



Setting the Standards for Innovative Environmental Solutions

PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT

WHITE PARK SOUTHSIDE TRAIL PROPERTY

**TAX PARCELS 31-09-048A-0006-0000, 31-09-048A-0007-0000,
31-09-0048-0041-0000, 31-09-0009-0024-0000, and 31-09-048A-0001-0000**

MORGANTOWN, MONONGALIA COUNTY, WEST VIRGINIA

BROWNFIELDS ASSESSMENT GRANT NUMBER BF-963692-01-0

May 31, 2022

Prepared for:

CITY OF MORGANTOWN, WEST VIRGINIA

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Setting the Standards for Innovative Environmental Solutions

May 31, 2022

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**Subject: Phase II Environmental Site Assessment Report
White Park Southside Trail Property**
Brownfield Assessment Grant Number BF-963692-01-0
Environmental Standards Project Number: 20219527

Dear Ms. Reaves:

Enclosed is the Phase II Environmental Site Assessment Report for White Park Southside Trail Property. The Phase II Environmental Site Assessment has confirmed impacts from historical activity on the Site.

We appreciate your assistance on this project. If you have any questions or need additional information, please feel free to contact us.

Sincerely,

Kelsey M. Morton
Staff Geoscientist II

Sincerely,

Leah D. Mistick, LRS
Project Geoscientist

Sincerely,

Lydia M. Work, LRS
Principal Chemist

Cc: Dawn Seeburger, LRS, Environmental, Resources & Consulting

Encl.

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ACRONYM GLOSSARY

AST	Aboveground Storage Tank
bgs	Below Ground Surface
BOPARC	Morgantown Board of Park and Recreation Commissioners
CERCLIS	Compensation, and Liability Information System
COC	Contaminant of Concern
COPC	Contaminant of Potential Concern
ERC	Environmental Resources and Consulting, LLC
ESA	Environmental Site Assessment
HRS	Hazard Ranking System
LRS	Licensed Remediation Specialist
mg/kg	milligram per kilogram
MS/MSD	Matrix Spike/Matrix Spike Duplicate
MUB	Morgantown Utility Board
OER	Office of Environmental Remediation
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PID	Photoionization Detector
PPM	Parts Per Million
PQS	Pennzoil Quaker State
QC	Quality Control
RBC	Risk-based Concentration
RCRA	Resource Conservation and Recovery Act
ROW	Right of Way
RSL	US EPA Regional Screening Level
SB	Subsurface Soil
SCS	Soil Conservation Service
SIM	Selective Ion Monitoring
SIR	Site Inspection Report
SPLP	Synthetic Precipitation Leaching Procedure
SS	Surface Soil
SVOC	Semivolatile Organic Compound
µg/kg	microgram per kilogram
USDA	U.S. Department of Agriculture
US EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
VRP	Voluntary Remediation Program
VRRA	West Virginia Voluntary Remediation and Redevelopment Act
WMS	Waste Management Section
WPS	White Park Southside
WVDEP	West Virginia Department of Environmental Protection
WVDNR	West Virginia Department of Natural Resources

1.0 INTRODUCTION

The West Virginia Land Stewardship Corporation (WVLSC) received a United States Environmental Protection Agency (US EPA) Brownfields Assessment Grant (Grant number BF-963692-01-0) to complete a community-wide assessment, including the completion of Phase II environmental site assessments (ESAs). The White Park Southside Trail (Site or Property) assessment work described herein was completed under a combination of funding from the City of Morgantown, West Virginia (City) and the WVLSC's Brownfields Assessment Grant.

WVLSC contracted Ms. Dawn Seeburger, owner and manager of Environmental, Resources & Consulting, LLC (ERC), to provide environmental consulting services. ERC contracted with Environmental Standards, Inc. (Environmental Standards) to provide field and reporting services for the White Park Southside Trail project. The City provided Environmental Standards access to the Property to complete the Phase II ESA (Appendix A, Consent for Access to Collect Soil Samples).

White Park consists of a 170-acre municipal park including playing fields, an ice rink, outdoor classrooms for the adjacent middle school, and more than 17 miles of hiking and biking trails. White Park is owned by the City. White Park lies at the northern end of an approximately 700-acre area that was operated as a crude oil tank farm by Standard Oil (formerly Pennzoil Quaker State [PQS] now Royal Dutch Shell [Shell]) from the late 1800s to the 1950s. The location of the Property is depicted in Figure 1, Topographic Map. Environmental investigations and remediations have occurred at White Park between 1987 and 2019, including sampling of groundwater, soil vapor, surface soils, and subsurface soils, as well as surface water and sediment in the on-site Cobun Creek reservoir. Standard Oil (a.k.a, PQS or Shell) has been identified as the responsible party for the associated historic contamination.

Based on the history of White Park and findings of previous assessments, a limited Phase II ESA investigation was recommended by Environmental Standards prior to construction of the proposed White Park Southside (WPS) trail. The term "limited" applies in this case because the assessment focused on the trail course, and not the entire property. The proposed WPS trail project is detailed in Figure 2, Site Location, Aerial Photograph. The trail corridor encroaches on parcel 31-09-0009-0024-0000 owned by Commercial Land Development, Inc., who agreed to include their property in the Phase II ESA. The WPS trail design corridor was wooded and undeveloped during the ESA.

Environmental Standards performed the Phase II ESA in two mobilizations, one in January 2022 and one in March 2022. The scope of the Phase II ESA included the collection of 65 surface soil samples, defined as 0-2 feet below ground surface (bgs), along the proposed trail corridor and four subsurface soil samples, between 2 and 8 feet bgs, in areas of potential borrow material. The analytical testing included Resource Conservation and Recovery Act (RCRA) metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, and zinc), polycyclic aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs; naphthalene only), selected based upon current West Virginia Department of Environmental Protection (WVDEP) requirements to analyze and report naphthalene as both a PAH and VOC in subsurface soils.

Environmental Standards has prepared this Phase II ESA Report for the City and the WVLSLSC, summarizing the Phase II ESA activities and the results of the laboratory analysis of samples collected.



2.0 SITE INFORMATION

2.1 Site Location

The White Park Site is located within the City of Morgantown, Monongalia County, West Virginia. The location of the Property is depicted in Figure 1, Site Topographic Map and in Figure 2, Site Location. The proposed WPS trail crosses five parcels totaling approximately 88.13 acres. The Cobun Creek Reservoir is located north of the proposed WPS trail, within White Park's boundaries. The remainder of White Park to the north is undeveloped, but there are several recreational areas (trails, ice rink, etc.) interspersed throughout. To the south of the WPS trail is a commercial area along Greenbag Road; east and west are both bordered by roadways, followed by moderately developed commercial areas.

2.2 Site Description

The portion of the White Park Property that encompasses the WPS trail project spans across three contiguous parcels owned by the City (31-09-048A-0006-0000, 31-09-048A-0007-0000, and 31-09-0048-0041-0000), which total approximately 88.13 acres. The proposed trail corridor also falls within or along the parcel boundaries of several other properties: 31-09-048A-0001-0000 (City of Morgantown Water Commission) and 31-09-0009-0024-0000 (Commercial Land Dev Inc.).

The WPS trail is a proposed 6,000-foot corridor of proposed recreational trail. The proposed WPS trail corridor is located within White Park and runs along the southern and eastern sides of Cobun Creek Reservoir, which serves as a supplemental potable water supply for the City. The trail Site is currently vacant and wooded, with a moderate and variable grade.

Municipality	Morgantown
County	Monongalia
Parcel IDs	31-09-048A-0006-0000, 31-09-048A-0007-0000, 31-09-0048-0041-0000, 31-09-0009-0024-0000, and 31-09-0009-0024-0000
Lot Size	31-09-048A-0006-0000 (40.740 acres) 31-09-048A-0007-0000 (7.118 acres) 31-09-0048-0041-0000 (33.51 acres) 31-09-0009-0024-0000 (3.711 acres) 31-09-048A-0001-0000 (3.051 acres)
Property Owners	City of Morgantown - 31-09-048A-0006-0000, 31-09-048A-0007-0000, 31-09-0048-0041-0000 Commercial Land Dev Inc. - 31-09-0009-0024-0000 City of Morgantown Water Commission - 31-09-048A-0001-0000
# of Buildings	None in area of proposed WPS trail
Additional Improvements and Site Features	None currently in area of proposed WPS trail; access to public services (water, sewage, electric)

No buildings are in the area of the proposed trail corridor; however, White Park hosts playing fields, an ice rink, outdoor classrooms for the adjacent middle school, and more than 17 miles of hiking and biking trails. There are commercial buildings associated with the Commercial

Land Dev Inc. property (parcel 31-09-0009-0024-0000); however, they are outside of the area included in investigation.

2.3 Historical Use of the Site

The 170-acre White Park Property, including the portion to be utilized for the WPS trail, was part of Standard Oil's (succeeded by Eureka Pipeline, Pennzoil-Quaker State, and Royal Dutch Shell) 700-acre South Morgantown Tank Farm. The tank farm was developed in the late 19th century and operated as such throughout the first half of the 20th century. Although largely abandoned by the late 1940s, a handful of aboveground storage tanks (ASTs) existed and may have been used for other purposes until the early 1970s. There are no ASTs currently on the Site. However, the locations of the historical ASTs are discernable by raised earthen dikes located throughout the Site.

In 1958, the Morgantown Utility Board (MUB) constructed a dam to form the Cobun Creek Reservoir. In 1973, the City of Morgantown acquired the Property and began developing a diverse park system.

2.4 Previous Environmental Investigations

2.4.1 1980s and 1990s

The Site was listed as a potentially hazardous waste site in the Compensation, and Liability Information System (CERCLIS) in August 1988 following an inspection and preliminary sampling investigation conducted by the West Virginia Department of Natural Resources, Waste Management Section (WVDNR WMS). The inspection was initiated by a report from a private citizen concerning tar-like deposits observed in an area remaining from a former crude oil tank farm. During the inspection, a tar-like substance with a petroleum odor was observed in a former dike area near the South Middle School, and additional tar-like deposits were observed along a small tributary stream that flowed into the Cobun Creek Reservoir.

A preliminary assessment (PA) was performed in March 1989 by WVDNR WMS, and a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site investigation was recommended. In April 1989, WVDNR WMS personnel inspected the Site.

In 1998, reclamation work was completed by the Eureka Pipeline Company at three dike areas near the ball fields with exposed hydrocarbon residues. These were identified as tank locations 44, 68, and 74. These are outside of the WPS trail Site. Please refer to Figure 3, Areas of Concern, 2010 SI. Subsequently, the WVDEP, Office of Environmental Remediation (OER) determined further assessment was warranted to determine potential risk associated with the Site and if the Site should undergo further investigation under CERCLA.

2.4.2 2010 Site Inspection and Soil Removal

A preliminary Hazard Ranking System (HRS) Site Score was calculated for the White Park CERCLIS site. Based on the preliminary HRS Site Score and knowledge the Cobun Creek Reservoir was potentially impacted by contaminants from the former tank farm, the US EPA and WVDEP, OER determined that a site inspection (SI) was warranted to assess potential risk associated with the Site and determine if the Site should undergo further action under CERCLA. An SI was performed under a pre-remedial cooperative agreement between the WVDEP and the US EPA Region III in 2010. Field sampling activities included 13 surface soil,

seven subsurface soil, two reservoir surface water, and two reservoir sediment samples. The samples were analyzed for VOCs, semivolatile organic compound (SVOCs) of which PAHs are a subset, RCRA 8 Metals, and polychlorinated biphenyls (PCBs). The investigation reported the following:

- Elevated concentrations of barium in the reservoir surface water
- Elevated levels of SVOCs in the reservoir sediments
- Arsenic, naphthalene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, methylene chloride, benzene, 1,2-dichloroethane, ethylbenzene, and 1,1,2,2-tetrachloroethane in soils at concentrations greater than their respective residential soil risk-based concentrations (RBCs)

The greatest concentration of noted contaminants were collected around observed free-product near former tank number 40 (refer to Figure 3). The Cobun Creek Reservoir was approximately 100 feet downgradient of the tank number 40 source of contamination. Former tank number 40 is within the WPS Site.

The following conclusions were stated in the SI Report (Triad, 2010):

- Contamination to site soils from historical land use (tank farm) exists
- Recreational visitors are being exposed to surface soil concentrations above residential soil RBCs
- The risk of a release to Cobun Creek Reservoir via overland flow exists

The following were recommended for consideration:

- Removal of the area of observed free-product in the diked area of tank number 40
- If not already in place, groundwater and future land use be restricted through a land use covenant or deed restriction

Pennzoil/Quaker State removed approximately 1,300 cubic yards of soil from the diked area of former tank number 40 and transported the impacted soils off site. Approximately 1,900 cubic yards of off-site backfill was imported from a virgin source approximately 1-mile south the Site. It was a hillside/hill cut at the southern terminus of Distributor Drive (MUB office located on intersection of Greenbag Road and Distributor Drive). Prior to importing the backfill to the Site, two characterization samples were collected and analyzed to determine that soils met WVDEP residential soil RBCs.

2.4.3 2018 Site Inspection Reassessment

In 2018, a site inspection reassessment (SIR) was performed under a pre-remedial cooperative agreement between the WVDEP and the US EPA Region III. The SIR was performed to qualitatively assess potential risk associated with the White Park CERCLIS Site and to determine whether the Site may be eligible for further investigation under CERCLA. Field sampling activities included collection of 11 surface soil, 5 subsurface soil, 5 surface water, 8 sediment samples, and 4 soil vapor samples. The media was analyzed for VOCs, SVOCs, metals, and PCBs. Elevated concentrations of metals were detected in surface water and sediment. Metals and PAH were detected in soils at concentrations greater than their respective action levels for residential soil RBCs. The greatest concentrations of the above-noted contaminants were collected in the surface impoundment areas of former tank numbers 30, 50, 60, 61, 62, and 74 (Figure 3). Based on the assessment activities, additional remedial activities were deemed warranted to protect human health and the environment from the previously identified on-site contaminants. Therefore, it was recommended to enter the Site into

the West Virginia Voluntary Remediation Program (VRP) to evaluate human health and ecological receptors and remedial options for the Site.

2.4.4 2019 MUB Phase II ESA and Soil Removal

The most recent investigation was a limited Phase II ESA of subsurface soils in June 2019 completed by MUB to assess contamination in the location of a proposed waterline. This waterline transects the Site running northeast to southwest, south of the reservoir. The ESA revealed evidence of contamination within the waterline right-of-way. 43 subsurface soil samples were collected and analyzed for metals, VOCs, and SVOCs. It was reported that low-level PAH and metals were identified in the subsurface soil of the proposed waterline.

MUB coordinated with the WVDEP and during construction of the waterline, the area was monitored by an environmental professional employed by Triad Engineering, Inc. (Triad). The findings revealed evidence of contamination in subsurface soils. A strong petroleum odor and soil staining was documented near the former tank number 40 location, south of the reservoir dam, which was presumably the same location remediated by Pennzoil/Quaker State in 2010. Triad documented that as excavation progressed northeast along the proposed waterline, evidence of petroleum contamination became less evident. Soils within identified contamination, as determined by field screening with a photoionization detector, were over excavated and stored onsite. The stockpiles were sampled and characterized to be non-hazardous. Based on interviews with City personnel, the excavated soils were disposed offsite at a local disposal facility. It is not recorded in the documents provided what material was used to backfill the waterline trench during construction.

No other supplemental documents or records of other environmental investigations were provided to Environmental Standards for review.

2.5 Current Use of the Site

The proposed WPS trail corridor is currently wooded and used by recreational visitors to White Park.

2.6 Site Geology and Hydrogeology

The area of the Site where the WPS trail is proposed lies at an elevation of approximately 950 to 1000 feet above mean sea level. The topography of the project area has a hilly and variable gradient, generally sloping towards the Cobun Creek Reservoir. Regionally, the slope trends west towards the Monongahela River.

The Appalachian Plateaus physiographic province underlies all of Monongalia County, including the White Park Property. Bedrock in the region is characteristically flat to gently folded shale, siltstone, and sandstone. Uppermost geology is the Conemaugh Group of the Pennsylvania Series, which consists of non-marine cyclic sequences of red and grey shale, siltstone, and sandstone; thin seams of limestone and coal are also present.

According to the U.S. Department of Agriculture's (USDA's) Soil Conservation Service (SCS) (<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>), primary soils in the vicinity of Property consist of Clarksburg silt loams, with minor contributions of Culleoka-Westmorland silt loams, Lobdell silt loams, and Urban Land. Clarksburg silt loams are moderately well drained and are derived from fine-loamy colluvium from shale, sandstone,

and limestone parent material. Urban land is largely introduced material.

Surface water is generally absorbed by the vegetative cover of the project area and park, with any runoff directed towards Cobun Creek and its associated Cobun Creek Reservoir, which discharges into the river. Under natural, unconfined aquifer conditions, shallow groundwater beneath the project area would reasonably be expected to flow towards the reservoir and Monongahela River. Based on a review of the online National Wetlands Inventory (<https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>), there are no wetlands located within the Site boundaries. Cobun Creek Reservoir is designated as a 12.17-acre freshwater pond; Cobun Creek incoming from the east is classified as a riverine habitat. The Monongahela River is approximately 0.25-miles downstream of the Site.

2.7 Selection of Contaminants of Potential Concern

Based on the history of White Park and findings of previous assessments, the following Contaminants of Potential Concern (COPCs) were identified for assessment in this ESA:

- Total Metals, both surface soils and subsurface soils
- PAHs, both surface soils and subsurface soils
- VOCs, subsurface soils only (naphthalene only)

3.0 SITE ASSESSMENT INVESTIGATION

3.1 Objectives

The objective of the Phase II ESA was to collect information about surface and near-surface soils at the Site to determine if COPCs identified during previous investigations have impacted the proposed WPS trail portion of White Park, specifically, define points of exposure in excess risk to a future WPS trail user. It is important to note portions of the trail intersect former tank locations, and samples were collected in these areas to represent an unbiased approach to potential trail use exposure.

3.2 Scope-of-Work

The scope of the Phase II ESA included the collection of 65 surface soil samples, defined as 0-2 feet bgs, and four subsurface soil samples, between 2 and 8 feet bgs. 63 of the surface soil samples were collected as one approximately every 100 feet along the proposed 6,000-foot trail corridor. Two surface soil samples (SS-58 and SS-60) and the four subsurface soil samples were collected in areas of potential borrow material.

Sample description and rationale for each sample are included on Table 1. Sample locations are depicted on Figure 4, Soil Sample Locations.

Due to frozen ground conditions in January 2022, Environmental Standards contracted with Geo-Environmental Drilling Company, Inc. (Geo-Environmental) to provide drilling services. The Geo-Environmental driller on site has West Virginia drilling license number 00587.

Samples were requested to be analyzed for the following COPCs, as summarized on Table 2:

- Metals (arsenic, barium, cobalt, copper, iron, lead, manganese, nickel, selenium, thallium, vanadium, zinc), both surface soils and subsurface soils
- PAHs, both surface soils and subsurface soils
- VOCs in subsurface soils only (naphthalene only)

All samples were laboratory analyzed by the Pace Analytical Services, LLC (Pace) network of laboratories, which are WVDEP-certified laboratories located in Greensburg, Pennsylvania and in Beaver, West Virginia.

Copies of the field records and are provided in Appendix B.

3.3 January 2022 Soil Boring Installation and Sample Collection

Environmental standards and Geo-Environmental employed a hollow-stem auger drilling rig to advance soil borings and collect soil samples (SS-01 through SS-46) on January 21 and January 24, 2022. At each soil boring location, a decontaminated split spoon was advanced and retrieved for the initial 2 feet bgs, followed by a deeper interval if the location warranted. Upon retrieval, the soil cores were visually inspected by an Environmental Standards professional for color, texture, and odor. Observations are documented in Appendix B.

Soil samples were then immediately transferred into certified-clean, laboratory-supplied bottleware using a clean pair of nitrile gloves, or if VOCs, a Terra Core™ sampler. After

collection, the containers were properly sealed and immediately placed upright in an iced-cooler pending packaging and shipment to the analytical laboratory.

Total soil samples collected in January 2022 include 46 surface and 4 subsurface locations.

The four subsurface soil borings, SS-03(6-8), SS-11(4-6), SS-15(4-6), and SS-30(4-6), were advanced to their maximum depths of 6 or 8 feet bgs due in part to the presence of an underground water line running at a shallow depth perpendicular to the reservoir, transecting the proposed trail, as well as due to the samples being largely for evaluation of soils for potential reuse as clean fill/cover. Excavation and soil reuse was not anticipated to be more than 8 ft bgs of the current topographic elevations.

When attempting to collect proposed subsurface soil samples from potential soil borrow areas, several refusals were encountered at extremely shallow depths, of 1-2 feet bgs. These refusals indicate shallow bedrock, as was also noted in previous reports completed at the Site. Sample locations where shallow refusals were noted include SS-19, SS-24, SS-25, SS-26, SS-27, SS-43, and SS-44.

Surface soil samples SS-17(0-2) and SS-40 (0-2) were selected for matrix spike/matrix spike duplicate (MS/MSD) quality control (QC) samples. Surface soil samples SS-01(0-2) and SS-28(0-2) were selected for the field QC duplicate samples. A trip blank sample for VOCs was also submitted to the laboratory for analysis.

3.4 March 2022 Surface Soil Sample Collection

On March 8, 2022, Environmental Standards staff remobilized to the Site and collected 19 surface soil samples (SS-47 through SS-65) via clean unused disposal scoops in areas that were not readably accessible during the January mobilization. Samples were immediately transferred into certified-clean, laboratory-supplied bottleware using a clean pair of nitrile gloves, or if VOCs, a Terra Core™ sampler. After collection, the containers were properly sealed and immediately placed upright in an ice-cooler pending packaging and shipment to the analytical laboratory.

Surface soil sample SS-64(0-2) was selected for the MS/MSD sample. Surface soil sample SS-60(0-2) was selected for the field duplicate samples. A trip blank sample for VOCs was also submitted to the laboratory for analysis.

3.5 Analytical Laboratory Services

Bottleware was labeled, placed into an iced container, and delivered with appropriate chain-of-custody documentation to Pace.

Samples were analyzed in accordance with the method requirements specified in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition* (SW-846); specifically, VOCs (naphthalene only) by US EPA SW-846 Method 8260C, PAHs by US EPA SW-846 Method 8270E with selective ion monitoring (SIM), metals by US EPA SW-846 Method 6010D, and mercury method EPA 7471B.

Copies of the Laboratory Analytical Results are provided in Appendix C.

4.0 NATURE AND EXTENT OF CONTAMINATION

Soil samples were collected to identify and characterize contaminants present at the Site that would be a potential risk to recreational trail users of the Site. This section of the report addresses the findings of the Phase II ESA investigation.

4.1 Recreational Use Regional Soil Screening Levels

The WVDEP and US EPA provide regional soil screening levels (RSLs) that are calculated based upon estimated human exposure to soils. Environmental Standards compared the Phase II ESA laboratory analytical data to calculated recreational RSLs to characterize the nature and extent of contamination in the context of the proposed recreational use as a trail.

The following exposure scenarios were used in the generation of the site-specific recreator RSLs (utilizing the US EPA regional screening level generator tool, https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search) for soil:

- Exposure frequency to a recreator of 114 days a year, estimated based on seasonal use between the months of March and November, averaging 3 days a week. Data provided by BOPARC.
- Exposure time to a recreator of 2 hours a day, estimated based on non-commuter use of the trail and average length of time using the trail per daily visit. Data provided by BOPARC.
- Hazard quotient not to exceed 1.0, set by the WVDEP.
- Cumulative cancer risk of 1×10^{-6} , set by the WVDEP.

Ross Brittain, WVDEP Toxicologist, was consulted in the use of the exposure scenarios and agreed with the appropriateness of the inputs. The US EPA RSL calculator weighs chemicals differently based on days of exposure versus hours of exposure. To be conservative, the RSL calculator was run two ways and the most conservative RSL was applied. The first was to calculate the site-specific RSLs using the exposure estimates above (114 days at 2 hours per day) and calculate the site-specific RSLs. The second was to calculate the total number of hours of expected exposure in a year (in this case, 228 hours a year), and divide by 24 to get the number of days of exposure in a year (in this case, 9.5 days a year). These exposure frequencies (9.5 days at 24 hours of exposure) were entered into the calculator and the site-specific RSLs derived. For each COPC, the exposure estimate of 114 days at 2 hours per day provided the more conservative RSL.

All surface soil results are summarized as compared to the calculated RSL on Table 3; subsurface soil results are summarized on Table 4. The RSL calculator output is provided as a supplement to Table 4.

4.1.1 Surface Soil Above RSLs

Environmental Standards compared the surface soil laboratory analytical data to the calculated recreational RSLs, to characterize the nature and extent of any surface soil contamination in the context of the proposed recreational use.

Metals

Laboratory analytical results indicate that the concentration of metals evaluated in surface soils collected at the Site are below the recreational soil RSLs, except for arsenic. Arsenic

occurs naturally in soils above RBCs and RSLs; therefore, a natural background RBC is applied as a standard for comparison. The arsenic in soil RBC used as comparison is the maximum background concentration published in the West Virginia Voluntary Remediation Program (VRP) Guidance Manual, *Table 3-3: Background Concentrations of Elements in WV Soils*. Arsenic above the maximum natural background RBC of 13.1 milligram per kilogram (mg/kg) was detected in the following surface soil samples:

Sample location	Arsenic concentration (mg/kg)
SS-07(0-2)	14.5
SS-12(0-2)	20.3
SS-13(0-2)	26.7
SS-14(0-2)	16.0
SS-18(0-2)	26.5
SS-21(0-2)	14.5
SS-23(0-2)	18.6
SS-29(0-2)	144
SS-51(0-2)	22.0
SS-59(0-2)	16.6
SS-60(0-2)	16.2
SS-62(0-2)	14.8
SS-63(0-2)	17.1

The source of the elevated concentrations of arsenic in the surface soil is unknown and may be indicative of a localized natural condition. Please refer to Section 4.2 for further analysis of the nature and extent of arsenic contamination at the Site.

PAHs

Laboratory analytical results indicate that there are PAH detections above the recreation RSLs at multiple surface soil sampling locations, as summarized below. The PAH compounds that exceed the RSL are benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene. Benzo[a]pyrene (BaP) is the PAH compound that exceeds the recreator soil RSL in the most locations and will be treated as a marker compound for soil impacts at the Site. The following surface soil sample locations had BaP concentrations above the RSL of 353 microgram per kilogram (µg/kg): SS-17(0-2), SS-23(0-2), SS-25(0-2), SS-35(0-2), SS-47(0-2), SS-48 (0-2), SS-50(0-2), SS-58(0-2), and SS-60(0-2).

The source of the elevated concentrations of PAHs in the surface soil can be attributed to petroleum impacts from the historical bulk fuel storage tank farm that operated on the Site. These detections of PAH compounds correspond with historical impacts measured at the Site. Please refer to Section 4.2 for further analysis of the nature and extent of PAH contamination at the Site.

4.1.2 Subsurface Soil Above RSLs

Environmental Standards compared the subsurface soil laboratory analytical data to the calculated recreational RSLs to characterize the nature and extent of subsurface soil contamination in the context of potential soil excavation and use of borrow material in the construction of the proposed recreational use.

Four subsurface samples, identified as SS-03(6-8), SS-11(4-6), SS-15(14-6), and SS-30(4-6), were collected and analyzed for metals, naphthalene (as a VOC), and PAHs.

Metals

Laboratory analytical results indicate that the concentration of metals evaluated in subsurface soils collected at the Site are below the recreational soil RSLs, except for arsenic in sample location SS-03(6-8) at a concentration of 14.1 mg/kg which exceeded the accepted background level of 13.1 mg/kg. Please refer to Section 4.2 for further analysis of the nature and extent of arsenic contamination at the Site.

PAHs

Laboratory analytical results indicate that the concentration of PAHs evaluated in the four subsurface soils collected at the Site are below the RSLs.

VOCs

Laboratory analytical results indicate that the concentration of naphthalene evaluated in subsurface soils collected at the Site is below the recreational soil RSL.

4.2 Calculating Upper Confidence Limits for Exposure Point Concentrations

An element of the risk assessment process is the estimation of the concentration of a chemical in the environment. This concentration, commonly termed the exposure point concentration (EPC), is a conservative estimate of the average chemical concentration in an environmental medium. The EPC can be determined for each individual exposure unit (in this case the WPS trail) within a site. An exposure unit is the area throughout which a receptor moves and encounters an environmental medium for the duration of the exposure. Unless there is site-specific evidence to the contrary, an individual receptor (that is, a trail user) is assumed to be equally exposed to media within all portions of the trail over the time frame of the risk assessment. US EPA recommends using the average concentration to represent a reasonable estimate of the concentration likely to be contacted over time and because of the uncertainty associated with estimating the true average concentration at a site, the 95 percent upper confidence limit (UCL) of the arithmetic mean should be used. (OSWER 9285.6-10, December 2002).

4.2.1 Arsenic Outlier Test

In the case of this risk assessment, outliers are concentrations in the data set that are not representative of the set as a whole, usually because they are very high concentrations relative to the rest of the data. It is common that a few very high concentration values may correspond to hot spots of contamination.

To determine these outliers, and therefore potential hot spots, Environmental Standards used US EPA's ProUCL software version 5.1 to conduct an outlier test to identify statistical outliers within the surface soil arsenic data set. The ProUCL outputs are provided in Appendix D. The outlier test identified one statistical outlier, arsenic at a concentration of 144 mg/kg, at surface soil sample location, SS-29.

The arsenic at location SS-29 cannot be considered indicative of natural conditions. The location is just outside a former tank secondary containment earthen embankment near the confluence of Cobun Creek with the reservoir. This area corresponds with an area that was

over excavated by MUB in 2019 as part of a waterline installation project (see Section 2.4.4) The source of the arsenic at this location is unknown. Please refer to Figure 5, Arsenic Surface Soil Exceedance Map, for the location of SS-29 area of concern.

4.2.2 Arsenic UCL EPC Calculation

The SS-29 arsenic concentration data point was then removed from the surface soil data set, and ProUCL was used to calculate a 95% UCL for arsenic to derive an arsenic EPC in surface soil. The ProUCL outputs are provided in Appendix D. The 95% UCL was calculated at 12.68 mg/kg for arsenic, which is less than the maximum natural background RBC of 13.1 mg/kg.

Therefore, apart from location SS-29, arsenic is not a contaminant of concern (COC) in surface soil for a recreator at the Site.

4.2.3 BaP Outlier Test

As discussed previously, BaP is a marker compound for impacted soil at the Site. To determine BaP outliers, and therefore hot spots, Environmental Standards used US EPA's ProUCL software version 5.1 to conduct an outlier test to identify statistical outliers within the surface soil BaP data set. The outlier test identified six surface soil locations that were statistical outliers. Those locations are SS-23, SS-25, SS-47, SS-48, SS-50, and SS-60.

Therefore, surface soil sample locations SS-23, SS-25, SS-47, SS-48, SS-50, and SS-60 have been identified as potential hot spots for BaP. All other PAH compound exceedances correspond with these same locations and were therefore not evaluated for EPCs. These locations directly correspond with former tank locations. Please refer to Figure 6, Benzo[a]pyrene Surface Soil Exceedance Map, for the location of these areas of concern.

4.2.4 BaP UCL EPC Calculation

The SS-23, SS-25, SS-47, SS-48, SS-50, and SS-60 (and its field duplicate) BaP concentration data points were then removed from the surface soil data set, and ProUCL was used to calculate a 95% UCL for BaP to derive an EPC in surface soil. The ProUCL outputs are provided in Appendix D. The 95% UCL was calculated at 172.8 µg/kg for BaP, which is less than the recreator RSL of 353 µg/kg.

Therefore, apart from areas of concern SS-23, SS-25, SS-47, SS-48, SS-50, and SS-60, BaP is not a COC in surface soil for a recreator at the Site.

5.0 **CONCLUSIONS**

Based on these Phase II ESA investigations and results, Environmental Standards developed the following conclusions.

5.1 **Surface Soil**

Surface soils have been impacted by historic on-site activities. Arsenic and PAHs are COCs in limited areas of surface soils on the Site, specifically, surface soil locations SS-23, SS-25, SS-47, SS-48, SS-50, and SS-60. Please refer to Table 5, 2022 Phase II ESA Soil Data - RSL and EPC Exceedances, for a summary table of just the exceedances.

Surface soil location SS-29 is an area of concern for arsenic exposure by a recreator trail user on the Site. Surface soil locations SS-23, SS-25, SS-47, SS-48, SS-50, and SS-60 are areas of concern for PAH exposure by a recreator trail user on the Site.

5.2 **Subsurface Soil**

Arsenic is a COC in subsurface soil, but only if excavation activities would cause the subsurface soils in the area of location SS-03 to become exposed to future recreators.

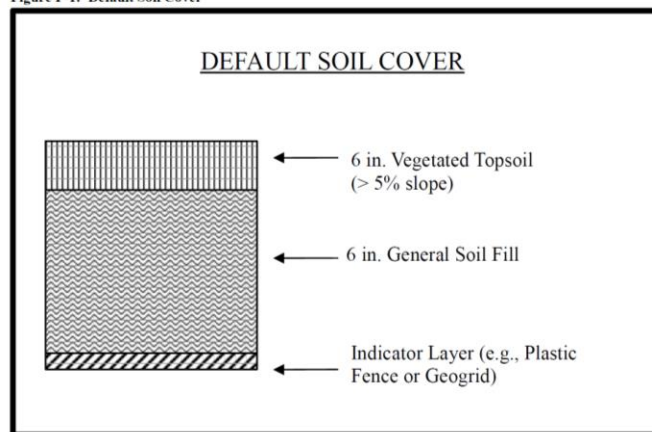
6.0 RECOMMENDATIONS

Based on the findings of the Phase II ESA, Environmental Standards recommends the following:

A Soil Management Plan (SMP) should be developed and followed to protect future users of the Site. The SMP should include guidance for soil testing if soils are to be brought onsite, as well as if soils are to be relocated onsite or disposed offsite. The SMP should provide guidance for a soil cover in areas of concern.

Based on the current proposed trail path, a soil cover should be established in the areas of sample locations SS-23, SS-25, SS-29, SS-47, SS-48, and SS-50. The cover is recommended to be a one-foot layer of clean soil that is intended to provide a barrier to the impacted soil. Below is an example of a default soil cover design provided by the WVDEP (*source: VRP Guidance Manual, June 2020*).

Figure F-1: Default Soil Cover



As an alternative to using soil to prevent direct contact with impacted soil, other materials may be used. For example, a minimum one-foot layer of aggregate (crushed stone or gravel) or three-inch pavement (asphalt or concrete) if heavy foot, bike, or vehicular traffic is anticipated. Rubber chips, wood chips, bark chips, or other organic mulch can be used in situations where the final use includes landscaping, these can include off-trail areas that recreators may use for activities such as relaxation or breaks from exercise, sightseeing, *etc.* In all cases, routine maintenance and repair of the cover is recommended.

Rerouting of the proposed trail to avoid areas of concern is not recommended unless additional surface soil testing is performed in the proposed rerouted areas.

Locations SS-23, SS-25, SS-29, SS-47, SS-48, SS-50, and SS-60 should not be used for borrow material unless the soils were to be covered in their final resting place as described above.

If excavation were to occur in and around SS-03 at depths greater than 2 feet bgs, an SMP should be developed and followed.

If future Property development should include the need for groundwater use, a groundwater testing program should be developed and followed to ensure the groundwater is appropriate

for the intended use. The testing program should include metals and PAHs.

It is recommended the City enter the Site into the WVDEP VRP. Once in the VRP, the WVDEP and a WV Licensed Remediation Specialist will oversee assessment and remediation activities, ensuring human health and the environment are protected using risk-based cleanup standards that consider site-specific conditions and future land use. The VRP also provides certain environmental liability protections under West Virginia law.



7.0 REFERENCES

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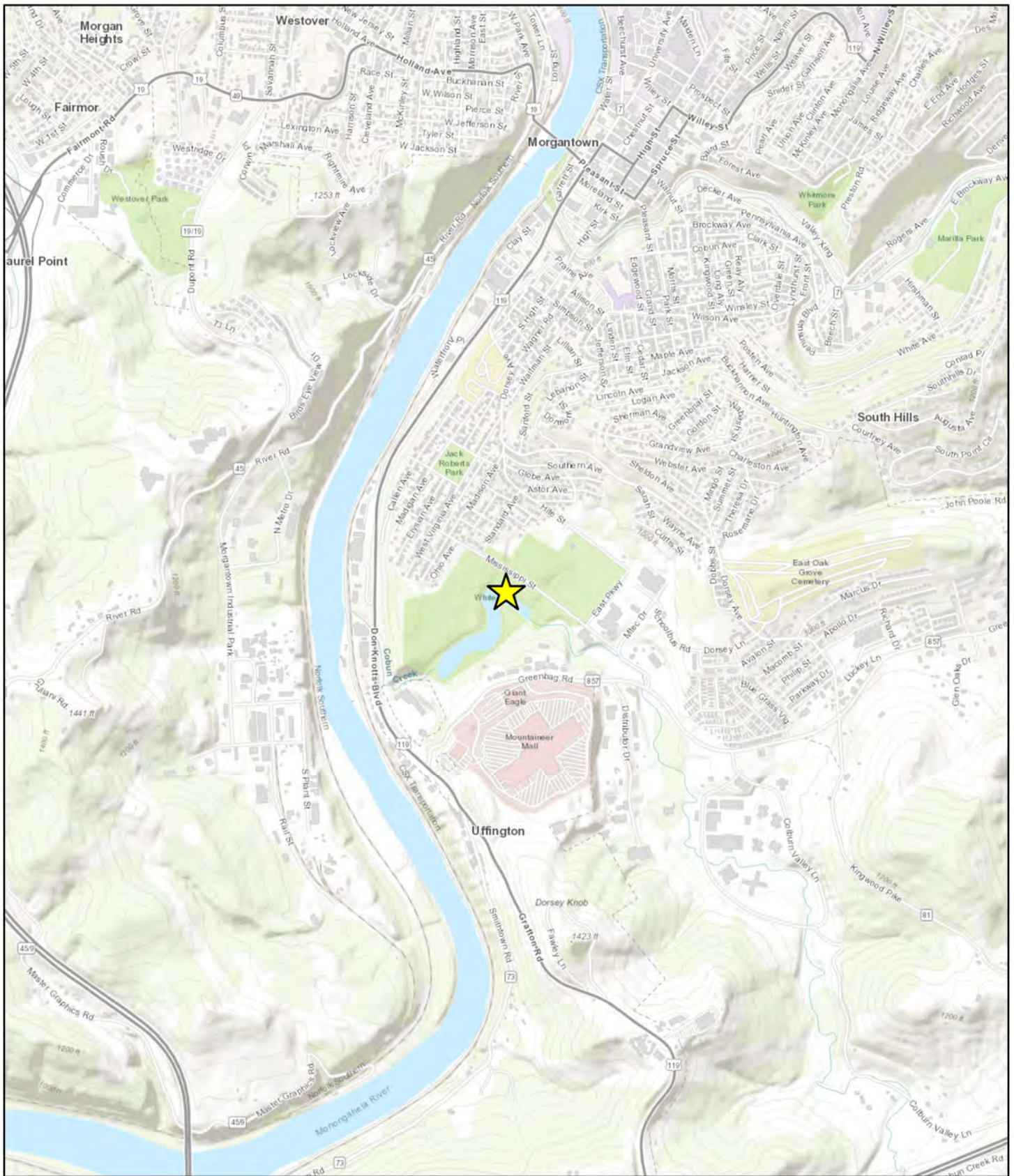
West Virginia Department of Natural Resources, Site Visit Summary Report, White Park, May 4, 1989

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FIGURES





West Virginia GIS, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

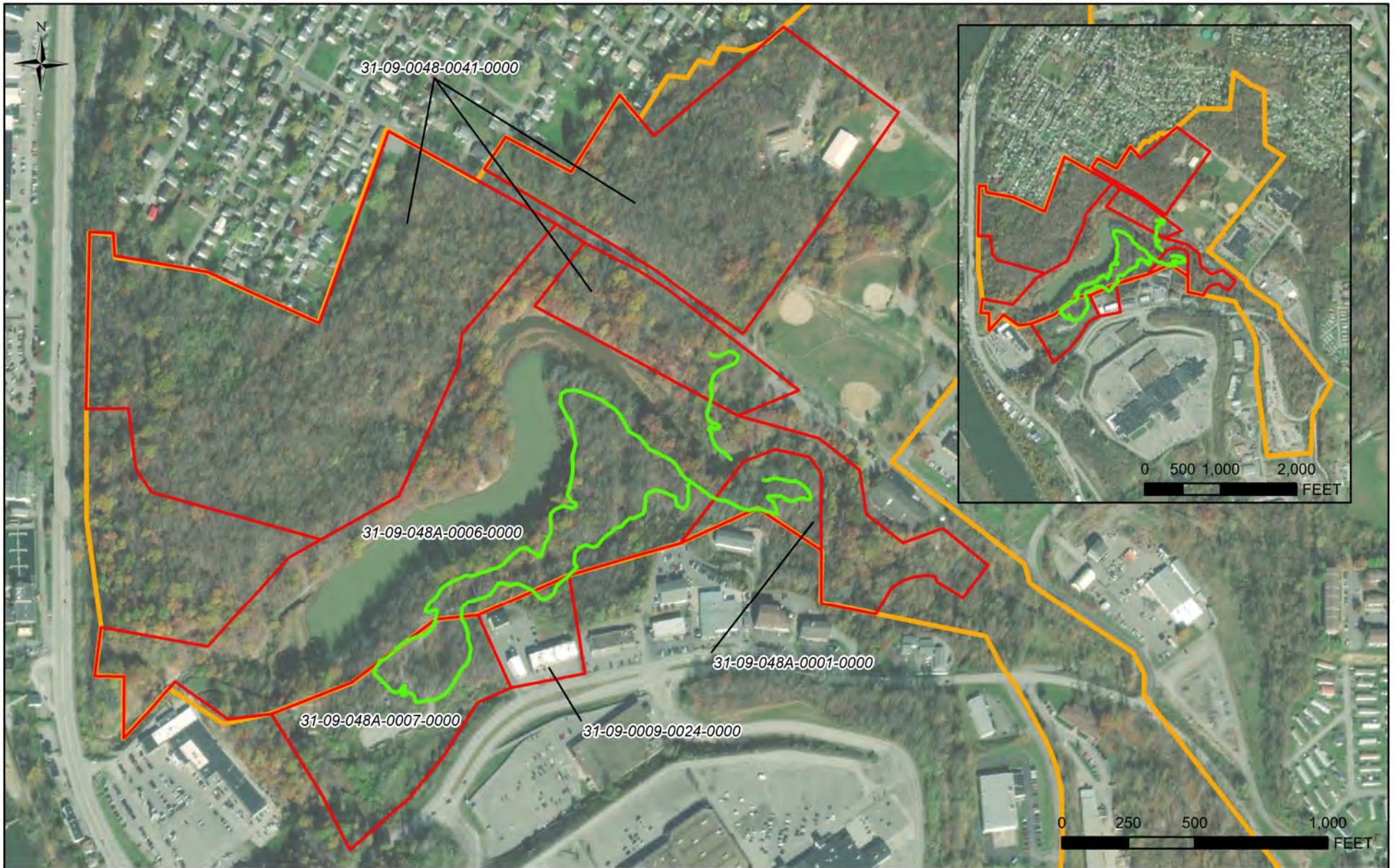


SITE LOCATION



0 0.25 0.5 1
MILES

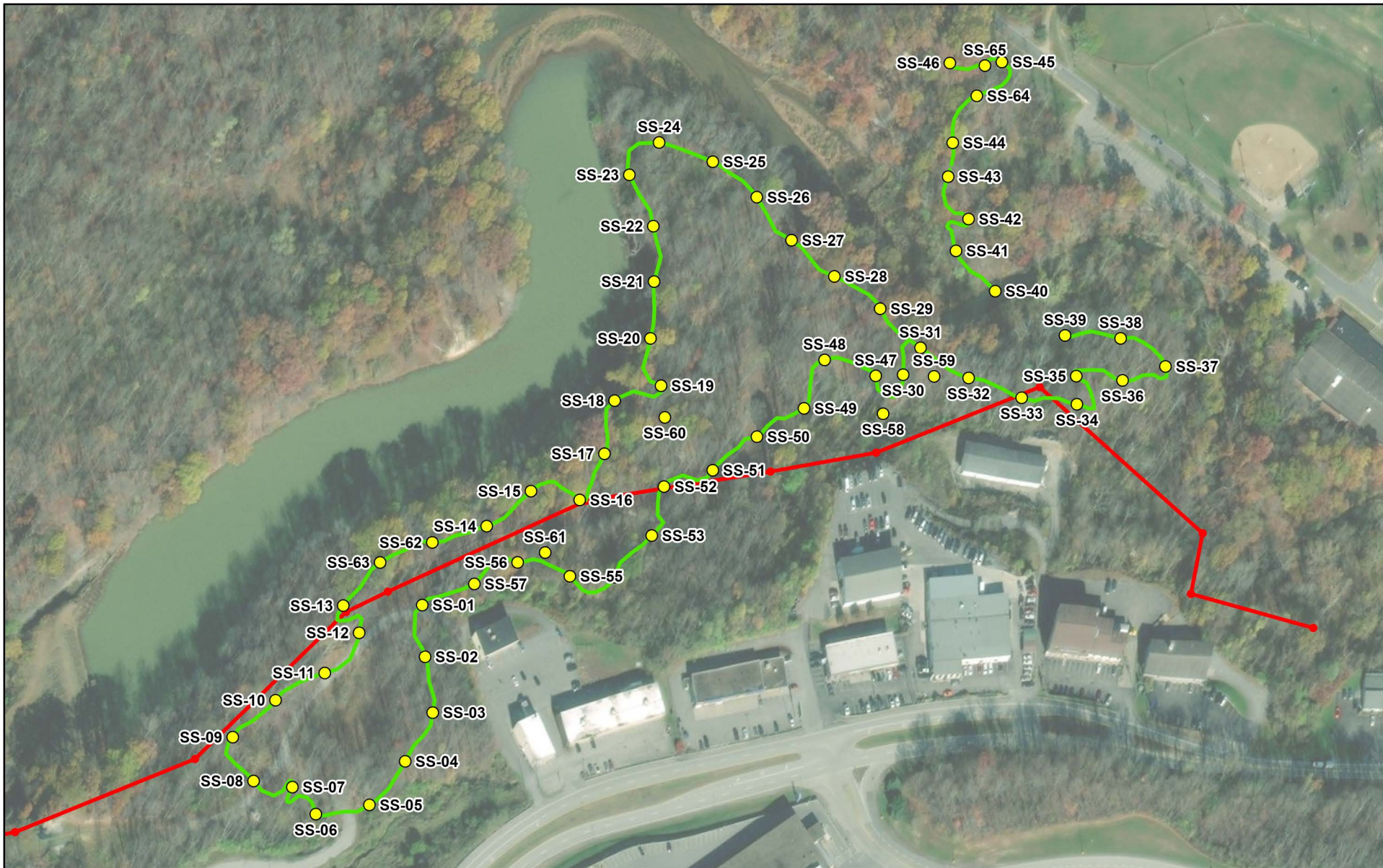
CREATION DATE: JANUARY 10, 2022		PROJECT NO: 20219527.A		FIGURE 1: SITE TOPOGRAPHIC MAP WHITE PARK - MISSISSIPPI STREET MORGANTOWN, MONINGALIA COUNTY, WV
		DRAWN BY: BPD	APPR'D BY: LM	
		CHEK'D BY: MNW	REVISION: 0	



- VRP SITE LIMIT
- APPROXIMATE PARCEL BOUNDARIES
- PROPOSED TRAIL

Earthstar Geographics, Maxar

CREATION DATE: JANUARY 10, 2022		PROJECT NO: 20219527.A		FIGURE 2: SITE LOCATION MAP
 ENVIRONMENTAL [®] STANDARDS		DRAWN BY: APPR'D BY:		
		BPD LM		
CHECK'D BY:		REVISION:		WHITE PARK - MISSISSIPPI STREET MORGANTOWN, MONINGALIA COUNTY, WV
MNW		0		



Maxar, Microsoft

- SOIL SAMPLE - PROPOSED AND SAMPLED
- PROPOSED TRAIL
- SOUTHERN BOUNDARY OF PARK

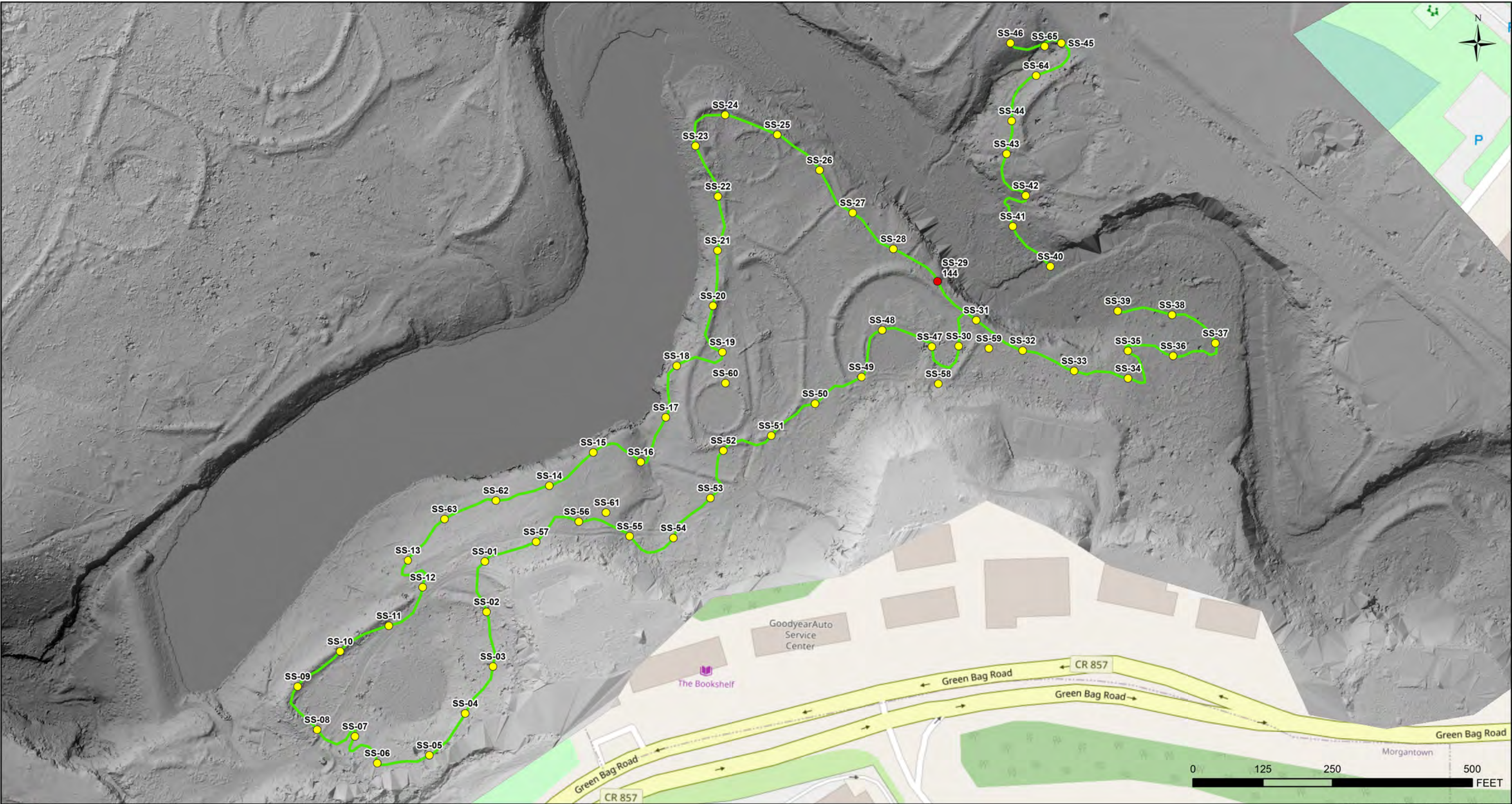


0 125 250 500
FEET

CREATION DATE: APRIL 1, 2022		PROJECT NO: 20219527.A		FIGURE 4: SOIL SAMPLE LOCATIONS
	DRAWN BY: MNW	APPR'D BY: LM		
	CHECK'D BY: MNW	REVISION: 0		
				W HTE PARK - MISSISSIPPI STREET MORGANTOWN, MONINGALIA COUNTY, WV

WHITE PARK - MISSISSIPPI STREET
MORGANTOWN, MONINGALIA COUNTY, WV

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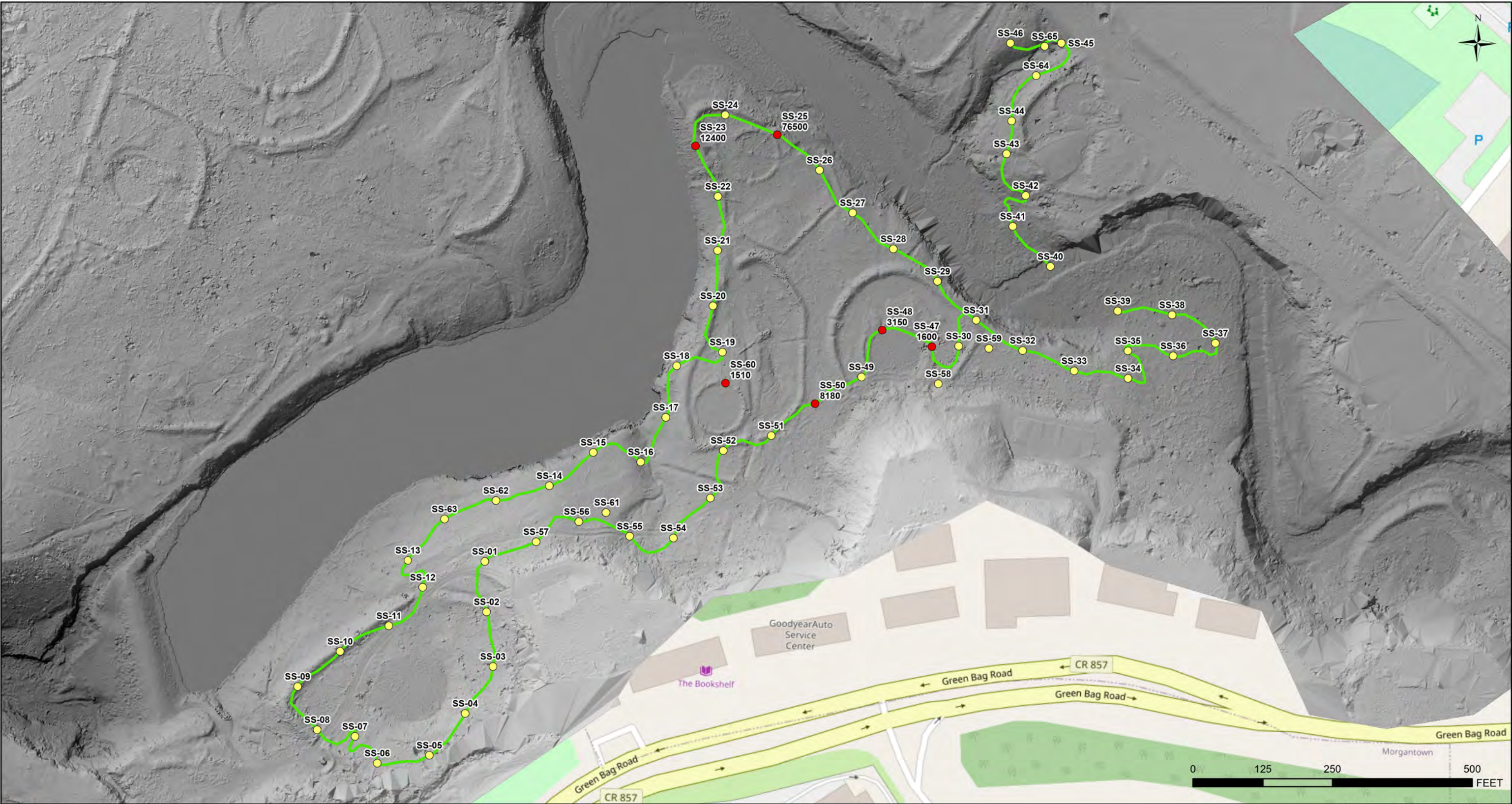


PROPOSED TRAIL

● SURFACE SOIL SAMPLE - EXCEEDS BOTH ARSENIC RECREATIONAL RBC AND IS A UCL OUTLIER

● SURFACE SOIL SAMPLE

CREATION DATE: MAY 26, 2022	PROJECT NO: 20219527.A	FIGURE 5: ARSENIC SURFACE SOIL EXCEEDANCES
	DRAWN BY: MNW	
	CHEKD BY: LM	
	APPRVD BY: LMW	
	REVISION: 0	



PROPOSED TRAIL

● SURFACE SOIL SAMPLE - EXCEEDS BOTH BENZO(A)PYRENE RECREATIONAL RBC AND IS A UCL OUTLIER

● SURFACE SOIL SAMPLE

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CREATION DATE: MAY 26, 2022	PROJECT NO: 20219527.A		FIGURE 6: ENZO(A)PYRENE SURFACE SOIL EXCEEDANCES
 ENVIRONMENTAL® STANDARDS	DRAWN BY: MNW	APPR'VD BY: LMW	
	CHEK'D BY: LM	REVISION: 0	WHITE PARK - MISSISSIPPI STREET MORGANTOWN, MONINGALIA COUNTY, WV

TABLES



Table 1. Phase II ESA Sample Summary
White Park Southside Trail Project
Grant BF-963692-01-0
Morgantown, Monongalia County, West Virginia

Sample Identification	Media	Area of Potential Concern	Reason for Assessment
SS-1	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-2	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-3	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-4	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-5	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-6	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-7	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-8	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-9	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-10	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-11	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-12	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-13	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-14	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-15	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-16	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-17	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-18	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-19	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-20	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-21	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-22	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-23	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-24	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-25	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-26	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-27	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-28	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-29	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-30	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-31	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-32	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-33	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions
SS-34	Surface Soil (0-2' bgs)	Linear path of the proposed Southside recreational trail	Current soil conditions

Table 2. Analytical Summary
White Park Southside Trail Project
Grant BF-963692-01-0
Morgantown, Monongalia County, West Virginia

Environmental Media and Sample Identification				Sample Type
	PAHs SW8270 SIM	Total Metals SW6010C or 6020A	VOC (naphthalene) SW8260C	
Soil Samples				
Surface Soil (0'-2' bgs)				
SS-01 (0-2)	1	1	--	Grab
SS-02 (0-2)	1	1	--	Grab
SS-03 (0-2)	1	1	--	Grab
SS-04 (0-2)	1	1	--	Grab
SS-05 (0-2)	1	1	--	Grab
SS-06 (0-2)	1	1	--	Grab
SS-07 (0-2)	1	1	--	Grab
SS-08 (0-2)	1	1	--	Grab
SS-09 (0-2)	1	1	--	Grab
SS-10 (0-2)	1	1	--	Grab
SS-11 (0-2)	1	1	--	Grab
SS-12 (0-2)	1	1	--	Grab
SS-13 (0-2)	1	1	--	Grab
SS-14 (0-2)	1	1	--	Grab
SS-15 (0-2)	1	1	--	Grab
SS-16 (0-2)	1	1	--	Grab
SS-17 (0-2)	1	1	--	Grab
SS-18 (0-2)	1	1	--	Grab
SS-19 (0-2)	1	1	--	Grab
SS-20 (0-2)	1	1	--	Grab
SS-21 (0-2)	1	1	--	Grab
SS-22 (0-2)	1	1	--	Grab
SS-23 (0-2)	1	1	--	Grab
SS-24 (0-2)	1	1	--	Grab
SS-25 (0-2)	1	1	--	Grab
SS-26 (0-2)	1	1	--	Grab
SS-27 (0-2)	1	1	--	Grab
SS-28 (0-2)	1	1	--	Grab
SS-29 (0-2)	1	1	--	Grab
SS-30 (0-2)	1	1	--	Grab
SS-31 (0-2)	1	1	--	Grab
SS-32 (0-2)	1	1	--	Grab
SS-33 (0-2)	1	1	--	Grab
SS-34 (0-2)	1	1	--	Grab
SS-35 (0-2)	1	1	--	Grab
SS-36 (0-2)	1	1	--	Grab
SS-37 (0-2)	1	1	--	Grab
SS-38 (0-2)	1	1	--	Grab

Table 2. Analytical Summary White Park Southside Trail Project Grant BF-963692-01-0 Morgantown, Monongalia County, West Virginia				
Environmental Media and Sample Identification				Sample Type
	PAHs SW8270 SIM	Total Metals SW6010C or 6020A	VOC (naphthalene) SW8260C	
Soil Samples				
SS-39 (0-2)	1	1	--	Grab
SS-40 (0-2)	1	1	--	Grab
SS-41 (0-2)	1	1	--	Grab
SS-42 (0-2)	1	1	--	Grab
SS-43 (0-2)	1	1	--	Grab
SS-44 (0-2)	1	1	--	Grab
SS-45 (0-2)	1	1	--	Grab
SS-46 (0-2)	1	1	--	Grab
SS-47 (0-2)	1	1	--	Grab
SS-48 (0-2)	1	1	--	Grab
SS-49 (0-2)	1	1	--	Grab
SS-50 (0-2)	1	1	--	Grab
SS-51 (0-2)	1	1	--	Grab
SS-52 (0-2)	1	1	--	Grab
SS-53 (0-2)	1	1	--	Grab
SS-54 (0-2)	1	1	--	Grab
SS-55 (0-2)	1	1	--	Grab
SS-56 (0-2)	1	1	--	Grab
SS-57 (0-2)	1	1	--	Grab
SS-58 (0-2)	1	1	--	Grab
SS-59 (0-2)	1	1	--	Grab
SS-60 (0-2)	1	1	--	Grab
SS-61 (0-2)	1	1	--	Grab
SS-62 (0-2)	1	1	--	Grab
SS-63 (0-2)	1	1	--	Grab
SS-64 (0-2)	1	1	--	Grab
SS-65 (0-2)	1	1	--	Grab
Subsurface Soil (> 2' bgs)				
SS-03 (6-8)	--	--	1	Grab
SS-11 (4-6)	--	--	1	Grab
SS-15 (4-6)	--	--	1	Grab
SS-30 (4-6)	--	--	1	Grab
Total Soil Samples	65	65	4	

Note:

VOC = Volatile Organic Compound

SIM= Selective Ion Monitoring

PAHs = polycyclic aromatic hydrocarbons

Table 3. 2022 Phase II ESA Surface Soil Data Compared to Site-Specific RSLs
City of Morgantown - White Park Southside Trail Project
Morgantown, West Virginia

Analyte Name	Recreational Soil RSL		SS-01 (0-2)	SS-01 (0-2) DUP	SS-02 (0-2)	SS-03 (0-2)	SS-04 (0-2)	SS-05 (0-2)	SS-06 (0-2)	SS-07 (0-2)	SS-08 (0-2)	SS-09 (0-2)	SS-10 (0-2)	
		Date:	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	
		Units	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	
RCRA Metals														
Arsenic**	13.1	mg/kg	11.2	6.4 J	12.2	12.4	8.5	10.0	11.6	14.5	10.5	9.3	6.8	
Barium	47900	mg/kg	80.8	58.7	87.8	100	141	118	242	190	130	163	108	
Cadmium	21.9	mg/kg	<0.13	<0.19	<0.15	<0.15	<0.15	<0.15	<0.15	<0.14	<0.16	<0.15	0.52 J	
Chromium (RBCr)	120000	mg/kg	12.7	8.4	29.0	31.1	27.0	30.9	40.2	30.1	25.7	30.2	19.6	
Lead (RBCr)	400	mg/kg	5.3 J	20.7	18.4	30.9	20.1	25.8	14.5	16.3	79.8	25.1	21.5	
Mercury	400	mg/kg	0.023J	0.021J	0.035J	0.036J	0.034J	0.072J	0.077J	0.062J	0.070J	0.076J	0.053J	
Selenium	1200	mg/kg	3.3 J	2.1 J	3.0 J	3.1 J	2.0 J	1.7 J	2.8 J	2.5 J	2.8 J	2.7 J	1.9 J	
Silver	1200	mg/kg	4.3	4.5	12.3	22.0	17.2	18.0	18.9	18.1	17.6	19.5	12.5	
Zinc	72000	mg/kg	43.4J	54.8	53.3	48.0	58.1	53.6	78.5	73.7	69.9	64.3	71.6	
PAHs														
Acenaphthene	11000000	ug/kg	<6.7	<9.2	<0.73	<0.74	<0.72	<0.75	<0.77	<0.70	<7.9	<0.74	<0.74	
Acenaphthylene (RBCr)	4246000	ug/kg	<5.3	<7.3	<0.58	<0.59	<0.57	<0.59	<0.61	<0.55	<6.2	<0.59	<0.59	
Anthracene	55100000	ug/kg	54.4 J	9.5 J	<0.73	<0.74	<0.72	<0.75	<0.77	<0.70	<7.9	<0.74	<0.74	
Benzo[a]anthracene	3520	ug/kg	125	38.0 J	<0.95	2.2 J	<0.94	<0.97	1.4 J	<0.91	47.8 J	1.5 J	<0.96	
Benzo[a]pyrene	353	ug/kg	116	29.3 J	<0.51	1.2 J	<0.50	<0.52	<0.53	<0.48	52.8 J	0.61 J	<0.51	
Benzo[b]fluoranthene	3530	ug/kg	213	58.5 J	<0.97	2.3 J	<0.96	<0.99	<1.0	<0.93	103	<0.98	4.2 J	
Benzo[g,h,i]perylene (RBCr)	1793000	ug/kg	70.1 J	20.0 J	<1.2	<1.2	<1.2	<1.2	<1.3	<1.2	28.9 J	<1.2	<1.2	
Benzo[k]fluoranthene	35300	ug/kg	210	57.7 J	<1.4	2.3 J	<1.3	<1.4	<1.4	<1.3	101	<1.4	4.1 J	
Chrysene	353000	ug/kg	135	38.1 J	<0.42	1.4 J	<0.41	<0.43	0.81 J	<0.40	54.0 J	<0.42	<0.42	
Dibenz[a,h]anthracene	353	ug/kg	19.7 J	<22.5	<1.8	<1.8	<1.8	<1.8	<1.9	<1.7	<19.3	<1.8	<1.8	
Fluoranthene	7340000	ug/kg	273	96.1 J	<0.61	3.0 J	<0.60	<0.63	<0.64	<0.59	77.9 J	1.4 J	2.6 J	
Fluorene	7340000	ug/kg	<6.8	<9.4	<0.75	<0.76	<0.74	<0.77	<0.79	<0.72	<8.0	<0.76	<0.76	
Indeno[1,2,3-cd]pyrene	3530	ug/kg	58.4 J	<19.3	<1.5	<1.6	<1.5	<1.6	<1.6	<1.5	27.4 J	<1.6	<1.6	
Naphthalene	11900	ug/kg	<14.3	<19.7	<1.6	<1.6	2.9 J	<1.6	<1.6	<1.5	32.1 J / <0.98	<1.6	1.9 J	
Phenanthrene (RBCr)	23464000	ug/kg	89.1	56.8 J	<0.71	2.1 J	<0.70	<0.73	1.3 J	<0.68	47.0 J	1.6 J	2.6 J	
Pyrene	5510000	ug/kg	212	80.0 J	<0.91	2.4 J	<0.90	<0.93	<0.95	<0.87	66.6 J	1.1 J	2.3 J	
Moisture Content														
Percent Moisture		%	9.4	35.0	19.5	19.3	16.5	19.2	22.4	15.3	23.8	19.8	19.7	

Notes:
RSL = Risk-based concentration for a recreator (trail user) using US EPA Regional Screening Level (RSL) calculator on May 12, 2022 for HQ=1, Cancer Risk 1x10⁻⁶, exposure frequency=114 days/yr, exposure time=2.0 hr/day.
RBCr = In the absence of a recreator RSL, the residential soil risk-based concentration (RBC) is used, as defined in the West Virginia Voluntary Remediation and Redevelopment Act Table 60-3B De Minimis, December 2021.
**Arsenic soil RBC is the maximum published background concentration (VRP Guidance Manual, Table 3-3: Background Concentrations of Elements in WV Soils).
*Naphthalene reported as both Method 8270 SIM/Method 8260.
< - Indicates analyte was not detected above Laboratory Method Detection Limit
J - indicates estimated result. The results is between the detection limit and the reporting limit.
" ---" - No standard available
mg/kg - milligrams per kilogram
ug/kg - micrograms per kilogram
Highlighted and bold results - Result is above the standard.

Table 3. 2022 Phase II ESA Surface Soil Data
City of Morgantown - White Park Southside Tr
Morgantown, West Virginia

Analyte Name	Recreational Soil RSL		SS-11 (0-2)	SS-12 (0-2)	SS-13 (0-2)	SS-14 (0-2)	SS-15 (0-2)	SS-16 (0-2)	SS-17 (0-2)	SS-18 (0-2)	SS-19 (0-2)	SS-20 (0-2)	SS- 21 (0-2)
		Date:	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022
		Units	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result
RCRA Metals													
Arsenic**	13.1	mg/kg	12.9	20.3	26.7	16.0	6.6 J	6.9	8.6	26.5	9.9	12.0	14.5
Barium	47900	mg/kg	90.0	75.3	70.0	37.4	122	94.0	29.7	54.6	38.2	39.9	56.4
Cadmium	21.9	mg/kg	<0.15	<0.14	<0.15	<0.14	<0.17	<0.15	<0.15	<0.16	<0.16	<0.15	0.47 J
Chromium (RBCr)	120000	mg/kg	28.1	21.5	26.8	19.5	21.5	25.9	21.7	37.3	17.1	31.3	23.7
Lead (RBCr)	400	mg/kg	21.9	18.4	15.2	11.8	17.0	16.7	7.6	34.5	26.0	18.5	15.4
Mercury	400	mg/kg	0.057J	0.058J	0.039J	0.020J	0.031J	0.046J	0.024J	0.060J	0.077J	0.054J	0.054J
Selenium	1200	mg/kg	1.9 J	2.3 J	2.7 J	<1.2	<1.5	2.9 J	1.8 J	3.3 J	2.1 J	2.7 J	<1.4
Silver	1200	mg/kg	18.4	20.5	28.2	16.5	8.6	24.0	19.5	27.5	12.7	22.0	<0.55
Zinc	72000	mg/kg	51.1	77.2	116	48.2	55.8	61.7	47.1	72.0	42.5	46.6	57.9
PAHs													
Acenaphthene	11000000	ug/kg	<0.74	<7.1	<0.72	<0.68	<0.83	5.2 J	4.8 J	<0.77	9.9 J	<0.75	<0.74
Acenaphthylene (RBCr)	4246000	ug/kg	<0.59	<5.6	<0.57	<0.54	<0.65	<0.59	31.7	1.9 J	42.5 J	8.1 J	<0.59
Anthracene	55100000	ug/kg	<0.74	141	<0.72	<0.69	<0.83	9.8	76.5	2.1 J	78.3 J	10.3	1.7 J
Benzo[a]anthracene	3520	ug/kg	<0.96	232	<0.93	<0.89	<1.1	18.0	448	11.5	344	67.6	8.5
Benzo[a]pyrene	353	ug/kg	<0.51	180	<0.50	<0.47	<0.57	21.3	353	9.1	295	58.8	6.3 J
Benzo[b]fluoranthene	3530	ug/kg	<0.98	318	<0.95	<0.91	<1.1	40.0	675	23.4	675	138	15.0
Benzo[g,h,i]perylene (RBCr)	1793000	ug/kg	<1.2	83.6	<1.2	<1.1	<1.4	11.3	192	3.1 J	87.9	17.3	1.7 J
Benzo[k]fluoranthene	35300	ug/kg	<1.4	314	<1.3	<1.3	<1.5	39.5	665	23.1	666	136	14.8
Chrysene	353000	ug/kg	<0.42	218	<0.41	<0.39	<0.47	19.6	431	12.2	362	71.9	8.4
Dibenz[a,h]anthracene	353	ug/kg	<1.8	26.3 J	<1.8	<1.7	<2.0	3.4 J	71.2	<1.9	36.5 J	7.1 J	<1.8
Fluoranthene	7340000	ug/kg	<0.62	599	<0.60	<0.57	<0.69	49.0	874	22.8	831	152	17.0
Fluorene	7340000	ug/kg	<0.76	<7.2	<0.74	<0.70	<0.84	6.2 J	12.0	<0.79	25.4 J	<0.77	<0.76
Indeno[1,2,3-cd]pyrene	3530	ug/kg	<1.6	83.6	<1.5	<1.4	<1.7	11.1	210	3.7 J	105	19.8	2.1 J
Naphthalene	11900	ug/kg	<1.6	<15.1	<1.5	<1.5 / <1.4	<1.8	6.0 J	8.2	<1.6 / <1.3	22.9 J	6.6 J	5.2 J / <2.0
Phenanthrene (RBCr)	23464000	ug/kg	<0.72	221	<0.70	<0.67	<0.80	36.5	350	7.7 J	467	53.3	9.2
Pyrene	5510000	ug/kg	<0.92	449	<0.89	<0.85	<1.0	37.7	655	18.4	632	115	13.0
Moisture Content													
Percent Moisture		%	18.9	16.9	17.3	14.0	27.6	21.0	17.4	22.4	23.3	20.6	20.6

Table 3. 2022 Phase II ESA Surface Soil Data
City of Morgantown - White Park Southside Tr
Morgantown, West Virginia

Analyte Name	Recreational Soil RSL		SS-22- (0-2)	SS-23 (0-2)	SS-24(0-2)	SS-25 (0-2)	SS-26 (0-2)	SS-27 (0-2)	SS-28 (0-2)	SS-28 (0-2) FD	SS-29 (0-2)	SS-30 (0-2)	SS-31 (0-2)	
		Date:	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/21/2022	1/24/2022	1/24/2022	1/24/2022	1/24/2022	1/24/2022
		Units	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result
RCRA Metals														
Arsenic**	13.1	mg/kg	9.8	18.6	8.8	8.1	3.2 J	8.1	10.3	9.1	144	7.4	11.2	
Barium	47900	mg/kg	107	101	46.2	51.6	78.6	54.3	49.6	48.7	163	113	65.2	
Cadmium	21.9	mg/kg	0.51 J	0.25 J	0.15 J	<0.18	<0.13	0.20 J	<0.15	<0.15	0.45 J	<0.16	<0.14	
Chromium (RBCr)	120000	mg/kg	25.9	20.6	16.4	13.6	14.6	18.5	21.9	20.7	21.9	17.4	22.6	
Lead (RBCr)	400	mg/kg	30.7	62.2	18.9	278	9.5	10.4	12.0	10.6	143	17.8	14.9	
Mercury	400	mg/kg	0.082J	0.077J	0.061J	0.14J	0.020J	0.047J	0.053J	0.047J	1.5	0.047J	0.050J	
Selenium	1200	mg/kg	<1.5	1.4 J	<1.3	<1.6	<1.2	<1.2	<1.3	<1.3	<1.8	<1.4	<1.3	
Silver	1200	mg/kg	<0.59	<0.52	<0.50	<0.63	<0.47	<0.47	<0.52	<0.53	<0.71	<0.56	<0.51	
Zinc	72000	mg/kg	115.0	107.0	50.4	57.0	45.6	60.0	47.4	47.4	132	47.5	44.7	
PAHs														
Acenaphthene	11000000	ug/kg	2.2 J	96.5	<7.0	1760	<0.65	2.4 J	<0.72	<0.72	<10	<0.76	<0.72	
Acenaphthylene (RBCr)	4246000	ug/kg	13.2	1190	30.5 J	10200	3.8 J	1.1 J	<0.57	<0.57	<7.9	<0.60	<0.57	
Anthracene	55100000	ug/kg	22.5	3850	55.6 J	33200	8.0	15.6	<0.72	1.2 J	19.9 J	<0.76	<0.72	
Benzo[a]anthracene	3520	ug/kg	112	11200	340	112000	37.5	50.3	2.1 J	6.7 J	101 J	<0.99	1.3 J	
Benzo[a]pyrene	353	ug/kg	85.6	12400	267	76500	28	69.8	1.1 J	6.0 J	86.6 J	<0.53	0.60 J	
Benzo[b]fluoranthene	3530	ug/kg	232	23100	611	161000	70.5	149	2.6 J	16.2	255	<1.0	<0.95	
Benzo[g,h,i]perylene (RBCr)	1793000	ug/kg	26.3	3550	84.0	38500	7.2 J	21.6	<1.2	1.8 J	25.8 J	<1.3	<1.2	
Benzo[k]fluoranthene	35300	ug/kg	229	23100	602	161000	69.5	147	2.6 J	16	252	<1.4	<1.3	
Chrysene	353000	ug/kg	124	10700	324	103000	35	53.3	<0.41	8.8	168	<0.44	<0.41	
Dibenz[a,h]anthracene	353	ug/kg	11.7	1900	35.7 J	16700	3.2 J	6.9 J	<1.8	<1.8	<24.5	<1.9	<1.8	
Fluoranthene	7340000	ug/kg	254	24900	703	250000	85.6	121	3.6 J	17.2	219	<0.64	<0.60	
Fluorene	7340000	ug/kg	5.6 J	261	<7.1	2060	<0.67	5.0 J	<0.74	<0.74	<10.2	<0.78	<0.73	
Indeno[1,2,3-cd]pyrene	3530	ug/kg	31.1	4370	98.0	44800	9.1	22.5	<1.5	2.0 J	30.5 J	<1.6	<1.5	
Naphthalene	11900	ug/kg	33.3	100	<14.9	998	3.7 J	2.3 J	<1.5	8.7	66.7 J	<1.6	<1.5 / <1.0	
Phenanthrene (RBCr)	23464000	ug/kg	135	15200	279	164000	42.5	52.7	<0.70	12.4	127	0.84 J	1.1 J	
Pyrene	5510000	ug/kg	185	17400	533	175000	60.4	99.4	2.6 J	12.3	171	<0.95	1.1 J	
Moisture Content														
Percent Moisture		%	28.9	18.1	14.7	31.7	7.5	11.7	17.3	18.4	41.1	21.6	17.0	

Table 3. 2022 Phase II ESA Surface Soil Data
City of Morgantown - White Park Southside Tr
Morgantown, West Virginia

Analyte Name	Recreational Soil RSL		SS-32 (0-2)	SS-33 (0-2)	SS-34 (0-2)	SS-35 (0-2)	SS-36 (0-2)	SS-37 (0-2)	SS-38 (0-2)	SS-39 (0-2)	SS-40 (0-2)	SS-41 (0-2)	SS-42 (0-2)
		Date:	1/24/2022	1/24/2022	1/24/2022	1/24/2022	1/24/2022	1/24/2022	1/24/2022	1/24/2022	1/24/2022	1/24/2022	1/24/2022
		Units	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result
RCRA Metals													
Arsenic**	13.1	mg/kg	0.10	6.8	8.9	0.075	6.9	7.8	6.9 J	5.9 J	7.4	8.5	5.7
Barium	47900	mg/kg	0.76	129	95.7	0.85	112	101	114	54.7	51.9	65.9	59.8
Cadmium	21.9	mg/kg	<0.0016	<0.15	0.18 J	<0.0015	<0.15	<0.14	0.25 J	<0.15	<0.14	<0.14	0.26 J
Chromium (RBCr)	120000	mg/kg	0.18	15.8	15.2	0.19	17.2	19.1	16.0	16.9	13.8	20.5	19.2
Lead (RBCr)	400	mg/kg	0.19	18.4	33.8	0.14	22.2	12.1	38.1	11.4	13.9	12.1	27.8
Mercury	400	mg/kg	0.056J	0.048J	0.10J	0.047J	0.031J	0.045J	0.071J	0.046J	0.047J	<0.011	0.062J
Selenium	1200	mg/kg	<0.014	<1.3	2.6 J	<0.013	3.0 J	<1.3	<1.5	<1.3	<1.3	<1.2	<1.2
Silver	1200	mg/kg	<0.0057	<0.52	<0.60	<0.0052	<0.54	<0.51	<0.61	<0.52	<0.50	<0.50	<0.46
Zinc	72000	mg/kg	0.45	52.2	59	0.49	46.7	41.5	56.3	45.4	48.2	63.1	73.0
PAHs													
Acenaphthene	11000000	ug/kg	<0.78	<0.74	11.2 J	8.8	<0.76	<0.70	<0.82	<0.74	<7.1	<0.68	<3.3
Acenaphthylene (RBCr)	4246000	ug/kg	<0.62	<0.59	28.3 J	36.9	<0.60	<0.55	<0.65	<0.58	<5.6	<0.54	<2.6
Anthracene	55100000	ug/kg	2.7 J	<0.74	89.4	78.0	<0.76	<0.70	1.9 J	<0.74	<7.1	0.90 J	6.1 J
Benzo[a]anthracene	3520	ug/kg	13.1	<0.96	336	419	5.1 J	1.5 J	8.8 J	<0.96	<9.2	5.4 J	36.2 J
Benzo[a]pyrene	353	ug/kg	13.1	<0.51	276	395	4.9 J	<0.48	8.4 J	<0.51	<4.9	4.5 J	31.9 J
Benzo[b]fluoranthene	3530	ug/kg	33.8	2.4 J	581	792	10.4	2.6 J	21.4	<0.98	<9.4	11.1	86.6
Benzo[g,h,i]perylene (RBCr)	1793000	ug/kg	3.7 J	<1.2	116	143	2.6 J	<1.2	4.3 J	<1.2	<11.8	<1.1	<5.5
Benzo[k]fluoranthene	35300	ug/kg	33.4	2.4 J	582	793	10.4	2.6 J	21.5	<1.4	<13.1	11.2	86.8
Chrysene	353000	ug/kg	16.6	<0.42	325	413	5.4 J	<0.40	10.7	<0.42	<4.0	5.8 J	43.4
Dibenz[a,h]anthracene	353	ug/kg	<1.9	<1.8	42.0 J	55.9	<1.9	<1.7	<2.0	<1.8	<17.4	<1.7	<8.1
Fluoranthene	7340000	ug/kg	30.6	1.7 J	802	854	9.7	2.5 J	20.4	<0.62	20.3 J	11.1	82.5
Fluorene	7340000	ug/kg	<0.80	<0.76	29.4 J	16.4	<0.78	<0.72	<0.84	<0.75	<7.2	<0.70	<3.4
Indeno[1,2,3-cd]pyrene	3530	ug/kg	4.0 J	<1.6	126	161	2.1 J	<1.5	4.1 J	<1.6	<14.9	<1.4	<7.0
Naphthalene	11900	ug/kg	17.0	<1.6	37.7 J	18.1	3.0 J	1.8 J / <1.0	6.4 J	<1.6	<15.1	6.8 J / 0.0	21.0 J
Phenanthrene (RBCr)	23464000	ug/kg	22.3	0.98 J	452	336	5.6 J	15 J	14.9	1.2 J	17.7 J	7.3 J	53.3
Pyrene	5510000	ug/kg	25.0	1.4 J	599	689	7.8 J	2.0 J	17.1	<0.92	16.9 J	9.3	65.4
Moisture Content													
Percent Moisture		%	23.6	19.2	30.1	16.9	20.7	13.5	28.2	19.8	15.7	14.1	9.3

Table 3. 2022 Phase II ESA Surface Soil Data
City of Morgantown - White Park Southside Tr
Morgantown, West Virginia

Analyte Name	Recreational Soil RSL		SS-43 (0-2)	SS-44 (0-2)	SS-45 (0-2)	SS-46 (0-2)	SS-47 (0-2)	SS-48 (0-2)	SS-49 (0-2)	SS-50 (0-2)	SS-51 (0-2)	SS-52 (0-2)	SS-53 (0-2)
		Date:	1/24/2022	1/24/2022	1/24/2022	1/24/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
		Units	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result
RCRA Metals													
Arsenic**	13.1	mg/kg	5.5 J	3.9 J	8.2	5.7J	10	9	9.2	4.0 J	22	5.0 J	6.3 J
Barium	47900	mg/kg	43.8	42.9	111	55	31.6	69.3	59.9	59.5	62.3	54.9	91.9
Cadmium	21.9	mg/kg	<0.15	<0.14	<0.15	<0.15	<0.19	0.26 J	<0.22	0.24 J	<0.25	<0.17	0.23 J
Chromium (RBCr)	120000	mg/kg	21.0	18.0	25.5	15.7	16.2	16.4	20.3	9.7	35.9	11.5	16.3
Lead (RBCr)	400	mg/kg	16.4	17.4	22	13.2	84.5	41.4	315	15.6	32.9	17.4	28
Mercury	400	mg/kg	0.051J	0.049J	0.076J	0.068J	0.12 J	0.072 J	0.096 J	0.076 J	0.19 J	0.087	0.14 J
Selenium	1200	mg/kg	<1.3	<1.3	1.3J	<1.3	1.7 J	2.2 J	2.3 J	2.2 J	3.6 J	<1.5	3.8 J
Silver	1200	mg/kg	<0.51	<0.50	<0.52	<0.54	<0.67	<0.69	<0.78	<0.65	<0.88	<0.59	<0.75
Zinc	72000	mg/kg	56.4	49.7	72.5	46.4							
PAHs													
Acenaphthene	11000000	ug/kg	<0.71	<0.69	15.7 J	<3.6	53.1 J	51.2 J	<5.4	259	8.4 J	<4.1	<5.2
Acenaphthylene (RBCr)	4246000	ug/kg	<0.56	<0.55	16.9 J	15.0 J	165	201	<4.2	<7.1	42.2 J	<3.2	<4.1
Anthracene	55100000	ug/kg	<0.71	<0.69	84.6	18.5 J	520	819	39.6 J	2190	93.2	5.3 J	9.9 J
Benzo[a]anthracene	3520	ug/kg	<0.92	<0.90	259	118	2450	4520	219	8760	467	36.1 J	73
Benzo[a]pyrene	353	ug/kg	<0.49	<0.48	236	105	1600	3150	146	8180	313	26.7 J	67.8
Benzo[b]fluoranthene	3530	ug/kg	<0.94	<0.92	544	277	3690	6530	308	13900	677	70.4	169
Benzo[g,h,i]perylene (RBCr)	1793000	ug/kg	<1.2	<1.2	60.4 J	32.7 J	1000	2020	83	5600	172	<6.8	43.6 J
Benzo[k]fluoranthene	35300	ug/kg	<1.3	<1.3	545	277	3720	6580	311	14000	683	71	171
Chrysene	353000	ug/kg	<0.40	<0.40	274	127	2540	4650	220	8510	471	45.6	108
Dibenz[a,h]anthracene	353	ug/kg	<1.7	<1.7	<17.8	<9.0	359	720	27.7 J	1450	61.7 J	<10	<12.7
Fluoranthene	7340000	ug/kg	1.1 J	1.4 J	539	273	5890	10000	459	18600	1000	87.2	181
Fluorene	7340000	ug/kg	<0.72	<0.70	24.1 J	<3.7	86.5J	88.8 J	<5.5	387	19.5 J	<4.2	<5.3
Indeno[1,2,3-cd]pyrene	3530	ug/kg	<1.5	<1.5	71.1 J	39.0 J	1010	2070	81.9	5220	180	<8.6	43.0 J
Naphthalene	11900	ug/kg	<1.5	1.6 J / <1.1	74.0 J	27.9 J	327	121	45.2 J	79.8 J	58.9 J	81.7	70
Phenanthrene (RBCr)	23464000	ug/kg	0.90 J	2.0 J	479	123	3980	4940	259	4140	510	68.3	114
Pyrene	5510000	ug/kg	<0.88	1.2 J	454	226	4270	7490	349	15900	745	64.7	139
Moisture Content													
Percent Moisture		%	15.8	13.1	19.0	19.2	34.9	38.7	43.7	34.6	51.2	26.5	42.8

Table 3. 2022 Phase II ESA Surface Soil Data
City of Morgantown - White Park Southside Tr
Morgantown, West Virginia

Analyte Name	Recreational Soil RSL		SS-54 (0-2)	SS-55 (0-2)	SS-56 (0-2)	SS-57 (0-2)	SS-58 (0-2)	SS-59 (0-2)	SS-60 (0-2)	SS-60-FD (0-2)	SS-61 (0-2)	SS-62 (0-2)	SS-63 (0-2)
		Date:	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
		Units	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result
RCRA Metals													
Arsenic**	13.1	mg/kg	6.7 J	7.2 J	8.7 J	9.0	9.6	16.6	16.2	13.5	11.2	14.8	17.1
Barium	47900	mg/kg	102	138	155	73.1	92.9	215	46.5	43.9	245	47.4	128
Cadmium	21.9	mg/kg	0.37 J	0.31 J	0.32 J	<0.19	<0.19	0.44 J	<0.19	<0.19	<0.16	<0.17	0.24J
Chromium (RBCr)	120000	mg/kg	13.8	23.3	27.4	18.1	22.3	40.6	21	19.7	29.6	23	29.9
Lead (RBCr)	400	mg/kg	20.7	24.9	31	39.9	43.7	62.3	60.7	58.3	24.1	38.3	34
Mercury	400	mg/kg	0.093 J	0.096 J	0.084 J	0.11 J	0.090 J	0.11 J	0.11 J	0.10 J	0.78 J	0.075 J	0.93 J
Selenium	1200	mg/kg	1.8 J	2.9 J	3.0 J	1.9 J	2.0 J	4.5 J	2.7 J	3.1 J	3.1 J	2.8 J	3.1 J
Silver	1200	mg/kg	<0.66	<0.80	<0.74	<0.67	<0.68	<0.70	<0.65	<0.66	<0.56	<0.58	<0.62
Zinc	72000	mg/kg											
PAHs													
Acenaphthene	11000000	ug/kg	<4.6	<5.5	<5.2	<4.7	34.8 J	<4.9	<44.7	122 J	<3.9	<4.0	<4.3
Acenaphthylene (RBCr)	4246000	ug/kg	<3.6	<4.4	<4.1	<3.7	68.7 J	<3.8	311 J	362 J	<3.1	7.8 J	4.5 J
Anthracene	55100000	ug/kg	8.9 J	16.3 J	13.0 J	5.4 J	383	7.4 J	397 J	1060	<3.9	6.8 J	8.0 J
Benzo[a]anthracene	3520	ug/kg	58	97.9	87.5	44.7 J	1610	42.2 J	2210	3480	<5.1	36.3 J	81.2
Benzo[a]pyrene	353	ug/kg	46.0 J	76.2	65.1	36.3	1100	37.7 J	1510	2210	<2.7	25.1 J	99.5
Benzo[b]fluoranthene	3530	ug/kg	103	167	161	103	2350	88.8	4180	5660	8.6 J	88.5	270
Benzo[g,h,i]perylene (RBCr)	1793000	ug/kg	30.2 J	<9.2	<8.7	25.0 J	560	<8.1	771	1050	<6.6	<6.7	66.5
Benzo[k]fluoranthene	35300	ug/kg	104	168	163	104	2370	89.6	4220	5710	8.7 J	89.3	272
Chrysene	353000	ug/kg	68.7	108	99.1	72.9	1600	56.5	2490	3730	<2.2	62.7	135
Dibenz[a,h]anthracene	353	ug/kg	<11.2	<13.5	<12.8	<11.5	189	<11.9	303 J	419 J	<9.7	<9.9	14.8 J
Fluoranthene	7340000	ug/kg	127	210	192	122	3720	94.2	4560	8140	<3.3	131	183
Fluorene	7340000	ug/kg	<4.7	<5.6	<5.3	10.2 J	58.7 J	<5.0	<45.8	270 J	<4.0	<4.1	<4.4
Indeno[1,2,3-cd]pyrene	3530	ug/kg	25.3 J	42.2 J	39.5 J	22.8 J	608	<10.2	856	1160	<8.3	<8.5	62.8
Naphthalene	11900	ug/kg	29.7 J	46.4 J	30.7 J/<1.7	141	64.1 J	45.4 J	273 J	315 J	<8.4	152	68.9
Phenanthrene (RBCr)	23464000	ug/kg	71.2	133	103	118	2430	70.9	2200	6310	<3.8	131	90
Pyrene	5510000	ug/kg	99.6	168	147	86.5	2740	76.1	3460	5940	<4.9	79.2	142
Moisture Content													
Percent Moisture		%	36	46.7	42.8	36.5	37.5	37.8	33.7	34.9	23.9	27.5	30.8

Table 3. 2022 Phase II ESA Surface Soil Data
City of Morgantown - White Park Southside T1
Morgantown, West Virginia

Analyte Name	Recreational Soil RSL		SS-64 (0-2)	SS-65 (0-2)
		Date:	3/8/2022	3/8/2022
		Units	Dry Result	Dry Result
RCRA Metals				
Arsenic**	13.1	mg/kg	7.6 J	4.6 J
Barium	47900	mg/kg	61.2	66.5
Cadmium	21.9	mg/kg	<0.20	<0.17
Chromium (RBCr)	120000	mg/kg	18.1	14.2
Lead (RBCr)	400	mg/kg	47	21.7
Mercury	400	mg/kg	0.091 J	0.053 J
Selenium	1200	mg/kg	2.4 J	<1.5
Silver	1200	mg/kg	<0.69	<0.59
Zinc	72000	mg/kg		
PAHs				
Acenaphthene	11000000	ug/kg	<4.9	<4.2
Acenaphthylene (RBCr)	4246000	ug/kg	<3.8	<3.3
Anthracene	55100000	ug/kg	12.0 J	12.6 J
Benzo[a]anthracene	3520	ug/kg	71.1	72.5
Benzo[a]pyrene	353	ug/kg	63	59.1
Benzo[b]fluoranthene	3530	ug/kg	165	164
Benzo[g,h,i]perylene (RBCr)	1793000	ug/kg	29.8 J	29.1 J
Benzo[k]fluoranthene	35300	ug/kg	166	166
Chrysene	353000	ug/kg	103	117
Dibenz[a,h]anthracene	353	ug/kg	<11.9	<10.2
Fluoranthene	7340000	ug/kg	175	174
Fluorene	7340000	ug/kg	21.4 J	17.0 J
Indeno[1,2,3-cd]pyrene	3530	ug/kg	28.9 J	28.6 J
Naphthalene	11900	ug/kg	101	110/ <1.5
Phenanthrene (RBCr)	23464000	ug/kg	150	164
Pyrene	5510000	ug/kg	139	137
Moisture Content				
Percent Moisture		%	38.5	27.8

Table 4. 2022 Phase II ESA Subsurface Soil Data Compared to Site-Specific RSLs
City of Morgantown - White Park Southside Trail Project
Morgantown, West Virginia

Analyte Name	Recreational Soil RSL		SS-03 (6-8)	SS-11 (4-6)	SS-15 (4-6)	SS-30 (4-6)
		Date:	1/21/2022	1/21/2022	1/21/2022	1/24/2022
		Units	Dry Result	Dry Result	Dry Result	Dry Result
RCRA Metals						
Arsenic**	13.1	mg/kg	14.1	10.6	9.5	10
Barium	47900	mg/kg	210	115	104	67.1
Cadmium	21.9	mg/kg	<0.14	<0.14	<0.15	<0.14
Chromium (RBCr)	120000	mg/kg	36.8	26.9	31.5	19.2
Lead (RBCr)	400	mg/kg	31.6	18.5	26.8	18.8
Mercury	400	mg/kg	0.062J	0.046J	0.058J	0.049J
Selenium	1200	mg/kg	2.6 J	3.7 J	4.7 J	<1.3
Silver	1200	mg/kg	25.8	18.2	31.8	<0.51
Zinc	72000	mg/kg	0.062J	50.7	84.6	49.9
PAHs						
Acenaphthene	11000000	ug/kg	<0.70	<0.68	<0.74	<0.70
Acenaphthylene (RBCr)	4246000	ug/kg	<0.55	<0.53	<0.58	<0.56
Anthracene	55100000	ug/kg	<0.7000	<0.68	<0.74	1.6 J
Benzo[a]anthracene	3520	ug/kg	<0.70	<0.88	<0.96	8.1
Benzo[a]pyrene	353	ug/kg	0.49 J	<0.47	<0.51	7.1 J
Benzo[b]fluoranthene	3530	ug/kg	1.8 J	<0.89	<0.98	18.2
Benzo[g,h,i]perylene (RBCr)	1793000	ug/kg	<1.2	<1.1	<1.2	1.9 J
Benzo[k]fluoranthene	35300	ug/kg	1.7 J	<1.3	<1.4	18.0
Chrysene	353000	ug/kg	0.77 J	<0.39	<0.42	8.2
Dibenz[a,h]anthracene	353	ug/kg	<1.7	<1.7	<1.8	<1.7
Fluoranthene	7340000	ug/kg	1.1 J	<0.57	<0.62	18.4
Fluorene	7340000	ug/kg	<0.71	<0.69	<0.75	<0.72
Indeno[1,2,3-cd]pyrene	3530	ug/kg	<1.5	<1.4	<1.6	2.2 J
Naphthalene*	11900	ug/kg	<1.5 / <1.1	<1.4	<1.6	3.4 J / <1.1
Phenanthrene (RBCr)	23464000	ug/kg	<0.68	0.74 J	<0.72	10.9
Pyrene	5510000	ug/kg	1.0 J	<0.84	<0.92	14.2
Moisture Content						
Percent Moisture	--	%	15.6	11.4	19.8	15.1

Notes:

RSL = Risk-based concentration for a recreator (trail user) using US EPA Regional Screening Level (RSL) calculator on May 12, 2022 for HQ=1, Cancer Risk 1×10^{-6} , exposure frequency=114 days/yr, exposure time=2.0 hr/day.

RBCr = In the absence of a recreator RBC, the residential soil RBC is used, as defined in the West Virginia Voluntary Remediation and Redevelopment Act Table 60-3B De Minimis, December 2021.

**Arsenic soil RBC is the maximum published background concentration (VRP Guidance Manual, Table 3-3: Background Concentrations of Elements in WV Soils).

*Naphthalene reported as Method 8270 SIM/Method 8260.

< - Indicates analyte was not detected above Laboratory Method Detection Limit

J - indicates estimated result. The results is between the detection limit and the reporting limit.

" ---" - No standard available

mg/kg - milligrams per kilogram

ug/kg - micrograms per kilogram

Highlighted and bold results - Result is above the standard.

Output generated 12MAY2022:13:52:39

Table 5. 2022 Phase II ESA Soil Data - RSL and EPC Exceedances
City of Morgantown - White Park Trail Project
Morgantown, West Virginia

Analyte Name	Recreational Soil RSL		SS-03 (6-8)	SS-29 (0-2)
			SUBSURFACE	SURFACE
		Date:	1/21/2022	1/24/2022
		Units	Dry Result	Dry Result
RCRA Metals				
Arsenic**	13.1	mg/kg	14.1	144

Analyte Name	Recreational Soil RSL		SS-23 (0-2)	SS-25 (0-2)	SS-47 (0-2)	SS-48 (0-2)	SS-50 (0-2)	SS-60 (0-2)	SS-60-FD (0-2)
		Date:	1/21/2022	1/21/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
		Units	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result	Dry Result
PAHs									
Benzo[a]anthracene	3520	ug/kg	11200	112000	2450	4520	8760	2210	3480
Benzo[a]pyrene	353	ug/kg	12400	76500	1600	3150	8180	1510	2210
Benzo[b]fluoranthene	3530	ug/kg	23100	161000	3690	6530	13900	4180	5660
Benzo[k]fluoranthene	35300	ug/kg	23100	161000	3720	6580	14000	4220	5710
Dibenz[a,h]anthracene	353	ug/kg	1900	16700	359	720	1450	303 J	419 J
Indeno[1,2,3-cd]pyrene	3530	ug/kg	4370	44800	1010	2070	5220	856	1160

Notes:

RSL = Risk-based concentration for a recreator (trail user) using US EPA Regional Screening Level (RSL) calculator on May 12, 2022 for HQ=1, Cancer Risk 1x10⁻⁶, exposure frequency=114 days/yr, exposure time=2.0 hr/day.

**Arsenic soil RBC is the maximum published background concentration (VRP Guidance Manual, Table 3-3: Background Concentrations of Elements in WV Soils).

mg/kg - milligrams per kilogram

ug/kg - micrograms per kilogram

Highlighted and bold results - Result is above the standard.

APPENDIX A





ENVIRONMENTAL®
STANDARDS

Setting the Standards for Innovative Environmental Solutions

January 6, 2022

Ms. Vanessa Reaves
City of Morgantown
389 Spruce Street
Morgantown, WV 26505

Re: Consent for Access to Collect Soil Samples
White Park Southside Trail Site, Morgantown, WV

Dear Ms. Reaves:

At the direction of the West Virginia Department of Environmental Protection (WVDEP), Environmental Standards Inc., (Environmental Standards) respectfully requests authorization from you to access your property, White Park, for the purpose of collecting 60 surface soil samples along a 6,000-foot corridor of proposed recreational trail. Environmental Standards has been working with the WVDEP, the West Virginia Land Stewardship Corporation (LSC) and Environmental Resources and Consulting, LLC (ERC) to complete an environmental investigation on the White Park Property. Based on the history of the Site and findings during previous assessments, a limited investigation was recommended prior to constructing the White Park Southside trail.

This activity will involve soil sampling along the 6,000-foot corridor of proposed recreational trail on your property (Attachment 1). We understand the soil disturbance that may occur during trail construction may be +/- 20 feet from the proposed trail. We will select sample locations with potential trail construction modifications in mind.

Sample depths will be limited to surface soils in the top two feet. The sixty surface soil samples, or one for every 100 linear feet of proposed trail, will be collected using disposable plastic scoops. Environmental Standards staff, consisting of two people, will be on-site performing this work. Once completed, any small holes generated during sampling will be filled with their original soil.

Soil sample collection is planned to be accomplished in one day, with 5 days advance notice to you. Soil samples will be collected for laboratory analysis. We do not anticipate generating any regulated waste during the sampling.

The proposed work will be performed in accordance with WVDEP requirements. Efforts will be made to minimize disruption to traffic and normal, daily activities within the property. You will receive copies of the test results, once available.

In accordance with WVDEP requirements, we ask that you please indicate your approval and acceptance of the request as described above, by signing where indicated below and returning one executed copy of this agreement.

Sincerely,



Lydia M. Work, LRS
Principal Chemist
Environmental Standards, Inc.
Email: lwork@envstd.com
Mobile: 304-552-1442

Enclosure(s): Property Location figure

cc: Drew Gatlin, City of Morgantown
Dawn Seeburger, ERC

Access granted and approved by:

City of Morgantown, WV

By:

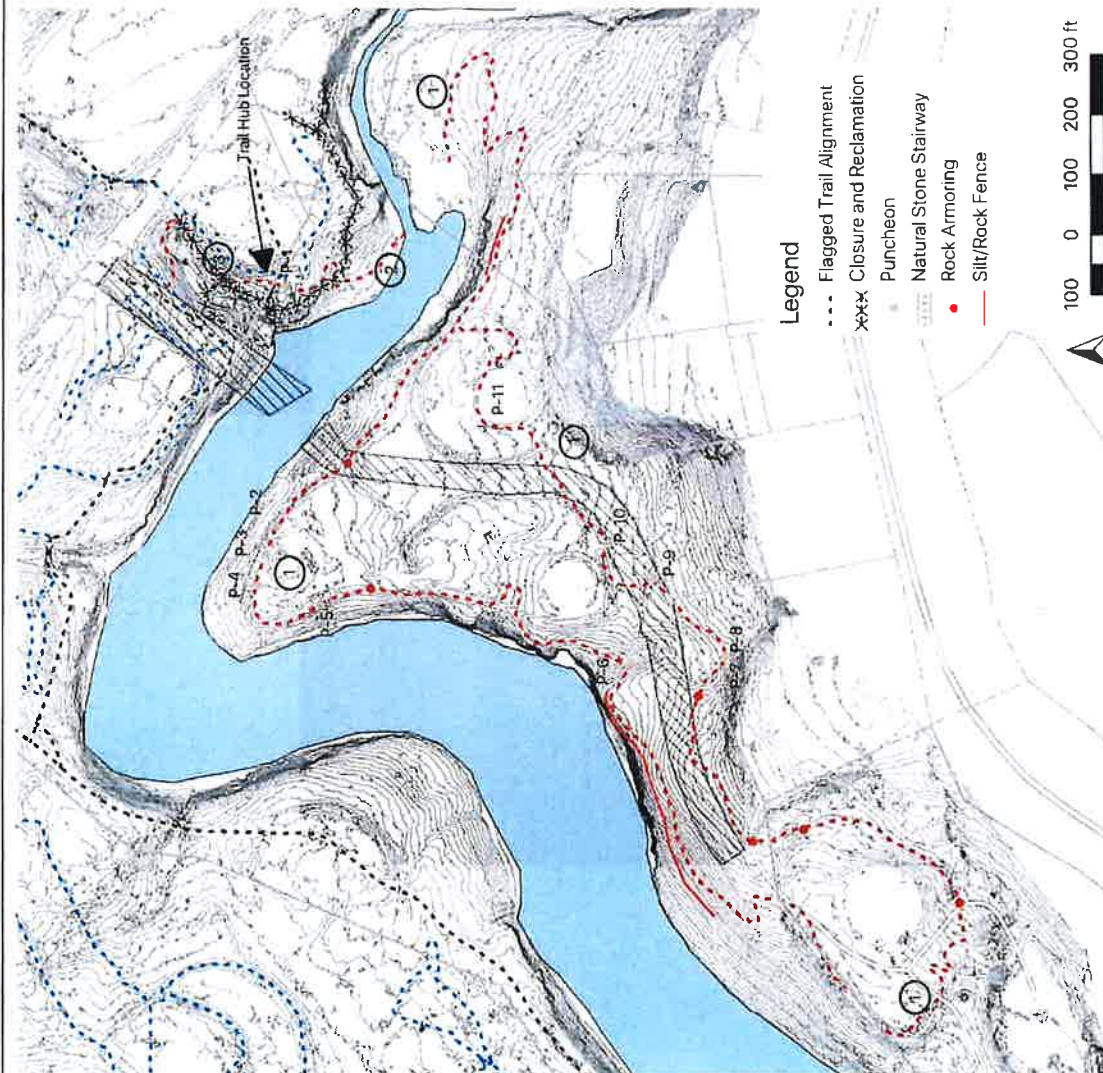
A. Kim Haws, City Manager
Name, Title

[Signature]
Signature

Date:

1/9/22

ATTACHMENT 1
PROPERTY LOCATION



Estimated Units		Puncheon Index	
QTY	Item Description	Length (ft)	Segment ID
5,765	Class 3 Trail - 39"	12	P-1
710	Trail Closure and Reclamation	12	P-2
200	Puncheon (LF)	12	P-3
300	Rock Armoring (SQFT)	12	P-4
60	Natural Stone Stairway (LF)	12	P-5
5,765	Additional Alternative Item - All Weather Soil Amendment (LF)	12	P-6
Segment Index			
Length	Segment ID		
5,125	1		
310	2		
330	3		

General Narrative:

- Trail Segment 1 is located on the south side of Coburn Reservoir and ranges 5 - 60% side slope. The most predominant features of the build site are unique earthen berms, historically used to contain oil tanks. These containment berms provide ample micro-topography to construct full bench trail. However, the delay of these structures control trail alignment as the interior of the structures are almost without exception low-lying and wet. In addition, recent construction of a new waterline has left low quality soil of variable depth within the utility right-of-way. Some super-elevated headway, limited sections of natural stone retaining wall, indicated sections of rock armoring, and substantial quantities of puncheon bridge will be required. Treadway shall average 39" in width. Machine width should not exceed tread width.
- Trail Segments 2 and 3 are located on moderate side hill but are in a location with a substantially high density of existing trail. New trail construction, trail closure and reclamation, limited natural stone retaining wall, specified puncheon bridge, specified natural stone stairway, and a "trail hub" are required.
- Treadway soil may be amended with 3" course of 1/2" minus sized limestone aggregate (AKA fines or "Stone Dust") to provide an alternate bid item.
- A substantial span bridge and boardwalk section will be required to connect segments 2 and 1 by crossing Coburn Creek and surrounding low-lying wet area. The bridge and boardwalk work should be completed concurrently with this trail construction project but are beyond the scope of these design documents due to specialized licensure and permitting requirements.
- Additionally, any needed kiosk, signage, and related trailhead infrastructure are not part of this bid packet.
- Alignments are flagged with black stripe on orange survey tape with orange pinflags for approximate centerline. Given terrain limitations, this is the anticipated build line. Variance up to 25 ft on either side of flagging is acceptable with prior approval.

Appalachian Dirt
22 Thistle Lane
Davis, WV 26260
(717) 448-3228
AppalachianDirt@gmail.com

Sheet Title: Site Map
Date: 9/19/20
Drawn By: ZDA
Approved by: ZDA

Client:
City of Morgantown c/o Drew Gatlin
389 Spruce Street
Morgantown, WV 26505
e: jgatl@cityofmorgantownwv.gov

APPENDIX B



White park

1/21/22

0745 mob to site
 0930 on site / meet w/ driver + LDM
 1030 begin soil sampling
 1555 end soil sampling
 1600 pack coolers / fill out COC
 1647 mob to Home office
 1815 @ home office / end day

White park

1/24/22

0745 mob to site
 0910 on site / meet w/ driver + LDM
 1010 begin soil sampling
 1345 end soil sampling
 1400 pack coolers / fill out COC
 1420 mob to Home office
 1630 @ home office / end day

18

White park

3/8/22

0700 mob to site

0835 on site

0855 collect Soil samples

1205 finish Soil collection

1230 Fill out col / pack cooler

1245 mob to Home office

1430 @ Home office / unpack car,

Scan paper work.

1500 end day

Km 3/8/22

APPENDIX C



March 16, 2022

Leah Mistick
Environmental Standards, Inc.
1140 Valley Forge Road
Valley Forge, PA 19482

RE: Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

Dear Leah Mistick:

Enclosed are the analytical results for sample(s) received by the laboratory on January 25, 2022. 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 - Beaver
- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision 1 - This report replaces the March 4, 2022 report. This project was revised on March 7, 2022 to add Zn to all samples.

(Greensburg, PA) - Revision 1 - This report replaces the March 4, 2022 report. This project was revised on March 16, 2022 to recheck Arsenic on Samples 016 and 036.

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

Sincerely,



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

Enclosures

cc: Kelsy Morton, Environmental Standards
Ms. Lydia Work, Environmental Standards, Inc.



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

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

Guam Certification

Florida: Cert E871149 SEKS WET

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 #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813

Virginia VELAP 460148

West Virginia DEP 060

West Virginia DHHR 00412CM

North Carolina DEQ 466

Kentucky Wastewater Certification KY90039

Pennsylvania DEP 68-00839

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30460926001	SS-01 (0-2)	Solid	01/21/22 10:35	01/25/22 15:45
30460926002	SS-01 (0-2)-Dup	Solid	01/21/22 10:35	01/25/22 15:45
30460926003	SS-02 (0-2)	Solid	01/21/22 10:45	01/25/22 15:45
30460926004	SS-03 (0-2)	Solid	01/21/22 10:50	01/25/22 15:45
30460926005	SS-03 (6-8)	Solid	01/21/22 10:55	01/25/22 15:45
30460926006	SS-04 (0-2)	Solid	01/21/22 11:05	01/25/22 15:45
30460926007	SS-05 (0-2)	Solid	01/21/22 11:10	01/25/22 15:45
30460926008	SS-06 (0-2)	Solid	01/21/22 11:15	01/25/22 15:45
30460926009	SS-07 (0-2)	Solid	01/21/22 11:25	01/25/22 15:45
30460926010	SS-08 (0-2)	Solid	01/21/22 11:30	01/25/22 15:45
30460926011	SS-09 (0-2)	Solid	01/21/22 11:45	01/25/22 15:45
30460926012	SS-10 (0-2)	Solid	01/21/22 11:50	01/25/22 15:45
30460926013	SS-11 (0-2)	Solid	01/21/22 11:55	01/25/22 15:45
30460926014	SS-11 (4-6)	Solid	01/21/22 12:00	01/25/22 15:45
30460926015	SS-12 (0-2)	Solid	01/21/22 12:05	01/25/22 15:45
30460926016	SS-13 (0-2)	Solid	01/21/22 14:00	01/25/22 15:45
30460926017	SS-14 (0-2)	Solid	01/21/22 14:05	01/25/22 15:45
30460926018	SS-15 (0-2)	Solid	01/21/22 14:30	01/25/22 15:45
30460926019	SS-15 (4-6)	Solid	01/21/22 14:30	01/25/22 15:45
30460926020	SS-16 (0-2)	Solid	01/21/22 14:40	01/25/22 15:45
30460926021	SS-17 (0-2)	Solid	01/21/22 14:45	01/25/22 15:45
30460926022	SS-17 (0-2)MS	Solid	01/21/22 14:45	01/25/22 15:45
30460926023	SS-18 (0-2)	Solid	01/21/22 14:55	01/25/22 15:45
30460926024	SS-19 (0-2)	Solid	01/21/22 15:00	01/25/22 15:45
30460926025	SS-20 (0-2)	Solid	01/21/22 15:10	01/25/22 15:45
30460926026	SS-21 (0-2)	Solid	01/21/22 15:15	01/25/22 15:45
30460926027	SS-22 (0-2)	Solid	01/21/22 15:25	01/25/22 15:45
30460926028	SS-23 (0-2)	Solid	01/21/22 15:30	01/25/22 15:45
30460926029	SS-24 (0-2)	Solid	01/21/22 15:35	01/25/22 15:45
30460926030	SS-25 (0-2)	Solid	01/21/22 15:40	01/25/22 15:45
30460926031	SS-26 (0-2)	Solid	01/21/22 15:50	01/25/22 15:45
30460926032	SS-27 (0-2)	Solid	01/21/22 15:55	01/25/22 15:45
30460926033	TB-01	Water	01/21/22 00:00	01/25/22 15:45
30460926034	SS-28 (0-2)	Solid	01/24/22 10:10	01/25/22 15:45
30460926035	SS-28 (0-2)-FD	Solid	01/24/22 10:10	01/25/22 15:45
30460926036	SS-29 (0-2)	Solid	01/24/22 10:15	01/25/22 15:45
30460926037	SS-30 (0-2)	Solid	01/24/22 10:20	01/25/22 15:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30460926038	SS-30 (4-6)	Solid	01/24/22 10:25	01/25/22 15:45
30460926039	SS-31 (0-2)	Solid	01/24/22 10:50	01/25/22 15:45
30460926040	SS-32 (0-2)	Solid	01/24/22 11:05	01/25/22 15:45
30460926041	SS-33 (0-2)	Solid	01/24/22 11:10	01/25/22 15:45
30460926042	SS-34 (0-2)	Solid	01/24/22 11:15	01/25/22 15:45
30460926043	SS-35 (0-2)	Solid	01/24/22 11:25	01/25/22 15:45
30460926044	SS-36 (0-2)	Solid	01/24/22 11:30	01/25/22 15:45
30460926045	SS-37 (0-2)	Solid	01/24/22 11:35	01/25/22 15:45
30460926046	SS-38 (0-2)	Solid	01/24/22 11:45	01/25/22 15:45
30460926047	SS-39 (0-2)	Solid	01/24/22 11:55	01/25/22 15:45
30460926048	SS-40 (0-2)	Solid	01/24/22 12:45	01/25/22 15:45
30460926049	SS-40 (0-2)MS	Solid	01/24/22 12:45	01/25/22 15:45
30460926050	SS-41 (0-2)	Solid	01/24/22 13:00	01/25/22 15:45
30460926051	SS-42 (0-2)	Solid	01/24/22 13:05	01/25/22 15:45
30460926052	SS-43 (0-2)	Solid	01/24/22 13:15	01/25/22 15:45
30460926053	SS-44 (0-2)	Solid	01/24/22 13:25	01/25/22 15:45
30460926054	SS-45 (0-2)	Solid	01/24/22 13:35	01/25/22 15:45
30460926055	SS-46 (0-2)	Solid	01/24/22 13:45	01/25/22 15:45
30460926056	TB-02	Water	01/24/22 00:00	01/25/22 15:45
30460926057	SS-17 (0-2) MSD	Solid	01/21/22 14:45	01/25/22 15:45
30460926058	SS-40 (0-2) MSD	Solid	01/24/22 12:45	01/25/22 15:45

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SAMPLE ANALYTE COUNT

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Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30460926001	SS-01 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926002	SS-01 (0-2)-Dup	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926003	SS-02 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926004	SS-03 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926005	SS-03 (6-8)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		EPA 8260C	JEW	5	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926006	SS-04 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926007	SS-05 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926008	SS-06 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926009	SS-07 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA

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Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30460926010	SS-08 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		EPA 8260C	ARG, JEW	5	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926011	SS-09 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926012	SS-10 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926013	SS-11 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926014	SS-11 (4-6)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926015	SS-12 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926016	SS-13 (0-2)	EPA 6010D	ACH1, MFC	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926017	SS-14 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		EPA 8260C	JEW	5	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926018	SS-15 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA

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Pace Project No.: 30460926

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30460926019	SS-15 (4-6)	ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926020	SS-16 (0-2)	ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926021	SS-17 (0-2)	ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926022	SS-17 (0-2)MS	ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926023	SS-18 (0-2)	ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926024	SS-19 (0-2)	EPA 8260C	ARG	5	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
30460926025	SS-20 (0-2)	EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
30460926026	SS-21 (0-2)	EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
30460926027	SS-22 (0-2)	EPA 8270E by SIM	DSC	18	PASI-PA
		EPA 8260C	ARG	5	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV

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SAMPLE ANALYTE COUNT

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Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30460926028	SS-23 (0-2)	EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926029	SS-24 (0-2)	ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926030	SS-25 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
30460926031	SS-26 (0-2)	EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	MFC	1	PASI-BV
30460926032	SS-27 (0-2)	EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926033	TB-01	ASTM D2974-87	OMZ	1	PASI-PA
30460926034	SS-28 (0-2)	EPA 8260C	LEL	5	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926035	SS-28 (0-2)-FD	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	MFC	1	PASI-BV
30460926036	SS-29 (0-2)	EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
30460926037	SS-30 (0-2)	EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV

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Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30460926038	SS-30 (4-6)	EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926039	SS-31 (0-2)	EPA 8260C	ARG	5	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926040	SS-32 (0-2)	EPA 8260C	ARG	5	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926041	SS-33 (0-2)	ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926042	SS-34 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
30460926043	SS-35 (0-2)	EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
30460926044	SS-36 (0-2)	EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926045	SS-37 (0-2)	ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		EPA 8260C	ARG	5	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30460926046	SS-38 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926047	SS-39 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926048	SS-40 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926049	SS-40 (0-2)MS	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926050	SS-41 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		EPA 8260C	ARG	1	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926051	SS-42 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926052	SS-43 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926053	SS-44 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		EPA 8260C	ARG	5	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926054	SS-45 (0-2)	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30460926055	SS-46 (0-2)	ASTM D2974-87	OMZ	1	PASI-PA
		EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30460926056	TB-02	ASTM D2974-87	OMZ	1	PASI-PA
		EPA 8260C	LEL	5	PASI-PA
30460926057	SS-17 (0-2) MSD	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA
30460926058	SS-40 (0-2) MSD	EPA 6010D	ACH1	8	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		ASTM D2974-87	OMZ	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-01 (0-2) **Lab ID: 30460926001** Collected: 01/21/22 10:35 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	11.2	mg/kg	5.6	0.61	1	02/08/22 06:03	02/09/22 10:49	7440-38-2	R1
Barium	80.8	mg/kg	5.6	0.64	1	02/08/22 06:03	02/09/22 10:49	7440-39-3	
Cadmium	<0.13	mg/kg	1.1	0.13	1	02/08/22 06:03	02/09/22 10:49	7440-43-9	
Chromium	12.7	mg/kg	5.6	0.65	1	02/08/22 06:03	02/09/22 10:49	7440-47-3	
Lead	5.3J	mg/kg	5.6	0.54	1	02/08/22 06:03	02/09/22 10:49	7439-92-1	
Selenium	3.3J	mg/kg	5.6	1.2	1	02/08/22 06:03	02/09/22 10:49	7782-49-2	
Silver	4.3	mg/kg	2.8	0.47	1	02/08/22 06:03	02/09/22 10:49	7440-22-4	
Zinc	43.4J	mg/kg	55.8	36.1	10	02/08/22 06:03	02/10/22 10:53	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.023J	mg/kg	0.11	0.010	1	02/10/22 11:49	02/14/22 15:54	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<6.7	ug/kg	73.7	6.7	10	01/27/22 08:36	01/28/22 17:52	83-32-9	ED
Acenaphthylene	<5.3	ug/kg	73.7	5.3	10	01/27/22 08:36	01/28/22 17:52	208-96-8	ED
Anthracene	54.4J	ug/kg	73.7	6.7	10	01/27/22 08:36	01/28/22 17:52	120-12-7	ED
Benzo(a)anthracene	125	ug/kg	73.7	8.7	10	01/27/22 08:36	01/28/22 17:52	56-55-3	ED
Benzo(a)pyrene	116	ug/kg	73.7	4.6	10	01/27/22 08:36	01/28/22 17:52	50-32-8	ED
Benzo(b)fluoranthene	213	ug/kg	73.7	8.8	10	01/27/22 08:36	01/28/22 17:52	205-99-2	ED,lp,ML
Benzo(g,h,i)perylene	70.1J	ug/kg	73.7	11.1	10	01/27/22 08:36	01/28/22 17:52	191-24-2	ED
Benzo(k)fluoranthene	210	ug/kg	73.7	12.4	10	01/27/22 08:36	01/28/22 17:52	207-08-9	ED,lp,ML
Chrysene	135	ug/kg	73.7	3.8	10	01/27/22 08:36	01/28/22 17:52	218-01-9	ED
Dibenz(a,h)anthracene	19.7J	ug/kg	73.7	16.4	10	01/27/22 08:36	01/28/22 17:52	53-70-3	ED
Fluoranthene	273	ug/kg	73.7	5.6	10	01/27/22 08:36	01/28/22 17:52	206-44-0	ED,ML
Fluorene	<6.8	ug/kg	73.7	6.8	10	01/27/22 08:36	01/28/22 17:52	86-73-7	ED,MH
Indeno(1,2,3-cd)pyrene	58.4J	ug/kg	73.7	14.0	10	01/27/22 08:36	01/28/22 17:52	193-39-5	ED
Naphthalene	<14.3	ug/kg	73.7	14.3	10	01/27/22 08:36	01/28/22 17:52	91-20-3	ED
Phenanthrene	89.1	ug/kg	73.7	6.5	10	01/27/22 08:36	01/28/22 17:52	85-01-8	ED
Pyrene	212	ug/kg	73.7	8.3	10	01/27/22 08:36	01/28/22 17:52	129-00-0	ED,ML
Surrogates									
2-Fluorobiphenyl (S)	92	%	37-88		10	01/27/22 08:36	01/28/22 17:52	321-60-8	S4
Terphenyl-d14 (S)	103	%	10-128		10	01/27/22 08:36	01/28/22 17:52	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	9.4	%	0.10	0.10	1		01/28/22 16:15		D6

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-01 (0-2)-Dup **Lab ID: 30460926002** Collected: 01/21/22 10:35 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	6.4J	mg/kg	7.8	0.86	1	02/08/22 06:03	02/09/22 11:00	7440-38-2	
Barium	58.7	mg/kg	7.8	0.89	1	02/08/22 06:03	02/09/22 11:00	7440-39-3	
Cadmium	<0.19	mg/kg	1.6	0.19	1	02/08/22 06:03	02/09/22 11:00	7440-43-9	
Chromium	8.4	mg/kg	7.8	0.90	1	02/08/22 06:03	02/09/22 11:00	7440-47-3	
Lead	20.7	mg/kg	7.8	0.75	1	02/08/22 06:03	02/09/22 11:00	7439-92-1	
Selenium	2.1J	mg/kg	7.8	1.6	1	02/08/22 06:03	02/09/22 11:00	7782-49-2	
Silver	4.5	mg/kg	3.9	0.66	1	02/08/22 06:03	02/09/22 11:00	7440-22-4	
Zinc	54.8	mg/kg	7.8	5.0	1	02/08/22 06:03	02/09/22 11:00	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.021J	mg/kg	0.15	0.014	1	02/10/22 11:49	02/14/22 15:51	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<9.2	ug/kg	101	9.2	10	01/27/22 08:36	01/28/22 18:51	83-32-9	ED
Acenaphthylene	<7.3	ug/kg	101	7.3	10	01/27/22 08:36	01/28/22 18:51	208-96-8	ED
Anthracene	9.5J	ug/kg	101	9.2	10	01/27/22 08:36	01/28/22 18:51	120-12-7	ED
Benzo(a)anthracene	38.0J	ug/kg	101	11.9	10	01/27/22 08:36	01/28/22 18:51	56-55-3	ED
Benzo(a)pyrene	29.3J	ug/kg	101	6.3	10	01/27/22 08:36	01/28/22 18:51	50-32-8	ED
Benzo(b)fluoranthene	58.5J	ug/kg	101	12.2	10	01/27/22 08:36	01/28/22 18:51	205-99-2	ED,lp
Benzo(g,h,i)perylene	20.0J	ug/kg	101	15.3	10	01/27/22 08:36	01/28/22 18:51	191-24-2	ED
Benzo(k)fluoranthene	57.7J	ug/kg	101	17.0	10	01/27/22 08:36	01/28/22 18:51	207-08-9	ED,lp
Chrysene	38.1J	ug/kg	101	5.2	10	01/27/22 08:36	01/28/22 18:51	218-01-9	ED
Dibenz(a,h)anthracene	<22.5	ug/kg	101	22.5	10	01/27/22 08:36	01/28/22 18:51	53-70-3	ED
Fluoranthene	96.1J	ug/kg	101	7.7	10	01/27/22 08:36	01/28/22 18:51	206-44-0	ED
Fluorene	<9.4	ug/kg	101	9.4	10	01/27/22 08:36	01/28/22 18:51	86-73-7	ED
Indeno(1,2,3-cd)pyrene	<19.3	ug/kg	101	19.3	10	01/27/22 08:36	01/28/22 18:51	193-39-5	ED
Naphthalene	<19.7	ug/kg	101	19.7	10	01/27/22 08:36	01/28/22 18:51	91-20-3	ED
Phenanthrene	56.8J	ug/kg	101	8.9	10	01/27/22 08:36	01/28/22 18:51	85-01-8	ED
Pyrene	80.0J	ug/kg	101	11.4	10	01/27/22 08:36	01/28/22 18:51	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	82	%	37-88		10	01/27/22 08:36	01/28/22 18:51	321-60-8	
Terphenyl-d14 (S)	90	%	10-128		10	01/27/22 08:36	01/28/22 18:51	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	35.0	%	0.10	0.10	1		01/28/22 16:15		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-02 (0-2) **Lab ID: 30460926003** Collected: 01/21/22 10:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	12.2	mg/kg	6.2	0.68	1	02/08/22 06:03	02/09/22 11:03	7440-38-2	
Barium	87.8	mg/kg	6.2	0.71	1	02/08/22 06:03	02/09/22 11:03	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 06:03	02/09/22 11:03	7440-43-9	
Chromium	29.0	mg/kg	6.2	0.72	1	02/08/22 06:03	02/09/22 11:03	7440-47-3	
Lead	18.4	mg/kg	6.2	0.60	1	02/08/22 06:03	02/09/22 11:03	7439-92-1	
Selenium	3.0J	mg/kg	6.2	1.3	1	02/08/22 06:03	02/09/22 11:03	7782-49-2	
Silver	12.3	mg/kg	3.1	0.53	1	02/08/22 06:03	02/09/22 11:03	7440-22-4	
Zinc	53.3	mg/kg	6.2	4.0	1	02/08/22 06:03	02/09/22 11:03	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.035J	mg/kg	0.12	0.011	1	02/10/22 11:49	02/14/22 15:57	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.73	ug/kg	8.1	0.73	1	01/27/22 08:36	01/28/22 19:11	83-32-9	
Acenaphthylene	<0.58	ug/kg	8.1	0.58	1	01/27/22 08:36	01/28/22 19:11	208-96-8	
Anthracene	<0.73	ug/kg	8.1	0.73	1	01/27/22 08:36	01/28/22 19:11	120-12-7	
Benzo(a)anthracene	<0.95	ug/kg	8.1	0.95	1	01/27/22 08:36	01/28/22 19:11	56-55-3	
Benzo(a)pyrene	<0.51	ug/kg	8.1	0.51	1	01/27/22 08:36	01/28/22 19:11	50-32-8	
Benzo(b)fluoranthene	<0.97	ug/kg	8.1	0.97	1	01/27/22 08:36	01/28/22 19:11	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	8.1	1.2	1	01/27/22 08:36	01/28/22 19:11	191-24-2	
Benzo(k)fluoranthene	<1.4	ug/kg	8.1	1.4	1	01/27/22 08:36	01/28/22 19:11	207-08-9	
Chrysene	<0.42	ug/kg	8.1	0.42	1	01/27/22 08:36	01/28/22 19:11	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.1	1.8	1	01/27/22 08:36	01/28/22 19:11	53-70-3	
Fluoranthene	<0.61	ug/kg	8.1	0.61	1	01/27/22 08:36	01/28/22 19:11	206-44-0	
Fluorene	<0.75	ug/kg	8.1	0.75	1	01/27/22 08:36	01/28/22 19:11	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.5	ug/kg	8.1	1.5	1	01/27/22 08:36	01/28/22 19:11	193-39-5	
Naphthalene	<1.6	ug/kg	8.1	1.6	1	01/27/22 08:36	01/28/22 19:11	91-20-3	
Phenanthrene	<0.71	ug/kg	8.1	0.71	1	01/27/22 08:36	01/28/22 19:11	85-01-8	
Pyrene	<0.91	ug/kg	8.1	0.91	1	01/27/22 08:36	01/28/22 19:11	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	74	%	37-88		1	01/27/22 08:36	01/28/22 19:11	321-60-8	
Terphenyl-d14 (S)	84	%	10-128		1	01/27/22 08:36	01/28/22 19:11	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	19.5	%	0.10	0.10	1		01/28/22 16:15		

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-03 (0-2) **Lab ID: 30460926004** Collected: 01/21/22 10:50 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	12.4	mg/kg	6.2	0.68	1	02/08/22 06:03	02/09/22 11:15	7440-38-2	
Barium	100	mg/kg	6.2	0.71	1	02/08/22 06:03	02/09/22 11:15	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 06:03	02/09/22 11:15	7440-43-9	
Chromium	31.1	mg/kg	6.2	0.72	1	02/08/22 06:03	02/09/22 11:15	7440-47-3	
Lead	30.9	mg/kg	6.2	0.60	1	02/08/22 06:03	02/09/22 11:15	7439-92-1	
Selenium	3.1J	mg/kg	6.2	1.3	1	02/08/22 06:03	02/09/22 11:15	7782-49-2	
Silver	22.0	mg/kg	3.1	0.53	1	02/08/22 06:03	02/09/22 11:15	7440-22-4	
Zinc	48.0	mg/kg	6.2	4.0	1	02/08/22 06:03	02/09/22 11:15	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.036J	mg/kg	0.12	0.011	1	02/10/22 11:49	02/14/22 15:30	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.74	ug/kg	8.2	0.74	1	01/27/22 08:36	01/28/22 19:31	83-32-9	
Acenaphthylene	<0.59	ug/kg	8.2	0.59	1	01/27/22 08:36	01/28/22 19:31	208-96-8	
Anthracene	<0.74	ug/kg	8.2	0.74	1	01/27/22 08:36	01/28/22 19:31	120-12-7	
Benzo(a)anthracene	2.2J	ug/kg	8.2	0.96	1	01/27/22 08:36	01/28/22 19:31	56-55-3	
Benzo(a)pyrene	1.2J	ug/kg	8.2	0.51	1	01/27/22 08:36	01/28/22 19:31	50-32-8	
Benzo(b)fluoranthene	2.3J	ug/kg	8.2	0.98	1	01/27/22 08:36	01/28/22 19:31	205-99-2	lp
Benzo(g,h,i)perylene	<1.2	ug/kg	8.2	1.2	1	01/27/22 08:36	01/28/22 19:31	191-24-2	
Benzo(k)fluoranthene	2.3J	ug/kg	8.2	1.4	1	01/27/22 08:36	01/28/22 19:31	207-08-9	lp
Chrysene	1.4J	ug/kg	8.2	0.42	1	01/27/22 08:36	01/28/22 19:31	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.2	1.8	1	01/27/22 08:36	01/28/22 19:31	53-70-3	
Fluoranthene	3.0J	ug/kg	8.2	0.62	1	01/27/22 08:36	01/28/22 19:31	206-44-0	
Fluorene	<0.76	ug/kg	8.2	0.76	1	01/27/22 08:36	01/28/22 19:31	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.6	ug/kg	8.2	1.6	1	01/27/22 08:36	01/28/22 19:31	193-39-5	
Naphthalene	<1.6	ug/kg	8.2	1.6	1	01/27/22 08:36	01/28/22 19:31	91-20-3	
Phenanthrene	2.1J	ug/kg	8.2	0.72	1	01/27/22 08:36	01/28/22 19:31	85-01-8	
Pyrene	2.4J	ug/kg	8.2	0.92	1	01/27/22 08:36	01/28/22 19:31	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	85	%	37-88		1	01/27/22 08:36	01/28/22 19:31	321-60-8	
Terphenyl-d14 (S)	90	%	10-128		1	01/27/22 08:36	01/28/22 19:31	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	19.3	%	0.10	0.10	1		01/28/22 16:15		

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-03 (6-8) **Lab ID: 30460926005** Collected: 01/21/22 10:55 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	14.1	mg/kg	5.9	0.65	1	02/08/22 06:03	02/09/22 11:17	7440-38-2	
Barium	210	mg/kg	5.9	0.68	1	02/08/22 06:03	02/09/22 11:17	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 06:03	02/09/22 11:17	7440-43-9	
Chromium	36.8	mg/kg	5.9	0.69	1	02/08/22 06:03	02/09/22 11:17	7440-47-3	
Lead	31.6	mg/kg	5.9	0.57	1	02/08/22 06:03	02/09/22 11:17	7439-92-1	
Selenium	2.6J	mg/kg	5.9	1.3	1	02/08/22 06:03	02/09/22 11:17	7782-49-2	
Silver	25.8	mg/kg	3.0	0.50	1	02/08/22 06:03	02/09/22 11:17	7440-22-4	
Zinc	57.9	mg/kg	5.9	3.8	1	02/08/22 06:03	02/09/22 11:17	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.062J	mg/kg	0.12	0.011	1	02/10/22 11:49	02/14/22 15:32	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.70	ug/kg	7.7	0.70	1	01/27/22 08:36	01/28/22 19:50	83-32-9	
Acenaphthylene	<0.55	ug/kg	7.7	0.55	1	01/27/22 08:36	01/28/22 19:50	208-96-8	
Anthracene	<0.70	ug/kg	7.7	0.70	1	01/27/22 08:36	01/28/22 19:50	120-12-7	
Benzo(a)anthracene	1.4J	ug/kg	7.7	0.90	1	01/27/22 08:36	01/28/22 19:50	56-55-3	
Benzo(a)pyrene	0.49J	ug/kg	7.7	0.48	1	01/27/22 08:36	01/28/22 19:50	50-32-8	
Benzo(b)fluoranthene	1.8J	ug/kg	7.7	0.92	1	01/27/22 08:36	01/28/22 19:50	205-99-2	lp
Benzo(g,h,i)perylene	<1.2	ug/kg	7.7	1.2	1	01/27/22 08:36	01/28/22 19:50	191-24-2	
Benzo(k)fluoranthene	1.7J	ug/kg	7.7	1.3	1	01/27/22 08:36	01/28/22 19:50	207-08-9	lp
Chrysene	0.77J	ug/kg	7.7	0.40	1	01/27/22 08:36	01/28/22 19:50	218-01-9	
Dibenz(a,h)anthracene	<1.7	ug/kg	7.7	1.7	1	01/27/22 08:36	01/28/22 19:50	53-70-3	
Fluoranthene	1.1J	ug/kg	7.7	0.58	1	01/27/22 08:36	01/28/22 19:50	206-44-0	
Fluorene	<0.71	ug/kg	7.7	0.71	1	01/27/22 08:36	01/28/22 19:50	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.5	ug/kg	7.7	1.5	1	01/27/22 08:36	01/28/22 19:50	193-39-5	
Naphthalene	<1.5	ug/kg	7.7	1.5	1	01/27/22 08:36	01/28/22 19:50	91-20-3	
Phenanthrene	<0.68	ug/kg	7.7	0.68	1	01/27/22 08:36	01/28/22 19:50	85-01-8	
Pyrene	1.0J	ug/kg	7.7	0.87	1	01/27/22 08:36	01/28/22 19:50	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	77	%.	37-88		1	01/27/22 08:36	01/28/22 19:50	321-60-8	
Terphenyl-d14 (S)	85	%.	10-128		1	01/27/22 08:36	01/28/22 19:50	1718-51-0	
8260C MSV 5035 Low Level									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A									
Pace Analytical Services - Greensburg									
Naphthalene	<1.1	ug/kg	5.8	1.1	1	01/27/22 10:46	01/27/22 18:05	91-20-3	1c
Surrogates									
Toluene-d8 (S)	95	%.	70-130		1	01/27/22 10:46	01/27/22 18:05	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	70-130		1	01/27/22 10:46	01/27/22 18:05	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%.	70-130		1	01/27/22 10:46	01/27/22 18:05	17060-07-0	
Dibromofluoromethane (S)	106	%.	70-130		1	01/27/22 10:46	01/27/22 18:05	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-03 (6-8) **Lab ID: 30460926005** Collected: 01/21/22 10:55 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	15.6	%	0.10	0.10	1		01/28/22 16:15		

Sample: SS-04 (0-2) **Lab ID: 30460926006** Collected: 01/21/22 11:05 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	8.5	mg/kg	6.0	0.67	1	02/08/22 06:03	02/09/22 11:19	7440-38-2	
Barium	141	mg/kg	6.0	0.69	1	02/08/22 06:03	02/09/22 11:19	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 06:03	02/09/22 11:19	7440-43-9	
Chromium	27.0	mg/kg	6.0	0.70	1	02/08/22 06:03	02/09/22 11:19	7440-47-3	
Lead	20.1	mg/kg	6.0	0.58	1	02/08/22 06:03	02/09/22 11:19	7439-92-1	
Selenium	2.0J	mg/kg	6.0	1.3	1	02/08/22 06:03	02/09/22 11:19	7782-49-2	
Silver	17.2	mg/kg	3.0	0.51	1	02/08/22 06:03	02/09/22 11:19	7440-22-4	
Zinc	58.1	mg/kg	6.0	3.9	1	02/08/22 06:03	02/09/22 11:19	7440-66-6	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.034J	mg/kg	0.12	0.011	1	02/10/22 11:49	02/14/22 15:40	7439-97-6	
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8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<0.72	ug/kg	8.0	0.72	1	01/27/22 08:36	01/28/22 20:10	83-32-9	
Acenaphthylene	<0.57	ug/kg	8.0	0.57	1	01/27/22 08:36	01/28/22 20:10	208-96-8	
Anthracene	<0.72	ug/kg	8.0	0.72	1	01/27/22 08:36	01/28/22 20:10	120-12-7	
Benzo(a)anthracene	<0.94	ug/kg	8.0	0.94	1	01/27/22 08:36	01/28/22 20:10	56-55-3	
Benzo(a)pyrene	<0.50	ug/kg	8.0	0.50	1	01/27/22 08:36	01/28/22 20:10	50-32-8	
Benzo(b)fluoranthene	<0.96	ug/kg	8.0	0.96	1	01/27/22 08:36	01/28/22 20:10	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	8.0	1.2	1	01/27/22 08:36	01/28/22 20:10	191-24-2	
Benzo(k)fluoranthene	<1.3	ug/kg	8.0	1.3	1	01/27/22 08:36	01/28/22 20:10	207-08-9	
Chrysene	<0.41	ug/kg	8.0	0.41	1	01/27/22 08:36	01/28/22 20:10	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.0	1.8	1	01/27/22 08:36	01/28/22 20:10	53-70-3	
Fluoranthene	<0.60	ug/kg	8.0	0.60	1	01/27/22 08:36	01/28/22 20:10	206-44-0	
Fluorene	<0.74	ug/kg	8.0	0.74	1	01/27/22 08:36	01/28/22 20:10	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.5	ug/kg	8.0	1.5	1	01/27/22 08:36	01/28/22 20:10	193-39-5	
Naphthalene	2.9J	ug/kg	8.0	1.5	1	01/27/22 08:36	01/28/22 20:10	91-20-3	
Phenanthrene	<0.70	ug/kg	8.0	0.70	1	01/27/22 08:36	01/28/22 20:10	85-01-8	
Pyrene	<0.90	ug/kg	8.0	0.90	1	01/27/22 08:36	01/28/22 20:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	74	%	37-88		1	01/27/22 08:36	01/28/22 20:10	321-60-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-04 (0-2) **Lab ID: 30460926006** Collected: 01/21/22 11:05 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Surrogates									
Terphenyl-d14 (S)	81	%	10-128		1	01/27/22 08:36	01/28/22 20:10	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	16.5	%	0.10	0.10	1		01/28/22 16:15		

Sample: SS-05 (0-2) **Lab ID: 30460926007** Collected: 01/21/22 11:10 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	10.0	mg/kg	6.1	0.67	1	02/08/22 06:03	02/09/22 11:22	7440-38-2	
Barium	118	mg/kg	6.1	0.70	1	02/08/22 06:03	02/09/22 11:22	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 06:03	02/09/22 11:22	7440-43-9	
Chromium	30.9	mg/kg	6.1	0.71	1	02/08/22 06:03	02/09/22 11:22	7440-47-3	
Lead	25.8	mg/kg	6.1	0.59	1	02/08/22 06:03	02/09/22 11:22	7439-92-1	
Selenium	1.7J	mg/kg	6.1	1.3	1	02/08/22 06:03	02/09/22 11:22	7782-49-2	
Silver	18.0	mg/kg	3.1	0.52	1	02/08/22 06:03	02/09/22 11:22	7440-22-4	
Zinc	53.6	mg/kg	6.1	4.0	1	02/08/22 06:03	02/09/22 11:22	7440-66-6	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury **0.072J** mg/kg 0.12 0.011 1 02/10/22 11:49 02/14/22 15:43 7439-97-6

8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<0.75	ug/kg	8.3	0.75	1	01/27/22 08:36	01/28/22 20:30	83-32-9	
Acenaphthylene	<0.59	ug/kg	8.3	0.59	1	01/27/22 08:36	01/28/22 20:30	208-96-8	
Anthracene	<0.75	ug/kg	8.3	0.75	1	01/27/22 08:36	01/28/22 20:30	120-12-7	
Benzo(a)anthracene	<0.97	ug/kg	8.3	0.97	1	01/27/22 08:36	01/28/22 20:30	56-55-3	
Benzo(a)pyrene	<0.52	ug/kg	8.3	0.52	1	01/27/22 08:36	01/28/22 20:30	50-32-8	
Benzo(b)fluoranthene	<0.99	ug/kg	8.3	0.99	1	01/27/22 08:36	01/28/22 20:30	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	8.3	1.2	1	01/27/22 08:36	01/28/22 20:30	191-24-2	
Benzo(k)fluoranthene	<1.4	ug/kg	8.3	1.4	1	01/27/22 08:36	01/28/22 20:30	207-08-9	
Chrysene	<0.43	ug/kg	8.3	0.43	1	01/27/22 08:36	01/28/22 20:30	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.3	1.8	1	01/27/22 08:36	01/28/22 20:30	53-70-3	
Fluoranthene	<0.63	ug/kg	8.3	0.63	1	01/27/22 08:36	01/28/22 20:30	206-44-0	
Fluorene	<0.77	ug/kg	8.3	0.77	1	01/27/22 08:36	01/28/22 20:30	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.6	ug/kg	8.3	1.6	1	01/27/22 08:36	01/28/22 20:30	193-39-5	

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-05 (0-2) **Lab ID: 30460926007** Collected: 01/21/22 11:10 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Naphthalene	<1.6	ug/kg	8.3	1.6	1	01/27/22 08:36	01/28/22 20:30	91-20-3	
Phenanthrene	<0.73	ug/kg	8.3	0.73	1	01/27/22 08:36	01/28/22 20:30	85-01-8	
Pyrene	<0.93	ug/kg	8.3	0.93	1	01/27/22 08:36	01/28/22 20:30	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	83	%	37-88		1	01/27/22 08:36	01/28/22 20:30	321-60-8	
Terphenyl-d14 (S)	91	%	10-128		1	01/27/22 08:36	01/28/22 20:30	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	19.2	%	0.10	0.10	1		01/28/22 16:15		

Sample: SS-06 (0-2) **Lab ID: 30460926008** Collected: 01/21/22 11:15 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	11.6	mg/kg	6.4	0.71	1	02/08/22 06:03	02/09/22 11:24	7440-38-2	
Barium	242	mg/kg	6.4	0.74	1	02/08/22 06:03	02/09/22 11:24	7440-39-3	
Cadmium	<0.15	mg/kg	1.3	0.15	1	02/08/22 06:03	02/09/22 11:24	7440-43-9	
Chromium	40.2	mg/kg	6.4	0.75	1	02/08/22 06:03	02/09/22 11:24	7440-47-3	
Lead	14.5	mg/kg	6.4	0.62	1	02/08/22 06:03	02/09/22 11:24	7439-92-1	
Selenium	2.8J	mg/kg	6.4	1.4	1	02/08/22 06:03	02/09/22 11:24	7782-49-2	
Silver	18.9	mg/kg	3.2	0.55	1	02/08/22 06:03	02/09/22 11:24	7440-22-4	
Zinc	78.5	mg/kg	6.4	4.2	1	02/08/22 06:03	02/09/22 11:24	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.077J	mg/kg	0.13	0.012	1	02/10/22 11:49	02/14/22 16:02	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.77	ug/kg	8.5	0.77	1	01/27/22 08:36	01/28/22 20:49	83-32-9	
Acenaphthylene	<0.61	ug/kg	8.5	0.61	1	01/27/22 08:36	01/28/22 20:49	208-96-8	
Anthracene	<0.77	ug/kg	8.5	0.77	1	01/27/22 08:36	01/28/22 20:49	120-12-7	
Benzo(a)anthracene	1.4J	ug/kg	8.5	1.0	1	01/27/22 08:36	01/28/22 20:49	56-55-3	
Benzo(a)pyrene	<0.53	ug/kg	8.5	0.53	1	01/27/22 08:36	01/28/22 20:49	50-32-8	
Benzo(b)fluoranthene	<1.0	ug/kg	8.5	1.0	1	01/27/22 08:36	01/28/22 20:49	205-99-2	
Benzo(g,h,i)perylene	<1.3	ug/kg	8.5	1.3	1	01/27/22 08:36	01/28/22 20:49	191-24-2	
Benzo(k)fluoranthene	<1.4	ug/kg	8.5	1.4	1	01/27/22 08:36	01/28/22 20:49	207-08-9	
Chrysene	0.81J	ug/kg	8.5	0.44	1	01/27/22 08:36	01/28/22 20:49	218-01-9	

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-06 (0-2) **Lab ID: 30460926008** Collected: 01/21/22 11:15 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Dibenz(a,h)anthracene	<1.9	ug/kg	8.5	1.9	1	01/27/22 08:36	01/28/22 20:49	53-70-3	
Fluoranthene	<0.64	ug/kg	8.5	0.64	1	01/27/22 08:36	01/28/22 20:49	206-44-0	
Fluorene	<0.79	ug/kg	8.5	0.79	1	01/27/22 08:36	01/28/22 20:49	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.6	ug/kg	8.5	1.6	1	01/27/22 08:36	01/28/22 20:49	193-39-5	
Naphthalene	<1.6	ug/kg	8.5	1.6	1	01/27/22 08:36	01/28/22 20:49	91-20-3	
Phenanthrene	1.3J	ug/kg	8.5	0.75	1	01/27/22 08:36	01/28/22 20:49	85-01-8	
Pyrene	<0.95	ug/kg	8.5	0.95	1	01/27/22 08:36	01/28/22 20:49	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	79	%	37-88		1	01/27/22 08:36	01/28/22 20:49	321-60-8	
Terphenyl-d14 (S)	88	%	10-128		1	01/27/22 08:36	01/28/22 20:49	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	22.4	%	0.10	0.10	1		01/28/22 16:15		

Sample: SS-07 (0-2) **Lab ID: 30460926009** Collected: 01/21/22 11:25 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	14.5	mg/kg	6.0	0.66	1	02/08/22 06:03	02/09/22 11:26	7440-38-2	
Barium	190	mg/kg	6.0	0.68	1	02/08/22 06:03	02/09/22 11:26	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 06:03	02/09/22 11:26	7440-43-9	
Chromium	30.1	mg/kg	6.0	0.69	1	02/08/22 06:03	02/09/22 11:26	7440-47-3	
Lead	16.3	mg/kg	6.0	0.58	1	02/08/22 06:03	02/09/22 11:26	7439-92-1	
Selenium	2.5J	mg/kg	6.0	1.3	1	02/08/22 06:03	02/09/22 11:26	7782-49-2	
Silver	18.1	mg/kg	3.0	0.51	1	02/08/22 06:03	02/09/22 11:26	7440-22-4	
Zinc	73.7	mg/kg	6.0	3.9	1	02/08/22 06:03	02/09/22 11:26	7440-66-6	

BVR 7471B Mercury Analytical Method: EPA 7471B Preparation Method: EPA 7471B

Pace Analytical Services - Beaver

Mercury	0.062J	mg/kg	0.12	0.011	1	02/10/22 11:49	02/14/22 15:46	7439-97-6	
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8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546

Pace Analytical Services - Greensburg

Acenaphthene	<0.70	ug/kg	7.7	0.70	1	01/27/22 08:36	01/28/22 21:09	83-32-9	
Acenaphthylene	<0.55	ug/kg	7.7	0.55	1	01/27/22 08:36	01/28/22 21:09	208-96-8	
Anthracene	<0.70	ug/kg	7.7	0.70	1	01/27/22 08:36	01/28/22 21:09	120-12-7	
Benzo(a)anthracene	<0.91	ug/kg	7.7	0.91	1	01/27/22 08:36	01/28/22 21:09	56-55-3	
Benzo(a)pyrene	<0.48	ug/kg	7.7	0.48	1	01/27/22 08:36	01/28/22 21:09	50-32-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-07 (0-2) **Lab ID: 30460926009** Collected: 01/21/22 11:25 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Benzo(b)fluoranthene	<0.93	ug/kg	7.7	0.93	1	01/27/22 08:36	01/28/22 21:09	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	7.7	1.2	1	01/27/22 08:36	01/28/22 21:09	191-24-2	
Benzo(k)fluoranthene	<1.3	ug/kg	7.7	1.3	1	01/27/22 08:36	01/28/22 21:09	207-08-9	
Chrysene	<0.40	ug/kg	7.7	0.40	1	01/27/22 08:36	01/28/22 21:09	218-01-9	
Dibenz(a,h)anthracene	<1.7	ug/kg	7.7	1.7	1	01/27/22 08:36	01/28/22 21:09	53-70-3	
Fluoranthene	<0.59	ug/kg	7.7	0.59	1	01/27/22 08:36	01/28/22 21:09	206-44-0	
Fluorene	<0.72	ug/kg	7.7	0.72	1	01/27/22 08:36	01/28/22 21:09	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.5	ug/kg	7.7	1.5	1	01/27/22 08:36	01/28/22 21:09	193-39-5	
Naphthalene	<1.5	ug/kg	7.7	1.5	1	01/27/22 08:36	01/28/22 21:09	91-20-3	
Phenanthrene	<0.68	ug/kg	7.7	0.68	1	01/27/22 08:36	01/28/22 21:09	85-01-8	
Pyrene	<0.87	ug/kg	7.7	0.87	1	01/27/22 08:36	01/28/22 21:09	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	80	%	37-88		1	01/27/22 08:36	01/28/22 21:09	321-60-8	
Terphenyl-d14 (S)	89	%	10-128		1	01/27/22 08:36	01/28/22 21:09	1718-51-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Pace Analytical Services - Greensburg

Percent Moisture	15.3	%	0.10	0.10	1		01/28/22 16:15		
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Sample: SS-08 (0-2) **Lab ID: 30460926010** Collected: 01/21/22 11:30 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	10.5	mg/kg	6.6	0.73	1	02/08/22 06:03	02/09/22 11:28	7440-38-2	
Barium	130	mg/kg	6.6	0.76	1	02/08/22 06:03	02/09/22 11:28	7440-39-3	
Cadmium	<0.16	mg/kg	1.3	0.16	1	02/08/22 06:03	02/09/22 11:28	7440-43-9	
Chromium	25.7	mg/kg	6.6	0.77	1	02/08/22 06:03	02/09/22 11:28	7440-47-3	
Lead	79.8	mg/kg	6.6	0.64	1	02/08/22 06:03	02/09/22 11:28	7439-92-1	
Selenium	2.83	mg/kg	6.6	1.4	1	02/08/22 06:03	02/09/22 11:28	7782-49-2	
Silver	17.6	mg/kg	3.3	0.56	1	02/08/22 06:03	02/09/22 11:28	7440-22-4	
Zinc	69.9	mg/kg	6.6	4.3	1	02/08/22 06:03	02/09/22 11:28	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.0703	mg/kg	0.13	0.012	1	02/10/22 11:49	02/14/22 15:59	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<7.9	ug/kg	87.0	7.9	10	01/27/22 08:36	02/01/22 03:22	83-32-9	ED

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-08 (0-2) **Lab ID: 30460926010** Collected: 01/21/22 11:30 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthylene	<6.2	ug/kg	87.0	6.2	10	01/27/22 08:36	02/01/22 03:22	208-96-8	ED
Anthracene	<7.9	ug/kg	87.0	7.9	10	01/27/22 08:36	02/01/22 03:22	120-12-7	ED
Benzo(a)anthracene	47.8J	ug/kg	87.0	10.2	10	01/27/22 08:36	02/01/22 03:22	56-55-3	ED
Benzo(a)pyrene	52.8J	ug/kg	87.0	5.4	10	01/27/22 08:36	02/01/22 03:22	50-32-8	ED
Benzo(b)fluoranthene	103	ug/kg	87.0	10.4	10	01/27/22 08:36	02/01/22 03:22	205-99-2	ED,lp
Benzo(g,h,i)perylene	28.9J	ug/kg	87.0	13.1	10	01/27/22 08:36	02/01/22 03:22	191-24-2	ED
Benzo(k)fluoranthene	101	ug/kg	87.0	14.6	10	01/27/22 08:36	02/01/22 03:22	207-08-9	ED,lp
Chrysene	54.0J	ug/kg	87.0	4.5	10	01/27/22 08:36	02/01/22 03:22	218-01-9	ED
Dibenz(a,h)anthracene	<19.3	ug/kg	87.0	19.3	10	01/27/22 08:36	02/01/22 03:22	53-70-3	ED
Fluoranthene	77.9J	ug/kg	87.0	6.6	10	01/27/22 08:36	02/01/22 03:22	206-44-0	ED
Fluorene	<8.0	ug/kg	87.0	8.0	10	01/27/22 08:36	02/01/22 03:22	86-73-7	ED
Indeno(1,2,3-cd)pyrene	27.4J	ug/kg	87.0	16.5	10	01/27/22 08:36	02/01/22 03:22	193-39-5	ED
Naphthalene	32.1J	ug/kg	87.0	16.8	10	01/27/22 08:36	02/01/22 03:22	91-20-3	ED
Phenanthrene	47.0J	ug/kg	87.0	7.7	10	01/27/22 08:36	02/01/22 03:22	85-01-8	ED
Pyrene	66.6J	ug/kg	87.0	9.8	10	01/27/22 08:36	02/01/22 03:22	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	96	%	37-88		10	01/27/22 08:36	02/01/22 03:22	321-60-8	S4
Terphenyl-d14 (S)	109	%	10-128		10	01/27/22 08:36	02/01/22 03:22	1718-51-0	
8260C MSV 5035 Low Level									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A									
Pace Analytical Services - Greensburg									
Naphthalene	<0.98	ug/kg	5.2	0.98	1	01/27/22 10:46	01/27/22 18:36	91-20-3	1c
Surrogates									
Toluene-d8 (S)	96	%	70-130		1	01/27/22 10:46	01/27/22 18:36	2037-26-5	
Toluene-d8 (S)	104	%	70-130		1	01/28/22 09:07	01/28/22 12:01	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130		1	01/27/22 10:46	01/27/22 18:36	460-00-4	
4-Bromofluorobenzene (S)	101	%	70-130		1	01/28/22 09:07	01/28/22 12:01	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	70-130		1	01/28/22 09:07	01/28/22 12:01	17060-07-0	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1	01/27/22 10:46	01/27/22 18:36	17060-07-0	
Dibromofluoromethane (S)	105	%	70-130		1	01/27/22 10:46	01/27/22 18:36	1868-53-7	
Dibromofluoromethane (S)	108	%	70-130		1	01/28/22 09:07	01/28/22 12:01	1868-53-7	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	23.8	%	0.10	0.10	1		01/28/22 16:15		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-09 (0-2) **Lab ID: 30460926011** Collected: 01/21/22 11:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	9.3	mg/kg	6.3	0.69	1	02/08/22 06:03	02/09/22 11:31	7440-38-2	
Barium	163	mg/kg	6.3	0.72	1	02/08/22 06:03	02/09/22 11:31	7440-39-3	
Cadmium	<0.15	mg/kg	1.3	0.15	1	02/08/22 06:03	02/09/22 11:31	7440-43-9	
Chromium	30.2	mg/kg	6.3	0.73	1	02/08/22 06:03	02/09/22 11:31	7440-47-3	
Lead	25.1	mg/kg	6.3	0.61	1	02/08/22 06:03	02/09/22 11:31	7439-92-1	
Selenium	2.7J	mg/kg	6.3	1.3	1	02/08/22 06:03	02/09/22 11:31	7782-49-2	
Silver	19.5	mg/kg	3.1	0.53	1	02/08/22 06:03	02/09/22 11:31	7440-22-4	
Zinc	64.3	mg/kg	6.3	4.1	1	02/08/22 06:03	02/09/22 11:31	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.076J	mg/kg	0.12	0.012	1	02/11/22 15:00	02/16/22 14:05	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.74	ug/kg	8.2	0.74	1	01/27/22 08:36	02/01/22 00:05	83-32-9	
Acenaphthylene	<0.59	ug/kg	8.2	0.59	1	01/27/22 08:36	02/01/22 00:05	208-96-8	
Anthracene	<0.74	ug/kg	8.2	0.74	1	01/27/22 08:36	02/01/22 00:05	120-12-7	
Benzo(a)anthracene	1.5J	ug/kg	8.2	0.96	1	01/27/22 08:36	02/01/22 00:05	56-55-3	
Benzo(a)pyrene	0.61J	ug/kg	8.2	0.51	1	01/27/22 08:36	02/01/22 00:05	50-32-8	
Benzo(b)fluoranthene	<0.98	ug/kg	8.2	0.98	1	01/27/22 08:36	02/01/22 00:05	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	8.2	1.2	1	01/27/22 08:36	02/01/22 00:05	191-24-2	
Benzo(k)fluoranthene	<1.4	ug/kg	8.2	1.4	1	01/27/22 08:36	02/01/22 00:05	207-08-9	
Chrysene	<0.42	ug/kg	8.2	0.42	1	01/27/22 08:36	02/01/22 00:05	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.2	1.8	1	01/27/22 08:36	02/01/22 00:05	53-70-3	
Fluoranthene	1.4J	ug/kg	8.2	0.62	1	01/27/22 08:36	02/01/22 00:05	206-44-0	
Fluorene	<0.76	ug/kg	8.2	0.76	1	01/27/22 08:36	02/01/22 00:05	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.6	ug/kg	8.2	1.6	1	01/27/22 08:36	02/01/22 00:05	193-39-5	
Naphthalene	<1.6	ug/kg	8.2	1.6	1	01/27/22 08:36	02/01/22 00:05	91-20-3	
Phenanthrene	1.6J	ug/kg	8.2	0.72	1	01/27/22 08:36	02/01/22 00:05	85-01-8	
Pyrene	1.1J	ug/kg	8.2	0.92	1	01/27/22 08:36	02/01/22 00:05	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	75	%	37-88		1	01/27/22 08:36	02/01/22 00:05	321-60-8	
Terphenyl-d14 (S)	87	%	10-128		1	01/27/22 08:36	02/01/22 00:05	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	19.8	%	0.10	0.10	1		01/28/22 16:15		

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-10 (0-2) **Lab ID: 30460926012** Collected: 01/21/22 11:50 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	6.8	mg/kg	6.3	0.69	1	02/08/22 06:03	02/09/22 11:38	7440-38-2	
Barium	108	mg/kg	6.3	0.72	1	02/08/22 06:03	02/09/22 11:38	7440-39-3	
Cadmium	0.52J	mg/kg	1.3	0.15	1	02/08/22 06:03	02/09/22 11:38	7440-43-9	
Chromium	19.6	mg/kg	6.3	0.73	1	02/08/22 06:03	02/09/22 11:38	7440-47-3	
Lead	21.5	mg/kg	6.3	0.61	1	02/08/22 06:03	02/09/22 11:38	7439-92-1	
Selenium	1.9J	mg/kg	6.3	1.3	1	02/08/22 06:03	02/09/22 11:38	7782-49-2	
Silver	12.5	mg/kg	3.1	0.53	1	02/08/22 06:03	02/09/22 11:38	7440-22-4	
Zinc	71.6	mg/kg	6.3	4.1	1	02/08/22 06:03	02/09/22 11:38	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.053J	mg/kg	0.12	0.012	1	02/11/22 15:00	02/16/22 13:33	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.74	ug/kg	8.2	0.74	1	01/27/22 08:36	02/01/22 00:25	83-32-9	
Acenaphthylene	<0.59	ug/kg	8.2	0.59	1	01/27/22 08:36	02/01/22 00:25	208-96-8	
Anthracene	<0.74	ug/kg	8.2	0.74	1	01/27/22 08:36	02/01/22 00:25	120-12-7	
Benzo(a)anthracene	<0.96	ug/kg	8.2	0.96	1	01/27/22 08:36	02/01/22 00:25	56-55-3	
Benzo(a)pyrene	<0.51	ug/kg	8.2	0.51	1	01/27/22 08:36	02/01/22 00:25	50-32-8	
Benzo(b)fluoranthene	4.2J	ug/kg	8.2	0.98	1	01/27/22 08:36	02/01/22 00:25	205-99-2	lp
Benzo(g,h,i)perylene	<1.2	ug/kg	8.2	1.2	1	01/27/22 08:36	02/01/22 00:25	191-24-2	
Benzo(k)fluoranthene	4.1J	ug/kg	8.2	1.4	1	01/27/22 08:36	02/01/22 00:25	207-08-9	lp
Chrysene	<0.42	ug/kg	8.2	0.42	1	01/27/22 08:36	02/01/22 00:25	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.2	1.8	1	01/27/22 08:36	02/01/22 00:25	53-70-3	
Fluoranthene	2.6J	ug/kg	8.2	0.62	1	01/27/22 08:36	02/01/22 00:25	206-44-0	
Fluorene	<0.76	ug/kg	8.2	0.76	1	01/27/22 08:36	02/01/22 00:25	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.6	ug/kg	8.2	1.6	1	01/27/22 08:36	02/01/22 00:25	193-39-5	
Naphthalene	1.9J	ug/kg	8.2	1.6	1	01/27/22 08:36	02/01/22 00:25	91-20-3	
Phenanthrene	2.6J	ug/kg	8.2	0.72	1	01/27/22 08:36	02/01/22 00:25	85-01-8	
Pyrene	2.3J	ug/kg	8.2	0.92	1	01/27/22 08:36	02/01/22 00:25	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	81	%	37-88		1	01/27/22 08:36	02/01/22 00:25	321-60-8	
Terphenyl-d14 (S)	85	%	10-128		1	01/27/22 08:36	02/01/22 00:25	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	19.7	%	0.10	0.10	1		01/28/22 16:15		

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-11 (0-2) **Lab ID: 30460926013** Collected: 01/21/22 11:55 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	12.9	mg/kg	6.3	0.69	1	02/08/22 06:42	02/09/22 11:45	7440-38-2	
Barium	90.0	mg/kg	6.3	0.72	1	02/08/22 06:42	02/09/22 11:45	7440-39-3	
Cadmium	<0.15	mg/kg	1.3	0.15	1	02/08/22 06:42	02/09/22 11:45	7440-43-9	
Chromium	28.1	mg/kg	6.3	0.73	1	02/08/22 06:42	02/09/22 11:45	7440-47-3	
Lead	21.9	mg/kg	6.3	0.61	1	02/08/22 06:42	02/09/22 11:45	7439-92-1	
Selenium	1.9J	mg/kg	6.3	1.3	1	02/08/22 06:42	02/09/22 11:45	7782-49-2	
Silver	18.4	mg/kg	3.1	0.53	1	02/08/22 06:42	02/09/22 11:45	7440-22-4	
Zinc	51.1	mg/kg	6.3	4.1	1	02/08/22 06:42	02/09/22 11:45	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.057J	mg/kg	0.12	0.012	1	02/11/22 15:00	02/16/22 13:41	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.74	ug/kg	8.2	0.74	1	01/27/22 08:36	02/01/22 00:45	83-32-9	
Acenaphthylene	<0.59	ug/kg	8.2	0.59	1	01/27/22 08:36	02/01/22 00:45	208-96-8	
Anthracene	<0.74	ug/kg	8.2	0.74	1	01/27/22 08:36	02/01/22 00:45	120-12-7	
Benzo(a)anthracene	<0.96	ug/kg	8.2	0.96	1	01/27/22 08:36	02/01/22 00:45	56-55-3	
Benzo(a)pyrene	<0.51	ug/kg	8.2	0.51	1	01/27/22 08:36	02/01/22 00:45	50-32-8	
Benzo(b)fluoranthene	<0.98	ug/kg	8.2	0.98	1	01/27/22 08:36	02/01/22 00:45	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	8.2	1.2	1	01/27/22 08:36	02/01/22 00:45	191-24-2	
Benzo(k)fluoranthene	<1.4	ug/kg	8.2	1.4	1	01/27/22 08:36	02/01/22 00:45	207-08-9	
Chrysene	<0.42	ug/kg	8.2	0.42	1	01/27/22 08:36	02/01/22 00:45	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.2	1.8	1	01/27/22 08:36	02/01/22 00:45	53-70-3	
Fluoranthene	<0.62	ug/kg	8.2	0.62	1	01/27/22 08:36	02/01/22 00:45	206-44-0	
Fluorene	<0.76	ug/kg	8.2	0.76	1	01/27/22 08:36	02/01/22 00:45	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.6	ug/kg	8.2	1.6	1	01/27/22 08:36	02/01/22 00:45	193-39-5	
Naphthalene	<1.6	ug/kg	8.2	1.6	1	01/27/22 08:36	02/01/22 00:45	91-20-3	
Phenanthrene	<0.72	ug/kg	8.2	0.72	1	01/27/22 08:36	02/01/22 00:45	85-01-8	
Pyrene	<0.92	ug/kg	8.2	0.92	1	01/27/22 08:36	02/01/22 00:45	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	76	%	37-88		1	01/27/22 08:36	02/01/22 00:45	321-60-8	
Terphenyl-d14 (S)	84	%	10-128		1	01/27/22 08:36	02/01/22 00:45	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	18.9	%	0.10	0.10	1		01/28/22 16:15		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-11 (4-6) **Lab ID: 30460926014** Collected: 01/21/22 12:00 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	10.6	mg/kg	5.7	0.62	1	02/08/22 06:42	02/09/22 11:47	7440-38-2	
Barium	115	mg/kg	5.7	0.65	1	02/08/22 06:42	02/09/22 11:47	7440-39-3	
Cadmium	<0.14	mg/kg	1.1	0.14	1	02/08/22 06:42	02/09/22 11:47	7440-43-9	
Chromium	26.9	mg/kg	5.7	0.66	1	02/08/22 06:42	02/09/22 11:47	7440-47-3	
Lead	18.5	mg/kg	5.7	0.55	1	02/08/22 06:42	02/09/22 11:47	7439-92-1	
Selenium	3.7J	mg/kg	5.7	1.2	1	02/08/22 06:42	02/09/22 11:47	7782-49-2	
Silver	18.2	mg/kg	2.8	0.48	1	02/08/22 06:42	02/09/22 11:47	7440-22-4	
Zinc	50.7	mg/kg	5.7	3.7	1	02/08/22 06:42	02/09/22 11:47	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.046J	mg/kg	0.11	0.010	1	02/08/22 14:53	02/14/22 14:54	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.68	ug/kg	7.5	0.68	1	01/27/22 08:36	02/01/22 01:04	83-32-9	
Acenaphthylene	<0.53	ug/kg	7.5	0.53	1	01/27/22 08:36	02/01/22 01:04	208-96-8	
Anthracene	<0.68	ug/kg	7.5	0.68	1	01/27/22 08:36	02/01/22 01:04	120-12-7	
Benzo(a)anthracene	<0.88	ug/kg	7.5	0.88	1	01/27/22 08:36	02/01/22 01:04	56-55-3	
Benzo(a)pyrene	<0.47	ug/kg	7.5	0.47	1	01/27/22 08:36	02/01/22 01:04	50-32-8	
Benzo(b)fluoranthene	<0.89	ug/kg	7.5	0.89	1	01/27/22 08:36	02/01/22 01:04	205-99-2	
Benzo(g,h,i)perylene	<1.1	ug/kg	7.5	1.1	1	01/27/22 08:36	02/01/22 01:04	191-24-2	
Benzo(k)fluoranthene	<1.3	ug/kg	7.5	1.3	1	01/27/22 08:36	02/01/22 01:04	207-08-9	
Chrysene	<0.39	ug/kg	7.5	0.39	1	01/27/22 08:36	02/01/22 01:04	218-01-9	
Dibenz(a,h)anthracene	<1.7	ug/kg	7.5	1.7	1	01/27/22 08:36	02/01/22 01:04	53-70-3	
Fluoranthene	<0.57	ug/kg	7.5	0.57	1	01/27/22 08:36	02/01/22 01:04	206-44-0	
Fluorene	<0.69	ug/kg	7.5	0.69	1	01/27/22 08:36	02/01/22 01:04	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.4	ug/kg	7.5	1.4	1	01/27/22 08:36	02/01/22 01:04	193-39-5	
Naphthalene	<1.4	ug/kg	7.5	1.4	1	01/27/22 08:36	02/01/22 01:04	91-20-3	
Phenanthrene	0.74J	ug/kg	7.5	0.66	1	01/27/22 08:36	02/01/22 01:04	85-01-8	
Pyrene	<0.84	ug/kg	7.5	0.84	1	01/27/22 08:36	02/01/22 01:04	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	75	%	37-88		1	01/27/22 08:36	02/01/22 01:04	321-60-8	
Terphenyl-d14 (S)	83	%	10-128		1	01/27/22 08:36	02/01/22 01:04	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	11.5	%	0.10	0.10	1		01/28/22 16:15		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-12 (0-2) **Lab ID: 30460926015** Collected: 01/21/22 12:05 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	20.3	mg/kg	6.0	0.66	1	02/08/22 06:42	02/09/22 11:49	7440-38-2	
Barium	75.3	mg/kg	6.0	0.68	1	02/08/22 06:42	02/09/22 11:49	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 06:42	02/09/22 11:49	7440-43-9	
Chromium	21.5	mg/kg	6.0	0.69	1	02/08/22 06:42	02/09/22 11:49	7440-47-3	
Lead	18.4	mg/kg	6.0	0.57	1	02/08/22 06:42	02/09/22 11:49	7439-92-1	
Selenium	2.3J	mg/kg	6.0	1.3	1	02/08/22 06:42	02/09/22 11:49	7782-49-2	
Silver	20.5	mg/kg	3.0	0.50	1	02/08/22 06:42	02/09/22 11:49	7440-22-4	
Zinc	77.2	mg/kg	6.0	3.9	1	02/08/22 06:42	02/09/22 11:49	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.058J	mg/kg	0.12	0.011	1	02/08/22 14:53	02/14/22 15:08	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<7.1	ug/kg	78.1	7.1	10	01/27/22 08:36	02/01/22 01:24	83-32-9	ED
Acenaphthylene	<5.6	ug/kg	78.1	5.6	10	01/27/22 08:36	02/01/22 01:24	208-96-8	ED
Anthracene	141	ug/kg	78.1	7.1	10	01/27/22 08:36	02/01/22 01:24	120-12-7	ED
Benzo(a)anthracene	232	ug/kg	78.1	9.2	10	01/27/22 08:36	02/01/22 01:24	56-55-3	ED
Benzo(a)pyrene	180	ug/kg	78.1	4.9	10	01/27/22 08:36	02/01/22 01:24	50-32-8	ED
Benzo(b)fluoranthene	318	ug/kg	78.1	9.4	10	01/27/22 08:36	02/01/22 01:24	205-99-2	ED,lp
Benzo(g,h,i)perylene	83.6	ug/kg	78.1	11.8	10	01/27/22 08:36	02/01/22 01:24	191-24-2	ED
Benzo(k)fluoranthene	314	ug/kg	78.1	13.1	10	01/27/22 08:36	02/01/22 01:24	207-08-9	ED,lp
Chrysene	218	ug/kg	78.1	4.0	10	01/27/22 08:36	02/01/22 01:24	218-01-9	ED
Dibenz(a,h)anthracene	26.3J	ug/kg	78.1	17.4	10	01/27/22 08:36	02/01/22 01:24	53-70-3	ED
Fluoranthene	599	ug/kg	78.1	5.9	10	01/27/22 08:36	02/01/22 01:24	206-44-0	ED
Fluorene	<7.2	ug/kg	78.1	7.2	10	01/27/22 08:36	02/01/22 01:24	86-73-7	ED
Indeno(1,2,3-cd)pyrene	83.6	ug/kg	78.1	14.9	10	01/27/22 08:36	02/01/22 01:24	193-39-5	ED
Naphthalene	<15.1	ug/kg	78.1	15.1	10	01/27/22 08:36	02/01/22 01:24	91-20-3	ED
Phenanthrene	221	ug/kg	78.1	6.9	10	01/27/22 08:36	02/01/22 01:24	85-01-8	ED
Pyrene	449	ug/kg	78.1	8.8	10	01/27/22 08:36	02/01/22 01:24	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	93	%	37-88		10	01/27/22 08:36	02/01/22 01:24	321-60-8	S4
Terphenyl-d14 (S)	105	%	10-128		10	01/27/22 08:36	02/01/22 01:24	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	16.9	%	0.10	0.10	1		01/28/22 16:15		

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-13 (0-2) **Lab ID: 30460926016** Collected: 01/21/22 14:00 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	26.7	mg/kg	6.0	0.67	1	03/09/22 10:17	03/09/22 18:16	7440-38-2	
Barium	70.0	mg/kg	6.2	0.70	1	02/08/22 06:42	02/09/22 11:52	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 06:42	02/09/22 11:52	7440-43-9	
Chromium	26.8	mg/kg	6.2	0.72	1	02/08/22 06:42	02/09/22 11:52	7440-47-3	
Lead	15.2	mg/kg	6.2	0.60	1	02/08/22 06:42	02/09/22 11:52	7439-92-1	
Selenium	2.7J	mg/kg	6.2	1.3	1	02/08/22 06:42	02/09/22 11:52	7782-49-2	
Silver	28.2	mg/kg	3.1	0.52	1	02/08/22 06:42	02/09/22 11:52	7440-22-4	
Zinc	116	mg/kg	6.2	4.0	1	02/08/22 06:42	02/09/22 11:52	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.039J	mg/kg	0.12	0.011	1	02/08/22 14:53	02/14/22 15:00	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.72	ug/kg	8.0	0.72	1	01/27/22 08:36	02/01/22 01:44	83-32-9	
Acenaphthylene	<0.57	ug/kg	8.0	0.57	1	01/27/22 08:36	02/01/22 01:44	208-96-8	
Anthracene	<0.72	ug/kg	8.0	0.72	1	01/27/22 08:36	02/01/22 01:44	120-12-7	
Benzo(a)anthracene	<0.93	ug/kg	8.0	0.93	1	01/27/22 08:36	02/01/22 01:44	56-55-3	
Benzo(a)pyrene	<0.50	ug/kg	8.0	0.50	1	01/27/22 08:36	02/01/22 01:44	50-32-8	
Benzo(b)fluoranthene	<0.95	ug/kg	8.0	0.95	1	01/27/22 08:36	02/01/22 01:44	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	8.0	1.2	1	01/27/22 08:36	02/01/22 01:44	191-24-2	
Benzo(k)fluoranthene	<1.3	ug/kg	8.0	1.3	1	01/27/22 08:36	02/01/22 01:44	207-08-9	
Chrysene	<0.41	ug/kg	8.0	0.41	1	01/27/22 08:36	02/01/22 01:44	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.0	1.8	1	01/27/22 08:36	02/01/22 01:44	53-70-3	
Fluoranthene	<0.60	ug/kg	8.0	0.60	1	01/27/22 08:36	02/01/22 01:44	206-44-0	
Fluorene	<0.74	ug/kg	8.0	0.74	1	01/27/22 08:36	02/01/22 01:44	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.5	ug/kg	8.0	1.5	1	01/27/22 08:36	02/01/22 01:44	193-39-5	
Naphthalene	<1.5	ug/kg	8.0	1.5	1	01/27/22 08:36	02/01/22 01:44	91-20-3	
Phenanthrene	<0.70	ug/kg	8.0	0.70	1	01/27/22 08:36	02/01/22 01:44	85-01-8	
Pyrene	<0.89	ug/kg	8.0	0.89	1	01/27/22 08:36	02/01/22 01:44	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	68	%	37-88		1	01/27/22 08:36	02/01/22 01:44	321-60-8	
Terphenyl-d14 (S)	81	%	10-128		1	01/27/22 08:36	02/01/22 01:44	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	17.3	%	0.10	0.10	1		01/28/22 16:15		

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-14 (0-2) **Lab ID: 30460926017** Collected: 01/21/22 14:05 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	16.0	mg/kg	5.8	0.64	1	02/08/22 06:42	02/09/22 11:54	7440-38-2	
Barium	37.4	mg/kg	5.8	0.66	1	02/08/22 06:42	02/09/22 11:54	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 06:42	02/09/22 11:54	7440-43-9	
Chromium	19.5	mg/kg	5.8	0.68	1	02/08/22 06:42	02/09/22 11:54	7440-47-3	
Lead	11.8	mg/kg	5.8	0.56	1	02/08/22 06:42	02/09/22 11:54	7439-92-1	
Selenium	<1.2	mg/kg	5.8	1.2	1	02/08/22 06:42	02/09/22 11:54	7782-49-2	
Silver	16.5	mg/kg	2.9	0.49	1	02/08/22 06:42	02/09/22 11:54	7440-22-4	
Zinc	48.2	mg/kg	5.8	3.8	1	02/08/22 06:42	02/09/22 11:54	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.020J	mg/kg	0.11	0.011	1	02/08/22 14:53	02/14/22 15:11	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.68	ug/kg	7.6	0.68	1	01/27/22 08:36	02/01/22 02:03	83-32-9	
Acenaphthylene	<0.54	ug/kg	7.6	0.54	1	01/27/22 08:36	02/01/22 02:03	208-96-8	
Anthracene	<0.69	ug/kg	7.6	0.69	1	01/27/22 08:36	02/01/22 02:03	120-12-7	
Benzo(a)anthracene	<0.89	ug/kg	7.6	0.89	1	01/27/22 08:36	02/01/22 02:03	56-55-3	
Benzo(a)pyrene	<0.47	ug/kg	7.6	0.47	1	01/27/22 08:36	02/01/22 02:03	50-32-8	
Benzo(b)fluoranthene	<0.91	ug/kg	7.6	0.91	1	01/27/22 08:36	02/01/22 02:03	205-99-2	
Benzo(g,h,i)perylene	<1.1	ug/kg	7.6	1.1	1	01/27/22 08:36	02/01/22 02:03	191-24-2	
Benzo(k)fluoranthene	<1.3	ug/kg	7.6	1.3	1	01/27/22 08:36	02/01/22 02:03	207-08-9	
Chrysene	<0.39	ug/kg	7.6	0.39	1	01/27/22 08:36	02/01/22 02:03	218-01-9	
Dibenz(a,h)anthracene	<1.7	ug/kg	7.6	1.7	1	01/27/22 08:36	02/01/22 02:03	53-70-3	
Fluoranthene	<0.57	ug/kg	7.6	0.57	1	01/27/22 08:36	02/01/22 02:03	206-44-0	
Fluorene	<0.70	ug/kg	7.6	0.70	1	01/27/22 08:36	02/01/22 02:03	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.4	ug/kg	7.6	1.4	1	01/27/22 08:36	02/01/22 02:03	193-39-5	
Naphthalene	<1.5	ug/kg	7.6	1.5	1	01/27/22 08:36	02/01/22 02:03	91-20-3	
Phenanthrene	<0.67	ug/kg	7.6	0.67	1	01/27/22 08:36	02/01/22 02:03	85-01-8	
Pyrene	<0.85	ug/kg	7.6	0.85	1	01/27/22 08:36	02/01/22 02:03	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	81	%	37-88		1	01/27/22 08:36	02/01/22 02:03	321-60-8	
Terphenyl-d14 (S)	87	%	10-128		1	01/27/22 08:36	02/01/22 02:03	1718-51-0	
8260C MSV 5035 Low Level									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A									
Pace Analytical Services - Greensburg									
Naphthalene	<1.4	ug/kg	7.5	1.4	1	01/27/22 10:46	01/27/22 19:06	91-20-3	1c
Surrogates									
Toluene-d8 (S)	94	%	70-130		1	01/27/22 10:46	01/27/22 19:06	2037-26-5	
4-Bromofluorobenzene (S)	108	%	70-130		1	01/27/22 10:46	01/27/22 19:06	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1	01/27/22 10:46	01/27/22 19:06	17060-07-0	
Dibromofluoromethane (S)	105	%	70-130		1	01/27/22 10:46	01/27/22 19:06	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-14 (0-2) **Lab ID: 30460926017** Collected: 01/21/22 14:05 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	14.0	%	0.10	0.10	1		01/28/22 16:15		

Sample: SS-15 (0-2) **Lab ID: 30460926018** Collected: 01/21/22 14:30 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	6.6J	mg/kg	7.0	0.77	1	02/08/22 06:42	02/09/22 11:56	7440-38-2	
Barium	122	mg/kg	7.0	0.80	1	02/08/22 06:42	02/09/22 11:56	7440-39-3	
Cadmium	<0.17	mg/kg	1.4	0.17	1	02/08/22 06:42	02/09/22 11:56	7440-43-9	
Chromium	21.5	mg/kg	7.0	0.81	1	02/08/22 06:42	02/09/22 11:56	7440-47-3	
Lead	17.0	mg/kg	7.0	0.67	1	02/08/22 06:42	02/09/22 11:56	7439-92-1	
Selenium	<1.5	mg/kg	7.0	1.5	1	02/08/22 06:42	02/09/22 11:56	7782-49-2	
Silver	8.6	mg/kg	3.5	0.59	1	02/08/22 06:42	02/09/22 11:56	7440-22-4	
Zinc	55.8	mg/kg	7.0	4.5	1	02/08/22 06:42	02/09/22 11:56	7440-66-6	

BVR 7471B Mercury Analytical Method: EPA 7471B Preparation Method: EPA 7471B

Pace Analytical Services - Beaver

Mercury	0.031J	mg/kg	0.13	0.013	1	02/10/22 11:49	02/14/22 15:49	7439-97-6	
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8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546

Pace Analytical Services - Greensburg

Acenaphthene	<0.83	ug/kg	9.1	0.83	1	01/27/22 08:36	02/01/22 02:23	83-32-9	
Acenaphthylene	<0.65	ug/kg	9.1	0.65	1	01/27/22 08:36	02/01/22 02:23	208-96-8	
Anthracene	<0.83	ug/kg	9.1	0.83	1	01/27/22 08:36	02/01/22 02:23	120-12-7	
Benzo(a)anthracene	<1.1	ug/kg	9.1	1.1	1	01/27/22 08:36	02/01/22 02:23	56-55-3	
Benzo(a)pyrene	<0.57	ug/kg	9.1	0.57	1	01/27/22 08:36	02/01/22 02:23	50-32-8	
Benzo(b)fluoranthene	<1.1	ug/kg	9.1	1.1	1	01/27/22 08:36	02/01/22 02:23	205-99-2	
Benzo(g,h,i)perylene	<1.4	ug/kg	9.1	1.4	1	01/27/22 08:36	02/01/22 02:23	191-24-2	
Benzo(k)fluoranthene	<1.5	ug/kg	9.1	1.5	1	01/27/22 08:36	02/01/22 02:23	207-08-9	
Chrysene	<0.47	ug/kg	9.1	0.47	1	01/27/22 08:36	02/01/22 02:23	218-01-9	
Dibenz(a,h)anthracene	<2.0	ug/kg	9.1	2.0	1	01/27/22 08:36	02/01/22 02:23	53-70-3	
Fluoranthene	<0.69	ug/kg	9.1	0.69	1	01/27/22 08:36	02/01/22 02:23	206-44-0	
Fluorene	<0.84	ug/kg	9.1	0.84	1	01/27/22 08:36	02/01/22 02:23	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.7	ug/kg	9.1	1.7	1	01/27/22 08:36	02/01/22 02:23	193-39-5	
Naphthalene	<1.8	ug/kg	9.1	1.8	1	01/27/22 08:36	02/01/22 02:23	91-20-3	
Phenanthrene	<0.80	ug/kg	9.1	0.80	1	01/27/22 08:36	02/01/22 02:23	85-01-8	
Pyrene	<1.0	ug/kg	9.1	1.0	1	01/27/22 08:36	02/01/22 02:23	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	80	%	37-88		1	01/27/22 08:36	02/01/22 02:23	321-60-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-15 (0-2) **Lab ID: 30460926018** Collected: 01/21/22 14:30 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Surrogates									
Terphenyl-d14 (S)	86	%	10-128		1	01/27/22 08:36	02/01/22 02:23	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	27.6	%	0.10	0.10	1		01/28/22 16:15		

Sample: SS-15 (4-6) **Lab ID: 30460926019** Collected: 01/21/22 14:30 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	9.5	mg/kg	6.2	0.69	1	02/08/22 06:42	02/09/22 11:59	7440-38-2	
Barium	104	mg/kg	6.2	0.71	1	02/08/22 06:42	02/09/22 11:59	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 06:42	02/09/22 11:59	7440-43-9	
Chromium	31.5	mg/kg	6.2	0.73	1	02/08/22 06:42	02/09/22 11:59	7440-47-3	
Lead	26.8	mg/kg	6.2	0.60	1	02/08/22 06:42	02/09/22 11:59	7439-92-1	
Selenium	4.7J	mg/kg	6.2	1.3	1	02/08/22 06:42	02/09/22 11:59	7782-49-2	
Silver	31.8	mg/kg	3.1	0.53	1	02/08/22 06:42	02/09/22 11:59	7440-22-4	
Zinc	84.6	mg/kg	6.2	4.0	1	02/08/22 06:42	02/09/22 11:59	7440-66-6	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.058J	mg/kg	0.12	0.012	1	02/11/22 15:00	02/16/22 13:27	7439-97-6	B
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8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<0.74	ug/kg	8.2	0.74	1	01/27/22 08:36	02/01/22 02:43	83-32-9	
Acenaphthylene	<0.58	ug/kg	8.2	0.58	1	01/27/22 08:36	02/01/22 02:43	208-96-8	
Anthracene	<0.74	ug/kg	8.2	0.74	1	01/27/22 08:36	02/01/22 02:43	120-12-7	
Benzo(a)anthracene	<0.96	ug/kg	8.2	0.96	1	01/27/22 08:36	02/01/22 02:43	56-55-3	
Benzo(a)pyrene	<0.51	ug/kg	8.2	0.51	1	01/27/22 08:36	02/01/22 02:43	50-32-8	
Benzo(b)fluoranthene	<0.98	ug/kg	8.2	0.98	1	01/27/22 08:36	02/01/22 02:43	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	8.2	1.2	1	01/27/22 08:36	02/01/22 02:43	191-24-2	
Benzo(k)fluoranthene	<1.4	ug/kg	8.2	1.4	1	01/27/22 08:36	02/01/22 02:43	207-08-9	
Chrysene	<0.42	ug/kg	8.2	0.42	1	01/27/22 08:36	02/01/22 02:43	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.2	1.8	1	01/27/22 08:36	02/01/22 02:43	53-70-3	
Fluoranthene	<0.62	ug/kg	8.2	0.62	1	01/27/22 08:36	02/01/22 02:43	206-44-0	
Fluorene	<0.75	ug/kg	8.2	0.75	1	01/27/22 08:36	02/01/22 02:43	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.6	ug/kg	8.2	1.6	1	01/27/22 08:36	02/01/22 02:43	193-39-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-15 (4-6) **Lab ID: 30460926019** Collected: 01/21/22 14:30 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Naphthalene	<1.6	ug/kg	8.2	1.6	1	01/27/22 08:36	02/01/22 02:43	91-20-3	
Phenanthrene	<0.72	ug/kg	8.2	0.72	1	01/27/22 08:36	02/01/22 02:43	85-01-8	
Pyrene	<0.92	ug/kg	8.2	0.92	1	01/27/22 08:36	02/01/22 02:43	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	77	%	37-88		1	01/27/22 08:36	02/01/22 02:43	321-60-8	
Terphenyl-d14 (S)	88	%	10-128		1	01/27/22 08:36	02/01/22 02:43	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	19.8	%	0.10	0.10	1		01/28/22 11:44		

Sample: SS-16 (0-2) **Lab ID: 30460926020** Collected: 01/21/22 14:40 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	6.9	mg/kg	6.3	0.70	1	02/08/22 06:42	02/09/22 12:20	7440-38-2	
Barium	94.0	mg/kg	6.3	0.72	1	02/08/22 06:42	02/09/22 12:20	7440-39-3	
Cadmium	<0.15	mg/kg	1.3	0.15	1	02/08/22 06:42	02/09/22 12:20	7440-43-9	
Chromium	25.9	mg/kg	6.3	0.74	1	02/08/22 06:42	02/09/22 12:20	7440-47-3	
Lead	16.7	mg/kg	6.3	0.61	1	02/08/22 06:42	02/09/22 12:20	7439-92-1	
Selenium	2.9J	mg/kg	6.3	1.3	1	02/08/22 06:42	02/09/22 12:20	7782-49-2	
Silver	24.0	mg/kg	3.2	0.54	1	02/08/22 06:42	02/09/22 12:20	7440-22-4	
Zinc	61.7	mg/kg	6.3	4.1	1	02/08/22 06:42	02/09/22 12:20	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.046J	mg/kg	0.12	0.012	1	02/10/22 11:49	02/14/22 16:05	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	5.2J	ug/kg	8.3	0.75	1	01/27/22 08:36	02/01/22 03:02	83-32-9	
Acenaphthylene	<0.59	ug/kg	8.3	0.59	1	01/27/22 08:36	02/01/22 03:02	208-96-8	
Anthracene	9.8	ug/kg	8.3	0.75	1	01/27/22 08:36	02/01/22 03:02	120-12-7	
Benzo(a)anthracene	18.0	ug/kg	8.3	0.97	1	01/27/22 08:36	02/01/22 03:02	56-55-3	
Benzo(a)pyrene	21.3	ug/kg	8.3	0.52	1	01/27/22 08:36	02/01/22 03:02	50-32-8	
Benzo(b)fluoranthene	40.0	ug/kg	8.3	0.99	1	01/27/22 08:36	02/01/22 03:02	205-99-2	lp
Benzo(g,h,i)perylene	11.3	ug/kg	8.3	1.2	1	01/27/22 08:36	02/01/22 03:02	191-24-2	
Benzo(k)fluoranthene	39.5	ug/kg	8.3	1.4	1	01/27/22 08:36	02/01/22 03:02	207-08-9	lp
Chrysene	19.6	ug/kg	8.3	0.43	1	01/27/22 08:36	02/01/22 03:02	218-01-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-16 (0-2) **Lab ID: 30460926020** Collected: 01/21/22 14:40 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Dibenz(a,h)anthracene	3.4J	ug/kg	8.3	1.8	1	01/27/22 08:36	02/01/22 03:02	53-70-3	
Fluoranthene	49.0	ug/kg	8.3	0.63	1	01/27/22 08:36	02/01/22 03:02	206-44-0	
Fluorene	6.2J	ug/kg	8.3	0.76	1	01/27/22 08:36	02/01/22 03:02	86-73-7	
Indeno(1,2,3-cd)pyrene	11.1	ug/kg	8.3	1.6	1	01/27/22 08:36	02/01/22 03:02	193-39-5	
Naphthalene	6.0J	ug/kg	8.3	1.6	1	01/27/22 08:36	02/01/22 03:02	91-20-3	
Phenanthrene	36.5	ug/kg	8.3	0.73	1	01/27/22 08:36	02/01/22 03:02	85-01-8	
Pyrene	37.7	ug/kg	8.3	0.93	1	01/27/22 08:36	02/01/22 03:02	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%.	37-88		1	01/27/22 08:36	02/01/22 03:02	321-60-8	
Terphenyl-d14 (S)	77	%.	10-128		1	01/27/22 08:36	02/01/22 03:02	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	21.0	%	0.10	0.10	1		01/28/22 11:44		

Sample: SS-17 (0-2) **Lab ID: 30460926021** Collected: 01/21/22 14:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	8.6	mg/kg	6.1	0.67	1	02/08/22 06:42	02/09/22 12:23	7440-38-2	M1
Barium	29.7	mg/kg	6.1	0.70	1	02/08/22 06:42	02/09/22 12:23	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 06:42	02/09/22 12:23	7440-43-9	
Chromium	21.7	mg/kg	6.1	0.71	1	02/08/22 06:42	02/09/22 12:23	7440-47-3	
Lead	7.6	mg/kg	6.1	0.59	1	02/08/22 06:42	02/09/22 12:23	7439-92-1	
Selenium	1.8J	mg/kg	6.1	1.3	1	02/08/22 06:42	02/09/22 12:23	7782-49-2	
Silver	19.5	mg/kg	3.1	0.52	1	02/08/22 06:42	02/09/22 12:23	7440-22-4	
Zinc	47.1	mg/kg	6.1	4.0	1	02/08/22 06:42	02/09/22 12:23	7440-66-6	

8270E MSSV PAH by SIM

Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546

Pace Analytical Services - Greensburg

Acenaphthene	4.8J	ug/kg	8.1	0.73	1	01/28/22 08:48	02/03/22 12:21	83-32-9	MH,ML
Acenaphthylene	31.7	ug/kg	8.1	0.58	1	01/28/22 08:48	02/03/22 12:21	208-96-8	MH,ML, R1
Anthracene	76.5	ug/kg	8.1	0.73	1	01/28/22 08:48	02/03/22 12:21	120-12-7	MH,ML, R1
Benzo(a)anthracene	448	ug/kg	8.1	0.95	1	01/28/22 08:48	02/03/22 12:21	56-55-3	MH,R1

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-17 (0-2) **Lab ID: 30460926021** Collected: 01/21/22 14:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Benzo(a)pyrene	353	ug/kg	8.1	0.51	1	01/28/22 08:48	02/03/22 12:21	50-32-8	MH,R1
Benzo(b)fluoranthene	675	ug/kg	8.1	0.97	1	01/28/22 08:48	02/03/22 12:21	205-99-2	Ip,MH, R1
Benzo(g,h,i)perylene	192	ug/kg	8.1	1.2	1	01/28/22 08:48	02/03/22 12:21	191-24-2	MH,R1
Benzo(k)fluoranthene	665	ug/kg	8.1	1.4	1	01/28/22 08:48	02/03/22 12:21	207-08-9	Ip,MH, R1
Chrysene	431	ug/kg	8.1	0.42	1	01/28/22 08:48	02/03/22 12:21	218-01-9	MH,R1
Dibenz(a,h)anthracene	71.2	ug/kg	8.1	1.8	1	01/28/22 08:48	02/03/22 12:21	53-70-3	MH,ML, R1
Fluoranthene	874	ug/kg	8.1	0.61	1	01/28/22 08:48	02/03/22 12:21	206-44-0	MH,R1
Fluorene	12.0	ug/kg	8.1	0.75	1	01/28/22 08:48	02/03/22 12:21	86-73-7	MH,ML, R1
Indeno(1,2,3-cd)pyrene	210	ug/kg	8.1	1.5	1	01/28/22 08:48	02/03/22 12:21	193-39-5	MH,R1
Naphthalene	8.2	ug/kg	8.1	1.6	1	01/28/22 08:48	02/03/22 12:21	91-20-3	MH,ML
Phenanthrene	350	ug/kg	8.1	0.71	1	01/28/22 08:48	02/03/22 12:21	85-01-8	MH,R1
Pyrene	655	ug/kg	8.1	0.91	1	01/28/22 08:48	02/03/22 12:21	129-00-0	MH,R1
Surrogates									
2-Fluorobiphenyl (S)	87	%.	37-88		1	01/28/22 08:48	02/03/22 12:21	321-60-8	
Terphenyl-d14 (S)	89	%.	10-128		1	01/28/22 08:48	02/03/22 12:21	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	17.4	%	0.10	0.10	1		01/28/22 11:44		

Sample: SS-17 (0-2)MS **Lab ID: 30460926022** Collected: 01/21/22 14:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	14.1	mg/kg	6.2	0.68	1	02/08/22 06:42	02/09/22 12:34	7440-38-2	
Barium	53.1	mg/kg	6.2	0.70	1	02/08/22 06:42	02/09/22 12:34	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 06:42	02/09/22 12:34	7440-43-9	
Chromium	28.3	mg/kg	6.2	0.72	1	02/08/22 06:42	02/09/22 12:34	7440-47-3	
Lead	18.9	mg/kg	6.2	0.60	1	02/08/22 06:42	02/09/22 12:34	7439-92-1	
Selenium	3.1J	mg/kg	6.2	1.3	1	02/08/22 06:42	02/09/22 12:34	7782-49-2	
Silver	21.5	mg/kg	3.1	0.52	1	02/08/22 06:42	02/09/22 12:34	7440-22-4	
Zinc	53.4	mg/kg	6.2	4.0	1	02/08/22 06:42	02/09/22 12:34	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.080J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 14:03	7439-97-6	B

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-17 (0-2)MS **Lab ID: 30460926022** Collected: 01/21/22 14:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	3.5J	ug/kg	8.0	0.73	1	01/28/22 08:48	02/03/22 12:48	83-32-9	
Acenaphthylene	48.1	ug/kg	8.0	0.58	1	01/28/22 08:48	02/03/22 12:48	208-96-8	
Anthracene	101	ug/kg	8.0	0.73	1	01/28/22 08:48	02/03/22 12:48	120-12-7	
Benzo(a)anthracene	656	ug/kg	8.0	0.94	1	01/28/22 08:48	02/03/22 12:48	56-55-3	
Benzo(a)pyrene	517	ug/kg	8.0	0.50	1	01/28/22 08:48	02/03/22 12:48	50-32-8	
Benzo(b)fluoranthene	995	ug/kg	8.0	0.96	1	01/28/22 08:48	02/03/22 12:48	205-99-2	Ip
Benzo(g,h,i)perylene	235	ug/kg	8.0	1.2	1	01/28/22 08:48	02/03/22 12:48	191-24-2	
Benzo(k)fluoranthene	981	ug/kg	8.0	1.3	1	01/28/22 08:48	02/03/22 12:48	207-08-9	Ip
Chrysene	621	ug/kg	8.0	0.42	1	01/28/22 08:48	02/03/22 12:48	218-01-9	
Dibenz(a,h)anthracene	91.8	ug/kg	8.0	1.8	1	01/28/22 08:48	02/03/22 12:48	53-70-3	
Fluoranthene	1200	ug/kg	8.0	0.61	1	01/28/22 08:48	02/03/22 12:48	206-44-0	
Fluorene	11.1	ug/kg	8.0	0.74	1	01/28/22 08:48	02/03/22 12:48	86-73-7	
Indeno(1,2,3-cd)pyrene	268	ug/kg	8.0	1.5	1	01/28/22 08:48	02/03/22 12:48	193-39-5	
Naphthalene	6.8J	ug/kg	8.0	1.6	1	01/28/22 08:48	02/03/22 12:48	91-20-3	
Phenanthrene	410	ug/kg	8.0	0.71	1	01/28/22 08:48	02/03/22 12:48	85-01-8	
Pyrene	902	ug/kg	8.0	0.90	1	01/28/22 08:48	02/03/22 12:48	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	87	%	37-88		1	01/28/22 08:48	02/03/22 12:48	321-60-8	
Terphenyl-d14 (S)	87	%	10-128		1	01/28/22 08:48	02/03/22 12:48	1718-51-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Pace Analytical Services - Greensburg

Percent Moisture	18.1	%	0.10	0.10	1	01/28/22 11:44
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Sample: SS-18 (0-2) **Lab ID: 30460926023** Collected: 01/21/22 14:55 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	26.5	mg/kg	6.5	0.72	1	02/08/22 06:42	02/09/22 12:36	7440-38-2	
Barium	54.6	mg/kg	6.5	0.74	1	02/08/22 06:42	02/09/22 12:36	7440-39-3	
Cadmium	<0.16	mg/kg	1.3	0.16	1	02/08/22 06:42	02/09/22 12:36	7440-43-9	
Chromium	37.3	mg/kg	6.5	0.76	1	02/08/22 06:42	02/09/22 12:36	7440-47-3	
Lead	34.5	mg/kg	6.5	0.63	1	02/08/22 06:42	02/09/22 12:36	7439-92-1	
Selenium	3.3J	mg/kg	6.5	1.4	1	02/08/22 06:42	02/09/22 12:36	7782-49-2	
Silver	27.5	mg/kg	3.3	0.55	1	02/08/22 06:42	02/09/22 12:36	7440-22-4	
Zinc	72.0	mg/kg	6.5	4.2	1	02/08/22 06:42	02/09/22 12:36	7440-66-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-18 (0-2) **Lab ID: 30460926023** Collected: 01/21/22 14:55 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.060J	mg/kg	0.13	0.012	1	02/10/22 11:49	02/14/22 16:16	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.77	ug/kg	8.5	0.77	1	01/28/22 08:48	02/03/22 13:43	83-32-9	
Acenaphthylene	1.9J	ug/kg	8.5	0.61	1	01/28/22 08:48	02/03/22 13:43	208-96-8	
Anthracene	2.1J	ug/kg	8.5	0.77	1	01/28/22 08:48	02/03/22 13:43	120-12-7	
Benzo(a)anthracene	11.5	ug/kg	8.5	1.0	1	01/28/22 08:48	02/03/22 13:43	56-55-3	
Benzo(a)pyrene	9.1	ug/kg	8.5	0.53	1	01/28/22 08:48	02/03/22 13:43	50-32-8	
Benzo(b)fluoranthene	23.4	ug/kg	8.5	1.0	1	01/28/22 08:48	02/03/22 13:43	205-99-2	lp
Benzo(g,h,i)perylene	3.1J	ug/kg	8.5	1.3	1	01/28/22 08:48	02/03/22 13:43	191-24-2	
Benzo(k)fluoranthene	23.1	ug/kg	8.5	1.4	1	01/28/22 08:48	02/03/22 13:43	207-08-9	lp
Chrysene	12.2	ug/kg	8.5	0.44	1	01/28/22 08:48	02/03/22 13:43	218-01-9	
Dibenz(a,h)anthracene	<1.9	ug/kg	8.5	1.9	1	01/28/22 08:48	02/03/22 13:43	53-70-3	
Fluoranthene	22.8	ug/kg	8.5	0.64	1	01/28/22 08:48	02/03/22 13:43	206-44-0	
Fluorene	<0.79	ug/kg	8.5	0.79	1	01/28/22 08:48	02/03/22 13:43	86-73-7	
Indeno(1,2,3-cd)pyrene	3.7J	ug/kg	8.5	1.6	1	01/28/22 08:48	02/03/22 13:43	193-39-5	
Naphthalene	<1.6	ug/kg	8.5	1.6	1	01/28/22 08:48	02/03/22 13:43	91-20-3	
Phenanthrene	7.7J	ug/kg	8.5	0.75	1	01/28/22 08:48	02/03/22 13:43	85-01-8	
Pyrene	18.4	ug/kg	8.5	0.95	1	01/28/22 08:48	02/03/22 13:43	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	84	%	37-88		1	01/28/22 08:48	02/03/22 13:43	321-60-8	
Terphenyl-d14 (S)	95	%	10-128		1	01/28/22 08:48	02/03/22 13:43	1718-51-0	
8260C MSV									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A									
Pace Analytical Services - Greensburg									
Naphthalene	<1.3	ug/kg	7.1	1.3	1	01/27/22 10:42	01/27/22 12:43	91-20-3	1c
Surrogates									
Toluene-d8 (S)	98	%	70-130		1	01/27/22 10:42	01/27/22 12:43	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130		1	01/27/22 10:42	01/27/22 12:43	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70-130		1	01/27/22 10:42	01/27/22 12:43	17060-07-0	
Dibromofluoromethane (S)	104	%	70-130		1	01/27/22 10:42	01/27/22 12:43	1868-53-7	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	22.4	%	0.10	0.10	1		01/28/22 11:44		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-19 (0-2) **Lab ID: 30460926024** Collected: 01/21/22 15:00 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	9.9	mg/kg	6.6	0.72	1	02/08/22 06:42	02/09/22 12:39	7440-38-2	
Barium	38.2	mg/kg	6.6	0.75	1	02/08/22 06:42	02/09/22 12:39	7440-39-3	
Cadmium	<0.16	mg/kg	1.3	0.16	1	02/08/22 06:42	02/09/22 12:39	7440-43-9	
Chromium	17.1	mg/kg	6.6	0.77	1	02/08/22 06:42	02/09/22 12:39	7440-47-3	
Lead	26.0	mg/kg	6.6	0.64	1	02/08/22 06:42	02/09/22 12:39	7439-92-1	
Selenium	2.1J	mg/kg	6.6	1.4	1	02/08/22 06:42	02/09/22 12:39	7782-49-2	
Silver	12.7	mg/kg	3.3	0.56	1	02/08/22 06:42	02/09/22 12:39	7440-22-4	
Zinc	42.5	mg/kg	6.6	4.3	1	02/08/22 06:42	02/09/22 12:39	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.077J	mg/kg	0.13	0.012	1	02/10/22 11:49	02/14/22 16:13	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	9.9J	ug/kg	85.9	7.8	10	01/28/22 08:48	02/03/22 14:09	83-32-9	ED
Acenaphthylene	42.5J	ug/kg	85.9	6.1	10	01/28/22 08:48	02/03/22 14:09	208-96-8	ED
Anthracene	78.3J	ug/kg	85.9	7.8	10	01/28/22 08:48	02/03/22 14:09	120-12-7	ED
Benzo(a)anthracene	344	ug/kg	85.9	10.1	10	01/28/22 08:48	02/03/22 14:09	56-55-3	ED
Benzo(a)pyrene	295	ug/kg	85.9	5.4	10	01/28/22 08:48	02/03/22 14:09	50-32-8	ED
Benzo(b)fluoranthene	675	ug/kg	85.9	10.3	10	01/28/22 08:48	02/03/22 14:09	205-99-2	ED,lp
Benzo(g,h,i)perylene	87.9	ug/kg	85.9	12.9	10	01/28/22 08:48	02/03/22 14:09	191-24-2	ED
Benzo(k)fluoranthene	666	ug/kg	85.9	14.4	10	01/28/22 08:48	02/03/22 14:09	207-08-9	ED,lp
Chrysene	362	ug/kg	85.9	4.4	10	01/28/22 08:48	02/03/22 14:09	218-01-9	ED
Dibenz(a,h)anthracene	36.5J	ug/kg	85.9	19.1	10	01/28/22 08:48	02/03/22 14:09	53-70-3	ED
Fluoranthene	831	ug/kg	85.9	6.5	10	01/28/22 08:48	02/03/22 14:09	206-44-0	ED
Fluorene	25.4J	ug/kg	85.9	7.9	10	01/28/22 08:48	02/03/22 14:09	86-73-7	ED
Indeno(1,2,3-cd)pyrene	105	ug/kg	85.9	16.3	10	01/28/22 08:48	02/03/22 14:09	193-39-5	ED
Naphthalene	22.9J	ug/kg	85.9	16.6	10	01/28/22 08:48	02/03/22 14:09	91-20-3	ED
Phenanthrene	467	ug/kg	85.9	7.6	10	01/28/22 08:48	02/03/22 14:09	85-01-8	ED
Pyrene	632	ug/kg	85.9	9.6	10	01/28/22 08:48	02/03/22 14:09	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	91	%	37-88		10	01/28/22 08:48	02/03/22 14:09	321-60-8	S4
Terphenyl-d14 (S)	104	%	10-128		10	01/28/22 08:48	02/03/22 14:09	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	23.3	%	0.10	0.10	1		01/28/22 11:44		

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-20 (0-2) **Lab ID: 30460926025** Collected: 01/21/22 15:10 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	12.0	mg/kg	6.3	0.69	1	02/08/22 06:42	02/09/22 12:41	7440-38-2	
Barium	39.9	mg/kg	6.3	0.72	1	02/08/22 06:42	02/09/22 12:41	7440-39-3	
Cadmium	<0.15	mg/kg	1.3	0.15	1	02/08/22 06:42	02/09/22 12:41	7440-43-9	
Chromium	31.3	mg/kg	6.3	0.73	1	02/08/22 06:42	02/09/22 12:41	7440-47-3	
Lead	18.5	mg/kg	6.3	0.61	1	02/08/22 06:42	02/09/22 12:41	7439-92-1	
Selenium	2.7J	mg/kg	6.3	1.3	1	02/08/22 06:42	02/09/22 12:41	7782-49-2	
Silver	22.0	mg/kg	3.1	0.53	1	02/08/22 06:42	02/09/22 12:41	7440-22-4	
Zinc	46.6	mg/kg	6.3	4.1	1	02/08/22 06:42	02/09/22 12:41	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.054J	mg/kg	0.12	0.012	1	02/11/22 15:00	02/16/22 13:19	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.75	ug/kg	8.3	0.75	1	01/28/22 08:48	02/03/22 14:36	83-32-9	
Acenaphthylene	8.1J	ug/kg	8.3	0.60	1	01/28/22 08:48	02/03/22 14:36	208-96-8	
Anthracene	10.3	ug/kg	8.3	0.76	1	01/28/22 08:48	02/03/22 14:36	120-12-7	
Benzo(a)anthracene	67.6	ug/kg	8.3	0.98	1	01/28/22 08:48	02/03/22 14:36	56-55-3	
Benzo(a)pyrene	58.8	ug/kg	8.3	0.52	1	01/28/22 08:48	02/03/22 14:36	50-32-8	
Benzo(b)fluoranthene	138	ug/kg	8.3	1.0	1	01/28/22 08:48	02/03/22 14:36	205-99-2	lp
Benzo(g,h,i)perylene	17.3	ug/kg	8.3	1.3	1	01/28/22 08:48	02/03/22 14:36	191-24-2	
Benzo(k)fluoranthene	136	ug/kg	8.3	1.4	1	01/28/22 08:48	02/03/22 14:36	207-08-9	lp
Chrysene	71.9	ug/kg	8.3	0.43	1	01/28/22 08:48	02/03/22 14:36	218-01-9	
Dibenz(a,h)anthracene	7.1J	ug/kg	8.3	1.9	1	01/28/22 08:48	02/03/22 14:36	53-70-3	
Fluoranthene	152	ug/kg	8.3	0.63	1	01/28/22 08:48	02/03/22 14:36	206-44-0	
Fluorene	<0.77	ug/kg	8.3	0.77	1	01/28/22 08:48	02/03/22 14:36	86-73-7	
Indeno(1,2,3-cd)pyrene	19.8	ug/kg	8.3	1.6	1	01/28/22 08:48	02/03/22 14:36	193-39-5	
Naphthalene	6.6J	ug/kg	8.3	1.6	1	01/28/22 08:48	02/03/22 14:36	91-20-3	
Phenanthrene	53.3	ug/kg	8.3	0.74	1	01/28/22 08:48	02/03/22 14:36	85-01-8	
Pyrene	115	ug/kg	8.3	0.94	1	01/28/22 08:48	02/03/22 14:36	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	80	%	37-88		1	01/28/22 08:48	02/03/22 14:36	321-60-8	
Terphenyl-d14 (S)	89	%	10-128		1	01/28/22 08:48	02/03/22 14:36	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	20.6	%	0.10	0.10	1		01/28/22 11:44		

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-21 (0-2) **Lab ID: 30460926026** Collected: 01/21/22 15:15 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	14.5	mg/kg	6.5	0.71	1	02/08/22 06:42	02/10/22 10:25	7440-38-2	
Barium	56.4	mg/kg	6.5	0.74	1	02/08/22 06:42	02/10/22 10:25	7440-39-3	
Cadmium	0.47J	mg/kg	1.3	0.16	1	02/08/22 06:42	02/10/22 10:25	7440-43-9	
Chromium	23.7	mg/kg	6.5	0.76	1	02/08/22 06:42	02/10/22 10:25	7440-47-3	
Lead	15.4	mg/kg	6.5	0.63	1	02/08/22 06:42	02/10/22 10:25	7439-92-1	
Selenium	<1.4	mg/kg	6.5	1.4	1	02/08/22 06:42	02/10/22 10:25	7782-49-2	
Silver	<0.55	mg/kg	3.2	0.55	1	02/08/22 06:42	02/10/22 10:25	7440-22-4	
Zinc	57.9	mg/kg	6.5	4.2	1	02/08/22 06:42	02/10/22 10:25	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.054J	mg/kg	0.12	0.012	1	02/10/22 11:49	02/14/22 16:21	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.74	ug/kg	8.2	0.74	1	01/28/22 08:48	02/03/22 15:02	83-32-9	
Acenaphthylene	<0.59	ug/kg	8.2	0.59	1	01/28/22 08:48	02/03/22 15:02	208-96-8	
Anthracene	1.7J	ug/kg	8.2	0.74	1	01/28/22 08:48	02/03/22 15:02	120-12-7	
Benzo(a)anthracene	8.5	ug/kg	8.2	0.96	1	01/28/22 08:48	02/03/22 15:02	56-55-3	
Benzo(a)pyrene	6.3J	ug/kg	8.2	0.51	1	01/28/22 08:48	02/03/22 15:02	50-32-8	
Benzo(b)fluoranthene	15.0	ug/kg	8.2	0.98	1	01/28/22 08:48	02/03/22 15:02	205-99-2	lp
Benzo(g,h,i)perylene	1.7J	ug/kg	8.2	1.2	1	01/28/22 08:48	02/03/22 15:02	191-24-2	
Benzo(k)fluoranthene	14.8	ug/kg	8.2	1.4	1	01/28/22 08:48	02/03/22 15:02	207-08-9	lp
Chrysene	8.4	ug/kg	8.2	0.42	1	01/28/22 08:48	02/03/22 15:02	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.2	1.8	1	01/28/22 08:48	02/03/22 15:02	53-70-3	
Fluoranthene	17.0	ug/kg	8.2	0.62	1	01/28/22 08:48	02/03/22 15:02	206-44-0	
Fluorene	<0.76	ug/kg	8.2	0.76	1	01/28/22 08:48	02/03/22 15:02	86-73-7	
Indeno(1,2,3-cd)pyrene	2.1J	ug/kg	8.2	1.6	1	01/28/22 08:48	02/03/22 15:02	193-39-5	
Naphthalene	5.2J	ug/kg	8.2	1.6	1	01/28/22 08:48	02/03/22 15:02	91-20-3	
Phenanthrene	9.2	ug/kg	8.2	0.72	1	01/28/22 08:48	02/03/22 15:02	85-01-8	
Pyrene	13.0	ug/kg	8.2	0.92	1	01/28/22 08:48	02/03/22 15:02	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	87	%.	37-88		1	01/28/22 08:48	02/03/22 15:02	321-60-8	
Terphenyl-d14 (S)	95	%.	10-128		1	01/28/22 08:48	02/03/22 15:02	1718-51-0	
8260C MSV									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A									
Pace Analytical Services - Greensburg									
Naphthalene	<2.0	ug/kg	10.9	2.0	1	01/27/22 10:42	01/27/22 13:14	91-20-3	1c
Surrogates									
Toluene-d8 (S)	97	%.	70-130		1	01/27/22 10:42	01/27/22 13:14	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	70-130		1	01/27/22 10:42	01/27/22 13:14	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%.	70-130		1	01/27/22 10:42	01/27/22 13:14	17060-07-0	
Dibromofluoromethane (S)	104	%.	70-130		1	01/27/22 10:42	01/27/22 13:14	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-21 (0-2) **Lab ID: 30460926026** Collected: 01/21/22 15:15 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	20.6	%	0.10	0.10	1		01/28/22 11:44		

Sample: SS-22 (0-2) **Lab ID: 30460926027** Collected: 01/21/22 15:25 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	9.8	mg/kg	7.0	0.77	1	02/08/22 06:42	02/10/22 10:28	7440-38-2	
Barium	107	mg/kg	7.0	0.80	1	02/08/22 06:42	02/10/22 10:28	7440-39-3	
Cadmium	0.51J	mg/kg	1.4	0.17	1	02/08/22 06:42	02/10/22 10:28	7440-43-9	
Chromium	25.9	mg/kg	7.0	0.81	1	02/08/22 06:42	02/10/22 10:28	7440-47-3	
Lead	30.7	mg/kg	7.0	0.67	1	02/08/22 06:42	02/10/22 10:28	7439-92-1	
Selenium	<1.5	mg/kg	7.0	1.5	1	02/08/22 06:42	02/10/22 10:28	7782-49-2	
Silver	<0.59	mg/kg	3.5	0.59	1	02/08/22 06:42	02/10/22 10:28	7440-22-4	
Zinc	115	mg/kg	7.0	4.5	1	02/08/22 06:42	02/10/22 10:28	7440-66-6	

BVR 7471B Mercury Analytical Method: EPA 7471B Preparation Method: EPA 7471B

Pace Analytical Services - Beaver

Mercury	0.082J	mg/kg	0.14	0.013	1	02/10/22 11:49	02/14/22 16:24	7439-97-6	
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8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546

Pace Analytical Services - Greensburg

Acenaphthene	2.2J	ug/kg	9.3	0.84	1	01/28/22 08:48	02/03/22 15:29	83-32-9	
Acenaphthylene	13.2	ug/kg	9.3	0.67	1	01/28/22 08:48	02/03/22 15:29	208-96-8	
Anthracene	22.5	ug/kg	9.3	0.85	1	01/28/22 08:48	02/03/22 15:29	120-12-7	
Benzo(a)anthracene	112	ug/kg	9.3	1.1	1	01/28/22 08:48	02/03/22 15:29	56-55-3	
Benzo(a)pyrene	85.6	ug/kg	9.3	0.58	1	01/28/22 08:48	02/03/22 15:29	50-32-8	
Benzo(b)fluoranthene	232	ug/kg	9.3	1.1	1	01/28/22 08:48	02/03/22 15:29	205-99-2	lp
Benzo(g,h,i)perylene	26.3	ug/kg	9.3	1.4	1	01/28/22 08:48	02/03/22 15:29	191-24-2	
Benzo(k)fluoranthene	229	ug/kg	9.3	1.6	1	01/28/22 08:48	02/03/22 15:29	207-08-9	lp
Chrysene	124	ug/kg	9.3	0.48	1	01/28/22 08:48	02/03/22 15:29	218-01-9	
Dibenz(a,h)anthracene	11.7	ug/kg	9.3	2.1	1	01/28/22 08:48	02/03/22 15:29	53-70-3	
Fluoranthene	254	ug/kg	9.3	0.71	1	01/28/22 08:48	02/03/22 15:29	206-44-0	
Fluorene	5.6J	ug/kg	9.3	0.86	1	01/28/22 08:48	02/03/22 15:29	86-73-7	
Indeno(1,2,3-cd)pyrene	31.1	ug/kg	9.3	1.8	1	01/28/22 08:48	02/03/22 15:29	193-39-5	
Naphthalene	33.3	ug/kg	9.3	1.8	1	01/28/22 08:48	02/03/22 15:29	91-20-3	
Phenanthrene	135	ug/kg	9.3	0.82	1	01/28/22 08:48	02/03/22 15:29	85-01-8	
Pyrene	185	ug/kg	9.3	1.0	1	01/28/22 08:48	02/03/22 15:29	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	71	%	37-88		1	01/28/22 08:48	02/03/22 15:29	321-60-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-22 (0-2) **Lab ID: 30460926027** Collected: 01/21/22 15:25 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Surrogates									
Terphenyl-d14 (S)	84	%	10-128		1	01/28/22 08:48	02/03/22 15:29	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	28.9	%	0.10	0.10	1		01/28/22 11:44		

Sample: SS-23 (0-2) **Lab ID: 30460926028** Collected: 01/21/22 15:30 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	18.6	mg/kg	6.2	0.68	1	02/08/22 06:42	02/10/22 10:30	7440-38-2	
Barium	101	mg/kg	6.2	0.70	1	02/08/22 06:42	02/10/22 10:30	7440-39-3	
Cadmium	0.25J	mg/kg	1.2	0.15	1	02/08/22 06:42	02/10/22 10:30	7440-43-9	
Chromium	20.6	mg/kg	6.2	0.72	1	02/08/22 06:42	02/10/22 10:30	7440-47-3	
Lead	62.2	mg/kg	6.2	0.59	1	02/08/22 06:42	02/10/22 10:30	7439-92-1	
Selenium	1.4J	mg/kg	6.2	1.3	1	02/08/22 06:42	02/10/22 10:30	7782-49-2	
Silver	<0.52	mg/kg	3.1	0.52	1	02/08/22 06:42	02/10/22 10:30	7440-22-4	
Zinc	107	mg/kg	6.2	4.0	1	02/08/22 06:42	02/10/22 10:30	7440-66-6	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.077J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 14:14	7439-97-6	B
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8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	96.5	ug/kg	79.7	7.2	10	01/28/22 08:48	02/03/22 15:56	83-32-9	ED
Acenaphthylene	1190	ug/kg	79.7	5.7	10	01/28/22 08:48	02/03/22 15:56	208-96-8	ED
Anthracene	3850	ug/kg	79.7	7.2	10	01/28/22 08:48	02/03/22 15:56	120-12-7	ED
Benzo(a)anthracene	11200	ug/kg	398	46.8	50	01/28/22 08:48	02/07/22 22:36	56-55-3	ED
Benzo(a)pyrene	12400	ug/kg	79.7	5.0	10	01/28/22 08:48	02/03/22 15:56	50-32-8	ED
Benzo(b)fluoranthene	23100	ug/kg	398	47.7	50	01/28/22 08:48	02/07/22 22:36	205-99-2	ED,IS, Ip
Benzo(g,h,i)perylene	3550	ug/kg	79.7	12.0	10	01/28/22 08:48	02/03/22 15:56	191-24-2	ED
Benzo(k)fluoranthene	23100	ug/kg	398	66.8	50	01/28/22 08:48	02/07/22 22:36	207-08-9	ED,IS, Ip
Chrysene	10700	ug/kg	398	20.6	50	01/28/22 08:48	02/07/22 22:36	218-01-9	ED
Dibenz(a,h)anthracene	1900	ug/kg	79.7	17.7	10	01/28/22 08:48	02/03/22 15:56	53-70-3	ED
Fluoranthene	24900	ug/kg	398	30.2	50	01/28/22 08:48	02/07/22 22:36	206-44-0	ED
Fluorene	261	ug/kg	79.7	7.4	10	01/28/22 08:48	02/03/22 15:56	86-73-7	ED

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

Sample: SS-23 (0-2) **Lab ID: 30460926028** Collected: 01/21/22 15:30 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Indeno(1,2,3-cd)pyrene	4370	ug/kg	79.7	15.2	10	01/28/22 08:48	02/03/22 15:56	193-39-5	ED
Naphthalene	100	ug/kg	79.7	15.4	10	01/28/22 08:48	02/03/22 15:56	91-20-3	ED
Phenanthrene	15200	ug/kg	398	35.1	50	01/28/22 08:48	02/07/22 22:36	85-01-8	ED
Pyrene	17400	ug/kg	398	44.7	50	01/28/22 08:48	02/07/22 22:36	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	84	%	37-88		10	01/28/22 08:48	02/03/22 15:56	321-60-8	
Terphenyl-d14 (S)	100	%	10-128		10	01/28/22 08:48	02/03/22 15:56	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	18.1	%	0.10	0.10	1		01/28/22 11:44		

Sample: SS-24 (0-2) **Lab ID: 30460926029** Collected: 01/21/22 15:35 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	8.8	mg/kg	5.9	0.65	1	02/08/22 06:42	02/10/22 10:32	7440-38-2	
Barium	46.2	mg/kg	5.9	0.68	1	02/08/22 06:42	02/10/22 10:32	7440-39-3	
Cadmium	0.15J	mg/kg	1.2	0.14	1	02/08/22 06:42	02/10/22 10:32	7440-43-9	
Chromium	16.4	mg/kg	5.9	0.69	1	02/08/22 06:42	02/10/22 10:32	7440-47-3	
Lead	18.9	mg/kg	5.9	0.57	1	02/08/22 06:42	02/10/22 10:32	7439-92-1	
Selenium	<1.3	mg/kg	5.9	1.3	1	02/08/22 06:42	02/10/22 10:32	7782-49-2	
Silver	<0.50	mg/kg	3.0	0.50	1	02/08/22 06:42	02/10/22 10:32	7440-22-4	
Zinc	50.4	mg/kg	5.9	3.8	1	02/08/22 06:42	02/10/22 10:32	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver									
Mercury	0.061J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 14:00	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Acenaphthene	<7.0	ug/kg	77.2	7.0	10	01/28/22 08:48	02/03/22 16:22	83-32-9	ED
Acenaphthylene	30.5J	ug/kg	77.2	5.5	10	01/28/22 08:48	02/03/22 16:22	208-96-8	ED
Anthracene	55.6J	ug/kg	77.2	7.0	10	01/28/22 08:48	02/03/22 16:22	120-12-7	ED
Benzo(a)anthracene	340	ug/kg	77.2	9.1	10	01/28/22 08:48	02/03/22 16:22	56-55-3	ED
Benzo(a)pyrene	267	ug/kg	77.2	4.8	10	01/28/22 08:48	02/03/22 16:22	50-32-8	ED
Benzo(b)fluoranthene	611	ug/kg	77.2	9.2	10	01/28/22 08:48	02/03/22 16:22	205-99-2	ED,lp
Benzo(g,h,i)perylene	84.0	ug/kg	77.2	11.6	10	01/28/22 08:48	02/03/22 16:22	191-24-2	ED
Benzo(k)fluoranthene	602	ug/kg	77.2	12.9	10	01/28/22 08:48	02/03/22 16:22	207-08-9	ED,lp

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-24 (0-2) **Lab ID: 30460926029** Collected: 01/21/22 15:35 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Chrysene	324	ug/kg	77.2	4.0	10	01/28/22 08:48	02/03/22 16:22	218-01-9	ED
Dibenz(a,h)anthracene	35.7J	ug/kg	77.2	17.1	10	01/28/22 08:48	02/03/22 16:22	53-70-3	ED
Fluoranthene	703	ug/kg	77.2	5.8	10	01/28/22 08:48	02/03/22 16:22	206-44-0	ED
Fluorene	<7.1	ug/kg	77.2	7.1	10	01/28/22 08:48	02/03/22 16:22	86-73-7	ED
Indeno(1,2,3-cd)pyrene	98.0	ug/kg	77.2	14.7	10	01/28/22 08:48	02/03/22 16:22	193-39-5	ED
Naphthalene	<14.9	ug/kg	77.2	14.9	10	01/28/22 08:48	02/03/22 16:22	91-20-3	ED
Phenanthrene	279	ug/kg	77.2	6.8	10	01/28/22 08:48	02/03/22 16:22	85-01-8	ED
Pyrene	533	ug/kg	77.2	8.7	10	01/28/22 08:48	02/03/22 16:22	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	110	%	37-88		10	01/28/22 08:48	02/03/22 16:22	321-60-8	S4
Terphenyl-d14 (S)	128	%	10-128		10	01/28/22 08:48	02/03/22 16:22	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	14.7	%	0.10	0.10	1		01/28/22 11:44		

Sample: SS-25 (0-2) **Lab ID: 30460926030** Collected: 01/21/22 15:40 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	8.1	mg/kg	7.5	0.82	1	02/08/22 06:42	02/10/22 10:35	7440-38-2	
Barium	51.6	mg/kg	7.5	0.85	1	02/08/22 06:42	02/10/22 10:35	7440-39-3	
Cadmium	<0.18	mg/kg	1.5	0.18	1	02/08/22 06:42	02/10/22 10:35	7440-43-9	
Chromium	13.6	mg/kg	7.5	0.87	1	02/08/22 06:42	02/10/22 10:35	7440-47-3	
Lead	278	mg/kg	7.5	0.72	1	02/08/22 06:42	02/10/22 10:35	7439-92-1	
Selenium	<1.6	mg/kg	7.5	1.6	1	02/08/22 06:42	02/10/22 10:35	7782-49-2	
Silver	<0.63	mg/kg	3.7	0.63	1	02/08/22 06:42	02/10/22 10:35	7440-22-4	
Zinc	57.0	mg/kg	7.5	4.8	1	02/08/22 06:42	02/10/22 10:35	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.14J	mg/kg	0.15	0.014	1	02/11/22 15:00	02/16/22 13:57	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	1760	ug/kg	476	43.0	50	01/28/22 08:48	02/07/22 22:56	83-32-9	ED
Acenaphthylene	10200	ug/kg	476	34.0	50	01/28/22 08:48	02/07/22 22:56	208-96-8	ED
Anthracene	33200	ug/kg	476	43.1	50	01/28/22 08:48	02/07/22 22:56	120-12-7	ED
Benzo(a)anthracene	112000	ug/kg	951	112	100	01/28/22 08:48	02/08/22 13:51	56-55-3	ED

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

Sample: SS-25 (0-2) **Lab ID: 30460926030** Collected: 01/21/22 15:40 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Benzo(a)pyrene	76500	ug/kg	951	59.5	100	01/28/22 08:48	02/08/22 13:51	50-32-8	ED
Benzo(b)fluoranthene	161000	ug/kg	951	114	100	01/28/22 08:48	02/08/22 13:51	205-99-2	ED,lp
Benzo(g,h,i)perylene	38500	ug/kg	951	143	100	01/28/22 08:48	02/08/22 13:51	191-24-2	ED
Benzo(k)fluoranthene	161000	ug/kg	951	160	100	01/28/22 08:48	02/08/22 13:51	207-08-9	ED,lp
Chrysene	103000	ug/kg	951	49.1	100	01/28/22 08:48	02/08/22 13:51	218-01-9	ED
Dibenz(a,h)anthracene	16700	ug/kg	951	211	100	01/28/22 08:48	02/08/22 13:51	53-70-3	ED
Fluoranthene	250000	ug/kg	951	72.1	100	01/28/22 08:48	02/08/22 13:51	206-44-0	E,ED
Fluorene	2060	ug/kg	476	44.0	50	01/28/22 08:48	02/07/22 22:56	86-73-7	ED
Indeno(1,2,3-cd)pyrene	44800	ug/kg	951	181	100	01/28/22 08:48	02/08/22 13:51	193-39-5	ED
Naphthalene	998	ug/kg	476	92.1	50	01/28/22 08:48	02/07/22 22:56	91-20-3	ED
Phenanthrene	164000	ug/kg	951	83.8	100	01/28/22 08:48	02/08/22 13:51	85-01-8	ED
Pyrene	175000	ug/kg	951	107	100	01/28/22 08:48	02/08/22 13:51	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	65	%	37-88		50	01/28/22 08:48	02/07/22 22:56	321-60-8	
Terphenyl-d14 (S)	92	%	10-128		50	01/28/22 08:48	02/07/22 22:56	1718-51-0	

Percent Moisture

Analytical Method: ASTM D2974-87
Pace Analytical Services - Greensburg

Percent Moisture	31.7	%	0.10	0.10	1		01/28/22 11:44		
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Sample: SS-26 (0-2) **Lab ID: 30460926031** Collected: 01/21/22 15:50 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	3.2J	mg/kg	5.6	0.61	1	02/08/22 06:42	02/10/22 10:37	7440-38-2	
Barium	78.6	mg/kg	5.6	0.64	1	02/08/22 06:42	02/10/22 10:37	7440-39-3	
Cadmium	<0.13	mg/kg	1.1	0.13	1	02/08/22 06:42	02/10/22 10:37	7440-43-9	
Chromium	14.6	mg/kg	5.6	0.65	1	02/08/22 06:42	02/10/22 10:37	7440-47-3	
Lead	9.5	mg/kg	5.6	0.54	1	02/08/22 06:42	02/10/22 10:37	7439-92-1	
Selenium	<1.2	mg/kg	5.6	1.2	1	02/08/22 06:42	02/10/22 10:37	7782-49-2	
Silver	<0.47	mg/kg	2.8	0.47	1	02/08/22 06:42	02/10/22 10:37	7440-22-4	
Zinc	45.6	mg/kg	5.6	3.6	1	02/08/22 06:42	02/10/22 10:37	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver									
Mercury	0.020J	mg/kg	0.11	0.010	1	02/10/22 11:49	02/14/22 16:18	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-26 (0-2) **Lab ID: 30460926031** Collected: 01/21/22 15:50 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.65	ug/kg	7.2	0.65	1	01/28/22 08:48	02/03/22 17:07	83-32-9	
Acenaphthylene	3.8J	ug/kg	7.2	0.52	1	01/28/22 08:48	02/03/22 17:07	208-96-8	
Anthracene	8.0	ug/kg	7.2	0.66	1	01/28/22 08:48	02/03/22 17:07	120-12-7	
Benzo(a)anthracene	37.5	ug/kg	7.2	0.85	1	01/28/22 08:48	02/03/22 17:07	56-55-3	
Benzo(a)pyrene	28.0	ug/kg	7.2	0.45	1	01/28/22 08:48	02/03/22 17:07	50-32-8	
Benzo(b)fluoranthene	70.5	ug/kg	7.2	0.87	1	01/28/22 08:48	02/03/22 17:07	205-99-2	Ip
Benzo(g,h,i)perylene	7.2J	ug/kg	7.2	1.1	1	01/28/22 08:48	02/03/22 17:07	191-24-2	
Benzo(k)fluoranthene	69.5	ug/kg	7.2	1.2	1	01/28/22 08:48	02/03/22 17:07	207-08-9	Ip
Chrysene	35.0	ug/kg	7.2	0.37	1	01/28/22 08:48	02/03/22 17:07	218-01-9	
Dibenz(a,h)anthracene	3.2J	ug/kg	7.2	1.6	1	01/28/22 08:48	02/03/22 17:07	53-70-3	
Fluoranthene	85.6	ug/kg	7.2	0.55	1	01/28/22 08:48	02/03/22 17:07	206-44-0	
Fluorene	<0.67	ug/kg	7.2	0.67	1	01/28/22 08:48	02/03/22 17:07	86-73-7	
Indeno(1,2,3-cd)pyrene	9.1	ug/kg	7.2	1.4	1	01/28/22 08:48	02/03/22 17:07	193-39-5	
Naphthalene	3.7J	ug/kg	7.2	1.4	1	01/28/22 08:48	02/03/22 17:07	91-20-3	
Phenanthrene	42.5	ug/kg	7.2	0.64	1	01/28/22 08:48	02/03/22 17:07	85-01-8	
Pyrene	60.4	ug/kg	7.2	0.81	1	01/28/22 08:48	02/03/22 17:07	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	85	%	37-88		1	01/28/22 08:48	02/03/22 17:07	321-60-8	
Terphenyl-d14 (S)	94	%	10-128		1	01/28/22 08:48	02/03/22 17:07	1718-51-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Pace Analytical Services - Greensburg

Percent Moisture	7.5	%	0.10	0.10	1		01/28/22 11:44		
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Sample: SS-27 (0-2) **Lab ID: 30460926032** Collected: 01/21/22 15:55 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	8.1	mg/kg	5.6	0.62	1	02/08/22 06:42	02/10/22 10:39	7440-38-2	
Barium	54.3	mg/kg	5.6	0.64	1	02/08/22 06:42	02/10/22 10:39	7440-39-3	
Cadmium	0.20J	mg/kg	1.1	0.13	1	02/08/22 06:42	02/10/22 10:39	7440-43-9	
Chromium	18.5	mg/kg	5.6	0.65	1	02/08/22 06:42	02/10/22 10:39	7440-47-3	
Lead	10.4	mg/kg	5.6	0.54	1	02/08/22 06:42	02/10/22 10:39	7439-92-1	
Selenium	<1.2	mg/kg	5.6	1.2	1	02/08/22 06:42	02/10/22 10:39	7782-49-2	
Silver	<0.47	mg/kg	2.8	0.47	1	02/08/22 06:42	02/10/22 10:39	7440-22-4	
Zinc	60.0	mg/kg	5.6	3.6	1	02/08/22 06:42	02/10/22 10:39	7440-66-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-27 (0-2) **Lab ID: 30460926032** Collected: 01/21/22 15:55 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver									
Mercury	0.047J	mg/kg	0.11	0.011	1	02/11/22 15:00	02/16/22 13:30	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Acenaphthene	2.4J	ug/kg	7.5	0.68	1	01/28/22 08:48	02/03/22 17:27	83-32-9	
Acenaphthylene	1.1J	ug/kg	7.5	0.53	1	01/28/22 08:48	02/03/22 17:27	208-96-8	
Anthracene	15.6	ug/kg	7.5	0.68	1	01/28/22 08:48	02/03/22 17:27	120-12-7	
Benzo(a)anthracene	50.3	ug/kg	7.5	0.88	1	01/28/22 08:48	02/03/22 17:27	56-55-3	
Benzo(a)pyrene	69.8	ug/kg	7.5	0.47	1	01/28/22 08:48	02/03/22 17:27	50-32-8	
Benzo(b)fluoranthene	149	ug/kg	7.5	0.89	1	01/28/22 08:48	02/03/22 17:27	205-99-2	lp
Benzo(g,h,i)perylene	21.6	ug/kg	7.5	1.1	1	01/28/22 08:48	02/03/22 17:27	191-24-2	
Benzo(k)fluoranthene	147	ug/kg	7.5	1.3	1	01/28/22 08:48	02/03/22 17:27	207-08-9	lp
Chrysene	53.3	ug/kg	7.5	0.39	1	01/28/22 08:48	02/03/22 17:27	218-01-9	
Dibenz(a,h)anthracene	6.9J	ug/kg	7.5	1.7	1	01/28/22 08:48	02/03/22 17:27	53-70-3	
Fluoranthene	121	ug/kg	7.5	0.57	1	01/28/22 08:48	02/03/22 17:27	206-44-0	
Fluorene	5.0J	ug/kg	7.5	0.69	1	01/28/22 08:48	02/03/22 17:27	86-73-7	
Indeno(1,2,3-cd)pyrene	22.5	ug/kg	7.5	1.4	1	01/28/22 08:48	02/03/22 17:27	193-39-5	
Naphthalene	2.3J	ug/kg	7.5	1.4	1	01/28/22 08:48	02/03/22 17:27	91-20-3	
Phenanthrene	52.7	ug/kg	7.5	0.66	1	01/28/22 08:48	02/03/22 17:27	85-01-8	
Pyrene	99.4	ug/kg	7.5	0.84	1	01/28/22 08:48	02/03/22 17:27	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	80	%.	37-88		1	01/28/22 08:48	02/03/22 17:27	321-60-8	
Terphenyl-d14 (S)	93	%.	10-128		1	01/28/22 08:48	02/03/22 17:27	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	11.7	%	0.10	0.10	1		01/28/22 11:44		

Sample: TB-01 **Lab ID: 30460926033** Collected: 01/21/22 00:00 Received: 01/25/22 15:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV									
Analytical Method: EPA 8260C Pace Analytical Services - Greensburg									
Naphthalene	<0.82	ug/L	2.0	0.82	1		02/02/22 15:38	91-20-3	
Surrogates									
4-Bromofluorobenzene (S)	104	%.	70-130		1		02/02/22 15:38	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%.	70-130		1		02/02/22 15:38	17060-07-0	
Toluene-d8 (S)	96	%.	70-130		1		02/02/22 15:38	2037-26-5	
Dibromofluoromethane (S)	107	%.	70-130		1		02/02/22 15:38	1868-53-7	

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-28 (0-2) **Lab ID: 30460926034** Collected: 01/24/22 10:10 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	10.3	mg/kg	6.1	0.67	1	02/08/22 09:21	02/10/22 11:00	7440-38-2	
Barium	49.6	mg/kg	6.1	0.70	1	02/08/22 09:21	02/10/22 11:00	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 09:21	02/10/22 11:00	7440-43-9	
Chromium	21.9	mg/kg	6.1	0.71	1	02/08/22 09:21	02/10/22 11:00	7440-47-3	
Lead	12.0	mg/kg	6.1	0.59	1	02/08/22 09:21	02/10/22 11:00	7439-92-1	
Selenium	<1.3	mg/kg	6.1	1.3	1	02/08/22 09:21	02/10/22 11:00	7782-49-2	
Silver	<0.52	mg/kg	3.1	0.52	1	02/08/22 09:21	02/10/22 11:00	7440-22-4	
Zinc	47.4	mg/kg	6.1	4.0	1	02/08/22 09:21	02/10/22 11:00	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.053J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 13:44	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.72	ug/kg	8.0	0.72	1	01/28/22 08:48	02/03/22 17:53	83-32-9	
Acenaphthylene	<0.57	ug/kg	8.0	0.57	1	01/28/22 08:48	02/03/22 17:53	208-96-8	
Anthracene	<0.72	ug/kg	8.0	0.72	1	01/28/22 08:48	02/03/22 17:53	120-12-7	
Benzo(a)anthracene	2.1J	ug/kg	8.0	0.94	1	01/28/22 08:48	02/03/22 17:53	56-55-3	
Benzo(a)pyrene	1.1J	ug/kg	8.0	0.50	1	01/28/22 08:48	02/03/22 17:53	50-32-8	
Benzo(b)fluoranthene	2.6J	ug/kg	8.0	0.96	1	01/28/22 08:48	02/03/22 17:53	205-99-2	lp
Benzo(g,h,i)perylene	<1.2	ug/kg	8.0	1.2	1	01/28/22 08:48	02/03/22 17:53	191-24-2	
Benzo(k)fluoranthene	2.6J	ug/kg	8.0	1.3	1	01/28/22 08:48	02/03/22 17:53	207-08-9	lp
Chrysene	<0.41	ug/kg	8.0	0.41	1	01/28/22 08:48	02/03/22 17:53	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.0	1.8	1	01/28/22 08:48	02/03/22 17:53	53-70-3	
Fluoranthene	3.6J	ug/kg	8.0	0.60	1	01/28/22 08:48	02/03/22 17:53	206-44-0	
Fluorene	<0.74	ug/kg	8.0	0.74	1	01/28/22 08:48	02/03/22 17:53	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.5	ug/kg	8.0	1.5	1	01/28/22 08:48	02/03/22 17:53	193-39-5	
Naphthalene	<1.5	ug/kg	8.0	1.5	1	01/28/22 08:48	02/03/22 17:53	91-20-3	
Phenanthrene	<0.70	ug/kg	8.0	0.70	1	01/28/22 08:48	02/03/22 17:53	85-01-8	
Pyrene	2.6J	ug/kg	8.0	0.90	1	01/28/22 08:48	02/03/22 17:53	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	87	%	37-88		1	01/28/22 08:48	02/03/22 17:53	321-60-8	
Terphenyl-d14 (S)	95	%	10-128		1	01/28/22 08:48	02/03/22 17:53	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	17.3	%	0.10	0.10	1		01/28/22 11:44		

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-28 (0-2)-FD **Lab ID: 30460926035** Collected: 01/24/22 10:10 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	9.1	mg/kg	6.3	0.70	1	02/08/22 09:21	02/10/22 11:02	7440-38-2	
Barium	48.7	mg/kg	6.3	0.72	1	02/08/22 09:21	02/10/22 11:02	7440-39-3	
Cadmium	<0.15	mg/kg	1.3	0.15	1	02/08/22 09:21	02/10/22 11:02	7440-43-9	
Chromium	20.7	mg/kg	6.3	0.73	1	02/08/22 09:21	02/10/22 11:02	7440-47-3	
Lead	10.6	mg/kg	6.3	0.61	1	02/08/22 09:21	02/10/22 11:02	7439-92-1	
Selenium	<1.3	mg/kg	6.3	1.3	1	02/08/22 09:21	02/10/22 11:02	7782-49-2	
Silver	<0.53	mg/kg	3.2	0.53	1	02/08/22 09:21	02/10/22 11:02	7440-22-4	
Zinc	47.4	mg/kg	6.3	4.1	1	02/08/22 09:21	02/10/22 11:02	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.047J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 13:46	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.72	ug/kg	8.0	0.72	1	01/28/22 08:48	02/03/22 18:19	83-32-9	
Acenaphthylene	<0.57	ug/kg	8.0	0.57	1	01/28/22 08:48	02/03/22 18:19	208-96-8	
Anthracene	1.2J	ug/kg	8.0	0.72	1	01/28/22 08:48	02/03/22 18:19	120-12-7	
Benzo(a)anthracene	6.7J	ug/kg	8.0	0.93	1	01/28/22 08:48	02/03/22 18:19	56-55-3	
Benzo(a)pyrene	6.0J	ug/kg	8.0	0.50	1	01/28/22 08:48	02/03/22 18:19	50-32-8	
Benzo(b)fluoranthene	16.2	ug/kg	8.0	0.95	1	01/28/22 08:48	02/03/22 18:19	205-99-2	lp
Benzo(g,h,i)perylene	1.8J	ug/kg	8.0	1.2	1	01/28/22 08:48	02/03/22 18:19	191-24-2	
Benzo(k)fluoranthene	16.0	ug/kg	8.0	1.3	1	01/28/22 08:48	02/03/22 18:19	207-08-9	lp
Chrysene	8.8	ug/kg	8.0	0.41	1	01/28/22 08:48	02/03/22 18:19	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.0	1.8	1	01/28/22 08:48	02/03/22 18:19	53-70-3	
Fluoranthene	17.2	ug/kg	8.0	0.60	1	01/28/22 08:48	02/03/22 18:19	206-44-0	
Fluorene	<0.74	ug/kg	8.0	0.74	1	01/28/22 08:48	02/03/22 18:19	86-73-7	
Indeno(1,2,3-cd)pyrene	2.0J	ug/kg	8.0	1.5	1	01/28/22 08:48	02/03/22 18:19	193-39-5	
Naphthalene	8.7	ug/kg	8.0	1.5	1	01/28/22 08:48	02/03/22 18:19	91-20-3	
Phenanthrene	12.4	ug/kg	8.0	0.70	1	01/28/22 08:48	02/03/22 18:19	85-01-8	
Pyrene	12.3	ug/kg	8.0	0.89	1	01/28/22 08:48	02/03/22 18:19	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	82	%	37-88		1	01/28/22 08:48	02/03/22 18:19	321-60-8	
Terphenyl-d14 (S)	85	%	10-128		1	01/28/22 08:48	02/03/22 18:19	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	18.4	%	0.10	0.10	1		01/28/22 11:44		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-29 (0-2) **Lab ID: 30460926036** Collected: 01/24/22 10:15 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	144	mg/kg	8.7	0.95	1	03/10/22 08:38	03/10/22 14:37	7440-38-2	D6
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver									
Mercury	1.5	mg/kg	0.17	0.016	1	02/11/22 15:00	02/16/22 13:49	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Acenaphthene	<10	ug/kg	110	10	10	01/28/22 08:48	02/03/22 18:44	83-32-9	ED
Acenaphthylene	<7.9	ug/kg	110	7.9	10	01/28/22 08:48	02/03/22 18:44	208-96-8	ED
Anthracene	19.9J	ug/kg	110	10.0	10	01/28/22 08:48	02/03/22 18:44	120-12-7	ED
Benzo(a)anthracene	101J	ug/kg	110	13.0	10	01/28/22 08:48	02/03/22 18:44	56-55-3	ED
Benzo(a)pyrene	86.6J	ug/kg	110	6.9	10	01/28/22 08:48	02/03/22 18:44	50-32-8	ED
Benzo(b)fluoranthene	255	ug/kg	110	13.2	10	01/28/22 08:48	02/03/22 18:44	205-99-2	ED,lp
Benzo(g,h,i)perylene	25.8J	ug/kg	110	16.6	10	01/28/22 08:48	02/03/22 18:44	191-24-2	ED
Benzo(k)fluoranthene	252	ug/kg	110	18.5	10	01/28/22 08:48	02/03/22 18:44	207-08-9	ED,lp
Chrysene	168	ug/kg	110	5.7	10	01/28/22 08:48	02/03/22 18:44	218-01-9	ED
Dibenz(a,h)anthracene	<24.5	ug/kg	110	24.5	10	01/28/22 08:48	02/03/22 18:44	53-70-3	ED
Fluoranthene	219	ug/kg	110	8.4	10	01/28/22 08:48	02/03/22 18:44	206-44-0	ED
Fluorene	<10.2	ug/kg	110	10.2	10	01/28/22 08:48	02/03/22 18:44	86-73-7	ED
Indeno(1,2,3-cd)pyrene	30.5J	ug/kg	110	21.0	10	01/28/22 08:48	02/03/22 18:44	193-39-5	ED
Naphthalene	66.7J	ug/kg	110	21.4	10	01/28/22 08:48	02/03/22 18:44	91-20-3	ED
Phenanthrene	127	ug/kg	110	9.7	10	01/28/22 08:48	02/03/22 18:44	85-01-8	ED
Pyrene	171	ug/kg	110	12.4	10	01/28/22 08:48	02/03/22 18:44	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	79	%	37-88		10	01/28/22 08:48	02/03/22 18:44	321-60-8	
Terphenyl-d14 (S)	93	%	10-128		10	01/28/22 08:48	02/03/22 18:44	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	41.1	%	0.10	0.10	1		01/28/22 11:44		

Sample: SS-30 (0-2) **Lab ID: 30460926037** Collected: 01/24/22 10:20 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	7.4	mg/kg	6.6	0.72	1	02/08/22 09:21	02/10/22 11:07	7440-38-2	
Barium	113	mg/kg	6.6	0.75	1	02/08/22 09:21	02/10/22 11:07	7440-39-3	
Cadmium	<0.16	mg/kg	1.3	0.16	1	02/08/22 09:21	02/10/22 11:07	7440-43-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-30 (0-2) **Lab ID: 30460926037** Collected: 01/24/22 10:20 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Chromium	17.4	mg/kg	6.6	0.76	1	02/08/22 09:21	02/10/22 11:07	7440-47-3	
Lead	17.8	mg/kg	6.6	0.63	1	02/08/22 09:21	02/10/22 11:07	7439-92-1	
Selenium	<1.4	mg/kg	6.6	1.4	1	02/08/22 09:21	02/10/22 11:07	7782-49-2	
Silver	<0.56	mg/kg	3.3	0.56	1	02/08/22 09:21	02/10/22 11:07	7440-22-4	
Zinc	47.5	mg/kg	6.6	4.3	1	02/08/22 09:21	02/10/22 11:07	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.047J	mg/kg	0.12	0.012	1	02/11/22 15:00	02/16/22 13:52	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.76	ug/kg	8.4	0.76	1	01/28/22 08:48	02/03/22 19:09	83-32-9	
Acenaphthylene	<0.60	ug/kg	8.4	0.60	1	01/28/22 08:48	02/03/22 19:09	208-96-8	
Anthracene	<0.76	ug/kg	8.4	0.76	1	01/28/22 08:48	02/03/22 19:09	120-12-7	
Benzo(a)anthracene	<0.99	ug/kg	8.4	0.99	1	01/28/22 08:48	02/03/22 19:09	56-55-3	
Benzo(a)pyrene	<0.53	ug/kg	8.4	0.53	1	01/28/22 08:48	02/03/22 19:09	50-32-8	
Benzo(b)fluoranthene	<1.0	ug/kg	8.4	1.0	1	01/28/22 08:48	02/03/22 19:09	205-99-2	
Benzo(g,h,i)perylene	<1.3	ug/kg	8.4	1.3	1	01/28/22 08:48	02/03/22 19:09	191-24-2	
Benzo(k)fluoranthene	<1.4	ug/kg	8.4	1.4	1	01/28/22 08:48	02/03/22 19:09	207-08-9	
Chrysene	<0.44	ug/kg	8.4	0.44	1	01/28/22 08:48	02/03/22 19:09	218-01-9	
Dibenz(a,h)anthracene	<1.9	ug/kg	8.4	1.9	1	01/28/22 08:48	02/03/22 19:09	53-70-3	
Fluoranthene	<0.64	ug/kg	8.4	0.64	1	01/28/22 08:48	02/03/22 19:09	206-44-0	
Fluorene	<0.78	ug/kg	8.4	0.78	1	01/28/22 08:48	02/03/22 19:09	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.6	ug/kg	8.4	1.6	1	01/28/22 08:48	02/03/22 19:09	193-39-5	
Naphthalene	<1.6	ug/kg	8.4	1.6	1	01/28/22 08:48	02/03/22 19:09	91-20-3	
Phenanthrene	0.84J	ug/kg	8.4	0.74	1	01/28/22 08:48	02/03/22 19:09	85-01-8	
Pyrene	<0.95	ug/kg	8.4	0.95	1	01/28/22 08:48	02/03/22 19:09	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	88	%	37-88		1	01/28/22 08:48	02/03/22 19:09	321-60-8	
Terphenyl-d14 (S)	95	%	10-128		1	01/28/22 08:48	02/03/22 19:09	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	21.6	%	0.10	0.10	1		01/28/22 11:44		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-30 (4-6) **Lab ID: 30460926038** Collected: 01/24/22 10:25 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	10	mg/kg	6.0	0.66	1	02/08/22 09:21	02/10/22 11:09	7440-38-2	
Barium	67.1	mg/kg	6.0	0.69	1	02/08/22 09:21	02/10/22 11:09	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 09:21	02/10/22 11:09	7440-43-9	
Chromium	19.2	mg/kg	6.0	0.70	1	02/08/22 09:21	02/10/22 11:09	7440-47-3	
Lead	18.8	mg/kg	6.0	0.58	1	02/08/22 09:21	02/10/22 11:09	7439-92-1	
Selenium	<1.3	mg/kg	6.0	1.3	1	02/08/22 09:21	02/10/22 11:09	7782-49-2	
Silver	<0.51	mg/kg	3.0	0.51	1	02/08/22 09:21	02/10/22 11:09	7440-22-4	
Zinc	49.9	mg/kg	6.0	3.9	1	02/08/22 09:21	02/10/22 11:09	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.049J	mg/kg	0.11	0.011	1	02/11/22 15:00	02/16/22 14:16	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.70	ug/kg	7.8	0.70	1	01/28/22 08:48	02/03/22 19:28	83-32-9	
Acenaphthylene	<0.56	ug/kg	7.8	0.56	1	01/28/22 08:48	02/03/22 19:28	208-96-8	
Anthracene	1.6J	ug/kg	7.8	0.70	1	01/28/22 08:48	02/03/22 19:28	120-12-7	
Benzo(a)anthracene	8.1	ug/kg	7.8	0.91	1	01/28/22 08:48	02/03/22 19:28	56-55-3	
Benzo(a)pyrene	7.1J	ug/kg	7.8	0.49	1	01/28/22 08:48	02/03/22 19:28	50-32-8	
Benzo(b)fluoranthene	18.2	ug/kg	7.8	0.93	1	01/28/22 08:48	02/03/22 19:28	205-99-2	lp
Benzo(g,h,i)perylene	1.9J	ug/kg	7.8	1.2	1	01/28/22 08:48	02/03/22 19:28	191-24-2	
Benzo(k)fluoranthene	18.0	ug/kg	7.8	1.3	1	01/28/22 08:48	02/03/22 19:28	207-08-9	lp
Chrysene	8.2	ug/kg	7.8	0.40	1	01/28/22 08:48	02/03/22 19:28	218-01-9	
Dibenz(a,h)anthracene	<1.7	ug/kg	7.8	1.7	1	01/28/22 08:48	02/03/22 19:28	53-70-3	
Fluoranthene	18.4	ug/kg	7.8	0.59	1	01/28/22 08:48	02/03/22 19:28	206-44-0	
Fluorene	<0.72	ug/kg	7.8	0.72	1	01/28/22 08:48	02/03/22 19:28	86-73-7	
Indeno(1,2,3-cd)pyrene	2.2J	ug/kg	7.8	1.5	1	01/28/22 08:48	02/03/22 19:28	193-39-5	
Naphthalene	3.4J	ug/kg	7.8	1.5	1	01/28/22 08:48	02/03/22 19:28	91-20-3	
Phenanthrene	10.9	ug/kg	7.8	0.69	1	01/28/22 08:48	02/03/22 19:28	85-01-8	
Pyrene	14.2	ug/kg	7.8	0.87	1	01/28/22 08:48	02/03/22 19:28	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	84	%	37-88		1	01/28/22 08:48	02/03/22 19:28	321-60-8	
Terphenyl-d14 (S)	95	%	10-128		1	01/28/22 08:48	02/03/22 19:28	1718-51-0	
8260C MSV									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A									
Pace Analytical Services - Greensburg									
Naphthalene	<1.1	ug/kg	5.8	1.1	1	01/27/22 10:42	01/27/22 13:45	91-20-3	1c
Surrogates									
Toluene-d8 (S)	96	%	70-130		1	01/27/22 10:42	01/27/22 13:45	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1	01/27/22 10:42	01/27/22 13:45	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	70-130		1	01/27/22 10:42	01/27/22 13:45	17060-07-0	
Dibromofluoromethane (S)	104	%	70-130		1	01/27/22 10:42	01/27/22 13:45	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-30 (4-6) **Lab ID: 30460926038** Collected: 01/24/22 10:25 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	15.1	%	0.10	0.10	1		01/28/22 11:44		

Sample: SS-31 (0-2) **Lab ID: 30460926039** Collected: 01/24/22 10:50 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	11.2	mg/kg	6.0	0.66	1	02/08/22 09:21	02/10/22 11:11	7440-38-2	
Barium	65.2	mg/kg	6.0	0.69	1	02/08/22 09:21	02/10/22 11:11	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 09:21	02/10/22 11:11	7440-43-9	
Chromium	22.6	mg/kg	6.0	0.70	1	02/08/22 09:21	02/10/22 11:11	7440-47-3	
Lead	14.9	mg/kg	6.0	0.58	1	02/08/22 09:21	02/10/22 11:11	7439-92-1	
Selenium	<1.3	mg/kg	6.0	1.3	1	02/08/22 09:21	02/10/22 11:11	7782-49-2	
Silver	<0.51	mg/kg	3.0	0.51	1	02/08/22 09:21	02/10/22 11:11	7440-22-4	
Zinc	44.7	mg/kg	6.0	3.9	1	02/08/22 09:21	02/10/22 11:11	7440-66-6	

BVR 7471B Mercury Analytical Method: EPA 7471B Preparation Method: EPA 7471B

Pace Analytical Services - Beaver

Mercury	0.050J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 13:08	7439-97-6	
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8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546

Pace Analytical Services - Greensburg

Acenaphthene	<0.72	ug/kg	7.9	0.72	1	01/28/22 08:48	02/03/22 19:48	83-32-9	
Acenaphthylene	<0.57	ug/kg	7.9	0.57	1	01/28/22 08:48	02/03/22 19:48	208-96-8	
Anthracene	<0.72	ug/kg	7.9	0.72	1	01/28/22 08:48	02/03/22 19:48	120-12-7	
Benzo(a)anthracene	1.3J	ug/kg	7.9	0.93	1	01/28/22 08:48	02/03/22 19:48	56-55-3	
Benzo(a)pyrene	0.60J	ug/kg	7.9	0.50	1	01/28/22 08:48	02/03/22 19:48	50-32-8	
Benzo(b)fluoranthene	<0.95	ug/kg	7.9	0.95	1	01/28/22 08:48	02/03/22 19:48	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	7.9	1.2	1	01/28/22 08:48	02/03/22 19:48	191-24-2	
Benzo(k)fluoranthene	<1.3	ug/kg	7.9	1.3	1	01/28/22 08:48	02/03/22 19:48	207-08-9	
Chrysene	<0.41	ug/kg	7.9	0.41	1	01/28/22 08:48	02/03/22 19:48	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	7.9	1.8	1	01/28/22 08:48	02/03/22 19:48	53-70-3	
Fluoranthene	<0.60	ug/kg	7.9	0.60	1	01/28/22 08:48	02/03/22 19:48	206-44-0	
Fluorene	<0.73	ug/kg	7.9	0.73	1	01/28/22 08:48	02/03/22 19:48	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.5	ug/kg	7.9	1.5	1	01/28/22 08:48	02/03/22 19:48	193-39-5	
Naphthalene	<1.5	ug/kg	7.9	1.5	1	01/28/22 08:48	02/03/22 19:48	91-20-3	
Phenanthrene	1.1J	ug/kg	7.9	0.70	1	01/28/22 08:48	02/03/22 19:48	85-01-8	
Pyrene	1.1J	ug/kg	7.9	0.89	1	01/28/22 08:48	02/03/22 19:48	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	84	%	37-88		1	01/28/22 08:48	02/03/22 19:48	321-60-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-31 (0-2) **Lab ID: 30460926039** Collected: 01/24/22 10:50 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Surrogates									
Terphenyl-d14 (S)	96	%	10-128		1	01/28/22 08:48	02/03/22 19:48	1718-51-0	
8260C MSV									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A									
Pace Analytical Services - Greensburg									
Naphthalene	<1.0	ug/kg	5.3	1.0	1	01/27/22 10:42	01/27/22 14:16	91-20-3	1c
Surrogates									
Toluene-d8 (S)	96	%	70-130		1	01/27/22 10:42	01/27/22 14:16	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		1	01/27/22 10:42	01/27/22 14:16	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	70-130		1	01/27/22 10:42	01/27/22 14:16	17060-07-0	
Dibromofluoromethane (S)	104	%	70-130		1	01/27/22 10:42	01/27/22 14:16	1868-53-7	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	17.0	%	0.10	0.10	1		01/28/22 11:44		

Sample: SS-32 (0-2) **Lab ID: 30460926040** Collected: 01/24/22 11:05 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	0.10	mg/kg	0.067	0.0074	1	02/08/22 09:21	02/10/22 11:14	7440-38-2	
Barium	0.76	mg/kg	0.067	0.0077	1	02/08/22 09:21	02/10/22 11:14	7440-39-3	
Cadmium	<0.0016	mg/kg	0.013	0.0016	1	02/08/22 09:21	02/10/22 11:14	7440-43-9	
Chromium	0.18	mg/kg	0.067	0.0079	1	02/08/22 09:21	02/10/22 11:14	7440-47-3	
Lead	0.19	mg/kg	0.067	0.0065	1	02/08/22 09:21	02/10/22 11:14	7439-92-1	
Selenium	<0.014	mg/kg	0.067	0.014	1	02/08/22 09:21	02/10/22 11:14	7782-49-2	
Silver	<0.0057	mg/kg	0.034	0.0057	1	02/08/22 09:21	02/10/22 11:14	7440-22-4	
Zinc	0.45	mg/kg	0.067	0.044	1	02/08/22 09:21	02/10/22 11:14	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.056J	mg/kg	0.13	0.012	1	02/11/22 15:00	02/16/22 13:11	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.78	ug/kg	8.6	0.78	1	01/28/22 08:48	02/03/22 20:12	83-32-9	
Acenaphthylene	<0.62	ug/kg	8.6	0.62	1	01/28/22 08:48	02/03/22 20:12	208-96-8	
Anthracene	2.7J	ug/kg	8.6	0.78	1	01/28/22 08:48	02/03/22 20:12	120-12-7	
Benzo(a)anthracene	13.1	ug/kg	8.6	1.0	1	01/28/22 08:48	02/03/22 20:12	56-55-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-32 (0-2) **Lab ID: 30460926040** Collected: 01/24/22 11:05 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Benzo(a)pyrene	13.1	ug/kg	8.6	0.54	1	01/28/22 08:48	02/03/22 20:12	50-32-8	
Benzo(b)fluoranthene	33.8	ug/kg	8.6	1.0	1	01/28/22 08:48	02/03/22 20:12	205-99-2	lp
Benzo(g,h,i)perylene	3.7J	ug/kg	8.6	1.3	1	01/28/22 08:48	02/03/22 20:12	191-24-2	
Benzo(k)fluoranthene	33.4	ug/kg	8.6	1.4	1	01/28/22 08:48	02/03/22 20:12	207-08-9	lp
Chrysene	16.6	ug/kg	8.6	0.45	1	01/28/22 08:48	02/03/22 20:12	218-01-9	
Dibenz(a,h)anthracene	<1.9	ug/kg	8.6	1.9	1	01/28/22 08:48	02/03/22 20:12	53-70-3	
Fluoranthene	30.6	ug/kg	8.6	0.65	1	01/28/22 08:48	02/03/22 20:12	206-44-0	
Fluorene	<0.80	ug/kg	8.6	0.80	1	01/28/22 08:48	02/03/22 20:12	86-73-7	
Indeno(1,2,3-cd)pyrene	4.0J	ug/kg	8.6	1.6	1	01/28/22 08:48	02/03/22 20:12	193-39-5	
Naphthalene	17.0	ug/kg	8.6	1.7	1	01/28/22 08:48	02/03/22 20:12	91-20-3	
Phenanthrene	22.3	ug/kg	8.6	0.76	1	01/28/22 08:48	02/03/22 20:12	85-01-8	
Pyrene	25.0	ug/kg	8.6	0.97	1	01/28/22 08:48	02/03/22 20:12	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	84	%	37-88		1	01/28/22 08:48	02/03/22 20:12	321-60-8	
Terphenyl-d14 (S)	92	%	10-128		1	01/28/22 08:48	02/03/22 20:12	1718-51-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Pace Analytical Services - Greensburg

Percent Moisture	23.6	%	0.10	0.10	1		01/28/22 11:40		
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Sample: SS-33 (0-2) **Lab ID: 30460926041** Collected: 01/24/22 11:10 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	6.8	mg/kg	6.1	0.67	1	02/08/22 09:21	02/10/22 11:21	7440-38-2	
Barium	129	mg/kg	6.1	0.70	1	02/08/22 09:21	02/10/22 11:21	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 09:21	02/10/22 11:21	7440-43-9	
Chromium	15.8	mg/kg	6.1	0.71	1	02/08/22 09:21	02/10/22 11:21	7440-47-3	
Lead	18.4	mg/kg	6.1	0.59	1	02/08/22 09:21	02/10/22 11:21	7439-92-1	
Selenium	<1.3	mg/kg	6.1	1.3	1	02/08/22 09:21	02/10/22 11:21	7782-49-2	
Silver	<0.52	mg/kg	3.1	0.52	1	02/08/22 09:21	02/10/22 11:21	7440-22-4	
Zinc	52.2	mg/kg	6.1	4.0	1	02/08/22 09:21	02/10/22 11:21	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.048J	mg/kg	0.12	0.012	1	02/11/22 15:00	02/16/22 13:55	7439-97-6	B

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-33 (0-2) **Lab ID: 30460926041** Collected: 01/24/22 11:10 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.74	ug/kg	8.2	0.74	1	02/04/22 08:48	02/07/22 16:26	83-32-9	
Acenaphthylene	<0.59	ug/kg	8.2	0.59	1	02/04/22 08:48	02/07/22 16:26	208-96-8	
Anthracene	<0.74	ug/kg	8.2	0.74	1	02/04/22 08:48	02/07/22 16:26	120-12-7	
Benzo(a)anthracene	<0.96	ug/kg	8.2	0.96	1	02/04/22 08:48	02/07/22 16:26	56-55-3	
Benzo(a)pyrene	<0.51	ug/kg	8.2	0.51	1	02/04/22 08:48	02/07/22 16:26	50-32-8	
Benzo(b)fluoranthene	2.4J	ug/kg	8.2	0.98	1	02/04/22 08:48	02/07/22 16:26	205-99-2	Ip
Benzo(g,h,i)perylene	<1.2	ug/kg	8.2	1.2	1	02/04/22 08:48	02/07/22 16:26	191-24-2	
Benzo(k)fluoranthene	2.4J	ug/kg	8.2	1.4	1	02/04/22 08:48	02/07/22 16:26	207-08-9	Ip
Chrysene	<0.42	ug/kg	8.2	0.42	1	02/04/22 08:48	02/07/22 16:26	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.2	1.8	1	02/04/22 08:48	02/07/22 16:26	53-70-3	
Fluoranthene	1.7J	ug/kg	8.2	0.62	1	02/04/22 08:48	02/07/22 16:26	206-44-0	
Fluorene	<0.76	ug/kg	8.2	0.76	1	02/04/22 08:48	02/07/22 16:26	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.6	ug/kg	8.2	1.6	1	02/04/22 08:48	02/07/22 16:26	193-39-5	
Naphthalene	<1.6	ug/kg	8.2	1.6	1	02/04/22 08:48	02/07/22 16:26	91-20-3	
Phenanthrene	0.98J	ug/kg	8.2	0.72	1	02/04/22 08:48	02/07/22 16:26	85-01-8	
Pyrene	1.4J	ug/kg	8.2	0.92	1	02/04/22 08:48	02/07/22 16:26	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	75	%	37-88		1	02/04/22 08:48	02/07/22 16:26	321-60-8	
Terphenyl-d14 (S)	79	%	10-128		1	02/04/22 08:48	02/07/22 16:26	1718-51-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Pace Analytical Services - Greensburg

Percent Moisture	19.2	%	0.10	0.10	1	01/28/22 11:40
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Sample: SS-34 (0-2) **Lab ID: 30460926042** Collected: 01/24/22 11:15 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	8.9	mg/kg	7.1	0.78	1	02/08/22 09:21	02/10/22 11:23	7440-38-2	
Barium	95.7	mg/kg	7.1	0.81	1	02/08/22 09:21	02/10/22 11:23	7440-39-3	
Cadmium	0.18J	mg/kg	1.4	0.17	1	02/08/22 09:21	02/10/22 11:23	7440-43-9	
Chromium	15.2	mg/kg	7.1	0.82	1	02/08/22 09:21	02/10/22 11:23	7440-47-3	
Lead	33.8	mg/kg	7.1	0.68	1	02/08/22 09:21	02/10/22 11:23	7439-92-1	
Selenium	2.6J	mg/kg	7.1	1.5	1	02/08/22 09:21	02/10/22 11:23	7782-49-2	
Silver	<0.60	mg/kg	3.5	0.60	1	02/08/22 09:21	02/10/22 11:23	7440-22-4	
Zinc	59.0	mg/kg	7.1	4.6	1	02/08/22 09:21	02/10/22 11:23	7440-66-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-34 (0-2) **Lab ID: 30460926042** Collected: 01/24/22 11:15 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver									
Mercury	0.10J	mg/kg	0.14	0.013	1	02/11/22 15:00	02/16/22 14:24	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Acenaphthene	11.2J	ug/kg	47.1	4.3	5	02/04/22 08:48	02/07/22 16:45	83-32-9	ED
Acenaphthylene	28.3J	ug/kg	47.1	3.4	5	02/04/22 08:48	02/07/22 16:45	208-96-8	ED
Anthracene	89.4	ug/kg	47.1	4.3	5	02/04/22 08:48	02/07/22 16:45	120-12-7	ED
Benzo(a)anthracene	336	ug/kg	47.1	5.5	5	02/04/22 08:48	02/07/22 16:45	56-55-3	ED
Benzo(a)pyrene	276	ug/kg	47.1	2.9	5	02/04/22 08:48	02/07/22 16:45	50-32-8	ED
Benzo(b)fluoranthene	581	ug/kg	47.1	5.6	5	02/04/22 08:48	02/07/22 16:45	205-99-2	ED,lp
Benzo(g,h,i)perylene	116	ug/kg	47.1	7.1	5	02/04/22 08:48	02/07/22 16:45	191-24-2	ED
Benzo(k)fluoranthene	582	ug/kg	47.1	7.9	5	02/04/22 08:48	02/07/22 16:45	207-08-9	ED,lp
Chrysene	325	ug/kg	47.1	2.4	5	02/04/22 08:48	02/07/22 16:45	218-01-9	ED
Dibenz(a,h)anthracene	42.0J	ug/kg	47.1	10.5	5	02/04/22 08:48	02/07/22 16:45	53-70-3	ED
Fluoranthene	802	ug/kg	47.1	3.6	5	02/04/22 08:48	02/07/22 16:45	206-44-0	ED
Fluorene	29.4J	ug/kg	47.1	4.4	5	02/04/22 08:48	02/07/22 16:45	86-73-7	ED
Indeno(1,2,3-cd)pyrene	126	ug/kg	47.1	9.0	5	02/04/22 08:48	02/07/22 16:45	193-39-5	ED
Naphthalene	37.7J	ug/kg	47.1	9.1	5	02/04/22 08:48	02/07/22 16:45	91-20-3	ED
Phenanthrene	452	ug/kg	47.1	4.2	5	02/04/22 08:48	02/07/22 16:45	85-01-8	ED
Pyrene	599	ug/kg	47.1	5.3	5	02/04/22 08:48	02/07/22 16:45	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	76	%	37-88		5	02/04/22 08:48	02/07/22 16:45	321-60-8	
Terphenyl-d14 (S)	83	%	10-128		5	02/04/22 08:48	02/07/22 16:45	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	30.1	%	0.10	0.10	1		01/28/22 11:40		

Sample: SS-35 (0-2) **Lab ID: 30460926043** Collected: 01/24/22 11:25 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	0.075	mg/kg	0.061	0.0068	1	02/08/22 09:21	02/10/22 11:25	7440-38-2	
Barium	0.85	mg/kg	0.061	0.0070	1	02/08/22 09:21	02/10/22 11:25	7440-39-3	
Cadmium	<0.0015	mg/kg	0.012	0.0015	1	02/08/22 09:21	02/10/22 11:25	7440-43-9	
Chromium	0.19	mg/kg	0.061	0.0071	1	02/08/22 09:21	02/10/22 11:25	7440-47-3	
Lead	0.14	mg/kg	0.061	0.0059	1	02/08/22 09:21	02/10/22 11:25	7439-92-1	
Selenium	<0.013	mg/kg	0.061	0.013	1	02/08/22 09:21	02/10/22 11:25	7782-49-2	
Silver	<0.0052	mg/kg	0.031	0.0052	1	02/08/22 09:21	02/10/22 11:25	7440-22-4	

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

Sample: SS-35 (0-2) **Lab ID: 30460926043** Collected: 01/24/22 11:25 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Zinc	0.49	mg/kg	0.061	0.040	1	02/08/22 09:21	02/10/22 11:25	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver									
Mercury	0.047J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 14:22	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Acenaphthene	8.8	ug/kg	7.9	0.72	1	02/04/22 08:48	02/07/22 17:05	83-32-9	
Acenaphthylene	36.9	ug/kg	7.9	0.57	1	02/04/22 08:48	02/07/22 17:05	208-96-8	
Anthracene	78.0	ug/kg	7.9	0.72	1	02/04/22 08:48	02/07/22 17:05	120-12-7	
Benzo(a)anthracene	419	ug/kg	7.9	0.93	1	02/04/22 08:48	02/07/22 17:05	56-55-3	
Benzo(a)pyrene	395	ug/kg	7.9	0.49	1	02/04/22 08:48	02/07/22 17:05	50-32-8	
Benzo(b)fluoranthene	792	ug/kg	7.9	0.95	1	02/04/22 08:48	02/07/22 17:05	205-99-2	lp
Benzo(g,h,i)perylene	143	ug/kg	7.9	1.2	1	02/04/22 08:48	02/07/22 17:05	191-24-2	
Benzo(k)fluoranthene	793	ug/kg	7.9	1.3	1	02/04/22 08:48	02/07/22 17:05	207-08-9	lp
Chrysene	413	ug/kg	7.9	0.41	1	02/04/22 08:48	02/07/22 17:05	218-01-9	
Dibenz(a,h)anthracene	55.9	ug/kg	7.9	1.8	1	02/04/22 08:48	02/07/22 17:05	53-70-3	
Fluoranthene	854	ug/kg	7.9	0.60	1	02/04/22 08:48	02/07/22 17:05	206-44-0	
Fluorene	16.4	ug/kg	7.9	0.73	1	02/04/22 08:48	02/07/22 17:05	86-73-7	
Indeno(1,2,3-cd)pyrene	161	ug/kg	7.9	1.5	1	02/04/22 08:48	02/07/22 17:05	193-39-5	
Naphthalene	18.1	ug/kg	7.9	1.5	1	02/04/22 08:48	02/07/22 17:05	91-20-3	
Phenanthrene	336	ug/kg	7.9	0.70	1	02/04/22 08:48	02/07/22 17:05	85-01-8	
Pyrene	689	ug/kg	7.9	0.89	1	02/04/22 08:48	02/07/22 17:05	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	77	%	37-88		1	02/04/22 08:48	02/07/22 17:05	321-60-8	
Terphenyl-d14 (S)	78	%	10-128		1	02/04/22 08:48	02/07/22 17:05	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	16.9	%	0.10	0.10	1		01/28/22 11:40		

Sample: SS-36 (0-2) **Lab ID: 30460926044** Collected: 01/24/22 11:30 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	6.9	mg/kg	6.4	0.71	1	02/08/22 09:21	02/10/22 11:28	7440-38-2	
Barium	112	mg/kg	6.4	0.73	1	02/08/22 09:21	02/10/22 11:28	7440-39-3	
Cadmium	<0.15	mg/kg	1.3	0.15	1	02/08/22 09:21	02/10/22 11:28	7440-43-9	

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-36 (0-2) **Lab ID: 30460926044** Collected: 01/24/22 11:30 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Chromium	17.2	mg/kg	6.4	0.75	1	02/08/22 09:21	02/10/22 11:28	7440-47-3	
Lead	22.2	mg/kg	6.4	0.62	1	02/08/22 09:21	02/10/22 11:28	7439-92-1	
Selenium	3.0J	mg/kg	6.4	1.4	1	02/08/22 09:21	02/10/22 11:28	7782-49-2	
Silver	<0.54	mg/kg	3.2	0.54	1	02/08/22 09:21	02/10/22 11:28	7440-22-4	
Zinc	46.7	mg/kg	6.4	4.2	1	02/08/22 09:21	02/10/22 11:28	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.031J	mg/kg	0.12	0.012	1	02/11/22 15:00	02/16/22 14:19	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.76	ug/kg	8.4	0.76	1	02/04/22 08:48	02/07/22 17:30	83-32-9	
Acenaphthylene	<0.60	ug/kg	8.4	0.60	1	02/04/22 08:48	02/07/22 17:30	208-96-8	
Anthracene	<0.76	ug/kg	8.4	0.76	1	02/04/22 08:48	02/07/22 17:30	120-12-7	
Benzo(a)anthracene	5.1J	ug/kg	8.4	0.99	1	02/04/22 08:48	02/07/22 17:30	56-55-3	
Benzo(a)pyrene	4.9J	ug/kg	8.4	0.53	1	02/04/22 08:48	02/07/22 17:30	50-32-8	
Benzo(b)fluoranthene	10.4	ug/kg	8.4	1.0	1	02/04/22 08:48	02/07/22 17:30	205-99-2	Ip
Benzo(g,h,i)perylene	2.6J	ug/kg	8.4	1.3	1	02/04/22 08:48	02/07/22 17:30	191-24-2	
Benzo(k)fluoranthene	10.4	ug/kg	8.4	1.4	1	02/04/22 08:48	02/07/22 17:30	207-08-9	Ip
Chrysene	5.4J	ug/kg	8.4	0.44	1	02/04/22 08:48	02/07/22 17:30	218-01-9	
Dibenz(a,h)anthracene	<1.9	ug/kg	8.4	1.9	1	02/04/22 08:48	02/07/22 17:30	53-70-3	
Fluoranthene	9.7	ug/kg	8.4	0.64	1	02/04/22 08:48	02/07/22 17:30	206-44-0	
Fluorene	<0.78	ug/kg	8.4	0.78	1	02/04/22 08:48	02/07/22 17:30	86-73-7	
Indeno(1,2,3-cd)pyrene	2.1J	ug/kg	8.4	1.6	1	02/04/22 08:48	02/07/22 17:30	193-39-5	
Naphthalene	3.0J	ug/kg	8.4	1.6	1	02/04/22 08:48	02/07/22 17:30	91-20-3	
Phenanthrene	5.6J	ug/kg	8.4	0.74	1	02/04/22 08:48	02/07/22 17:30	85-01-8	
Pyrene	7.8J	ug/kg	8.4	0.95	1	02/04/22 08:48	02/07/22 17:30	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	74	%	37-88		1	02/04/22 08:48	02/07/22 17:30	321-60-8	
Terphenyl-d14 (S)	76	%	10-128		1	02/04/22 08:48	02/07/22 17:30	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	20.7	%	0.10	0.10	1		01/28/22 11:40		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-37 (0-2) **Lab ID: 30460926045** Collected: 01/24/22 11:35 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	7.8	mg/kg	6.0	0.66	1	02/08/22 09:21	02/10/22 11:30	7440-38-2	
Barium	101	mg/kg	6.0	0.68	1	02/08/22 09:21	02/10/22 11:30	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 09:21	02/10/22 11:30	7440-43-9	
Chromium	19.1	mg/kg	6.0	0.69	1	02/08/22 09:21	02/10/22 11:30	7440-47-3	
Lead	12.1	mg/kg	6.0	0.58	1	02/08/22 09:21	02/10/22 11:30	7439-92-1	
Selenium	<1.3	mg/kg	6.0	1.3	1	02/08/22 09:21	02/10/22 11:30	7782-49-2	
Silver	<0.51	mg/kg	3.0	0.51	1	02/08/22 09:21	02/10/22 11:30	7440-22-4	
Zinc	41.5	mg/kg	6.0	3.9	1	02/08/22 09:21	02/10/22 11:30	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.045J	mg/kg	0.11	0.011	1	02/11/22 15:00	02/16/22 12:41	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.70	ug/kg	7.7	0.70	1	02/04/22 08:48	02/07/22 17:54	83-32-9	
Acenaphthylene	<0.55	ug/kg	7.7	0.55	1	02/04/22 08:48	02/07/22 17:54	208-96-8	
Anthracene	<0.70	ug/kg	7.7	0.70	1	02/04/22 08:48	02/07/22 17:54	120-12-7	
Benzo(a)anthracene	1.5J	ug/kg	7.7	0.91	1	02/04/22 08:48	02/07/22 17:54	56-55-3	
Benzo(a)pyrene	<0.48	ug/kg	7.7	0.48	1	02/04/22 08:48	02/07/22 17:54	50-32-8	
Benzo(b)fluoranthene	2.6J	ug/kg	7.7	0.93	1	02/04/22 08:48	02/07/22 17:54	205-99-2	lp
Benzo(g,h,i)perylene	<1.2	ug/kg	7.7	1.2	1	02/04/22 08:48	02/07/22 17:54	191-24-2	
Benzo(k)fluoranthene	2.6J	ug/kg	7.7	1.3	1	02/04/22 08:48	02/07/22 17:54	207-08-9	lp
Chrysene	<0.40	ug/kg	7.7	0.40	1	02/04/22 08:48	02/07/22 17:54	218-01-9	
Dibenz(a,h)anthracene	<1.7	ug/kg	7.7	1.7	1	02/04/22 08:48	02/07/22 17:54	53-70-3	
Fluoranthene	2.5J	ug/kg	7.7	0.59	1	02/04/22 08:48	02/07/22 17:54	206-44-0	
Fluorene	<0.72	ug/kg	7.7	0.72	1	02/04/22 08:48	02/07/22 17:54	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.5	ug/kg	7.7	1.5	1	02/04/22 08:48	02/07/22 17:54	193-39-5	
Naphthalene	1.8J	ug/kg	7.7	1.5	1	02/04/22 08:48	02/07/22 17:54	91-20-3	
Phenanthrene	1.5J	ug/kg	7.7	0.68	1	02/04/22 08:48	02/07/22 17:54	85-01-8	
Pyrene	2.0J	ug/kg	7.7	0.87	1	02/04/22 08:48	02/07/22 17:54	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	70	%.	37-88		1	02/04/22 08:48	02/07/22 17:54	321-60-8	
Terphenyl-d14 (S)	76	%.	10-128		1	02/04/22 08:48	02/07/22 17:54	1718-51-0	
8260C MSV									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A									
Pace Analytical Services - Greensburg									
Naphthalene	<1.0	ug/kg	5.5	1.0	1	01/27/22 10:42	01/27/22 14:46	91-20-3	1c
Surrogates									
Toluene-d8 (S)	95	%.	70-130		1	01/27/22 10:42	01/27/22 14:46	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	70-130		1	01/27/22 10:42	01/27/22 14:46	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%.	70-130		1	01/27/22 10:42	01/27/22 14:46	17060-07-0	
Dibromofluoromethane (S)	107	%.	70-130		1	01/27/22 10:42	01/27/22 14:46	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

Sample: SS-37 (0-2) **Lab ID: 30460926045** Collected: 01/24/22 11:35 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	13.5	%	0.10	0.10	1		01/28/22 11:40		

Sample: SS-38 (0-2) **Lab ID: 30460926046** Collected: 01/24/22 11:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	6.9J	mg/kg	7.2	0.79	1	02/08/22 09:21	02/10/22 11:32	7440-38-2	
Barium	114	mg/kg	7.2	0.82	1	02/08/22 09:21	02/10/22 11:32	7440-39-3	
Cadmium	0.25J	mg/kg	1.4	0.17	1	02/08/22 09:21	02/10/22 11:32	7440-43-9	
Chromium	16.0	mg/kg	7.2	0.83	1	02/08/22 09:21	02/10/22 11:32	7440-47-3	
Lead	38.1	mg/kg	7.2	0.69	1	02/08/22 09:21	02/10/22 11:32	7439-92-1	
Selenium	<1.5	mg/kg	7.2	1.5	1	02/08/22 09:21	02/10/22 11:32	7782-49-2	
Silver	<0.61	mg/kg	3.6	0.61	1	02/08/22 09:21	02/10/22 11:32	7440-22-4	
Zinc	56.3	mg/kg	7.2	4.6	1	02/08/22 09:21	02/10/22 11:32	7440-66-6	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.071J	mg/kg	0.14	0.013	1	02/11/22 15:00	02/16/22 12:44	7439-97-6	
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8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<0.82	ug/kg	9.1	0.82	1	02/04/22 08:48	02/07/22 18:19	83-32-9	
Acenaphthylene	<0.65	ug/kg	9.1	0.65	1	02/04/22 08:48	02/07/22 18:19	208-96-8	
Anthracene	1.9J	ug/kg	9.1	0.83	1	02/04/22 08:48	02/07/22 18:19	120-12-7	
Benzo(a)anthracene	8.8J	ug/kg	9.1	1.1	1	02/04/22 08:48	02/07/22 18:19	56-55-3	
Benzo(a)pyrene	8.4J	ug/kg	9.1	0.57	1	02/04/22 08:48	02/07/22 18:19	50-32-8	
Benzo(b)fluoranthene	21.4	ug/kg	9.1	1.1	1	02/04/22 08:48	02/07/22 18:19	205-99-2	lp
Benzo(g,h,i)perylene	4.3J	ug/kg	9.1	1.4	1	02/04/22 08:48	02/07/22 18:19	191-24-2	
Benzo(k)fluoranthene	21.5	ug/kg	9.1	1.5	1	02/04/22 08:48	02/07/22 18:19	207-08-9	lp
Chrysene	10.7	ug/kg	9.1	0.47	1	02/04/22 08:48	02/07/22 18:19	218-01-9	
Dibenz(a,h)anthracene	<2.0	ug/kg	9.1	2.0	1	02/04/22 08:48	02/07/22 18:19	53-70-3	
Fluoranthene	20.4	ug/kg	9.1	0.69	1	02/04/22 08:48	02/07/22 18:19	206-44-0	
Fluorene	<0.84	ug/kg	9.1	0.84	1	02/04/22 08:48	02/07/22 18:19	86-73-7	
Indeno(1,2,3-cd)pyrene	4.1J	ug/kg	9.1	1.7	1	02/04/22 08:48	02/07/22 18:19	193-39-5	
Naphthalene	6.4J	ug/kg	9.1	1.8	1	02/04/22 08:48	02/07/22 18:19	91-20-3	
Phenanthrene	14.9	ug/kg	9.1	0.80	1	02/04/22 08:48	02/07/22 18:19	85-01-8	
Pyrene	17.1	ug/kg	9.1	1.0	1	02/04/22 08:48	02/07/22 18:19	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	77	%	37-88		1	02/04/22 08:48	02/07/22 18:19	321-60-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-38 (0-2) **Lab ID: 30460926046** Collected: 01/24/22 11:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Surrogates									
Terphenyl-d14 (S)	79	%	10-128		1	02/04/22 08:48	02/07/22 18:19	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	28.2	%	0.10	0.10	1		01/28/22 11:40		

Sample: SS-39 (0-2) **Lab ID: 30460926047** Collected: 01/24/22 11:55 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	5.9J	mg/kg	6.2	0.68	1	02/08/22 09:21	02/10/22 11:34	7440-38-2	
Barium	54.7	mg/kg	6.2	0.71	1	02/08/22 09:21	02/10/22 11:34	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 09:21	02/10/22 11:34	7440-43-9	
Chromium	16.9	mg/kg	6.2	0.72	1	02/08/22 09:21	02/10/22 11:34	7440-47-3	
Lead	11.4	mg/kg	6.2	0.60	1	02/08/22 09:21	02/10/22 11:34	7439-92-1	
Selenium	<1.3	mg/kg	6.2	1.3	1	02/08/22 09:21	02/10/22 11:34	7782-49-2	
Silver	<0.52	mg/kg	3.1	0.52	1	02/08/22 09:21	02/10/22 11:34	7440-22-4	
Zinc	45.4	mg/kg	6.2	4.0	1	02/08/22 09:21	02/10/22 11:34	7440-66-6	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury **0.046J** mg/kg 0.12 0.011 1 02/11/22 15:00 02/16/22 12:47 7439-97-6

8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<0.74	ug/kg	8.2	0.74	1	02/04/22 08:48	02/07/22 18:45	83-32-9	
Acenaphthylene	<0.58	ug/kg	8.2	0.58	1	02/04/22 08:48	02/07/22 18:45	208-96-8	
Anthracene	<0.74	ug/kg	8.2	0.74	1	02/04/22 08:48	02/07/22 18:45	120-12-7	
Benzo(a)anthracene	<0.96	ug/kg	8.2	0.96	1	02/04/22 08:48	02/07/22 18:45	56-55-3	
Benzo(a)pyrene	<0.51	ug/kg	8.2	0.51	1	02/04/22 08:48	02/07/22 18:45	50-32-8	
Benzo(b)fluoranthene	<0.98	ug/kg	8.2	0.98	1	02/04/22 08:48	02/07/22 18:45	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	8.2	1.2	1	02/04/22 08:48	02/07/22 18:45	191-24-2	
Benzo(k)fluoranthene	<1.4	ug/kg	8.2	1.4	1	02/04/22 08:48	02/07/22 18:45	207-08-9	
Chrysene	<0.42	ug/kg	8.2	0.42	1	02/04/22 08:48	02/07/22 18:45	218-01-9	
Dibenz(a,h)anthracene	<1.8	ug/kg	8.2	1.8	1	02/04/22 08:48	02/07/22 18:45	53-70-3	
Fluoranthene	<0.62	ug/kg	8.2	0.62	1	02/04/22 08:48	02/07/22 18:45	206-44-0	
Fluorene	<0.75	ug/kg	8.2	0.75	1	02/04/22 08:48	02/07/22 18:45	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.6	ug/kg	8.2	1.6	1	02/04/22 08:48	02/07/22 18:45	193-39-5	

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-39 (0-2) **Lab ID: 30460926047** Collected: 01/24/22 11:55 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Naphthalene	<1.6	ug/kg	8.2	1.6	1	02/04/22 08:48	02/07/22 18:45	91-20-3	
Phenanthrene	1.2J	ug/kg	8.2	0.72	1	02/04/22 08:48	02/07/22 18:45	85-01-8	
Pyrene	<0.92	ug/kg	8.2	0.92	1	02/04/22 08:48	02/07/22 18:45	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%	37-88		1	02/04/22 08:48	02/07/22 18:45	321-60-8	
Terphenyl-d14 (S)	73	%	10-128		1	02/04/22 08:48	02/07/22 18:45	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	19.8	%	0.10	0.10	1		01/28/22 11:40		

Sample: SS-40 (0-2) **Lab ID: 30460926048** Collected: 01/24/22 12:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	7.4	mg/kg	5.9	0.65	1	02/08/22 09:21	02/10/22 11:37	7440-38-2	
Barium	51.9	mg/kg	5.9	0.68	1	02/08/22 09:21	02/10/22 11:37	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 09:21	02/10/22 11:37	7440-43-9	
Chromium	13.8	mg/kg	5.9	0.69	1	02/08/22 09:21	02/10/22 11:37	7440-47-3	
Lead	13.9	mg/kg	5.9	0.57	1	02/08/22 09:21	02/10/22 11:37	7439-92-1	
Selenium	<1.3	mg/kg	5.9	1.3	1	02/08/22 09:21	02/10/22 11:37	7782-49-2	
Silver	<0.50	mg/kg	3.0	0.50	1	02/08/22 09:21	02/10/22 11:37	7440-22-4	
Zinc	48.2	mg/kg	5.9	3.8	1	02/08/22 09:21	02/10/22 11:37	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.047J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 12:49	7439-97-6	M1,R1
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<7.1	ug/kg	78.1	7.1	10	02/04/22 08:48	02/07/22 19:09	83-32-9	ED,R1
Acenaphthylene	<5.6	ug/kg	78.1	5.6	10	02/04/22 08:48	02/07/22 19:09	208-96-8	ED,R1
Anthracene	<7.1	ug/kg	78.1	7.1	10	02/04/22 08:48	02/07/22 19:09	120-12-7	ED
Benzo(a)anthracene	<9.2	ug/kg	78.1	9.2	10	02/04/22 08:48	02/07/22 19:09	56-55-3	ED
Benzo(a)pyrene	<4.9	ug/kg	78.1	4.9	10	02/04/22 08:48	02/07/22 19:09	50-32-8	ED
Benzo(b)fluoranthene	<9.4	ug/kg	78.1	9.4	10	02/04/22 08:48	02/07/22 19:09	205-99-2	ED
Benzo(g,h,i)perylene	<11.8	ug/kg	78.1	11.8	10	02/04/22 08:48	02/07/22 19:09	191-24-2	ED
Benzo(k)fluoranthene	<13.1	ug/kg	78.1	13.1	10	02/04/22 08:48	02/07/22 19:09	207-08-9	ED
Chrysene	<4.0	ug/kg	78.1	4.0	10	02/04/22 08:48	02/07/22 19:09	218-01-9	ED

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-40 (0-2) **Lab ID: 30460926048** Collected: 01/24/22 12:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Dibenz(a,h)anthracene	<17.4	ug/kg	78.1	17.4	10	02/04/22 08:48	02/07/22 19:09	53-70-3	ED
Fluoranthene	20.3J	ug/kg	78.1	5.9	10	02/04/22 08:48	02/07/22 19:09	206-44-0	ED
Fluorene	<7.2	ug/kg	78.1	7.2	10	02/04/22 08:48	02/07/22 19:09	86-73-7	ED,R1
Indeno(1,2,3-cd)pyrene	<14.9	ug/kg	78.1	14.9	10	02/04/22 08:48	02/07/22 19:09	193-39-5	ED
Naphthalene	<15.1	ug/kg	78.1	15.1	10	02/04/22 08:48	02/07/22 19:09	91-20-3	ED,R1
Phenanthrene	17.7J	ug/kg	78.1	6.9	10	02/04/22 08:48	02/07/22 19:09	85-01-8	ED
Pyrene	16.9J	ug/kg	78.1	8.8	10	02/04/22 08:48	02/07/22 19:09	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	88	%.	37-88		10	02/04/22 08:48	02/07/22 19:09	321-60-8	
Terphenyl-d14 (S)	97	%.	10-128		10	02/04/22 08:48	02/07/22 19:09	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	15.7	%	0.10	0.10	1		01/28/22 11:40		

Sample: SS-40 (0-2)MS **Lab ID: 30460926049** Collected: 01/24/22 12:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	7.1	mg/kg	5.8	0.64	1	02/08/22 09:21	02/10/22 11:53	7440-38-2	
Barium	36.1	mg/kg	5.8	0.66	1	02/08/22 09:21	02/10/22 11:53	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 09:21	02/10/22 11:53	7440-43-9	
Chromium	17.6	mg/kg	5.8	0.68	1	02/08/22 09:21	02/10/22 11:53	7440-47-3	
Lead	10.9	mg/kg	5.8	0.56	1	02/08/22 09:21	02/10/22 11:53	7439-92-1	
Selenium	<1.2	mg/kg	5.8	1.2	1	02/08/22 09:21	02/10/22 11:53	7782-49-2	
Silver	<0.49	mg/kg	2.9	0.49	1	02/08/22 09:21	02/10/22 11:53	7440-22-4	
Zinc	52.7	mg/kg	5.8	3.8	1	02/08/22 09:21	02/10/22 11:53	7440-66-6	

BVR 7471B Mercury Analytical Method: EPA 7471B Preparation Method: EPA 7471B

Pace Analytical Services - Beaver

Mercury	0.036J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 12:58	7439-97-6	
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8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546

Pace Analytical Services - Greensburg

Acenaphthene	111	ug/kg	77.8	7.0	10	02/04/22 08:48	02/07/22 19:34	83-32-9	ED
Acenaphthylene	112	ug/kg	77.8	5.6	10	02/04/22 08:48	02/07/22 19:34	208-96-8	ED
Anthracene	131	ug/kg	77.8	7.1	10	02/04/22 08:48	02/07/22 19:34	120-12-7	ED
Benzo(a)anthracene	135	ug/kg	77.8	9.1	10	02/04/22 08:48	02/07/22 19:34	56-55-3	ED
Benzo(a)pyrene	128	ug/kg	77.8	4.9	10	02/04/22 08:48	02/07/22 19:34	50-32-8	ED

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

Sample: SS-40 (0-2)MS **Lab ID: 30460926049** Collected: 01/24/22 12:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Benzo(b)fluoranthene	165	ug/kg	77.8	9.3	10	02/04/22 08:48	02/07/22 19:34	205-99-2	ED
Benzo(g,h,i)perylene	76.13	ug/kg	77.8	11.7	10	02/04/22 08:48	02/07/22 19:34	191-24-2	ED
Benzo(k)fluoranthene	158	ug/kg	77.8	13.1	10	02/04/22 08:48	02/07/22 19:34	207-08-9	ED
Chrysene	136	ug/kg	77.8	4.0	10	02/04/22 08:48	02/07/22 19:34	218-01-9	ED
Dibenz(a,h)anthracene	90.7	ug/kg	77.8	17.3	10	02/04/22 08:48	02/07/22 19:34	53-70-3	ED
Fluoranthene	154	ug/kg	77.8	5.9	10	02/04/22 08:48	02/07/22 19:34	206-44-0	ED
Fluorene	123	ug/kg	77.8	7.2	10	02/04/22 08:48	02/07/22 19:34	86-73-7	ED
Indeno(1,2,3-cd)pyrene	94.5	ug/kg	77.8	14.8	10	02/04/22 08:48	02/07/22 19:34	193-39-5	ED
Naphthalene	93.6	ug/kg	77.8	15.1	10	02/04/22 08:48	02/07/22 19:34	91-20-3	ED
Phenanthrene	141	ug/kg	77.8	6.9	10	02/04/22 08:48	02/07/22 19:34	85-01-8	ED
Pyrene	151	ug/kg	77.8	8.7	10	02/04/22 08:48	02/07/22 19:34	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	64	%.	37-88		10	02/04/22 08:48	02/07/22 19:34	321-60-8	
Terphenyl-d14 (S)	80	%.	10-128		10	02/04/22 08:48	02/07/22 19:34	1718-51-0	

Percent Moisture

Analytical Method: ASTM D2974-87
Pace Analytical Services - Greensburg

Percent Moisture	14.9	%	0.10	0.10	1		01/28/22 11:40		
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Sample: SS-41 (0-2) **Lab ID: 30460926050** Collected: 01/24/22 13:00 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	8.5	mg/kg	5.9	0.65	1	02/08/22 09:21	02/10/22 11:55	7440-38-2	
Barium	65.9	mg/kg	5.9	0.67	1	02/08/22 09:21	02/10/22 11:55	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 09:21	02/10/22 11:55	7440-43-9	
Chromium	20.5	mg/kg	5.9	0.68	1	02/08/22 09:21	02/10/22 11:55	7440-47-3	
Lead	12.1	mg/kg	5.9	0.57	1	02/08/22 09:21	02/10/22 11:55	7439-92-1	
Selenium	<1.2	mg/kg	5.9	1.2	1	02/08/22 09:21	02/10/22 11:55	7782-49-2	
Silver	<0.50	mg/kg	2.9	0.50	1	02/08/22 09:21	02/10/22 11:55	7440-22-4	
Zinc	63.1	mg/kg	5.9	3.8	1	02/08/22 09:21	02/10/22 11:55	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver									
Mercury	<0.011	mg/kg	0.12	0.011	1	02/25/22 08:17	02/25/22 14:17	7439-97-6	H1,H2
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Acenaphthene	<0.68	ug/kg	7.6	0.68	1	02/04/22 08:48	02/07/22 20:18	83-32-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

Sample: SS-41 (0-2) **Lab ID: 30460926050** Collected: 01/24/22 13:00 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthylene	<0.54	ug/kg	7.6	0.54	1	02/04/22 08:48	02/07/22 20:18	208-96-8	
Anthracene	0.90J	ug/kg	7.6	0.68	1	02/04/22 08:48	02/07/22 20:18	120-12-7	
Benzo(a)anthracene	5.4J	ug/kg	7.6	0.89	1	02/04/22 08:48	02/07/22 20:18	56-55-3	
Benzo(a)pyrene	4.5J	ug/kg	7.6	0.47	1	02/04/22 08:48	02/07/22 20:18	50-32-8	
Benzo(b)fluoranthene	11.1	ug/kg	7.6	0.91	1	02/04/22 08:48	02/07/22 20:18	205-99-2	Ip
Benzo(g,h,i)perylene	<1.1	ug/kg	7.6	1.1	1	02/04/22 08:48	02/07/22 20:18	191-24-2	
Benzo(k)fluoranthene	11.2	ug/kg	7.6	1.3	1	02/04/22 08:48	02/07/22 20:18	207-08-9	Ip
Chrysene	5.8J	ug/kg	7.6	0.39	1	02/04/22 08:48	02/07/22 20:18	218-01-9	
Dibenz(a,h)anthracene	<1.7	ug/kg	7.6	1.7	1	02/04/22 08:48	02/07/22 20:18	53-70-3	
Fluoranthene	11.1	ug/kg	7.6	0.57	1	02/04/22 08:48	02/07/22 20:18	206-44-0	
Fluorene	<0.70	ug/kg	7.6	0.70	1	02/04/22 08:48	02/07/22 20:18	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.4	ug/kg	7.6	1.4	1	02/04/22 08:48	02/07/22 20:18	193-39-5	
Naphthalene	6.8J	ug/kg	7.6	1.5	1	02/04/22 08:48	02/07/22 20:18	91-20-3	
Phenanthrene	7.3J	ug/kg	7.6	0.67	1	02/04/22 08:48	02/07/22 20:18	85-01-8	
Pyrene	9.3	ug/kg	7.6	0.85	1	02/04/22 08:48	02/07/22 20:18	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	76	%	37-88		1	02/04/22 08:48	02/07/22 20:18	321-60-8	
Terphenyl-d14 (S)	79	%	10-128		1	02/04/22 08:48	02/07/22 20:18	1718-51-0	

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

Naphthalene	<1.5	ug/kg	7.8	1.5	1	01/27/22 10:42	01/27/22 15:17	91-20-3	1c
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Percent Moisture Analytical Method: ASTM D2974-87
Pace Analytical Services - Greensburg

Percent Moisture	14.1	%	0.10	0.10	1		01/28/22 11:40		
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Sample: SS-42 (0-2) **Lab ID: 30460926051** Collected: 01/24/22 13:05 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	5.7	mg/kg	5.5	0.60	1	02/08/22 09:21	02/10/22 11:58	7440-38-2	
Barium	59.8	mg/kg	5.5	0.62	1	02/08/22 09:21	02/10/22 11:58	7440-39-3	
Cadmium	0.26J	mg/kg	1.1	0.13	1	02/08/22 09:21	02/10/22 11:58	7440-43-9	
Chromium	19.2	mg/kg	5.5	0.63	1	02/08/22 09:21	02/10/22 11:58	7440-47-3	
Lead	27.8	mg/kg	5.5	0.53	1	02/08/22 09:21	02/10/22 11:58	7439-92-1	
Selenium	<1.2	mg/kg	5.5	1.2	1	02/08/22 09:21	02/10/22 11:58	7782-49-2	
Silver	<0.46	mg/kg	2.7	0.46	1	02/08/22 09:21	02/10/22 11:58	7440-22-4	
Zinc	73.0	mg/kg	5.5	3.5	1	02/08/22 09:21	02/10/22 11:58	7440-66-6	

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-42 (0-2) **Lab ID: 30460926051** Collected: 01/24/22 13:05 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.062J	mg/kg	0.11	0.010	1	02/11/22 15:00	02/16/22 13:00	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<3.3	ug/kg	36.6	3.3	5	02/04/22 08:48	02/07/22 20:38	83-32-9	ED
Acenaphthylene	<2.6	ug/kg	36.6	2.6	5	02/04/22 08:48	02/07/22 20:38	208-96-8	ED
Anthracene	6.1J	ug/kg	36.6	3.3	5	02/04/22 08:48	02/07/22 20:38	120-12-7	ED
Benzo(a)anthracene	36.2J	ug/kg	36.6	4.3	5	02/04/22 08:48	02/07/22 20:38	56-55-3	ED
Benzo(a)pyrene	31.9J	ug/kg	36.6	2.3	5	02/04/22 08:48	02/07/22 20:38	50-32-8	ED
Benzo(b)fluoranthene	86.6	ug/kg	36.6	4.4	5	02/04/22 08:48	02/07/22 20:38	205-99-2	ED,lp
Benzo(g,h,i)perylene	<5.5	ug/kg	36.6	5.5	5	02/04/22 08:48	02/07/22 20:38	191-24-2	ED
Benzo(k)fluoranthene	86.8	ug/kg	36.6	6.1	5	02/04/22 08:48	02/07/22 20:38	207-08-9	ED,lp
Chrysene	43.4	ug/kg	36.6	1.9	5	02/04/22 08:48	02/07/22 20:38	218-01-9	ED
Dibenz(a,h)anthracene	<8.1	ug/kg	36.6	8.1	5	02/04/22 08:48	02/07/22 20:38	53-70-3	ED
Fluoranthene	82.5	ug/kg	36.6	2.8	5	02/04/22 08:48	02/07/22 20:38	206-44-0	ED
Fluorene	<3.4	ug/kg	36.6	3.4	5	02/04/22 08:48	02/07/22 20:38	86-73-7	ED
Indeno(1,2,3-cd)pyrene	<7.0	ug/kg	36.6	7.0	5	02/04/22 08:48	02/07/22 20:38	193-39-5	ED
Naphthalene	21.0J	ug/kg	36.6	7.1	5	02/04/22 08:48	02/07/22 20:38	91-20-3	ED
Phenanthrene	53.3	ug/kg	36.6	3.2	5	02/04/22 08:48	02/07/22 20:38	85-01-8	ED
Pyrene	65.4	ug/kg	36.6	4.1	5	02/04/22 08:48	02/07/22 20:38	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	75	%	37-88		5	02/04/22 08:48	02/07/22 20:38	321-60-8	
Terphenyl-d14 (S)	83	%	10-128		5	02/04/22 08:48	02/07/22 20:38	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	9.3	%	0.10	0.10	1		01/28/22 11:40		

Sample: SS-43 (0-2) **Lab ID: 30460926052** Collected: 01/24/22 13:15 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	5.5J	mg/kg	6.1	0.67	1	02/08/22 09:21	02/10/22 12:00	7440-38-2	
Barium	43.8	mg/kg	6.1	0.69	1	02/08/22 09:21	02/10/22 12:00	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/08/22 09:21	02/10/22 12:00	7440-43-9	
Chromium	21.0	mg/kg	6.1	0.71	1	02/08/22 09:21	02/10/22 12:00	7440-47-3	
Lead	16.4	mg/kg	6.1	0.58	1	02/08/22 09:21	02/10/22 12:00	7439-92-1	
Selenium	<1.3	mg/kg	6.1	1.3	1	02/08/22 09:21	02/10/22 12:00	7782-49-2	
Silver	<0.51	mg/kg	3.0	0.51	1	02/08/22 09:21	02/10/22 12:00	7440-22-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-43 (0-2) **Lab ID: 30460926052** Collected: 01/24/22 13:15 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Zinc	56.4	mg/kg	6.1	3.9	1	02/08/22 09:21	02/10/22 12:00	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver									
Mercury	0.051J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 12:11	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Acenaphthene	<0.71	ug/kg	7.8	0.71	1	02/04/22 08:48	02/07/22 20:58	83-32-9	
Acenaphthylene	<0.56	ug/kg	7.8	0.56	1	02/04/22 08:48	02/07/22 20:58	208-96-8	
Anthracene	<0.71	ug/kg	7.8	0.71	1	02/04/22 08:48	02/07/22 20:58	120-12-7	
Benzo(a)anthracene	<0.92	ug/kg	7.8	0.92	1	02/04/22 08:48	02/07/22 20:58	56-55-3	
Benzo(a)pyrene	<0.49	ug/kg	7.8	0.49	1	02/04/22 08:48	02/07/22 20:58	50-32-8	
Benzo(b)fluoranthene	<0.94	ug/kg	7.8	0.94	1	02/04/22 08:48	02/07/22 20:58	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	7.8	1.2	1	02/04/22 08:48	02/07/22 20:58	191-24-2	
Benzo(k)fluoranthene	<1.3	ug/kg	7.8	1.3	1	02/04/22 08:48	02/07/22 20:58	207-08-9	
Chrysene	<0.40	ug/kg	7.8	0.40	1	02/04/22 08:48	02/07/22 20:58	218-01-9	
Dibenz(a,h)anthracene	<1.7	ug/kg	7.8	1.7	1	02/04/22 08:48	02/07/22 20:58	53-70-3	
Fluoranthene	1.1J	ug/kg	7.8	0.59	1	02/04/22 08:48	02/07/22 20:58	206-44-0	
Fluorene	<0.72	ug/kg	7.8	0.72	1	02/04/22 08:48	02/07/22 20:58	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.5	ug/kg	7.8	1.5	1	02/04/22 08:48	02/07/22 20:58	193-39-5	
Naphthalene	<1.5	ug/kg	7.8	1.5	1	02/04/22 08:48	02/07/22 20:58	91-20-3	
Phenanthrene	0.90J	ug/kg	7.8	0.69	1	02/04/22 08:48	02/07/22 20:58	85-01-8	
Pyrene	<0.88	ug/kg	7.8	0.88	1	02/04/22 08:48	02/07/22 20:58	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	78	%	37-88		1	02/04/22 08:48	02/07/22 20:58	321-60-8	
Terphenyl-d14 (S)	79	%	10-128		1	02/04/22 08:48	02/07/22 20:58	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	15.8	%	0.10	0.10	1		01/28/22 11:40		

Sample: SS-44 (0-2) **Lab ID: 30460926053** Collected: 01/24/22 13:25 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	3.9J	mg/kg	5.9	0.65	1	02/08/22 09:21	02/10/22 12:02	7440-38-2	
Barium	42.9	mg/kg	5.9	0.68	1	02/08/22 09:21	02/10/22 12:02	7440-39-3	
Cadmium	<0.14	mg/kg	1.2	0.14	1	02/08/22 09:21	02/10/22 12:02	7440-43-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-44 (0-2) **Lab ID: 30460926053** Collected: 01/24/22 13:25 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Chromium	18.0	mg/kg	5.9	0.69	1	02/08/22 09:21	02/10/22 12:02	7440-47-3	
Lead	17.4	mg/kg	5.9	0.57	1	02/08/22 09:21	02/10/22 12:02	7439-92-1	
Selenium	<1.3	mg/kg	5.9	1.3	1	02/08/22 09:21	02/10/22 12:02	7782-49-2	
Silver	<0.50	mg/kg	3.0	0.50	1	02/08/22 09:21	02/10/22 12:02	7440-22-4	
Zinc	49.7	mg/kg	5.9	3.8	1	02/08/22 09:21	02/10/22 12:02	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.049J	mg/kg	0.11	0.011	1	02/11/22 15:00	02/16/22 12:09	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<0.69	ug/kg	7.7	0.69	1	02/04/22 08:48	02/07/22 21:17	83-32-9	
Acenaphthylene	<0.55	ug/kg	7.7	0.55	1	02/04/22 08:48	02/07/22 21:17	208-96-8	
Anthracene	<0.69	ug/kg	7.7	0.69	1	02/04/22 08:48	02/07/22 21:17	120-12-7	
Benzo(a)anthracene	<0.90	ug/kg	7.7	0.90	1	02/04/22 08:48	02/07/22 21:17	56-55-3	
Benzo(a)pyrene	<0.48	ug/kg	7.7	0.48	1	02/04/22 08:48	02/07/22 21:17	50-32-8	
Benzo(b)fluoranthene	<0.92	ug/kg	7.7	0.92	1	02/04/22 08:48	02/07/22 21:17	205-99-2	
Benzo(g,h,i)perylene	<1.2	ug/kg	7.7	1.2	1	02/04/22 08:48	02/07/22 21:17	191-24-2	
Benzo(k)fluoranthene	<1.3	ug/kg	7.7	1.3	1	02/04/22 08:48	02/07/22 21:17	207-08-9	
Chrysene	<0.40	ug/kg	7.7	0.40	1	02/04/22 08:48	02/07/22 21:17	218-01-9	
Dibenz(a,h)anthracene	<1.7	ug/kg	7.7	1.7	1	02/04/22 08:48	02/07/22 21:17	53-70-3	
Fluoranthene	1.4J	ug/kg	7.7	0.58	1	02/04/22 08:48	02/07/22 21:17	206-44-0	
Fluorene	<0.71	ug/kg	7.7	0.71	1	02/04/22 08:48	02/07/22 21:17	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.5	ug/kg	7.7	1.5	1	02/04/22 08:48	02/07/22 21:17	193-39-5	
Naphthalene	1.6J	ug/kg	7.7	1.5	1	02/04/22 08:48	02/07/22 21:17	91-20-3	
Phenanthrene	2.0J	ug/kg	7.7	0.68	1	02/04/22 08:48	02/07/22 21:17	85-01-8	
Pyrene	1.2J	ug/kg	7.7	0.86	1	02/04/22 08:48	02/07/22 21:17	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	78	%	37-88		1	02/04/22 08:48	02/07/22 21:17	321-60-8	
Terphenyl-d14 (S)	79	%	10-128		1	02/04/22 08:48	02/07/22 21:17	1718-51-0	
8260C MSV									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A									
Pace Analytical Services - Greensburg									
Naphthalene	<1.1	ug/kg	5.8	1.1	1	01/27/22 10:42	01/27/22 15:48	91-20-3	1c
Surrogates									
Toluene-d8 (S)	96	%	70-130		1	01/27/22 10:42	01/27/22 15:48	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		1	01/27/22 10:42	01/27/22 15:48	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	70-130		1	01/27/22 10:42	01/27/22 15:48	17060-07-0	
Dibromofluoromethane (S)	105	%	70-130		1	01/27/22 10:42	01/27/22 15:48	1868-53-7	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	13.1	%	0.10	0.10	1		01/28/22 11:40		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-45 (0-2) **Lab ID: 30460926054** Collected: 01/24/22 13:35 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	8.2	mg/kg	6.1	0.67	1	02/09/22 06:25	02/10/22 12:09	7440-38-2	
Barium	111	mg/kg	6.1	0.70	1	02/09/22 06:25	02/10/22 12:09	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/09/22 06:25	02/10/22 12:09	7440-43-9	
Chromium	25.5	mg/kg	6.1	0.71	1	02/09/22 06:25	02/10/22 12:09	7440-47-3	
Lead	22.0	mg/kg	6.1	0.59	1	02/09/22 06:25	02/10/22 12:09	7439-92-1	
Selenium	1.3J	mg/kg	6.1	1.3	1	02/09/22 06:25	02/10/22 12:09	7782-49-2	
Silver	<0.52	mg/kg	3.1	0.52	1	02/09/22 06:25	02/10/22 12:09	7440-22-4	
Zinc	72.5	mg/kg	6.1	4.0	1	02/09/22 06:25	02/10/22 12:09	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.076J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 12:06	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	15.7J	ug/kg	80.1	7.2	10	02/04/22 08:48	02/07/22 21:37	83-32-9	ED
Acenaphthylene	16.9J	ug/kg	80.1	5.7	10	02/04/22 08:48	02/07/22 21:37	208-96-8	ED
Anthracene	84.6	ug/kg	80.1	7.3	10	02/04/22 08:48	02/07/22 21:37	120-12-7	ED
Benzo(a)anthracene	259	ug/kg	80.1	9.4	10	02/04/22 08:48	02/07/22 21:37	56-55-3	ED
Benzo(a)pyrene	236	ug/kg	80.1	5.0	10	02/04/22 08:48	02/07/22 21:37	50-32-8	ED
Benzo(b)fluoranthene	544	ug/kg	80.1	9.6	10	02/04/22 08:48	02/07/22 21:37	205-99-2	ED,lp
Benzo(g,h,i)perylene	60.4J	ug/kg	80.1	12.1	10	02/04/22 08:48	02/07/22 21:37	191-24-2	ED
Benzo(k)fluoranthene	545	ug/kg	80.1	13.4	10	02/04/22 08:48	02/07/22 21:37	207-08-9	ED,lp
Chrysene	274	ug/kg	80.1	4.1	10	02/04/22 08:48	02/07/22 21:37	218-01-9	ED
Dibenz(a,h)anthracene	<17.8	ug/kg	80.1	17.8	10	02/04/22 08:48	02/07/22 21:37	53-70-3	ED
Fluoranthene	539	ug/kg	80.1	6.1	10	02/04/22 08:48	02/07/22 21:37	206-44-0	ED
Fluorene	24.1J	ug/kg	80.1	7.4	10	02/04/22 08:48	02/07/22 21:37	86-73-7	ED
Indeno(1,2,3-cd)pyrene	71.1J	ug/kg	80.1	15.2	10	02/04/22 08:48	02/07/22 21:37	193-39-5	ED
Naphthalene	74.0J	ug/kg	80.1	15.5	10	02/04/22 08:48	02/07/22 21:37	91-20-3	ED
Phenanthrene	479	ug/kg	80.1	7.1	10	02/04/22 08:48	02/07/22 21:37	85-01-8	ED
Pyrene	454	ug/kg	80.1	9.0	10	02/04/22 08:48	02/07/22 21:37	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	87	%	37-88		10	02/04/22 08:48	02/07/22 21:37	321-60-8	
Terphenyl-d14 (S)	92	%	10-128		10	02/04/22 08:48	02/07/22 21:37	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	19.0	%	0.10	0.10	1		01/28/22 11:40		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-46 (0-2) **Lab ID: 30460926055** Collected: 01/24/22 13:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	5.7J	mg/kg	6.4	0.70	1	02/09/22 06:25	02/10/22 12:16	7440-38-2	
Barium	55.0	mg/kg	6.4	0.73	1	02/09/22 06:25	02/10/22 12:16	7440-39-3	
Cadmium	<0.15	mg/kg	1.3	0.15	1	02/09/22 06:25	02/10/22 12:16	7440-43-9	
Chromium	15.7	mg/kg	6.4	0.74	1	02/09/22 06:25	02/10/22 12:16	7440-47-3	
Lead	13.2	mg/kg	6.4	0.62	1	02/09/22 06:25	02/10/22 12:16	7439-92-1	
Selenium	<1.3	mg/kg	6.4	1.3	1	02/09/22 06:25	02/10/22 12:16	7782-49-2	
Silver	<0.54	mg/kg	3.2	0.54	1	02/09/22 06:25	02/10/22 12:16	7440-22-4	
Zinc	46.4	mg/kg	6.4	4.1	1	02/09/22 06:25	02/10/22 12:16	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.068J	mg/kg	0.12	0.012	1	02/11/22 15:00	02/16/22 12:03	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<3.6	ug/kg	40.3	3.6	5	02/04/22 08:48	02/07/22 21:57	83-32-9	ED
Acenaphthylene	15.0J	ug/kg	40.3	2.9	5	02/04/22 08:48	02/07/22 21:57	208-96-8	ED
Anthracene	18.5J	ug/kg	40.3	3.7	5	02/04/22 08:48	02/07/22 21:57	120-12-7	ED
Benzo(a)anthracene	118	ug/kg	40.3	4.7	5	02/04/22 08:48	02/07/22 21:57	56-55-3	ED
Benzo(a)pyrene	105	ug/kg	40.3	2.5	5	02/04/22 08:48	02/07/22 21:57	50-32-8	ED,IS
Benzo(b)fluoranthene	277	ug/kg	40.3	4.8	5	02/04/22 08:48	02/07/22 21:57	205-99-2	ED,IS, Ip
Benzo(g,h,i)perylene	32.7J	ug/kg	40.3	6.1	5	02/04/22 08:48	02/07/22 21:57	191-24-2	ED,IS
Benzo(k)fluoranthene	277	ug/kg	40.3	6.8	5	02/04/22 08:48	02/07/22 21:57	207-08-9	ED,IS, Ip
Chrysene	127	ug/kg	40.3	2.1	5	02/04/22 08:48	02/07/22 21:57	218-01-9	ED
Dibenz(a,h)anthracene	<9.0	ug/kg	40.3	9.0	5	02/04/22 08:48	02/07/22 21:57	53-70-3	ED,IS
Fluoranthene	273	ug/kg	40.3	3.1	5	02/04/22 08:48	02/07/22 21:57	206-44-0	ED
Fluorene	<3.7	ug/kg	40.3	3.7	5	02/04/22 08:48	02/07/22 21:57	86-73-7	ED
Indeno(1,2,3-cd)pyrene	39.0J	ug/kg	40.3	7.7	5	02/04/22 08:48	02/07/22 21:57	193-39-5	ED,IS
Naphthalene	27.9J	ug/kg	40.3	7.8	5	02/04/22 08:48	02/07/22 21:57	91-20-3	ED
Phenanthrene	123	ug/kg	40.3	3.6	5	02/04/22 08:48	02/07/22 21:57	85-01-8	ED
Pyrene	226	ug/kg	40.3	4.5	5	02/04/22 08:48	02/07/22 21:57	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	81	%	37-88		5	02/04/22 08:48	02/07/22 21:57	321-60-8	
Terphenyl-d14 (S)	81	%	10-128		5	02/04/22 08:48	02/07/22 21:57	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	19.2	%	0.10	0.10	1		01/28/22 11:40		

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: TB-02		Lab ID: 30460926056		Collected: 01/24/22 00:00		Received: 01/25/22 15:45		Matrix: Water	
Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV Analytical Method: EPA 8260C Pace Analytical Services - Greensburg									
Naphthalene	<0.82	ug/L	2.0	0.82	1		02/02/22 16:04	91-20-3	
Surrogates									
4-Bromofluorobenzene (S)	105	%.	70-130		1		02/02/22 16:04	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%.	70-130		1		02/02/22 16:04	17060-07-0	
Toluene-d8 (S)	94	%.	70-130		1		02/02/22 16:04	2037-26-5	
Dibromofluoromethane (S)	109	%.	70-130		1		02/02/22 16:04	1868-53-7	

Sample: SS-17 (0-2) MSD **Lab ID: 30460926057** Collected: 01/21/22 14:45 Received: 01/25/22 15:45 Matrix: Solid
Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	20.4	mg/kg	6.3	0.70	1	02/09/22 06:25	02/10/22 12:18	7440-38-2	
Barium	55.4	mg/kg	6.3	0.72	1	02/09/22 06:25	02/10/22 12:18	7440-39-3	
Cadmium	0.25J	mg/kg	1.3	0.15	1	02/09/22 06:25	02/10/22 12:18	7440-43-9	
Chromium	37.2	mg/kg	6.3	0.74	1	02/09/22 06:25	02/10/22 12:18	7440-47-3	
Lead	10.8	mg/kg	6.3	0.61	1	02/09/22 06:25	02/10/22 12:18	7439-92-1	
Selenium	<1.3	mg/kg	6.3	1.3	1	02/09/22 06:25	02/10/22 12:18	7782-49-2	
Silver	<0.54	mg/kg	3.2	0.54	1	02/09/22 06:25	02/10/22 12:18	7440-22-4	
Zinc	83.5	mg/kg	6.3	4.1	1	02/09/22 06:25	02/10/22 12:18	7440-66-6	
BVR 7471B Mercury Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver									
Mercury	0.040J	mg/kg	0.12	0.012	1	02/11/22 15:00	02/16/22 12:36	7439-97-6	
8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Acenaphthene	332	ug/kg	8.0	0.73	1	01/28/22 08:48	02/03/22 13:15	83-32-9	
Acenaphthylene	472	ug/kg	8.0	0.57	1	01/28/22 08:48	02/03/22 13:15	208-96-8	
Anthracene	2250	ug/kg	8.0	0.73	1	01/28/22 08:48	02/03/22 13:15	120-12-7	E
Benzo(a)anthracene	7480	ug/kg	8.0	0.94	1	01/28/22 08:48	02/03/22 13:15	56-55-3	E
Benzo(a)pyrene	5410	ug/kg	8.0	0.50	1	01/28/22 08:48	02/03/22 13:15	50-32-8	E
Benzo(b)fluoranthene	11800	ug/kg	8.0	0.96	1	01/28/22 08:48	02/03/22 13:15	205-99-2	E,lp
Benzo(g,h,i)perylene	1340	ug/kg	8.0	1.2	1	01/28/22 08:48	02/03/22 13:15	191-24-2	
Benzo(k)fluoranthene	11600	ug/kg	8.0	1.3	1	01/28/22 08:48	02/03/22 13:15	207-08-9	E,lp
Chrysene	5150	ug/kg	8.0	0.41	1	01/28/22 08:48	02/03/22 13:15	218-01-9	E
Dibenz(a,h)anthracene	725	ug/kg	8.0	1.8	1	01/28/22 08:48	02/03/22 13:15	53-70-3	
Fluoranthene	12300	ug/kg	8.0	0.61	1	01/28/22 08:48	02/03/22 13:15	206-44-0	E
Fluorene	665	ug/kg	8.0	0.74	1	01/28/22 08:48	02/03/22 13:15	86-73-7	
Indeno(1,2,3-cd)pyrene	1680	ug/kg	8.0	1.5	1	01/28/22 08:48	02/03/22 13:15	193-39-5	E
Naphthalene	267	ug/kg	8.0	1.6	1	01/28/22 08:48	02/03/22 13:15	91-20-3	

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-17 (0-2) MSD **Lab ID: 30460926057** Collected: 01/21/22 14:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Phenanthrene	9150	ug/kg	8.0	0.71	1	01/28/22 08:48	02/03/22 13:15	85-01-8	E
Pyrene	9330	ug/kg	8.0	0.90	1	01/28/22 08:48	02/03/22 13:15	129-00-0	E
Surrogates									
2-Fluorobiphenyl (S)	73	%	37-88		1	01/28/22 08:48	02/03/22 13:15	321-60-8	
Terphenyl-d14 (S)	75	%	10-128		1	01/28/22 08:48	02/03/22 13:15	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87 Pace Analytical Services - Greensburg									
Percent Moisture	18.5	%	0.10	0.10	1		02/02/22 09:47		

Sample: SS-40 (0-2) MSD **Lab ID: 30460926058** Collected: 01/24/22 12:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	6.8	mg/kg	6.1	0.67	1	02/09/22 06:25	02/10/22 12:21	7440-38-2	
Barium	38.9	mg/kg	6.1	0.69	1	02/09/22 06:25	02/10/22 12:21	7440-39-3	
Cadmium	<0.15	mg/kg	1.2	0.15	1	02/09/22 06:25	02/10/22 12:21	7440-43-9	
Chromium	18.6	mg/kg	6.1	0.71	1	02/09/22 06:25	02/10/22 12:21	7440-47-3	
Lead	11.0	mg/kg	6.1	0.59	1	02/09/22 06:25	02/10/22 12:21	7439-92-1	
Selenium	<1.3	mg/kg	6.1	1.3	1	02/09/22 06:25	02/10/22 12:21	7782-49-2	
Silver	<0.51	mg/kg	3.0	0.51	1	02/09/22 06:25	02/10/22 12:21	7440-22-4	
Zinc	50.3	mg/kg	6.1	3.9	1	02/09/22 06:25	02/10/22 12:21	7440-66-6	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver									
Mercury	0.036J	mg/kg	0.12	0.011	1	02/11/22 15:00	02/16/22 12:39	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Greensburg									
Acenaphthene	141	ug/kg	77.8	7.0	10	02/04/22 08:48	02/07/22 19:59	83-32-9	ED
Acenaphthylene	147	ug/kg	77.8	5.6	10	02/04/22 08:48	02/07/22 19:59	208-96-8	ED
Anthracene	157	ug/kg	77.8	7.1	10	02/04/22 08:48	02/07/22 19:59	120-12-7	ED
Benzo(a)anthracene	151	ug/kg	77.8	9.1	10	02/04/22 08:48	02/07/22 19:59	56-55-3	ED
Benzo(a)pyrene	143	ug/kg	77.8	4.9	10	02/04/22 08:48	02/07/22 19:59	50-32-8	ED
Benzo(b)fluoranthene	182	ug/kg	77.8	9.3	10	02/04/22 08:48	02/07/22 19:59	205-99-2	ED
Benzo(g,h,i)perylene	84.4	ug/kg	77.8	11.7	10	02/04/22 08:48	02/07/22 19:59	191-24-2	ED
Benzo(k)fluoranthene	189	ug/kg	77.8	13.1	10	02/04/22 08:48	02/07/22 19:59	207-08-9	ED
Chrysene	157	ug/kg	77.8	4.0	10	02/04/22 08:48	02/07/22 19:59	218-01-9	ED
Dibenz(a,h)anthracene	99.2	ug/kg	77.8	17.3	10	02/04/22 08:48	02/07/22 19:59	53-70-3	ED

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Sample: SS-40 (0-2) MSD **Lab ID: 30460926058** Collected: 01/24/22 12:45 Received: 01/25/22 15:45 Matrix: Solid

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

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Fluoranthene	169	ug/kg	77.8	5.9	10	02/04/22 08:48	02/07/22 19:59	206-44-0	ED
Fluorene	154	ug/kg	77.8	7.2	10	02/04/22 08:48	02/07/22 19:59	86-73-7	ED
Indeno(1,2,3-cd)pyrene	101	ug/kg	77.8	14.8	10	02/04/22 08:48	02/07/22 19:59	193-39-5	ED
Naphthalene	124	ug/kg	77.8	15.1	10	02/04/22 08:48	02/07/22 19:59	91-20-3	ED
Phenanthrene	164	ug/kg	77.8	6.9	10	02/04/22 08:48	02/07/22 19:59	85-01-8	ED
Pyrene	169	ug/kg	77.8	8.7	10	02/04/22 08:48	02/07/22 19:59	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	86	%.	37-88		10	02/04/22 08:48	02/07/22 19:59	321-60-8	
Terphenyl-d14 (S)	92	%.	10-128		10	02/04/22 08:48	02/07/22 19:59	1718-51-0	
Percent Moisture									
Analytical Method: ASTM D2974-87									
Pace Analytical Services - Greensburg									
Percent Moisture	15.1	%	0.10	0.10	1		02/02/22 09:47		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	482411	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3050B	Analysis Description:	BVR 6010D MET ICP,Solid,3050B
		Laboratory:	Pace Analytical Services - Beaver
Associated Lab Samples:	30460926001, 30460926002, 30460926003, 30460926004, 30460926005, 30460926006, 30460926007, 30460926008, 30460926009, 30460926010, 30460926011, 30460926012		

METHOD BLANK:	2331920	Matrix:	Solid
Associated Lab Samples:	30460926001, 30460926002, 30460926003, 30460926004, 30460926005, 30460926006, 30460926007, 30460926008, 30460926009, 30460926010, 30460926011, 30460926012		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	<0.55	5.0	0.55	02/09/22 10:21	
Barium	mg/kg	<0.57	5.0	0.57	02/09/22 10:21	
Cadmium	mg/kg	<0.12	1.0	0.12	02/09/22 10:21	
Chromium	mg/kg	<0.58	5.0	0.58	02/09/22 10:21	
Lead	mg/kg	<0.48	5.0	0.48	02/09/22 10:21	
Selenium	mg/kg	<1.1	5.0	1.1	02/09/22 10:21	
Silver	mg/kg	<0.42	2.5	0.42	02/09/22 10:21	

LABORATORY CONTROL SAMPLE: 2331921

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	100	96.4	96	80-120	
Barium	mg/kg	100	101	101	80-120	
Cadmium	mg/kg	50	49.3	99	80-120	
Chromium	mg/kg	100	101	101	80-120	
Lead	mg/kg	100	99.5	99	80-120	
Selenium	mg/kg	100	89.9	90	80-120	
Silver	mg/kg	25	24.9	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2331922 2331923

Parameter	Units	30460926001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	11.2	111	111	121	121	99	99	75-125	0	20	
Barium	mg/kg	80.8	111	111	206	164	112	75	75-125	22	20	R1
Cadmium	mg/kg	<0.13	55.7	55.7	47.0	47.0	84	84	75-125	0	20	
Chromium	mg/kg	12.7	111	111	123	120	99	96	75-125	2	20	
Lead	mg/kg	5.3J	111	111	111	108	95	92	75-125	3	20	
Selenium	mg/kg	3.3J	111	111	107	107	93	93	75-125	1	20	
Silver	mg/kg	4.3	27.9	27.9	36.4	34.5	115	108	75-125	5	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	482418	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3050B	Analysis Description:	BVR 6010D MET ICP,Solid,3050B
		Laboratory:	Pace Analytical Services - Beaver
Associated Lab Samples:	30460926013, 30460926014, 30460926015, 30460926016, 30460926017, 30460926018, 30460926019, 30460926020, 30460926021, 30460926022, 30460926023, 30460926024, 30460926025, 30460926026, 30460926027, 30460926028, 30460926029, 30460926030, 30460926031, 30460926032		

METHOD BLANK:	2331929	Matrix:	Solid
Associated Lab Samples:	30460926013, 30460926014, 30460926015, 30460926016, 30460926017, 30460926018, 30460926019, 30460926020, 30460926021, 30460926022, 30460926023, 30460926024, 30460926025, 30460926026, 30460926027, 30460926028, 30460926029, 30460926030, 30460926031, 30460926032		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	<0.55	5.0	0.55	02/09/22 11:40	
Barium	mg/kg	<0.57	5.0	0.57	02/09/22 11:40	
Cadmium	mg/kg	<0.12	1.0	0.12	02/09/22 11:40	
Chromium	mg/kg	<0.58	5.0	0.58	02/09/22 11:40	
Lead	mg/kg	<0.48	5.0	0.48	02/09/22 11:40	
Selenium	mg/kg	<1.1	5.0	1.1	02/09/22 11:40	
Silver	mg/kg	<0.42	2.5	0.42	02/09/22 11:40	

LABORATORY CONTROL SAMPLE: 2331930

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	100	95.4	95	80-120	
Barium	mg/kg	100	103	103	80-120	
Cadmium	mg/kg	50	49.6	99	80-120	
Chromium	mg/kg	100	104	104	80-120	
Lead	mg/kg	100	101	101	80-120	
Selenium	mg/kg	100	86.0	86	80-120	
Silver	mg/kg	25	24.3	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2331931 2331932

Parameter	Units	30460926021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	8.6	122	121	121	130	92	100	75-125	7	20	
Barium	mg/kg	29.7	122	121	189	199	130	140	75-125	5	20 M1	
Cadmium	mg/kg	<0.15	61.2	60.6	54.5	57.9	89	96	75-125	6	20	
Chromium	mg/kg	21.7	122	121	155	164	109	117	75-125	6	20	
Lead	mg/kg	7.6	122	121	128	134	98	104	75-125	5	20	
Selenium	mg/kg	1.8J	122	121	102	111	82	90	75-125	9	20	
Silver	mg/kg	19.5	30.6	30.3	46.1	47.6	87	93	75-125	3	20	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	482482	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3050B	Analysis Description:	BVR 6010D MET ICP,Solid,3050B
		Laboratory:	Pace Analytical Services - Beaver
Associated Lab Samples:	30460926034, 30460926035, 30460926037, 30460926038, 30460926039, 30460926040, 30460926041, 30460926042, 30460926043, 30460926044, 30460926045, 30460926046, 30460926047, 30460926048, 30460926049, 30460926050, 30460926051, 30460926052, 30460926053		

METHOD BLANK:	2332044	Matrix:	Solid
Associated Lab Samples:	30460926034, 30460926035, 30460926037, 30460926038, 30460926039, 30460926040, 30460926041, 30460926042, 30460926043, 30460926044, 30460926045, 30460926046, 30460926047, 30460926048, 30460926049, 30460926050, 30460926051, 30460926052, 30460926053		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	<0.55	5.0	0.55	02/10/22 10:55	
Barium	mg/kg	<0.57	5.0	0.57	02/10/22 10:55	
Cadmium	mg/kg	<0.12	1.0	0.12	02/10/22 10:55	
Chromium	mg/kg	<0.58	5.0	0.58	02/10/22 10:55	
Lead	mg/kg	<0.48	5.0	0.48	02/10/22 10:55	
Selenium	mg/kg	<1.1	5.0	1.1	02/10/22 10:55	
Silver	mg/kg	<0.42	2.5	0.42	02/10/22 10:55	

LABORATORY CONTROL SAMPLE: 2332045

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	100	97.8	98	80-120	
Barium	mg/kg	100	106	106	80-120	
Cadmium	mg/kg	50	52.5	105	80-120	
Chromium	mg/kg	100	106	106	80-120	
Lead	mg/kg	100	103	103	80-120	
Selenium	mg/kg	100	100	100	80-120	
Silver	mg/kg	25	24.4	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2332046 2332047

Parameter	Units	30460926048 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	7.4	120	117	129	123	101	98	75-125	5	20	
Barium	mg/kg	51.9	120	117	211	203	133	129	75-125	4	20	
Cadmium	mg/kg	<0.14	59.9	58.7	60.9	59.2	102	101	75-125	3	20	
Chromium	mg/kg	13.8	120	117	143	141	108	109	75-125	1	20	
Lead	mg/kg	13.9	120	117	140	138	105	105	75-125	1	20	
Selenium	mg/kg	<1.3	120	117	125	122	103	103	75-125	3	20	
Silver	mg/kg	<0.50	30	29.4	30.6	29.9	102	102	75-125	2	20	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

QC Batch: 482680 Analysis Method: EPA 6010D
QC Batch Method: EPA 3050B Analysis Description: BVR 6010D MET ICP,Solid,3050B
Laboratory: Pace Analytical Services - Beaver
Associated Lab Samples: 30460926054, 30460926055, 30460926057, 30460926058

METHOD BLANK: 2333122 Matrix: Solid
Associated Lab Samples: 30460926054, 30460926055, 30460926057, 30460926058

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	<0.55	5.0	0.55	02/10/22 12:04	
Barium	mg/kg	<0.57	5.0	0.57	02/10/22 12:04	
Cadmium	mg/kg	<0.12	1.0	0.12	02/10/22 12:04	
Chromium	mg/kg	<0.58	5.0	0.58	02/10/22 12:04	
Lead	mg/kg	<0.48	5.0	0.48	02/10/22 12:04	
Selenium	mg/kg	<1.1	5.0	1.1	02/10/22 12:04	
Silver	mg/kg	<0.42	2.5	0.42	02/10/22 12:04	
Zinc	mg/kg	<3.2	5.0	3.2	02/10/22 12:04	

LABORATORY CONTROL SAMPLE: 2333123

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	100	103	103	80-120	
Barium	mg/kg	100	110	110	80-120	
Cadmium	mg/kg	50	54.6	109	80-120	
Chromium	mg/kg	100	109	109	80-120	
Lead	mg/kg	100	105	105	80-120	
Selenium	mg/kg	100	103	103	80-120	
Silver	mg/kg	25	24.8	99	80-120	
Zinc	mg/kg	100	113	113	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2333124 2333125

Parameter	Units	30463022001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	7.3	121	122	135	133	106	103	75-125	2	20	
Barium	mg/kg	43.3	121	122	187	182	119	114	75-125	3	20	
Cadmium	mg/kg	ND	60.4	61	65.5	64.0	108	105	75-125	2	20	
Chromium	mg/kg	8.2	121	122	141	138	110	106	75-125	3	20	
Lead	mg/kg	10.8	121	122	139	135	106	102	75-125	2	20	
Selenium	mg/kg	ND	121	122	131	130	108	106	75-125	1	20	
Silver	mg/kg	ND	30.2	30.6	31.3	31.0	104	101	75-125	1	20	
Zinc	mg/kg	58.6	121	122	195	188	112	106	75-125	4	20	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch: 489116

Analysis Method: EPA 6010D

QC Batch Method: EPA 3050B

Analysis Description: BVR 6010D MET ICP,Solid,3050B

Laboratory: Pace Analytical Services - Beaver

Associated Lab Samples: 30460926016

METHOD BLANK: 2365375

Matrix: Solid

Associated Lab Samples: 30460926016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	<0.55	5.0	0.55	03/09/22 18:11	

LABORATORY CONTROL SAMPLE: 2365376

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	100	101	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2365377 2365378

Parameter	Units	30470838001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	5.1J	542	526	570	564	104	106	75-125	1	20	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

QC Batch: 489341	Analysis Method: EPA 6010D
QC Batch Method: EPA 3050B	Analysis Description: BVR 6010D MET ICP,Solid,3050B
	Laboratory: Pace Analytical Services - Beaver

Associated Lab Samples: 30460926036

METHOD BLANK: 2366960 Matrix: Solid

Associated Lab Samples: 30460926036

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	<0.55	5.0	0.55	03/10/22 14:33	

LABORATORY CONTROL SAMPLE: 2366961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	100	96.4	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2366963 2366964

Parameter	Units	30471419001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	ND	621	615	591	597	95	97	75-125	1	20	

SAMPLE DUPLICATE: 2366962

Parameter	Units	30460926036 Result	Dup Result	RPD	Max RPD	Qualifiers
Arsenic	mg/kg	144	89.1	47	20	D6

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	482555	Analysis Method:	EPA 7471B
QC Batch Method:	EPA 7471B	Analysis Description:	BVR 7471B Mercury
		Laboratory:	Pace Analytical Services - Beaver

Associated Lab Samples: 30460926014, 30460926015, 30460926016, 30460926017

METHOD BLANK: 2332478 Matrix: Solid
Associated Lab Samples: 30460926014, 30460926015, 30460926016, 30460926017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0094	0.10	0.0094	02/14/22 14:00	

LABORATORY CONTROL SAMPLE: 2332479

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.49	0.51	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2332480 2332481

Parameter	Units	30453579005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	ND	0.56	0.55	<0.011	<0.010	0	0	80-120		20	H1,M1

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	483075	Analysis Method:	EPA 7471B
QC Batch Method:	EPA 7471B	Analysis Description:	BVR 7471B Mercury
		Laboratory:	Pace Analytical Services - Beaver
Associated Lab Samples:	30460926001, 30460926002, 30460926003, 30460926004, 30460926005, 30460926006, 30460926007, 30460926008, 30460926009, 30460926010, 30460926018, 30460926020, 30460926021, 30460926023, 30460926024, 30460926026, 30460926027, 30460926031		

METHOD BLANK:	2335357	Matrix:	Solid
Associated Lab Samples:	30460926001, 30460926002, 30460926003, 30460926004, 30460926005, 30460926006, 30460926007, 30460926008, 30460926009, 30460926010, 30460926018, 30460926020, 30460926021, 30460926023, 30460926024, 30460926026, 30460926027, 30460926031		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0093	0.099	0.0093	02/14/22 15:19	

LABORATORY CONTROL SAMPLE: 2335358						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.49	0.52	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:					2335359	2335360							
Parameter	Units	30460926021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Mercury	mg/kg	0.024J	0.59	0.59	0.62	0.63	101	101	80-120	1	20		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	483345	Analysis Method:	EPA 7471B
QC Batch Method:	EPA 7471B	Analysis Description:	BVR 7471B Mercury
		Laboratory:	Pace Analytical Services - Beaver
Associated Lab Samples:	30460926011, 30460926012, 30460926013, 30460926019, 30460926022, 30460926025, 30460926028, 30460926029, 30460926030, 30460926032, 30460926034, 30460926035, 30460926036, 30460926037, 30460926038, 30460926041, 30460926042, 30460926043, 30460926044		

METHOD BLANK:	2337124	Matrix:	Solid
Associated Lab Samples:	30460926011, 30460926012, 30460926013, 30460926019, 30460926022, 30460926025, 30460926028, 30460926029, 30460926030, 30460926032, 30460926034, 30460926035, 30460926036, 30460926037, 30460926038, 30460926041, 30460926042, 30460926043, 30460926044		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	0.021J	0.098	0.0092	02/16/22 13:14	

LABORATORY CONTROL SAMPLE:	2337125					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.49	0.46	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	2337126			2337127								
Parameter	Units	30460926025 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.054J	0.64	0.63	0.61	0.57	87	81	80-120	7	20	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	483347	Analysis Method:	EPA 7471B
QC Batch Method:	EPA 7471B	Analysis Description:	BVR 7471B Mercury
		Laboratory:	Pace Analytical Services - Beaver
Associated Lab Samples:	30460926039, 30460926040, 30460926045, 30460926046, 30460926047, 30460926048, 30460926049, 30460926051, 30460926052, 30460926053, 30460926054, 30460926055, 30460926057, 30460926058		

METHOD BLANK:	2337135	Matrix:	Solid
Associated Lab Samples:	30460926039, 30460926040, 30460926045, 30460926046, 30460926047, 30460926048, 30460926049, 30460926051, 30460926052, 30460926053, 30460926054, 30460926055, 30460926057, 30460926058		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0092	0.098	0.0092	02/16/22 11:53	

LABORATORY CONTROL SAMPLE: 2337136						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.5	0.45	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2337137					2337138							
		30460926048	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Parameter	Units	Result										
Mercury	mg/kg	0.047J	0.59	0.59	0.41	0.54	62	83	80-120	27	20	M1,R1

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch: 486420

Analysis Method: EPA 7471B

QC Batch Method: EPA 7471B

Analysis Description: BVR 7471B Mercury

Laboratory: Pace Analytical Services - Beaver

Associated Lab Samples: 30460926050

METHOD BLANK: 2352592

Matrix: Solid

Associated Lab Samples: 30460926050

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	<0.0093	0.099	0.0093	02/25/22 13:51	

LABORATORY CONTROL SAMPLE: 2352593

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.49	0.57	117	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2352594 2352595

Parameter	Units	30461669001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	ND	0.49	0.49	0.45	0.45	91	91	80-120	0	20	H3

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	480869	Analysis Method:	EPA 8260C
QC Batch Method:	EPA 5035A	Analysis Description:	8260C MSV 5035 Low
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30460926005, 30460926010, 30460926017

METHOD BLANK: 2323599 Matrix: Solid

Associated Lab Samples: 30460926005, 30460926010, 30460926017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Naphthalene	ug/kg	0.99J	5.0	0.94	01/27/22 11:56	
1,2-Dichloroethane-d4 (S)	%.	97	70-130		01/27/22 11:56	
4-Bromofluorobenzene (S)	%.	101	70-130		01/27/22 11:56	
Dibromofluoromethane (S)	%.	106	70-130		01/27/22 11:56	
Toluene-d8 (S)	%.	94	70-130		01/27/22 11:56	

LABORATORY CONTROL SAMPLE: 2323600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	20	18.0	90	65-110	
1,2-Dichloroethane-d4 (S)	%.			111	70-130	
4-Bromofluorobenzene (S)	%.			100	70-130	
Dibromofluoromethane (S)	%.			104	70-130	
Toluene-d8 (S)	%.			99	70-130	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch: 481010

Analysis Method: EPA 8260C

QC Batch Method: EPA 5035A

Analysis Description: 8260C MSV 5035 Low

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30460926010

METHOD BLANK: 2324336

Matrix: Solid

Associated Lab Samples: 30460926010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane-d4 (S)	%.	114	70-130		01/28/22 10:20	
4-Bromofluorobenzene (S)	%.	92	70-130		01/28/22 10:20	
Dibromofluoromethane (S)	%.	106	70-130		01/28/22 10:20	
Toluene-d8 (S)	%.	94	70-130		01/28/22 10:20	

LABORATORY CONTROL SAMPLE: 2324337

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%.			107	70-130	
4-Bromofluorobenzene (S)	%.			93	70-130	
Dibromofluoromethane (S)	%.			101	70-130	
Toluene-d8 (S)	%.			98	70-130	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	480868	Analysis Method:	EPA 8260C
QC Batch Method:	EPA 5035A	Analysis Description:	8260C MSV UST-SOIL
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30460926023, 30460926026, 30460926038, 30460926039, 30460926045, 30460926050, 30460926053

METHOD BLANK: 2323597 Matrix: Solid

Associated Lab Samples: 30460926023, 30460926026, 30460926038, 30460926039, 30460926045, 30460926050, 30460926053

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Naphthalene	ug/kg	<0.94	5.0	0.94	01/27/22 12:11	
1,2-Dichloroethane-d4 (S)	%.	109	70-130		01/27/22 12:11	
4-Bromofluorobenzene (S)	%.	100	70-130		01/27/22 12:11	
Dibromofluoromethane (S)	%.	102	70-130		01/27/22 12:11	
Toluene-d8 (S)	%.	98	70-130		01/27/22 12:11	

LABORATORY CONTROL SAMPLE: 2323598

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	20	18.4	92	65-110	
1,2-Dichloroethane-d4 (S)	%.			103	70-130	
4-Bromofluorobenzene (S)	%.			100	70-130	
Dibromofluoromethane (S)	%.			104	70-130	
Toluene-d8 (S)	%.			98	70-130	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	481501	Analysis Method:	EPA 8260C
QC Batch Method:	EPA 8260C	Analysis Description:	8260C MSV
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30460926033, 30460926056

METHOD BLANK: 2326868 Matrix: Water

Associated Lab Samples: 30460926033, 30460926056

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Naphthalene	ug/L	<0.82	2.0	0.82	02/02/22 14:21	
1,2-Dichloroethane-d4 (S)	%.	102	70-130		02/02/22 14:21	
4-Bromofluorobenzene (S)	%.	99	70-130		02/02/22 14:21	
Dibromofluoromethane (S)	%.	106	70-130		02/02/22 14:21	
Toluene-d8 (S)	%.	96	70-130		02/02/22 14:21	

LABORATORY CONTROL SAMPLE: 2326869

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/L	20	20.0	100	55-160	
1,2-Dichloroethane-d4 (S)	%.			94	70-130	
4-Bromofluorobenzene (S)	%.			101	70-130	
Dibromofluoromethane (S)	%.			98	70-130	
Toluene-d8 (S)	%.			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2326870 2326871

Parameter	Units	30461666001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Naphthalene	ug/L	ND	20	20	18.9	18.3	95	92	30-157	3	30	
1,2-Dichloroethane-d4 (S)	%.						91	92	70-130			
4-Bromofluorobenzene (S)	%.						102	100	70-130			
Dibromofluoromethane (S)	%.						90	91	70-130			
Toluene-d8 (S)	%.						99	101	70-130			

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	480843	Analysis Method:	EPA 8270E by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270E/3546 MSSV PAH by SIM
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30460926001, 30460926002, 30460926003, 30460926004, 30460926005, 30460926006, 30460926007, 30460926008, 30460926009, 30460926010, 30460926011, 30460926012, 30460926013, 30460926014, 30460926015, 30460926016, 30460926017, 30460926018, 30460926019, 30460926020		

METHOD BLANK: 2323515

Matrix: Solid

Associated Lab Samples: 30460926001, 30460926002, 30460926003, 30460926004, 30460926005, 30460926006, 30460926007, 30460926008, 30460926009, 30460926010, 30460926011, 30460926012, 30460926013, 30460926014, 30460926015, 30460926016, 30460926017, 30460926018, 30460926019, 30460926020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	<0.60	6.7	0.60	01/28/22 11:20	
Acenaphthylene	ug/kg	<0.48	6.7	0.48	01/28/22 11:20	
Anthracene	ug/kg	<0.60	6.7	0.60	01/28/22 11:20	
Benzo(a)anthracene	ug/kg	<0.78	6.7	0.78	01/28/22 11:20	
Benzo(a)pyrene	ug/kg	<0.42	6.7	0.42	01/28/22 11:20	
Benzo(b)fluoranthene	ug/kg	<0.80	6.7	0.80	01/28/22 11:20	
Benzo(g,h,i)perylene	ug/kg	<1.0	6.7	1.0	01/28/22 11:20	
Benzo(k)fluoranthene	ug/kg	<1.1	6.7	1.1	01/28/22 11:20	
Chrysene	ug/kg	<0.34	6.7	0.34	01/28/22 11:20	
Dibenz(a,h)anthracene	ug/kg	<1.5	6.7	1.5	01/28/22 11:20	
Fluoranthene	ug/kg	<0.50	6.7	0.50	01/28/22 11:20	
Fluorene	ug/kg	<0.62	6.7	0.62	01/28/22 11:20	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.3	6.7	1.3	01/28/22 11:20	
Naphthalene	ug/kg	<1.3	6.7	1.3	01/28/22 11:20	
Phenanthrene	ug/kg	<0.59	6.7	0.59	01/28/22 11:20	
Pyrene	ug/kg	<0.75	6.7	0.75	01/28/22 11:20	
2-Fluorobiphenyl (S)	%	80	37-88		01/28/22 11:20	
Terphenyl-d14 (S)	%	88	10-128		01/28/22 11:20	

LABORATORY CONTROL SAMPLE: 2323516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	133	115	87	47-104	
Acenaphthylene	ug/kg	133	117	88	49-115	
Anthracene	ug/kg	133	127	96	52-115	
Benzo(a)anthracene	ug/kg	133	135	102	54-130	
Benzo(a)pyrene	ug/kg	133	125	94	59-126	
Benzo(b)fluoranthene	ug/kg	133	133	100	55-133	
Benzo(g,h,i)perylene	ug/kg	133	140	105	54-127	
Benzo(k)fluoranthene	ug/kg	133	137	103	56-120	
Chrysene	ug/kg	133	129	97	56-115	
Dibenz(a,h)anthracene	ug/kg	133	143	108	55-129	
Fluoranthene	ug/kg	133	134	101	56-125	
Fluorene	ug/kg	133	124	94	50-114	
Indeno(1,2,3-cd)pyrene	ug/kg	133	151	114	55-129	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

LABORATORY CONTROL SAMPLE: 2323516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	133	111	83	45-102	
Phenanthrene	ug/kg	133	121	91	50-110	
Pyrene	ug/kg	133	135	102	56-122	
2-Fluorobiphenyl (S)	%			85	37-88	
Terphenyl-d14 (S)	%			91	10-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2323517 2323518

Parameter	Units	30460926001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<6.7	142	144	133	159	90	108	24-109	17	20	
Acenaphthylene	ug/kg	<5.3	142	144	131	157	92	110	26-119	18	20	
Anthracene	ug/kg	54.4J	142	144	143	161	62	75	32-115	12	20	
Benzo(a)anthracene	ug/kg	125	142	144	181	196	39	49	30-133	8	20	
Benzo(a)pyrene	ug/kg	116	142	144	170	180	37	45	11-151	6	20	
Benzo(b)fluoranthene	ug/kg	213	142	144	194	220	-13	6	25-140	13	20	ML
Benzo(g,h,i)perylene	ug/kg	70.1J	142	144	122	122	36	36	10-126	0	20	
Benzo(k)fluoranthene	ug/kg	210	142	144	176	188	-23	-15	25-127	6	20	ML
Chrysene	ug/kg	135	142	144	183	198	33	44	10-142	8	20	
Dibenz(a,h)anthracene	ug/kg	19.7J	142	144	113	123	66	72	13-127	9	20	
Fluoranthene	ug/kg	273	142	144	208	208	-45	-45	20-139	0	20	ML
Fluorene	ug/kg	<6.8	142	144	142	167	100	116	28-114	16	20	MH
Indeno(1,2,3-cd)pyrene	ug/kg	58.4J	142	144	135	139	54	56	15-123	2	20	
Naphthalene	ug/kg	<14.3	142	144	126	153	82	101	15-104	20	20	
Phenanthrene	ug/kg	89.1	142	144	175	189	60	70	10-135	7	20	
Pyrene	ug/kg	212	142	144	201	203	-8	-6	13-139	1	20	ML
2-Fluorobiphenyl (S)	%						93	102	37-88			S4
Terphenyl-d14 (S)	%						102	108	10-128			

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

QC Batch:	481000	Analysis Method:	EPA 8270E by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270E/3546 MSSV PAH by SIM
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30460926021, 30460926022, 30460926023, 30460926024, 30460926025, 30460926026, 30460926027, 30460926028, 30460926029, 30460926030, 30460926031, 30460926032, 30460926034, 30460926035, 30460926036, 30460926037, 30460926038, 30460926039, 30460926040, 30460926057		

METHOD BLANK:	2324290	Matrix:	Solid
Associated Lab Samples:	30460926021, 30460926022, 30460926023, 30460926024, 30460926025, 30460926026, 30460926027, 30460926028, 30460926029, 30460926030, 30460926031, 30460926032, 30460926034, 30460926035, 30460926036, 30460926037, 30460926038, 30460926039, 30460926040, 30460926057		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	<0.60	6.7	0.60	02/03/22 11:28	
Acenaphthylene	ug/kg	<0.48	6.7	0.48	02/03/22 11:28	
Anthracene	ug/kg	<0.61	6.7	0.61	02/03/22 11:28	
Benzo(a)anthracene	ug/kg	<0.78	6.7	0.78	02/03/22 11:28	
Benzo(a)pyrene	ug/kg	<0.42	6.7	0.42	02/03/22 11:28	
Benzo(b)fluoranthene	ug/kg	<0.80	6.7	0.80	02/03/22 11:28	
Benzo(g,h,i)perylene	ug/kg	<1.0	6.7	1.0	02/03/22 11:28	
Benzo(k)fluoranthene	ug/kg	<1.1	6.7	1.1	02/03/22 11:28	
Chrysene	ug/kg	<0.35	6.7	0.35	02/03/22 11:28	
Dibenz(a,h)anthracene	ug/kg	<1.5	6.7	1.5	02/03/22 11:28	
Fluoranthene	ug/kg	<0.51	6.7	0.51	02/03/22 11:28	
Fluorene	ug/kg	<0.62	6.7	0.62	02/03/22 11:28	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.3	6.7	1.3	02/03/22 11:28	
Naphthalene	ug/kg	<1.3	6.7	1.3	02/03/22 11:28	
Phenanthrene	ug/kg	<0.59	6.7	0.59	02/03/22 11:28	
Pyrene	ug/kg	<0.75	6.7	0.75	02/03/22 11:28	
2-Fluorobiphenyl (S)	%	97	37-88		02/03/22 11:28	ST
Terphenyl-d14 (S)	%	106	10-128		02/03/22 11:28	

LABORATORY CONTROL SAMPLE: 2324291

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	131	113	86	47-104	
Acenaphthylene	ug/kg	131	99.4	76	49-115	
Anthracene	ug/kg	131	119	91	52-115	
Benzo(a)anthracene	ug/kg	131	133	102	54-130	
Benzo(a)pyrene	ug/kg	131	123	93	59-126	
Benzo(b)fluoranthene	ug/kg	131	126	96	55-133	
Benzo(g,h,i)perylene	ug/kg	131	140	106	54-127	
Benzo(k)fluoranthene	ug/kg	131	139	106	56-120	
Chrysene	ug/kg	131	127	96	56-115	
Dibenz(a,h)anthracene	ug/kg	131	141	108	55-129	
Fluoranthene	ug/kg	131	128	98	56-125	
Fluorene	ug/kg	131	120	91	50-114	
Indeno(1,2,3-cd)pyrene	ug/kg	131	149	113	55-129	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

LABORATORY CONTROL SAMPLE: 2324291

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	131	110	84	45-102	
Phenanthrene	ug/kg	131	116	88	50-110	
Pyrene	ug/kg	131	131	100	56-122	
2-Fluorobiphenyl (S)	%			82	37-88	
Terphenyl-d14 (S)	%			90	10-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2324292 2324293

Parameter	Units	30460926021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	4.8J	159	157	3.5J	327	-1	205	24-109		20	MH,ML
Acenaphthylene	ug/kg	31.7	159	157	47.7	466	10	276	26-119	163	20	MH, ML, R1
Anthracene	ug/kg	76.5	159	157	101	2220	15	1360	32-115	183	20	E,MH, ML, R1
Benzo(a)anthracene	ug/kg	448	159	157	651	7380	128	4400	30-133	168	20	E,MH, R1
Benzo(a)pyrene	ug/kg	353	159	157	513	5340	101	3170	11-151	165	20	E,MH, R1
Benzo(b)fluoranthene	ug/kg	675	159	157	986	11600	196	6930	25-140	169	20	E,Ip, MH, R1
Benzo(g,h,i)perylene	ug/kg	192	159	157	233	1320	26	715	10-126	140	20	MH, R1
Benzo(k)fluoranthene	ug/kg	665	159	157	973	11500	194	6840	25-127	169	20	E,Ip, MH, R1
Chrysene	ug/kg	431	159	157	616	5090	116	2950	10-142	157	20	E,MH, R1
Dibenz(a,h)anthracene	ug/kg	71.2	159	157	91.0	716	12	409	13-127	155	20	MH, ML, R1
Fluoranthene	ug/kg	874	159	157	1190	12100	197	7140	20-139	164	20	E,MH, R1
Fluorene	ug/kg	12.0	159	157	11.0	657	-1	409	28-114	193	20	MH, ML, R1
Indeno(1,2,3-cd)pyrene	ug/kg	210	159	157	265	1660	35	920	15-123	145	20	E,MH, R1
Naphthalene	ug/kg	8.2	159	157	6.7J	263	-1	162	15-104		20	MH,ML
Phenanthrene	ug/kg	350	159	157	407	9040	36	5510	10-135	183	20	E,MH, R1
Pyrene	ug/kg	655	159	157	894	9210	151	5430	13-139	165	20	E,MH, R1
2-Fluorobiphenyl (S)	%						87	73	37-88			
Terphenyl-d14 (S)	%						87	75	10-128			

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	481843	Analysis Method:	EPA 8270E by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270E/3546 MSSV PAH by SIM
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30460926041, 30460926042, 30460926043, 30460926044, 30460926045, 30460926046, 30460926047, 30460926048, 30460926049, 30460926050, 30460926051, 30460926052, 30460926053, 30460926054, 30460926055, 30460926058		

METHOD BLANK: 2329400

Matrix: Solid

Associated Lab Samples: 30460926041, 30460926042, 30460926043, 30460926044, 30460926045, 30460926046, 30460926047, 30460926048, 30460926049, 30460926050, 30460926051, 30460926052, 30460926053, 30460926054, 30460926055, 30460926058

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	<0.60	6.7	0.60	02/07/22 15:15	
Acenaphthylene	ug/kg	<0.48	6.7	0.48	02/07/22 15:15	
Anthracene	ug/kg	<0.61	6.7	0.61	02/07/22 15:15	
Benzo(a)anthracene	ug/kg	<0.78	6.7	0.78	02/07/22 15:15	
Benzo(a)pyrene	ug/kg	<0.42	6.7	0.42	02/07/22 15:15	
Benzo(b)fluoranthene	ug/kg	<0.80	6.7	0.80	02/07/22 15:15	
Benzo(g,h,i)perylene	ug/kg	<1.0	6.7	1.0	02/07/22 15:15	
Benzo(k)fluoranthene	ug/kg	<1.1	6.7	1.1	02/07/22 15:15	
Chrysene	ug/kg	<0.34	6.7	0.34	02/07/22 15:15	
Dibenz(a,h)anthracene	ug/kg	<1.5	6.7	1.5	02/07/22 15:15	
Fluoranthene	ug/kg	<0.51	6.7	0.51	02/07/22 15:15	
Fluorene	ug/kg	<0.62	6.7	0.62	02/07/22 15:15	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.3	6.7	1.3	02/07/22 15:15	
Naphthalene	ug/kg	<1.3	6.7	1.3	02/07/22 15:15	
Phenanthrene	ug/kg	<0.59	6.7	0.59	02/07/22 15:15	
Pyrene	ug/kg	<0.75	6.7	0.75	02/07/22 15:15	
2-Fluorobiphenyl (S)	%	84	37-88		02/07/22 15:15	
Terphenyl-d14 (S)	%	94	10-128		02/07/22 15:15	

LABORATORY CONTROL SAMPLE: 2329401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	130	114	88	47-104	
Acenaphthylene	ug/kg	130	116	90	49-115	
Anthracene	ug/kg	130	120	93	52-115	
Benzo(a)anthracene	ug/kg	130	116	89	54-130	
Benzo(a)pyrene	ug/kg	130	119	92	59-126	
Benzo(b)fluoranthene	ug/kg	130	131	101	55-133	
Benzo(g,h,i)perylene	ug/kg	130	135	104	54-127	
Benzo(k)fluoranthene	ug/kg	130	136	105	56-120	
Chrysene	ug/kg	130	117	90	56-115	
Dibenz(a,h)anthracene	ug/kg	130	141	109	55-129	
Fluoranthene	ug/kg	130	126	97	56-125	
Fluorene	ug/kg	130	118	91	50-114	
Indeno(1,2,3-cd)pyrene	ug/kg	130	144	111	55-129	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

LABORATORY CONTROL SAMPLE: 2329401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	130	99.8	77	45-102	
Phenanthrene	ug/kg	130	118	91	50-110	
Pyrene	ug/kg	130	125	97	56-122	
2-Fluorobiphenyl (S)	%			82	37-88	
Terphenyl-d14 (S)	%			88	10-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2329402 2329403

Parameter	Units	30460926048	MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Max	Qual
		Result	Spike	Spike									
Acenaphthene	ug/kg	<7.1	157	155	112	142	72	91	24-109	23	20	R1	
Acenaphthylene	ug/kg	<5.6	157	155	114	148	73	95	26-119	27	20	R1	
Anthracene	ug/kg	<7.1	157	155	133	158	85	101	32-115	17	20		
Benzo(a)anthracene	ug/kg	<9.2	157	155	136	152	87	97	30-133	11	20		
Benzo(a)pyrene	ug/kg	<4.9	157	155	130	144	83	92	11-151	10	20		
Benzo(b)fluoranthene	ug/kg	<9.4	157	155	167	183	107	118	25-140	9	20		
Benzo(g,h,i)perylene	ug/kg	<11.8	157	155	76.9J	84.9	49	54	10-126		20		
Benzo(k)fluoranthene	ug/kg	<13.1	157	155	159	190	102	122	25-127	18	20		
Chrysene	ug/kg	<4.0	157	155	137	158	88	101	10-142	14	20		
Dibenz(a,h)anthracene	ug/kg	<17.4	157	155	91.6	99.9	59	64	13-127	9	20		
Fluoranthene	ug/kg	20.3J	157	155	155	170	86	96	20-139	9	20		
Fluorene	ug/kg	<7.2	157	155	125	155	80	99	28-114	22	20	R1	
Indeno(1,2,3-cd)pyrene	ug/kg	<14.9	157	155	95.5	101	61	65	15-123	6	20		
Naphthalene	ug/kg	<15.1	157	155	94.5	125	58	78	15-104	28	20	R1	
Phenanthrene	ug/kg	17.7J	157	155	142	165	80	94	10-135	15	20		
Pyrene	ug/kg	16.9J	157	155	153	171	87	99	13-139	11	20		
2-Fluorobiphenyl (S)	%						64	86	37-88				
Terphenyl-d14 (S)	%						80	92	10-128				

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	480903	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:	30460926001, 30460926002, 30460926003, 30460926004, 30460926005, 30460926006, 30460926007, 30460926008, 30460926009, 30460926010, 30460926011, 30460926012, 30460926013, 30460926014, 30460926015, 30460926016, 30460926017, 30460926018		

SAMPLE DUPLICATE: 2324048

Parameter	Units	30460926001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	9.4	6.0	44	20	D6

SAMPLE DUPLICATE: 2324049

Parameter	Units	30460926002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	35.0	38.0	8	20	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	480904	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:	30460926019, 30460926020, 30460926021, 30460926022, 30460926023, 30460926024, 30460926025, 30460926026, 30460926027, 30460926028, 30460926029, 30460926030, 30460926031, 30460926032, 30460926034, 30460926035, 30460926036, 30460926037, 30460926038, 30460926039		

SAMPLE DUPLICATE: 2323747

Parameter	Units	30460926019 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.8	18.6	6	20	

SAMPLE DUPLICATE: 2323748

Parameter	Units	30460926021 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	17.4	18.1	4	20	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch:	480905	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:	30460926040, 30460926041, 30460926042, 30460926043, 30460926044, 30460926045, 30460926046, 30460926047, 30460926048, 30460926049, 30460926050, 30460926051, 30460926052, 30460926053, 30460926054, 30460926055		

SAMPLE DUPLICATE: 2323751

Parameter	Units	30460926040 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.6	23.1	2	20	

SAMPLE DUPLICATE: 2323752

Parameter	Units	30460926048 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.7	16.4	4	20	

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QUALITY CONTROL DATA

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

QC Batch: 481292

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: 30460926057, 30460926058

SAMPLE DUPLICATE: 2325480

Parameter	Units	30461530001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	23.2	21.0	10	20	

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QUALIFIERS

Project: 20210457.PROP-Revised Report
Pace Project No.: 30460926

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.
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 480868
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: 480869
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: 481010
[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.
B Analyte was detected in the associated method blank.
D6 The precision between the sample and sample duplicate exceeded laboratory control limits.
E Analyte concentration exceeded the calibration range. The reported result is estimated.
ED Due to the extract's physical characteristics, the analysis was performed at dilution.
H1 Analysis conducted outside the EPA method holding time.
H2 Extraction or preparation conducted outside EPA method holding time.
H3 Sample was received or analysis requested beyond the recognized method holding time.
IS The internal standard response is below criteria. Results may be biased high.

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QUALIFIERS

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

ANALYTE QUALIFIERS

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.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
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.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
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: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30460926001	SS-01 (0-2)	EPA 3050B	482411	EPA 6010D	482729
30460926002	SS-01 (0-2)-Dup	EPA 3050B	482411	EPA 6010D	482729
30460926003	SS-02 (0-2)	EPA 3050B	482411	EPA 6010D	482729
30460926004	SS-03 (0-2)	EPA 3050B	482411	EPA 6010D	482729
30460926005	SS-03 (6-8)	EPA 3050B	482411	EPA 6010D	482729
30460926006	SS-04 (0-2)	EPA 3050B	482411	EPA 6010D	482729
30460926007	SS-05 (0-2)	EPA 3050B	482411	EPA 6010D	482729
30460926008	SS-06 (0-2)	EPA 3050B	482411	EPA 6010D	482729
30460926009	SS-07 (0-2)	EPA 3050B	482411	EPA 6010D	482729
30460926010	SS-08 (0-2)	EPA 3050B	482411	EPA 6010D	482729
30460926011	SS-09 (0-2)	EPA 3050B	482411	EPA 6010D	482729
30460926012	SS-10 (0-2)	EPA 3050B	482411	EPA 6010D	482729
30460926013	SS-11 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926014	SS-11 (4-6)	EPA 3050B	482418	EPA 6010D	482730
30460926015	SS-12 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926016	SS-13 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926016	SS-13 (0-2)	EPA 3050B	489116	EPA 6010D	489245
30460926017	SS-14 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926018	SS-15 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926019	SS-15 (4-6)	EPA 3050B	482418	EPA 6010D	482730
30460926020	SS-16 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926021	SS-17 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926022	SS-17 (0-2)MS	EPA 3050B	482418	EPA 6010D	482730
30460926023	SS-18 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926024	SS-19 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926025	SS-20 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926026	SS-21 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926027	SS-22 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926028	SS-23 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926029	SS-24 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926030	SS-25 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926031	SS-26 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926032	SS-27 (0-2)	EPA 3050B	482418	EPA 6010D	482730
30460926034	SS-28 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926035	SS-28 (0-2)-FD	EPA 3050B	482482	EPA 6010D	482731
30460926036	SS-29 (0-2)	EPA 3050B	489341	EPA 6010D	489481
30460926037	SS-30 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926038	SS-30 (4-6)	EPA 3050B	482482	EPA 6010D	482731
30460926039	SS-31 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926040	SS-32 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926041	SS-33 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926042	SS-34 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926043	SS-35 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926044	SS-36 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926045	SS-37 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926046	SS-38 (0-2)	EPA 3050B	482482	EPA 6010D	482731

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30460926047	SS-39 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926048	SS-40 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926049	SS-40 (0-2)MS	EPA 3050B	482482	EPA 6010D	482731
30460926050	SS-41 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926051	SS-42 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926052	SS-43 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926053	SS-44 (0-2)	EPA 3050B	482482	EPA 6010D	482731
30460926054	SS-45 (0-2)	EPA 3050B	482680	EPA 6010D	482795
30460926055	SS-46 (0-2)	EPA 3050B	482680	EPA 6010D	482795
30460926057	SS-17 (0-2) MSD	EPA 3050B	482680	EPA 6010D	482795
30460926058	SS-40 (0-2) MSD	EPA 3050B	482680	EPA 6010D	482795
30460926001	SS-01 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926002	SS-01 (0-2)-Dup	EPA 7471B	483075	EPA 7471B	483315
30460926003	SS-02 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926004	SS-03 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926005	SS-03 (6-8)	EPA 7471B	483075	EPA 7471B	483315
30460926006	SS-04 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926007	SS-05 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926008	SS-06 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926009	SS-07 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926010	SS-08 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926011	SS-09 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926012	SS-10 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926013	SS-11 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926014	SS-11 (4-6)	EPA 7471B	482555	EPA 7471B	483316
30460926015	SS-12 (0-2)	EPA 7471B	482555	EPA 7471B	483316
30460926016	SS-13 (0-2)	EPA 7471B	482555	EPA 7471B	483316
30460926017	SS-14 (0-2)	EPA 7471B	482555	EPA 7471B	483316
30460926018	SS-15 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926019	SS-15 (4-6)	EPA 7471B	483345	EPA 7471B	483711
30460926020	SS-16 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926021	SS-17 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926022	SS-17 (0-2)MS	EPA 7471B	483345	EPA 7471B	483711
30460926023	SS-18 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926024	SS-19 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926025	SS-20 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926026	SS-21 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926027	SS-22 (0-2)	EPA 7471B	483075	EPA 7471B	483315
30460926028	SS-23 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926029	SS-24 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926030	SS-25 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926031	SS-26 (0-2)	EPA 7471B	483075	EPA 7471B	483315

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30460926032	SS-27 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926034	SS-28 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926035	SS-28 (0-2)-FD	EPA 7471B	483345	EPA 7471B	483711
30460926036	SS-29 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926037	SS-30 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926038	SS-30 (4-6)	EPA 7471B	483345	EPA 7471B	483711
30460926039	SS-31 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926040	SS-32 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926041	SS-33 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926042	SS-34 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926043	SS-35 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926044	SS-36 (0-2)	EPA 7471B	483345	EPA 7471B	483711
30460926045	SS-37 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926046	SS-38 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926047	SS-39 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926048	SS-40 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926049	SS-40 (0-2)MS	EPA 7471B	483347	EPA 7471B	483712
30460926050	SS-41 (0-2)	EPA 7471B	486420	EPA 7471B	486431
30460926051	SS-42 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926052	SS-43 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926053	SS-44 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926054	SS-45 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926055	SS-46 (0-2)	EPA 7471B	483347	EPA 7471B	483712
30460926057	SS-17 (0-2) MSD	EPA 7471B	483347	EPA 7471B	483712
30460926058	SS-40 (0-2) MSD	EPA 7471B	483347	EPA 7471B	483712
30460926001	SS-01 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926002	SS-01 (0-2)-Dup	EPA 3546	480843	EPA 8270E by SIM	480913
30460926003	SS-02 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926004	SS-03 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926005	SS-03 (6-8)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926006	SS-04 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926007	SS-05 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926008	SS-06 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926009	SS-07 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926010	SS-08 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926011	SS-09 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926012	SS-10 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926013	SS-11 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926014	SS-11 (4-6)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926015	SS-12 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926016	SS-13 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926017	SS-14 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926018	SS-15 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926019	SS-15 (4-6)	EPA 3546	480843	EPA 8270E by SIM	480913
30460926020	SS-16 (0-2)	EPA 3546	480843	EPA 8270E by SIM	480913

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30460926021	SS-17 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926022	SS-17 (0-2)MS	EPA 3546	481000	EPA 8270E by SIM	481067
30460926023	SS-18 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926024	SS-19 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926025	SS-20 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926026	SS-21 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926027	SS-22 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926028	SS-23 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926029	SS-24 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926030	SS-25 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926031	SS-26 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926032	SS-27 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926034	SS-28 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926035	SS-28 (0-2)-FD	EPA 3546	481000	EPA 8270E by SIM	481067
30460926036	SS-29 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926037	SS-30 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926038	SS-30 (4-6)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926039	SS-31 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926040	SS-32 (0-2)	EPA 3546	481000	EPA 8270E by SIM	481067
30460926041	SS-33 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926042	SS-34 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926043	SS-35 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926044	SS-36 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926045	SS-37 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926046	SS-38 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926047	SS-39 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926048	SS-40 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926049	SS-40 (0-2)MS	EPA 3546	481843	EPA 8270E by SIM	481991
30460926050	SS-41 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926051	SS-42 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926052	SS-43 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926053	SS-44 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926054	SS-45 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926055	SS-46 (0-2)	EPA 3546	481843	EPA 8270E by SIM	481991
30460926057	SS-17 (0-2) MSD	EPA 3546	481000	EPA 8270E by SIM	481067
30460926058	SS-40 (0-2) MSD	EPA 3546	481843	EPA 8270E by SIM	481991
30460926005	SS-03 (6-8)	EPA 5035A	480869	EPA 8260C	480880
30460926010	SS-08 (0-2)	EPA 5035A	480869	EPA 8260C	480880
30460926010	SS-08 (0-2)	EPA 5035A	481010	EPA 8260C	481020
30460926017	SS-14 (0-2)	EPA 5035A	480869	EPA 8260C	480880
30460926023	SS-18 (0-2)	EPA 5035A	480868	EPA 8260C	480877
30460926026	SS-21 (0-2)	EPA 5035A	480868	EPA 8260C	480877
30460926038	SS-30 (4-6)	EPA 5035A	480868	EPA 8260C	480877
30460926039	SS-31 (0-2)	EPA 5035A	480868	EPA 8260C	480877
30460926045	SS-37 (0-2)	EPA 5035A	480868	EPA 8260C	480877

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 20210457.PROP-Revised Report

Pace Project No.: 30460926

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30460926050	SS-41 (0-2)	EPA 5035A	480868	EPA 8260C	480877
30460926053	SS-44 (0-2)	EPA 5035A	480868	EPA 8260C	480877
30460926033	TB-01	EPA 8260C	481501		
30460926056	TB-02	EPA 8260C	481501		
30460926001	SS-01 (0-2)	ASTM D2974-87	480903		
30460926002	SS-01 (0-2)-Dup	ASTM D2974-87	480903		
30460926003	SS-02 (0-2)	ASTM D2974-87	480903		
30460926004	SS-03 (0-2)	ASTM D2974-87	480903		
30460926005	SS-03 (6-8)	ASTM D2974-87	480903		
30460926006	SS-04 (0-2)	ASTM D2974-87	480903		
30460926007	SS-05 (0-2)	ASTM D2974-87	480903		
30460926008	SS-06 (0-2)	ASTM D2974-87	480903		
30460926009	SS-07 (0-2)	ASTM D2974-87	480903		
30460926010	SS-08 (0-2)	ASTM D2974-87	480903		
30460926011	SS-09 (0-2)	ASTM D2974-87	480903		
30460926012	SS-10 (0-2)	ASTM D2974-87	480903		
30460926013	SS-11 (0-2)	ASTM D2974-87	480903		
30460926014	SS-11 (4-6)	ASTM D2974-87	480903		
30460926015	SS-12 (0-2)	ASTM D2974-87	480903		
30460926016	SS-13 (0-2)	ASTM D2974-87	480903		
30460926017	SS-14 (0-2)	ASTM D2974-87	480903		
30460926018	SS-15 (0-2)	ASTM D2974-87	480903		
30460926019	SS-15 (4-6)	ASTM D2974-87	480904		
30460926020	SS-16 (0-2)	ASTM D2974-87	480904		
30460926021	SS-17 (0-2)	ASTM D2974-87	480904		
30460926022	SS-17 (0-2)MS	ASTM D2974-87	480904		
30460926023	SS-18 (0-2)	ASTM D2974-87	480904		
30460926024	SS-19 (0-2)	ASTM D2974-87	480904		
30460926025	SS-20 (0-2)	ASTM D2974-87	480904		
30460926026	SS-21 (0-2)	ASTM D2974-87	480904		
30460926027	SS-22 (0-2)	ASTM D2974-87	480904		
30460926028	SS-23 (0-2)	ASTM D2974-87	480904		
30460926029	SS-24 (0-2)	ASTM D2974-87	480904		
30460926030	SS-25 (0-2)	ASTM D2974-87	480904		
30460926031	SS-26 (0-2)	ASTM D2974-87	480904		
30460926032	SS-27 (0-2)	ASTM D2974-87	480904		
30460926034	SS-28 (0-2)	ASTM D2974-87	480904		
30460926035	SS-28 (0-2)-FD	ASTM D2974-87	480904		
30460926036	SS-29 (0-2)	ASTM D2974-87	480904		
30460926037	SS-30 (0-2)	ASTM D2974-87	480904		
30460926038	SS-30 (4-6)	ASTM D2974-87	480904		
30460926039	SS-31 (0-2)	ASTM D2974-87	480904		
30460926040	SS-32 (0-2)	ASTM D2974-87	480905		
30460926041	SS-33 (0-2)	ASTM D2974-87	480905		
30460926042	SS-34 (0-2)	ASTM D2974-87	480905		
30460926043	SS-35 (0-2)	ASTM D2974-87	480905		
30460926044	SS-36 (0-2)	ASTM D2974-87	480905		

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Pace Project No.: 30460926

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30460926045	SS-37 (0-2)	ASTM D2974-87	480905		
30460926046	SS-38 (0-2)	ASTM D2974-87	480905		
30460926047	SS-39 (0-2)	ASTM D2974-87	480905		
30460926048	SS-40 (0-2)	ASTM D2974-87	480905		
30460926049	SS-40 (0-2)MS	ASTM D2974-87	480905		
30460926050	SS-41 (0-2)	ASTM D2974-87	480905		
30460926051	SS-42 (0-2)	ASTM D2974-87	480905		
30460926052	SS-43 (0-2)	ASTM D2974-87	480905		
30460926053	SS-44 (0-2)	ASTM D2974-87	480905		
30460926054	SS-45 (0-2)	ASTM D2974-87	480905		
30460926055	SS-46 (0-2)	ASTM D2974-87	480905		
30460926057	SS-17 (0-2) MSD	ASTM D2974-87	481292		
30460926058	SS-40 (0-2) MSD	ASTM D2974-87	481292		

REPORT OF LABORATORY ANALYSIS

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Company: Environmental Standards Address: 1140 Valley Forge Rd Valley Forge, PA		Billing Information: ENV STD				
Report To: Leah Mistick		Email To: leahm@envstd.com				
Copy To:		Site Collection Info/Address: White Park				
Customer Project Name/Number: 20210457.PROP		State: WV County/City: Morgantown Time Zone Collected: [] PT [] MT [] CT [] ET				
Phone:		Site/Facility ID #:				
Email:		Compliance Monitoring? ☐ Yes ☐ No				
Collected By (print): F. W. W. W.		Purchase Order #: Quote #: 00105335				
Collected By (Signature): [Signature]		Turnaround Date Required: STD 10 Day				
Sample Disposal: ☒ Dispose as appropriate [] Return ☐ Archive: ☐ Hold:		Rush: ☐ Same Day [] Next Day ☐ 2 Day [] 3 Day [] 4 Day [] 5 Day (Expedite Charges Apply)				
* 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)	Composite End	Res Cl	# of Cms
SS-09(0-2)	SL	G	1/21/22 1145		N/A	2
SS-10(0-2)	SL	G	1/21/22 1150		N/A	2
SS-11(0-2)	SL	G	1/21/22 1155		N/A	2
SS-11(4-10)	SL	G	1/21/22 1200		N/A	2
SS-12(0-2)	SL	G	1/21/22 1205		N/A	2
SS-13(0-2)	SL	G	1/21/22 1400		N/A	2
SS-14(0-2)	SL	G	1/21/22 1405		N/A	6
SS-15(0-2)	SL	G	1/21/22 1430		N/A	2
SS-15(4-6)	SL	G	1/21/22 1430		N/A	2
SS-16(0-2)	SL	G	1/21/22 1440		N/A	2
Customer Remarks / Special Conditions / Possible Hazards:				Type of Ice Used: Wet Blue Dry None		
Packing Material Used:				Raddchem sample(s) screened (<500 cpm): Y N NA		
Relinquished by/Company (Signature) Kelly Motter/ES		Date/Time: 1/25/22 1253		Received by/Company (Signature) Bill Graham		
Relinquished by/Company (Signature) Bill Graham		Date/Time: 1/25/22 1545		Received by/Company (Signature) Bill Graham		
Relinquished by/Company (Signature)		Date/Time:		Received by/Company (Signature)		

CHAIN-OF-CUSTODY Analytical Request Document

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

Company: Environmental Standards		Billing Information: ENV STD				
Address: 1140 Valley Forge Rd Valley Forge, PA		Email To: emistick@env-std.com				
Report To: Leah Mistick		Site Collection Info/Address: White Park				
Copy To:		County/City: WV / Morgantown				
Customer Project Name/Number: 20210457.PROP		Time Zone Collected: [] PT [] MT [] CT [] ET				
Phone: Email:		Compliance Monitoring? [] Yes [] No				
Collected By (print): K. MASTON		DW PWS ID #: DW Location Code:				
Collected By (signature): [Signature]		Immediately Packed on Ice: ☒ Yes [] No				
Sample Disposal: ☒ Dispose as appropriate [] Return [] Archive: [] Hold:		Field Filtered (if applicable): [] Yes ☒ No				
Turnaround Date Required: STD 10 Day		Analysis: _____				
* 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)	Composite End	Res Cl	# of Ctns
SS-26(0-2)	SL	G	1/21/22 1530		N/A	2
SS-27(0-2)	SL	G	1/21/22 1555		N/A	2
FB-01	SL	G	1/21/22 0600		N/A	
	SL	G			N/A	
	SL	G			N/A	
	SL	G			N/A	
	SL	G			N/A	
	SL	G			N/A	
	SL	G			N/A	
	SL	G			N/A	
	SL	G			N/A	
Customer Remarks / Special Conditions / Possible Hazards:				Type of Ice Used: Wet Blue Dry None		
Packing Material Used:						
Radchem sample(s) screened (<500 cpm):				Y N NA		
Relinquished by/Company: (Signature) [Signature]		Date/Time: 1/25/22 1253		Received by/Company: (Signature) [Signature]		
Relinquished by/Company: (Signature) [Signature]		Date/Time: 1/25/22 1545		Received by/Company: (Signature) [Signature]		
Relinquished by/Company: (Signature) [Signature]		Date/Time:		Received by/Company: (Signature) [Signature]		

LAB USE ONLY - Affix Workorder # W0#: 30460926 PM: MS1 CLIENT: ESI Due Date: 02/08/22		ALL SHADED 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 Profile/Line: Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signature Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA Cl Strips: Y N NA Sample pH Acceptable Y N NA pH Strips: Y N NA Sulfide Present Y N NA Lead Acetate Strips: Y N NA LAB USE ONLY: Lab Sample # / Comments:		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; height: 100px; vertical-align: top;"> </td> <td style="width:50%; height: 100px; vertical-align: top;"> </td> </tr> </table>			
Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signature Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA Cl Strips: Y N NA Sample pH Acceptable Y N NA pH Strips: Y N NA Sulfide Present Y N NA Lead Acetate Strips: Y N NA LAB USE ONLY: Lab Sample # / Comments:		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; height: 100px; vertical-align: top;"> </td> <td style="width:50%; height: 100px; vertical-align: top;"> </td> </tr> </table>			
Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signature Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA Cl Strips: Y N NA Sample pH Acceptable Y N NA pH Strips: Y N NA Sulfide Present Y N NA Lead Acetate Strips: Y N NA LAB USE ONLY: Lab Sample # / Comments:		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; height: 100px; vertical-align: top;"> </td> <td style="width:50%; height: 100px; vertical-align: top;"> </td> </tr> </table>			
Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signature Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA Cl Strips: Y N NA Sample pH Acceptable Y N NA pH Strips: Y N NA Sulfide Present Y N NA Lead Acetate Strips: Y N NA LAB USE ONLY: Lab Sample # / Comments:		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; height: 100px; vertical-align: top;"> </td> <td style="width:50%; height: 100px; vertical-align: top;"> </td> </tr> </table>			
Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signature Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA Cl Strips: Y N NA Sample pH Acceptable Y N NA pH Strips: Y N NA Sulfide Present Y N NA Lead Acetate Strips: Y N NA LAB USE ONLY: Lab Sample # / Comments:		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; height: 100px; vertical-align: top;"> </td> <td style="width:50%; height: 100px; vertical-align: top;"> </td></tr></table>			

CHAIN-OF-CUSTODY Analytical Request Document

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

Company: Environmental Standards

Address: 1140 Valley Forge Rd
Valley Forge, PA

Report To: Leah Mistick

Copy To:

Email To: mistick@env-std.com

Site Collection Info/Address:
White Park

Customer Project Name/Number: 20210457.PROP

State: WV / Morgantown

Time Zone Collected: [] PT [] MT [] CT [] ET

Site/Facility ID #:

Purchase Order #:

Quote #: 00105335

Turnaround Date Required: STD 10 Day

Rush: [] Same Day [] Next Day [] 2 Day [] 3 Day [] 4 Day [] 5 Day (Expedite Charges Apply)

Sample Disposal: [] Dispose as appropriate [] Return [] Archive: [] Hold:

* Matrix Codes (Insert in Matrix box below): Drinking 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	Composite End Date	Time	Res Cl	# of Chns
SS-28(0-2)	SL	G	1/24/22	1010			N/A	2
SS-28(0-2)-FD	SL	G	1/24/22	1010			N/A	2
SS-29(0-2)	SL	G	1/24/22	1015			N/A	2
SS-30(0-2)	SL	G	1/24/22	1020			N/A	2
SS-30(4-6)	SL	G	1/24/22	1025			N/A	6
SS-31(0-2)	SL	G	1/24/22	1050			N/A	6
SS-32(0-2)	SL	G	1/24/22	1105			N/A	2
SS-33(0-2)	SL	G	1/24/22	1110			N/A	2
SS-34(0-2)	SL	G	1/24/22	1115			N/A	2
SS-35(0-2)	SL	G	1/24/22	1125			N/A	2

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Leah Mistick / ES	1/25/22 1253	Bill Gordon	1/25/22 1255
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Bill Gordon	1/25/22 1540	Bill Gordon	1/25/22 1545
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

124

LAB USE ONLY - Affix Workorder/Login
MTJL Log

W0#: 30460926

PM: MS1 Due Date: 02/08/22

CLIENT: ESI

ALL SHADED AREA

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 Profile/Line:
VOC 8260 (N/A) PCEA metals PAH 8270 8im	Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signatures Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA Cl Strips: Y N NA Sample pH Acceptable Y N NA pH Strips: Y N NA Sulfide Present Y N NA Lead Acetate Strips: Y N NA LAB USE ONLY: Lab Sample # / Comments:
	034
	035
	036
	037
	038
	039
	040
	041
	042
	043

Lab Sample Temperature Info:

Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____ oC
Cooler 1 Therm Corr. Factor: _____ oC
Cooler 1 Corrected Temp: _____ oC
Comments:

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

Lab Tracking #:

Samples received via:	FEDEX	UPS	Client	Courier	Pace Courier
Date/Time:	1/25/22 1255				
Table #:					
Accum:					
Template:					
Prelimin:					
PM:					
PB:					

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO
Page: 5 of 7

CHAIN-OF-CUSTODY Analytical Request Document

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

Company: **Environmental Standards**

Address: 1140 Valley Forge Rd
Valley Forge, PA

Report To: **Leah Mistick**

Copy To:

Customer Project Name/Number:

20210457.PROP

Phone:

Email:

Collected By (Print):

Quote #: 00105335

Turnaround Date Required:

STD 10 Day

Sample Disposal:

[] Same Day [] Next Day

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

[] Hold:

[] Archive:

[] Return

[] Hold:

[] Disposal as appropriate [] Return

[] Hold:

[] Archive:

[] Return

[] Hold:

[] Disposal as appropriate [] Return

[] Hold:

[] Archive:

[] Return

[] Hold:

[] Disposal as appropriate [] Return

[] Hold:

[] Archive:

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[] Disposal as appropriate [] Return

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[] Archive:

[] Return

[] Hold:

LAB USE ONLY - Affix Workorder/Login
MTJL Log-

PM: MS1
CLIENT: ESI

Due Date: 02/08/22

ALL SHADED AREAS

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 Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA
Custody Signatures Present Y N NA
Collector Signatures Present Y N NA
Bottles Intact Y N NA
Correct Bottles Y N NA
Sufficient Volume Y N NA
Samples Received on Ice Y N NA
VDA - Headspace Acceptable Y N NA
USDA Regulated Soils Y N NA
Samples in Holding Time Y N NA
Residual Chlorine Present Y N NA
Cl Strips: Y N NA
Sample pH Acceptable Y N NA
pH Strips: Y N NA
Sulfide Present Y N NA
Lead Acetate Strips: Y N NA

LAB USE ONLY:
Lab Sample # / Comments:

PAH 8270 SIM
PCRA metals
VOC 8260-NAPHTHALENE ONLY

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Time	Composite End Date	Time	Res Cl	# of Ctns
SS-36(0-2)	SL	G	1/24/21	1130			N/A	2
SS-37(0-2)	SL	G	1/24/21	1135			N/A	6
SS-38(0-2)	SL	G	1/24/21	1145			N/A	2
SS-39(0-2)	SL	G	1/24/21	1155			N/A	2
SS-40(0-2)	SL	G	1/24/21	1245			N/A	2
SS-40(6-2)MSHSD	SL	G	1/24/21	1245			N/A	4
SS-41(0-2)	SL	G	1/24/21	1300			N/A	6
SS-42(0-2)	SL	G	1/24/21	1305			N/A	2
SS-43(0-2)	SL	G	1/24/21	1315			N/A	2
SS-44(0-2)	SL	G	1/24/21	1325			N/A	6

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

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

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

Date/Time: 1/25/22 1255

Date/Time: 1/25/22 1545

Date/Time: 1/25/22 1545

Date/Time: 1/25/22 1545

Date/Time: 1/25/22 1545

Date/Time: 1/25/22 1545

Date/Time: 1/25/22 1545

Date/Time: 1/25/22 1545

Date/Time: 1/25/22 1545

Date/Time: 1/25/22 1545

Date/Time: 1/25/22 1545

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#:

Cooler 1 Temp Upon Receipt: °C

Cooler 1 Therm Corr. Factor: °C

Cooler 1 Corrected Temp: °C

Comments:

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 6 of: 7

Pace Container Order #907194

PLEASE RETURN
THIS COPY
WITH COC

Addresses

Order By :

Company Environmental Standards, Inc.
Contact Kelsey Morton
Email kmorton@envstd.com
Address 1140 Valley Forge Road
Address 2 _____
City Valley Forge
State PA Zip 19482
Phone (814) 449-0221

Ship To :

Company Environmental Standards, Inc.-
Contact Kelsey Morton
Email kmorton@envstd.com
Address 1 Chartiers Place
Address 2 _____
City Pittsburgh
State PA Zip 15205
Phone (814) 449-0221

Return To:

Company Pace Analytical Pittsburgh
Contact Smetanka, Megan
Email megan.smetanka@pacelabs.com
Address 1638 Roseytown Road
Address 2 Suites 2,3,4
City Greensburg
State PA Zip 15601
Phone (724)850-5600

Info

Project Name White Park Due Date 01/19/2022 Profile 13650 Quote _____
Project Manager Smetanka, Megan Return Date _____ Carrier Pace Courier Location WV

Trip Blanks

☒ Include Trip Blanks

Bottle Labels

☐ Blank
☒ Pre-Printed No Sample IDs
☐ Pre-Printed With Sample IDs

Bottles

☐ Boxed Cases
☒ Individually Wrapped
☐ Grouped By Sample ID/Matrix

Return Shipping Labels

☐ No Shipper
☐ With Shipper

COC Options

☐ Number of Blanks _____
☐ Pre-Printed _____

Misc

☐ Sampling Instructions
☐ Custody Seal
☐ Temp. Blanks
☐ Coolers _____
☐ Syringes _____
☐ Extra Bubble Wrap
☐ Short Hold/Rush Stickers
☐ DI Water Liter(s)
☐ USDA Regulated Soils

# of Samples	Matrix	Test	Container	Total	# of	Lot #	Notes
66	SL	8270 SVOC	4oz. Amber Wide Mouth Jar unpres	66	0	120621-1KM	
66	SL	Metals	4oz. amber jar unpreserved	66	0	120621-1KM	

WO# : 30460926

PM: MS1

Due Date: 02/08/22

CLIENT: ESI

Hazard Shipping Placard In Place : NO

*Sample receiving hours are typically 8am-5pm, but may differ by location. Please check with your Pace Project Manager.

*Pace Analytical reserves the right to return hazardous, toxic, or radioactive samples to you.

*Pace Analytical reserves the right to charge for unused bottles, as well as cost associated with sample storage/disposal.

*Payment term are net 30 days.

*Please include the proposal number on the chain of custody to insure proper billing.

LAB USE:

Ship Date : 01/19/2022

Prepared By: David F

Verified By: Megan

Sample

CLIENT USE (Optional):

Date Rec'd: _____

Received By: _____

Verified By: _____

Pace Greensburg Lab -Sample Container Count



Client _____

Site 26210457

Profile Number 13650

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																											
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

Container Codes

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

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

WO#: 30460926

PM: MS1 Due Date: 02/08/22
CLIENT: ESI



Client

Site 20210457

Profile Number 13650

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	WGCU	ZPLC
13	SL																										
14																											
15																											
16																											
17																											
18																											
19																											
20																											
21																											
22																											
23																											
24																											

Container Codes

Glass	
GJN	1 Gallon Jug with HNO3
AG5U	100mL amber glass unprservd
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 unprservd
AG3S	250mL amber glass H2SO4
AG3U	250mL amber glass unprservd
DG9S	40mL amber VOA vial H2SO4
VG9U	40mL clear VOA vial
VG9T	40mL clear VOA vial Na Thiosulf
VG9H	40mL clear VOA vial HCl
JGFU	4oz amber wide jar
WGFU	4oz wide jar unprservd
BG2U	500mL clear glass unprservd
AG2U	500mL amber glass unprservd
WGKU	8oz wide jar unprservd

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

#30460926

Client

Site 20210457

Profile Number 13650

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		ZPLC
125	SL																									2		
126	—																								4	2		
127	—																									2		
128	—																									2		
129	—																									2		
130	—																									2		
131	—																									2		
132	↓																									2		
133	WT																					2						
134	SL																									2		
135	—																									2		
136	↓																									2		

Container Codes

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

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

#30460926



Client

Profile Number 13650

Site

20210457

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
137	SL																											
138																									4	2		
139																									4	2		
140																										2		
141																										2		
142																										2		
143																										2		
144																										2		
145																									4	2		
146																										2		
147																										2		
148																										2		

Container Codes

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

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

#30460926

Client

Profile Number 13650

Site

20210457

Notes

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Container Codes

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

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

#30460926



Sample Receiving Non-Conformance Form (NCF)

Date: 1/26/22	Evaluated by:
Client: Environmental Standards	

Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

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:

Trip Blanks listed as SL on COC instead of water.
Sent 4 extra Trip Blanks and 2 were broken.

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:

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:

730460926

WO# : 30460926
30460926

LIMS30 Internal Shipping Manifest

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping Information		Received information	
Cooler ID	1	Cooler temp (rcvd) °C	5.8
Packaged on ice (Y/N)	Y	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	5.8
Tracking #	NA	IR GUN ID	923
PWS* Drinking water?	NA	Received on ice?	Y

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished	GRACEY, MIA	GBUR	2/2/22	10:00
Received		Beav	2/8/22	2:11
Relinquished				
Received				
Relinquished				
Received				

Log#	Scan Date	Container ID	Type	LIMS LAB ID	LIMS MON Order
RDC	2/2/2022	30460381003 WGFU2/2	WGFU	30460381003	30460381
RDC	2/2/2022	30461348001 WGFU3/3	WGFU	30461348001	30461348
RDC	2/2/2022	30461411001 WGFU1/1	WGFU	30461411001	30461411
RDC	2/2/2022	30461412001 WGFU1/1	WGFU	30461412001	30461412
RDC	2/2/2022	30459395002 WGFU2/2	WGFU	30459395002	30459395
RDC	2/2/2022	30459395003 WGFU2/2	WGFU	30459395003	30459395
RDC	2/2/2022	30459395004 WGFU2/2	WGFU	30459395004	30459395
RDC	2/2/2022	30459395005 WGFU2/2	WGFU	30459395005	30459395
RDC	2/2/2022	30459395006 WGFU2/2	WGFU	30459395006	30459395
RDC	2/2/2022	30459395007 WGFU2/2	WGFU	30459395007	30459395
RDC	2/2/2022	30459395008 WGFU2/2	WGFU	30459395008	30459395
RDC	2/2/2022	30459395009 WGFU2/2	WGFU	30459395009	30459395
RDC	2/2/2022	30459395010 WGFU2/2	WGFU	30459395010	30459395
RDC	2/2/2022	30459395011 WGFU2/2	WGFU	30459395011	30459395
RDC	2/2/2022	30459395012 WGFU2/2	WGFU	30459395012	30459395
RDC	2/2/2022	30459395013 WGFU2/2	WGFU	30459395013	30459395
RDC	2/2/2022	30459395014 WGFU2/2	WGFU	30459395014	30459395
RDC	2/2/2022	30459395015 WGFU2/2	WGFU	30459395015	30459395
RDC	2/2/2022	30459395016 WGFU2/2	WGFU	30459395016	30459395
RDC	2/2/2022	30459395017 WGFU2/2	WGFU	30459395017	30459395
RDC	2/2/2022	30459395018 WGFU2/2	WGFU	30459395018	30459395
RDC	2/2/2022	30460926001 WGFU2/2	WGFU	30460926001	30460926
RDC	2/2/2022	30460926002 WGFU2/2	WGFU	30460926002	30460926
RDC	2/2/2022	30460926003 WGFU2/2	WGFU	30460926003	30460926
RDC	2/2/2022	30460926004 WGFU2/2	WGFU	30460926004	30460926
RDC	2/2/2022	30460926005 WGFU2/2	WGFU	30460926005	30460926
RDC	2/2/2022	30460926006 WGFU2/2	WGFU	30460926006	30460926
RDC	2/2/2022	30460926007 WGFU2/2	WGFU	30460926007	30460926
RDC	2/2/2022	30460926008 WGFU2/2	WGFU	30460926008	30460926
RDC	2/2/2022	30460926009 WGFU2/2	WGFU	30460926009	30460926
RDC	2/2/2022	30460926010 WGFU2/2	WGFU	30460926010	30460926
RDC	2/2/2022	30460926011 WGFU2/2	WGFU	30460926011	30460926
RDC	2/2/2022	30460926012 WGFU2/2	WGFU	30460926012	30460926
RDC	2/2/2022	30460926013 WGFU2/2	WGFU	30460926013	30460926

W0#: 30460926
PM: MS1
CLIENT: ESI
Due Date: 02/08/22

LIMS30 Internal Shipping Manifest

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping Information			
Cooler ID	1	Cooler temp (rcvd) °C	
Packaged on Ice (Y/N)	Y	Correction Factor	
Shipping Method	Courier	Cooler temp (corr) °C	
Tracking #	NA	IR GUN ID	
PWS* Drinking water?	NA	Received on Ice?	

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR		
Received				
Relinquished				
Received				
Relinquished				
Received				

Log#	Scan Date	Container ID	Type	LIMS Lab ID	LIMS Work Order
RDC	2/2/2022	30460926014 WGFU2/2	WGFU	30460926014	30460926
RDC	2/2/2022	30460926015 WGFU2/2	WGFU	30460926015	30460926
RDC	2/2/2022	30460926016 WGFU2/2	WGFU	30460926016	30460926
RDC	2/2/2022	30460926017 WGFU2/2	WGFU	30460926017	30460926
RDC	2/2/2022	30460926018 WGFU2/2	WGFU	30460926018	30460926
RDC	2/2/2022	30460926019 WGFU2/2	WGFU	30460926019	30460926
RDC	2/2/2022	30460926020 WGFU2/2	WGFU	30460926020	30460926
RDC	2/2/2022	30460926021 WGFU2/2	WGFU	30460926021	30460926
RDC	2/2/2022	30459395022 WGFU2/2	WGFU	30459395022	30459395
RDC	2/2/2022	30459395023 WGFU2/2	WGFU	30459395023	30459395
RDC	2/2/2022	30459395024 WGFU2/2	WGFU	30459395024	30459395
RDC	2/2/2022	30459395025 WGFU2/2	WGFU	30459395025	30459395
RDC	2/2/2022	30459395026 WGFU2/2	WGFU	30459395026	30459395
RDC	2/2/2022	30459395027 WGFU2/2	WGFU	30459395027	30459395
RDC	2/2/2022	30459395028 WGFU2/2	WGFU	30459395028	30459395
RDC	2/2/2022	30459395029 WGFU2/2	WGFU	30459395029	30459395
RDC	2/2/2022	30459395030 WGFU2/2	WGFU	30459395030	30459395
RDC	2/2/2022	30459395031 WGFU2/2	WGFU	30459395031	30459395
RDC	2/2/2022	30459395032 WGFU2/2	WGFU	30459395032	30459395
RDC	2/2/2022	30459395033 WGFU2/2	WGFU	30459395033	30459395
RDC	2/2/2022	30459395034 WGFU2/2	WGFU	30459395034	30459395
RDC	2/2/2022	30459395035 WGFU2/2	WGFU	30459395035	30459395
RDC	2/2/2022	30459395036 WGFU2/2	WGFU	30459395036	30459395
RDC	2/2/2022	30459395037 WGFU2/2	WGFU	30459395037	30459395
RDC	2/2/2022	30459395038 WGFU2/2	WGFU	30459395038	30459395
RDC	2/2/2022	30460926039 WGFU2/2	WGFU	30460926039	30460926
RDC	2/2/2022	30460926040 WGFU2/2	WGFU	30460926040	30460926
RDC	2/2/2022	30460926041 WGFU2/2	WGFU	30460926041	30460926
RDC	2/2/2022	30460926042 WGFU2/2	WGFU	30460926042	30460926
RDC	2/2/2022	30460926043 WGFU2/2	WGFU	30460926043	30460926
RDC	2/2/2022	30460926044 WGFU2/2	WGFU	30460926044	30460926
RDC	2/2/2022	30460926045 WGFU2/2	WGFU	30460926045	30460926
RDC	2/2/2022	30460926046 WGFU2/2	WGFU	30460926046	30460926
RDC	2/2/2022	30460926047 WGFU2/2	WGFU	30460926047	30460926
RDC	2/2/2022	30460926048 WGFU2/2	WGFU	30460926048	30460926
RDC	2/2/2022	30460926049 WGFU2/2	WGFU	30460926049	30460926
RDC	2/2/2022	30460926050 WGFU2/2	WGFU	30460926050	30460926

LIMS30 Internal Shipping

WO# : 30460926
PM: MS1 Due Date: 02/08/22
CLIENT: ESI

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping Information		Received Information	
Cooler ID	1	Cooler temp (recv) °C	
Packaged on ice (Y/N)	Y	Correction Factor	
Shipping Method	Courier	Cooler temp (corr) °C	
Tracking #	NA	IR GUN ID	
PWS* Drinking water?	NA	Received on ice?	

* If sample is from a PWS, the PWSID can be found in LIMS30

	Signature	Location	Date	Time
Relinquished		GBUR		
Received				
Relinquished				
Received				
Relinquished				
Received				

Logger	Scan Date	Container ID	Type	LIMS Lab ID	LIMS Work Order
RDC	2/2/2022	30460926051 WGFU2/2	WGFU	30460926051	30460926
RDC	2/2/2022	30460926052 WGFU2/2	WGFU	30460926052	30460926
RDC	2/2/2022	30460926053 WGFU2/2	WGFU	30460926053	30460926
RDC	2/2/2022	30460926054 WGFU2/2	WGFU	30460926054	30460926
RDC	2/2/2022	30460926055 WGFU2/2	WGFU	30460926055	30460926
RDC	2/2/2022	30460926056 WGFU2/2	WGFU	30460926056	30460926
RDC	2/2/2022	30460926057 WGFU2/2	WGFU	30460926057	30460926
RDC	2/2/2022	30460926058 WGFU2/2	WGFU	30460926058	30460926
RDC	2/2/2022	30460381001 WGFU2/2	WGFU	30460381001	30460381
RDC	2/2/2022	30460381002 WGFU2/2	WGFU	30460381002	30460381
RDC	2/2/2022	30461418001 WGFU2/2	WGFU	30461418001	30461418
RDC	2/2/2022	30461418002 WGFU2/2	WGFU	30461418002	30461418
RDC	2/2/2022	30461418003 WGFU2/2	WGFU	30461418003	30461418
RDC	2/2/2022	30461210002 BP2N1/1	BP2N	30461210002	30461210

LIMS73 Lab Sample Condition Upon Receipt (West Virgi

W0# : 30460926

PM: MS1

Due Date: 02/08/22

CLIENT: ESI

Page 124 of 124

Face Analytical

Client Name:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☒ Other:

Tracking #:

Seals Intact: ☐ yes ☐ noCustody Seal on CoolerBox/Containers Present: ☐ yes ☐ no

Thermometer Used

Type of Ice: ☒ Wet ☐ Dry

Blue None

Cooler Temperature

Observed Temp

5.8 °C

Correction Factor: 0 °C

Final Temp: 5.8 °C

Comments:

pH paper Lot#

025320

Date and Initials of person examining contents:

2/13/20

	Yes	No	N/A
Chain of Custody Present:			
Chain of Custody Filled Out:			
Chain of Custody Relinquished:			
Sampler Name & Signature on COC:			
Sample Labels match COC:			
-Includes date/time/ID			
Samples Arrived within Hold Time:			
Short Hold Time Analysis (<72hr remaining):			
Rush Turn Around Time Requested:			
Sufficient Volume:			
Correct Containers Used:			
-Pace Containers Used:			
Containers Intact:			
Orthophosphate field filtered:			
Hex Cr Aqueous sample field filtered:			
-pH adjusted within 24 hours? (If yes, indicate acid lot #)			
Filtered volume received for Dissolved tests:			
All containers have been checked for preservation:			
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix			
All containers meet method preservation requirements:			
Headspace in VOA Vials:			
Trip Blank Present:			
Trip Blank Custody Seals Present:			
Initial when completed:			
Date:			
Tests not preserved:			
Initial when completed:			
Date:			

Client Notification/ Resolution:

Person Contacted:

Date/Time:

Contacted By:

Comments/ Resolution:

☐ A check in this box indicates that additional information has been stored in ereports.

*PM review is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

March 30, 2022

Leah Mistick
Environmental Standards, Inc.
1140 Valley Forge Road
Valley Forge, PA 19482

RE: Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Dear Leah Mistick:

Enclosed are the analytical results for sample(s) received by the laboratory on March 08, 2022. 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 - Beaver
- Pace Analytical Services - Greensburg

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

Sincerely,



Megan A. Rager
megan.rager@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Kelsy Morton, Environmental Standards
Ms. Lydia Work, Environmental Standards, Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

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 #: 460198

Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

Wyoming Certification #: 8TMS-L

Pace Analytical Services Beaver

225 Industrial Park Road, Beaver, WV 25813

Virginia VELAP 460148

West Virginia DEP 060

West Virginia DHHR 00412CM

North Carolina DEQ 466

Kentucky Wastewater Certification KY90039

Pennsylvania DEP 68-00839

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30471709001	SS-47	Solid	03/08/22 08:55	03/08/22 16:40
30471709002	SS-48	Solid	03/08/22 09:00	03/08/22 16:40
30471709003	SS-49	Solid	03/08/22 09:05	03/08/22 16:40
30471709004	SS-50	Solid	03/08/22 09:10	03/08/22 16:40
30471709005	SS-51	Solid	03/08/22 09:15	03/08/22 16:40
30471709006	SS-52	Solid	03/08/22 09:20	03/08/22 16:40
30471709007	SS-53	Solid	03/08/22 09:25	03/08/22 16:40
30471709008	SS-54	Solid	03/08/22 09:30	03/08/22 16:40
30471709009	SS-55	Solid	03/08/22 09:40	03/08/22 16:40
30471709010	SS-56	Solid	03/08/22 09:45	03/08/22 16:40
30471709011	SS-57	Solid	03/08/22 09:50	03/08/22 16:40
30471709012	SS-58	Solid	03/08/22 10:30	03/08/22 16:40
30471709013	SS-59	Solid	03/08/22 10:35	03/08/22 16:40
30471709014	SS-60	Solid	03/08/22 10:45	03/08/22 16:40
30471709015	SS-60-FD	Solid	03/08/22 10:45	03/08/22 16:40
30471709016	SS-61	Solid	03/08/22 11:00	03/08/22 16:40
30471709017	SS-62	Solid	03/08/22 11:05	03/08/22 16:40
30471709018	SS-63	Solid	03/08/22 11:10	03/08/22 16:40
30471709019	SS-64/ss-64-ms/msd	Solid	03/08/22 11:50	03/08/22 16:40
30471709020	SS-65	Solid	03/08/22 12:05	03/08/22 16:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30471709001	SS-47	EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709002	SS-48	EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709003	SS-49	EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709004	SS-50	EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709005	SS-51	EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709006	SS-52	EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709007	SS-53	EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709008	SS-54	EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709009	SS-55	EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709010	SS-56	EPA 6010D	MFC	7	PASI-BV

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SAMPLE ANALYTE COUNT

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30471709011	SS-57	EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		EPA 8260C	JEW	5	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
		EPA 6010D	MFC	7	PASI-BV
30471709012	SS-58	EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
		EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
30471709013	SS-59	EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
		EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30471709014	SS-60	SM 2540G-2015	SRW	1	PASI-PA
		EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709015	SS-60-FD	EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
		EPA 6010D	MFC	7	PASI-BV
30471709016	SS-61	EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
		EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
30471709017	SS-62	EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
		EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
30471709018	SS-63	SM 2540G-2015	SRW	1	PASI-PA
		EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
30471709019	SS-64/ss-64-ms/msd	EPA 6010D	MFC	7	PASI-BV

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SAMPLE ANALYTE COUNT

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30471709020	SS-65	EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		SM 2540G-2015	SRW	1	PASI-PA
		EPA 6010D	MFC	7	PASI-BV
		EPA 7471B	RCH	1	PASI-BV
		EPA 8270E by SIM	DSC	18	PASI-PA
		EPA 8260C	JEW	5	PASI-PA
		SM 2540G-2015	OMZ	1	PASI-PA

PASI-BV = Pace Analytical Services - Beaver

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-47 **Lab ID: 30471709001** Collected: 03/08/22 08:55 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	10.0	mg/kg	7.9	0.87	1	03/15/22 06:39	03/15/22 14:35	7440-38-2	M1
Barium	31.6	mg/kg	7.9	0.90	1	03/15/22 06:39	03/15/22 14:35	7440-39-3	
Cadmium	<0.19	mg/kg	1.6	0.19	1	03/15/22 06:39	03/15/22 14:35	7440-43-9	
Chromium	16.2	mg/kg	7.9	0.92	1	03/15/22 06:39	03/15/22 14:35	7440-47-3	
Lead	84.5	mg/kg	7.9	0.76	1	03/15/22 06:39	03/15/22 14:35	7439-92-1	
Selenium	1.7J	mg/kg	7.9	1.7	1	03/15/22 06:39	03/15/22 14:35	7782-49-2	
Silver	<0.67	mg/kg	4.0	0.67	1	03/15/22 06:39	03/15/22 14:35	7440-22-4	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.12J	mg/kg	0.15	0.014	1	03/16/22 13:34	03/22/22 16:04	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	53.1J	ug/kg	102	9.2	10	03/11/22 08:24	03/14/22 10:13	83-32-9	ED
Acenaphthylene	165	ug/kg	102	7.3	10	03/11/22 08:24	03/14/22 10:13	208-96-8	ED
Anthracene	520	ug/kg	102	9.2	10	03/11/22 08:24	03/14/22 10:13	120-12-7	ED
Benzo(a)anthracene	2450	ug/kg	102	12.0	10	03/11/22 08:24	03/14/22 10:13	56-55-3	ED
Benzo(a)pyrene	1600	ug/kg	102	6.4	10	03/11/22 08:24	03/14/22 10:13	50-32-8	ED
Benzo(b)fluoranthene	3690	ug/kg	102	12.2	10	03/11/22 08:24	03/14/22 10:13	205-99-2	ED,lp
Benzo(g,h,i)perylene	1000	ug/kg	102	15.4	10	03/11/22 08:24	03/14/22 10:13	191-24-2	ED
Benzo(k)fluoranthene	3720	ug/kg	102	17.1	10	03/11/22 08:24	03/14/22 10:13	207-08-9	ED,lp
Chrysene	2540	ug/kg	102	5.3	10	03/11/22 08:24	03/14/22 10:13	218-01-9	ED
Dibenz(a,h)anthracene	359	ug/kg	102	22.6	10	03/11/22 08:24	03/14/22 10:13	53-70-3	ED
Fluoranthene	5890	ug/kg	102	7.7	10	03/11/22 08:24	03/14/22 10:13	206-44-0	ED
Fluorene	86.5J	ug/kg	102	9.4	10	03/11/22 08:24	03/14/22 10:13	86-73-7	ED
Indeno(1,2,3-cd)pyrene	1010	ug/kg	102	19.4	10	03/11/22 08:24	03/14/22 10:13	193-39-5	ED
Naphthalene	327	ug/kg	102	19.7	10	03/11/22 08:24	03/14/22 10:13	91-20-3	ED
Phenanthrene	3980	ug/kg	102	9.0	10	03/11/22 08:24	03/14/22 10:13	85-01-8	ED
Pyrene	4270	ug/kg	102	11.4	10	03/11/22 08:24	03/14/22 10:13	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	67	%.	37-88		10	03/11/22 08:24	03/14/22 10:13	321-60-8	
Terphenyl-d14 (S)	48	%.	10-128		10	03/11/22 08:24	03/14/22 10:13	1718-51-0	
Percent Moisture									
Analytical Method: SM 2540G-2015									
Pace Analytical Services - Greensburg									
Percent Moisture	34.9	%	0.10	0.10	1		03/12/22 11:35		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-48 **Lab ID: 30471709002** Collected: 03/08/22 09:00 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	9.0	mg/kg	8.2	0.90	1	03/15/22 06:39	03/15/22 14:46	7440-38-2	
Barium	69.3	mg/kg	8.2	0.93	1	03/15/22 06:39	03/15/22 14:46	7440-39-3	
Cadmium	0.26J	mg/kg	1.6	0.20	1	03/15/22 06:39	03/15/22 14:46	7440-43-9	
Chromium	16.4	mg/kg	8.2	0.95	1	03/15/22 06:39	03/15/22 14:46	7440-47-3	
Lead	41.4	mg/kg	8.2	0.79	1	03/15/22 06:39	03/15/22 14:46	7439-92-1	
Selenium	2.2J	mg/kg	8.2	1.7	1	03/15/22 06:39	03/15/22 14:46	7782-49-2	
Silver	<0.69	mg/kg	4.1	0.69	1	03/15/22 06:39	03/15/22 14:46	7440-22-4	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.072J	mg/kg	0.16	0.015	1	03/15/22 15:30	03/16/22 12:36	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	51.2J	ug/kg	108	9.8	10	03/11/22 08:24	03/14/22 10:41	83-32-9	ED
Acenaphthylene	201	ug/kg	108	7.7	10	03/11/22 08:24	03/14/22 10:41	208-96-8	ED
Anthracene	819	ug/kg	108	9.8	10	03/11/22 08:24	03/14/22 10:41	120-12-7	ED
Benzo(a)anthracene	4520	ug/kg	108	12.7	10	03/11/22 08:24	03/14/22 10:41	56-55-3	ED
Benzo(a)pyrene	3150	ug/kg	108	6.7	10	03/11/22 08:24	03/14/22 10:41	50-32-8	ED
Benzo(b)fluoranthene	6530	ug/kg	108	12.9	10	03/11/22 08:24	03/14/22 10:41	205-99-2	ED,lp
Benzo(g,h,i)perylene	2020	ug/kg	108	16.3	10	03/11/22 08:24	03/14/22 10:41	191-24-2	ED
Benzo(k)fluoranthene	6580	ug/kg	108	18.1	10	03/11/22 08:24	03/14/22 10:41	207-08-9	ED,lp
Chrysene	4650	ug/kg	108	5.6	10	03/11/22 08:24	03/14/22 10:41	218-01-9	ED
Dibenz(a,h)anthracene	720	ug/kg	108	24.0	10	03/11/22 08:24	03/14/22 10:41	53-70-3	ED
Fluoranthene	10000	ug/kg	108	8.2	10	03/11/22 08:24	03/14/22 10:41	206-44-0	ED
Fluorene	88.8J	ug/kg	108	10	10	03/11/22 08:24	03/14/22 10:41	86-73-7	ED
Indeno(1,2,3-cd)pyrene	2070	ug/kg	108	20.5	10	03/11/22 08:24	03/14/22 10:41	193-39-5	ED
Naphthalene	121	ug/kg	108	20.9	10	03/11/22 08:24	03/14/22 10:41	91-20-3	ED
Phenanthrene	4940	ug/kg	108	9.5	10	03/11/22 08:24	03/14/22 10:41	85-01-8	ED
Pyrene	7490	ug/kg	108	12.1	10	03/11/22 08:24	03/14/22 10:41	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	85	%	37-88		10	03/11/22 08:24	03/14/22 10:41	321-60-8	
Terphenyl-d14 (S)	94	%	10-128		10	03/11/22 08:24	03/14/22 10:41	1718-51-0	
Percent Moisture									
Analytical Method: SM 2540G-2015									
Pace Analytical Services - Greensburg									
Percent Moisture	38.7	%	0.10	0.10	1		03/12/22 11:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-49 **Lab ID: 30471709003** Collected: 03/08/22 09:05 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	9.4	mg/kg	9.2	1.0	1	03/15/22 06:39	03/15/22 14:49	7440-38-2	
Barium	59.9	mg/kg	9.2	1.0	1	03/15/22 06:39	03/15/22 14:49	7440-39-3	
Cadmium	<0.22	mg/kg	1.8	0.22	1	03/15/22 06:39	03/15/22 14:49	7440-43-9	
Chromium	20.3	mg/kg	9.2	1.1	1	03/15/22 06:39	03/15/22 14:49	7440-47-3	
Lead	31.5	mg/kg	9.2	0.88	1	03/15/22 06:39	03/15/22 14:49	7439-92-1	
Selenium	2.3J	mg/kg	9.2	1.9	1	03/15/22 06:39	03/15/22 14:49	7782-49-2	
Silver	<0.78	mg/kg	4.6	0.78	1	03/15/22 06:39	03/15/22 14:49	7440-22-4	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.096J	mg/kg	0.18	0.017	1	03/15/22 15:30	03/16/22 12:37	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<5.4	ug/kg	59.3	5.4	5	03/11/22 08:24	03/14/22 11:06	83-32-9	ED
Acenaphthylene	<4.2	ug/kg	59.3	4.2	5	03/11/22 08:24	03/14/22 11:06	208-96-8	ED
Anthracene	39.6J	ug/kg	59.3	5.4	5	03/11/22 08:24	03/14/22 11:06	120-12-7	ED
Benzo(a)anthracene	219	ug/kg	59.3	7.0	5	03/11/22 08:24	03/14/22 11:06	56-55-3	ED
Benzo(a)pyrene	146	ug/kg	59.3	3.7	5	03/11/22 08:24	03/14/22 11:06	50-32-8	ED
Benzo(b)fluoranthene	308	ug/kg	59.3	7.1	5	03/11/22 08:24	03/14/22 11:06	205-99-2	ED,lp
Benzo(g,h,i)perylene	83.0	ug/kg	59.3	8.9	5	03/11/22 08:24	03/14/22 11:06	191-24-2	ED
Benzo(k)fluoranthene	311	ug/kg	59.3	9.9	5	03/11/22 08:24	03/14/22 11:06	207-08-9	ED,lp
Chrysene	220	ug/kg	59.3	3.1	5	03/11/22 08:24	03/14/22 11:06	218-01-9	ED
Dibenz(a,h)anthracene	27.7J	ug/kg	59.3	13.2	5	03/11/22 08:24	03/14/22 11:06	53-70-3	ED
Fluoranthene	459	ug/kg	59.3	4.5	5	03/11/22 08:24	03/14/22 11:06	206-44-0	ED
Fluorene	<5.5	ug/kg	59.3	5.5	5	03/11/22 08:24	03/14/22 11:06	86-73-7	ED
Indeno(1,2,3-cd)pyrene	81.9	ug/kg	59.3	11.3	5	03/11/22 08:24	03/14/22 11:06	193-39-5	ED
Naphthalene	45.2J	ug/kg	59.3	11.5	5	03/11/22 08:24	03/14/22 11:06	91-20-3	ED
Phenanthrene	259	ug/kg	59.3	5.2	5	03/11/22 08:24	03/14/22 11:06	85-01-8	ED
Pyrene	349	ug/kg	59.3	6.7	5	03/11/22 08:24	03/14/22 11:06	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	82	%.	37-88		5	03/11/22 08:24	03/14/22 11:06	321-60-8	
Terphenyl-d14 (S)	92	%.	10-128		5	03/11/22 08:24	03/14/22 11:06	1718-51-0	
Percent Moisture									
Analytical Method: SM 2540G-2015									
Pace Analytical Services - Greensburg									
Percent Moisture	43.7	%	0.10	0.10	1		03/12/22 11:30		

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Sample: SS-50 **Lab ID: 30471709004** Collected: 03/08/22 09:10 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	4.0J	mg/kg	7.7	0.85	1	03/15/22 06:39	03/15/22 14:56	7440-38-2	
Barium	59.5	mg/kg	7.7	0.88	1	03/15/22 06:39	03/15/22 14:56	7440-39-3	
Cadmium	0.24J	mg/kg	1.5	0.19	1	03/15/22 06:39	03/15/22 14:56	7440-43-9	
Chromium	9.7	mg/kg	7.7	0.90	1	03/15/22 06:39	03/15/22 14:56	7440-47-3	
Lead	15.6	mg/kg	7.7	0.75	1	03/15/22 06:39	03/15/22 14:56	7439-92-1	
Selenium	2.2J	mg/kg	7.7	1.6	1	03/15/22 06:39	03/15/22 14:56	7782-49-2	
Silver	<0.65	mg/kg	3.9	0.65	1	03/15/22 06:39	03/15/22 14:56	7440-22-4	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.076J	mg/kg	0.15	0.014	1	03/15/22 15:30	03/16/22 12:39	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	259	ug/kg	99.8	9.0	10	03/11/22 08:24	03/14/22 11:33	83-32-9	ED
Acenaphthylene	<7.1	ug/kg	99.8	7.1	10	03/11/22 08:24	03/14/22 11:33	208-96-8	ED
Anthracene	2190	ug/kg	99.8	9.0	10	03/11/22 08:24	03/14/22 11:33	120-12-7	ED
Benzo(a)anthracene	8760	ug/kg	99.8	11.7	10	03/11/22 08:24	03/14/22 11:33	56-55-3	ED
Benzo(a)pyrene	8180	ug/kg	99.8	6.2	10	03/11/22 08:24	03/14/22 11:33	50-32-8	ED
Benzo(b)fluoranthene	13900	ug/kg	99.8	12.0	10	03/11/22 08:24	03/14/22 11:33	205-99-2	ED,lp
Benzo(g,h,i)perylene	5600	ug/kg	99.8	15.0	10	03/11/22 08:24	03/14/22 11:33	191-24-2	ED
Benzo(k)fluoranthene	14000	ug/kg	99.8	16.7	10	03/11/22 08:24	03/14/22 11:33	207-08-9	ED,lp
Chrysene	8510	ug/kg	99.8	5.2	10	03/11/22 08:24	03/14/22 11:33	218-01-9	ED
Dibenz(a,h)anthracene	1450	ug/kg	99.8	22.2	10	03/11/22 08:24	03/14/22 11:33	53-70-3	ED
Fluoranthene	18600	ug/kg	99.8	7.6	10	03/11/22 08:24	03/14/22 11:33	206-44-0	ED
Fluorene	387	ug/kg	99.8	9.2	10	03/11/22 08:24	03/14/22 11:33	86-73-7	ED
Indeno(1,2,3-cd)pyrene	5220	ug/kg	99.8	19.0	10	03/11/22 08:24	03/14/22 11:33	193-39-5	ED
Naphthalene	79.8J	ug/kg	99.8	19.3	10	03/11/22 08:24	03/14/22 11:33	91-20-3	ED
Phenanthrene	4140	ug/kg	99.8	8.8	10	03/11/22 08:24	03/14/22 11:33	85-01-8	ED
Pyrene	15900	ug/kg	99.8	11.2	10	03/11/22 08:24	03/14/22 11:33	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	89	%	37-88		10	03/11/22 08:24	03/14/22 11:33	321-60-8	S4
Terphenyl-d14 (S)	92	%	10-128		10	03/11/22 08:24	03/14/22 11:33	1718-51-0	
Percent Moisture									
Analytical Method: SM 2540G-2015									
Pace Analytical Services - Greensburg									
Percent Moisture	34.6	%	0.10	0.10	1		03/12/22 11:30		

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-51 **Lab ID: 30471709005** Collected: 03/08/22 09:15 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	22.0	mg/kg	10.4	1.1	1	03/15/22 06:39	03/15/22 14:58	7440-38-2	
Barium	62.3	mg/kg	10.4	1.2	1	03/15/22 06:39	03/15/22 14:58	7440-39-3	
Cadmium	<0.25	mg/kg	2.1	0.25	1	03/15/22 06:39	03/15/22 14:58	7440-43-9	
Chromium	35.9	mg/kg	10.4	1.2	1	03/15/22 06:39	03/15/22 14:58	7440-47-3	
Lead	32.9	mg/kg	10.4	1.0	1	03/15/22 06:39	03/15/22 14:58	7439-92-1	
Selenium	3.6J	mg/kg	10.4	2.2	1	03/15/22 06:39	03/15/22 14:58	7782-49-2	
Silver	<0.88	mg/kg	5.2	0.88	1	03/15/22 06:39	03/15/22 14:58	7440-22-4	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.19J	mg/kg	0.20	0.019	1	03/15/22 15:30	03/16/22 12:40	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	8.4J	ug/kg	67.4	6.1	5	03/11/22 08:24	03/14/22 12:00	83-32-9	ED
Acenaphthylene	42.2J	ug/kg	67.4	4.8	5	03/11/22 08:24	03/14/22 12:00	208-96-8	ED
Anthracene	93.2	ug/kg	67.4	6.1	5	03/11/22 08:24	03/14/22 12:00	120-12-7	ED
Benzo(a)anthracene	467	ug/kg	67.4	7.9	5	03/11/22 08:24	03/14/22 12:00	56-55-3	ED
Benzo(a)pyrene	313	ug/kg	67.4	4.2	5	03/11/22 08:24	03/14/22 12:00	50-32-8	ED
Benzo(b)fluoranthene	677	ug/kg	67.4	8.1	5	03/11/22 08:24	03/14/22 12:00	205-99-2	ED,lp
Benzo(g,h,i)perylene	172	ug/kg	67.4	10.2	5	03/11/22 08:24	03/14/22 12:00	191-24-2	ED
Benzo(k)fluoranthene	683	ug/kg	67.4	11.3	5	03/11/22 08:24	03/14/22 12:00	207-08-9	ED,lp
Chrysene	471	ug/kg	67.4	3.5	5	03/11/22 08:24	03/14/22 12:00	218-01-9	ED
Dibenz(a,h)anthracene	61.7J	ug/kg	67.4	15.0	5	03/11/22 08:24	03/14/22 12:00	53-70-3	ED
Fluoranthene	1000	ug/kg	67.4	5.1	5	03/11/22 08:24	03/14/22 12:00	206-44-0	ED
Fluorene	19.5J	ug/kg	67.4	6.2	5	03/11/22 08:24	03/14/22 12:00	86-73-7	ED
Indeno(1,2,3-cd)pyrene	180	ug/kg	67.4	12.8	5	03/11/22 08:24	03/14/22 12:00	193-39-5	ED
Naphthalene	58.9J	ug/kg	67.4	13.0	5	03/11/22 08:24	03/14/22 12:00	91-20-3	ED
Phenanthrene	510	ug/kg	67.4	5.9	5	03/11/22 08:24	03/14/22 12:00	85-01-8	ED
Pyrene	745	ug/kg	67.4	7.6	5	03/11/22 08:24	03/14/22 12:00	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	82	%.	37-88		5	03/11/22 08:24	03/14/22 12:00	321-60-8	
Terphenyl-d14 (S)	89	%.	10-128		5	03/11/22 08:24	03/14/22 12:00	1718-51-0	
Percent Moisture									
Analytical Method: SM 2540G-2015									
Pace Analytical Services - Greensburg									
Percent Moisture	51.2	%	0.10	0.10	1		03/12/22 11:30		

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-52 **Lab ID: 30471709006** Collected: 03/08/22 09:20 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	5.0J	mg/kg	7.0	0.77	1	03/15/22 06:39	03/15/22 15:00	7440-38-2	
Barium	54.9	mg/kg	7.0	0.80	1	03/15/22 06:39	03/15/22 15:00	7440-39-3	
Cadmium	<0.17	mg/kg	1.4	0.17	1	03/15/22 06:39	03/15/22 15:00	7440-43-9	
Chromium	11.5	mg/kg	7.0	0.82	1	03/15/22 06:39	03/15/22 15:00	7440-47-3	
Lead	17.4	mg/kg	7.0	0.68	1	03/15/22 06:39	03/15/22 15:00	7439-92-1	
Selenium	<1.5	mg/kg	7.0	1.5	1	03/15/22 06:39	03/15/22 15:00	7782-49-2	
Silver	<0.59	mg/kg	3.5	0.59	1	03/15/22 06:39	03/15/22 15:00	7440-22-4	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.087J	mg/kg	0.13	0.013	1	03/15/22 15:30	03/16/22 12:42	7439-97-6	B
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<4.1	ug/kg	45.0	4.1	5	03/11/22 08:24	03/14/22 12:20	83-32-9	ED
Acenaphthylene	<3.2	ug/kg	45.0	3.2	5	03/11/22 08:24	03/14/22 12:20	208-96-8	ED
Anthracene	5.3J	ug/kg	45.0	4.1	5	03/11/22 08:24	03/14/22 12:20	120-12-7	ED
Benzo(a)anthracene	36.1J	ug/kg	45.0	5.3	5	03/11/22 08:24	03/14/22 12:20	56-55-3	ED
Benzo(a)pyrene	26.7J	ug/kg	45.0	2.8	5	03/11/22 08:24	03/14/22 12:20	50-32-8	ED
Benzo(b)fluoranthene	70.4	ug/kg	45.0	5.4	5	03/11/22 08:24	03/14/22 12:20	205-99-2	ED,lp
Benzo(g,h,i)perylene	<6.8	ug/kg	45.0	6.8	5	03/11/22 08:24	03/14/22 12:20	191-24-2	ED
Benzo(k)fluoranthene	71.0	ug/kg	45.0	7.5	5	03/11/22 08:24	03/14/22 12:20	207-08-9	ED,lp
Chrysene	45.6	ug/kg	45.0	2.3	5	03/11/22 08:24	03/14/22 12:20	218-01-9	ED
Dibenz(a,h)anthracene	<10	ug/kg	45.0	10	5	03/11/22 08:24	03/14/22 12:20	53-70-3	ED
Fluoranthene	87.2	ug/kg	45.0	3.4	5	03/11/22 08:24	03/14/22 12:20	206-44-0	ED
Fluorene	<4.2	ug/kg	45.0	4.2	5	03/11/22 08:24	03/14/22 12:20	86-73-7	ED
Indeno(1,2,3-cd)pyrene	<8.6	ug/kg	45.0	8.6	5	03/11/22 08:24	03/14/22 12:20	193-39-5	ED
Naphthalene	81.7	ug/kg	45.0	8.7	5	03/11/22 08:24	03/14/22 12:20	91-20-3	ED
Phenanthrene	68.3	ug/kg	45.0	4.0	5	03/11/22 08:24	03/14/22 12:20	85-01-8	ED
Pyrene	64.7	ug/kg	45.0	5.0	5	03/11/22 08:24	03/14/22 12:20	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	57	%.	37-88		5	03/11/22 08:24	03/14/22 12:20	321-60-8	
Terphenyl-d14 (S)	49	%.	10-128		5	03/11/22 08:24	03/14/22 12:20	1718-51-0	
Percent Moisture									
Analytical Method: SM 2540G-2015									
Pace Analytical Services - Greensburg									
Percent Moisture	26.5	%	0.10	0.10	1		03/12/22 11:30		

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-53 **Lab ID: 30471709007** Collected: 03/08/22 09:25 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	6.3J	mg/kg	8.8	0.97	1	03/15/22 06:39	03/15/22 15:03	7440-38-2	
Barium	91.9	mg/kg	8.8	1.0	1	03/15/22 06:39	03/15/22 15:03	7440-39-3	
Cadmium	0.23J	mg/kg	1.8	0.21	1	03/15/22 06:39	03/15/22 15:03	7440-43-9	
Chromium	16.3	mg/kg	8.8	1.0	1	03/15/22 06:39	03/15/22 15:03	7440-47-3	
Lead	28.0	mg/kg	8.8	0.85	1	03/15/22 06:39	03/15/22 15:03	7439-92-1	
Selenium	3.8J	mg/kg	8.8	1.9	1	03/15/22 06:39	03/15/22 15:03	7782-49-2	
Silver	<0.75	mg/kg	4.4	0.75	1	03/15/22 06:39	03/15/22 15:03	7440-22-4	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.14J	mg/kg	0.17	0.016	1	03/15/22 15:30	03/16/22 12:44	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<5.2	ug/kg	57.0	5.2	5	03/11/22 08:24	03/14/22 12:47	83-32-9	ED
Acenaphthylene	<4.1	ug/kg	57.0	4.1	5	03/11/22 08:24	03/14/22 12:47	208-96-8	ED
Anthracene	9.9J	ug/kg	57.0	5.2	5	03/11/22 08:24	03/14/22 12:47	120-12-7	ED
Benzo(a)anthracene	73.0	ug/kg	57.0	6.7	5	03/11/22 08:24	03/14/22 12:47	56-55-3	ED
Benzo(a)pyrene	67.8	ug/kg	57.0	3.6	5	03/11/22 08:24	03/14/22 12:47	50-32-8	ED
Benzo(b)fluoranthene	169	ug/kg	57.0	6.8	5	03/11/22 08:24	03/14/22 12:47	205-99-2	ED,lp
Benzo(g,h,i)perylene	43.6J	ug/kg	57.0	8.6	5	03/11/22 08:24	03/14/22 12:47	191-24-2	ED
Benzo(k)fluoranthene	171	ug/kg	57.0	9.6	5	03/11/22 08:24	03/14/22 12:47	207-08-9	ED,lp
Chrysene	108	ug/kg	57.0	2.9	5	03/11/22 08:24	03/14/22 12:47	218-01-9	ED
Dibenz(a,h)anthracene	<12.7	ug/kg	57.0	12.7	5	03/11/22 08:24	03/14/22 12:47	53-70-3	ED
Fluoranthene	181	ug/kg	57.0	4.3	5	03/11/22 08:24	03/14/22 12:47	206-44-0	ED
Fluorene	<5.3	ug/kg	57.0	5.3	5	03/11/22 08:24	03/14/22 12:47	86-73-7	ED
Indeno(1,2,3-cd)pyrene	43.0J	ug/kg	57.0	10.8	5	03/11/22 08:24	03/14/22 12:47	193-39-5	ED
Naphthalene	70.0	ug/kg	57.0	11.0	5	03/11/22 08:24	03/14/22 12:47	91-20-3	ED
Phenanthrene	114	ug/kg	57.0	5.0	5	03/11/22 08:24	03/14/22 12:47	85-01-8	ED
Pyrene	139	ug/kg	57.0	6.4	5	03/11/22 08:24	03/14/22 12:47	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	82	%	37-88		5	03/11/22 08:24	03/14/22 12:47	321-60-8	
Terphenyl-d14 (S)	91	%	10-128		5	03/11/22 08:24	03/14/22 12:47	1718-51-0	
Percent Moisture									
Analytical Method: SM 2540G-2015									
Pace Analytical Services - Greensburg									
Percent Moisture	42.8	%	0.10	0.10	1		03/12/22 11:30		

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-54 **Lab ID: 30471709008** Collected: 03/08/22 09:30 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	6.7J	mg/kg	7.8	0.86	1	03/15/22 06:39	03/15/22 15:05	7440-38-2	
Barium	102	mg/kg	7.8	0.89	1	03/15/22 06:39	03/15/22 15:05	7440-39-3	
Cadmium	0.37J	mg/kg	1.6	0.19	1	03/15/22 06:39	03/15/22 15:05	7440-43-9	
Chromium	13.8	mg/kg	7.8	0.91	1	03/15/22 06:39	03/15/22 15:05	7440-47-3	
Lead	20.7	mg/kg	7.8	0.75	1	03/15/22 06:39	03/15/22 15:05	7439-92-1	
Selenium	1.8J	mg/kg	7.8	1.7	1	03/15/22 06:39	03/15/22 15:05	7782-49-2	
Silver	<0.66	mg/kg	3.9	0.66	1	03/15/22 06:39	03/15/22 15:05	7440-22-4	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.093J	mg/kg	0.16	0.015	1	03/15/22 15:30	03/16/22 12:45	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<4.6	ug/kg	50.6	4.6	5	03/11/22 08:24	03/14/22 13:14	83-32-9	ED
Acenaphthylene	<3.6	ug/kg	50.6	3.6	5	03/11/22 08:24	03/14/22 13:14	208-96-8	ED
Anthracene	8.9J	ug/kg	50.6	4.6	5	03/11/22 08:24	03/14/22 13:14	120-12-7	ED
Benzo(a)anthracene	58.0	ug/kg	50.6	5.9	5	03/11/22 08:24	03/14/22 13:14	56-55-3	ED
Benzo(a)pyrene	46.0J	ug/kg	50.6	3.2	5	03/11/22 08:24	03/14/22 13:14	50-32-8	ED
Benzo(b)fluoranthene	103	ug/kg	50.6	6.1	5	03/11/22 08:24	03/14/22 13:14	205-99-2	ED,lp
Benzo(g,h,i)perylene	30.2J	ug/kg	50.6	7.6	5	03/11/22 08:24	03/14/22 13:14	191-24-2	ED
Benzo(k)fluoranthene	104	ug/kg	50.6	8.5	5	03/11/22 08:24	03/14/22 13:14	207-08-9	ED,lp
Chrysene	68.7	ug/kg	50.6	2.6	5	03/11/22 08:24	03/14/22 13:14	218-01-9	ED
Dibenz(a,h)anthracene	<11.2	ug/kg	50.6	11.2	5	03/11/22 08:24	03/14/22 13:14	53-70-3	ED
Fluoranthene	127	ug/kg	50.6	3.8	5	03/11/22 08:24	03/14/22 13:14	206-44-0	ED
Fluorene	<4.7	ug/kg	50.6	4.7	5	03/11/22 08:24	03/14/22 13:14	86-73-7	ED
Indeno(1,2,3-cd)pyrene	25.3J	ug/kg	50.6	9.6	5	03/11/22 08:24	03/14/22 13:14	193-39-5	ED
Naphthalene	29.7J	ug/kg	50.6	9.8	5	03/11/22 08:24	03/14/22 13:14	91-20-3	ED
Phenanthrene	71.2	ug/kg	50.6	4.5	5	03/11/22 08:24	03/14/22 13:14	85-01-8	ED
Pyrene	99.6	ug/kg	50.6	5.7	5	03/11/22 08:24	03/14/22 13:14	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	85	%.	37-88		5	03/11/22 08:24	03/14/22 13:14	321-60-8	
Terphenyl-d14 (S)	91	%.	10-128		5	03/11/22 08:24	03/14/22 13:14	1718-51-0	
Percent Moisture									
Analytical Method: SM 2540G-2015									
Pace Analytical Services - Greensburg									
Percent Moisture	36.0	%	0.10	0.10	1		03/12/22 11:30		

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-55 **Lab ID: 30471709009** Collected: 03/08/22 09:40 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	7.2J	mg/kg	9.5	1.0	1	03/15/22 06:39	03/15/22 15:07	7440-38-2	
Barium	138	mg/kg	9.5	1.1	1	03/15/22 06:39	03/15/22 15:07	7440-39-3	
Cadmium	0.31J	mg/kg	1.9	0.23	1	03/15/22 06:39	03/15/22 15:07	7440-43-9	
Chromium	23.3	mg/kg	9.5	1.1	1	03/15/22 06:39	03/15/22 15:07	7440-47-3	
Lead	24.9	mg/kg	9.5	0.91	1	03/15/22 06:39	03/15/22 15:07	7439-92-1	
Selenium	2.9J	mg/kg	9.5	2.0	1	03/15/22 06:39	03/15/22 15:07	7782-49-2	
Silver	<0.80	mg/kg	4.7	0.80	1	03/15/22 06:39	03/15/22 15:07	7440-22-4	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.096J	mg/kg	0.18	0.017	1	03/15/22 15:30	03/16/22 12:47	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<5.5	ug/kg	61.0	5.5	5	03/11/22 08:24	03/14/22 13:41	83-32-9	ED
Acenaphthylene	<4.4	ug/kg	61.0	4.4	5	03/11/22 08:24	03/14/22 13:41	208-96-8	ED
Anthracene	16.3J	ug/kg	61.0	5.5	5	03/11/22 08:24	03/14/22 13:41	120-12-7	ED
Benzo(a)anthracene	97.9	ug/kg	61.0	7.2	5	03/11/22 08:24	03/14/22 13:41	56-55-3	ED
Benzo(a)pyrene	76.2	ug/kg	61.0	3.8	5	03/11/22 08:24	03/14/22 13:41	50-32-8	ED
Benzo(b)fluoranthene	167	ug/kg	61.0	7.3	5	03/11/22 08:24	03/14/22 13:41	205-99-2	ED,lp
Benzo(g,h,i)perylene	<9.2	ug/kg	61.0	9.2	5	03/11/22 08:24	03/14/22 13:41	191-24-2	ED
Benzo(k)fluoranthene	168	ug/kg	61.0	10.2	5	03/11/22 08:24	03/14/22 13:41	207-08-9	ED,lp
Chrysene	108	ug/kg	61.0	3.2	5	03/11/22 08:24	03/14/22 13:41	218-01-9	ED
Dibenz(a,h)anthracene	<13.5	ug/kg	61.0	13.5	5	03/11/22 08:24	03/14/22 13:41	53-70-3	ED
Fluoranthene	210	ug/kg	61.0	4.6	5	03/11/22 08:24	03/14/22 13:41	206-44-0	ED
Fluorene	<5.6	ug/kg	61.0	5.6	5	03/11/22 08:24	03/14/22 13:41	86-73-7	ED
Indeno(1,2,3-cd)pyrene	42.2J	ug/kg	61.0	11.6	5	03/11/22 08:24	03/14/22 13:41	193-39-5	ED
Naphthalene	46.4J	ug/kg	61.0	11.8	5	03/11/22 08:24	03/14/22 13:41	91-20-3	ED
Phenanthrene	133	ug/kg	61.0	5.4	5	03/11/22 08:24	03/14/22 13:41	85-01-8	ED
Pyrene	168	ug/kg	61.0	6.8	5	03/11/22 08:24	03/14/22 13:41	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	84	%	37-88		5	03/11/22 08:24	03/14/22 13:41	321-60-8	
Terphenyl-d14 (S)	92	%	10-128		5	03/11/22 08:24	03/14/22 13:41	1718-51-0	
Percent Moisture									
Analytical Method: SM 2540G-2015									
Pace Analytical Services - Greensburg									
Percent Moisture	46.7	%	0.10	0.10	1		03/12/22 11:30		

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Sample: SS-56 **Lab ID: 30471709010** Collected: 03/08/22 09:45 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B									
Analytical Method: EPA 6010D Preparation Method: EPA 3050B									
Pace Analytical Services - Beaver									
Arsenic	8.7J	mg/kg	8.7	0.96	1	03/15/22 06:39	03/15/22 15:10	7440-38-2	
Barium	155	mg/kg	8.7	1.0	1	03/15/22 06:39	03/15/22 15:10	7440-39-3	
Cadmium	0.32J	mg/kg	1.7	0.21	1	03/15/22 06:39	03/15/22 15:10	7440-43-9	
Chromium	27.4	mg/kg	8.7	1.0	1	03/15/22 06:39	03/15/22 15:10	7440-47-3	
Lead	31.0	mg/kg	8.7	0.84	1	03/15/22 06:39	03/15/22 15:10	7439-92-1	
Selenium	3.0J	mg/kg	8.7	1.8	1	03/15/22 06:39	03/15/22 15:10	7782-49-2	
Silver	<0.74	mg/kg	4.4	0.74	1	03/15/22 06:39	03/15/22 15:10	7440-22-4	
BVR 7471B Mercury									
Analytical Method: EPA 7471B Preparation Method: EPA 7471B									
Pace Analytical Services - Beaver									
Mercury	0.084J	mg/kg	0.17	0.016	1	03/15/22 15:30	03/16/22 12:49	7439-97-6	
8270E MSSV PAH by SIM									
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546									
Pace Analytical Services - Greensburg									
Acenaphthene	<5.2	ug/kg	57.6	5.2	5	03/11/22 08:24	03/14/22 14:08	83-32-9	ED
Acenaphthylene	<4.1	ug/kg	57.6	4.1	5	03/11/22 08:24	03/14/22 14:08	208-96-8	ED
Anthracene	13.0J	ug/kg	57.6	5.2	5	03/11/22 08:24	03/14/22 14:08	120-12-7	ED
Benzo(a)anthracene	87.5	ug/kg	57.6	6.8	5	03/11/22 08:24	03/14/22 14:08	56-55-3	ED
Benzo(a)pyrene	65.1	ug/kg	57.6	3.6	5	03/11/22 08:24	03/14/22 14:08	50-32-8	ED
Benzo(b)fluoranthene	161	ug/kg	57.6	6.9	5	03/11/22 08:24	03/14/22 14:08	205-99-2	ED,lp
Benzo(g,h,i)perylene	<8.7	ug/kg	57.6	8.7	5	03/11/22 08:24	03/14/22 14:08	191-24-2	ED
Benzo(k)fluoranthene	163	ug/kg	57.6	9.7	5	03/11/22 08:24	03/14/22 14:08	207-08-9	ED,lp
Chrysene	99.1	ug/kg	57.6	3.0	5	03/11/22 08:24	03/14/22 14:08	218-01-9	ED
Dibenz(a,h)anthracene	<12.8	ug/kg	57.6	12.8	5	03/11/22 08:24	03/14/22 14:08	53-70-3	ED
Fluoranthene	192	ug/kg	57.6	4.4	5	03/11/22 08:24	03/14/22 14:08	206-44-0	ED
Fluorene	<5.3	ug/kg	57.6	5.3	5	03/11/22 08:24	03/14/22 14:08	86-73-7	ED
Indeno(1,2,3-cd)pyrene	39.5J	ug/kg	57.6	11.0	5	03/11/22 08:24	03/14/22 14:08	193-39-5	ED
Naphthalene	30.7J	ug/kg	57.6	11.2	5	03/11/22 08:24	03/14/22 14:08	91-20-3	ED
Phenanthrene	103	ug/kg	57.6	5.1	5	03/11/22 08:24	03/14/22 14:08	85-01-8	ED
Pyrene	147	ug/kg	57.6	6.5	5	03/11/22 08:24	03/14/22 14:08	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	85	%.	37-88		5	03/11/22 08:24	03/14/22 14:08	321-60-8	
Terphenyl-d14 (S)	95	%.	10-128		5	03/11/22 08:24	03/14/22 14:08	1718-51-0	
8260C MSV 5035 Low Level									
Analytical Method: EPA 8260C Preparation Method: EPA 5035A									
Pace Analytical Services - Greensburg									
Naphthalene	<1.7	ug/kg	9.2	1.7	1	03/17/22 11:29	03/17/22 14:24	91-20-3	1c
Surrogates									
Toluene-d8 (S)	104	%.	70-130		1	03/17/22 11:29	03/17/22 14:24	2037-26-5	
4-Bromofluorobenzene (S)	105	%.	70-130		1	03/17/22 11:29	03/17/22 14:24	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%.	70-130		1	03/17/22 11:29	03/17/22 14:24	17060-07-0	
Dibromofluoromethane (S)	101	%.	70-130		1	03/17/22 11:29	03/17/22 14:24	1868-53-7	

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Sample: SS-56 **Lab ID: 30471709010** Collected: 03/08/22 09:45 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg								
Percent Moisture	42.8	%	0.10	0.10	1		03/12/22 11:30		

Sample: SS-57 **Lab ID: 30471709011** Collected: 03/08/22 09:50 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver								
Arsenic	9.0	mg/kg	7.9	0.87	1	03/15/22 06:39	03/15/22 15:12	7440-38-2	
Barium	73.1	mg/kg	7.9	0.90	1	03/15/22 06:39	03/15/22 15:12	7440-39-3	
Cadmium	<0.19	mg/kg	1.6	0.19	1	03/15/22 06:39	03/15/22 15:12	7440-43-9	
Chromium	18.1	mg/kg	7.9	0.92	1	03/15/22 06:39	03/15/22 15:12	7440-47-3	
Lead	39.9	mg/kg	7.9	0.76	1	03/15/22 06:39	03/15/22 15:12	7439-92-1	
Selenium	1.9J	mg/kg	7.9	1.7	1	03/15/22 06:39	03/15/22 15:12	7782-49-2	
Silver	<0.67	mg/kg	3.9	0.67	1	03/15/22 06:39	03/15/22 15:12	7440-22-4	

BVR 7471B Mercury Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.11J	mg/kg	0.15	0.014	1	03/15/22 15:30	03/16/22 12:54	7439-97-6	B
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8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<4.7	ug/kg	51.8	4.7	5	03/11/22 08:24	03/14/22 14:35	83-32-9	ED
Acenaphthylene	<3.7	ug/kg	51.8	3.7	5	03/11/22 08:24	03/14/22 14:35	208-96-8	ED
Anthracene	5.4J	ug/kg	51.8	4.7	5	03/11/22 08:24	03/14/22 14:35	120-12-7	ED
Benzo(a)anthracene	44.7J	ug/kg	51.8	6.1	5	03/11/22 08:24	03/14/22 14:35	56-55-3	ED
Benzo(a)pyrene	36.3J	ug/kg	51.8	3.2	5	03/11/22 08:24	03/14/22 14:35	50-32-8	ED
Benzo(b)fluoranthene	103	ug/kg	51.8	6.2	5	03/11/22 08:24	03/14/22 14:35	205-99-2	ED,lp
Benzo(g,h,i)perylene	25.0J	ug/kg	51.8	7.8	5	03/11/22 08:24	03/14/22 14:35	191-24-2	ED
Benzo(k)fluoranthene	104	ug/kg	51.8	8.7	5	03/11/22 08:24	03/14/22 14:35	207-08-9	ED,lp
Chrysene	72.9	ug/kg	51.8	2.7	5	03/11/22 08:24	03/14/22 14:35	218-01-9	ED
Dibenz(a,h)anthracene	<11.5	ug/kg	51.8	11.5	5	03/11/22 08:24	03/14/22 14:35	53-70-3	ED
Fluoranthene	122	ug/kg	51.8	3.9	5	03/11/22 08:24	03/14/22 14:35	206-44-0	ED
Fluorene	10.2J	ug/kg	51.8	4.8	5	03/11/22 08:24	03/14/22 14:35	86-73-7	ED
Indeno(1,2,3-cd)pyrene	22.8J	ug/kg	51.8	9.9	5	03/11/22 08:24	03/14/22 14:35	193-39-5	ED
Naphthalene	141	ug/kg	51.8	10.0	5	03/11/22 08:24	03/14/22 14:35	91-20-3	ED
Phenanthrene	118	ug/kg	51.8	4.6	5	03/11/22 08:24	03/14/22 14:35	85-01-8	ED
Pyrene	86.5	ug/kg	51.8	5.8	5	03/11/22 08:24	03/14/22 14:35	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	77	%	37-88		5	03/11/22 08:24	03/14/22 14:35	321-60-8	
Terphenyl-d14 (S)	79	%	10-128		5	03/11/22 08:24	03/14/22 14:35	1718-51-0	

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-57 **Lab ID: 30471709011** Collected: 03/08/22 09:50 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg									
Percent Moisture	36.5	%	0.10	0.10	1		03/12/22 11:30		

Sample: SS-58 **Lab ID: 30471709012** Collected: 03/08/22 10:30 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	9.6	mg/kg	8.1	0.89	1	03/15/22 06:39	03/15/22 15:14	7440-38-2	
Barium	92.9	mg/kg	8.1	0.92	1	03/15/22 06:39	03/15/22 15:14	7440-39-3	
Cadmium	<0.19	mg/kg	1.6	0.19	1	03/15/22 06:39	03/15/22 15:14	7440-43-9	
Chromium	22.6	mg/kg	8.1	0.94	1	03/15/22 06:39	03/15/22 15:14	7440-47-3	
Lead	43.7	mg/kg	8.1	0.78	1	03/15/22 06:39	03/15/22 15:14	7439-92-1	
Selenium	2.0J	mg/kg	8.1	1.7	1	03/15/22 06:39	03/15/22 15:14	7782-49-2	
Silver	<0.68	mg/kg	4.0	0.68	1	03/15/22 06:39	03/15/22 15:14	7440-22-4	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.090J	mg/kg	0.16	0.015	1	03/15/22 15:30	03/16/22 12:55	7439-97-6	
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8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	34.8J	ug/kg	106	9.6	10	03/11/22 08:24	03/14/22 15:02	83-32-9	ED
Acenaphthylene	68.7J	ug/kg	106	7.6	10	03/11/22 08:24	03/14/22 15:02	208-96-8	ED
Anthracene	383	ug/kg	106	9.6	10	03/11/22 08:24	03/14/22 15:02	120-12-7	ED
Benzo(a)anthracene	1610	ug/kg	106	12.4	10	03/11/22 08:24	03/14/22 15:02	56-55-3	ED
Benzo(a)pyrene	1100	ug/kg	106	6.6	10	03/11/22 08:24	03/14/22 15:02	50-32-8	ED
Benzo(b)fluoranthene	2350	ug/kg	106	12.7	10	03/11/22 08:24	03/14/22 15:02	205-99-2	ED,lp
Benzo(g,h,i)perylene	560	ug/kg	106	16.0	10	03/11/22 08:24	03/14/22 15:02	191-24-2	ED
Benzo(k)fluoranthene	2370	ug/kg	106	17.8	10	03/11/22 08:24	03/14/22 15:02	207-08-9	ED,lp
Chrysene	1600	ug/kg	106	5.5	10	03/11/22 08:24	03/14/22 15:02	218-01-9	ED
Dibenz(a,h)anthracene	189	ug/kg	106	23.5	10	03/11/22 08:24	03/14/22 15:02	53-70-3	ED
Fluoranthene	3720	ug/kg	106	8.0	10	03/11/22 08:24	03/14/22 15:02	206-44-0	ED
Fluorene	58.7J	ug/kg	106	9.8	10	03/11/22 08:24	03/14/22 15:02	86-73-7	ED
Indeno(1,2,3-cd)pyrene	608	ug/kg	106	20.1	10	03/11/22 08:24	03/14/22 15:02	193-39-5	ED
Naphthalene	64.1J	ug/kg	106	20.5	10	03/11/22 08:24	03/14/22 15:02	91-20-3	ED
Phenanthrene	2430	ug/kg	106	9.3	10	03/11/22 08:24	03/14/22 15:02	85-01-8	ED
Pyrene	2740	ug/kg	106	11.9	10	03/11/22 08:24	03/14/22 15:02	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	88	%.	37-88		10	03/11/22 08:24	03/14/22 15:02	321-60-8	
Terphenyl-d14 (S)	96	%.	10-128		10	03/11/22 08:24	03/14/22 15:02	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Sample: SS-59 **Lab ID: 30471709012** Collected: 03/08/22 10:30 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg								
Percent Moisture	37.5	%	0.10	0.10	1		03/12/22 11:30		

Sample: SS-59 **Lab ID: 30471709013** Collected: 03/08/22 10:35 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver								
Arsenic	16.6	mg/kg	8.3	0.91	1	03/15/22 06:39	03/15/22 15:17	7440-38-2	
Barium	215	mg/kg	8.3	0.95	1	03/15/22 06:39	03/15/22 15:17	7440-39-3	
Cadmium	0.44J	mg/kg	1.7	0.20	1	03/15/22 06:39	03/15/22 15:17	7440-43-9	
Chromium	40.6	mg/kg	8.3	0.96	1	03/15/22 06:39	03/15/22 15:17	7440-47-3	
Lead	62.3	mg/kg	8.3	0.80	1	03/15/22 06:39	03/15/22 15:17	7439-92-1	
Selenium	4.5J	mg/kg	8.3	1.8	1	03/15/22 06:39	03/15/22 15:17	7782-49-2	
Silver	<0.70	mg/kg	4.1	0.70	1	03/15/22 06:39	03/15/22 15:17	7440-22-4	

BVR 7471B Mercury Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.11J	mg/kg	0.16	0.015	1	03/15/22 15:30	03/16/22 12:57	7439-97-6	
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8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<4.9	ug/kg	53.7	4.9	5	03/11/22 08:24	03/14/22 15:26	83-32-9	ED
Acenaphthylene	<3.8	ug/kg	53.7	3.8	5	03/11/22 08:24	03/14/22 15:26	208-96-8	ED
Anthracene	7.4J	ug/kg	53.7	4.9	5	03/11/22 08:24	03/14/22 15:26	120-12-7	ED
Benzo(a)anthracene	42.2J	ug/kg	53.7	6.3	5	03/11/22 08:24	03/14/22 15:26	56-55-3	ED
Benzo(a)pyrene	37.7J	ug/kg	53.7	3.4	5	03/11/22 08:24	03/14/22 15:26	50-32-8	ED
Benzo(b)fluoranthene	88.8	ug/kg	53.7	6.4	5	03/11/22 08:24	03/14/22 15:26	205-99-2	ED,lp
Benzo(g,h,i)perylene	<8.1	ug/kg	53.7	8.1	5	03/11/22 08:24	03/14/22 15:26	191-24-2	ED
Benzo(k)fluoranthene	89.6	ug/kg	53.7	9.0	5	03/11/22 08:24	03/14/22 15:26	207-08-9	ED,lp
Chrysene	56.5	ug/kg	53.7	2.8	5	03/11/22 08:24	03/14/22 15:26	218-01-9	ED
Dibenz(a,h)anthracene	<11.9	ug/kg	53.7	11.9	5	03/11/22 08:24	03/14/22 15:26	53-70-3	ED
Fluoranthene	94.2	ug/kg	53.7	4.1	5	03/11/22 08:24	03/14/22 15:26	206-44-0	ED
Fluorene	<5.0	ug/kg	53.7	5.0	5	03/11/22 08:24	03/14/22 15:26	86-73-7	ED
Indeno(1,2,3-cd)pyrene	<10.2	ug/kg	53.7	10.2	5	03/11/22 08:24	03/14/22 15:26	193-39-5	ED
Naphthalene	45.4J	ug/kg	53.7	10.4	5	03/11/22 08:24	03/14/22 15:26	91-20-3	ED
Phenanthrene	70.9	ug/kg	53.7	4.7	5	03/11/22 08:24	03/14/22 15:26	85-01-8	ED
Pyrene	76.1	ug/kg	53.7	6.0	5	03/11/22 08:24	03/14/22 15:26	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	86	%	37-88		5	03/11/22 08:24	03/14/22 15:26	321-60-8	
Terphenyl-d14 (S)	94	%	10-128		5	03/11/22 08:24	03/14/22 15:26	1718-51-0	

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Sample: SS-59 **Lab ID: 30471709013** Collected: 03/08/22 10:35 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg								
Percent Moisture	37.8	%	0.10	0.10	1		03/12/22 11:30		

Sample: SS-60 **Lab ID: 30471709014** Collected: 03/08/22 10:45 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver								
Arsenic	16.2	mg/kg	7.7	0.85	1	03/15/22 06:39	03/15/22 15:24	7440-38-2	
Barium	46.5	mg/kg	7.7	0.88	1	03/15/22 06:39	03/15/22 15:24	7440-39-3	
Cadmium	<0.19	mg/kg	1.5	0.19	1	03/15/22 06:39	03/15/22 15:24	7440-43-9	
Chromium	21.0	mg/kg	7.7	0.90	1	03/15/22 06:39	03/15/22 15:24	7440-47-3	
Lead	60.7	mg/kg	7.7	0.74	1	03/15/22 06:39	03/15/22 15:24	7439-92-1	
Selenium	2.7J	mg/kg	7.7	1.6	1	03/15/22 06:39	03/15/22 15:24	7782-49-2	
Silver	<0.65	mg/kg	3.8	0.65	1	03/15/22 06:39	03/15/22 15:24	7440-22-4	

BVR 7471B Mercury Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.11J	mg/kg	0.15	0.014	1	03/15/22 15:30	03/16/22 12:59	7439-97-6	B
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8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<44.7	ug/kg	494	44.7	50	03/11/22 08:24	03/14/22 15:46	83-32-9	ED
Acenaphthylene	311J	ug/kg	494	35.4	50	03/11/22 08:24	03/14/22 15:46	208-96-8	ED
Anthracene	397J	ug/kg	494	44.8	50	03/11/22 08:24	03/14/22 15:46	120-12-7	ED
Benzo(a)anthracene	2210	ug/kg	494	58.0	50	03/11/22 08:24	03/14/22 15:46	56-55-3	ED
Benzo(a)pyrene	1510	ug/kg	494	30.9	50	03/11/22 08:24	03/14/22 15:46	50-32-8	ED
Benzo(b)fluoranthene	4180	ug/kg	494	59.2	50	03/11/22 08:24	03/14/22 15:46	205-99-2	ED,lp
Benzo(g,h,i)perylene	771	ug/kg	494	74.5	50	03/11/22 08:24	03/14/22 15:46	191-24-2	ED
Benzo(k)fluoranthene	4220	ug/kg	494	82.9	50	03/11/22 08:24	03/14/22 15:46	207-08-9	ED,lp
Chrysene	2490	ug/kg	494	25.5	50	03/11/22 08:24	03/14/22 15:46	218-01-9	ED
Dibenz(a,h)anthracene	303J	ug/kg	494	110	50	03/11/22 08:24	03/14/22 15:46	53-70-3	ED
Fluoranthene	4560	ug/kg	494	37.5	50	03/11/22 08:24	03/14/22 15:46	206-44-0	ED
Fluorene	<45.8	ug/kg	494	45.8	50	03/11/22 08:24	03/14/22 15:46	86-73-7	ED
Indeno(1,2,3-cd)pyrene	856	ug/kg	494	94.0	50	03/11/22 08:24	03/14/22 15:46	193-39-5	ED
Naphthalene	273J	ug/kg	494	95.7	50	03/11/22 08:24	03/14/22 15:46	91-20-3	ED
Phenanthrene	2200	ug/kg	494	43.6	50	03/11/22 08:24	03/14/22 15:46	85-01-8	ED
Pyrene	3460	ug/kg	494	55.5	50	03/11/22 08:24	03/14/22 15:46	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	136	%	37-88		50	03/11/22 08:24	03/14/22 15:46	321-60-8	S4
Terphenyl-d14 (S)	146	%	10-128		50	03/11/22 08:24	03/14/22 15:46	1718-51-0	S4

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Sample: SS-60 **Lab ID: 30471709014** Collected: 03/08/22 10:45 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg								
Percent Moisture	33.7	%	0.10	0.10	1		03/12/22 11:30		

Sample: SS-60-FD **Lab ID: 30471709015** Collected: 03/08/22 10:45 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver								
Arsenic	13.5	mg/kg	7.8	0.86	1	03/15/22 06:39	03/15/22 15:26	7440-38-2	
Barium	43.9	mg/kg	7.8	0.89	1	03/15/22 06:39	03/15/22 15:26	7440-39-3	
Cadmium	<0.19	mg/kg	1.6	0.19	1	03/15/22 06:39	03/15/22 15:26	7440-43-9	
Chromium	19.7	mg/kg	7.8	0.91	1	03/15/22 06:39	03/15/22 15:26	7440-47-3	
Lead	58.3	mg/kg	7.8	0.76	1	03/15/22 06:39	03/15/22 15:26	7439-92-1	
Selenium	3.1J	mg/kg	7.8	1.7	1	03/15/22 06:39	03/15/22 15:26	7782-49-2	
Silver	<0.66	mg/kg	3.9	0.66	1	03/15/22 06:39	03/15/22 15:26	7440-22-4	

BVR 7471B Mercury Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.10J	mg/kg	0.15	0.014	1	03/15/22 15:30	03/16/22 13:00	7439-97-6	B
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8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	122J	ug/kg	513	46.4	50	03/11/22 08:24	03/14/22 16:06	83-32-9	ED
Acenaphthylene	362J	ug/kg	513	36.7	50	03/11/22 08:24	03/14/22 16:06	208-96-8	ED
Anthracene	1060	ug/kg	513	46.5	50	03/11/22 08:24	03/14/22 16:06	120-12-7	ED
Benzo(a)anthracene	3480	ug/kg	513	60.3	50	03/11/22 08:24	03/14/22 16:06	56-55-3	ED
Benzo(a)pyrene	2210	ug/kg	513	32.1	50	03/11/22 08:24	03/14/22 16:06	50-32-8	ED
Benzo(b)fluoranthene	5660	ug/kg	513	61.5	50	03/11/22 08:24	03/14/22 16:06	205-99-2	ED,lp
Benzo(g,h,i)perylene	1050	ug/kg	513	77.4	50	03/11/22 08:24	03/14/22 16:06	191-24-2	ED
Benzo(k)fluoranthene	5710	ug/kg	513	86.1	50	03/11/22 08:24	03/14/22 16:06	207-08-9	ED,lp
Chrysene	3730	ug/kg	513	26.5	50	03/11/22 08:24	03/14/22 16:06	218-01-9	ED
Dibenz(a,h)anthracene	419J	ug/kg	513	114	50	03/11/22 08:24	03/14/22 16:06	53-70-3	ED
Fluoranthene	8140	ug/kg	513	38.9	50	03/11/22 08:24	03/14/22 16:06	206-44-0	ED
Fluorene	270J	ug/kg	513	47.5	50	03/11/22 08:24	03/14/22 16:06	86-73-7	ED
Indeno(1,2,3-cd)pyrene	1160	ug/kg	513	97.7	50	03/11/22 08:24	03/14/22 16:06	193-39-5	ED
Naphthalene	315J	ug/kg	513	99.4	50	03/11/22 08:24	03/14/22 16:06	91-20-3	ED
Phenanthrene	6310	ug/kg	513	45.2	50	03/11/22 08:24	03/14/22 16:06	85-01-8	ED
Pyrene	5940	ug/kg	513	57.7	50	03/11/22 08:24	03/14/22 16:06	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	100	%	37-88		50	03/11/22 08:24	03/14/22 16:06	321-60-8	S4
Terphenyl-d14 (S)	96	%	10-128		50	03/11/22 08:24	03/14/22 16:06	1718-51-0	

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Sample: SS-60-FD **Lab ID: 30471709015** Collected: 03/08/22 10:45 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg									
Percent Moisture	34.9	%	0.10	0.10	1		03/12/22 11:35		

Sample: SS-61 **Lab ID: 30471709016** Collected: 03/08/22 11:00 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	11.2	mg/kg	6.6	0.73	1	03/15/22 06:39	03/15/22 15:28	7440-38-2	
Barium	245	mg/kg	6.6	0.76	1	03/15/22 06:39	03/15/22 15:28	7440-39-3	
Cadmium	<0.16	mg/kg	1.3	0.16	1	03/15/22 06:39	03/15/22 15:28	7440-43-9	
Chromium	29.6	mg/kg	6.6	0.77	1	03/15/22 06:39	03/15/22 15:28	7440-47-3	
Lead	24.1	mg/kg	6.6	0.64	1	03/15/22 06:39	03/15/22 15:28	7439-92-1	
Selenium	3.1J	mg/kg	6.6	1.4	1	03/15/22 06:39	03/15/22 15:28	7782-49-2	
Silver	<0.56	mg/kg	3.3	0.56	1	03/15/22 06:39	03/15/22 15:28	7440-22-4	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.078J	mg/kg	0.13	0.012	1	03/15/22 15:30	03/16/22 13:02	7439-97-6	B
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8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<3.9	ug/kg	43.5	3.9	5	03/11/22 08:24	03/14/22 16:25	83-32-9	ED
Acenaphthylene	<3.1	ug/kg	43.5	3.1	5	03/11/22 08:24	03/14/22 16:25	208-96-8	ED
Anthracene	<3.9	ug/kg	43.5	3.9	5	03/11/22 08:24	03/14/22 16:25	120-12-7	ED
Benzo(a)anthracene	<5.1	ug/kg	43.5	5.1	5	03/11/22 08:24	03/14/22 16:25	56-55-3	ED
Benzo(a)pyrene	<2.7	ug/kg	43.5	2.7	5	03/11/22 08:24	03/14/22 16:25	50-32-8	ED
Benzo(b)fluoranthene	8.6J	ug/kg	43.5	5.2	5	03/11/22 08:24	03/14/22 16:25	205-99-2	ED,lp
Benzo(g,h,i)perylene	<6.6	ug/kg	43.5	6.6	5	03/11/22 08:24	03/14/22 16:25	191-24-2	ED
Benzo(k)fluoranthene	8.7J	ug/kg	43.5	7.3	5	03/11/22 08:24	03/14/22 16:25	207-08-9	ED,lp
Chrysene	<2.2	ug/kg	43.5	2.2	5	03/11/22 08:24	03/14/22 16:25	218-01-9	ED
Dibenz(a,h)anthracene	<9.7	ug/kg	43.5	9.7	5	03/11/22 08:24	03/14/22 16:25	53-70-3	ED
Fluoranthene	<3.3	ug/kg	43.5	3.3	5	03/11/22 08:24	03/14/22 16:25	206-44-0	ED
Fluorene	<4.0	ug/kg	43.5	4.0	5	03/11/22 08:24	03/14/22 16:25	86-73-7	ED
Indeno(1,2,3-cd)pyrene	<8.3	ug/kg	43.5	8.3	5	03/11/22 08:24	03/14/22 16:25	193-39-5	ED
Naphthalene	<8.4	ug/kg	43.5	8.4	5	03/11/22 08:24	03/14/22 16:25	91-20-3	ED
Phenanthrene	<3.8	ug/kg	43.5	3.8	5	03/11/22 08:24	03/14/22 16:25	85-01-8	ED
Pyrene	<4.9	ug/kg	43.5	4.9	5	03/11/22 08:24	03/14/22 16:25	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	83	%	37-88		5	03/11/22 08:24	03/14/22 16:25	321-60-8	
Terphenyl-d14 (S)	90	%	10-128		5	03/11/22 08:24	03/14/22 16:25	1718-51-0	

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Sample: SS-61 **Lab ID: 30471709016** Collected: 03/08/22 11:00 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg									
Percent Moisture	23.9	%	0.10	0.10	1		03/12/22 11:35		

Sample: SS-62 **Lab ID: 30471709017** Collected: 03/08/22 11:05 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	14.8	mg/kg	6.9	0.76	1	03/18/22 13:00	03/23/22 12:23	7440-38-2	
Barium	47.4	mg/kg	6.9	0.79	1	03/18/22 13:00	03/23/22 12:23	7440-39-3	
Cadmium	<0.17	mg/kg	1.4	0.17	1	03/18/22 13:00	03/23/22 12:23	7440-43-9	
Chromium	23.0	mg/kg	6.9	0.80	1	03/18/22 13:00	03/23/22 12:23	7440-47-3	
Lead	38.3	mg/kg	6.9	0.67	1	03/18/22 13:00	03/23/22 12:23	7439-92-1	
Selenium	2.8J	mg/kg	6.9	1.5	1	03/18/22 13:00	03/23/22 12:23	7782-49-2	
Silver	<0.58	mg/kg	3.4	0.58	1	03/18/22 13:00	03/23/22 12:23	7440-22-4	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.075J	mg/kg	0.13	0.013	1	03/25/22 17:30	03/28/22 15:46	7439-97-6	B,L1
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8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<4.0	ug/kg	44.7	4.0	5	03/11/22 08:24	03/14/22 16:45	83-32-9	ED
Acenaphthylene	7.8J	ug/kg	44.7	3.2	5	03/11/22 08:24	03/14/22 16:45	208-96-8	ED
Anthracene	6.8J	ug/kg	44.7	4.1	5	03/11/22 08:24	03/14/22 16:45	120-12-7	ED
Benzo(a)anthracene	36.6J	ug/kg	44.7	5.3	5	03/11/22 08:24	03/14/22 16:45	56-55-3	ED
Benzo(a)pyrene	25.1J	ug/kg	44.7	2.8	5	03/11/22 08:24	03/14/22 16:45	50-32-8	ED
Benzo(b)fluoranthene	88.5	ug/kg	44.7	5.4	5	03/11/22 08:24	03/14/22 16:45	205-99-2	ED,lp
Benzo(g,h,i)perylene	<6.7	ug/kg	44.7	6.7	5	03/11/22 08:24	03/14/22 16:45	191-24-2	ED
Benzo(k)fluoranthene	89.3	ug/kg	44.7	7.5	5	03/11/22 08:24	03/14/22 16:45	207-08-9	ED,lp
Chrysene	62.7	ug/kg	44.7	2.3	5	03/11/22 08:24	03/14/22 16:45	218-01-9	ED
Dibenz(a,h)anthracene	<9.9	ug/kg	44.7	9.9	5	03/11/22 08:24	03/14/22 16:45	53-70-3	ED
Fluoranthene	131	ug/kg	44.7	3.4	5	03/11/22 08:24	03/14/22 16:45	206-44-0	ED
Fluorene	<4.1	ug/kg	44.7	4.1	5	03/11/22 08:24	03/14/22 16:45	86-73-7	ED
Indeno(1,2,3-cd)pyrene	<8.5	ug/kg	44.7	8.5	5	03/11/22 08:24	03/14/22 16:45	193-39-5	ED
Naphthalene	152	ug/kg	44.7	8.7	5	03/11/22 08:24	03/14/22 16:45	91-20-3	ED
Phenanthrene	131	ug/kg	44.7	3.9	5	03/11/22 08:24	03/14/22 16:45	85-01-8	ED
Pyrene	79.2	ug/kg	44.7	5.0	5	03/11/22 08:24	03/14/22 16:45	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	72	%	37-88		5	03/11/22 08:24	03/14/22 16:45	321-60-8	
Terphenyl-d14 (S)	66	%	10-128		5	03/11/22 08:24	03/14/22 16:45	1718-51-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Sample: SS-62 **Lab ID: 30471709017** Collected: 03/08/22 11:05 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg									
Percent Moisture	27.5	%	0.10	0.10	1		03/12/22 11:35		

Sample: SS-63 **Lab ID: 30471709018** Collected: 03/08/22 11:10 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	17.1	mg/kg	7.3	0.80	1	03/15/22 06:39	03/15/22 15:31	7440-38-2	
Barium	128	mg/kg	7.3	0.83	1	03/15/22 06:39	03/15/22 15:31	7440-39-3	
Cadmium	0.24J	mg/kg	1.5	0.18	1	03/15/22 06:39	03/15/22 15:31	7440-43-9	
Chromium	29.9	mg/kg	7.3	0.85	1	03/15/22 06:39	03/15/22 15:31	7440-47-3	
Lead	34.0	mg/kg	7.3	0.70	1	03/15/22 06:39	03/15/22 15:31	7439-92-1	
Selenium	3.1J	mg/kg	7.3	1.5	1	03/15/22 06:39	03/15/22 15:31	7782-49-2	
Silver	<0.62	mg/kg	3.6	0.62	1	03/15/22 06:39	03/15/22 15:31	7440-22-4	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.093J	mg/kg	0.14	0.013	1	03/16/22 13:34	03/22/22 16:02	7439-97-6	
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8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<4.3	ug/kg	48.1	4.3	5	03/11/22 08:24	03/14/22 17:05	83-32-9	ED
Acenaphthylene	4.5J	ug/kg	48.1	3.4	5	03/11/22 08:24	03/14/22 17:05	208-96-8	ED
Anthracene	8.0J	ug/kg	48.1	4.4	5	03/11/22 08:24	03/14/22 17:05	120-12-7	ED
Benzo(a)anthracene	81.2	ug/kg	48.1	5.6	5	03/11/22 08:24	03/14/22 17:05	56-55-3	ED
Benzo(a)pyrene	99.5	ug/kg	48.1	3.0	5	03/11/22 08:24	03/14/22 17:05	50-32-8	ED
Benzo(b)fluoranthene	270	ug/kg	48.1	5.8	5	03/11/22 08:24	03/14/22 17:05	205-99-2	ED,lp
Benzo(g,h,i)perylene	66.5	ug/kg	48.1	7.2	5	03/11/22 08:24	03/14/22 17:05	191-24-2	ED
Benzo(k)fluoranthene	272	ug/kg	48.1	8.1	5	03/11/22 08:24	03/14/22 17:05	207-08-9	ED,lp
Chrysene	135	ug/kg	48.1	2.5	5	03/11/22 08:24	03/14/22 17:05	218-01-9	ED
Dibenz(a,h)anthracene	14.8J	ug/kg	48.1	10.7	5	03/11/22 08:24	03/14/22 17:05	53-70-3	ED
Fluoranthene	183	ug/kg	48.1	3.6	5	03/11/22 08:24	03/14/22 17:05	206-44-0	ED
Fluorene	<4.4	ug/kg	48.1	4.4	5	03/11/22 08:24	03/14/22 17:05	86-73-7	ED
Indeno(1,2,3-cd)pyrene	62.8	ug/kg	48.1	9.1	5	03/11/22 08:24	03/14/22 17:05	193-39-5	ED
Naphthalene	68.9	ug/kg	48.1	9.3	5	03/11/22 08:24	03/14/22 17:05	91-20-3	ED
Phenanthrene	90.0	ug/kg	48.1	4.2	5	03/11/22 08:24	03/14/22 17:05	85-01-8	ED
Pyrene	142	ug/kg	48.1	5.4	5	03/11/22 08:24	03/14/22 17:05	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	88	%	37-88		5	03/11/22 08:24	03/14/22 17:05	321-60-8	
Terphenyl-d14 (S)	96	%	10-128		5	03/11/22 08:24	03/14/22 17:05	1718-51-0	

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

Sample: SS-63 **Lab ID: 30471709018** Collected: 03/08/22 11:10 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture	Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg								
Percent Moisture	30.8	%	0.10	0.10	1		03/12/22 11:35		

Sample: SS-64/ss-64-ms/msd **Lab ID: 30471709019** Collected: 03/08/22 11:50 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver								
Arsenic	7.6J	mg/kg	8.1	0.89	1	03/18/22 13:00	03/23/22 12:25	7440-38-2	
Barium	61.2	mg/kg	8.1	0.93	1	03/18/22 13:00	03/23/22 12:25	7440-39-3	
Cadmium	<0.20	mg/kg	1.6	0.20	1	03/18/22 13:00	03/23/22 12:25	7440-43-9	
Chromium	18.1	mg/kg	8.1	0.95	1	03/18/22 13:00	03/23/22 12:25	7440-47-3	
Lead	47.0	mg/kg	8.1	0.78	1	03/18/22 13:00	03/23/22 12:25	7439-92-1	
Selenium	2.4J	mg/kg	8.1	1.7	1	03/18/22 13:00	03/23/22 12:25	7782-49-2	
Silver	<0.69	mg/kg	4.1	0.69	1	03/18/22 13:00	03/23/22 12:25	7440-22-4	
BVR 7471B Mercury	Analytical Method: EPA 7471B Preparation Method: EPA 7471B Pace Analytical Services - Beaver								
Mercury	0.091J	mg/kg	0.16	0.015	1	03/25/22 17:30	03/28/22 15:48	7439-97-6	L1,M0

8270E MSSV PAH by SIM Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<4.9	ug/kg	53.7	4.9	5	03/11/22 08:24	03/14/22 17:24	83-32-9	ED
Acenaphthylene	<3.8	ug/kg	53.7	3.8	5	03/11/22 08:24	03/14/22 17:24	208-96-8	ED
Anthracene	12.0J	ug/kg	53.7	4.9	5	03/11/22 08:24	03/14/22 17:24	120-12-7	ED
Benzo(a)anthracene	71.1	ug/kg	53.7	6.3	5	03/11/22 08:24	03/14/22 17:24	56-55-3	ED,R1
Benzo(a)pyrene	63.0	ug/kg	53.7	3.4	5	03/11/22 08:24	03/14/22 17:24	50-32-8	ED,R1
Benzo(b)fluoranthene	165	ug/kg	53.7	6.4	5	03/11/22 08:24	03/14/22 17:24	205-99-2	ED,lp
Benzo(g,h,i)perylene	29.8J	ug/kg	53.7	8.1	5	03/11/22 08:24	03/14/22 17:24	191-24-2	ED,R1
Benzo(k)fluoranthene	166	ug/kg	53.7	9.0	5	03/11/22 08:24	03/14/22 17:24	207-08-9	ED,lp,ML
Chrysene	103	ug/kg	53.7	2.8	5	03/11/22 08:24	03/14/22 17:24	218-01-9	ED
Dibenz(a,h)anthracene	<11.9	ug/kg	53.7	11.9	5	03/11/22 08:24	03/14/22 17:24	53-70-3	ED,R1
Fluoranthene	175	ug/kg	53.7	4.1	5	03/11/22 08:24	03/14/22 17:24	206-44-0	ED
Fluorene	21.4J	ug/kg	53.7	5.0	5	03/11/22 08:24	03/14/22 17:24	86-73-7	ED
Indeno(1,2,3-cd)pyrene	28.9J	ug/kg	53.7	10.2	5	03/11/22 08:24	03/14/22 17:24	193-39-5	ED,R1
Naphthalene	101	ug/kg	53.7	10.4	5	03/11/22 08:24	03/14/22 17:24	91-20-3	ED
Phenanthrene	150	ug/kg	53.7	4.7	5	03/11/22 08:24	03/14/22 17:24	85-01-8	ED
Pyrene	139	ug/kg	53.7	6.0	5	03/11/22 08:24	03/14/22 17:24	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	72	%	37-88		5	03/11/22 08:24	03/14/22 17:24	321-60-8	
Terphenyl-d14 (S)	78	%	10-128		5	03/11/22 08:24	03/14/22 17:24	1718-51-0	

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-64/ss-64-ms/msd **Lab ID:** 30471709019 **Collected:** 03/08/22 11:50 **Received:** 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg									
Percent Moisture	38.5	%	0.10	0.10	1		03/12/22 11:35		

Sample: SS-65 **Lab ID:** 30471709020 **Collected:** 03/08/22 12:05 **Received:** 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BVR 6010D MET ICP,Solid,3050B Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Beaver									
Arsenic	4.6J	mg/kg	6.9	0.76	1	03/15/22 06:39	03/15/22 15:33	7440-38-2	
Barium	66.5	mg/kg	6.9	0.79	1	03/15/22 06:39	03/15/22 15:33	7440-39-3	
Cadmium	<0.17	mg/kg	1.4	0.17	1	03/15/22 06:39	03/15/22 15:33	7440-43-9	
Chromium	14.2	mg/kg	6.9	0.81	1	03/15/22 06:39	03/15/22 15:33	7440-47-3	
Lead	21.7	mg/kg	6.9	0.67	1	03/15/22 06:39	03/15/22 15:33	7439-92-1	
Selenium	<1.5	mg/kg	6.9	1.5	1	03/15/22 06:39	03/15/22 15:33	7782-49-2	
Silver	<0.59	mg/kg	3.5	0.59	1	03/15/22 06:39	03/15/22 15:33	7440-22-4	

BVR 7471B Mercury
Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Beaver

Mercury	0.053J	mg/kg	0.14	0.013	1	03/16/22 13:34	03/22/22 15:57	7439-97-6	
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8270E MSSV PAH by SIM
Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546
Pace Analytical Services - Greensburg

Acenaphthene	<4.2	ug/kg	46.0	4.2	5	03/11/22 08:24	03/14/22 18:23	83-32-9	ED
Acenaphthylene	<3.3	ug/kg	46.0	3.3	5	03/11/22 08:24	03/14/22 18:23	208-96-8	ED
Anthracene	12.6J	ug/kg	46.0	4.2	5	03/11/22 08:24	03/14/22 18:23	120-12-7	ED
Benzo(a)anthracene	72.5	ug/kg	46.0	5.4	5	03/11/22 08:24	03/14/22 18:23	56-55-3	ED
Benzo(a)pyrene	59.1	ug/kg	46.0	2.9	5	03/11/22 08:24	03/14/22 18:23	50-32-8	ED
Benzo(b)fluoranthene	164	ug/kg	46.0	5.5	5	03/11/22 08:24	03/14/22 18:23	205-99-2	ED,lp
Benzo(g,h,i)perylene	29.1J	ug/kg	46.0	6.9	5	03/11/22 08:24	03/14/22 18:23	191-24-2	ED
Benzo(k)fluoranthene	166	ug/kg	46.0	7.7	5	03/11/22 08:24	03/14/22 18:23	207-08-9	ED,lp
Chrysene	117	ug/kg	46.0	2.4	5	03/11/22 08:24	03/14/22 18:23	218-01-9	ED
Dibenz(a,h)anthracene	<10.2	ug/kg	46.0	10.2	5	03/11/22 08:24	03/14/22 18:23	53-70-3	ED
Fluoranthene	174	ug/kg	46.0	3.5	5	03/11/22 08:24	03/14/22 18:23	206-44-0	ED
Fluorene	17.0J	ug/kg	46.0	4.3	5	03/11/22 08:24	03/14/22 18:23	86-73-7	ED
Indeno(1,2,3-cd)pyrene	28.6J	ug/kg	46.0	8.8	5	03/11/22 08:24	03/14/22 18:23	193-39-5	ED
Naphthalene	110	ug/kg	46.0	8.9	5	03/11/22 08:24	03/14/22 18:23	91-20-3	ED
Phenanthrene	164	ug/kg	46.0	4.1	5	03/11/22 08:24	03/14/22 18:23	85-01-8	ED
Pyrene	137	ug/kg	46.0	5.2	5	03/11/22 08:24	03/14/22 18:23	129-00-0	ED
Surrogates									
2-Fluorobiphenyl (S)	67	%	37-88		5	03/11/22 08:24	03/14/22 18:23	321-60-8	
Terphenyl-d14 (S)	73	%	10-128		5	03/11/22 08:24	03/14/22 18:23	1718-51-0	

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ANALYTICAL RESULTS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Sample: SS-65 **Lab ID: 30471709020** Collected: 03/08/22 12:05 Received: 03/08/22 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	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260C MSV 5035 Low Level Analytical Method: EPA 8260C Preparation Method: EPA 5035A Pace Analytical Services - Greensburg									
Naphthalene	<1.5	ug/kg	7.7	1.5	1	03/22/22 14:33	03/22/22 16:37	91-20-3	1c
Surrogates									
Toluene-d8 (S)	99	%.	70-130		1	03/22/22 14:33	03/22/22 16:37	2037-26-5	
4-Bromofluorobenzene (S)	112	%.	70-130		1	03/22/22 14:33	03/22/22 16:37	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%.	70-130		1	03/22/22 14:33	03/22/22 16:37	17060-07-0	
Dibromofluoromethane (S)	98	%.	70-130		1	03/22/22 14:33	03/22/22 16:37	1868-53-7	
Percent Moisture Analytical Method: SM 2540G-2015 Pace Analytical Services - Greensburg									
Percent Moisture	27.8	%	0.10	0.10	1		03/15/22 10:40		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP
Pace Project No.: 30471709

QC Batch:	490262	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3050B	Analysis Description:	BVR 6010D MET ICP,Solid,3050B
		Laboratory:	Pace Analytical Services - Beaver

Associated Lab Samples: 30471709001, 30471709002, 30471709003, 30471709004, 30471709005, 30471709006, 30471709007, 30471709008, 30471709009, 30471709010, 30471709011, 30471709012, 30471709013, 30471709014, 30471709015, 30471709016, 30471709018, 30471709020

METHOD BLANK:	2371933	Matrix:	Solid
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Associated Lab Samples: 30471709001, 30471709002, 30471709003, 30471709004, 30471709005, 30471709006, 30471709007, 30471709008, 30471709009, 30471709010, 30471709011, 30471709012, 30471709013, 30471709014, 30471709015, 30471709016, 30471709018, 30471709020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	<0.55	5.0	0.55	03/15/22 14:30	
Barium	mg/kg	<0.57	5.0	0.57	03/15/22 14:30	
Cadmium	mg/kg	<0.12	1.0	0.12	03/15/22 14:30	
Chromium	mg/kg	<0.58	5.0	0.58	03/15/22 14:30	
Lead	mg/kg	0.86J	5.0	0.48	03/15/22 14:30	
Selenium	mg/kg	<1.1	5.0	1.1	03/15/22 14:30	
Silver	mg/kg	<0.42	2.5	0.42	03/15/22 14:30	

LABORATORY CONTROL SAMPLE: 2371934

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	100	96.8	97	80-120	
Barium	mg/kg	100	110	110	80-120	
Cadmium	mg/kg	50	53.1	106	80-120	
Chromium	mg/kg	100	109	109	80-120	
Lead	mg/kg	100	104	104	80-120	
Selenium	mg/kg	100	87.5	87	80-120	
Silver	mg/kg	25	25.6	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2371935 2371936

Parameter	Units	30471709001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	10.0	157	154	166	159	99	97	75-125	4	20	
Barium	mg/kg	31.6	157	154	230	219	127	122	75-125	5	20 M1	
Cadmium	mg/kg	<0.19	78.3	76.8	80.5	77.0	103	100	75-125	4	20	
Chromium	mg/kg	16.2	157	154	193	185	113	110	75-125	4	20	
Lead	mg/kg	84.5	157	154	248	230	104	95	75-125	7	20	
Selenium	mg/kg	1.7J	157	154	144	138	91	89	75-125	4	20	
Silver	mg/kg	<0.67	39.1	38.4	41.4	39.9	106	104	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

QC Batch:	491400	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3050B	Analysis Description:	BVR 6010D MET ICP,Solid,3050B
		Laboratory:	Pace Analytical Services - Beaver

Associated Lab Samples: 30471709017, 30471709019

METHOD BLANK: 2377426 Matrix: Solid

Associated Lab Samples: 30471709017, 30471709019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Arsenic	mg/kg	<0.55	5.0	0.55	03/23/22 11:36	
Barium	mg/kg	<0.57	5.0	0.57	03/23/22 11:36	
Cadmium	mg/kg	<0.12	1.0	0.12	03/23/22 11:36	
Chromium	mg/kg	<0.58	5.0	0.58	03/23/22 11:36	
Lead	mg/kg	<0.48	5.0	0.48	03/23/22 11:36	
Selenium	mg/kg	<1.1	5.0	1.1	03/23/22 11:36	
Silver	mg/kg	<0.42	2.5	0.42	03/23/22 11:36	

LABORATORY CONTROL SAMPLE: 2377427

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	100	98.3	98	80-120	
Barium	mg/kg	100	104	104	80-120	
Cadmium	mg/kg	50	51.0	102	80-120	
Chromium	mg/kg	100	104	104	80-120	
Lead	mg/kg	100	102	102	80-120	
Selenium	mg/kg	100	96.7	97	80-120	
Silver	mg/kg	25	25.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2377428 2377429

Parameter	Units	30471709019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	7.6J	163	163	176	173	104	102	75-125	2	20	
Barium	mg/kg	61.2	163	163	238	240	109	110	75-125	1	20	
Cadmium	mg/kg	<0.20	81.3	81.3	82.4	81.9	101	101	75-125	1	20	
Chromium	mg/kg	18.1	163	163	189	187	105	104	75-125	1	20	
Lead	mg/kg	47.0	163	163	203	198	96	93	75-125	3	20	
Selenium	mg/kg	2.4J	163	163	172	170	104	103	75-125	1	20	
Silver	mg/kg	<0.69	40.6	40.6	42.1	41.8	104	103	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

QC Batch:	490159	Analysis Method:	EPA 7471B
QC Batch Method:	EPA 7471B	Analysis Description:	BVR 7471B Mercury
		Laboratory:	Pace Analytical Services - Beaver

Associated Lab Samples: 30471709001, 30471709018, 30471709020

METHOD BLANK: 2371284 Matrix: Solid

Associated Lab Samples: 30471709001, 30471709018, 30471709020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	0.012J	0.098	0.0092	03/22/22 15:16	

LABORATORY CONTROL SAMPLE: 2371285

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.15	0.17	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2374178 2374179

Parameter	Units	30468097001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.72	3.2	3.2	3.6	3.7	91	91	80-120	0	20	

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

QC Batch:	490161	Analysis Method:	EPA 7471B
QC Batch Method:	EPA 7471B	Analysis Description:	BVR 7471B Mercury
		Laboratory:	Pace Analytical Services - Beaver
Associated Lab Samples:	30471709002, 30471709003, 30471709004, 30471709005, 30471709006, 30471709007, 30471709008, 30471709009, 30471709010, 30471709011, 30471709012, 30471709013, 30471709014, 30471709015, 30471709016		

METHOD BLANK:	2371295	Matrix:	Solid
Associated Lab Samples:	30471709002, 30471709003, 30471709004, 30471709005, 30471709006, 30471709007, 30471709008, 30471709009, 30471709010, 30471709011, 30471709012, 30471709013, 30471709014, 30471709015, 30471709016		

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	0.014J	0.099	0.0093	03/16/22 12:14	

LABORATORY CONTROL SAMPLE:	2371296					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.5	0.52	104	80-120	

LABORATORY CONTROL SAMPLE:	2372667					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.49	0.51	104	80-120	

LABORATORY CONTROL SAMPLE:	2372668					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.49	0.52	106	80-120	

LABORATORY CONTROL SAMPLE:	2372669					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.5	0.52	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:												
2371297					2371298							
Parameter	Units	30471419001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.93	3	3	2.2	3.9	43	100	80-120	55	20	M1,R1

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

QC Batch: 492884

Analysis Method: EPA 7471B

QC Batch Method: EPA 7471B

Analysis Description: BVR 7471B Mercury

Laboratory: Pace Analytical Services - Beaver

Associated Lab Samples: 30471709017, 30471709019

METHOD BLANK: 2385217

Matrix: Solid

Associated Lab Samples: 30471709017, 30471709019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/kg	0.013J	0.099	0.0093	03/28/22 15:43	

LABORATORY CONTROL SAMPLE: 2385218

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.49	0.69	141	80-120	L1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2385219 2385220

Parameter	Units	30471709019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.091J	0.81	0.8	1.2	1.2	139	134	80-120	5	20	M0

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

QC Batch:	491116	Analysis Method:	EPA 8260C
QC Batch Method:	EPA 5035A	Analysis Description:	8260C MSV 5035 Low
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30471709010

METHOD BLANK: 2375789 Matrix: Solid

Associated Lab Samples: 30471709010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Naphthalene	ug/kg	<0.94	5.0	0.94	03/17/22 10:25	
1,2-Dichloroethane-d4 (S)	%.	95	70-130		03/17/22 10:25	
4-Bromofluorobenzene (S)	%.	101	70-130		03/17/22 10:25	
Dibromofluoromethane (S)	%.	105	70-130		03/17/22 10:25	
Toluene-d8 (S)	%.	102	70-130		03/17/22 10:25	

LABORATORY CONTROL SAMPLE: 2375790

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	20	21.8	109	65-110	
1,2-Dichloroethane-d4 (S)	%.			94	70-130	
4-Bromofluorobenzene (S)	%.			99	70-130	
Dibromofluoromethane (S)	%.			104	70-130	
Toluene-d8 (S)	%.			104	70-130	

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

QC Batch: 492119

Analysis Method: EPA 8260C

QC Batch Method: EPA 5035A

Analysis Description: 8260C MSV 5035 Low

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30471709020

METHOD BLANK: 2380756

Matrix: Solid

Associated Lab Samples: 30471709020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Naphthalene	ug/kg	4.1J	5.0	0.94	03/22/22 15:37	
1,2-Dichloroethane-d4 (S)	%.	109	70-130		03/22/22 15:37	
4-Bromofluorobenzene (S)	%.	106	70-130		03/22/22 15:37	
Dibromofluoromethane (S)	%.	97	70-130		03/22/22 15:37	
Toluene-d8 (S)	%.	96	70-130		03/22/22 15:37	

LABORATORY CONTROL SAMPLE: 2380757

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	20	21.8	109	65-110	
1,2-Dichloroethane-d4 (S)	%.			100	70-130	
4-Bromofluorobenzene (S)	%.			105	70-130	
Dibromofluoromethane (S)	%.			97	70-130	
Toluene-d8 (S)	%.			103	70-130	

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

QC Batch:	489567	Analysis Method:	EPA 8270E by SIM
QC Batch Method:	EPA 3546	Analysis Description:	8270E/3546 MSSV PAH by SIM
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30471709001, 30471709002, 30471709003, 30471709004, 30471709005, 30471709006, 30471709007, 30471709008, 30471709009, 30471709010, 30471709011, 30471709012, 30471709013, 30471709014, 30471709015, 30471709016, 30471709017, 30471709018, 30471709019, 30471709020		

METHOD BLANK: 2368021

Matrix: Solid

Associated Lab Samples: 30471709001, 30471709002, 30471709003, 30471709004, 30471709005, 30471709006, 30471709007, 30471709008, 30471709009, 30471709010, 30471709011, 30471709012, 30471709013, 30471709014, 30471709015, 30471709016, 30471709017, 30471709018, 30471709019, 30471709020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthene	ug/kg	<0.61	6.7	0.61	03/14/22 09:18	
Acenaphthylene	ug/kg	<0.48	6.7	0.48	03/14/22 09:18	
Anthracene	ug/kg	<0.61	6.7	0.61	03/14/22 09:18	
Benzo(a)anthracene	ug/kg	<0.79	6.7	0.79	03/14/22 09:18	
Benzo(a)pyrene	ug/kg	<0.42	6.7	0.42	03/14/22 09:18	
Benzo(b)fluoranthene	ug/kg	<0.80	6.7	0.80	03/14/22 09:18	
Benzo(g,h,i)perylene	ug/kg	<1.0	6.7	1.0	03/14/22 09:18	
Benzo(k)fluoranthene	ug/kg	<1.1	6.7	1.1	03/14/22 09:18	
Chrysene	ug/kg	<0.35	6.7	0.35	03/14/22 09:18	
Dibenz(a,h)anthracene	ug/kg	<1.5	6.7	1.5	03/14/22 09:18	
Fluoranthene	ug/kg	<0.51	6.7	0.51	03/14/22 09:18	
Fluorene	ug/kg	<0.62	6.7	0.62	03/14/22 09:18	
Indeno(1,2,3-cd)pyrene	ug/kg	<1.3	6.7	1.3	03/14/22 09:18	
Naphthalene	ug/kg	<1.3	6.7	1.3	03/14/22 09:18	
Phenanthrene	ug/kg	<0.59	6.7	0.59	03/14/22 09:18	
Pyrene	ug/kg	<0.75	6.7	0.75	03/14/22 09:18	
2-Fluorobiphenyl (S)	%	93	37-88		03/14/22 09:18	ST
Terphenyl-d14 (S)	%	100	10-128		03/14/22 09:18	

LABORATORY CONTROL SAMPLE: 2368022

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/kg	133	113	85	47-104	
Acenaphthylene	ug/kg	133	123	93	49-115	
Anthracene	ug/kg	133	126	95	52-115	
Benzo(a)anthracene	ug/kg	133	139	104	54-130	
Benzo(a)pyrene	ug/kg	133	124	93	59-126	
Benzo(b)fluoranthene	ug/kg	133	133	100	55-133	
Benzo(g,h,i)perylene	ug/kg	133	100	75	54-127	
Benzo(k)fluoranthene	ug/kg	133	132	99	56-120	
Chrysene	ug/kg	133	142	106	56-115	
Dibenz(a,h)anthracene	ug/kg	133	104	78	55-129	
Fluoranthene	ug/kg	133	132	99	56-125	
Fluorene	ug/kg	133	118	88	50-114	
Indeno(1,2,3-cd)pyrene	ug/kg	133	102	77	55-129	

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

LABORATORY CONTROL SAMPLE: 2368022

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	133	127	95	45-102	
Phenanthrene	ug/kg	133	124	93	50-110	
Pyrene	ug/kg	133	133	100	56-122	
2-Fluorobiphenyl (S)	%			88	37-88	
Terphenyl-d14 (S)	%			95	10-128	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2368023 2368024

Parameter	Units	30471709019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthene	ug/kg	<4.9	211	215	138	157	65	73	24-109	13	20	
Acenaphthylene	ug/kg	<3.8	211	215	146	170	69	79	26-119	15	20	
Anthracene	ug/kg	12.0J	211	215	140	170	61	74	32-115	19	20	
Benzo(a)anthracene	ug/kg	71.1	211	215	194	245	58	81	30-133	24	20	R1
Benzo(a)pyrene	ug/kg	63.0	211	215	156	202	44	65	11-151	26	20	R1
Benzo(b)fluoranthene	ug/kg	165	211	215	230	281	31	55	25-140	20	20	
Benzo(g,h,i)perylene	ug/kg	29.8J	211	215	80.9	125	24	45	10-126	43	20	R1
Benzo(k)fluoranthene	ug/kg	166	211	215	195	228	14	29	25-127	16	20	ML
Chrysene	ug/kg	103	211	215	224	274	58	80	10-142	20	20	
Dibenz(a,h)anthracene	ug/kg	<11.9	211	215	83.9	123	40	57	13-127	38	20	R1
Fluoranthene	ug/kg	175	211	215	292	344	56	79	20-139	16	20	
Fluorene	ug/kg	21.4J	211	215	156	181	64	74	28-114	15	20	
Indeno(1,2,3-cd)pyrene	ug/kg	28.9J	211	215	97.0	137	32	51	15-123	34	20	R1
Naphthalene	ug/kg	101	211	215	239	250	66	70	15-104	4	20	
Phenanthrene	ug/kg	150	211	215	270	313	57	76	10-135	15	20	
Pyrene	ug/kg	139	211	215	252	301	54	76	13-139	18	20	
2-Fluorobiphenyl (S)	%						64	73	37-88			
Terphenyl-d14 (S)	%						63	79	10-128			

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

QC Batch:	489721	Analysis Method:	SM 2540G-2015
QC Batch Method:	SM 2540G-2015	Analysis Description:	Dry Weight/Percent Moisture
		Laboratory:	Pace Analytical Services - Greensburg
Associated Lab Samples:	30471709002, 30471709003, 30471709004, 30471709005, 30471709006, 30471709007, 30471709008, 30471709009, 30471709010, 30471709011, 30471709012, 30471709013, 30471709014		

SAMPLE DUPLICATE: 2368979

Parameter	Units	30458878004 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.2	7.4	11	10	D6,H1

SAMPLE DUPLICATE: 2368980

Parameter	Units	30458878005 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	98.4	98.7	0	10	H1

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

QC Batch:	489729	Analysis Method:	SM 2540G-2015
QC Batch Method:	SM 2540G-2015	Analysis Description:	Dry Weight/Percent Moisture
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 30471709001, 30471709015, 30471709016, 30471709017, 30471709018, 30471709019

SAMPLE DUPLICATE: 2368989

Parameter	Units	30471709001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	34.9	31.5	10	10	

SAMPLE DUPLICATE: 2368990

Parameter	Units	30471709015 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	34.9	34.8	0	10	

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QUALITY CONTROL DATA

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

QC Batch: 490096

Analysis Method: SM 2540G-2015

QC Batch Method: SM 2540G-2015

Analysis Description: Dry Weight/Percent Moisture

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30471709020

SAMPLE DUPLICATE: 2370968

Parameter	Units	30472412001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.5	10.2	41	10	D6,H3

SAMPLE DUPLICATE: 2370969

Parameter	Units	30472412002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	15.0	16.8	11	10	D6,H3

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QUALIFIERS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 491116

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

Batch: 492119

[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.

B Analyte was detected in the associated method blank.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

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

H1 Analysis conducted outside the EPA method holding time.

H3 Sample was received or analysis requested beyond the recognized method holding time.

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.

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

ANALYTE QUALIFIERS

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.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
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: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30471709001	SS-47	EPA 3050B	490262	EPA 6010D	490401
30471709002	SS-48	EPA 3050B	490262	EPA 6010D	490401
30471709003	SS-49	EPA 3050B	490262	EPA 6010D	490401
30471709004	SS-50	EPA 3050B	490262	EPA 6010D	490401
30471709005	SS-51	EPA 3050B	490262	EPA 6010D	490401
30471709006	SS-52	EPA 3050B	490262	EPA 6010D	490401
30471709007	SS-53	EPA 3050B	490262	EPA 6010D	490401
30471709008	SS-54	EPA 3050B	490262	EPA 6010D	490401
30471709009	SS-55	EPA 3050B	490262	EPA 6010D	490401
30471709010	SS-56	EPA 3050B	490262	EPA 6010D	490401
30471709011	SS-57	EPA 3050B	490262	EPA 6010D	490401
30471709012	SS-58	EPA 3050B	490262	EPA 6010D	490401
30471709013	SS-59	EPA 3050B	490262	EPA 6010D	490401
30471709014	SS-60	EPA 3050B	490262	EPA 6010D	490401
30471709015	SS-60-FD	EPA 3050B	490262	EPA 6010D	490401
30471709016	SS-61	EPA 3050B	490262	EPA 6010D	490401
30471709017	SS-62	EPA 3050B	491400	EPA 6010D	492310
30471709018	SS-63	EPA 3050B	490262	EPA 6010D	490401
30471709019	SS-64/ss-64-ms/msd	EPA 3050B	491400	EPA 6010D	492310
30471709020	SS-65	EPA 3050B	490262	EPA 6010D	490401
30471709001	SS-47	EPA 7471B	490159	EPA 7471B	491788
30471709002	SS-48	EPA 7471B	490161	EPA 7471B	490737
30471709003	SS-49	EPA 7471B	490161	EPA 7471B	490737
30471709004	SS-50	EPA 7471B	490161	EPA 7471B	490737
30471709005	SS-51	EPA 7471B	490161	EPA 7471B	490737
30471709006	SS-52	EPA 7471B	490161	EPA 7471B	490737
30471709007	SS-53	EPA 7471B	490161	EPA 7471B	490737
30471709008	SS-54	EPA 7471B	490161	EPA 7471B	490737
30471709009	SS-55	EPA 7471B	490161	EPA 7471B	490737
30471709010	SS-56	EPA 7471B	490161	EPA 7471B	490737
30471709011	SS-57	EPA 7471B	490161	EPA 7471B	490737
30471709012	SS-58	EPA 7471B	490161	EPA 7471B	490737
30471709013	SS-59	EPA 7471B	490161	EPA 7471B	490737
30471709014	SS-60	EPA 7471B	490161	EPA 7471B	490737
30471709015	SS-60-FD	EPA 7471B	490161	EPA 7471B	490737
30471709016	SS-61	EPA 7471B	490161	EPA 7471B	490737
30471709017	SS-62	EPA 7471B	492884	EPA 7471B	493373
30471709018	SS-63	EPA 7471B	490159	EPA 7471B	491788
30471709019	SS-64/ss-64-ms/msd	EPA 7471B	492884	EPA 7471B	493373
30471709020	SS-65	EPA 7471B	490159	EPA 7471B	491788
30471709001	SS-47	EPA 3546	489567	EPA 8270E by SIM	489786
30471709002	SS-48	EPA 3546	489567	EPA 8270E by SIM	489786
30471709003	SS-49	EPA 3546	489567	EPA 8270E by SIM	489786

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: White Park/ 20219527.NAPP

Pace Project No.: 30471709

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30471709004	SS-50	EPA 3546	489567	EPA 8270E by SIM	489786
30471709005	SS-51	EPA 3546	489567	EPA 8270E by SIM	489786
30471709006	SS-52	EPA 3546	489567	EPA 8270E by SIM	489786
30471709007	SS-53	EPA 3546	489567	EPA 8270E by SIM	489786
30471709008	SS-54	EPA 3546	489567	EPA 8270E by SIM	489786
30471709009	SS-55	EPA 3546	489567	EPA 8270E by SIM	489786
30471709010	SS-56	EPA 3546	489567	EPA 8270E by SIM	489786
30471709011	SS-57	EPA 3546	489567	EPA 8270E by SIM	489786
30471709012	SS-58	EPA 3546	489567	EPA 8270E by SIM	489786
30471709013	SS-59	EPA 3546	489567	EPA 8270E by SIM	489786
30471709014	SS-60	EPA 3546	489567	EPA 8270E by SIM	489786
30471709015	SS-60-FD	EPA 3546	489567	EPA 8270E by SIM	489786
30471709016	SS-61	EPA 3546	489567	EPA 8270E by SIM	489786
30471709017	SS-62	EPA 3546	489567	EPA 8270E by SIM	489786
30471709018	SS-63	EPA 3546	489567	EPA 8270E by SIM	489786
30471709019	SS-64/ss-64-ms/msd	EPA 3546	489567	EPA 8270E by SIM	489786
30471709020	SS-65	EPA 3546	489567	EPA 8270E by SIM	489786
30471709010	SS-56	EPA 5035A	491116	EPA 8260C	491117
30471709020	SS-65	EPA 5035A	492119	EPA 8260C	492126
30471709001	SS-47	SM 2540G-2015	489729		
30471709002	SS-48	SM 2540G-2015	489721		
30471709003	SS-49	SM 2540G-2015	489721		
30471709004	SS-50	SM 2540G-2015	489721		
30471709005	SS-51	SM 2540G-2015	489721		
30471709006	SS-52	SM 2540G-2015	489721		
30471709007	SS-53	SM 2540G-2015	489721		
30471709008	SS-54	SM 2540G-2015	489721		
30471709009	SS-55	SM 2540G-2015	489721		
30471709010	SS-56	SM 2540G-2015	489721		
30471709011	SS-57	SM 2540G-2015	489721		
30471709012	SS-58	SM 2540G-2015	489721		
30471709013	SS-59	SM 2540G-2015	489721		
30471709014	SS-60	SM 2540G-2015	489721		
30471709015	SS-60-FD	SM 2540G-2015	489729		
30471709016	SS-61	SM 2540G-2015	489729		
30471709017	SS-62	SM 2540G-2015	489729		
30471709018	SS-63	SM 2540G-2015	489729		
30471709019	SS-64/ss-64-ms/msd	SM 2540G-2015	489729		
30471709020	SS-65	SM 2540G-2015	490096		

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY Analytical Request Document

Company: Environmental Standards

Address: 1140 Valley Forge Rd, Valley Forge, PA

Report To: Leah Mistick

Copy To: KMORTON@ENVSTD.COM

Customer Project Name/Number: White Park/ 20219527.NAPP

Phone: 814-449-0221

Email: kmorton@envstd.com

Collected By (print): K. MORTON

Collected By (signature): [Signature]

Sample Disposal: [] Dispose as appropriate [] Return [] Archive: [] Hold:

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	Composite End Date	Time	Res Cl	# of Ctns
SS-57	SL	G	3/8/22	09:50			N/A	0
SS-58	SL	G	3/8/22	10:30			N/A	2
SS-59	SL	G	3/8/22	10:35			N/A	2
SS-60	SL	G	3/8/22	10:45			N/A	2
SS-60-FD	SL	G	3/8/22	10:45			N/A	2
SS-61	SL	G	3/8/22	11:00			N/A	2
SS-62	SL	G	3/8/22	11:05			N/A	2
SS-63	SL	G	3/8/22	11:10			N/A	2
SS-64	SL	G	3/8/22	11:50			N/A	0
SS-65	SL	G	3/8/22	12:05			N/A	0

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

Date/Time: 3/9/22

Received by/Company: (Signature) [Signature]

Relinquished by/Company: (Signature) [Signature]

Relinquished by/Company: (Signature) [Signature]

Relinquished by/Company: (Signature) [Signature]

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA

Custody Signatures Present Y N NA

Collector Signature Present Y N NA

Bottles Intact Y N NA

Correct Bottles Y N NA

Sufficient Volume Y N NA

Samples Received on Ice Y N NA

VOA - Headspace Acceptable Y N NA

USDA Regulated Soils Y N NA

Samples in Holding Time Y N NA

Residual Chlorine Present Y N NA

Cl Strips: Y N NA

Sample pH Acceptable Y N NA

pH Strips: Y N NA

Sulfide Present Y N NA

Lead Acetate Strips: Y N NA

LAB USE ONLY:

Lab Sample # / Comments: See page 1

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#: _____

Cooler 1 Temp Upon Receipt: _____ °C

Cooler 1 Therm Corr. Factor: _____ °C

Cooler 1 Corrected Temp: _____ °C

Comments:

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 2 of 2

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

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

Company: Environmental Standards

Address: 1140 Valley Forge Rd
Valley Forge, PA

Billing Information:

Same

Report To: Leah Mistick

Email To: lmistick@envstd.com

Copy To: kmorton@envstd.com

Site Collection Info/Address:

Customer Project Name/Number:
White Park/ 20219527.NAPP

State: County/City: Time Zone Collected:
WV Morgantown [] PT [] MT [] CT [] ET

Phone: 814-449-0221

Email: kmorton@envstd.com

Collected By (print): L. Morton

Purchase Order #: 00105335

DW PWS ID #:

DW Location Code:

Compliance Monitoring?
[] Yes [X] No

Collected By (signature): *L. Morton*

Turnaround Date Required: STD

Immediately Packed on Ice:
[X] Yes [] No

Sample Disposal:
[X] Dispose as appropriate [] Return

Rush:
[] Same Day [] Next Day
[] 2 Day [] 3 Day [] 5 Day
(Expedite Charges Apply)

Field Filtered (if applicable):
[] Yes [X] No

Analysis:

* 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)	Composite End	Res CI	# of Ctns
SS-47	SL	G	3/8/22 0555		N/A	2
SS-48	SL	G	3/8/22 0900		N/A	2
SS-49	SL	G	3/8/22 0905		N/A	2
SS-50	SL	G	3/8/22 0910		N/A	2
SS-51	SL	G	3/8/22 0915		N/A	2
SS-52	SL	G	3/8/22 0920		N/A	2
SS-53	SL	G	3/8/22 0925		N/A	2
SS-54	SL	G	3/8/22 0930		N/A	2
SS-55	SL	G	3/8/22 0940		N/A	2
SS-56	SL	G	3/8/22 0945		N/A	2

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet

Blue Dry None

Packing Material Used: Ice

Radchem sample(s) screened (<500 cpm): Y N NA

Received by/Company: (Signature)

Date/Time: 3/9/22

Received by/Company: (Signature)

Date/Time: 3-9-22 1110

Received by/Company: (Signature)

Date/Time: 3/9/22 9:40

Received by/Company: (Signature)

Date/Time: 3-9-22 1110

LAB USE ONLY - Affix Workorder/ Login Label Here or List Page Markorder Markorder

WO#: 30471709

ALL SHADED

Container Preservative Type *

30471709

** 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 Profile/Line:	Lab Sample Receipt Checklist:
VOC 8270 TerraCore (Naphthalene only)	VOC 8260 KMM 3/14/22	Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signatures Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA Cl Strips: Y N NA Sample pH Acceptable Y N NA pH Strips: Y N NA Sulfide Present Y N NA Lead Acetate Strips: Y N NA LAB USE ONLY: Lab Sample # / Comments: <i>gm</i>
PAH 8270 sim		
RAA Metals (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver, Zinc)		

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: 14
Cooler 1 Temp Upon Receipt: 4.9 oC
Cooler 1 Therm Corr. Factor: 0 oC
Cooler 1 Corrected Temp: 4.9 oC
Comments:

Trip Blank Received: Y N NA
HCL MeOH TSP Other
Non Conformance(s): YES / NO
Page: 1 of 2

CHAIN-OF-CUSTODY Analytical Request Document

Company: Environmental Standards

Address: 1140 Valley Forge Rd, Valley Forge, PA

Report To: Leah Mistick

Copy To: KMORTON@ENVSTD.COM

Customer Project Name/Number: White Park/ 20219527.NAPP

Phone: 814-449-0221

Email: kmorton@envstd.com

Collected By (print): K. Morton

Collected By (signature): K. Morton

Sample Disposal: [X] Dispose as appropriate [] Return [] Archive: [] Hold:

* 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	Composite End Date	Time	Res Cl	# of Ctns
SS-57	SL	G	3/8/22	09:50			N/A	0
SS-58	SL	G	3/8/22	10:30			N/A	2
SS-59	SL	G	3/8/22	10:35			N/A	2
SS-60	SL	G	3/8/22	10:45			N/A	2
SS-60-FD	SL	G	3/8/22	10:45			N/A	2
SS-61	SL	G	3/8/22	11:00			N/A	2
SS-62	SL	G	3/8/22	11:05			N/A	2
SS-63	SL	G	3/8/22	11:10			N/A	2
SS-64	SL	G	3/8/22	11:50			N/A	0
SS-65	SL	G	3/8/22	12:05			N/A	0

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

Date/Time: 3/9/22

Received by/Company: (Signature) Date/Time: 3/9/22

Relinquished by/Company: (Signature) Date/Time: 3/9/22

Relinquished by/Company: (Signature) Date/Time: 3/9/22

Relinquished by/Company: (Signature) Date/Time: 3/9/22

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA

Custody Signatures Present Y N NA

Collector Signature Present Y N NA

Bottles Intact Y N NA

Correct Bottles Y N NA

Sufficient Volume Y N NA

Samples Received on Ice Y N NA

VOA - Headspace Acceptable Y N NA

USDA Regulated Soils Y N NA

Samples in Holding Time Y N NA

Residual Chlorine Present Y N NA

Cl Strips: Y N NA

Sample pH Acceptable Y N NA

pH Strips: Y N NA

Sulfide Present Y N NA

Lead Acetate Strips: Y N NA

LAB USE ONLY:

Lab Sample # / Comments: See page 1

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#: _____

Cooler 1 Temp Upon Receipt: _____ °C

Cooler 1 Therm Corr. Factor: _____ °C

Cooler 1 Corrected Temp: _____ °C

Comments:

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 2 of 2

Shipping Laboratory Location Code		Receiving Laboratory Location Code	
GBUR		BEAV	
Pace Greensburg: 1638 Roseytown Road Suite 2,3,4 Greensburg PA 15601		Pace Beaver: 225 Industrial Park Road Beaver WV 25813	
Shipping information		Received information	
Cooler ID	22	Cooler temp (rcvd) °C	1.7
Packaged on Ice (Y/N)	Yes	Correction Factor	0
Shipping Method	Courier	Cooler temp (corr) °C	1.7
Tracking #	N/A	IIR GUN ID	23
PWS * Drinking water?	No	Received on ice?	Y

	Signature	Location	Date	Time
Relinquished		GRUR	3/16/22	2030
Received		REAV	3/17/22	313
Relinquished				
Received				
Relinquished				
Received				

[illegible]

LIMS73 Lab Sample Condition Upon Receipt (West Virginia)

MO#: 30471709

PM: MAR

Due Date: 03/22/22

CLIENT: ESI

Page 22 of 49

Face Analytical

Client Name:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ Other:

SRL Perry County

Tracking #:

Custody Seal on Cooler/Box/Containers Present: ☐ yes ☒ noSeals intact: ☐ yes ☒ no

Thermometer Used

Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temperature

Observed Temp 23 1.7 °C

Correction Factor: 0 °C

Final Temp: 1.7 °C

Comments:

pH paper Lot# _____ Date and Initials of person examining contents: SC 3/17/22

	Yes	No	N/A
Chain of Custody Present:			
Chain of Custody Filled Out:			
Chain of Custody Relinquished:			
Sampler Name & Signature on COC:			
Sample Labels match COC:			
-Includes date/time/ID			
Matrix: SL			
Samples Arrived within Hold Time:			
Short Hold Time Analysis (<72hr remaining):			
Rush Turn Around Time Requested:			
Sufficient Volume:			
Correct Containers Used:			
-Pace Containers Used:			
Containers Intact:			
Orthophosphate field filtered:			
Hex Cr Aqueous sample field filtered:			
-pH adjusted within 24 hours? (if yes, indicate acid lot #)			
Filtered volume received for Dissolved tests:			
All containers have been checked for preservation:			
exceptions: VOA, coliform, O&G, LLMercury, Non-aqueous matrix			
All containers meet method preservation requirements:			
Headspace in VOA Vials:			
Trip Blank Present:			
Trip Blank Custody Seals Present:			
Initial when completed:			
Date:			
Tests not preserved:			
Initial when completed:			
Date:			

Client Notification/ Resolution:

Person Contacted:

Date/Time:

Contacted By:

Comments/ Resolution:

☐ A check in this box indicates that additional information has been stored in ereports.

*PM review is documented electronically in LIMS, when the Project Manager closes the SRF Review schedule in LIMS. The status may be reviewed in the Status section of the Workorder Edit Screen.

APPENDIX D



	A	B	C	D	E	F	G	H	I	J	K	L
1					Outlier Tests for Selected Uncensored Variables							
2	User Selected Options											
3	Date/Time of Computation			3/30/2022 5:11:54 PM								
4				From File	arsenic input for UCL SS ONLY.xls							
5				Full Precision	OFF							
6												
7												
8	Rosner's Outlier Test for Arsenic (0-2')											
9												
10												
11	Mean			11.91								
12	Standard Deviation			17.04								
13	Number of data			68								
14	Number of suspected outliers			1								
15												
16				Potential	Obs.	Test	Critical	Critical				
17	#	Mean	sd	outlier	Number	value	value (5%)	value (1%)				
18	1	11.91	16.92	144	31	7.809	3.248	3.608				
19												
20	For 5% Significance Level, there is 1 Potential Outlier											
21	Potential outliers is: 144											
22												
23	For 1% Significance Level, there is 1 Potential Outlier											
24	Potential outliers is: 144											
25												

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Uncensored Full Data Sets											
2												
3	User Selected Options											
4	Date/Time of Computation			3/30/2022 5:14:10 PM								
5	From File			arsenic input for UCL SS only wo SS29.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10												
11	Arsenic (0-2')											
12												
13	General Statistics											
14	Total Number of Observations				67		Number of Distinct Observations				55	
15							Number of Missing Observations				0	
16	Minimum				0.075		Mean				9.935	
17	Maximum				26.7		Median				8.9	
18	SD				5.148		Std. Error of Mean				0.629	
19	Coefficient of Variation				0.518		Skewness				1.224	
20												
21	Normal GOF Test											
22	Shapiro Wilk Test Statistic				0.907		Shapiro Wilk GOF Test					
23	5% Shapiro Wilk P Value				3.1653E-5		Data Not Normal at 5% Significance Level					
24	Lilliefors Test Statistic				0.152		Lilliefors GOF Test					
25	5% Lilliefors Critical Value				0.108		Data Not Normal at 5% Significance Level					
26	Data Not Normal at 5% Significance Level											
27												
28	Assuming Normal Distribution											
29	95% Normal UCL				95% UCLs (Adjusted for Skewness)							
30	95% Student's-t UCL				10.98		95% Adjusted-CLT UCL (Chen-1995)				11.07	
31							95% Modified-t UCL (Johnson-1978)				11	
32												
33	Gamma GOF Test											
34	A-D Test Statistic				2.436		Anderson-Darling Gamma GOF Test					
35	5% A-D Critical Value				0.76		Data Not Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic				0.158		Kolmogrov-Smirnoff Gamma GOF Test					
37	5% K-S Critical Value				0.11		Data Not Gamma Distributed at 5% Significance Level					
38	Data Not Gamma Distributed at 5% Significance Level											
39												
40	Gamma Statistics											
41	k hat (MLE)				2.563		k star (bias corrected MLE)				2.458	
42	Theta hat (MLE)				3.877		Theta star (bias corrected MLE)				4.042	
43	nu hat (MLE)				343.4		nu star (bias corrected)				329.3	
44	MLE Mean (bias corrected)				9.935		MLE Sd (bias corrected)				6.337	
45							Approximate Chi Square Value (0.05)				288.3	
46	Adjusted Level of Significance				0.0464		Adjusted Chi Square Value				287.5	
47												
48	Assuming Gamma Distribution											
49	95% Approximate Gamma UCL (use when n>=50))				11.35		95% Adjusted Gamma UCL (use when n<50)				11.38	
50												
51	Lognormal GOF Test											

	A	B	C	D	E	F	G	H	I	J	K	L
52	Shapiro Wilk Test Statistic					0.634	Shapiro Wilk Lognormal GOF Test					
53	5% Shapiro Wilk P Value					0	Data Not Lognormal at 5% Significance Level					
54	Lilliefors Test Statistic					0.232	Lilliefors Lognormal GOF Test					
55	5% Lilliefors Critical Value					0.108	Data Not Lognormal at 5% Significance Level					
56	Data Not Lognormal at 5% Significance Level											
57												
58	Lognormal Statistics											
59	Minimum of Logged Data					-2.59	Mean of logged Data					2.088
60	Maximum of Logged Data					3.285	SD of logged Data					0.911
61												
62	Assuming Lognormal Distribution											
63	95% H-UCL					15.65	90% Chebyshev (MVUE) UCL					16.82
64	95% Chebyshev (MVUE) UCL					18.95	97.5% Chebyshev (MVUE) UCL					21.9
65	99% Chebyshev (MVUE) UCL					27.7						
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data do not follow a Discernible Distribution (0.05)											
69												
70	Nonparametric Distribution Free UCLs											
71	95% CLT UCL					10.97	95% Jackknife UCL					10.98
72	95% Standard Bootstrap UCL					10.96	95% Bootstrap-t UCL					11.11
73	95% Hall's Bootstrap UCL					11.09	95% Percentile Bootstrap UCL					11.03
74	95% BCA Bootstrap UCL					11.07						
75	90% Chebyshev(Mean, Sd) UCL					11.82	95% Chebyshev(Mean, Sd) UCL					12.68
76	97.5% Chebyshev(Mean, Sd) UCL					13.86	99% Chebyshev(Mean, Sd) UCL					16.19
77												
78	Suggested UCL to Use											
79	95% Chebyshev (Mean, Sd) UCL					12.68						
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)											
83	and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.											
84	For additional insight the user may want to consult a statistician.											
85												

	A	B	C	D	E	F	G	H	I	J	K	L
1	UCL Statistics for Data Sets with Non-Detects											
2												
3	User Selected Options											
4	Date/Time of Computation			5/25/2022 3:19:43 PM								
5	From File			BaP input for UCL SS ONLY wo SS-23 25 47 48 50 60 60FD.xls								
6	Full Precision			OFF								
7	Confidence Coefficient			95%								
8	Number of Bootstrap Operations			2000								
9												
10	Benzo(a)pyrene											
11												
12	General Statistics											
13	Total Number of Observations				61		Number of Distinct Observations				52	
14	Number of Detects				44		Number of Non-Detects				17	
15	Number of Distinct Detects				44		Number of Distinct Non-Detects				9	
16	Minimum Detect				0.6		Minimum Non-Detect				0.47	
17	Maximum Detect				1100		Maximum Non-Detect				4.9	
18	Variance Detects				34359		Percent Non-Detects				27.87%	
19	Mean Detects				111.5		SD Detects				185.4	
20	Median Detects				55.8		CV Detects				1.662	
21	Skewness Detects				3.853		Kurtosis Detects				18.77	
22	Mean of Logged Detects				3.59		SD of Logged Detects				1.803	
23												
24	Normal GOF Test on Detects Only											
25	Shapiro Wilk Test Statistic				0.587		Shapiro Wilk GOF Test					
26	5% Shapiro Wilk Critical Value				0.944		Detected Data Not Normal at 5% Significance Level					
27	Lilliefors Test Statistic				0.275		Lilliefors GOF Test					
28	5% Lilliefors Critical Value				0.134		Detected Data Not Normal at 5% Significance Level					
29	Detected Data Not Normal at 5% Significance Level											
30												
31	Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs											
32	Mean				80.58		Standard Error of Mean				21.16	
33	SD				163.4		95% KM (BCA) UCL				118.2	
34	95% KM (t) UCL				115.9		95% KM (Percentile Bootstrap) UCL				117.6	
35	95% KM (z) UCL				115.4		95% KM Bootstrap t UCL				138.2	
36	90% KM Chebyshev UCL				144.1		95% KM Chebyshev UCL				172.8	
37	97.5% KM Chebyshev UCL				212.7		99% KM Chebyshev UCL				291.1	
38												
39	Gamma GOF Tests on Detected Observations Only											
40	A-D Test Statistic				0.372		Anderson-Darling GOF Test					
41	5% A-D Critical Value				0.808		Detected data appear Gamma Distributed at 5% Significance Level					
42	K-S Test Statistic				0.0955		Kolmogrov-Smirnoff GOF					
43	5% K-S Critical Value				0.14		Detected data appear Gamma Distributed at 5% Significance Level					
44	Detected data appear Gamma Distributed at 5% Significance Level											
45												
46	Gamma Statistics on Detected Data Only											
47	k hat (MLE)				0.556		k star (bias corrected MLE)				0.533	
48	Theta hat (MLE)				200.6		Theta star (bias corrected MLE)				209.1	
49	nu hat (MLE)				48.93		nu star (bias corrected)				46.93	
50	MLE Mean (bias corrected)				111.5		MLE Sd (bias corrected)				152.7	
51												

	A	B	C	D	E	F	G	H	I	J	K	L
52	Gamma Kaplan-Meier (KM) Statistics											
53	k hat (KM)				0.243		nu hat (KM)				29.67	
54	Approximate Chi Square Value (29.67, α)				18.23		Adjusted Chi Square Value (29.67, β)				18.02	
55	95% Gamma Approximate KM-UCL (use when $n \geq 50$)				131.1		95% Gamma Adjusted KM-UCL (use when $n < 50$)				132.7	
56												
57	Gamma ROS Statistics using Imputed Non-Detects											
58	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
59	GROS may not be used when kstar of detected data is small such as < 0.1											
60	For such situations, GROS method tends to yield inflated values of UCLs and BTVs											
61	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
62	Minimum				0.01		Mean				80.45	
63	Maximum				1100		Median				25.1	
64	SD				164.8		CV				2.049	
65	k hat (MLE)				0.233		k star (bias corrected MLE)				0.233	
66	Theta hat (MLE)				345.1		Theta star (bias corrected MLE)				345.9	
67	nu hat (MLE)				28.44		nu star (bias corrected)				28.38	
68	MLE Mean (bias corrected)				80.45		MLE Sd (bias corrected)				166.8	
69							Adjusted Level of Significance (β)				0.0461	
70	Approximate Chi Square Value (28.38, α)				17.22		Adjusted Chi Square Value (28.38, β)				17.01	
71	95% Gamma Approximate UCL (use when $n \geq 50$)				132.6		95% Gamma Adjusted UCL (use when $n < 50$)				134.2	
72												
73	Lognormal GOF Test on Detected Observations Only											
74	Shapiro Wilk Test Statistic				0.948		Shapiro Wilk GOF Test					
75	5% Shapiro Wilk Critical Value				0.944		Detected Data appear Lognormal at 5% Significance Level					
76	Lilliefors Test Statistic				0.124		Lilliefors GOF Test					
77	5% Lilliefors Critical Value				0.134		Detected Data appear Lognormal at 5% Significance Level					
78	Detected Data appear Lognormal at 5% Significance Level											
79												
80	Lognormal ROS Statistics Using Imputed Non-Detects											
81	Mean in Original Scale				80.69		Mean in Log Scale				2.509	
82	SD in Original Scale				164.7		SD in Log Scale				2.348	
83	95% t UCL (assumes normality of ROS data)				115.9		95% Percentile Bootstrap UCL				116.8	
84	95% BCA Bootstrap UCL				134.6		95% Bootstrap t UCL				142.3	
85	95% H-UCL (Log ROS)				542.9							
86												
87	UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed											
88	KM Mean (logged)				2.384		95% H-UCL (KM -Log)				674.1	
89	KM SD (logged)				2.463		95% Critical H Value (KM-Log)				3.448	
90	KM Standard Error of Mean (logged)				0.319							
91												
92	DL/2 Statistics											
93	DL/2 Normal					DL/2 Log-Transformed						
94	Mean in Original Scale				80.55		Mean in Log Scale				2.244	
95	SD in Original Scale				164.8		SD in Log Scale				2.68	
96	95% t UCL (Assumes normality)				115.8		95% H-Stat UCL				1214	
97	DL/2 is not a recommended method, provided for comparisons and historical reasons											
98												
99	Nonparametric Distribution Free UCL Statistics											
100	Detected Data appear Gamma Distributed at 5% Significance Level											
101												
102	Suggested UCL to Use											

	A	B	C	D	E	F	G	H	I	J	K	L
103	95% KM (Chebyshev) UCL					172.8	95% GROS Approximate Gamma UCL					132.6
104	95% Approximate Gamma KM-UCL					131.1						
105												
106	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
107	Recommendations are based upon data size, data distribution, and skewness.											
108	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
109	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
110												