selenium (mg/kg)					100
Zinc (mg/kg)					2,500
TKN (mg/kg)					
Ammonia Nitrogen (mg/kg)					
Nitrate (mg/kg)					
Total Phosphorus (mg/kg)					
Total Potassium (mg/kg)					
pH (s.u.)					
Total Solids(%)					
Total Volatile Solids (%)					
Fecal Coliform (MPN/g)					<1,000 MPN/g
Salmonella (MPN/4g)					<3MPN/4g
Other_____					

SECTION 7 –SAMPLE MANAGEMENT PLAN

For permitted SSO composting facilities only. Describe the number, frequency and location of samples taken. Include a diagram showing all sampling locations.

SECTION 8 – ATTACHMENTS (IF REQUIRED)

Permitted SSO composting facilities, please attach:

- Temperature monitoring and detention time data.
- Sample analyses laboratory reports.
- Any additional reporting requirements.

Do you have a variance to the Part 360 permit requirements? ◯ Yes ◉ No

If yes, please describe:

SECTION 9 – UNAUTHORIZED WASTE

Has unauthorized solid waste been received at the composting facility during the reporting period?

◯ Yes ◉ No

If yes, give information below for each incident (attach additional sheets if necessary):

SECTION 10 – PROBLEMS/COMPLAINTS

Describe any operational problems or neighbor complaints arising from the composting operation and include any methods used to remedy the situations. This should include odor complaints, marketing difficulties, major equipment failure, etc.

No Complaints.

SECTION 11 – QUESTIONS

Please identify any questions or concerns that you would like the Department to answer or consider:

SECTION 12 – FOOD DONATION & FOOD SCRAPS RECYCLING LAW

If you are registered or permitted to compost food scraps please complete the following. For all other operations that are interested in processing food scraps, please contact your DEC regional office to determine what is required.

In 2019, New York State passed the Food Donation & Food Scraps Recycling law. Effective January 1, 2022, large generators of food scraps (defined as generating an annual average of two tons per week or more) must donate excess food and recycle all remaining food scraps if they are within 25 miles of an organics recycler (composting facility, anaerobic digester, etc.). Examples of large generators include: large restaurants, grocery stores, hotels, colleges, etc. For more information visit: https://www.dec.ny.gov/chemical/114499.html

Contact Information

Under this legislation, DEC is responsible for providing a list of organics recyclers (compost facilities, anaerobic digesters, etc.) to large generators so they can determine available food scraps recycling opportunities in their area.

You will be included in this listing if you hold a permit or registration for the composting of source separated organics or food scraps. This will educate both large generators and haulers of food scraps that you are an available composter in their area.

Please provide the following information to include in the listing.

Name of Business: _____

Business Phone Number: _____

Business Email: _____

Business Website: _____

☐ I would like to opt out of DEC listing my facility as an available food scraps recycler for large generators as it relates to the Food Donation and Food Scraps Recycling law.

Assessing Your Food Scraps Recycling Capacity

DEC is responsible for assessing available food scraps recycling capacity across New York State. Information from your operation will help us do this. Please complete the following section to calculate the amount of excess food scraps your operation will have the capability to process in **2022.** Please stay consistent with units (wet tons or cubic yards).

A. Amount of foods scraps projected to be processed in **2020**: _____ Choose Unit

B. Amount of foods scraps projected to be processed in **2022**: _____ Choose Unit

* Note: You will not be required to process this quantity of material, these estimates will only be used to assist DEC in capacity planning across the state in preparation for the Food Donation and Food Scraps Recycling law effective January 1, 2022.

Questions?

DEC USE ONLY

Excess Capacity:

_____

SECTION 13 - CERTIFICATION

The Owner or Operator must sign, date and submit one completed form with an original signature to the appropriate Regional Office (See attachment for Regional Office addresses and Contacts.)

The Owner or Operator must also submit one copy by email, fax or mail to:

NYS Department of Environmental Conservation
Bureau of Waste Reduction and Recycling – Annual Report
625 Broadway – 9th Floor
Albany, New York 12233-7253

Phone: 518-402-8706
Fax 518-402-9024
Email address: organicrecycling@dec.ny.gov

I certify, under penalty of law, that the information that will be used to determine compliance with the requirements in Subpart 361-3 of 6 NYCRR Part 361 has been prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that false statement made herein are punishable pursuant to section 210.45 of the penal law.

Signature

2-20-2020
Date

Carl Clemente
Name (Print)

Owner
Title (Print)

carlclemente@bondedconrete.com
Email (Print)

PO Box 171
Address

Watervliet
City

NY, 12189
State and Zip

(518) 423-1804
Phone Number

ATTACHMENTS: ○NO ◉YES (IF YES, LIST ATTACHMENTS)

- Finished Compost Analysis
- _____
- _____

ATLANTIC TESTING LABORATORIES

Albany
22 Corporate Drive
Clifton Park, NY 12065
518-383-9144 (T)
518-383-9166 (F)

WBE certified company

February 03, 2020

Troy Sand & Gravel Company, Inc.
34 Grange Road
PO Box 171
Watervliet, NY 12189

Attn: Brendan Clemente

Re: Soil Laboratory Testing
2009 Blanket LSA
Clifton Park, New York
ATL Report No.: AT003SL-828-01-20

Dear Brendan,

On January 06, 2020, our representative obtained one sample of Compost material from Kinderhook Pit and delivered it to our Albany, New York facility for testing. A Moisture, Ash, and Organic Matter of Peat and Other Organic Soils Test in accordance with ASTM D 2974 was performed on this sample. The results follow:

PERCENT ORGANICS, ASH CONTENT, AND MOISTURE CONTENT
ASTM D 2974

ATL Sample No.	Organics (%)	Project Specification	Furnace Temperature (°C)	Ash (%)	Project Specification	Moisture (%)	Test Method A	Oven Drying Temperature
AT003S-828-1	49.1	---	440	50.9	---	184.6	Oven-Dried	110

Please contact our office should you have any questions or if we may be of further service.

Sincerely,
ATLANTIC TESTING LABORATORIES, Limited

Robert E. Field
Laboratory Manager
bfield@atlantictesting.com

REF/RML

cc: Brendan Clemente, Troy Sand & Gravel Company, Inc., 34 Grange Road, PO Box 171, Watervliet NY 12189
Carl Clemente, Troy Sand & Gravel Company, Inc., 34 Grange Road, PO Box 171, Watervliet NY 12189
Jude Clemente, Troy Sand & Gravel Company, Inc., 34 Grange Road, PO Box 171, Watervliet NY 12189
Nick Dinova, Troy Sand & Gravel Company, Inc., 34 Grange Road, PO Box 171, Watervliet NY 12189

ALPHA ANALYTICAL

ANALYTICAL REPORT

Lab Number:	L2003636
Client:	Atlantic Testing Laboratories, Limited 22 Corporate Drive Clifton Park, NY 12065
ATTN:	Robert E. Field
Phone:	(518) 383-9144
Project Name:	LSA
Project Number:	AT003
Report Date:	01/28/20

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:	LSA	**Lab Number:**	L2003636
Project Number:	AT003	**Report Date:**	01/28/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2003636-01	828 KINDERHOOK PH	SOIL	Not Specified	01/06/20 10:00	01/07/20

Project Name:	LSA	**Lab Number:**	L2003636
Project Number:	AT003	**Report Date:**	01/28/20

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.

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

The sample collection date and time were specified by the client.

PCBs

L2003636-01: The sample has elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

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: Kelly Stenstrom

Title: Technical Director/Representative Date: 01/28/20

ORGANICS

PCBS

Project Name: LSA
Project Number: AT003

Lab Number: L2003636
Report Date: 01/28/20

SAMPLE RESULTS

Lab ID: L2003636-01
Client ID: 828 KINDERHOOK PIT
Sample Location: Not Specified

Date Collected: 01/06/20 10:00
Date Received: 01/07/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/09/20 22:04
Analyst: AD
Percent Solids: 37%

Extraction Method: EPA 3546
Extraction Date: 01/08/20 17:24
Cleanup Method: EPA 3665A
Cleanup Date: 01/09/20
Cleanup Method: EPA 3660B
Cleanup Date: 01/09/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	130	11.6	1	A
Aroclor 1221	ND		ug/kg	130	13.0	1	A
Aroclor 1232	ND		ug/kg	130	27.6	1	A
Aroclor 1242	ND		ug/kg	130	17.6	1	A
Aroclor 1248	ND		ug/kg	130	19.5	1	A
Aroclor 1254	ND		ug/kg	130	14.2	1	A
Aroclor 1260	ND		ug/kg	130	24.1	1	A
Aroclor 1262	ND		ug/kg	130	16.5	1	A
Aroclor 1268	ND		ug/kg	130	13.5	1	A
PCBs, Total	ND		ug/kg	130	11.6	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: LSA
Project Number: AT003

Lab Number: L2003636
Report Date: 01/28/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 01/08/20 17:00
Analyst: CW

Extraction Method: EPA 3546
Extraction Date: 01/08/20 09:01
Cleanup Method: EPA 3665A
Cleanup Date: 01/08/20
Cleanup Method: EPA 3660B
Cleanup Date: 01/08/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1327899-1						
Aroclor 1016	ND		ug/kg	33.2	2.95	A
Aroclor 1221	ND		ug/kg	33.2	3.33	A
Aroclor 1232	ND		ug/kg	33.2	7.04	A
Aroclor 1242	ND		ug/kg	33.2	4.48	A
Aroclor 1248	ND		ug/kg	33.2	4.98	A
Aroclor 1254	ND		ug/kg	33.2	3.63	A
Aroclor 1260	ND		ug/kg	33.2	6.14	A
Aroclor 1262	ND		ug/kg	33.2	4.22	A
Aroclor 1268	ND		ug/kg	33.2	3.44	A
PCBs, Total	ND		ug/kg	33.2	2.95	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	86		30-150	A
2,4,5,6-Tetrachloro-m-xylene	99		30-150	B
Decachlorobiphenyl	86		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: LSA
Project Number: AT003

Lab Number: L2003636
Report Date: 01/28/20

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: WG1327899-2 WG1327899-3									
Aroclor 1016	82		82		40-140	0		50	A
Aroclor 1260	77		76		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		89		30-150	A
Decachlorobiphenyl	83		81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	93		90		30-150	B
Decachlorobiphenyl	99		78		30-150	B

METALS

Project Name: LSA
Project Number: AT003
Lab Number: L2003636
Report Date: 01/28/20

SAMPLE RESULTS

Lab ID: L2003636-01
Client ID: 828 KINDERHOOK PIT
Sample Location: Not Specified
Date Collected: 01/06/20 10:00
Date Received: 01/07/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 37%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Cadmium, Total	0.230	J	mg/kg	1.04	0.102	1	01/08/20 20:30	01/09/20 11:20	EPA 3050B	1,6010D	LC
Chromium, Total	6.43		mg/kg	1.04	0.100	1	01/08/20 20:30	01/09/20 11:20	EPA 3050B	1,6010D	LC
Copper, Total	27.8		mg/kg	1.04	0.269	1	01/08/20 20:30	01/09/20 11:20	EPA 3050B	1,6010D	LC
Lead, Total	17.0		mg/kg	5.22	0.280	1	01/08/20 20:30	01/09/20 11:20	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.172	0.112	1	01/09/20 04:45	01/09/20 14:02	EPA 7471B	1,7471B	GD
Nickel, Total	5.18		mg/kg	2.61	0.252	1	01/08/20 20:30	01/09/20 11:20	EPA 3050B	1,6010D	LC
Potassium, Total	5540		mg/kg	261	15.0	1	01/08/20 20:30	01/09/20 11:20	EPA 3050B	1,6010D	LC
Zinc, Total	68.5		mg/kg	5.22	0.306	1	01/08/20 20:30	01/09/20 11:20	EPA 3050B	1,6010D	LC

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1328108-1										
Cadmium, Total	ND		mg/kg	0.400	0.039	1	01/08/20 20:30	01/09/20 10:14	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	01/08/20 20:30	01/09/20 10:14	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	01/08/20 20:30	01/09/20 10:14	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	01/08/20 20:30	01/09/20 10:14	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	01/08/20 20:30	01/09/20 10:14	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	01/08/20 20:30	01/09/20 10:14	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	01/08/20 20:30	01/09/20 10:14	1,6010D	LC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1328213-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	01/09/20 04:45	01/09/20 13:30	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis
Batch Quality Control

Project Name: LSA
Project Number: AT003

Lab Number: L2003636
Report Date: 01/28/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1328108-2 SRM Lot Number: D105-540								
Cadmium, Total	98		-		75-125	-		
Chromium, Total	90		-		70-130	-		
Copper, Total	95		-		75-125	-		
Lead, Total	90		-		71-128	-		
Nickel, Total	94		-		70-131	-		
Potassium, Total	64		-		60-140	-		
Zinc, Total	91		-		70-130	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1328213-2 SRM Lot Number: D105-540								
Mercury, Total	96		-		60-141	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: LSA
Project Number: AT003

Lab Number: L2003636
Report Date: 01/28/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1328108-3 WG1328108-4 QC Sample: L2000650-02 Client ID: MS Sample												
Cadmium, Total	0.656J	4.52	4.92	109		4.72	105		75-125	4		20
Chromium, Total	12.0	17.7	28.1	91		27.1	85		75-125	4		20
Copper, Total	39.8	22.2	62.4	102		56.7	76		75-125	10		20
Lead, Total	289	45.2	275	0	Q	278	0	Q	75-125	1		20
Nickel, Total	10.5	44.3	51.7	93		51.0	92		75-125	1		20
Potassium, Total	483	886	1350	98		1380	102		75-125	2		20
Zinc, Total	507	44.3	416	0	Q	354	0	Q	75-125	16		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1328213-3 WG1328213-4 QC Sample: L2000650-02 Client ID: MS Sample												
Mercury, Total	0.304	0.146	0.585	193	Q	0.638	229	Q	80-120	9		20

INORGANICS
&
MISCELLANEOUS

Project Name: LSA
Project Number: AT003

Lab Number: L2003636
Report Date: 01/28/20

SAMPLE RESULTS

Lab ID: L2003636-01
Client ID: 828 KINDERHOOK PIT
Sample Location: Not Specified

Date Collected: 01/06/20 10:00
Date Received: 01/07/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	15.2		%	0.010	0.010	1	-	01/13/20 14:16	1,9060A	SP
Total Organic Carbon (Rep2)	17.5		%	0.010	0.010	1	-	01/13/20 14:16	1,9060A	SP
Total Organic Carbon (Average)	16.4		%	0.010	0.010	1	-	01/13/20 14:16	1,9060A	SP
General Chemistry - Westborough Lab										
Solids, Total	36.5		%	0.100	NA	1	-	01/08/20 11:05	121,2540G	RI
Solids, Total Volatile	48		%	0.10	0.10	1	-	01/13/20 06:30	121,2540G	DW
pH (H)	7.9		SU	-	NA	1	-	01/08/20 11:15	1,9045D	JA
Nitrogen, Ammonia	28		mg/kg	19	7.1	1	01/10/20 03:15	01/10/20 20:50	121,4500NH3-BH	AT
Nitrogen, Nitrate	1.3	J	mg/kg	2.4	0.63	1	-	01/09/20 08:08	121,4500NO3-F	MR
Nitrogen, Total Kjeldahl	13000		mg/kg	380	80.	1	01/10/20 03:36	01/10/20 19:25	121,4500NH3-H	AT
Phosphorus, Total	1600		mg/kg	68	23.	5	-	01/09/20 09:30	121,4500P-E	SD

Project Name: LSA
Project Number: AT003

Lab Number: L2003636
Report Date: 01/28/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
ieneral Chemistry - Westborough Lab for sample(s): 01 Batch: WG1328265-1										
trogen, Nitrate	ND		mg/kg	1.0	0.03	1	-	01/09/20 07:54	121,4500NO3-F	MR
otal Organic Carbon - Mansfield Lab for sample(s): 01 Batch: WG1328366-1										
tal Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	01/13/20 09:40	1,9060A	SP
tal Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	01/13/20 09:40	1,9060A	SP
tal Organic Carbon (Average)	ND		%	0.010	0.010	1	-	01/13/20 09:40	1,9060A	SP
ieneral Chemistry - Westborough Lab for sample(s): 01 Batch: WG1328585-1										
trogen, Total Kjeldahl	ND		mg/kg	150	0.02	1	01/10/20 03:36	01/10/20 19:22	121,4500NH3-H	AT
eneral Chemistry - Westborough Lab for sample(s): 01 Batch: WG1328590-1										
trogen, Ammonia	ND		mg/kg	7.5	0.02	1	01/10/20 03:15	01/10/20 20:46	121,4500NH3-BH	AT
eneral Chemistry - Westborough Lab for sample(s): 01 Batch: WG1329379-1										
lids, Total Volatile	ND		%	0.10	0.10	1	-	01/13/20 06:30	121,2540G	DW
eneral Chemistry - Westborough Lab for sample(s): 01 Batch: WG1334504-1										
osphorus, Total	ND		mg/kg	5.0	1.7	1	-	01/09/20 09:30	121,4500P-E	SD

Lab Control Sample Analysis
Batch Quality Control

Project Name: LSA
Project Number: AT003

Lab Number: L2003636
Report Date: 01/28/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1327925-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1328265-2								
Nitrogen, Nitrate	105		-		90-110	-		20
Total Organic Carbon - Mansfield Lab Associated sample(s): 01 Batch: WG1328366-2								
Total Organic Carbon (Rep1)	100		-		75-125	-		25
Total Organic Carbon (Rep2)	104		-		75-125	-		25
Total Organic Carbon (Average)	102		-		75-125	-		25
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1328585-2								
Nitrogen, Total Kjeldahl	102		-		83-111	-		26
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1328590-2								
Nitrogen, Ammonia	101		-		83-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1334504-2								
Phosphorus, Total	85		-		52-148	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: LSA
Project Number: AT003

Lab Number: L2003636
Report Date: 01/28/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1328265-4 QC Sample: L2000575-01 Client ID: MS Sample												
Nitrogen, Nitrate	1.4J	200	180	90		-	-		80-120	-		20
Total Organic Carbon - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1328366-4 WG1328366-5 QC Sample: L2000862-08 Client ID: MS Sample												
Total Organic Carbon (Rep1)	0.123	1.09	1.19	98		1.28	97		75-125	7		25
Total Organic Carbon (Rep2)	0.127	0.905	0.998	96		1.33	104		75-125	29	Q	25
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1328585-4 QC Sample: L2000719-01 Client ID: MS Sample												
Nitrogen, Total Kjeldahl	78J	3250	3000	92		-	-		43-160	-		26
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1328590-4 QC Sample: L2000634-01 Client ID: MS Sample												
Nitrogen, Ammonia	16	430	350	78		-	-		55-144	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1334504-3 QC Sample: L2000001-192 Client ID: MS Sample												
Phosphorus, Total	31	239	280	100		-	-		75-125	-		20

Project Name: LSA
Project Number: AT003

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L2003636
Report Date: 01/28/20

arameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
eneral Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1327925-2 QC Sample: L2000575-01 Client ID: DUP Sample						
pH	8.0	7.8	SU	3		5
eneral Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1327935-1 QC Sample: L2000634-01 Client ID: DUP Sample						
Solids, Total	85.3	86.1	%	1		20
eneral Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1328265-3 QC Sample: L2000575-01 Client ID: DUP Sample						
Nitrogen, Nitrate	1.4J	1.1J	mg/kg	NC		20
otal Organic Carbon - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1328366-3 QC Sample: L2000862-08 Client ID: DUP Sample						
Total Organic Carbon (Rep1)	0.123	0.070	%	55	Q	25
Total Organic Carbon (Rep2)	0.127	0.073	%	54	Q	25
Total Organic Carbon (Average)	0.125	0.072	%	54	Q	25
eneral Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1328585-3 QC Sample: L2000719-01 Client ID: DUP Sample						
Nitrogen, Total Kjeldahl	78J	140J	mg/kg	NC		26
eneral Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1328590-3 QC Sample: L2000634-01 Client ID: DUP Sample						
Nitrogen, Ammonia	16	9.2	mg/kg	54	Q	20
eneral Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1329379-2 QC Sample: L2000575-01 Client ID: DUP Sample						
Solids, Total Volatile	53	52	%	2		11
eneral Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1334504-4 QC Sample: L2000001-192 Client ID: DUP Sample						
Phosphorus, Total	31	39	mg/kg	23	Q	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(*)
L2003636-01A	Plastic 2oz unpreserved for TS	A	NA		3.5	Y	Absent		CR-TI(180),NI-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),HG-T(28),CD-TI(180),K-TI(180)
L2003636-01B	Glass 60mL/2oz unpreserved	A	NA		3.5	Y	Absent		A2-TOC-9060-2REPS(28)
L2003636-01C	Glass 250ml/8oz unpreserved	A	NA		3.5	Y	Absent		TKN-4500(28),TS(7),TVS-2540(7),TPHOS-4500(28),NO3-4500(2),PH-9045(1),NYTCL-8082(14),NH3-4500(28)

*Values in parentheses indicate holding time in days

Project Name:	LSA	**Lab Number:**	L2003636
Project Number:	AT003	**Report Date:**	01/28/20

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:	LSA	**Lab Number:**	L2003636
Project Number:	AT003	**Report Date:**	01/28/20

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.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

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

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

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: DU Report with 'J' Qualifiers

Project Name: LSA **Lab Number:** L2003636
Project Number: AT003 **Report Date:** 01/28/20

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.

Project Name:	LSA	**Lab Number:**	L2003636
Project Number:	AT003	**Report Date:**	01/28/20

REFERENCES

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

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.
Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

Mansfield Facility:

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

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

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

ATLANTIC TESTING LABORATORIES

L2000575

GEOTECHNICAL/CONSTRUCTION MATERIALS - CHAIN OF CUSTODY RECORD

L2003636

Albany 22 Corporate Drive Clifton Park, NY 12065 518/383-9144 (T) 518/383-9156 (F)

Binghamton 126 Park Avenue Binghamton, NY 13903 607/773-1812 (T) 607/773-1835 (F)

Canton 6431 U.S. Highway 11 Canton, NY 13617 315/386-4578 (T) 315/386-8057 (F)

Elmira 2330 Route 352 Elmira, NY 14903 607/737-0700 (T) 607/737-0714 (F)

Plattsburgh 130 Arizona Avenue, Suite 1540 Plattsburgh, NY 12903 518/563-5878 (T) 518/562-1321 (F)

Poughkeepsie 251 Upper North Road Highland, NY 12528 845/691-6066 (T) 845/691-6099 (F)

Rochester 3495 Winton Place Building B, Suite 4A Rochester, NY 14623 585/427-9020 (T) 585/427-9021 (F)

Syracuse 6085 Court Street Road Suite A Syracuse, NY 13039 315/099-5281 (T) 315/099-3374 (F)

Utica 301 St. Anthony Street Utica, NY 13501 315/735-3308 (T) 315/735-0742 (F)

Watertown 26581 NYS Route 283 Watertown, NY 13601 315/786-7687 (T) 315/786-2022 (F)

Client: Troy Sand & Gravel
Project: LSA
Project No.: AT003
ATL Project Manager: Bob Field
Test Data / Report Distribution

Applicable Specification: ☐ ASTM ☐ AASHTO ☐ NYSDOT ☐ Other

Office to Complete Report: Alpha Analytical
Send Test Data / Report To: Bob Field (name) bfield@atlantictesting.com (email address)

Page of

Shipment Rec'd Intact? ☐ YES ☐ NO

Page 1 of 2

Sample No.	Sample Type	Sample Location	Sample Description	No. of Containers	TKN	Ammonia	Nitrate	Total Potassium	pH	Total Solids	Total Volatile Solids	EPA Method 8082 PCB	EPA Method 7471	Cadmium Chromium	TOC	Field Notes
Tests Required																
Date Required					Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
~~827~~	~~S~~	~~Clifton Park~~ Transfer Station	~~Compost~~	~~2~~	x	x	x	x	x	x	x	x	x	x	x	*One sample per report (3 total)
828	S	Kinderhook Pit	Compost	2	x	x	x	x	x	x	x	x	x	x	x	
~~829~~	~~S~~	~~Zerunda Pit~~	~~Compost~~	~~2~~	x	x	x	x	x	x	x	x	x	x	x	

Sampled By: Client Date: 1/6/2020

Samples Relinquished By:				Samples Received By:			
Name:	R. Lansing	Date:	1/7/2020	Name:	Ben Wagner AAL	Date:	1-7-2020
Signature:		Time:	7:30	Signature:		Time:	1315
Name:	Ben Wagner	Date:	1-7-2020	Name:	Ryan Morrissey	Date:	1/8/20
Signature:		Time:	1350	Signature:		Time:	00:35
Name:		Date:		Name:		Date:	
Signature:		Time:		Signature:		Time:	

Sample Type Code Key: A=Aggregate F=Fireproofing S=Soil I=In-situ C=Concrete R=Rock M=Masonry O=Other B=Bituminous NO=Not determined by sampler

Storage Location of Sample:

Laboratory Remarks:

ATLANTIC TESTING LABORATORIES

GEOTECHNICAL/CONSTRUCTION MATERIALS - CHAIN OF CUSTODY RECORD

~~L2000575~~
L2003636

Albany	Binghamton	Canton	Elmira	Plattsburgh	Poughkeepsie	Rochester	Syracuse	Utica	Watertown
22 Corporate Drive Clifton Park, NY 12065 518/383-9144 (T) 518/383-9166 (F)	126 Park Avenue Binghamton, NY 13903 607/773-1812 (T) 607/773-1835 (F)	6431 U.S. Highway 11 Canton, NY 13617 315/386-4578 (T) 315/386-5067 (F)	2330 Route 352 Elmira, NY 14903 607/737-0700 (T) 607/737-0714 (F)	130 Arizona Avenue, Suite 1540 Plattsburgh, NY 12903 518/563-8878 (T) 518/562-1321 (F)	251 Upper North Road Highland, NY 12528 845/691-6098 (T) 845/691-6089 (F)	3495 Winton Place Building B, Suite 4A Rochester, NY 14623 585/427-9020 (T) 585/427-9021 (F)	6085 Court Street Road Suite A Syracuse, NY 13039 315/699-5281 (T) 315/699-3374 (F)	301 St. Anthony Street Utica, NY 13501 315/735-3309 (T) 315/735-0742 (F)	26581 NYS Route 283 Watertown, NY 13601 315/786-7867 (T) 315/786-2022 (F)

Client: Troy Sand & Gravel
Project: LSA
Project No.: AT003
ATL Project Manager: Bob Field

Applicable Specification: ☐ ASTM ☐ AASHTO ☐ NYSDOT ☐ Other

Tests Required: Copper, Lead, Nickel, Zinc; Mercury; Total Phosphorus

Page of
Shipment Rec'd Intact? ☐ YES ☐ NO

Test Data / Report Distribution

Office to Complete Report: Alpha Analytical
Send Test Data / Report To: Bob Field (name)
bfield@atlantictesting.com (email address)

Date Required: Date | Date | Date | Date | Date | Date | Date | Date | Date | Date | Date

Page 2 of 2

Sample No.	Sample Type	Sample Location	Sample Description	No. of Containers	Copper, Lead, Nickel, Zinc	Mercury	Total Phosphorus									Field Notes
~~827~~	~~S~~	~~Clifton Park Transfer Station~~	~~Compost~~	~~2~~	~~x~~	~~x~~	~~x~~									
828	S	Kinderhook Pit	Compost	2	x	x	x									
~~829~~	~~S~~	~~Zerunda Pit~~	~~Compost~~	~~2~~	~~x~~	~~x~~	~~x~~									

Sampled By: Client Date: 1/6/2020

Samples Relinquished By:		Date/Time		Samples Received By:		Date/Time	
Name:	R. Lansing	Date:	1/7/2020	Name:	Ben Wagner AAL	Date:	1-7-2020
Signature:	[signature]	Time:	7:30	Signature:	[signature]	Time:	1315
Name:	Ben Wagner	Date:	1-7-2020	Name:	Ryan Morrissey	Date:	1/8/20
Signature:	[signature]	Time:	1350	Signature:	[signature]	Time:	00:30
Name:		Date:		Name:		Date:	
Signature:		Time:		Signature:		Time:	

Sample Type Code Key:
A=Aggregate F=Fireproofing
S=Soil I=In-situ
C=Concrete R=Rock
M=Masonry O=Other
B=Bituminous
ND=Not determined by sampler

Storage Location of Sample:

Laboratory Remarks:

Distribution: Original with Samples
Other Copies as Required

OF-7
Rev 5 03/15

H2H GEOSCIENCE ENGINEERING

179 River Street, Troy, New York 12180
(518) 270-1620/Fax (518) 270-1672

Environmental Professionals
Geologic Consultants
Construction Services

February 27, 2020

via UPS

Bureau of Waste Reduction and Recycling
625 Broadway
Albany, NY 12233-7253

Subject: **Troy Sand & Gravel Company, Inc.**
2019 Annual Report – Kinderhook Mine #11P14401

This Report is submitted on behalf of the Applicant, Troy Sand & Gravel Company Inc., to fulfill annual reporting requirements for the above mentioned operation.

If you have any questions regarding this information, please contact me at 518.270.1620 ext. 102, or by email mpolacco@h2hassociates.com.

Sincerely,

H2H Geoscience Engineering, PLLC

M Polacco

Michael Polacco
Project Geologist

c Attachments as noted

Victoria Schmitt, NYSDEC Region 4 w/attach
Carl Clemente, Troy S&G w/ attach
File