



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

**Environmental Professionals  
Geologic Consultants  
Construction Services**

February 3, 2021

via UPS

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



**Subject: Troy Sand & Gravel Company, Inc.  
2020 Annual Report – Bailey Farm #46PP0020**

NYSDEC - Region 5  
Environmental Quality

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](mailto:mpolacco@h2hassociates.com).

Sincerely,

H2H Geoscience Engineering, PLLC

*Michael Polacco*

Michael Polacco  
Project Geologist

c Attachments as noted

Jessie Sangster, NYSDEC Region 5 w/attach  
Carl Clemente, Troy S&G w/ attach  
File

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

RECEIVED

FEB 23 2021

NYSDEC - Region 5  
Environmental Quality

2020  
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, 2020 to December 31, 2020**

**Annual Report Form Due: No Later than March 1, 2021**

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](mailto: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: Bailey Farm Mine Yard Waste Composting/Troy Sand and Gravel Co Inc

SW FACILITY ACTIVITY NUMBER(S): (Ex. 02P20099) 46PP0020

COUNTY WHERE FACILITY IS LOCATED: Saratoga 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: <b>Bailey Farm Mine Yard Waste Composition</b>			
FACILITY LOCATION ADDRESS: <b>Rt 146</b>	FACILITY CITY: <b>Halfmoon</b>	STATE: <b>NY</b>	ZIP CODE: <b>12065</b>
FACILITY TOWN: <b>Halfmoon</b>	FACILITY COUNTY: <b>Saratoga</b>	FACILITY PHONE NUMBER: <b>(518) 423-1804</b>	
NYSDEC REGION #: <b>5</b>			
FACILITY CONTACT: <b>Carl Clemente</b>	CONTACT PHONE NUMBER: <b>(518) 423-1804</b>		
CONTACT EMAIL ADDRESS: <b>carlc@bondedconcrere.com</b>			
OWNER INFORMATION			
OWNER NAME: <b>Troy Sand &amp; Gravel Co Inc</b>	OWNER PHONE NUMBER: <b>(518) 423-1804</b>		
OWNER ADDRESS: <b>PO Box 171</b>	OWNER CITY: <b>Watervliet</b>	STATE: <b>NY</b>	ZIP CODE: <b>12189</b>
OWNER CONTACT: <b>Carl Clemente</b>	OWNER CONTACT EMAIL ADDRESS: <b>carlc@bondedconcrete.com</b>		
OPERATOR INFORMATION			
OPERATOR NAME: <input checked="" type="checkbox"/> Same as owner			
PREFERENCES			
Preferred address to receive correspondence: <input type="radio"/> Facility location address <input type="radio"/> Owner address <input type="radio"/> Other (provide):			
Preferred email address: <input type="radio"/> Facility Contact <input type="radio"/> Owner Contact <input type="radio"/> Other (provide):			
Preferred individual to receive correspondence: <input type="radio"/> Facility Contact <input type="radio"/> Owner <input type="radio"/> Owner Contact <input type="radio"/> Other (provide):			
Did you operate in 2020? <input checked="" type="radio"/> Yes; Complete this form. <input type="radio"/> 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, 2020 to December 31, 2020

	Inputs	Quantity	Unit	Source(s)
YARD WASTE	Leaves only		Choose Units	
	Grass Clippings		Choose Units	
	Mixture of Grass and Leaves	4,000	Cubic Yards	Other permitted composting facilities
	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	



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,  $\geq 40C$ ,  $\geq 45 C$  avg.

**IMPORTANT NOTE!**

**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):

No complaints.

## **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.

## **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 **2021**: \_\_\_\_\_ 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  
825 Broadway – 9<sup>th</sup> 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.

*Carl Clemente*  
Signature

2-11-2021  
Date

Carl Clemente  
Name (Print)

Owner  
Title (Print)

carlclemente@bondedconcrete.com  
Email (Print)

PO Box 171  
Address

Waterviet *Waterviet*  
City

NY, 12189  
State and Zip

518 423 1804  
Phone Number

ATTACHMENTS:  NO  YES (IF YES, LIST ATTACHMENTS)

- Finished Compost Analysis
- \_\_\_\_\_
- \_\_\_\_\_

New York State Department of Environmental Conservation  
Division of Materials Management  
Bureau of Waste Reduction and Recycling

## MATERIAL MANAGEMENT PROGRAM CONTACTS

### CENTRAL OFFICE

Bureau of Waste Reduction and Recycling  
625 Broadway  
Albany, NY 12233-7253  
Phone: (518) 402-8706

For Submission of Organics Recycling Annual Reports only:

Fax: (518) 402-9024

Email: [organicrecycling@dec.ny.gov](mailto:organicrecycling@dec.ny.gov)

### REGIONAL OFFICE ADDRESS & LEAD CONTACT PERSON

#### REGION 1 (Nassau, Suffolk)

Syed Rahman/David Gibb  
SUNY @ Stony Brook  
50 Circle Road  
Stony Brook, NY 11790  
Phone: (631) 444-0375  
SWMFannualreportR1@dec.ny.gov

#### REGION 2 (Bronx, Kings, New York, Queens, Richmond)

Joseph O'Connell  
47-40 21st Street  
Long Island City, NY 11101-5407  
Phone: (718) 482-4896  
SWMFannualreportR2@dec.ny.gov

#### REGION 3 (Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester)

James Lansing  
21 South Putt Corners Road  
New Paltz, NY 12561  
Phone: (845) 256-3123  
SWMFannualreportR3@dec.ny.gov

#### REGION 4 (Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie)

Victoria Schmitt  
1130 North Westcott Road  
Schenectady, NY 12306  
Phone: (518) 357-2243  
SWMFannualreportR4@dec.ny.gov

#### REGION 5 (Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington)

Jessie Sangster  
1115 State Route 86, PO Box 296  
Ray Brook, NY 12977  
Phone: (518) 897-1266  
SWMFannualreportR5@dec.ny.gov

#### REGION 6 (Herkimer, Jefferson, Lewis, Oneida, St. Lawrence)

Gary McCullouch  
317 Washington Street  
Watertown, NY 13601  
Phone: (315) 785-2513  
SWMFannualreportR6@dec.ny.gov

#### REGION 7 (Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins)

Thomas Annal  
615 Erie Boulevard West  
Syracuse, NY 13204  
Phone: (315) 426-7419  
SWMFannualreportR7@dec.ny.gov

#### REGION 8 (Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuylers, Seneca, Steuben, Wayne, Yates)

Greg MacLean  
6274 East Avon-Lima Road  
Avon, NY 14414  
Phone: (585) 226-5411  
SWMFannualreportR8@dec.ny.gov

#### REGION 9 (Allegany, Cattaraugus, Chautauqua, Erie, Niagara, Wyoming)

Peter Grasso  
270 Michigan Avenue  
Buffalo, NY 14203  
Phone: (716) 851-7220  
SWMFannualreportR9@dec.ny.gov

September 2020



# ATLANTIC TESTING LABORATORIES

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

**WBE certified company**

November 16, 2020

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

Re: Soil Lab  
2009 Blanket LSA  
Clifton Park, New York

Dear Brendan,

Enclosed is the following report:

Report Number AT003SL-850-10-20 Soil Lab Report, dated October 30, 2020

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



ANALYTICAL REPORT

Lab Number:	L2048083
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:	11/10/20

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).

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



**Project Name:** LSA  
**Project Number:** AT003

**Lab Number:** L2048083  
**Report Date:** 11/10/20

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2048083-01	850	SOIL	ZERUNDA PIT	10/30/20 10:00	11/03/20

**Project Name:** LSA  
**Project Number:** AT003

**Lab Number:** L2048083  
**Report Date:** 11/10/20

**Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the gray 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: LSA  
Project Number: AT003

Lab Number: L2048083  
Report Date: 11/10/20

Case Narrative (continued)

Report Submission

November 10, 2020: This is a preliminary report.

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

This report contains the results of the analyses performed on Client ID "850". The results of all other analyses will be issued under separate cover.

Sample Receipt

The collection time was specified by the client.

Nitrogen, Ammonia

The WG1431047-3 Laboratory Duplicate RPD for nitrogen, ammonia (48%), performed on L2048083-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

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

Authorized Signature: *Melissa Sturgis* Melissa Sturgis

Title: Technical Director/Representative Date: 11/10/20

# ORGANICS

# PCBS

Project Name: LSA  
 Project Number: AT003

Lab Number: L2048083  
 Report Date: 11/10/20

**SAMPLE RESULTS**

Lab ID: L2048083-01  
 Client ID: 850  
 Sample Location: ZERUNDA PIT

Date Collected: 10/30/20 10:00  
 Date Received: 11/03/20  
 Field Prep: Not Specified

Sample Depth:  
 Matrix: Soil  
 Analytical Method: 1,8082A  
 Analytical Date: 11/05/20 19:05  
 Analyst: JAW  
 Percent Solids: 49%

Extraction Method: EPA 3540C  
 Extraction Date: 11/04/20 14:50  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 11/05/20  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 11/05/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	190	16.8	1	A
Aroclor 1221	NO		ug/kg	190	19.0	1	A
Aroclor 1232	ND		ug/kg	190	40.2	1	A
Aroclor 1242	ND		ug/kg	190	25.6	1	A
Aroclor 1248	ND		ug/kg	190	28.4	1	A
Aroclor 1254	ND		ug/kg	190	20.7	1	A
Aroclor 1260	ND		ug/kg	190	35.0	1	A
Aroclor 1262	ND		ug/kg	190	24.1	1	A
Aroclor 1268	ND		ug/kg	190	19.6	1	A
PCBs, Total	NO		ug/kg	190	16.8	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	A
Decachlorobiphenyl	57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	56		30-150	B

Project Name: LSA  
 Project Number: AT003

Lab Number: L2048083  
 Report Date: 11/10/20

**Method Blank Analysis**  
 Batch Quality Control

Analytical Method: 1,8082A  
 Analytical Date: 11/05/20 19:19  
 Analyst: CW

Extraction Method: EPA 3540C  
 Extraction Date: 11/04/20 10:10  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 11/05/20  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 11/05/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1430396-1						
Aroclor 1016	ND		ug/kg	32.5	2.88	A
Aroclor 1221	ND		ug/kg	32.5	3.26	A
Aroclor 1232	ND		ug/kg	32.5	6.89	A
Aroclor 1242	ND		ug/kg	32.5	4.38	A
Aroclor 1248	ND		ug/kg	32.5	4.87	A
Aroclor 1254	ND		ug/kg	32.5	3.55	A
Aroclor 1260	ND		ug/kg	32.5	6.00	A
Aroclor 1262	ND		ug/kg	32.5	4.13	A
Aroclor 1268	ND		ug/kg	32.5	3.36	A
PCBs, Total	ND		ug/kg	32.5	2.88	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	66		30-150	B

### Lab Control Sample Analysis Batch Quality Control

Project Name: LSA  
Project Number: AT003

Lab Number: L2048083  
Report Date: 11/10/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD	
	%Recovery	Qual	%Recovery	Qual				Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1430396-2 WG1430396-3									
Aroclor 1016	77		76		40-140	1		50	A
Aroclor 1260	74		71		40-140	4		50	A

Surrogate	LCS		LCSD		Acceptance Criteria	Column
	%Recovery	Qual	%Recovery	Qual		
2,4,5,6-Tetrachloro-m-xylene	63		63		30-150	A
Decachlorobiphenyl	63		60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		60		30-150	B
Decachlorobiphenyl	62		57		30-150	B

## METALS

**Project Name:** LSA  
**Project Number:** AT003

**Lab Number:** L2048083  
**Report Date:** 11/10/20

**SAMPLE RESULTS**

**Lab ID:** L2048083-01  
**Client ID:** 850  
**Sample Location:** ZERUNDA PIT

**Date Collected:** 10/30/20 10:00  
**Date Received:** 11/03/20  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil  
**Percent Solids:** 49%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Cadmium, Total	0.161	J	mg/kg	0.767	0.075	1	11/10/20 08:15	11/10/20 13:03	EPA 3050B	1,6010D	GD
Chromium, Total	5.28		mg/kg	0.767	0.074	1	11/10/20 08:15	11/10/20 13:03	EPA 3050B	1,6010D	GD
Copper, Total	19.2		mg/kg	0.767	0.198	1	11/10/20 08:15	11/10/20 13:03	EPA 3050B	1,6010D	GD
Lead, Total	12.0		mg/kg	3.83	0.206	1	11/10/20 08:15	11/10/20 13:03	EPA 3050B	1,6010D	GD
Mercury, Total	ND		mg/kg	0.127	0.083	1	11/10/20 07:25	11/10/20 11:06	EPA 7471B	1,7471B	EW
Nickel, Total	4.78		mg/kg	1.92	0.186	1	11/10/20 08:15	11/10/20 13:03	EPA 3050B	1,6010D	GD
Potassium, Total	3150		mg/kg	192	11.0	1	11/10/20 08:15	11/10/20 13:03	EPA 3050B	1,6010D	GD
Zinc, Total	62.9		mg/kg	3.83	0.225	1	11/10/20 08:15	11/10/20 13:03	EPA 3050B	1,6010D	GD





Project Name: LSA  
 Project Number: AT003

Lab Number: L2048083  
 Report Date: 11/10/20

### 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: WG1430951-1										
Cadmium, Total	ND		mg/kg	0.400	0.039	1	11/10/20 08:15	11/10/20 11:35	1,6010D	GD
Chromium, Total	0.068	J	mg/kg	0.400	0.038	1	11/10/20 08:15	11/10/20 11:35	1,6010D	GD
Copper, Total	ND		mg/kg	0.400	0.103	1	11/10/20 08:15	11/10/20 11:35	1,6010D	GD
Lead, Total	ND		mg/kg	2.00	0.107	1	11/10/20 08:15	11/10/20 13:18	1,6010D	GD
Nickel, Total	ND		mg/kg	1.00	0.097	1	11/10/20 08:15	11/10/20 11:35	1,6010D	GD
Potassium, Total	ND		mg/kg	100	5.76	1	11/10/20 08:15	11/10/20 11:35	1,6010D	GD
Zinc, Total	ND		mg/kg	2.00	0.117	1	11/10/20 08:15	11/10/20 11:35	1,6010D	GD

**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: WG1430952-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	11/10/20 07:25	11/10/20 10:26	1,7471B	EW

**Prep Information**

Digestion Method: EPA 7471B

**Lab Control Sample Analysis**  
Batch Quality Control

Project Name: LSA  
Project Number: AT003

Lab Number: L2048083  
Report Date: 11/10/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1430951-2 SRM Lot Number: D109-540								
Cadmium, Total	95		-		75-125	-		
Chromium, Total	100		-		70-130	-		
Copper, Total	101		-		75-125	-		
Lead, Total	98		-		72-128	-		
Nickel, Total	96		-		70-130	-		
Potassium, Total	91		-		59-141	-		
Zinc, Total	105		-		70-130	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1430952-2 SRM Lot Number: D109-540								
Mercury, Total	118		-		60-140	-		

**Matrix Spike Analysis**  
**Batch Quality Control**

Project Name: LSA  
 Project Number: AT003

Lab Number: L2048083  
 Report Date: 11/10/20

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: WG1430951-3    QC Sample: L2047955-01    Client ID: MS Sample												
Cadmium, Total	1.58	5.88	6.07	76		-	-		75-125	-		20
Chromium, Total	28.4	23.1	41.3	56	Q	-	-		75-125	-		20
Copper, Total	37.3	28.8	56.7	67	Q	-	-		75-125	-		20
Lead, Total	39.3	58.8	97.4	99		-	-		75-125	-		20
Nickel, Total	10.0	57.7	45.1	61	Q	-	-		75-125	-		20
Potassium, Total	431	1150	1720	112		-	-		75-125	-		20
Zinc, Total	580	57.7	619	68	Q	-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01    QC Batch ID: WG1430952-3    QC Sample: L2047955-01    Client ID: MS Sample												
Mercury, Total	0.270	0.187	0.434	88		-	-		80-120	-		20

Project Name: LSA  
 Project Number: AT003

**Lab Duplicate Analysis**  
*Batch Quality Control*

Lab Number: L2048083  
 Report Date: 11/10/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01	QC Batch ID: WG1430951-4	QC Sample: L2047955-01	Client ID: DUP Sample			
Cadmium, Total	1.58	1.06	mg/kg	39	Q	20
Chromium, Total	28.4	28.5	mg/kg	0		20
Total Metals - Mansfield Lab Associated sample(s): 01	QC Batch ID: WG1430951-4	QC Sample: L2047955-01	Client ID: DUP Sample			
Lead, Total	39.3	47.0	mg/kg	18		20
Total Metals - Mansfield Lab Associated sample(s): 01	QC Batch ID: WG1430952-4	QC Sample: L2047955-01	Client ID: DUP Sample			
Mercury, Total	0.270	0.253	mg/kg	7		20

# INORGANICS & MISCELLANEOUS

**Project Name:** LSA  
**Project Number:** AT003

**Lab Number:** L2048083  
**Report Date:** 11/10/20

**SAMPLE RESULTS**

**Lab ID:** L2048083-01  
**Client ID:** 850  
**Sample Location:** ZERUNDA PIT

**Date Collected:** 10/30/20 10:00  
**Date Received:** 11/03/20  
**Field Prep:** Not Specified

**Sample Depth:**  
**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	49.2		%	0.100	NA	1	-	11/04/20 12:03	121,2540G	RI
Solids, Total Volatile	36		%	0.10	0.10	1	-	11/05/20 06:25	121,2540G	DW
pH (H)	7.1		SU	-	NA	1	-	11/04/20 21:04	1,9045D	AS
Nitrogen, Ammonia	92		mg/kg	14	5.4	1	11/06/20 04:55	11/06/20 23:36	121,4500NH3-BH	AT
Nitrogen, Nitrate	11		mg/kg	1.9	0.50	1	-	11/07/20 05:15	121,4500NO3-F	MR
Nitrogen, Total Kjeldahl	6100		mg/kg	230	48.	1	11/09/20 15:00	11/09/20 21:32	121,4500NH3-H	AT
Phosphorus, Total	1100		mg/kg	49	16.	4.8	-	11/06/20 09:30	121,4500P-E	SD



Project Name: LSA  
 Project Number: AT003

Lab Number: L2048083  
 Report Date: 11/10/20

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

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1430615-1										
Solids, Total Volatile	ND		%	0.10	0.10	1	-	11/05/20 06:25	121,2540G	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1431047-1										
Nitrogen, Ammonia	6.0	J	mg/kg	7.5	0.02	1	11/06/20 04:55	11/06/20 23:30	121,4500NH3-BH	AT
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1431185-1										
Phosphorus, Total	ND		mg/kg	5.0	1.7	1	-	11/06/20 09:30	121,4500P-E	SD
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1431595-1										
Nitrogen, Nitrate	ND		mg/kg	1.0	0.03	1	-	11/07/20 04:58	121,4500NO3-F	MR
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1432141-1										
Nitrogen, Total Kjeldahl	5.5	J	mg/kg	150	0.02	1	11/09/20 15:00	11/09/20 21:25	121,4500NH3-H	AT

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** LSA  
**Project Number:** AT003

**Lab Number:** L2048083  
**Report Date:** 11/10/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01		Batch: WG1430499-1					
pH	101		-		99-101	-		
General Chemistry - Westborough Lab	Associated sample(s): 01		Batch: WG1431047-2					
Nitrogen, Ammonia	95		-		83-115	-		20
General Chemistry - Westborough Lab	Associated sample(s): 01		Batch: WG1431185-2					
Phosphorus, Total	107		-		52-148	-		20
General Chemistry - Westborough Lab	Associated sample(s): 01		Batch: WG1431595-2					
Nitrogen, Nitrate	92		-		90-110	-		20
General Chemistry - Westborough Lab	Associated sample(s): 01		Batch: WG1432141-2					
Nitrogen, Total Kjeldahl	92		-		83-111	-		26



### Matrix Spike Analysis Batch Quality Control

Project Name: LSA  
Project Number: AT003

Lab Number: L2048083  
Report Date: 11/10/20

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: WG1431047-4 QC Sample: L2048083-01 Client ID: 850												
Nitrogen, Ammonia	92	800	800	89	-	-	-	-	55-144	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1431185-3 QC Sample: L2048080-01 Client ID: MS Sample												
Phosphorus, Total	1800	617	2300	81	-	-	-	-	75-125	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1431595-4 QC Sample: L2048080-01 Client ID: MS Sample												
Nitrogen, Nitrate	10	198	200	96	-	-	-	-	80-120	-	-	20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1432141-4 QC Sample: L2048080-01 Client ID: MS Sample												
Nitrogen, Total Kjeldahl	7100	7500	17000	132	-	-	-	-	43-160	-	-	26

**Project Name:** LSA  
**Project Number:** AT003

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Lab Number:** L2048083  
**Report Date:** 11/10/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1430305-1	QC Sample: L2048055-02	Client ID: DUP	Sample	
Solids, Total	87.1	88.4	%	1		20
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1430499-2	QC Sample: L2048046-02	Client ID: DUP	Sample	
pH	8.1	8.1	SU	0		5
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1430615-2	QC Sample: L2048046-02	Client ID: DUP	Sample	
Solids, Total Volatile	1.6	1.8	%	12	Q	11
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1431047-3	QC Sample: L2048083-01	Client ID: 850		
Nitrogen, Ammonia	92	150	mg/kg	48	Q	20
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1431185-4	QC Sample: L2048080-01	Client ID: DUP	Sample	
Phosphorus, Total	1800	1600	mg/kg	12		20
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1431595-3	QC Sample: L2048080-01	Client ID: DUP	Sample	
Nitrogen, Nitrate	10	7.6	mg/kg	27	Q	20
General Chemistry - Westborough Lab	Associated sample(s): 01	QC Batch ID: WG1432141-3	QC Sample: L2048080-01	Client ID: DUP	Sample	
Nitrogen, Total Kjeldahl	7100	10000	mg/kg	34	Q	26

**Project Name:** LSA  
**Project Number:** AT003

**Lab Number:** L2048083  
**Report Date:** 11/10/20

**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2048083-01A	Plastic 2oz unpreserved for TS	A	NA		4.7	Y	Absent		TS(7)
L2048083-01B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		4.7	Y	Absent		NI-TI(180),CR-TI(180),PB-TI(180),ZN-TI(180),CU-TI(180),HG-T(28),K-TI(180),CD-TI(180)
L2048083-01C	Glass 250ml/8oz unpreserved	A	NA		4.7	Y	Absent		A2-TOC-9060-2REPS(28)
L2048083-01D	Glass 250ml/8oz unpreserved	A	NA		4.7	Y	Absent		TKN-4500(28),TPHOS-4500(28),TVS-2540(7),PH-9045(1),NO3-4500(2),NH3-4500(28),NYTCL-8082-3540C(14)

\*Values in parentheses indicate holding time in days

**Project Name:** LSA  
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**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.
- LCS D - 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.
- NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
- 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.

**Report Format:** DU Report with 'J' Qualifiers



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**Footnotes**

- I - 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(c)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

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

**Data Qualifiers**

- A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- 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

Report Format: DU Report with 'J' Qualifiers



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**Data Qualifiers**

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

**Project Name:** LSA  
**Project Number:** AT003

**Lab Number:** L2048083  
**Report Date:** 11/10/20

**REFERENCES**

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

**LIMITATION OF LIABILITIES**

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

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



**Certification Information**

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

**Westborough Facility**

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

**Mansfield Facility**

SM 2540D: TSS  
 EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.  
 EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.  
 EPA TO-12 Non-methane organics  
 EPA 3C Fixed gases  
 Biological Tissue Matrix: EPA 3050B

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

**Westborough Facility:**

**Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B  
 EPA 332: Perchlorate; EPA 624.2: THMs and VOCs; EPA 504.1: EDB, DBCP.  
 Microbiology: SM9215B; SM9223-PIA, 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.