



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.

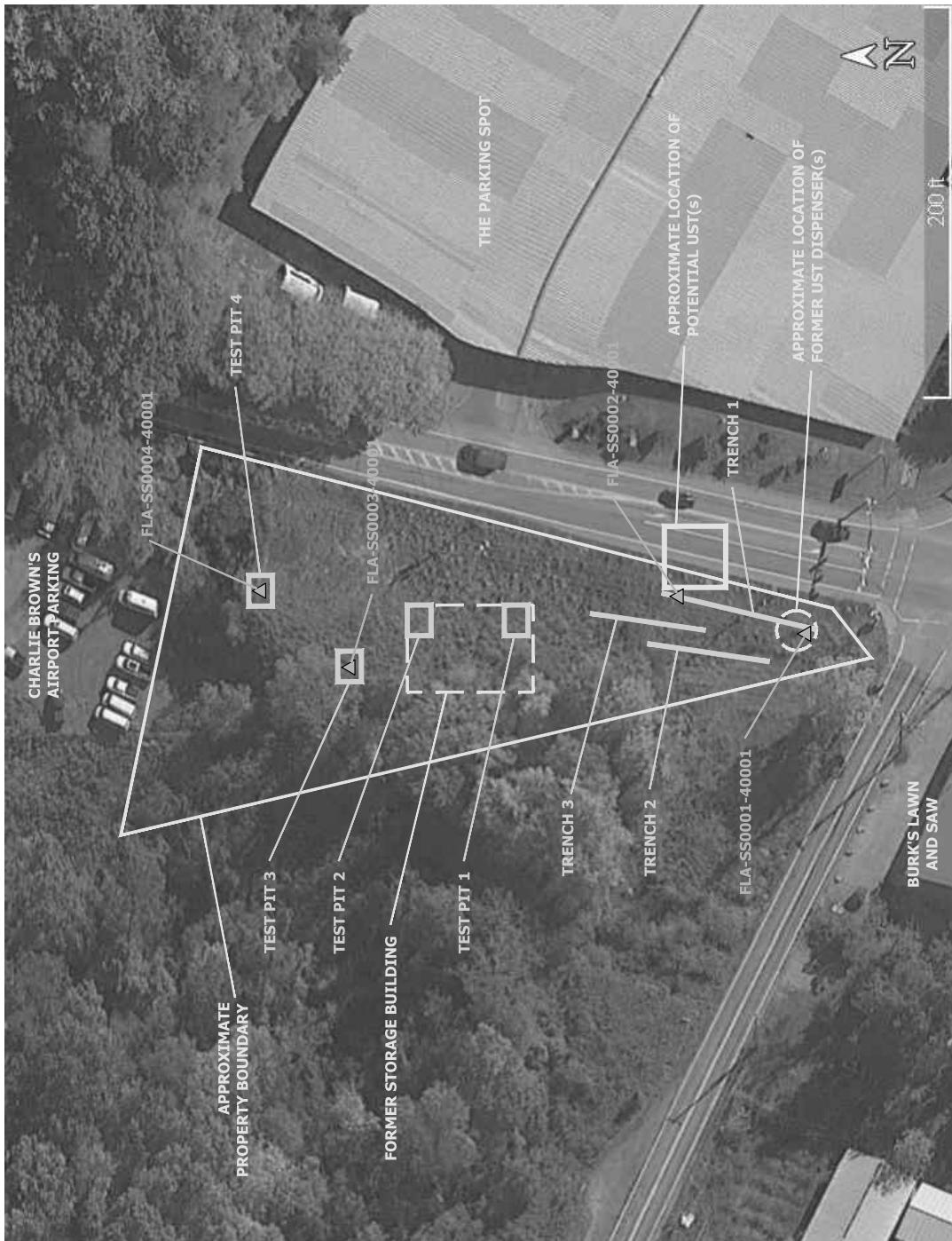


Zachary Lieb
Senior Scientist I



Ian Farrar
Chief Scientist

FIGURE



DRAWN BY	JM	MAX FELDMAN
DATE		PHASE II ENVIRONMENTAL SITE ASSESSMENT
CHECKED BY		700 FLAUGHERY RUN ROAD
JOB NO.	20211187-2-FEL	FINDLAY TOWNSHIP, ALLEGHENY COUNTY, PENNSYLVANIA
DWG FILE	20211187_Feldman_Test Pits_ph2.dwg	SAMPLE LOCATION MAP
DRAWING SCALE	NOT TO SCALE	DRAWING NAME
		FIGURE 1
		REV. 0

AGES 

Approved Geology And Environmental Sciences, Inc.
2402 Grade Road, Suite 200
Clinton, PA 15026
412.264.6453

LEGEND:

△ SURFACE SOIL SAMPLE LOCATION

Plot: 08/31/2021 16:10 20211187-Feldman-Faugherty Run Rd-Phase I and Phase II \CAD\1-20211187-Feldman_Test Pits_ph2.dwg

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)				
Volatile Organics							
Benzene	ug/kg	57,000	290,000	330,000	11.2	< 6.8	< 4.6
1,2-Dibromoethane	ug/kg	740	3,700	4,300	< 9.3	< 6.8	NA
1,2-Dichloroethane	ug/kg	17,000	86,000	98,000	< 9.3	< 6.8	NA
Ethylbenzene	ug/kg	180,000	890,000	1,000,000	< 9.3	< 6.8	< 4.6
Isopropylbenzene (Cumene)	ug/kg	7,700,000	10,000,000	10,000,000	< 9.3	< 6.8	NA
Naphthalene	ug/kg	160,000	760,000	190,000,000	< 9.3	< 6.8	90.4
Toluene	ug/kg	10,000,000	10,000,000	10,000,000	< 9.3	< 6.8	< 4.6
Trimethylbenzene, 1,2,4-	ug/kg	130,000	560,000	640,000	< 9.3	< 6.8	NA
Trimethylbenzene, 1,3,5-	ug/kg	2,200,000	10,000,000	10,000,000	< 9.3	< 6.8	NA
Total Xylene	ug/kg	1,900,000	8,000,000	9,100,000	< 27.9	< 20.4	< 13.9
Polyyclic Aromatic Hydrocarbons							
Acenaphthene	ug/kg	13,000,000	190,000,000	190,000,000	NA	NA	< 71.8
Acenaphthylene	ug/kg	13,000,000	190,000,000	190,000,000	NA	NA	< 71.8
Anthracene	ug/kg	66,000,000	190,000,000	190,000,000	NA	NA	< 71.8
Benzo(a)anthracene	ug/kg	6,000	130,000	190,000,000	NA	NA	322
Benzo(a)pyrene	ug/kg	580	12,000	190,000,000	NA	NA	393
Benzo(b)fluoranthene	ug/kg	3,500	76,000	190,000,000	NA	NA	784
Benzo(g,h,i)perylene	ug/kg	13,000,000	190,000,000	190,000,000	NA	NA	130
Chrysene	ug/kg	35,000	760,000	190,000,000	NA	NA	319
Dibenz(a,h)anthracene	ug/kg	1,000	22,000	190,000,000	NA	NA	< 71.8
Fluoranthene	ug/kg	8,800,000	130,000,000	190,000,000	NA	NA	426
Fluorene	ug/kg	8,800,000	130,000,000	190,000,000	NA	NA	< 71.8
Indeno[1,2,3-cd]pyrene	ug/kg	3,500	130,000,000	190,000,000	NA	NA	81.9
2-Methylnaphthalene	ug/kg	880,000	130,000,000	190,000,000	NA	NA	145
Phenanthrene	ug/kg	66,000,000	190,000,000	190,000,000	NA	NA	150
Pyrene	ug/kg	6,600,000	96,000,000	190,000,000	NA	NA	401
RCRA Metals							
Arsenic	mg/kg	12	61	190,000	NA	NA	12.8
Barium	mg/kg	44,000	190,000	190,000	NA	NA	86.2
Cadmium	mg/kg	110	1,600	190,000	NA	NA	< 0.30
Chromium*	mg/kg	4	220	20,000	NA	NA	11.7
Lead	mg/kg	500	1,000	190,000	134	15.8	16.3
Selenium	mg/kg	1,100	16,000	190,000	NA	NA	1.3
Silver	mg/kg	1,100	16,000	190,000	NA	NA	< 0.59
Mercury	mg/kg	35	510	190,000	NA	NA	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

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
SITE NAME: 700 Flaugherty Run Road	SITE LOCATION: Findlay Township, Allegheny County, Pennsylvania
PHOTOGRAPHER: AGES, Inc.	
DATE: August 11, 2021	
DIRECTION: NW	
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

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 Flaugherty
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

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

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

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

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

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

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

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

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

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

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

REPORT OF LABORATORY ANALYSIS

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

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

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

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
 - Dibenz(a,h)anthracene
 - Fluoranthene
 - Indeno(1,2,3-cd)pyrene
 - Phenanthrene
 - Pyrene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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

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

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

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

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

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

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

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

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

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	
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

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

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

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

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

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

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
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

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

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	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 700 Flaughertry

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	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

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	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

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	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

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	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

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	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

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	Max RPD	Max RPD	Max 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,Ip,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			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

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	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

QUALIFIERS

Project: 700 Flaughertry
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

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

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

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

W# : 30435644

Face Analytical®

CHAIN-OF-CUSTODY Analytical Request Document

LAB USE ONLY- Affix Workorder#

N

ACEs

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Billing Information:

Address: 402 Hockleyn Grade Rd Clinton, PA 15026
 Report To: Tan Fina
 Copy To: Zach Leek

Customer Project Name/Number:

200 Fluegerty / 2021187

Site Collection Info/Address:

/

Phone:

[] PT [] MT [] CT [] ET

Email:

[] Yes [] No

Site/Facility ID #:

DW PWS ID #:

Purchase Order #:

DW Location Code:

Quote #:

2021187

Turnaround Date Required:

Immediately Packed on Ice:

[] Yes [] No

[] Standard

Rush:

Field Filtered (if applicable):

[] Same Day [] Next Day

[] Yes [] No

[] 2 Day [] 3 Day [] 4 Day [] 5 Day

Analysis: [] No

(Expedite Charges Apply)

[] Hold:

[] Archive: _____

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Archive:

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

[] Hold:

[] Return

[] Dispose as appropriate

[] Return

Sample Receiving Non-Conf

WO# : 30435644

Date: 8/21/21

Evaluated by: AM/CK

Client: AGIES

Due Date: 08/26/21

PM: MS1

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:

**Job# : 30435644****Sample Container Count**PM : MS1
CLIENT : APPLIED GEOLApplied Geo
700 FlangrayDue Date: 08/26/21
Profile Number 14176

Site	Container Codes	Notes
1	AG1H	
2	AG2U	
3	AG3S	
4	AG4T	
5	AG5U	
6	AG63	
7	AG71	
8	AG80	
9	AG9S	
10	AG10	
11	AG11	
12	AG12	

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

Plastic / Misc.	
GCUB	1 Gallon Cubitainer
EZI	5g Encore
VOAK	Kit for Volatile Solid
BP1U	1L Wipe/Swab
BP2U	120mL Coliform Na Thiosulfate
BP3U	1L plastic HNO3
BP4U	1L plastic unpreserved
BP5T	120mL Coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP2N	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP4U	250mL plastic unpreserved
BP5C	250mL plastic NaOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved