

September 1, 2021

Mr. Max Feldman
1322 5th Avenue
Coraopolis, Pennsylvania 15108

**Subject: Sampling Results for the Phase II Environmental Site Assessment (ESA)
700 Flaugherty Run Road
Parcel 1049-M-383
Findlay Township, Allegheny County, Pennsylvania**

Dear Mr. Feldman:

On behalf of Applied Geology and Environmental Science (AGES), Inc., we would like to thank you for the opportunity to submit this letter-report for the above-referenced project.

INTRODUCTION

The purpose of this letter-report is to provide documentation regarding the site investigation and soil sampling event that occurred at 700 Flaugherty Run Road, parcel 1049-M-383 in Findlay Township, Allegheny County, Pennsylvania (Figure 1). All samples were collected in accordance with standard industry procedures and according to applicable regulations of the Commonwealth of Pennsylvania.

BACKGROUND

In August 2021, Max Feldman contracted with AGES to conduct a Phase I Environmental Site Assessment (ESA) at the approximate 0.95-acre site consisting of one (1) parcel, located at 700 Flaugherty Run Road, Findlay Township, Allegheny County, Pennsylvania (site). Results of the Phase I ESA indicated the following four (4) recognized environmental concerns (RECs):

- Mr. Nicholas Mauro, the current land owner, stated that, until the late 1960s, at least one (1) gasoline underground storage tank (UST) and dispenser were located on the east side of the residential house. This is located approximately 20-30 feet west of Flaugherty Run Road, between the utility pole and the intersection. Mr. Mauro was unsure of when the UST(s) were installed, how long they were in-service or how the UST(s) may have been closed out. No records of proper tank closure could be located. The lack of tank closure documentation and the unknown condition of the underlying soils is an environmental concern.

- Mr. Mauro stated that the former owners of the property had poor housekeeping. The subject site was used to store various scattered debris and was in a constant state of disrepair. Furthermore, the large number of cars seen in aerial photographs from 1969 to 1975 belonged to a man who stored and repaired cars on the subject site. The lack of housekeeping coupled with the nature of site activities is an environmental concern.
- Unger Recreational Vehicles (now Burk's Lawn and Saw) located at 800 Flaugherty Run Road recorded two (2) 2,000-gallon gasoline USTs and were classified in the EDR database search as "Closed Without a Permit." As such, the lack of a closure report is an environmental concern.
- Based on the undulating topography of the surrounding area, and the relative flat surface of the site (observed during the site visit), there is the potential that imported materials of unknown origin were used to level the site. As such, this is an environmental concern.

As part of the Phase I ESA, AGES recommended a comprehensive soil investigation for the southern half of the site and a limited investigation of the northern half of the site.

FIELD WORK

On August 11, 2021, AGES completed the excavation of three (3) trenches and four (4) test pits to characterize near surface soils to determine the presence/absence of USTs related to the former fuel dispenser and other former onsite activities/buildings identified by the current landowner, Mr. Mauro. Excavation work using a mini excavator was provided by EnviroServ. A total of four (4) soil samples were collected based on visual, olfactory, and photoionization detector (PID) field data. Photographs of the site investigation and excavation work are included in Attachment A.

The field investigation commenced in the southeast corner of the site within proximity of the former fuel dispenser (Trench 1). Two (2) fuel pipes, approximately 2" diameter, were located within Trench 1. Both pipes recorded a petroleum odor and registered a PID level of approximately 40 parts per million (ppm). The fuel pipes originated from the area of the former dispenser. Soil sample FLA-SS0001-40001 was collected from 1.5 feet below ground surface (bgs) where both pipes converged. No signs of petroleum impacts were observed and PID levels in exposed soils were recorded at 1.5 ppm.

From the dispenser, the fuel pipes ran parallel to Flaugherty Run Road in a northerly direction until south of the utility pole where they turned 90 degrees east toward Flaugherty Run Road. Due to the presence of a concrete berm just below the ground surface; the proximity of Flaugherty Run Road and utility pole; and an undefined property boundary, further investigation toward the east was not possible during this phase of work. Although no USTs were observed

during this investigation, the excavation of two (2) fuel pipes indicated the potential presence of two (2) USTs under Flaugherty Run Road. A pit was excavated to a depth of seven (7) feet bgs within a section of Trench 1, directly to the west of the potential tank area to evaluate for the presence of impacted soils. The top two (2) feet of soils were predominantly composed of fill materials while soils from two (2) to seven (7) feet bgs were classified as naturally occurring gray/brown clay. Soil sample FLA-SS0002-40001 was collected in the test pit at a depth of 6.5 feet bgs (Figure 1). No signs of petroleum impacted soils were observed and PID levels were recorded at 0.5 ppm.

Trenches 2 and 3 were excavated to approximately three (3) feet bgs (Figure 1). Fill material was observed to a depth of approximately two (2) feet bgs. The fill material was composed of asphalt, brick, blacked soils, crushed terracotta tiles, and concrete fragments. Below two (2) feet, the soils were composed of gray/brown clay. No signs of petroleum impacted soils were observed and PID levels were recorded at 0.5 ppm. No soil samples were therefore collected at this location.

Four (4) test pits were excavated in the northern half of the site to evaluate near surface soils. Test Pit 1 and Test Pit 2 were excavated in the general area of the southeast and northeast corners of the former storage building, respectively (Figure 1). The test pits were excavated to a total depth of six (6) feet bgs. Both excavations were composed of fill materials similar to the trenches described above however, the fill materials were present at a greater depth, approximately four (4) feet bgs. Underlying the fill materials was natural gray/brown clay. No signs of petroleum impacted soils were observed and PID levels were recorded at 0 ppm. No soil samples were therefore collected at either location.

Test Pit 3 was excavated in the northwest portion of the site (Figure 1). This test pit was excavated to a depth of seven (7) feet bgs. Black asphaltic materials were observed in Test Pit 3 to a depth of five (5) feet bgs. Gray/brown clay was observed from five (5) feet bgs to seven (7) feet bgs. Soil sample FLA-SS0003-40001 was collected at a depth of four (4) feet bgs from the black asphaltic material and recorded a PID level of 0 ppm.

Test Pit 4 was excavated in the northern-central portion of the site (Figure 1). This test pit was excavated to a depth of five (5) feet bgs and was predominantly composed of crushed concrete material. The mini excavator reached refusal at approximately five (5) feet bgs. Soil sample FLA-SS0004-40001, composed of the fill material, was collected at five (5) feet bgs and recorded a PID level of 0 ppm.

All samples were placed in appropriate laboratory glassware, placed in a cooler with ice, and shipped next day to Pace Analytical Laboratories in Greensburg, Pennsylvania. Samples FLA-SS0001-40001 and FLA-SS0002-40001 were analyzed for Benzene, Toluene, Ethyl Benzene, Xylene (Total BTEX), Cumene, Naphthalene, 1,2,4 and 1,3,5 Trimethyl benzene, Dichloroethane, Dibromoethane, and Lead (Total). Samples FLA-SS0003-40001 and FLA-

SS0004-40001 were analyzed for Total BTEX, Polyaromatic Hydrocarbons (PAHs), Percent Moisture, and Total RCRA Metals.

All field work was conducted in accordance with standard industry practices. To ensure sample integrity, all samples were handled and shipped in accordance with strict chain-of-custody protocol.

RESULTS

Analytical results for the soil samples are summarized in Table 1. The analytical laboratory report is provided in Attachment B. The analytical results were compared to relevant Pennsylvania Department of Environmental Protection (PADEP) Statewide Health Standards Medium-Specific Concentrations (MSCs) for Direct Contact Residential and Non-Residential Values in soil.

No Volatile Organic Compounds (VOCs) were detected above the MSCs in any of the soil samples.

Arsenic (12.8 milligrams per kilogram [mg/kg]) was detected above the MSC (12 mg/kg) in sample FLA-SS0003-40001. This result is well below the Non-Residential MSCs of 61 mg/kg (0-2 feet) and 190,000 mg/kg (2-15 feet). All results for Chromium were less than the Residential MSC for Trivalent Chromium (190,000 mg/kg). Although Hexavalent Chromium is not typically present in natural conditions, as a conservative measure, the results were compared to the MSC for Hexavalent Chromium. The results exceeded the Residential MSC (4 mg/kg) for Hexavalent Chromium at FLA-SS0003-40001 (11.7 mg/kg) and FLA-SS0004-40001 (20.1 mg/kg); both results are well below the Non-Residential MSCs of 220 mg/kg (0-2 feet) and 20,000 mg/kg (2-15 feet). No other metals were detected above MSCs in any sample.

One (1) Polycyclic Aromatic Hydrocarbon (PAH), Benzo(a)pyrene, was detected above the Residential MSC (0.58 mg/kg) at 0.632 mg/kg at FLA-SS0004-40001. This result is well below the Non-Residential MSCs of 12 mg/kg (0-2 feet) and 190,000 mg/kg (2-15 feet). No other PAHs were detected above MSCs in any sample.

Mr. Max Feldman
September 1, 2021
Page 5 of 5

CLOSING

If you have any questions concerning this letter report, please feel free to contact us at (412) 264-6453. Thank you again for the opportunity to be of service.

Sincerely,

Applied Geology and Environmental Science, Inc.

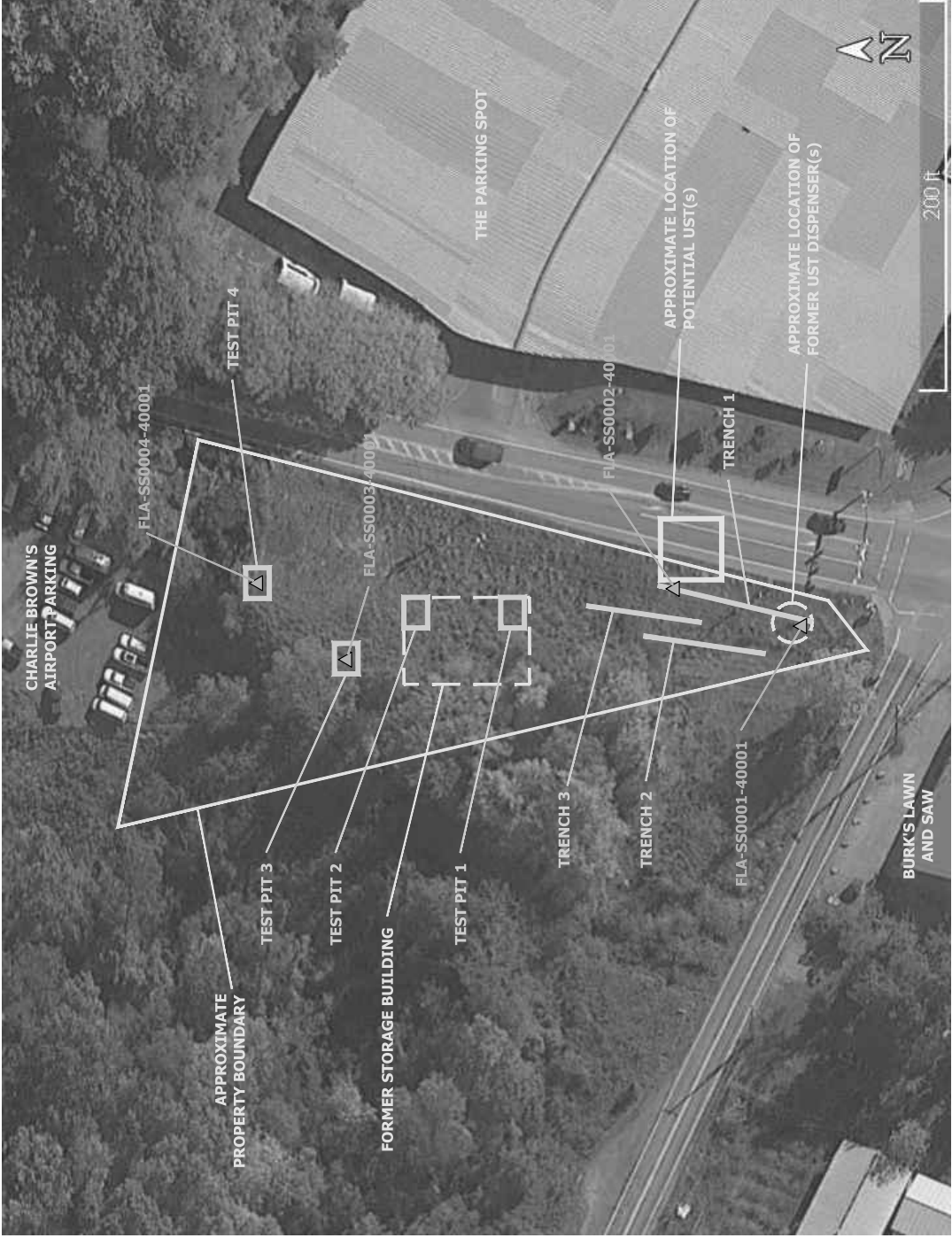
A handwritten signature in black ink, appearing to read 'ZL', with a stylized, flowing script.

Zachary Lieb
Senior Scientist I

A handwritten signature in black ink, appearing to read 'IF', with a stylized, flowing script.

Ian Farrar
Chief Scientist

FIGURE



LEGEND:
▲ SURFACE SOIL SAMPLE LOCATION

DOWN BY	JM	MAX FELDMAN
DATE		PHASE II ENVIRONMENTAL SITE ASSESSMENT
CHECKED BY		700 FLAUGHERTY RUN ROAD
JOB NO.	2021187-2-FEL	FINDLAY TOWNSHIP, ALLEGHENY COUNTY, PENNSYLVANIA
DWG FILE	_2021187_Feldman_Test Pits.ph2.dwg	SAMPLE LOCATION MAP
DRAWING SCALE	NOT TO SCALE	DRAWING NAME
		FIGURE 1
		REV. 0



2402 Hookstown Grade Road, Suite 200
Clinton, PA 15026
412.264.6453

TABLE

Summary of Soil Analytical Results
700 Flaugherty Run Road
Findlay Township, Allegheny County, Pennsylvania

PARAMETERS	Soil Screening Criteria ¹			FLA-SS0001-40001	FLA-SS0002-40001	FLA-SS0003-40001	FLA-SS0004-40001
	MSC Residential (0-15 feet)	MSC Non-Residential (0-2 feet)	MSC Non-Residential (2-15 feet)	8/11/2021 (1.5 feet bgs)	8/11/2021 (6.5 feet bgs)	8/11/2021 (4 feet bgs)	8/11/2021 (5 feet bgs)
Volatiles Organics							
Units							
Benzene	57,000	290,000	330,000	11.2	< 6.8	< 4.6	< 7.3
1,2-Dibromomethane	740	3,700	4,300	< 9.3	< 6.8	NA	NA
1,2-Dichloroethane	17,000	86,000		< 9.3	< 6.8	NA	NA
Ethylbenzene	180,000	890,000	1,000,000	< 9.3	< 6.8	< 4.6	< 7.3
Isopropylbenzene (Cumene)	7,700,000	10,000,000	10,000,000	< 9.3	< 6.8	NA	NA
Naphthalene	160,000	760,000	190,000,000	< 9.3	< 6.8	90.4	100
Toluene	10,000,000	10,000,000	10,000,000	< 9.3	< 6.8	< 4.6	< 7.3
Trimethylbenzene, 1,2,4-	130,000	560,000	640,000	< 9.3	< 6.8	NA	NA
Trimethylbenzene, 1,3,5-	2,200,000	10,000,000	10,000,000	< 9.3	< 6.8	NA	NA
Total Xylene	1,900,000	8,000,000	9,100,000	< 27.9	< 20.4	< 13.9	< 21.8
Polycyclic Aromatic Hydrocarbons							
Units							
Acenaphthene	13,000,000	190,000,000	190,000,000	NA	NA	< 71.8	< 73.9
Acenaphthylene	13,000,000	190,000,000	190,000,000	NA	NA	< 71.8	< 73.9
Anthracene	66,000,000	190,000,000	190,000,000	NA	NA	< 71.8	< 73.9
Benzo(a)anthracene	6,000	130,000	190,000,000	NA	NA	322	426
Benzo(a)pyrene	580	12,000	190,000,000	NA	NA	393	632
Benzo(b)fluoranthene	3,500	76,000	190,000,000	NA	NA	784	1,370
Benzo(g,h,i)perylene	13,000,000	190,000,000	190,000,000	NA	NA	99.1	130
Chrysene	35,000	760,000	190,000,000	NA	NA	319	444
Dibenz(a,h)anthracene	1,000	22,000	190,000,000	NA	NA	< 71.8	< 73.9
Fluoranthene	8,800,000	130,000,000	190,000,000	NA	NA	426	565
Fluorene	8,800,000	130,000,000	190,000,000	NA	NA	< 71.8	< 73.9
Indeno(1,2,3-cd)pyrene	3,500	130,000,000	190,000,000	NA	NA	81.9	129
2-Methylnaphthalene	880,000	130,000,000	190,000,000	NA	NA	145	< 73.9
Phenanthrene	66,000,000	190,000,000	190,000,000	NA	NA	150	116
Pyrene	6,600,000	96,000,000	190,000,000	NA	NA	401	533
RCRA Metals							
Units							
Arsenic	12	61	190,000	NA	NA	12.8	6.2
Barium	44,000	190,000	190,000	NA	NA	86.2	155
Cadmium	110	1,600	190,000	NA	NA	< 0.30	< 0.30
Chromium*	4	220	20,000	NA	NA	11.7	20.1
Lead	500	1,000	190,000	134	15.8	16.3	38.8
Selenium	1,100	16,000	190,000	NA	NA	1.3	< 0.80
Silver	1,100	16,000	190,000	NA	NA	< 0.59	< 0.60
Mercury	35	510	190,000	NA	NA	0.12	0.12

Notes:

(1) Values reflect Medium-Specific Concentrations obtained from Tables 3a & Tables 4a of Appendix A under 25 Pa Code §250

MSC Residential: Medium-Specific Concentrations For Regulated Substances in Soil Residential 0-15 feet - Direct Contact

MSC Non-Residential: Medium-Specific Concentrations For Regulated Substances in Soil Non Residential 0-2 feet and 2-15 feet - Direct Contact

MSC - Indicates an Exceedance

NA: Analyte not tested

* Medium Specific Concentrations for Chromium VI

ATTACHMENT A
ONSITE PHOTOGRAPHS

APPLIED GEOLOGY AND ENVIRONMENTAL SCIENCE, INC.
PHOTOGRAPHIC RECORD
PHOTOGRAPH NUMBERS 1 AND 2

CLIENT:

Mr. Max Feldman

PROJECT NUMBER:

2021187

SITE NAME:

700 Flaugherty Run Road

SITE LOCATION:

Findlay Township, Allegheny County, Pennsylvania

PHOTOGRAPHER:

AGES, Inc.

DATE:

August 11, 2021

DIRECTION:

North

COMMENTS:

Beginning excavation of Trench 1.



PHOTOGRAPHER:

AGES, Inc.

DATE:

August 11, 2021

DIRECTION:

East

COMMENTS:

Fuel piping next to Flaugherty Run Road.




APPLIED GEOLOGY AND ENVIRONMENTAL SCIENCE, INC.
PHOTOGRAPHIC RECORD
PHOTOGRAPH NUMBERS 3 AND 4


CLIENT: Mr. Max Feldman	PROJECT NUMBER: 2021187
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SITE NAME: 700 Flaugherty Run Road	SITE LOCATION: Findlay Township, Allegheny County, Pennsylvania
--	---


PHOTOGRAPHER: AGES, Inc.	
------------------------------------	---

DATE: August 11, 2021	
---------------------------------	---


DIRECTION: NW	
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COMMENTS: Fuel piping and fill materials close to former fuel dispenser location.	
---	---

PHOTOGRAPHER: AGES, Inc.	
------------------------------------	--

DATE: August 11, 2021	
---------------------------------	--

DIRECTION: South	
----------------------------	--

COMMENTS: Excavation to 7 feet below ground surface to the west of potential tank location. SS0002 collected here.	
--	--

APPLIED GEOLOGY AND ENVIRONMENTAL SCIENCE, INC.
PHOTOGRAPHIC RECORD
PHOTOGRAPH NUMBERS 5 AND 6

CLIENT:

Mr. Max Feldman

PROJECT NUMBER:

2021187

SITE NAME:

700 Flaugherty Run Road

SITE LOCATION:

Findlay Township, Allegheny County, Pennsylvania

PHOTOGRAPHER:

AGES, Inc.

DATE:

August 11, 2021

DIRECTION:

North

COMMENTS:

Excavation of Trench 2.



PHOTOGRAPHER:

AGES, Inc.

DATE:

August 11, 2021

DIRECTION:

NE

COMMENTS:

Excavation of Trench 3.



APPLIED GEOLOGY AND ENVIRONMENTAL SCIENCE, INC.
PHOTOGRAPHIC RECORD
PHOTOGRAPH NUMBERS 7 AND 8

CLIENT: Mr. Max Feldman	PROJECT NUMBER: 2021187
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SITE NAME: 700 Flaugherty Run Road	SITE LOCATION: Findlay Township, Allegheny County, Pennsylvania
--	---

PHOTOGRAPHER: AGES, Inc.

DATE: August 11, 2021

DIRECTION: South

COMMENTS: Test Pit 1. Six (6) feet below ground surface.
--



PHOTOGRAPHER: AGES, Inc.

DATE: August 11, 2021

DIRECTION: West

COMMENTS: Test Pit 2. Six (6) feet below ground surface.
--



APPLIED GEOLOGY AND ENVIRONMENTAL SCIENCE, INC.
PHOTOGRAPHIC RECORD
PHOTOGRAPH NUMBERS 9 AND 10

CLIENT:

Mr. Max Feldman

PROJECT NUMBER:

2021187

SITE NAME:

700 Flaugherty Run Road

SITE LOCATION:

Findlay Township, Allegheny County, Pennsylvania

PHOTOGRAPHER:

AGES, Inc.

DATE:

August 11, 2021

DIRECTION:

North

COMMENTS:

Test Pit 3. Seven (7) feet below ground surface.



PHOTOGRAPHER:

AGES, Inc.

DATE:

August 11, 2021

DIRECTION:

NA

COMMENTS:

Test Pit 4. Five (5) feet below ground surface.



ATTACHMENT B

**LABORATORY ANALYTICAL REPORT
(PACE ANALYTICAL LABORATORIES, INC.)**

August 30, 2021

Zach Lieb
Applied Geology
2402 Hookstown Grade Road
Clinton, PA 15026

RE: Project: 700 Flaugherly
Pace Project No.: 30435644

Dear Zach Lieb:

Enclosed are the analytical results for sample(s) received by the laboratory on August 12, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

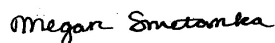
The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

Revision 1 - This report replaces the August, 27, 2021 report. This project was revised on August, 30, 2021 to revise Work ID and Sample IDs. (Greensburg, PA)

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Megan J. Smetanka
megan.smetanka@pacelabs.com
(724)850-5600
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: 700 Flaugherty

Pace Project No.: 30435644

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 04222CA

Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

Delaware Certification

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Florida: Cert E871149 SEKS WET

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas/TNI Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA180012

Louisiana DEQ/TNI Certification #: 4086

Maine Certification #: 2017020

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification #: 9991

Missouri Certification #: 235

Montana Certification #: Cert0082

Nebraska Certification #: NE-OS-29-14

Nevada Certification #: PA014572018-1

New Hampshire/TNI Certification #: 297617

New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-010

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: 02867

Texas/TNI Certification #: T104704188-17-3

Utah/TNI Certification #: PA014572017-9

USDA Soil Permit #: P330-17-00091

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 9526

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

Wyoming Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 700 Flaugherty

Pace Project No.: 30435644

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30435644001	FLA-SS0001-40001	Solid	08/11/21 10:30	08/12/21 16:40
30435644002	FLA-SS0002-40001	Solid	08/11/21 10:50	08/12/21 16:40
30435644003	FLA-SS0003-40001	Solid	08/11/21 13:50	08/12/21 16:40
30435644004	FLA-SS0004-40001	Solid	08/11/21 14:10	08/12/21 16:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 700 Flaugherty

Pace Project No.: 30435644

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30435644001	FLA-SS0001-40001	EPA 6010B	CTS	1	PASI-PA
		EPA 8260B	ARG	14	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30435644002	FLA-SS0002-40001	EPA 6010B	CTS	1	PASI-PA
		EPA 8260B	ARG	14	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30435644003	FLA-SS0003-40001	EPA 6010B	CTS	7	PASI-PA
		EPA 7471A	CTS	1	PASI-PA
		EPA 8270D by SIM	CF1	18	PASI-PA
		EPA 8260B	ARG	8	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30435644004	FLA-SS0004-40001	EPA 6010B	CTS	7	PASI-PA
		EPA 7471A	CTS	1	PASI-PA
		EPA 8270D by SIM	CF1	18	PASI-PA
		EPA 8260B	ARG	8	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 700 Flaugherty

Pace Project No.: 30435644

Method: EPA 6010B

Description: 6010 MET ICP

Client: Applied Geology and Environmental Science, Inc

Date: August 30, 2021

General Information:

4 samples were analyzed for EPA 6010B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3050B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 460332

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30435563001

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2222629)
- Barium

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 700 Flaugherty

Pace Project No.: 30435644

Method: EPA 7471A

Description: 7471 Mercury

Client: Applied Geology and Environmental Science, Inc

Date: August 30, 2021

General Information:

2 samples were analyzed for EPA 7471A by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7471A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 700 Flaugherty

Pace Project No.: 30435644

Method: EPA 8270D by SIM

Description: 8270D MSSV PAH by SIM

Client: Applied Geology and Environmental Science, Inc

Date: August 30, 2021

General Information:

2 samples were analyzed for EPA 8270D by SIM by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

ED: Due to the extract's physical characteristics, the analysis was performed at dilution.

- FLA-SS0003-40001 (Lab ID: 30435644003)
- FLA-SS0004-40001 (Lab ID: 30435644004)

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

QC Batch: 460178

IS: The internal standard response is below criteria. Results may be biased high.

- FLA-SS0003-40001 (Lab ID: 30435644003)
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Benzo(g,h,i)perylene
 - Indeno(1,2,3-cd)pyrene
- FLA-SS0004-40001 (Lab ID: 30435644004)
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Benzo(g,h,i)perylene
 - Dibenzo(a,h)anthracene
 - Indeno(1,2,3-cd)pyrene
- MS (Lab ID: 2221920)
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Benzo(g,h,i)perylene
 - Dibenzo(a,h)anthracene
 - Indeno(1,2,3-cd)pyrene
- MSD (Lab ID: 2221921)
 - Benzo(a)pyrene

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 700 Flaugherty

Pace Project No.: 30435644

Method: EPA 8270D by SIM

Description: 8270D MSSV PAH by SIM

Client: Applied Geology and Environmental Science, Inc

Date: August 30, 2021

QC Batch: 460178

IS: The internal standard response is below criteria. Results may be biased high.

- Benzo(b)fluoranthene
- Benzo(g,h,i)perylene
- Dibenz(a,h)anthracene
- Indeno(1,2,3-cd)pyrene

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: 460178

ST: Surrogate recovery was above laboratory control limits. Results may be biased high.

- LCS (Lab ID: 2221813)
- 2-Fluorobiphenyl (S)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 460178

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30435644004

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2221920)
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
- MSD (Lab ID: 2221921)
 - Anthracene
 - Benzo(a)anthracene
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Benzo(g,h,i)perylene
 - Chrysene
 - Fluoranthene
 - Indeno(1,2,3-cd)pyrene
 - Phenanthrene
 - Pyrene

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2221920)
 - Naphthalene

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 700 Flaugherty

Pace Project No.: 30435644

Method: EPA 8270D by SIM

Description: 8270D MSSV PAH by SIM

Client: Applied Geology and Environmental Science, Inc

Date: August 30, 2021

QC Batch: 460178

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30435644004

R1: RPD value was outside control limits.

- MSD (Lab ID: 2221921)
 - Anthracene
 - Benzo(a)anthracene
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Benzo(g,h,i)perylene
 - Chrysene
 - Dibenzo(a,h)anthracene
 - Fluoranthene
 - Indeno(1,2,3-cd)pyrene
 - Phenanthrene
 - Pyrene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 700 Flaugherty

Pace Project No.: 30435644

Method: EPA 8260B

Description: 8260B MSV

Client: Applied Geology and Environmental Science, Inc

Date: August 30, 2021

General Information:

4 samples were analyzed for EPA 8260B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 5035A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 461287

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

Analyte Comments:

QC Batch: 461287

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- FLA-SS0001-40001 (Lab ID: 30435644001)
 - 1,2-Dichloroethane
 - 1,2-Dibromoethane (EDB)
 - 1,2,4-Trimethylbenzene

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 700 Flaugherty

Pace Project No.: 30435644

Method: EPA 8260B

Description: 8260B MSV

Client: Applied Geology and Environmental Science, Inc

Date: August 30, 2021

Analyte Comments:

QC Batch: 461287

1c: A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

- FLA-SS0001-40001 (Lab ID: 30435644001)

- 1,3,5-Trimethylbenzene
- Benzene
- Ethylbenzene
- Isopropylbenzene (Cumene)
- Naphthalene
- Toluene

- FLA-SS0002-40001 (Lab ID: 30435644002)

- 1,2-Dichloroethane
- 1,2-Dibromoethane (EDB)
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Benzene
- Ethylbenzene
- Isopropylbenzene (Cumene)
- Naphthalene
- Toluene

- FLA-SS0003-40001 (Lab ID: 30435644003)

- Benzene
- Ethylbenzene
- Toluene

- FLA-SS0004-40001 (Lab ID: 30435644004)

- Benzene
- Ethylbenzene
- Toluene

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 700 Flaugherty
Pace Project No.: 30435644

Sample: FLA-SS0001-40001 **Lab ID: 30435644001** Collected: 08/11/21 10:30 Received: 08/12/21 16:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010B Preparation Method: EPA 3050B Pace Analytical Services - Greensburg								
Lead	134	mg/kg	0.56	1	08/17/21 13:09	08/19/21 10:37	7439-92-1	
8260B MSV								
Analytical Method: EPA 8260B Preparation Method: EPA 5035A Pace Analytical Services - Greensburg								
Benzene	11.2	ug/kg	9.3	1	08/23/21 10:52	08/24/21 02:30	71-43-2	1c
1,2-Dibromoethane (EDB)	ND	ug/kg	9.3	1	08/23/21 10:52	08/24/21 02:30	106-93-4	1c
1,2-Dichloroethane	ND	ug/kg	9.3	1	08/23/21 10:52	08/24/21 02:30	107-06-2	1c
Ethylbenzene	ND	ug/kg	9.3	1	08/23/21 10:52	08/24/21 02:30	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	9.3	1	08/23/21 10:52	08/24/21 02:30	98-82-8	1c
Naphthalene	ND	ug/kg	9.3	1	08/23/21 10:52	08/24/21 02:30	91-20-3	1c
Toluene	ND	ug/kg	9.3	1	08/23/21 10:52	08/24/21 02:30	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	9.3	1	08/23/21 10:52	08/24/21 02:30	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	9.3	1	08/23/21 10:52	08/24/21 02:30	108-67-8	1c
Xylene (Total)	ND	ug/kg	27.9	1	08/23/21 10:52	08/24/21 02:30	1330-20-7	
Surrogates								
Toluene-d8 (S)	93	%	70-130	1	08/23/21 10:52	08/24/21 02:30	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130	1	08/23/21 10:52	08/24/21 02:30	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130	1	08/23/21 10:52	08/24/21 02:30	17060-07-0	
Dibromofluoromethane (S)	114	%	70-130	1	08/23/21 10:52	08/24/21 02:30	1868-53-7	
Percent Moisture								
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg								
Percent Moisture	19.5	%	0.10	1		08/17/21 13:29		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 700 Flaugherty
Pace Project No.: 30435644

Sample: FLA-SS0002-40001 **Lab ID: 30435644002** Collected: 08/11/21 10:50 Received: 08/12/21 16:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010B Preparation Method: EPA 3050B Pace Analytical Services - Greensburg								
Lead	15.8	mg/kg	0.59	1	08/17/21 13:09	08/19/21 10:43	7439-92-1	
8260B MSV								
Analytical Method: EPA 8260B Preparation Method: EPA 5035A Pace Analytical Services - Greensburg								
Benzene	ND	ug/kg	6.8	1	08/23/21 10:52	08/24/21 02:58	71-43-2	1c
1,2-Dibromoethane (EDB)	ND	ug/kg	6.8	1	08/23/21 10:52	08/24/21 02:58	106-93-4	1c
1,2-Dichloroethane	ND	ug/kg	6.8	1	08/23/21 10:52	08/24/21 02:58	107-06-2	1c
Ethylbenzene	ND	ug/kg	6.8	1	08/23/21 10:52	08/24/21 02:58	100-41-4	1c
Isopropylbenzene (Cumene)	ND	ug/kg	6.8	1	08/23/21 10:52	08/24/21 02:58	98-82-8	1c
Naphthalene	ND	ug/kg	6.8	1	08/23/21 10:52	08/24/21 02:58	91-20-3	1c
Toluene	ND	ug/kg	6.8	1	08/23/21 10:52	08/24/21 02:58	108-88-3	1c
1,2,4-Trimethylbenzene	ND	ug/kg	6.8	1	08/23/21 10:52	08/24/21 02:58	95-63-6	1c
1,3,5-Trimethylbenzene	ND	ug/kg	6.8	1	08/23/21 10:52	08/24/21 02:58	108-67-8	1c
Xylene (Total)	ND	ug/kg	20.4	1	08/23/21 10:52	08/24/21 02:58	1330-20-7	
Surrogates								
Toluene-d8 (S)	94	%	70-130	1	08/23/21 10:52	08/24/21 02:58	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130	1	08/23/21 10:52	08/24/21 02:58	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130	1	08/23/21 10:52	08/24/21 02:58	17060-07-0	
Dibromofluoromethane (S)	117	%	70-130	1	08/23/21 10:52	08/24/21 02:58	1868-53-7	
Percent Moisture								
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg								
Percent Moisture	22.4	%	0.10	1		08/17/21 13:29		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 700 Flaugherty
Pace Project No.: 30435644

Sample: FLA-SS0003-40001 **Lab ID: 30435644003** Collected: 08/11/21 13:50 Received: 08/12/21 16:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010B Preparation Method: EPA 3050B Pace Analytical Services - Greensburg								
Arsenic	12.8	mg/kg	0.49	1	08/16/21 07:08	08/17/21 09:11	7440-38-2	
Barium	86.2	mg/kg	2.0	1	08/16/21 07:08	08/17/21 09:11	7440-39-3	
Cadmium	ND	mg/kg	0.30	1	08/16/21 07:08	08/17/21 09:11	7440-43-9	
Chromium	11.7	mg/kg	0.49	1	08/16/21 07:08	08/17/21 09:11	7440-47-3	
Lead	16.3	mg/kg	0.49	1	08/16/21 07:08	08/17/21 09:11	7439-92-1	
Selenium	1.3	mg/kg	0.79	1	08/16/21 07:08	08/17/21 09:11	7782-49-2	
Silver	ND	mg/kg	0.59	1	08/16/21 07:08	08/17/21 09:11	7440-22-4	

7471 Mercury

Analytical Method: EPA 7471A Preparation Method: EPA 7471A
Pace Analytical Services - Greensburg

Mercury	0.12	mg/kg	0.10	1	08/18/21 12:16	08/19/21 10:23	7439-97-6	
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8270D MSSV PAH by SIM

Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	ND	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	83-32-9	ED
Acenaphthylene	ND	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	208-96-8	ED
Anthracene	ND	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	120-12-7	ED
Benzo(a)anthracene	322	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	56-55-3	ED
Benzo(a)pyrene	393	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	50-32-8	ED, IS
Benzo(b)fluoranthene	784	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	205-99-2	ED, IS, Ip
Benzo(g,h,i)perylene	99.1	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	191-24-2	ED, IS
Chrysene	319	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	218-01-9	ED
Dibenz(a,h)anthracene	ND	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	53-70-3	ED
Fluoranthene	426	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	206-44-0	ED
Fluorene	ND	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	86-73-7	ED
Indeno(1,2,3-cd)pyrene	81.9	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	193-39-5	ED, IS
2-Methylnaphthalene	145	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	91-57-6	ED
Naphthalene	90.4	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	91-20-3	ED
Phenanthrene	150	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	85-01-8	ED
Pyrene	401	ug/kg	71.8	10	08/13/21 08:30	08/13/21 18:05	129-00-0	ED
Surrogates								
2-Fluorobiphenyl (S)	77	%.	37-88	10	08/13/21 08:30	08/13/21 18:05	321-60-8	
Terphenyl-d14 (S)	78	%.	10-128	10	08/13/21 08:30	08/13/21 18:05	1718-51-0	

8260B MSV

Analytical Method: EPA 8260B Preparation Method: EPA 5035A
Pace Analytical Services - Greensburg

Benzene	ND	ug/kg	4.6	1	08/23/21 10:52	08/24/21 03:27	71-43-2	1c
Ethylbenzene	ND	ug/kg	4.6	1	08/23/21 10:52	08/24/21 03:27	100-41-4	1c
Toluene	ND	ug/kg	4.6	1	08/23/21 10:52	08/24/21 03:27	108-88-3	1c
Xylene (Total)	ND	ug/kg	13.9	1	08/23/21 10:52	08/24/21 03:27	1330-20-7	
Surrogates								
Toluene-d8 (S)	100	%.	70-130	1	08/23/21 10:52	08/24/21 03:27	2037-26-5	
4-Bromofluorobenzene (S)	118	%.	70-130	1	08/23/21 10:52	08/24/21 03:27	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%.	70-130	1	08/23/21 10:52	08/24/21 03:27	17060-07-0	
Dibromofluoromethane (S)	110	%.	70-130	1	08/23/21 10:52	08/24/21 03:27	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 700 Flaugherty

Pace Project No.: 30435644

Sample: FLA-SS0003-40001 **Lab ID: 30435644003** Collected: 08/11/21 13:50 Received: 08/12/21 16:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture								
Analytical Method: ASTM D2974-87								
Pace Analytical Services - Greensburg								
Percent Moisture	8.0	%	0.10	1		08/17/21 13:29		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 700 Flaugherty
Pace Project No.: 30435644

Sample: FLA-SS0004-40001 **Lab ID: 30435644004** Collected: 08/11/21 14:10 Received: 08/12/21 16:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010B Preparation Method: EPA 3050B Pace Analytical Services - Greensburg								
Arsenic	6.2	mg/kg	0.50	1	08/16/21 07:08	08/17/21 09:13	7440-38-2	
Barium	155	mg/kg	2.0	1	08/16/21 07:08	08/17/21 09:13	7440-39-3	
Cadmium	ND	mg/kg	0.30	1	08/16/21 07:08	08/17/21 09:13	7440-43-9	
Chromium	20.1	mg/kg	0.50	1	08/16/21 07:08	08/17/21 09:13	7440-47-3	
Lead	38.8	mg/kg	0.50	1	08/16/21 07:08	08/17/21 09:13	7439-92-1	
Selenium	ND	mg/kg	0.80	1	08/16/21 07:08	08/17/21 09:13	7782-49-2	
Silver	ND	mg/kg	0.60	1	08/16/21 07:08	08/17/21 09:13	7440-22-4	
7471 Mercury								
Analytical Method: EPA 7471A Preparation Method: EPA 7471A Pace Analytical Services - Greensburg								
Mercury	0.12	mg/kg	0.10	1	08/18/21 12:16	08/19/21 10:28	7439-97-6	
8270D MSSV PAH by SIM								
Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg								
Acenaphthene	ND	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	83-32-9	ED
Acenaphthylene	ND	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	208-96-8	ED
Anthracene	ND	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	120-12-7	ED,MH, R1
Benzo(a)anthracene	426	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	56-55-3	ED,MH, R1
Benzo(a)pyrene	632	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	50-32-8	ED,IS, MH,R1
Benzo(b)fluoranthene	1370	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	205-99-2	ED,IS,Ip, MH,R1
Benzo(g,h,i)perylene	130	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	191-24-2	ED,IS, MH,R1
Chrysene	444	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	218-01-9	ED,MH, R1
Dibenz(a,h)anthracene	ND	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	53-70-3	ED,IS, R1
Fluoranthene	565	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	206-44-0	ED,MH, R1
Fluorene	ND	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	86-73-7	ED
Indeno(1,2,3-cd)pyrene	129	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	193-39-5	ED,IS, MH,R1
2-Methylnaphthalene	ND	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	91-57-6	
Naphthalene	100	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	91-20-3	ED,ML
Phenanthrene	116	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	85-01-8	ED,MH, R1
Pyrene	533	ug/kg	73.9	10	08/13/21 08:30	08/13/21 18:25	129-00-0	ED,MH, R1
Surrogates								
2-Fluorobiphenyl (S)	68	%.	37-88	10	08/13/21 08:30	08/13/21 18:25	321-60-8	
Terphenyl-d14 (S)	74	%.	10-128	10	08/13/21 08:30	08/13/21 18:25	1718-51-0	
8260B MSV								
Analytical Method: EPA 8260B Preparation Method: EPA 5035A Pace Analytical Services - Greensburg								
Benzene	ND	ug/kg	7.3	1	08/23/21 10:52	08/24/21 03:55	71-43-2	1c

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 700 Flaugherly

Pace Project No.: 30435644

Sample: FLA-SS0004-40001 **Lab ID: 30435644004** Collected: 08/11/21 14:10 Received: 08/12/21 16:40 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV								
Analytical Method: EPA 8260B Preparation Method: EPA 5035A								
Pace Analytical Services - Greensburg								
Ethylbenzene	ND	ug/kg	7.3	1	08/23/21 10:52	08/24/21 03:55	100-41-4	1c
Toluene	ND	ug/kg	7.3	1	08/23/21 10:52	08/24/21 03:55	108-88-3	1c
Xylene (Total)	ND	ug/kg	21.8	1	08/23/21 10:52	08/24/21 03:55	1330-20-7	
Surrogates								
Toluene-d8 (S)	94	%.	70-130	1	08/23/21 10:52	08/24/21 03:55	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	70-130	1	08/23/21 10:52	08/24/21 03:55	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130	1	08/23/21 10:52	08/24/21 03:55	17060-07-0	
Dibromofluoromethane (S)	112	%.	70-130	1	08/23/21 10:52	08/24/21 03:55	1868-53-7	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Pace Analytical Services - Greensburg								
Percent Moisture	10.8	%	0.10	1		08/17/21 13:29		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 700 Flaugherty
Pace Project No.: 30435644

QC Batch: 460706	Analysis Method: EPA 7471A
QC Batch Method: EPA 7471A	Analysis Description: 7471 Mercury
	Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30435644003, 30435644004

METHOD BLANK: 2224574 Matrix: Solid
Associated Lab Samples: 30435644003, 30435644004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.096	08/19/21 10:20	

LABORATORY CONTROL SAMPLE: 2224575

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.21	0.21	100	80-120	

MATRIX SPIKE SAMPLE: 2224577

Parameter	Units	30435644003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.12	0.54	0.64	94	80-120	

SAMPLE DUPLICATE: 2224576

Parameter	Units	30435644003 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	mg/kg	0.12	0.12	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 700 Flaugherty
Pace Project No.: 30435644

QC Batch:	460332	Analysis Method:	EPA 6010B
QC Batch Method:	EPA 3050B	Analysis Description:	6010 MET
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30435644003, 30435644004

METHOD BLANK: 2222626 Matrix: Solid

Associated Lab Samples: 30435644003, 30435644004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	0.49	08/17/21 08:13	
Barium	mg/kg	ND	2.0	08/17/21 08:13	
Cadmium	mg/kg	ND	0.29	08/17/21 08:13	
Chromium	mg/kg	ND	0.49	08/17/21 08:13	
Lead	mg/kg	ND	0.49	08/17/21 08:13	
Selenium	mg/kg	ND	0.78	08/17/21 08:13	
Silver	mg/kg	ND	0.59	08/17/21 08:13	

LABORATORY CONTROL SAMPLE: 2222627

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	48.1	96	80-120	
Barium	mg/kg	50	51.8	104	80-120	
Cadmium	mg/kg	50	50.1	100	80-120	
Chromium	mg/kg	50	49.4	99	80-120	
Lead	mg/kg	50	46.5	93	80-120	
Selenium	mg/kg	50	48.0	96	80-120	
Silver	mg/kg	25	24.6	98	80-120	

MATRIX SPIKE SAMPLE: 2222629

Parameter	Units	30435563001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	6.0	55.2	55.9	91	75-125	
Barium	mg/kg	105	55.2	184	144	75-125	MH
Cadmium	mg/kg	ND	55.2	49.8	90	75-125	
Chromium	mg/kg	23.2	55.2	68.2	82	75-125	
Lead	mg/kg	11.9	55.2	61.4	90	75-125	
Selenium	mg/kg	0.99	55.2	46.6	83	75-125	
Silver	mg/kg	ND	27.5	24.4	88	75-125	

SAMPLE DUPLICATE: 2222628

Parameter	Units	30435563001 Result	Dup Result	RPD	Max RPD	Qualifiers
Arsenic	mg/kg	6.0	6.4	7	20	
Barium	mg/kg	105	124	17	20	
Cadmium	mg/kg	ND	.12J		20	

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QUALITY CONTROL DATA

Project: 700 Flaugherty

Pace Project No.: 30435644

SAMPLE DUPLICATE: 2222628

Parameter	Units	30435563001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium	mg/kg	23.2	21.8	7	20	
Lead	mg/kg	11.9	12.3	3	20	
Selenium	mg/kg	0.99	.69J		20	
Silver	mg/kg	ND	ND		20	

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QUALITY CONTROL DATA

Project: 700 Flaugherty

Pace Project No.: 30435644

QC Batch: 460512

Analysis Method: EPA 6010B

QC Batch Method: EPA 3050B

Analysis Description: 6010 MET

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30435644001, 30435644002

METHOD BLANK: 2223413

Matrix: Solid

Associated Lab Samples: 30435644001, 30435644002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	ND	0.49	08/19/21 10:33	

LABORATORY CONTROL SAMPLE: 2223414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	49	45.4	93	80-120	

MATRIX SPIKE SAMPLE: 2223416

Parameter	Units	30435644001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	134	56.5	187	95	75-125	

SAMPLE DUPLICATE: 2223415

Parameter	Units	30435644001 Result	Dup Result	RPD	Max RPD	Qualifiers
Lead	mg/kg	134	133	1	20	

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QUALITY CONTROL DATA

Project: 700 Flaugherty
Pace Project No.: 30435644

QC Batch: 461287 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035A Analysis Description: 8260B MSV UST-SOIL
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30435644001, 30435644002, 30435644003, 30435644004

METHOD BLANK: 2227117 Matrix: Solid
Associated Lab Samples: 30435644001, 30435644002, 30435644003, 30435644004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	08/23/21 21:46	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	08/23/21 21:46	
1,2-Dichloroethane	ug/kg	ND	5.0	08/23/21 21:46	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	08/23/21 21:46	
Benzene	ug/kg	ND	5.0	08/23/21 21:46	
Ethylbenzene	ug/kg	ND	5.0	08/23/21 21:46	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	08/23/21 21:46	
Naphthalene	ug/kg	ND	5.0	08/23/21 21:46	
Toluene	ug/kg	ND	5.0	08/23/21 21:46	
Xylene (Total)	ug/kg	ND	15.0	08/23/21 21:46	
1,2-Dichloroethane-d4 (S)	%.	103	70-130	08/23/21 21:46	
4-Bromofluorobenzene (S)	%.	106	70-130	08/23/21 21:46	
Dibromofluoromethane (S)	%.	112	70-130	08/23/21 21:46	
Toluene-d8 (S)	%.	92	70-130	08/23/21 21:46	

LABORATORY CONTROL SAMPLE: 2227118

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	12.7	64	58-126	
1,2-Dibromoethane (EDB)	ug/kg	20	13.8	69	60-115	
1,2-Dichloroethane	ug/kg	20	14.4	72	62-112	
1,3,5-Trimethylbenzene	ug/kg	20	12.6	63	56-124	
Benzene	ug/kg	20	15.5	77	51-123	
Ethylbenzene	ug/kg	20	13.8	69	61-123	
Isopropylbenzene (Cumene)	ug/kg	20	15.4	77	62-136	
Naphthalene	ug/kg	20	14.2	71	65-110	
Toluene	ug/kg	20	13.6	68	56-120	
Xylene (Total)	ug/kg	60	38.9	65	57-125	
1,2-Dichloroethane-d4 (S)	%.			99	70-130	
4-Bromofluorobenzene (S)	%.			102	70-130	
Dibromofluoromethane (S)	%.			104	70-130	
Toluene-d8 (S)	%.			94	70-130	

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QUALITY CONTROL DATA

Project: 700 Flaugherty
Pace Project No.: 30435644

QC Batch:	460178	Analysis Method:	EPA 8270D by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270D/3546 MSSV PAH by SIM
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30435644003, 30435644004

METHOD BLANK: 2221812 Matrix: Solid

Associated Lab Samples: 30435644003, 30435644004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Methylnaphthalene	ug/kg	ND	6.7	08/13/21 13:07	
Acenaphthene	ug/kg	ND	6.7	08/13/21 13:07	
Acenaphthylene	ug/kg	ND	6.7	08/13/21 13:07	
Anthracene	ug/kg	ND	6.7	08/13/21 13:07	
Benzo(a)anthracene	ug/kg	ND	6.7	08/13/21 13:07	
Benzo(a)pyrene	ug/kg	ND	6.7	08/13/21 13:07	
Benzo(b)fluoranthene	ug/kg	ND	6.7	08/13/21 13:07	
Benzo(g,h,i)perylene	ug/kg	ND	6.7	08/13/21 13:07	
Chrysene	ug/kg	ND	6.7	08/13/21 13:07	
Dibenz(a,h)anthracene	ug/kg	ND	6.7	08/13/21 13:07	
Fluoranthene	ug/kg	ND	6.7	08/13/21 13:07	
Fluorene	ug/kg	ND	6.7	08/13/21 13:07	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	6.7	08/13/21 13:07	
Naphthalene	ug/kg	ND	6.7	08/13/21 13:07	
Phenanthrene	ug/kg	ND	6.7	08/13/21 13:07	
Pyrene	ug/kg	ND	6.7	08/13/21 13:07	
2-Fluorobiphenyl (S)	%	88	37-88	08/13/21 13:07	
Terphenyl-d14 (S)	%	98	10-128	08/13/21 13:07	

LABORATORY CONTROL SAMPLE: 2221813

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Methylnaphthalene	ug/kg	132	138	105	40-110	
Acenaphthene	ug/kg	132	126	95	47-104	
Acenaphthylene	ug/kg	132	130	99	49-115	
Anthracene	ug/kg	132	130	99	52-115	
Benzo(a)anthracene	ug/kg	132	140	106	54-130	
Benzo(a)pyrene	ug/kg	132	149	113	59-126	
Benzo(b)fluoranthene	ug/kg	132	138	105	55-133	
Benzo(g,h,i)perylene	ug/kg	132	141	107	54-127	
Chrysene	ug/kg	132	139	106	56-115	
Dibenz(a,h)anthracene	ug/kg	132	145	110	55-129	
Fluoranthene	ug/kg	132	139	105	56-125	
Fluorene	ug/kg	132	133	101	50-114	
Indeno(1,2,3-cd)pyrene	ug/kg	132	143	109	55-129	
Naphthalene	ug/kg	132	133	101	45-102	
Phenanthrene	ug/kg	132	127	96	50-110	
Pyrene	ug/kg	132	138	105	56-122	
2-Fluorobiphenyl (S)	%			93	37-88 ST	

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QUALITY CONTROL DATA

Project: 700 Flaugherty

Pace Project No.: 30435644

LABORATORY CONTROL SAMPLE: 2221813

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	‰.			103	10-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2221920 2221921

Parameter	Units	30435644004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Methylnaphthalene	ug/kg	ND	147	147	127	137	62	70	12-138	8	20	
Acenaphthene	ug/kg	ND	147	147	112	137	69	86	24-109	20	20	
Acenaphthylene	ug/kg	ND	147	147	158	140	94	83	26-119	12	20	
Anthracene	ug/kg	ND	147	147	160	544	79	341	32-115	109	20	MH,R1
Benzo(a)anthracene	ug/kg	426	147	147	597	2310	116	1290	30-133	118	20	MH,R1
Benzo(a)pyrene	ug/kg	632	147	147	904	2190	184	1060	11-151	83	20	IS,MH, R1
Benzo(b)fluoranthene	ug/kg	1370	147	147	1970	5130	408	2570	25-140	89	20	IS,lp, MH,R1
Benzo(g,h,i)perylene	ug/kg	130	147	147	175	330	31	137	10-126	61	20	IS,MH, R1
Chrysene	ug/kg	444	147	147	614	1910	116	999	10-142	103	20	MH,R1
Dibenz(a,h)anthracene	ug/kg	ND	147	147	88.0	170	60	116	13-127	64	20	IS,R1
Fluoranthene	ug/kg	565	147	147	610	3610	31	2080	20-139	142	20	MH,R1
Fluorene	ug/kg	ND	147	147	124	143	84	98	28-114	15	20	
Indeno(1,2,3-cd)pyrene	ug/kg	129	147	147	171	374	28	167	15-123	75	20	IS,MH, R1
Naphthalene	ug/kg	100	147	147	119	143	13	29	15-104	18	20	ML
Phenanthrene	ug/kg	116	147	147	208	1310	63	816	10-135	145	20	MH,R1
Pyrene	ug/kg	533	147	147	609	2770	51	1530	13-139	128	20	MH,R1
2-Fluorobiphenyl (S)	‰.						67	70	37-88			
Terphenyl-d14 (S)	‰.						77	79	10-128			

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QUALITY CONTROL DATA

Project: 700 Flaugherty

Pace Project No.: 30435644

QC Batch:	460531	Analysis Method:	ASTM D2974-87
QC Batch Method:	ASTM D2974-87	Analysis Description:	Dry Weight/Percent Moisture
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30435644001, 30435644002, 30435644003, 30435644004

SAMPLE DUPLICATE: 2223592

Parameter	Units	30436097009 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.1	18.1	5	20	

SAMPLE DUPLICATE: 2223593

Parameter	Units	30435426001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	0.10 U	0.11		20	

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QUALIFIERS

Project: 700 Flaugherty
Pace Project No.: 30435644

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 461287

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1c A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
ED Due to the extract's physical characteristics, the analysis was performed at dilution.
IS The internal standard response is below criteria. Results may be biased high.
Ip Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria specified in the test method. Sample results included are reported as individual isomers, but the lab and the client must recognize them as an isomeric pair.
MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
ML Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
R1 RPD value was outside control limits.
ST Surrogate recovery was above laboratory control limits. Results may be biased high.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 700 Flaugherty

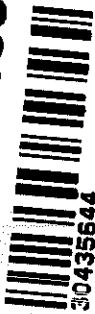
Pace Project No.: 30435644

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30435644001	FLA-SS0001-40001	EPA 3050B	460512	EPA 6010B	460790
30435644002	FLA-SS0002-40001	EPA 3050B	460512	EPA 6010B	460790
30435644003	FLA-SS0003-40001	EPA 3050B	460332	EPA 6010B	460416
30435644004	FLA-SS0004-40001	EPA 3050B	460332	EPA 6010B	460416
30435644003	FLA-SS0003-40001	EPA 7471A	460706	EPA 7471A	460785
30435644004	FLA-SS0004-40001	EPA 7471A	460706	EPA 7471A	460785
30435644003	FLA-SS0003-40001	EPA 3546	460178	EPA 8270D by SIM	460241
30435644004	FLA-SS0004-40001	EPA 3546	460178	EPA 8270D by SIM	460241
30435644001	FLA-SS0001-40001	EPA 5035A	461287	EPA 8260B	461291
30435644002	FLA-SS0002-40001	EPA 5035A	461287	EPA 8260B	461291
30435644003	FLA-SS0003-40001	EPA 5035A	461287	EPA 8260B	461291
30435644004	FLA-SS0004-40001	EPA 5035A	461287	EPA 8260B	461291
30435644001	FLA-SS0001-40001	ASTM D2974-87	460531		
30435644002	FLA-SS0002-40001	ASTM D2974-87	460531		
30435644003	FLA-SS0003-40001	ASTM D2974-87	460531		
30435644004	FLA-SS0004-40001	ASTM D2974-87	460531		

REPORT OF LABORATORY ANALYSIS

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WO#: 30435644



CHAIN-OF-CUSTODY Analytical Request Document

LAB USE ONLY- Affix Workorder N

ALL SHADED

Company: AGES		Billing Information:	
Address: 2402 Hookstown Grade Rd Clinton, PA 15026			
Report To: Ian Farrar		Email To:	
Copy To: Zach Leeb		Site Collection Info/Address:	
Customer Project Name/Number: 200 Flaugherly/2021187		State: PA County/City: Clinton	
Phone: 724-333-1111		Time Zone Collected: ET	
Email: zach@ages.com		Compliance Monitoring? [] Yes [] No	
Collected By (print): Zach Leeb		DW PWS ID #: 2021187	
Collected By (signature): <i>[Signature]</i>		DW Location Code: Standard	
Sample Disposal: [] Same Day [] Next Day [] 13 Day [] 14 Day [] 15 Day [] Hold:		Field Filtered (if applicable): [] Yes [] No	
Turnaround Date Required: Standard		Immediately Packed on Ice: [] Yes [] No	
Rush: [] Same Day [] Next Day [] 13 Day [] 14 Day [] 15 Day [] Hold:		Analysis: [] Yes [] No	
* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)			
Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date Time
FLA-SS0001-40001	Soil	Grab	8/12/21 1030
FLA-SS0002-40001	Soil	Grab	8/12/21 1050
FLA-SS0003-40001	Soil	Grab	8/12/21 1350
FLA-SS0004-40001	Soil	Grab	8/12/21 1410
Customer Remarks / Special Conditions / Possible Hazards:		Type of Ice Used: Wet	Blue Dry None
Packing Material Used: Wet		Radchem sample(s) screened (<500 cpm): Wet	
Relinquished by/Company: (Signature) <i>[Signature]</i>		Date/Time: 8-12-21 1600	Received by/Company: (Signature) <i>[Signature]</i>
Relinquished by/Company: (Signature) <i>[Signature]</i>		Date/Time: 8-12-21 1640	Received by/Company: (Signature) <i>[Signature]</i>
Relinquished by/Company: (Signature) <i>[Signature]</i>		Date/Time: 8-12-21 1640	Received by/Company: (Signature) <i>[Signature]</i>

Container Preservative Type **

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses

Lab Sample Receipt Checklist:	Lab Profile/Line:
Custody Seals Present/Intact <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	Custody Signatures Present <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N
Collector Signatures Present <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	Bottles Intact <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N
Correct Bottles <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	Sufficient Volume <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N
Samples Received on Ice <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	VOA - Headspace Acceptable <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N
USDA Regulated Soils <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	Samples in Holding Time <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N
Residual Chlorine Present <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	Cl Strips: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N
Sample pH Acceptable <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	pH Strips: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N
Sulfide Present <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	Sulfide Strips: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N
Lead Acetate Strips: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	Lead Acetate Strips: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N
LAB USE ONLY:	LAB USE ONLY:
Lab Sample # / Comments:	Lab Sample # / Comments:

Lab Sample Temperature Info:

Temp Blank Received: **13** Y ☒ N ☒ NA

Therm ID#: **31**

Cooler 1 Temp Upon Receipt: **31** °C

Cooler 1 Therm Corr. Factor: **0.0** °C

Cooler 1 Corrected Temp: **31** °C

Comments: **OK 8/12/21**

Trip Blank Received: Y ☒ N ☒ NA

HCL MeOH TSP Other

Non Conformance(s): **(YES) / NO** Page: **1** of: **1**

SHORT HOLDS PRESENT (<72 hours): Y ☒ N ☒ N/A

Lab Tracking #: **2454785**

Samples received via: FEDEX UPS Client Courier **Pace Courier**

Date/Time: **8/12/21 3:53 PM**

Table #: **2454785**

Acctnum: **9330**

Template: **9330**

Prelogin: **9330**

PM: **8/12/21 16:40**

PB: **8/12/21 16:40**



Sample Receiving Non-Conf

Date: 8/12/21	Evaluated by: APLOCK
Client: AGES	

WO#: 30435644

PM: MS1 Due Date: 08/26/21
CLIENT: APPLIED GEOL

1. If Chain-of-Custody (COC) is not received: contact client and if necessary, fill out a COC and indicate that it was filled out by lab personnel. Note issues on this NCF.

2. If COC is incomplete, check applicable issues below and add details where appropriate:

Collection date/time missing or incorrect	Analyses or analytes: missing or clarification needed	Samples listed on COC do not match samples received (missing, additional, etc.)
Sample IDs on COC do not match sample labels	Required trip blanks were not received	Required signatures are missing

Comments/Details/Other Issues not listed above:

3. Sample integrity issues: check applicable issues below and add details where appropriate:

Samples: Past holding time	Samples: Condition needs to be brought to lab personnel's attention (details below)	Preservation: Improper
Samples: Not field filtered	Containers: Broken or compromised	Temperature: not within acceptance criteria (typically 0-6C)
Samples: Insufficient volume received	Containers: Incorrect	Temperature: Samples arrived frozen
Samples: Cooler damaged or compromised	Custody Seals: Missing or compromised on samples, trip blanks or coolers	Vials received with improper headspace
Samples: contain chlorine or sulfides	Packing Material: Insufficient/Improper	Other:

Comments/Details:

- NO preservation listed

4. If Samples not preserved properly and Sample Receiving adjusts pH, add details below:

Sample ID:	Date/Time:	Amount/type pres added:
Preserved by:	Initial and Final pH:	Lot # of pres added:
Sample ID:	Date/Time:	Amount/type pres added:
Preserved by:	Initial and Final pH:	Lot # of pres added:
Sample ID:	Date/Time:	Amount/type pres added:
Preserved by:	Initial and Final pH:	Lot # of pres added:

5. Client Contact: If client is contacted for any issue listed above, fill in details below:

Client:	Contacted per:
PM Initials:	Date/Time:

Client Comments/Instructions:



Sample Container Count

WO#: 30435644

PM: MS1

Due Date: 08/26/21

CLIENT: APPLIED GEOL

Profile Number

14176

Client

Site

Applied Geo

700 Flaugherty

Notes

Sample Line Item	Matrix	AG1H	AG1S	AG1T	AG2U	AG3S	AG3U	AG5U	AG5T	BG1U	BG2U	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	GCUB	VG9H	VG9T	VG9U	VOAK	WG9U	WGKU	ZPLC
1	SL																								J			
2																									J			
3																									J			
4																									J			
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

Container Codes

Glass	
GJN	1 Gallon Jug with HNO3
AG5U	100mL amber glass unpreserved
AG5T	100mL amber glass Na Thiosulfate
GJN	1 Gallon Jug
AG1S	1L amber glass H2SO4
AG1H	1L amber glass HCl
AG1T	1L amber glass Na Thiosulfate
BG1U	1L clear glass unpreserved
AG3S	250mL amber glass H2SO4
AG3U	250mL amber glass unpreserved
DG9S	40mL amber VOA vial H2SO4
VG9U	40mL clear VOA vial
VG9T	40mL clear VOA vial Na Thiosulfate
VG9H	40mL clear VOA vial HCl
JGFU	4oz amber wide jar
WG9U	4oz wide jar unpreserved
BG2U	500mL clear glass unpreserved
AG2U	500mL amber glass unpreserved
WGKU	8oz wide jar unpreserved

Plastic / Misc.	
GCUB	1 Gallon Cubitainer
12GN	1/2 Gallon Cubitainer
SP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NaOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved
EZI	5g Encore
VOAK	Kit for Volatile Solid
I	Wipe/Swab
ZPLC	Ziploc Bag
WT	Water
SL	Solid
OL	Non-aqueous liquid
WP	Wipe