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**Department of Environmental Protection**

**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF ENVIRONMENTAL CLEANUP AND BROWNFIELDS**

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**SAMPLING EVALUATION REPORT**

SPS Technologies Fire Investigation  
Abington Township, Montgomery County  
Pennsylvania

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Attachment A: DEP March 14, 2025, Sampling and Analysis Plan

Attachment B: March 18, 2025, DEP Site Visit Narrative

Attachment C: Pace Analytical Services Inc. Laboratory Reports

## **1.0 INTRODUCTION**

### **1.1 Objective**

The Pennsylvania Department of Environmental Protection (PA DEP), Hazardous Sites Cleanup Act (HSCA) program performed an investigation of soil following a fire that occurred on February 17, 2025, at the SPS Technologies Facility (facility). The purpose of this investigation was to determine if hazardous substances and/or contaminants which may have released during the fire lead to soil contamination at properties in the vicinity of the facility.

### **1.2 Executive Summary**

DEP and TRC Companies, Inc. (TRC), a contractor working on behalf of SPS Technologies, collected shallow soil and deep soil samples from residential, park, school, and community properties near the facility. The samples were analyzed for polycyclic aromatic hydrocarbons (PAHs), select metals, cyanide, and asbestos. DEP evaluated the sample results for exceedances of Act 2 direct contact Medium-Specific Concentrations (MSCs) for residential soil, compared the concentrations in the shallow and deep soil samples, and evaluated correlations between the regulated substances that exceeded their MSCs.

A few regulated substances (benzo(b)fluoranthene, arsenic, and lead) at the sampled properties exceeded Act 2 MSCs. These exceedances and the ratio of shallow and deep concentrations of the regulated substances did not show a discernable pattern of distribution or correlation across the Area of Investigation (AoI) that could be attributable to the fire at the facility. The benzo(b)fluoranthene, arsenic, and lead concentrations appear to be consistent with background conditions indicative of urban environments and to be unrelated to the SPS Fire.

## **2.0 THE AREA OF INVESTIGATION**

### **2.1 Location**

SPS Technologies, located at 301 Highland Avenue, in Abington Township, Montgomery County, operated a manufacturing facility (facility) that produced fasteners and other materials for the aviation industry.

The area surrounding the facility is mixed use and includes commercial, recreational, and residential properties. The Jenkintown Middle and High School is located approximately a quarter (0.25) mile to the southeast. A SEPTA regional rail line runs north-south and bisects the AoI between SPS Technologies and residential properties to the east.

The Tookany and Tacony Creeks border the facility to the east and south. The Tookany joins the Tacony Creek just south of the facility, and the Tacony flows southeast for approximately ten (10) miles before joining with the Delaware River.



## 2.2 Background

On February 17, 2025, a fire started at SPS Technologies. SPS used a variety of chemicals in their manufacturing processes, including heavy metals, cyanide salts, and zinc-containing compounds.

Emergency responders from several dozen local fire companies extinguished the fire on February 22, 2025. The fire resulted in a visible smoke plume, and the deposition of debris from the facility onto multiple nearby properties. Mandatory and voluntary evacuation zones were established up to a mile to the east of the facility based on the wind direction during the fire.

Following the extinguishment of the fire, both TRC and DEP developed soil sampling plans for several nearby properties including recreational and school properties within the mandatory evacuation zone. Upon securing access, DEP and TRC initiated soil sampling within the AoI.

## 3.0 INVESTIGATION OF RELEASE OR THREAT OF RELEASE

TRC collected sixty-one (61) soil samples from twenty-one (21) properties within the AoI between March 14<sup>th</sup> and March 21<sup>st</sup>. DEP personnel observed TRC sampling activities on March 14<sup>th</sup>, 15<sup>th</sup>, 17<sup>th</sup>, and 18<sup>th</sup>. The properties sampled included Jenkintown School District properties, Abington Friends School, Wall Park, Cedar Street Moretti Park, Jenkintown Town Square, Hallowell Park, Cheese Playground, Knights of Columbus/ Immaculate Conception and 13 residential properties.

DEP collected sixteen (16) soil samples from five (5) properties within the AoI on March 18<sup>th</sup>. Samples were collected from two locations in Hallowell Park, one location each at three residential properties, and two locations from the Jenkintown School District properties. DEP sampling activities were conducted as planned (Sampling and Analysis Plan, 2025 March 14, **Attachment A**) except for properties that did not grant access for DEP to collect soil samples prior to March 18<sup>th</sup>.

DEP sample locations were screened using an X-Ray Fluorescence (XRF) Analyzer to collect readings of concentrations of several metals to aid in sample location selection at each property. XRF readings were taken of surface soil in-situ, and of all DEP samples ex-situ prior to being placed into laboratory bottleware. Additionally, DEP took XRF readings at three locations directly adjacent to TRC sampling locations. XRF results are included in **Appendix 3**.

DEP and TRC soil sample locations are depicted on **Figure 1**.

## 4.0 RESULTS DISCUSSION

Soil sample results are compiled in **Appendix 1 and Appendix 2**. The laboratory data package is included in **Attachment C**. XRF readings for the DEP samples, both in-situ, and ex-situ are included as **Appendix 3**.

DEP conceptualized four (4) zones for evaluation across the AoI based on reported wind direction during the fire at the facility, and proximity of the properties to the facility:

- 1. Near Downwind Properties (Near):** Downwind, within eight hundred (800) meters of the facility
- 2. Far Downwind Properties (Far):** Far Downwind, greater than eight hundred (800) meters of the facility
- 3. Near Upwind Properties (Near Upwind):** Upwind, within eight hundred (800) meters of the facility
- 4. Distal Properties (Distal):** Properties unlikely to be impacted due to their distance and orientation from the facility.

The results were compared to Act 2 MSCs to determine if there were exceedances, except for asbestos which was compared to the regulatory threshold of 1% by weight that defines asbestos containing material (ACM).

To ascertain if the fire at the facility resulted in a discernable pattern of increased concentrations of regulated substances across the AoI, DEP conducted two evaluations:

- A primary comparison of the shallow soil concentrations against the deep soil concentrations for total PAHs, and regulated substances that had exceedances of their MSCs.
- A secondary evaluation of calculated Pearson Correlation Coefficients (PCC) for the regulated substances in the shallow soil samples that had exceedances of their MSCs.

Note: A PCC is the result of statistical test that indicates the magnitude of a linear association between two sets of variables. PCCs are widely used in data analysis, with values ranging between one (1) and negative one (-1). A PCC of one (1) indicates a strong positive correlation, and values approaching negative one (-1) indicate a strong negative correlation.

Comparison of the shallow soil concentrations against the deep soil concentrations for a given chemical:

DEP calculated a unitless ratio (S/D ratio) of shallow and deep samples concentrations of paired samples collected by DEP and TRC for Total PAHs, and three regulated substances that had exceedances of the MSCs.

$$S/D = \frac{SS}{DS}$$

Where:

- |     |                                               |
|-----|-----------------------------------------------|
| S/D | is the Ratio of Shallow and Deep soil results |
| SS  | is the Shallow Soil Result in mg/kg           |
| DS  | is the Deep Soil Result in mg/kg              |

Note: For results less than the reported detection limit, the detection limit was used.

S/D ratios with values less than one (<1) represent higher concentrations of a given chemical in the deeper soil than the shallow soil. S/D ratios with values more than one (>1) represent higher concentrations of a given chemical in shallow soil than the deeper soil.

DEP performed simple linear regression analyses of the S/D ratios for Total PAHs, benzo(b)fluoranthene, arsenic, and lead using Microsoft Excel compared to approximate distance from the facility. Simple linear regression is a statistical model that evaluates the relationship between a scalar and dependent variable. Trendlines for each regulated substance were drawn and include a regression coefficient, which is the slope of the trendline. Regression coefficients of zero (0) indicate no strong evidence of a linear relationship between the scalar, and dependent variable. Coefficient of Determinations ( $R^2$ ) are a measure of how well the linear regressions were able to predict outcomes.  $R^2$  values of range between zero (0) and one (1), with  $R^2$  values closer to one (1) indicating better predictive power.

Evaluation of Pearson Correlation Coefficients (PCC) of the Regulated Substances in the shallow soil that had exceedances of their MSCs:

DEP also calculated population using PCC for the shallow soil concentrations of regulated substances that exceeded their MSC using Microsoft Excel. Population PCCs are calculated as follows:

$$r(R1, R2) = \frac{cov(R1, R2)}{SD1 * SD2}$$

Where:

- r is the Pearson Correlation Coefficient (PCC)
- R1 is Regulated Substance 1
- R2 is Regulated Substance 2
- SD1 is the Standard Deviation of Regulated Substance 1
- SD2 is the Standard Deviation of Regulated Substance 2
- cov is the covariance of R1 and R2 (measure of variability)

Note: Population PCCs are invariant. For results less than the reported detection limit, the detection limit was used

#### 4.1 Polycyclic Aromatic Hydrocarbons Results

Polycyclic Aromatic Hydrocarbons (PAHs) are a group of organic compounds commonly formed during incomplete combustion of organic materials. PAHs are widespread in urban soils such as at within the AoI, with common sources being vehicle exhaust, and petroleum spills. “PAHs are primarily associated with particulate matter, and thus can be transported by air and water and settle out in either soil or sediments, which can then serve as contaminant sinks.” (NIH, 2020) EPA lists 16 PAH compounds on the [Priority Pollutant List](#) (PPL) per [40 CFR Part 423, Appendix A](#).

#### 4.1(a) PAH Exceedances:

DEP sampled for the 16 PAHs on the PPL and submitted to Pace Analytical Services, Greensburg for analysis via USEPA Method 8270 SIM. TRC sampled for 17 PAHs also by USEPA Method 8270 SIM – the same 16 PAHs as DEP, and additionally 2-methylnaphthalene (TRC Work Plans, 2025). The results are summarized in **Appendix 1**.

Benzo(b)fluoranthene was detected above its MSC of 3.5 mg/kg in four (4) samples located on two different properties located in the Far and Near Upwind Zones. Concentrations ranged up to 5.2 mg/kg. **Figure 4** shows the exceedances of benzo(b)fluoranthene in the AoI.

**Table 1** Number of samples per zone and depth with benzo(b)fluoranthene MSC Exceedances.

| Zone        | Depth (in) |       |
|-------------|------------|-------|
|             | 0 – 1      | 1 – 6 |
| Near        | 0          | 0     |
| Far         | 1          | 1     |
| Near Upwind | 0          | 2     |
| Distal      | 0          | 0     |

#### 4.1(b) Comparison between PAHs in surface soil and deep soil across the AoI:

##### Total PAHs:

Total PAH values were calculated for each sample by adding the 16 PAHs analyzed by both DEP and TRC. **Figure 2** depicts Total PAH Results. The additional 2-methylnaphthalene analyzed by TRC was not included in TRC's Total PAH summation results. DEP calculated the ratio of Total PAHs in shallow and deep soil for each set of paired samples.

**Appendix 1** includes the Total PAHs S/Ds for each sample. Below, the Average Total PAH S/D ratios were greater than one (1) in the samples, indicating that higher concentrations of Total PAHs were present in the shallow soil than the deep soil. The average Total PAH S/D ratios were highest in the Far samples, and lowest in the Distal samples.

| Zone                        | Near | Far | Distal | Near Upwind |
|-----------------------------|------|-----|--------|-------------|
| Average Total PAH S/D Ratio | 1.2  | 1.6 | 0.75   | 1.1         |

There was significant variability within the zones. **Figure 3** shows the distribution of Total PAH S/D ratios across the AoI. **Graph 1** shows the distribution of Total PAH S/D by distance for the zones. **Graph 2** shows the linear regression of Total PAH S/Ds in the downwind direction of the fire by distance. The regression coefficient was 0.0005, and the R<sup>2</sup> was .0528. The graphical results and regression analysis indicate that there is no correlation between increased S/D ratios and downwind proximity to the facility.

**Benzo(b)fluoranthene:** **Appendix 1** includes the Benzo(b)fluoranthene S/D ratios for each sample. As seen below, most benzo(b)fluoranthene S/D ratio results were greater than one (>1),

indicating that higher concentrations of Total PAHs were present in the shallow soil than the deep soil. The average benzo(b)fluoranthene S/D ratios were highest in the Far samples, and the lowest in the Distal samples.

| Zone                              | Near | Far | Distal | Near Upwind |
|-----------------------------------|------|-----|--------|-------------|
| Average                           | 1.2  | 1.5 | 0.76   | 1.1         |
| Benzo(b)fluoranthene<br>S/D Ratio |      |     |        |             |

There was significant variability within the zones. **Figure 5** shows the distribution of benzo(b)fluoranthene S/D ratios across the AoI. **Graph 3** shows the distribution of Benzo(b)fluoranthene S/D by distance for the zones. **Graph 4** shows the linear regression of Benzo(b)fluoranthene S/Ds in the downwind direction of the fire by distance. The regression coefficient was 0.0005, and the  $R^2$  was .0528. The graphical results and regression analysis indicate that there is no correlation between increased S/D ratios and downwind proximity to the facility.

## 4.2 Metals Results

DEP and TRC sampled for a broad suite of many of the metals or metal containing compounds used at the facility including chromium, cadmium, lead, and zinc containing compounds (SPS, 2025). Many of the metals, including arsenic and lead are also naturally occurring in soils and rocks in the Commonwealth of Pennsylvania (ITRC, 2017).

An arsenic background study consisting of soil samples collected from seven states at locations that were representative of background conditions included 408 soil samples collected across Pennsylvania (AECOM, 2002). The AECOM study calculated an arsenic background threshold value (BTV) of 23.4 mg/kg in Pennsylvania.

As part of a background survey of soils in the United States, a total of 75 samples were collected from sites located in Pennsylvania (USGS, 2013). Soil samples were analyzed for a number of major and trace elements, including lead. This dataset was used to calculate a 95% Upper Confidence Limit (UCL) of 68.9 mg/kg of lead in Pennsylvania soils. Additionally, lead was released during the combustion of leaded gas, which was in use from 1921 to 1996, and was used in paint for residential homes until 1978 (Stolark, 2016).

DEP sampled for 25 Metals and submitted them to Pace Analytical Services, Beaver for analysis via USEPA Method 6010D, and mercury via USEPA Method 7471B. TRC analyzed for 22 Metals via USEPA Method 6010D and Method 7471B. DEP's analyte list included two metals, lithium and titanium, that were not analyzed by TRC's laboratory, and TRC sampled for one metal, barium, that was not included on DEP's analyte list. The results are summarized in **Appendix 2**.

#### 4.2(a) Metals Exceedances:

Both arsenic and lead, exceeded their respective Act 2 MSCs in several samples. The results are depicted in **Figure 4** and **Figure 8**, respectively.

**Arsenic:** Twelve (12) samples were above the MSC of 12 mg/kg on six (6) different properties located in the AoI. Concentrations ranged up to 26 mg/kg.

**Table 2 Number of samples per zone and depth with arsenic MSC Exceedances**

| Zone        | Depth (in) |       |
|-------------|------------|-------|
|             | 0 – 1      | 1 – 6 |
| Near        | 4          | 3     |
| Far         | 2          | 2     |
| Near Upwind | 1          | 0     |
| Distal      | 0          | 0     |

**Lead:** Thirteen (13) samples were above the MSC of 500 mg/kg in samples collected from six (6) different properties located in the AoI. Concentrations ranged up to 2400 mg/kg.

**Table 3 Number of samples per zone and depth with lead MSC Exceedances**

| Zone        | Depth (in) |       |
|-------------|------------|-------|
|             | 0 – 1      | 1 – 6 |
| Near        | 3          | 4     |
| Far         | 3          | 3     |
| Near Upwind | 0          | 0     |
| Distal      | 0          | 0     |

#### 4.2(b) Comparison between metals in surface soil and deep soil across the AoI

**Arsenic:** **Appendix 2** includes the average arsenic S/D Ratios for each sample. **Figure 7** shows the distribution of arsenic S/D ratios across the AoI.

| Zone                       | Near | Far  | Distal | Near Upwind |
|----------------------------|------|------|--------|-------------|
| Average Arsenic S/D Ratios | 0.98 | 0.82 | 0.92   | 0.80        |

Average arsenic S/D ratios were less than one (<1) in the samples, indicating that lower concentrations of arsenic were present in the shallow soil than the deep soil. The average arsenic S/D ratio were highest in the Near samples, and lowest in the Near Upwind samples.

There was significant variability within the zones. **Figure 7** shows the distribution of arsenic S/D ratios across the AoI. **Graph 5** shows the distribution of arsenic S/D by distance for the zones. **Graph 6** shows the linear regression of arsenic S/D ratios in the downwind direction of the fire by distance. The regression coefficient was -0.0001, and the R<sup>2</sup> was .0306. The graphical results

and regression analysis indicate that there is no correlation between increased S/D ratios and downwind proximity to the facility.

**Lead:** **Appendix 2** includes the lead S/D ratios for each sample. Most lead S/D ratios were less than one (<1) in the samples, indicating that lower concentrations of lead were present in the shallow soil than the deep soil. The of average lead S/D ratios were highest in the Near zone samples, and the lowest in the Near Upwind samples as seen below.

| Zone                    | Near | Far  | Distal | Near Upwind |
|-------------------------|------|------|--------|-------------|
| Average Lead S/D Ratios | 1.1  | 0.92 | 0.94   | 0.86        |

There was significant variability within the zones. **Figure 9** shows the distribution of lead S/D ratios across the AoI. **Graph 7** shows the distribution of lead S/D by distance for the zones. **Graph 8** shows the linear regression of lead S/D ratios in the downwind direction of the fire by distance. The regression coefficient was -0.000007, and the R<sup>2</sup> was .000006. The graphical results and regression analysis indicate that there is no correlation between increased S/D ratios and downwind proximity to the facility.

#### **4.3 Cyanide Results**

Cyanide was present in the facility's manufacturing process as potassium cyanide and sodium cyanide, and cyanide was detected in the Tacony Creek during the fire (Clean Water Program, 2025). Hydrogen cyanide can be generated in fires from the combustion of organic materials (Yang et al., 2022).

Both DEP and TRC sampled for cyanide, and the results are presented in **Appendix 2**. Total cyanide was analyzed for DEP by Pace Analytical Services Inc. Greensburg via EPA Method 9012B. Additional analysis of cyanide by method SM 4500 CN G-16 was performed to speciate total cyanide if results exceeded screening against the MSC.

Total cyanide was not detected above the Act 2 MSC for free cyanide in any of the samples.

Amenable and free cyanide were sampled for by DEP and TRC, respectively, and were all below the total cyanide concentrations and thus below the MSC.

#### **4.4 Asbestos Results**

At the time of the fire, an unknown amount of asbestos was believed to be present as part of the facility insulation.

Asbestos samples were also subcontracted to Pace Analytical Services Inc. Golden for analysis via USEPA Method EPA 600/R-93/116 using Polarized Light Microscopy (PLM).

Asbestos was not detected in any of the samples collected by DEP or TRC.

#### **4.5 Pearson Correlation Coefficients (PCC)**

DEP calculated population PCCs for shallow soil samples for the three (3) regulated substances that exceeded their MSCs, for each of the four (4) zones.

*Table 4: Population PCCs for shallow soil samples.*

| <b>Zone</b>        | <b>Benzo(b)fluoranthene<br/>/Arsenic</b> | <b>Benzo(b)fluoranthene<br/>/Lead</b> | <b>Lead<br/>/Arsenic</b> |
|--------------------|------------------------------------------|---------------------------------------|--------------------------|
| <b>Near</b>        | 0.38                                     | -0.14                                 | -0.05                    |
| <b>Far</b>         | -0.28                                    | -0.17                                 | -0.17                    |
| <b>Distal</b>      | 0.95                                     | 0.08                                  | 0.26                     |
| <b>Near Upwind</b> | -0.24                                    | 0.92                                  | 0.17                     |

A strong correlation between benzo(b)fluoranthene and arsenic was found in the Distal zone samples. A strong correlation of benzo(b)fluoranthene and lead was found in the Near Upwind zone samples. Weak, or negative correlations were found between lead and arsenic in all zones.

### **5.0 CONCLUSIONS**

DEP used generally acceptable methods, and best practices in the field of environmental investigation to ascertain if there are discernable patterns of exceedances of regulated substances resulting from the fire, and/or enrichment of the shallow soil at the sampled locations across the AoI. DEP's review and analysis did not discern a pattern of PAH exceedances within the set of samples collected.

PAHs were likely generated and released during the fire, due to the incomplete combustion of organic substances in building materials (ITRC, 2017). The lack of pre-fire soil sampling data prevents DEP from ascertaining if the presence of a specific PAH at a specific location detected within this set of sample results was a direct result of the fire or increased by a measurable concentration as a result of the fire.

The concentrations of two metals, lead and arsenic, exceeded their respective MSCs at several properties. The results did not reveal a discernable pattern of arsenic and lead exceedances or a pattern of increased arsenic and lead concentrations in the shallow soil compared to the deeper soil. The concentrations of lead and arsenic were generally within previously documented ranges for soil in Pennsylvania (ITRC, 2017), with the exception of a few residential properties with elevated levels of lead concentration that may reflect property-specific conditions.

Linear regressions of the S/D ratios for Total PAHs, benzo(b)fluoranthene, arsenic, and lead found negligible associations between the ratios and downwind distance from the facility. The predictive power of the regressions was likewise infinitesimal. The graphical results and regression analysis indicate that there is no correlation between increased S/D ratios and downwind proximity to the facility.



Correlations of benzo(b)fluoranthene concentrations between arsenic and lead concentrations were identified in a few areas in the AoI. However, strong positive correlations were found in the upwind and distal zones, not in the downwind zones, and therefore were not distributed in a spatial pattern that would indicate the correlations are a result of the fire at the facility.

## 6.0 DISCUSSION OF LIMITATIONS

**Small Sample Sizes:** Soil is inherently heterogenous environmental media, and contaminants typically do not diffuse evenly into soil. Concentrations of contaminants can vary between locations at a microscale. Only a small subset of the properties within the AoI were sampled by DEP and TRC. The reasons for the small number of samples include both restricted property access and operational costs. DEP's conclusions are based solely on the available data for the AoI. DEP reserves the right to amend or revise this report based on additional data.

**Reliance on Third Party Data:** This report and its conclusions rely substantially on the accuracy of sample results collected by TRC, which were voluntarily provided to DEP. DEP did not collect duplicate samples from the same locations as TRC. DEP and TRC sample results are generally consistent for the properties that were sampled by both DEP and TRC. DEP reserves the right to amend or revise this report if substantial errors with the TRC sample results are found.

**Determination of Property-Specific Risks:** The sampling performed by DEP and TRC was not designed to fully evaluate risks to human-health or the environment at any specific property. A determination of the risks posed by the MSC exceedances detected is outside the scope of the sampling, and this report.

**Access:** Prior to sampling, DEP sought access to a wider number of properties that did not respond to requests. However, many of those properties were not directly downwind, and their results are not expected to significantly change the conclusions of this report.

**Location Data:** Both DEP and TRC used devices with Global Positioning Systems (GPSs) to record locations that are precise to 10 – 15 meters. The deposition of PAHs from petroleum-fueled vehicles is known to decrease with distance from roadways (Hitchins, 2000). The use of more precise GPSs could have allowed for enhanced data review.

**Statistical Test:** DEP calculated population PPCs for the shallow soil sample locations by zone. This analysis can only identify linear correlations between data sets. Likewise linear regression can only quantify linear relationships between variables. Correlations do not provide definitive evidence of causation.

## 7.0 RECOMMENDATIONS

At the time of the sampling, waste removal activities were ongoing at the facility, and a full determination had not been made available to DEP whether there were additional releases of hazardous substances or contaminants to the environment. If a release of hazardous substances or contaminants is documented at the facility, then SPS should enter DEP's Act 2 Program.

Consistent with Pennsylvania Department of Health guidelines, park visitors and school children should be discouraged from eating soil or placing soil in their mouths. All visitors should wash their hands after park activities. Residential property owners with elevated soil lead and arsenic concentrations should follow precautions such as washing hands after working or playing in the dirt (like gardening) or removing footwear before entering the home. Areas where children play should be covered with grass, mulch or clean soil to reduce exposures. Property owners with further concerns about environmental conditions should contact an environmental consultant to perform additional environmental investigation and/or remediation activities.

## 8.0 REFERENCES

Administration of the Land Recycling Program, Chapter 250, 25 Pa. Code §250.1 *et seq.* [25 Pa. Code Chapter 250. Administration Of Land Recycling Program](#)

AECOM (2002). *Background Versus Risk-Based Screening Levels – An Examination of Arsenic Background Soil Concentrations in Seven States.*  
<https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1093&context=soilsproceedings>

Clean Water Program. (2025 March 6). *NPDES Compliance Inspection Report: SPS Technologies – Jenkintown Plant.* (No. PA0010961; pp. 1–3). DEP SERO. Retrieved May 8, 2025, from <https://www.pa.gov/agencies/dep/about-dep/regional-office-locations/southeast-regional-office/southeast-community-information/sps-technologies.html>

EPA. (2014, December). *Priority Pollutant List.* Retrieved from epa.gov:  
<https://www.epa.gov/sites/default/files/2015-09/documents/priority-pollutant-list-epa.pdf>

Hitchins Jet al. (2000). Concentrations of submicrometre particles from vehicle emissions near a major road. *Atmospheric Environment*, 34(1):51–59.

ITRC (Interstate Technology & Regulatory Council). (2017). *Bioavailability of Contaminants in Soil: Considerations for Human Health Risk Assessment BCS-1.* Washington, D.C.: Interstate Technology & Regulatory Council. [www.itrcweb.org](http://www.itrcweb.org).

*EPA Method 8270E (SW-846): Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC-MS) | US EPA.* (2024, October 21). <https://www.epa.gov/esam/epa-method-8270e-sw-846-semivolatile-organic-compounds-gas-chromatographymass-spectrometry-gc>

*EPA SW-846 Test Method 9012B: Total and amenable cyanide (Automated Colorimetric, with Off-Line distillation) | US EPA.* (2024, August 14). <https://www.epa.gov/hw-sw846/sw-846-test-method-9012b-total-and-amenable-cyanide-automated-colorimetric-line>

MSCs Tables for Regulated Substances in Soil: Direct Contact Values. *Statewide health standards.* (2021, March 27). Department of Environmental Protection | Commonwealth of Pennsylvania. <https://www.pa.gov/agencies/dep/programs-and-services/land/land-recycling-program/standards-guidance-and-procedures/statewide-health-standards.html>

Perkins, R. L., & Harvey, B. W. (1993, June). *Method for the determination of asbestos in in Soil and Bulk Materials.* [EPA-600-R-93-116](https://semspub.epa.gov/work/HQ/177098.pdf). <https://semspub.epa.gov/work/HQ/177098.pdf>

Patel, A. B., Shaikh, S., Jain, K. R., Desai, C., & Madamwar, D. (2020, November 5). *Polycyclic Aromatic Hydrocarbons: Sources, Toxicity, and Remediation Approaches.* *Frontiers in Microbiology.* <https://doi.org/10.3389/fmicb.2020.562813>

*Proposed Fire Response Dust and Soil Investigation School Workplan: Jenkintown School,* March 14, 2025, prepared by TRC on behalf of SPS Technologies

*Proposed Fire Response Dust and Soil Investigation School Workplan: Abington Friends School,* March 14, 2025, prepared by TRC on behalf of SPS Technologies

*Proposed Fire Response: Residential Indoor Dust and Residential and Community Soil Sampling Workplan,* March 17, 2025, prepared by TRC on behalf of SPS Technologies

*Soil and Surface Wipe Sampling Summary Report: Jenkintown and Abington Friends School,* April 14, 2025, prepared by TRC on behalf of SPS Technologies

*Preliminary Soil Sampling Results Spreadsheet* provided April 17, 2025, prepared by TRC on behalf of SPS Technologies

*Laboratory Reports, and TRC's Data Validation Reports for the School and Community Sampling* performed by TRC on behalf of SPS, provided by SPS Technologies on April 18, 2025

SPS Technologies (2025). *Overview of manufacturing processes and how we make aerospace fasteners.* [SPS Process Overview Fo 2025.02.26](https://www.spsupdates.com/) <https://www.spsupdates.com/>

Stolark, J. (2016, March). Fact sheet: A brief history of octane in gasoline: From lead to ethanol. Environmental and Energy Study Institute (EESI). <https://www.eesi.org/papers/view/fact-sheet-a-brief-history-of-octane>

*Technical Guidance Manual.* (2021, March 27). Department of Environmental Protection | Commonwealth of Pennsylvania. <https://www.pa.gov/agencies/dep/programs-and-services/land/land-recycling-program/standards-guidance-and-procedures/guidance-and-technical-tools/technical-guidance-manual.html>

USGS (2013). *Geochemical and Mineralogical Data for Soils of the Conterminous United States.*

Yang, X., Lan, L., Zhao, Z., Zhou, S., Kang, K., Song, H., & Bai, S. (2022). A review on cyanide gas elimination methods and materials. *Molecules*, 27(20), 7125.  
<https://doi.org/10.3390/molecules27207125>

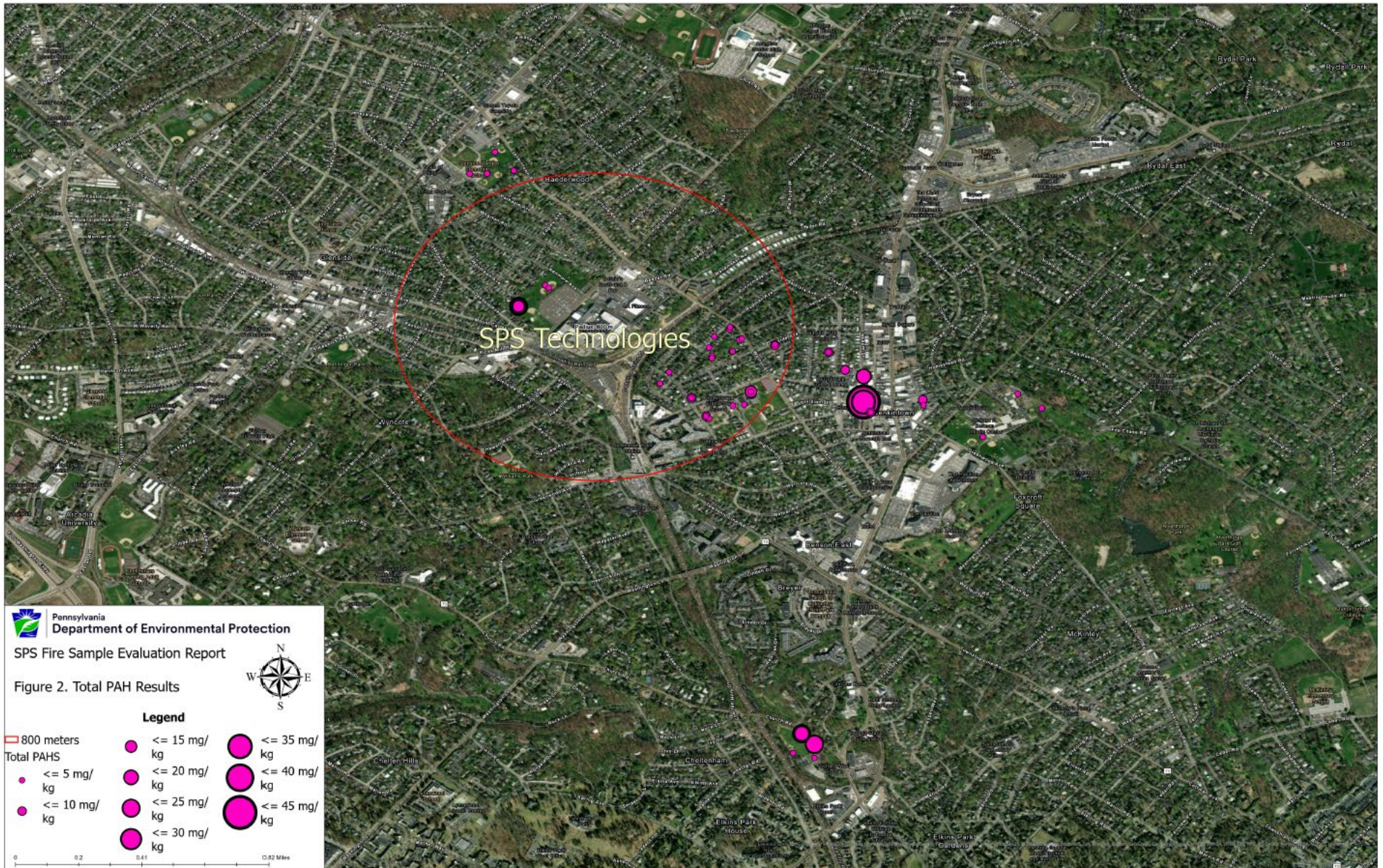


**Figure 1: Soil Sampling Locations**





**Figure 2: Total PAH Results**





**Figure 3: Total PAH S/D Ratios**





**Figure 4: Benzo(b)fluoranthene MSC Exceedances**





**Figure 5: Benzo(b)fluoranthene S/D Ratios**





**Figure 6: Arsenic MSC Exceedances**





Figure 7: Arsenic S/D Ratios





**Figure 8: Lead MSC Exceedances**

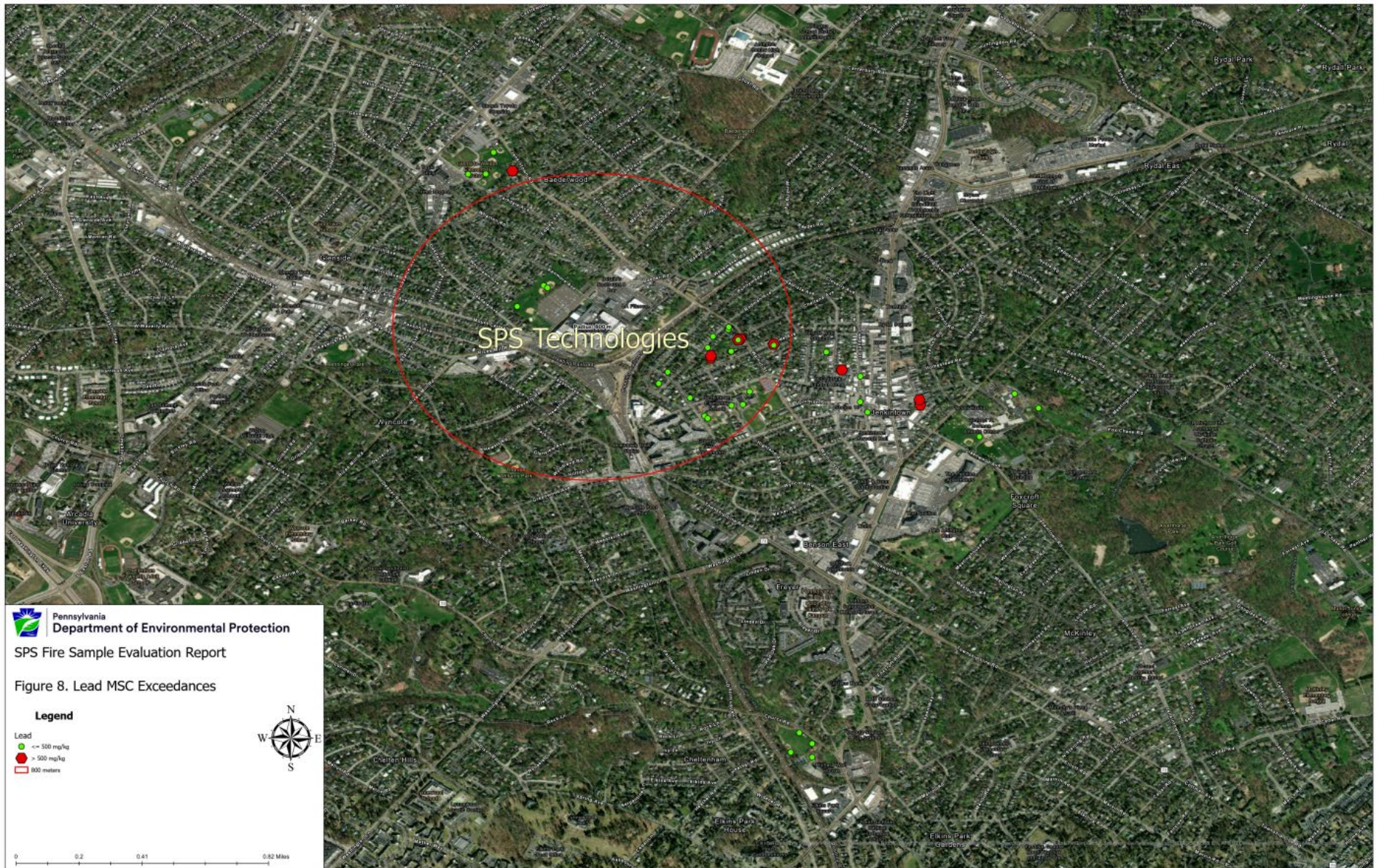
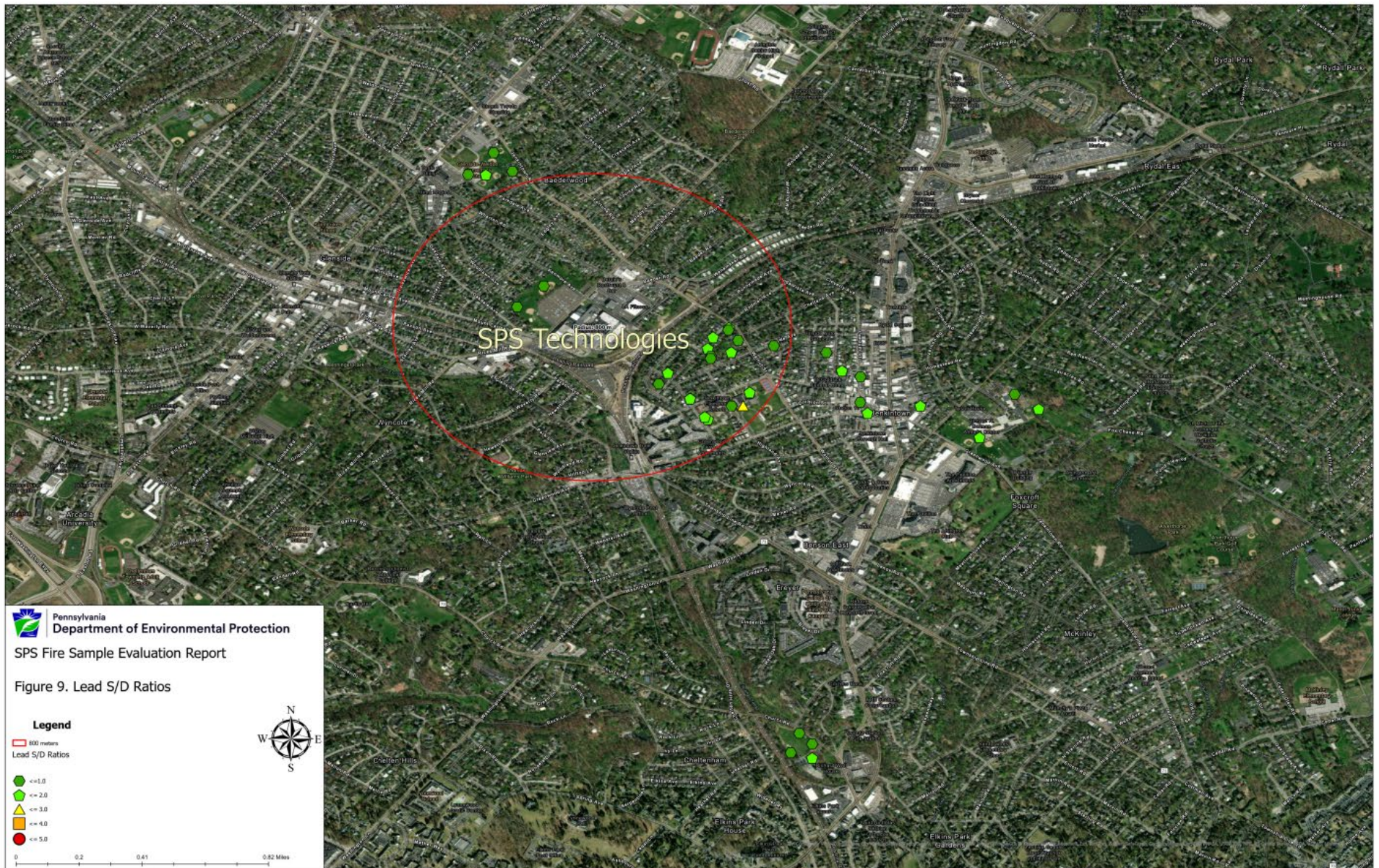


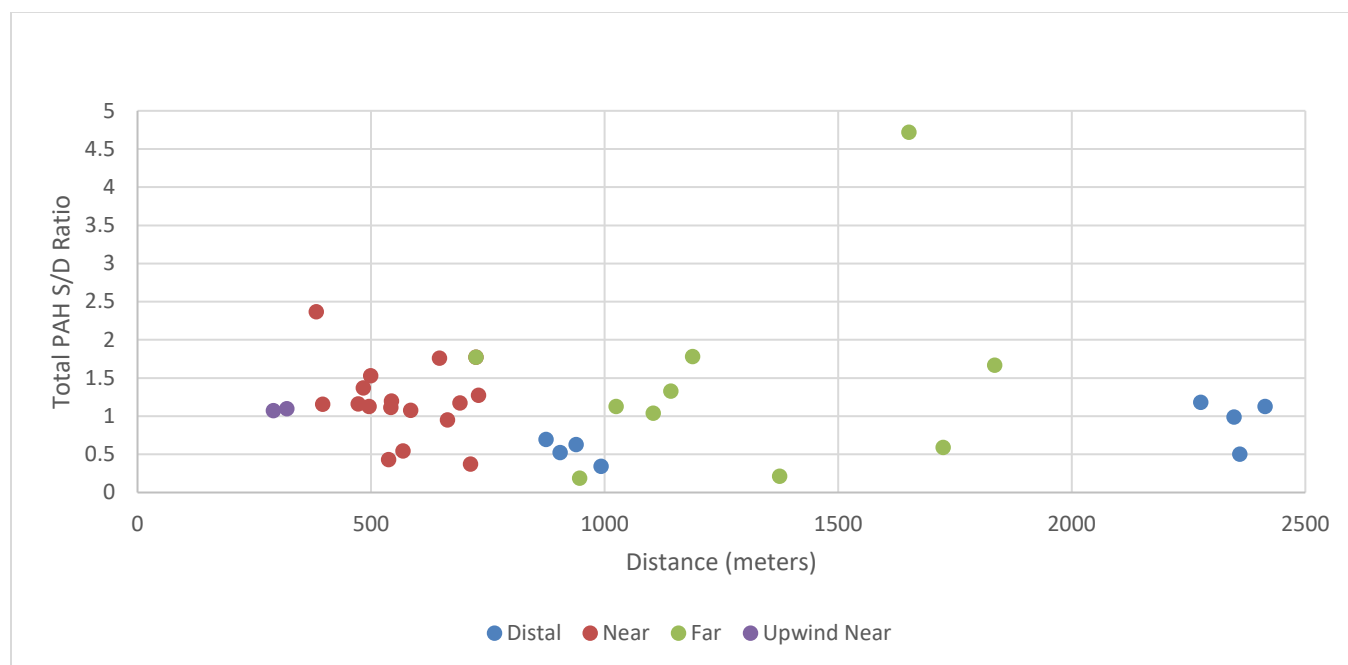


Figure 9: Lead S/D Ratios

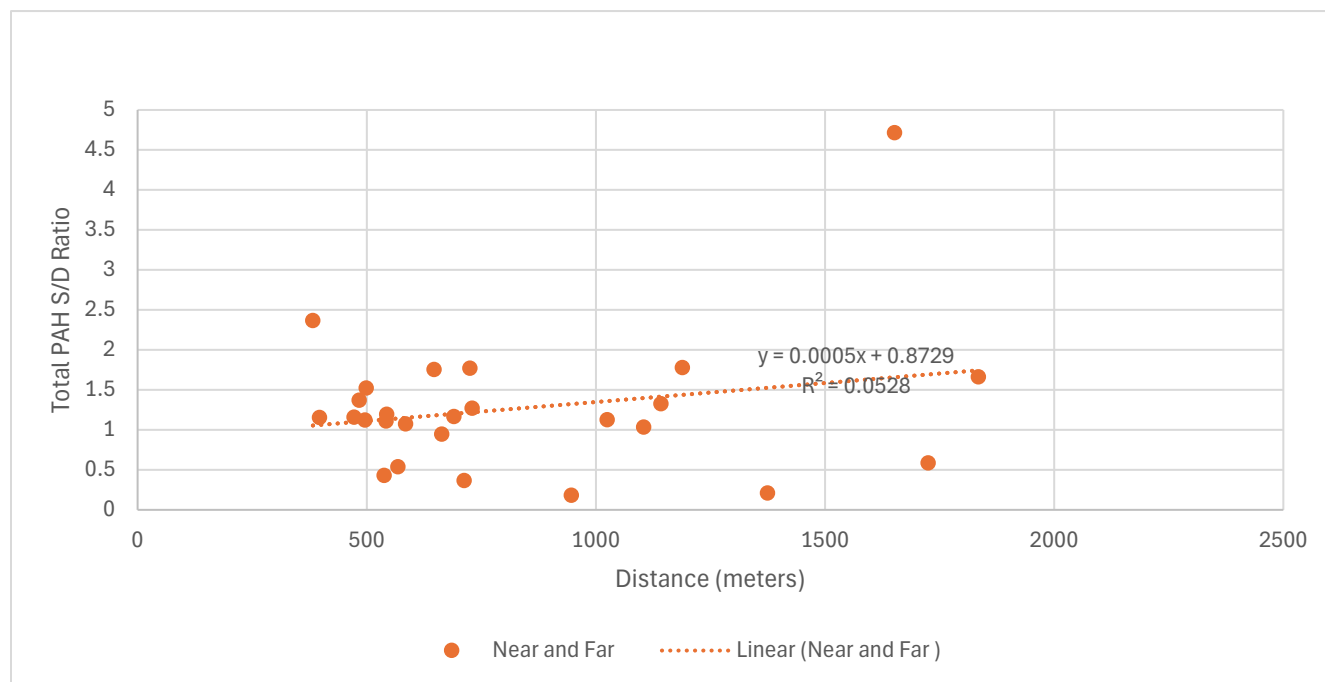




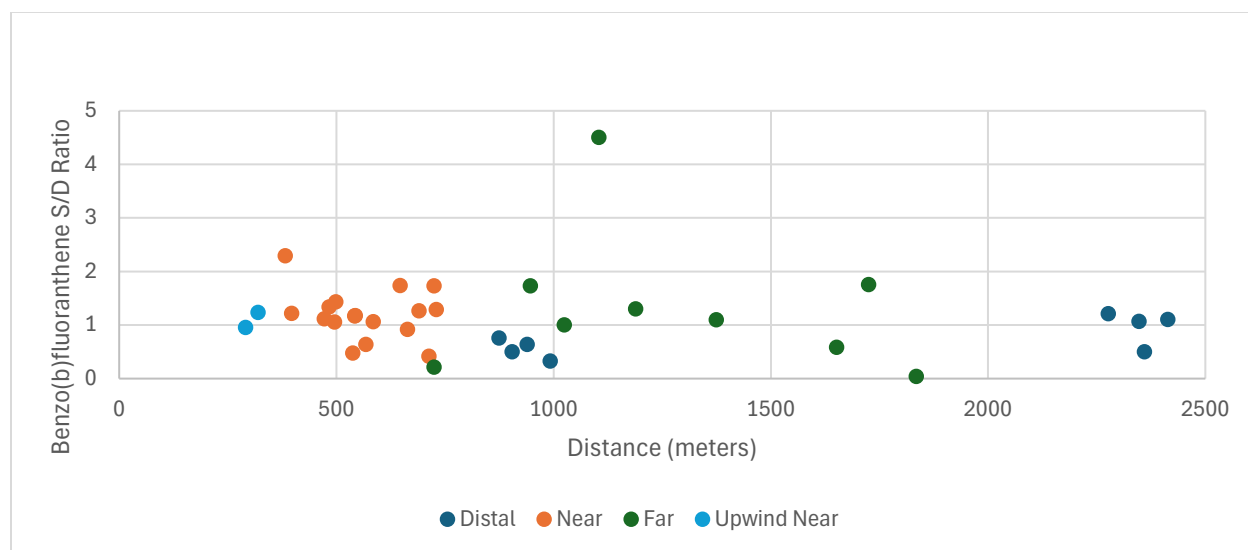
**Graph 1: Total PAH S/D Ratio vs Distance from the Facility**



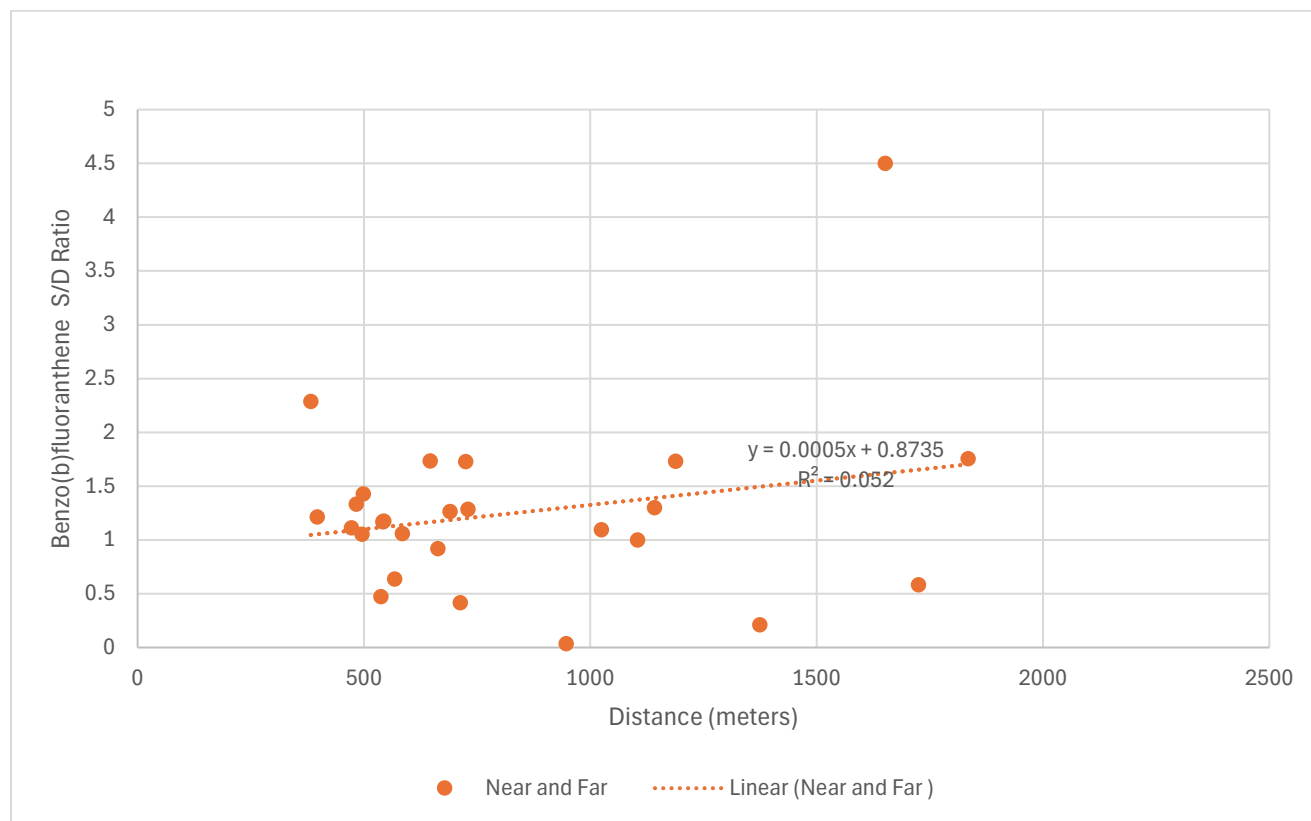
**Graph 2: Linear Regression of Total PAH S/D Ratios Downwind of the Facility**



**Graph 3: Benzo(b)fluoranthene S/D Ratios vs Distance from the Facility**

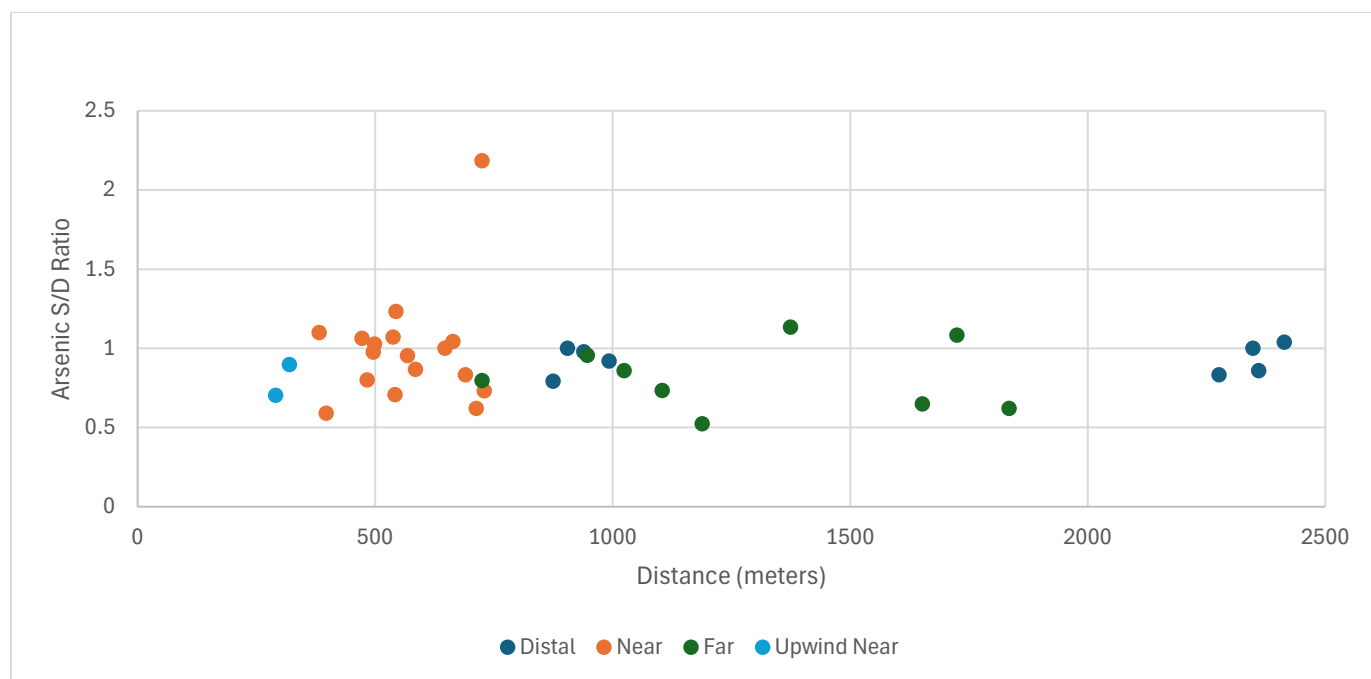


**Graph 4: Linear Regression of Benzo(b)fluoranthene S/D Ratios Downwind of the Facility**

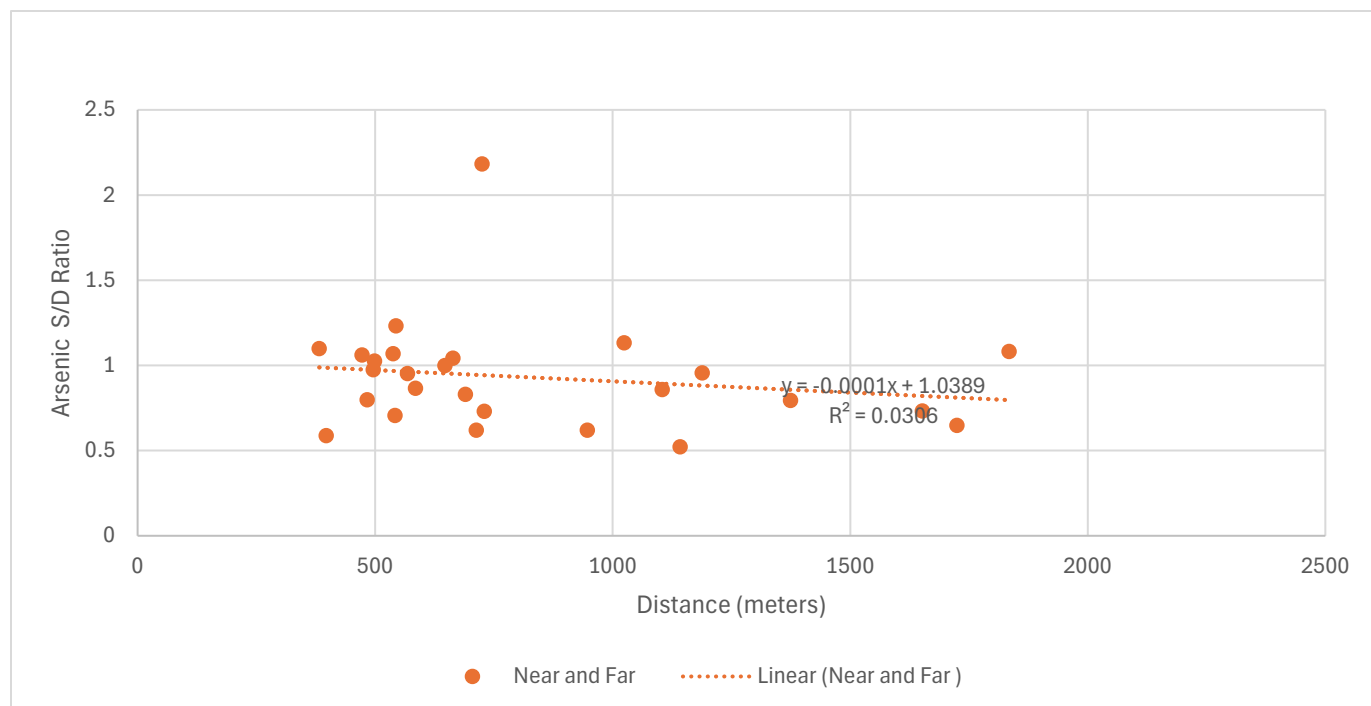




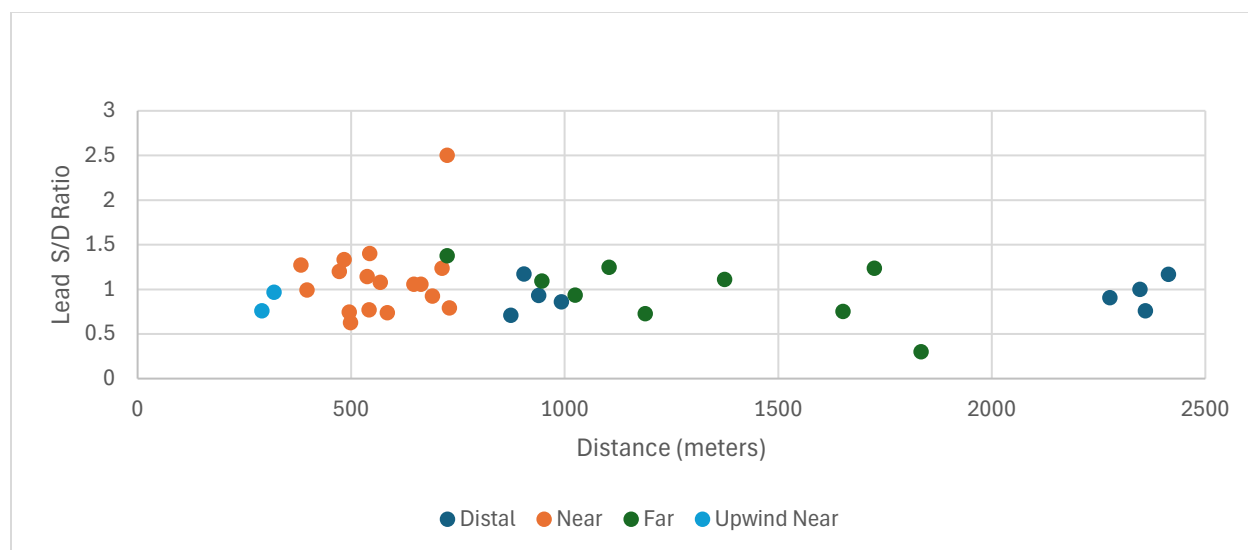
**Graph 5: Arsenic Ratios vs Distance from the Facility**



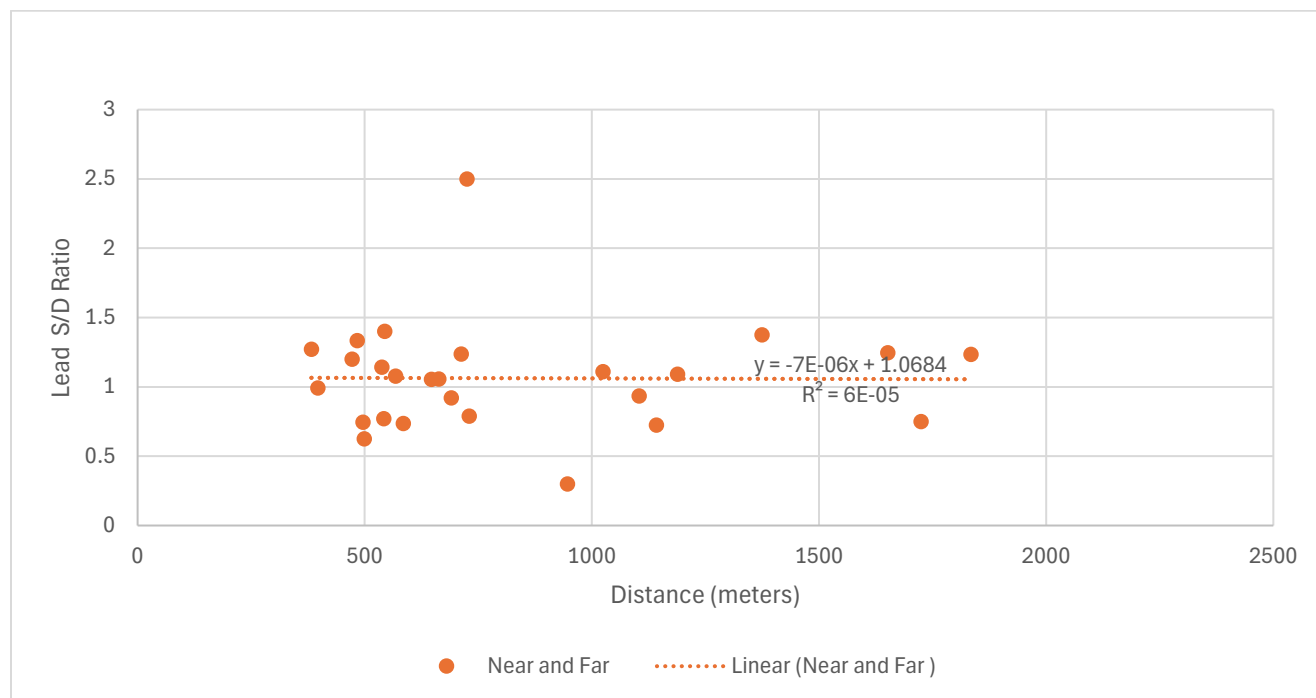
**Graph 6: Linear Regression of Arsenic S/D Ratios Downwind of the Facility**



**Graph 7: Lead Ratios vs Distance from the Facility**



**Graph 8: Linear Regression of Lead S/D Ratios Downwind of the Facility**





***Appendix 1: PAH Results***

| Physical Address                          | Depth | Zone   | Sampling Organization | Acenaphthene Q | Acenaphthylene Q | Anthracene Q | Benzo(a)anthracene Q | Benzo(a)pyrene Q | Benzo(b)fluoranthene Q | Benzo(ghi)perylene Q | Benzo(k)fluoranthene Q | Chrysene Q | Dibenzo(a,h)anthracene Q | Fluoranthene Q | Fluorene Q | Indeno(1,2,3-cd)pyrene Q | Naphthalene Q | Phenanthrene Q | Pyrene Q | 2-Methylnaphthalene Q | Total PAHs | Total PAH S/D Ratio | Benzo(b)fluoranthene S/D Ratio |
|-------------------------------------------|-------|--------|-----------------------|----------------|------------------|--------------|----------------------|------------------|------------------------|----------------------|------------------------|------------|--------------------------|----------------|------------|--------------------------|---------------|----------------|----------|-----------------------|------------|---------------------|--------------------------------|
| CAS#                                      |       |        |                       | 83-32-9        | 208-96-8         | 120-12-7     | 56-55-3              | 50-32-8          | 205-99-2               | 191-24-2             | 207-08-9               | 218-01-9   | 53-70-3                  | 206-44-0       | 86-73-7    | 193-39-5                 | 91-20-3       | 85-01-8        | 129-00-0 | 91-57-6               |            |                     |                                |
| Direct Contact MSC                        |       |        |                       | 13000          | 13000            | 66000        | 6.1                  | 4.2              | 3.5                    | 13000                | 3.5                    | 35         | 1                        | 8800           | 8800       | 3.5                      | 13            | 66000          | 6600     | 57                    |            |                     |                                |
| Cheese Playgournd                         | 0-1"  | Distal | TRC                   | 0.0067         | 0.0047           | 0.02         | 0.1                  | 0.1              | 0.14                   | 0.061                | 0.049                  | 0.1        | 0.02                     | 0.21           | 0.0058     | 0.077                    | <0.0021       | 0.097          | 0.16     | <0.0021               | 1.15       | 0.63                | 0.64                           |
| Cheese Playgournd                         | 1-6"  | Distal | TRC                   | 0.0086 J       | 0.0098 J         | 0.028        | 0.16                 | 0.16             | 0.22                   | 0.093                | 0.074                  | 0.16       | 0.026                    | 0.35           | 0.0084 J   | 0.12                     | <0.0089       | 0.15           | 0.26     | <0.0084               | 1.84       |                     |                                |
| Cheese Playgournd                         | 0-1"  | Distal | TRC                   | 0.0045         | 0.0054           | 0.015        | 0.1                  | 0.11             | 0.15                   | 0.073                | 0.055                  | 0.11       | 0.022                    | 0.19           | 0.0041     | 0.087                    | 0.0028 J      | 0.069          | 0.16     | <0.0022               | 1.16       | 0.52                | 0.50                           |
| Cheese Playgournd                         | 1-6"  | Distal | TRC                   | 0.011          | 0.012            | 0.033        | 0.19                 | 0.21             | 0.3                    | 0.13                 | 0.097                  | 0.2        | 0.035                    | 0.38           | 0.0099 J   | 0.16                     | <0.0092       | 0.15           | 0.3      | <0.0092               | 2.23       |                     |                                |
| Cheese Playgournd                         | 0-1"  | Distal | TRC                   | 0.0041         | 0.0064           | 0.016        | 0.12                 | 0.14             | 0.2                    | 0.088                | 0.065                  | 0.13       | 0.022                    | 0.27           | 0.0043     | 0.11                     | <0.0025       | 0.088          | 0.19     | <0.0025               | 1.46       | 0.34                | 0.33                           |
| Cheese Playgournd                         | 1-6"  | Distal | TRC                   | 0.013          | 0.027            | 0.048        | 0.36                 | 0.41             | 0.61                   | 0.26                 | 0.2                    | 0.39       | 0.068                    | 0.74           | 0.011      | 0.32                     | <0.0089       | 0.21           | 0.57     | <0.0089               | 4.25       |                     |                                |
| Jenkintown Rd - Home                      | 0-1"  | Distal | TRC                   | 0.0058         | 0.019            | 0.029        | 0.15                 | 0.15             | 0.22                   | 0.1                  | 0.072                  | 0.15       | 0.032                    | 0.25           | 0.0056     | 0.12                     | 0.0096        | 0.098          | 0.19     | 0.0071                | 1.60       | 0.69                | 0.76                           |
| Jenkintown Rd - Home                      | 1-6"  | Distal | TRC                   | 0.015          | 0.018            | 0.048        | 0.22                 | 0.22             | 0.29                   | 0.13                 | 0.11                   | 0.21       | 0.045                    | 0.37           | 0.013      | 0.16                     | 0.011         | 0.18           | 0.27     | 0.011                 | 2.31       |                     |                                |
| Wall Park                                 | 0-1"  | Distal | TRC                   | 0.0089 J       | 0.043            | 0.039        | 0.23                 | 0.24             | 0.32                   | 0.15                 | 0.11                   | 0.21       | 0.046                    | 0.41           | 0.011 J    | 0.18                     | <0.017        | 0.15           | 0.33     | <0.017                | 2.49       | 1.13                | 1.10                           |
| Wall Park                                 | 1-6"  | Distal | TRC                   | 0.0056         | 0.058            | 0.033        | 0.2                  | 0.22             | 0.29                   | 0.15                 | 0.1                    | 0.19       | 0.045                    | 0.3            | 0.007      | 0.17                     | 0.066         | 0.098          | 0.28     | 0.0054                | 2.21       |                     |                                |
| Wall Park                                 | 0-1"  | Distal | TRC                   | <9.8           | 0.019 J          | 0.019 J      | 0.093                | 0.1              | 0.14                   | 0.07                 | 0.048                  | 0.096      | 0.025                    | 0.18           | <0.0098    | 0.087                    | <0.020        | 0.063          | 0.14     | <0.020                | 1.12       | 0.50                | 0.50                           |
| Wall Park                                 | 1-6"  | Distal | TRC                   | 0.017 J        | 0.022            | 0.042        | 0.21                 | 0.21             | 0.28                   | 0.12                 | 0.086                  | 0.18       | 0.041                    | 0.38           | 0.011      | 0.15                     | <0.018        | 0.17           | 0.3      | <0.018 J              | 2.24       |                     |                                |
| Wall Park                                 | 0-1"  | Distal | TRC                   | 0.072 J        | 0.45 J           | 0.36         | 2                    | 2                | 2.9                    | 1.3                  | 0.97                   | 1.9        | 0.4                      | 0.077          | 3.7        | 1.5                      | 0.046 J       | 1.2            | 2.8      | 0.032                 | 21.68      | 1.18                | 1.21                           |
| Wall Park                                 | 1-6"  | Distal | TRC                   | 0.067 J        | 0.31 J           | 0.3          | 1.7                  | 1.7              | 2.4                    | 1                    | 0.78                   | 1.6        | 0.31                     | 3.3            | 0.07       | 1.2                      | 0.028 J       | 1.1            | 2.5      | 0.02                  | 18.37      |                     |                                |
| Wall Park                                 | 0-1"  | Distal | TRC                   | 0.059 J        | 0.37 J           | 0.36         | 2.2                  | 2.5              | 3.2                    | 1.5                  | 1.1                    | 1.9        | 0.43                     | 3.3            | 0.058      | 1.7                      | 0.057         | 0.83           | 2.9      | 0.029 J               | 22.46      | 0.99                | 1.07                           |
| Wall Park                                 | 1-6"  | Distal | TRC                   | 0.063 J        | 0.29 J           | 0.43         | 2.4                  | 2.4              | 3                      | 1.3                  | 0.98                   | 1.9        | 0.4                      | 3.7            | 0.066      | 1.6                      | 0.046 J       | 1.2            | 3        | 0.023                 | 22.78      |                     |                                |
| Cottman St - Home 1                       | 0-1"  | Far    | TRC                   | 0.0037         | 0.016            | 0.018        | 0.1                  | 0.1              | 0.14                   | 0.063                | 0.052                  | 0.11       | 0.017                    | 0.21           | 0.0044     | 0.078                    | 0.0022        | 0.074          | 0.16     | <1.8                  | 1.15       | 0.21                | 0.21                           |
| Cottman St - Home 1                       | 1-6"  | Far    | TRC                   | 0.016          | 0.092            | 0.084        | 0.48                 | 0.49             | 0.66                   | 0.3                  | 0.24                   | 0.49       | 0.083                    | 0.96           | 0.021      | 0.37                     | <19           | 0.34           | 0.73     | <19                   | 5.38       |                     |                                |
| Abington Friends                          | 0-1"  | Far    | TRC                   | 0.036 J        | 0.023 J          | 0.1          | 0.36                 | 0.36             | 0.54                   | 0.25                 | 0.17                   | 0.37       | 0.072                    | 0.81           | 0.042      | 0.29                     | 0.022 J       | 0.48           | 0.59     | 0.012 J               | 4.52       | 4.72                | 4.50                           |
| Abington Friends                          | 1-6"  | Far    | TRC                   | 0.0043 J       | 0.012 J          | 0.016        | 0.082                | 0.088            | 0.12                   | 0.069                | 0.04                   | 0.085      | 0.018                    | 0.16           | 0.005 J    | 0.071                    | <0.0076       | 0.067          | 0.13     | <7.6 J                | 0.96       |                     |                                |
| Abington Friends                          | 0-1"  | Far    | TRC                   | <4.0           | 0.0051 J         | 0.0041 J     | 0.016                | 0.018            | 0.028                  | 0.014                | 0.008                  | 0.018      | <0.0040                  | 0.03           | <0.0040    | 0.015                    | <0.0080       | 0.012 J        | 0.024    | <8.0 J                | 0.20       | 0.58                | 0.58                           |
| Abington Friends                          | 1-6"  | Far    | TRC                   | 0.0095 J       | 0.0069 J         | 0.0066       | 0.03                 | 0.034            | 0.048                  | 0.022                | 0.015                  | 0.034      | 0.0067                   | 0.054          | 0.0014 J   | 0.025                    | 0.0074 J      | 0.017          | 0.042    | <1.9 J                | 0.35       |                     |                                |
| Abington Friends                          | 0-1"  | Far    | TRC                   | 0.002 J        | 0.01 J           | 0.012        | 0.068                | 0.072            | 0.1                    | 0.045                | 0.035                  | 0.07       | 0.014                    | 0.14           | 0.0026     | 0.055                    | 0.0015 J      | 0.046          | 0.1      | 0.0016 J              | 0.77       | 1.67                | 1.75                           |
| Abington Friends                          | 1-6"  | Far    | TRC                   | 0.0024 J       | 0.0055 J         | 0.011        | 0.041                | 0.041            | 0.057                  | 0.02                 | 0.041                  | 0.0081     | 0.008                    | 0.08           | 0.0033     | 0.031                    | 0.0027 J      | 0.037          | 0.058    | 0.0026 J              | 0.46       |                     |                                |
| Cedar St - Home 1                         | 0-1"  | Far    | TRC                   | 0.012          | 0.13             | 0.083        | 0.46                 | 0.5              | 0.7                    | 0.34                 | 0.3                    | 0.51       | 0.1                      | 1.1            | 0.033      | 0.4                      | 0.033         | 0.56           | 0.84     | 0.017 J               | 6.10       | 1.13                | 1.09                           |
| Cedar St - Home 1                         | 1-6"  | Far    | TRC                   | 0.011          | 0.088            | 0.079        | 0.4                  | 0.48             | 0.64                   | 0.31                 | 0.24                   | 0.42       | 0.09                     | 1              | 0.021      | 0.36                     | 0.016         | 0.48           | 0.78     | 0.0096                | 5.42       |                     |                                |
| Cedar Street Moretti Park                 | 0-1"  | Far    | TRC                   | <0.80          | 0.0015           | 0.0022       | 0.0094               | 0.014            | 0.021                  | 0.012                | 0.007                  | 0.013      | 0.0037                   | 0.023          | <0.80      | 0.013                    | 0.0017        | 0.01           | 0.018    | 0.0018                | 1.03       | 0.18                | 0.04                           |
| Cedar Street Moretti Park                 | 1-6"  | Far    | TRC                   | 0.044          | 0.0081           | 0.14         | 0.46                 | 0.4              | 0.58                   | 0.26                 | 0.21                   | 0.44       | 0.075                    | 1.1            | 0.046      | 0.32                     | 0.0053        | 0.68           | 0.8      | 0.0059                | 5.57       |                     |                                |
| Jenkintown Town Square                    | 0-1"  | Far    | TRC                   | 0.028          | 0.031            | 0.11         | 0.49                 | 0.5              | 0.71                   | 0.33                 | 0.24                   | 0.46       | 0.093                    | 1              | 0.03       | 0.39                     | <17           | 0.46           | 0.77     | <17                   | 5.86       | 1.78                | 1.73                           |
| Jenkintown Town Square                    | 1-6"  | Far    | TRC                   | 0.013          | 0.026            | 0.052        | 0.29                 | 0.3              | 0.41                   | 0.2                  | 0.14                   | 0.27       | 0.059                    | 0.55           | 0.014      | 0.23                     | <16           | 0.19           | 0.42     | <16                   | 3.18       |                     |                                |
| Knights of Columbus/Immaculate Conception | 0-1"  | Far    | TRC                   | 0.069          | 0.092            | 0.33         | 3.3                  | 3.3              | <b>5.2</b>             | 2                    | 1.9                    | 3.8        | 0.66                     | 9              | 0.072      | 2.5                      | 0.026         | 3              | 6.2      | 0.02                  | 41.45      | 1.33                | 1.30                           |
| Knights of Columbus/Immaculate Conception | 1-6"  | Far    | TRC                   | 0.044          | 0.058            | 0.23         | 2.5                  | 2.5              | <b>4</b>               | 1.6                  | 1.4                    | 2.9        | 0.53                     | 6.7            | 0.046      | 2                        | 0.013         | 2              | 4.7      | <0.010                | 31.22      |                     |                                |
| Leedom St - Home 1                        | 0-1"  | Far    | TRC                   | 0.1            | 0.12             | 0.35         | 1.3                  | 1.4              | 1.9                    | 0.9                  | 0.72                   | 1.3        | 0.25                     | 2.7            | 0.11       | 1.1                      | 0.076         | 1.4            | 2.2      | 0.049                 | 15.93      | 1.04                | 1.00                           |
| Leedom St - Home 1                        | 1-6"  | Far    | TRC                   | 0.079          | 0.14             | 0.31         | 1.3                  | 1.4              | 1.9                    | 0.86                 | 0.65                   | 1.4        | 0.23                     | 2.7            | 0.084      | 1                        | 0.028         | 1.2            | 2.1      | 0.023                 | 15.38      |                     |                                |
| Hillside Ave - Home 1                     | 0-1"  | Near   | DEP                   | <0.113         | <0.113           | <0.113       | 0.136                | 0.135            | 0.282                  | <0.113               | 0.258                  | 0.175      | <0.113                   | 0.367          | <0.0224    | <0.225                   | <0.113        | <0.225         | 0.304    | NS                    | 2.81       | 1.12                | 1.05                           |
| Hillside Ave - Home 1                     | 1-6"  | Near   | DEP                   | <0.0982        | 0.268            | <0.0982      | 0.122                | 0.127            | 0.0982                 | 0.246                | 0.138                  | <0.0982    | 0.277                    | <0.196         | <0.0982    | <0.0982                  | <0.196        | 0.241          | NS       | 2.50                  |            |                     |                                |
| Hillside Ave - Home 1                     | 0-1"  | Near   | TRC                   | 0.0069         | 0.022            | 0.025        | 0.14                 | 0.15             | 0.2                    | 0.097                | 0.068                  | 0.14       | 0.03                     | 0.28           | 0.0071     | 0.12                     | 0.0059        | 0.11           | 0.22     | 0.0051                | 1.62       | 1.53                | 1.43                           |
| Hillside Ave - Home 1                     | 1-6"  | Near   | TRC                   | 0.0039         | 0.018            | 0.019        | 0.088                | 0.098            | 0.14                   | 0.065                | 0.043                  | 0.089      | 0.02                     | 0.18           | 0.0041     | 0.079                    | 0.0047        | 0.071          | 0.14     | 0.0039                | 1.06       |                     |                                |
| Hillside Ave - Home 2                     | 0-1"  | Near   | TRC                   | < 9.8          | 0.013            | 0.015        | 0.088                | 0.096            | 0.14                   | 0.061                | 0.048                  | 0.097      | 0.017                    | 0.18           | <0.098     | 0.081                    | <0.020        | 0.059          | 0.14     | <20                   | 1.07       | 0.54                | 0.64                           |
| Hillside Ave - Home 2                     | 1-6"  | Near   | TRC                   | < 8.8          | 0.027            | 0.03         | 0.13                 | 0.16             | 0.22                   | 0.11                 | 0.091                  | 0.16       | 0.046                    | 0.34           | 0.011      | 0.14                     | <0.018        | 0.21           | 0.28     | <18                   | 1.98       |                     |                                |
| Hillside Ave - Home 3                     | 0-1"  | Near   | TRC                   | 0.023          | 0.063            | 0.098        | 0.5                  | 0.52             | 0.72                   | 0.32                 | 0.25                   | 0.52       | 0.095                    | 1.1            | 0.027      | 0.39                     | <18           | 0.47           | 0.82     | <18                   | 5.93       | 1.27                | 1.29                           |
| Hillside Ave - Home 3                     | 1-6"  | Near   | TRC                   | 0.02           | 0.059            | 0.081        | 0.39                 | 0.41             | 0.56                   | 0.25                 | 0.2                    | 0.41       | 0.071                    | 0.85           | 0.022      | 0.31                     | <17           | 0.36           | 0.65     | <17                   | 4.66       |                     |                                |
| Jenkintown Schools                        | 0-1"  | Near   | DEP                   | <0.0863        | <0.0863          | <0.0863      | 0.141                | 0.136            | 0.287                  | 0.102                | 0.263                  | 0.152      | <0.0863                  | 0.304          | <0.172     | <0.0863                  | <0.0863       | <0.172         | 0.259    | NS                    | 2.51       | 1.17                | 1.26                           |
| Jenkintown Schools                        | 1-6"  | Near   | DEP                   | <0.0818        | <0.0818          | <0.0818      | 0.117                | 0.115            | 0.227                  | 0.0831               | 0.208                  | 0.122      | <0.0818                  | 0.243          | <0.163     | <0.0818                  | <0.0818       | <0.163         | 0.21     | NS                    | 2.14       |                     |                                |
| Jenkintown Schools                        | 0-1"  | Near   | DEP                   | <0.0919        | <0.0919          | <0.0919      | 0.172                | 0.19             | 0.388                  | 0.14                 | 0.355                  | 0.199      | <0.0919                  | 0.387          | <0.183     | 0.115                    | <0.0919       | <0.183         | 0.322    | NS                    | 3.09       | 0.95                | 0.92                           |
| Jenkintown Schools                        | 1-6"  | Near   | DEP                   | <0.0807        | <0.0807          | <0.0807      | 0.202                | 0.216            | 0.422                  | 0.151                | 0.386                  | 0.218      | <0.0807                  | 0.449          | <0.161     | 0.119                    | <0.0807       | 0.162          | 0.374    | NS                    | 3.26       |                     |                                |
| Jenkintown schools                        | 0-1"  | Near   | TRC                   | 0.028 J        | 0.022 J          | 0.1          | 0.38                 | 0.38             | 0.54                   | 0.23                 | 0.18                   | 0.39       | 0.069                    | 0.86           | 0.026      | 0.28                     | <0.0074       | 0.41           | 0.6      | <0.0074 J             | 4.50       | 0.37                | 0.42                           |
| Jenkintown schools                        | 1-6"  | Near   | TRC                   | 0.24 J         | 0.019 J          | 0.41         | 1                    | 0.93             | 1.3                    | 0.54                 | 0.37                   | 0.94       | 0.14                     | 2.3            | 0.19       | 0.67                     | 0.042 J       | 1.6            | 1.5      | 0.023 J               | 12.19      |                     |                                |
| Jenkintown schools                        | 0-1"  | Near   | TRC                   | 0.061 J        | 0.032 J          | 0.11         | 0.45                 | 0.44             | 0.59                   | 0.24                 | 0.22                   | 0.42       | 0.076                    | 0.95           | 0.034      | 0.31                     | 0.013 J       | 0.44           | 0.71     | <0.0082 J             | 5.10       | 1.76                | 1.74                           |
| Jenkintown schools                        | 1-6"  | Near   | TRC                   | 0.013 J        | 0.019 J          | 0.042        | 0.26                 | 0.27             | 0.34                   | 0.16                 | 0.15                   | 0.25       | 0.046                    | 0.53           | 0.0095 J   | 0.2                      | <0.0084 J     | 0.19           | 0.41     | <0.0084 J             | 2.90       |                     |                                |
| Jenkintown schools                        | 0-1"  | Near   | TRC                   | 0.057 J        | 0.014 J          | 0.084        | 0.29                 | 0.27             | 0.38                   | 0.15                 | 0.14                   | 0.27       | 0.049                    | 0.62           | 0.029      | 0.19                     | <0.0099       | 0.34           | 0.44     | <0.0099 J             | 3.33       | 1.77                | 1.73                           |
| Jenkintown schools                        | 1-6"  | Near   | TRC                   | 0.024 J        | 0.0084 J         | 0.043        | 0.18                 | 0.16             | 0.22                   | 0.087                | 0.077                  | 0.16       | 0.028                    | 0.35           | 0.012      | 0.11                     | 0.0023 J      | 0.17           | 0.25     | 0.0017 J              | 1.88       |                     |                                |
| Rodman Ave - Home 1                       | 0-1"  | Near   | DEP                   | <0.0934        | <0               |              |                      |                  |                        |                      |                        |            |                          |                |            |                          |               |                |          |                       |            |                     |                                |



***Appendix 2: Metals, Cyanide, and Asbestos Results***

### ***Appendix 3: XRF Results***



Appendix 2: Metals, Cyanide, and Asbestos Results

| Physical Address                           | Depth | Zone   | Sampling Organization | Aluminum Q | Antimony Q | Arsenic Q | Barium Q  | Beryllium Q | Boron Q   | Cadmium Q | Calcium Q | Total Chromium Q | Cobalt Q  | Copper Q  | Iron Q    | Lead Q      | Lithium Q  | Magnesium Q | Manganese Q | Nickel Q  | Potassium Q | Selenium Q | Silver Q  | Sodium Q  | Thallium Q | Titanium Q | Vanadium Q | Zinc Q    | Mercury Q | Total Cyanide Q | Asbestos | Arsenic S/D Ratio | Lead S/D Ratio |      |      |      |
|--------------------------------------------|-------|--------|-----------------------|------------|------------|-----------|-----------|-------------|-----------|-----------|-----------|------------------|-----------|-----------|-----------|-------------|------------|-------------|-------------|-----------|-------------|------------|-----------|-----------|------------|------------|------------|-----------|-----------|-----------------|----------|-------------------|----------------|------|------|------|
| CAS#                                       |       |        |                       | 7429-90-5  | 7440-36-0  | 7440-38-2 | 7440-39-3 | 7440-41-7   | 7440-42-8 | 7440-43-9 | 7440-70-2 |                  | 7440-48-4 | 7440-50-8 | 7439-89-6 | 7439-92-1   | 7439-93-2  | 7439-95-4   | 7439-96-5   | 7440-02-0 | 2023695     | 7782-49-2  | 7440-22-4 | 7440-23-5 | 7440-28-0  | 7440-32-6  | 7440-62-2  | 7440-66-6 | 7439-97-6 |                 |          |                   |                |      |      |      |
| Direct Contact MSC                         |       |        |                       | 190000     | 88         | 12        | 44000     | 440         | 44000     | 110       | NA        | NA               | 66        | 7200      | 150000    | 500         | 440        | NA          | 31000       | 4400      | NA          | 1100       | 1100      | NS        | 2.2        | NS         | 1100       | 66000     | 35        |                 | 0.01     |                   |                |      |      |      |
| Cheese Playground                          | 0-1"  | Distal | TRC                   | 19000      | 0.45       | 4.5       | 130       | 0.64        | NS        | 0.32      | J+        | 2200             | 27        | 8.8       | 20        | 19000       | 53         | NS          | 3900        | 440       | 15          | 3100       | 0.29      | J         | 0.099      | J          | 89         | 0.23      | NS        | 90              | 35       | 0.0079            | <0.26          | ND   | 0.98 | 0.93 |
| Cheese Playground                          | 1-6"  | Distal | TRC                   | 17000      | 0.48       | 4.6       | 100       | 0.62        | NS        | 0.27      | J+        | 1400             | 28        | 8.2       | 18        | 17000       | 57         | NS          | 3400        | 420       | 13          | 2400       | 0.34      | J         | 0.099      | 62         | 0.20       | NS        | 84        | 33              | 0.092    | <0.24             | ND             |      |      |      |
| Cheese Playground                          | 0-1"  | Distal | TRC                   | 27000      | 0.52       | 5.7       | 140       | 1.0         | NS        | 0.26      | J+        | 6200             | 41        | 12        | 28        | 27000       | 41         | NS          | 6500        | 500       | 22          | 4100       | 0.46      | J         | 0.079      | J          | 99         | 0.29      | NS        | 110             | 52       | 0.091             | <0.29          | ND   | 1.00 | 1.17 |
| Cheese Playground                          | 1-6"  | Distal | TRC                   | 25000      | 0.43       | 5.7       | 120       | 0.93        | NS        | 0.28      | J+        | 26000            | 40        | 11        | 22        | 25000       | 35         | NS          | 19000       | 480       | 21          | 2800       | 0.35      | J         | 0.071      | J          | 90         | 0.24      | NS        | 91              | 49       | 0.093             | <0.24          | ND   |      |      |
| Cheese Playground                          | 0-1"  | Distal | TRC                   | 33000      | 0.5        | 4.6       | 200       | 1.1         | NS        | 0.34      | J+        | 3200             | 51        | 13        | 35        | 34000       | 55         | NS          | 7200        | 480       | 24          | 5400       | 0.53      | J         | 0.12       | J          | 110        | 0.36      | NS        | 140             | 64       | 0.14              | <0.32          | ND   | 0.92 | 0.86 |
| Cheese Playground                          | 1-6"  | Distal | TRC                   | 37000      | 0.43       | 5         | 200       | 1.0         | NS        | 0.28      | NS        | 2200             | 63        | 11.0      | 32        | 35000       | 64         | NS          | 6300        | 440       | 26          | 4400       | 0.60      | 0.10      | J          | 76         | 0.41       | NS        | 140       | 70              | 0.12     | <0.22             | ND             |      |      |      |
| Jenkintown Rd - Home 1                     | 0-1"  | Distal | TRC                   | 29000      | 1.3        | 6.5       | 230       | 1.1         | NS        | 2         | 5100      | 34               | 13        | 60        | 33000     | <b>530</b>  | NS         | 7100        | 500         | 22        | 5400        | 0.82       | 0.19      | 91        | 0.37       | NS         | 490        | 51        | 0.67      | < 0.20          | ND       | 0.79              | 0.71           |      |      |      |
| Jenkintown Rd - Home 1                     | 1-6"  | Distal | TRC                   | 29000      | 1.5        | 8.2       | 250       | 1.1         | NS        | 2.2       | 4600      | 39               | 13        | 99        | 41000     | <b>750</b>  | NS         | 6700        | 540         | 24        | 5000        | 0.7        | 0.18      | 91        | 0.35       | NS         | 500        | 52        | 0.61      | <0.29           | ND       |                   |                |      |      |      |
| Wall Park                                  | 0-1"  | Distal | TRC                   | 24000      | 0.25       | 5.4       | 120       | 1.1         | NS        | 0.17      | 1500      | 33               | 14        | 35        | 26000     | 56          | NS         | 7800        | 530         | 27        | 6300        | 0.37       | J         | 0.088     | J          | 160        | 0.43       | NS        | 210       | 48              | 0.062    | <0.22             | ND             | 1.04 | 1.17 |      |
| Wall Park                                  | 1-6"  | Distal | TRC                   | 26000      | 0.23       | 5.2       | 130       | 1.2         | NS        | 0.20      | 1300      | 35               | 15        | 36        | 32000     | 48          | NS         | 8300        | 560         | 29        | 6400        | 0.46       | 0.083     | J         | 170        | 0.45       | NS         | 50        | 230       | 0.069           | <0.2     | ND                |                |      |      |      |
| Wall Park                                  | 0-1"  | Distal | TRC                   | 28000      | 0.53       | 6.1       | 180       | 1.4         | NS        | 0.61      | 3400      | 36               | 17        | 61        | 28000     | 250         | NS         | 7400        | 740         | 36        | 5900        | 0.61       | 0.57      | 140       | 0.47       | NS         | 320        | 49        | 0.41      | <0.2            | ND       | 0.86              | 0.76           |      |      |      |
| Wall Park                                  | 1-6"  | Distal | TRC                   | 27000      | 0.52       | 7.1       | 260       | 1.5         | NS        | 1.10      | 3100      | 37               | 16        | 94        | 32000     | 330         | NS         | 6900        | 690         | 33        | 6000        | 0.65       | 1.1       | 180       | 0.48       | NS         | 540        | 54        | 0.33      | <0.23           | ND       |                   |                |      |      |      |
| Wall Park                                  | 0-1"  | Distal | TRC                   | 35000      | 0.83       | 10        | 190       | 1.7         | NS        | 1.3       | 6900      | 47               | 17        | 82        | 29000     | 290         | NS         | 7900        | 730         | 34        | 4700        | 0.85       | 0.19      | 290       | 0.40       | NS         | 260        | 81        | 0.17      | <0.24           | ND       | 0.83              | 0.91           |      |      |      |
| Wall Park                                  | 1-6"  | Distal | TRC                   | 30000      | 0.91       | 12        | 190       | 2           | NS        | 1.300     | 3700      | 47               | 16        | 79        | 34000     | 320         | NS         | 7600        | 690         | 34        | 3900        | 0.88       | 0.180     | 230       | 0.42       | NS         | 250        | 82        | 0.18      | <0.23           | ND       |                   |                |      |      |      |
| Wall Park                                  | 0-1"  | Distal | TRC                   | 30000      | 0.59       | 11        | 200       | 1.7         | NS        | 0.33      | 5100      | 50               | 18        | 56        | 37000     | 110         | NS         | 8000        | 660         | 33        | 5400        | 0.77       | 0.12      | 300       | 0.47       | NS         | 170        | 76        | 0.16      | <0.24           | ND       | 1.00              | 1.00           |      |      |      |
| Wall Park                                  | 1-6"  | Distal | TRC                   | 29000      | 0.65       | 11        | 190       | 1.7         | NS        | 0.23      | 3000      | 52               | 17        | 54        | 36000     | 110         | NS         | 7800        | 650         | 33        | 5100        | 0.86       | 0.12      | 300       | 0.44       | NS         | 150        | 79        | 0.16      | <0.22           | ND       |                   |                |      |      |      |
| Cottman St - Home 1                        | 0-1"  | Far    | TRC                   | 18000      | 0.8        | 6.6       | 190       | 1.6         | NS        | 0.91      | 3800      | 33               | 9.7       | 66        | 26000     | <b>1100</b> | NS         | 2400        | 500         | 18        | 1300        | 0.91       | 0.26      | 180       | 0.2        | NS         | 440        | 37        | 0.46      | < 0.25          | ND       | 0.80              | 1.38           |      |      |      |
| Cottman St - Home 1                        | 1-6"  | Far    | TRC                   | 19000      | 1.1        | 8.3       | 210       | 1.8         | NS        | 0.92      | 3800      | 37               | 11        | 69        | 28000     | <b>800</b>  | NS         | 3000        | 580         | 23        | 1600        | 0.8        | 0.33      | 170       | 0.27       | NS         | 460        | 40        | 0.33      | < 0.26          | ND       |                   |                |      |      |      |
| Abington Friends                           | 0-1"  | Far    | TRC                   | 21000      | 0.34       | 11        | 130       | 1.5         | NS        | 0.30      | 3900      | 39               | 15        | 44        | 30000     | 71          | NS         | 5400        | 590         | 27        | 3400        | 0.37       | J         | 0.13      | 150        | 0.32       | NS         | 120       | 51        | 0.27            | <0.19    | ND                | 0.73           | 1.25 |      |      |
| Abington Friends                           | 1-6"  | Far    | TRC                   | 23000      | 0.23       | <b>15</b> | 120       | 1.8         | NS        | 0.23      | 5400      | 51               | 16        | 38        | 32000     | 57          | NS         | 7500        | 640         | 27        | 3700        | 0.43       | 0.11      | 190       | 0.42       | NS         | 110        | 65        | 0.46      | <0.21           | ND       |                   |                |      |      |      |
| Abington Friends                           | 0-1"  | Far    | TRC                   | 29000      | J          | 0.12      | 5.9       | 160         | 1.5       | NS        | 0.11      | 2600             | 50        | 19        | 45        | 35000       | 30         | NS          | 8000        | 630       | 32          | 6100       | 0.34      | J         | 0.053      | J          | 140        | 0.39      | NS        | 100             | 70       | 0.14              | <0.25          | ND   | 0.65 | 0.75 |
| Abington Friends                           | 1-6"  | Far    | TRC                   | 26000      | 0.19       | J         | 9.1       | 190         | 1.4       | NS        | 0.20      | 10000            | 310       | 15        | 53        | 47000       | 40         | NS          | 8600        | 2800      | 30          | 5000       | 0.37      | J         | 0.085      | J          | 160        | 0.37      | NS        | 120             | 99       | 0.35              | <0.18          | ND   |      |      |
| Abington Friends                           | 0-1"  | Far    | TRC                   | 23000      | 0.29       | <b>13</b> | 110       | 1.2         | NS        | 0.34      | 1900      | 41               | 11        | 20        | 25000     | 63          | NS         | 3000        | 570         | 21        | 1800        | 0.58       | 0.15      | 90        | 0.23       | NS         | 82         | 45        | 0.26      | <0.22           | ND       | 1.08              | 1.24           |      |      |      |
| Abington Friends                           | 1-6"  | Far    | TRC                   | 22000      | 0.25       | 12        | 96        | 1.1         | NS        | 0.31      | 1500      | 43               | 9.7       | 18        | 26000     | 51          | NS         | 2800        | 480         | 19        | 1700        | 0.51       | 0.17      | 81        | 0.23       | NS         | 68         | 44        | 0.19      | <0.22           | ND       |                   |                |      |      |      |
| Cedar St - Home 1                          | 0-1"  | Far    | TRC                   | 29000      | 2.8        | J         | 9.3       | 320         | 1.3       | NS        | 1.4       | 3800             | 47        | 18        | 85        | J           | <b>610</b> | NS          | 4800        | 680       | 31          | 4500       | 1         | 7.7       | 160        | 0.47       | NS         | 480       | 52        | 0.48            | < 0.23   | ND                | 1.13           | 1.11 |      |      |
| Cedar St - Home 1                          | 1-6"  | Far    | TRC                   | 28000      | 1.8        | J         | 8.2       | 330         | 1.3       | NS        | 1.4       | 2500             | 40        | 15        | 81        | J           | <b>550</b> | NS          | 4800        | 580       | 29          | 4600       | 0.9       | 1.3       | 130        | 0.51       | NS         | 450       | 47        | 0.43            | < 0.23   | ND                |                |      |      |      |
| Cedar Street Moretti Park                  | 0-1"  | Far    | TRC                   | 18000      | 0.26       | 5.4       | 130       | 1.1         | NS        | 0.2       | 890       | 18               | 9.1       | 18        | 20000     | 24          | NS         | 1600        | 800         | 13        | 1500        | 0.31       | 0.051     | 73        | 0.17       | NS         | 28         | 58        | 0.032     | 0.21            | ND       | 0.62              | 0.30           |      |      |      |
| Cedar Street Moretti Park                  | 1-6"  | Far    | TRC                   | 22000      | 0.35       | 8.7       | 170       | 1.4         | NS        | 0.2       | 2000      | 27               | 13        | 28        | 28000     | 80          | NS         | 2300        | 900         | 18        | 1500        | 0.45       | 0.085     | 98        | 0.22       | NS         | 46         | 86        | 0.083     | <0.24           | ND       |                   |                |      |      |      |
| Jenkintown Town Square                     | 0-1"  | Far    | TRC                   | 20000      | 0.54       | <b>22</b> | 110       | 0.9         | NS        | 0.33      | 3900      | 34               | 8.8       | 25        | 23000     | 120         | NS         | 3300        | 400         | 17        | 2400        | 0.62       | 0.1       | 290       | 0.24       | NS         | 42         | 150       | 0.12      | <0.21           | ND       | 0.96              | 1.09           |      |      |      |
| Jenkintown Town Square                     | 1-6"  | Far    | TRC                   | 15000      | 0.53       | <b>23</b> | 88        | 0.66        | NS        | 0.32      | 3500      | 24               | 7.4       | 24        | 18000     | 110         | NS         | 3000        | 320         | 14        | 1600        | 0.65       | 0.071     | 130       | 0.19       | NS         | 32         | 120       | 0.14      | <0.25           | ND       |                   |                |      |      |      |
| Knights of Columbus/ Immaculate Conception | 0-1"  | Far    | TRC                   | 20000      | 0.43       | 4.6       | 140       | 0.82        | NS        | 0.28      | 59000     | 35               | 11        | 38        | 24000     | 37          | NS         | 37000       | 570         | 22        | 4800        | 0.28       | 0.66      | 170       | 0.27       | NS         | 120        | 51        | 0.12      | <0.27           | ND       | 0.52              | 0.73           |      |      |      |
| Knights of Columbus/ Immaculate Conception | 1-6"  | Far    | TRC                   | 27000      | 0.6        | 8.8       | 180       | 1.2         | NS        | 0.45      | 7700      | 48               | 14        | 58        | 31000     | 51          | NS         | 6400        | 690         | 27        | 4200        | 0.56       | 1.5       | 150       | 0.28       | NS         | 160        | 63        | 0.17      | <0.20           | ND       |                   |                |      |      |      |
| Leedom St - Home 1                         | 0-1"  | Far    | TRC                   | 21000      | 1.2        | 6.7       | 140       | 1.3         | NS        | 0.83      | 2800      | 35               | 13        | 54        | 29000     | 430         | NS         | 2800        | 480         | 23        | 2800        | 0.91       | 0.21      | 540       | 0.25       | NS         | 310        | 49        | 0.27      | 0.43            | ND       | 0.86              | 0.93           |      |      |      |
| Leedom St - Home 1                         | 1-6"  | Far    | TRC                   | 26000      | 1.3        | 7.8       | 180       | 1.7         | NS        | 0.8       | 2100      | 40               | 21        | 58        | 38000     | 460         | NS         | 4600        | 870         | 35        | 3100        | 0.95       | 0.24      | 310       | 0.39       | NS         | 340        | 59        | 0.26      | < 0.25          | ND       |                   |                |      |      |      |
| Hillside Ave - Home 1                      | 0-1"  | Near   | DEP                   | 17100      | <8.3       | <8.3      | NS        | <0.83       | <8.3      | <1.7      | 9160      | 27.6             | 9.5       | 57.2      | 21000     | <b>524</b>  | 26         | 2730        | 333         | 22.9      | 2480        | <8.3       | <4.1      | 116       | <8.3       | 509        | 36.7       | 304       | 0.7       | <1.5            | ND       | 0.98              | 0.74           |      |      |      |
| Hillside Ave - Home 1                      | 1-6"  | Near   | DEP                   | 22100      | <7.1       | 8.5       | NS        | 0.8         | <7.1      | <1.4      | 9640      | 47.3             | 10        | 98.3      | 34000     | <b>704</b>  | 32.6       | 3280        | 327         | 23.5      | 2880        | <7.1       | <3.6      | 140       | <7.1       | 530        | 46.7       | 387       | 0.6       | <1.3            | ND       |                   |                |      |      |      |
| Hillside Ave - Home 1                      | 0-1"  | Near   | TRC                   | 34000      | 2.5        | 7.8       | 210       | 1.9         | NS        | 0.68      | 1200      | 49               | 19        | 67        | 36000     | <b>1500</b> | NS         | 6000        | 460         | 39        | 5100        | 0.9        | 0.41      | 110       | 0.5        | NS         | 330        | 64        | 0.24      | < 0.22          | ND       | 1.03              | 0.63           |      |      |      |
| Hillside Ave - Home 1                      | 1-6"  | Near   | TRC                   | 32000      | 2.7        | 7.6       | 220       | 1.8         | NS        | 0.43      | 860       | 48               | 20        | 370       | 33000     | <b>2400</b> | NS         | 5600        | 620         | 36        | 4500        | 0.87       | 0.52      | 91        | 0.46       | NS         | 370        | 65        | 0.13      | < 0.26          | ND       |                   |                |      |      |      |
| Hillside Ave - Home 2                      | 0-1"  | Near   | TRC                   | 22000      | 0.49       | 8.1       | 100       | 1.1         | NS        | 0.43      | 3700      | 31               | 13        | 29        | 28000     | 97          | NS         | 4400        | 530         | 23        | 2800        | 0.6        | 0.11      | 83        | 0.33       | NS         | 140        | 45        | 0.82      | < 0.23          | ND       | 0.95              | 1.08           |      |      |      |
| Hillside Ave - Home 2                      | 1-6"  | Near   | TRC                   | 22000      | 0.49       | 8.5       | 110       | 2.3         | NS        | 0.37      | 3500      | 51               | 14        | 36        | 38000     | 90          | NS         | 5100        | 560         | 29        | 2800        | 0.88       | 0.098     | 81        | 0.37       | NS         | 130        | 53        | 0.74      | 1.2             | ND       |                   |                |      |      |      |
| Hillside Ave - Home 3                      | 0-1"  | Near   | TRC                   | 22000      | 0.6        | <b>19</b> | 190       | 1.2         | NS        | 1.2       | 1700      | 35               | 12        | 30        | 27000     | 450         | NS         | 4200        | 560         | 24        | 2300        | 0.72       | 0.13      | 93        | 0.3        | NS         |            |           |           |                 |          |                   |                |      |      |      |

***Attachment A: DEP March 14, 2025, Sampling and Analysis Plan***

Appendix 3: XRF Results

| Location            | Ag | Ag +/- | Al | Al +/- | As | As +/- | Ba  | Ba +/- | Ca   | Ca +/- | Cd | Cd +/- | Ce | Ce +/- | Co | Co +/- | Cr | Cr +/- | Cs | Cs +/- | Cu | Cu +/- | Fe    | Fe +/- | H   | H +/- | Hg | Hg +/- | K     | K +/- | La  | La +/- | Mg | Mg +/- | Mn  | Mn +/- | Mo | Mo +/- | Nb | Nb +/- | P | P +/- | Pb  | Pb +/- | Rb | Rb +/- | S | S +/- | Sb | Sb +/- | Se | Se +/- | Sn | Sn +/- | Sr | Sr +/- | Ta   | Ta +/- | Ti   | Ti +/- | Tl   | Tl +/- | T+ | T- | V  | V +/- | W  | W +/- | Y   | Y +/- | Zn   | Zn +/- | Zr  | Zr +/- |     |    |
|---------------------|----|--------|----|--------|----|--------|-----|--------|------|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|-------|--------|-----|-------|----|--------|-------|-------|-----|--------|----|--------|-----|--------|----|--------|----|--------|---|-------|-----|--------|----|--------|---|-------|----|--------|----|--------|----|--------|----|--------|------|--------|------|--------|------|--------|----|----|----|-------|----|-------|-----|-------|------|--------|-----|--------|-----|----|
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 220 | 60     | 2030 | 80     | 0  | 0      | 0  | 0      | 0  | 0      | 10 | 10     | 0  | 0      | 0  | 0      | 17820 | 390    | 0   | 0     | 0  | 0      | 5880  | 160   | 0   | 0      | 0  | 0      | 300 | 50     | 10 | 10     | 10 | 10     | 0 | 0     | 60  | 10     | 40 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 50   | 10     | 20   | 10     | 2480 | 50     | 0  | 0  | 0  | 0     | 40 | 10    | 0   | 0     | 20   | 10     | 80  | 10     | 390 | 10 |
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 290 | 50     | 4370 | 110    | 0  | 0      | 0  | 0      | 0  | 0      | 10 | 10     | 0  | 0      | 20 | 10     | 23420 | 470    | 0   | 0     | 0  | 10     | 7490  | 180   | 0   | 0      | 0  | 0      | 410 | 60     | 10 | 10     | 10 | 10     | 0 | 0     | 50  | 10     | 50 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 0      | 60 | 10     | 30   | 10     | 2880 | 50     | 0    | 0      | 0  | 0  | 50 | 10    | 0  | 0     | 20  | 10    | 90   | 10     | 320 | 10     |     |    |
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 210 | 50     | 3270 | 90     | 0  | 0      | 0  | 0      | 0  | 0      | 20 | 10     | 0  | 0      | 0  | 0      | 21500 | 410    | 0   | 0     | 0  | 10     | 7600  | 170   | 0   | 0      | 0  | 0      | 400 | 50     | 0  | 0      | 10 | 10     | 0 | 0     | 30  | 10     | 50 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 0      | 60 | 10     | 20   | 10     | 3360 | 60     | 0    | 0      | 0  | 0  | 50 | 10    | 0  | 0     | 30  | 10    | 60   | 10     | 400 | 10     |     |    |
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 350 | 50     | 3330 | 100    | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 20 | 10     | 27810 | 560    | 0   | 0     | 0  | 10     | 7110  | 190   | 0   | 0      | 0  | 0      | 490 | 70     | 10 | 10     | 10 | 10     | 0 | 0     | 60  | 10     | 60 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 0      | 60 | 10     | 30   | 10     | 3210 | 60     | 0    | 0      | 0  | 0  | 50 | 10    | 0  | 0     | 30  | 10    | 110  | 10     | 350 | 10     |     |    |
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 320 | 60     | 3070 | 100    | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 20     | 10 | 23450  | 500   | 0      | 0   | 0     | 10 | 6620   | 190   | 0     | 0   | 0      | 0  | 330    | 60  | 20     | 10 | 10     | 10 | 0      | 0 | 60    | 10  | 60     | 10 | 0      | 0 | 0     | 0  | 0      | 0  | 30     | 10 | 60     | 10 | 30     | 10   | 3060   | 60   | 0      | 0    | 0      | 0  | 50 | 10 | 0     | 0  | 20    | 10  | 100   | 10   | 370    | 10  |        |     |    |
| Rodman Ave - Home 1 | 0  | 0      | 0  | 0      | 0  | 0      | 0   | 0      | 1720 | 90     | 0  | 0      | 0  | 0      | 0  | 0      | 50 | 10     | 0  | 0      | 0  | 0      | 14360 | 420    | 0   | 0     | 0  | 0      | 6630  | 230   | 0   | 0      | 0  | 0      | 220 | 60     | 0  | 0      | 10 | 10     | 0 | 0     | 90  | 10     | 40 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 40     | 10 | 0      | 0    | 2210   | 60   | 0      | 0    | 0      | 0  | 40 | 10 | 0     | 0  | 20    | 10  | 70    | 10   | 290    | 10  |        |     |    |
| Rodman Ave - Home 1 | 0  | 0      | 0  | 0      | 0  | 0      | 450 | 60     | 2550 | 100    | 0  | 0      | 0  | 0      | 0  | 0      | 20 | 10     | 0  | 0      | 20 | 10     | 21890 | 480    | 0   | 0     | 0  | 0      | 7960  | 220   | 0   | 0      | 0  | 0      | 390 | 60     | 10 | 10     | 10 | 10     | 0 | 0     | 170 | 10     | 70 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 0      | 50 | 10     | 30   | 10     | 2940 | 60     | 0    | 0      | 0  | 0  | 50 | 10    | 0  | 0     | 30  | 10    | 120  | 10     | 350 | 10     |     |    |
| Rodman Ave - Home 1 | 0  | 0      | 0  | 0      | 0  | 0      | 360 | 60     | 2750 | 100    | 0  | 0      | 0  | 0      | 0  | 0      | 20 | 10     | 0  | 0      | 20 | 10     | 21970 | 480    | 0   | 0     | 0  | 10     | 7880  | 210   | 0   | 0      | 0  | 0      | 450 | 70     | 10 | 10     | 10 | 10     | 0 | 0     | 160 | 10     | 70 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 0      | 70 | 10     | 40   | 10     | 3110 | 60     | 0    | 0      | 0  | 0  | 60 | 10    | 0  | 0     | 30  | 10    | 130  | 10     | 330 | 10     |     |    |
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 240 | 60     | 3160 | 90     | 0  | 0      | 0  | 0      | 0  | 0      | 10 | 10     | 0  | 0      | 0  | 0      | 21290 | 430    | 0   | 0     | 0  | 0      | 7330  | 180   | 0   | 0      | 0  | 0      | 230 | 50     | 0  | 0      | 10 | 10     | 0 | 0     | 30  | 10     | 50 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 50     | 10 | 0      | 0    | 3210   | 60   | 0      | 0    | 0      | 0  | 50 | 10 | 0     | 0  | 20    | 10  | 70    | 10   | 310    | 10  |        |     |    |
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 260 | 50     | 9520 | 160    | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 20350  | 420   | 0      | 0   | 0     | 0  | 7080   | 180   | 0     | 0   | 0      | 0  | 380    | 60  | 10     | 10 | 10     | 10 | 0      | 0 | 20    | 10  | 40     | 10 | 0      | 0 | 0     | 0  | 0      | 0  | 0      | 50 | 10     | 20 | 10     | 2750 | 50     | 0    | 0      | 0    | 0      | 40 | 10 | 0  | 0     | 20 | 10    | 80  | 10    | 230  | 10     |     |        |     |    |
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 340 | 50     | 3450 | 100    | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 20 | 10     | 19470 | 390    | 0   | 0     | 0  | 10     | 7630  | 180   | 0   | 0      | 0  | 0      | 290 | 50     | 10 | 10     | 10 | 10     | 0 | 0     | 30  | 10     | 60 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 60     | 10 | 30     | 10   | 3160   | 60   | 0      | 0    | 0      | 0  | 50 | 10 | 0     | 0  | 20    | 10  | 60    | 10   | 370    | 10  |        |     |    |
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 290 | 50     | 3780 | 100    | 0  | 0      | 0  | 0      | 0  | 0      | 20 | 10     | 0  | 0      | 30 | 10     | 18460 | 380    | 0   | 0     | 0  | 10     | 6060  | 160   | 0   | 0      | 0  | 0      | 330 | 50     | 20 | 10     | 10 | 10     | 0 | 0     | 80  | 10     | 50 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 50     | 10 | 0      | 0    | 2440   | 50   | 0      | 0    | 0      | 0  | 50 | 10 | 0     | 0  | 20    | 10  | 100   | 10   | 250    | 10  |        |     |    |
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 330 | 50     | 3470 | 100    | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 30 | 10     | 23460 | 460    | 0   | 0     | 0  | 10     | 7240  | 190   | 0   | 0      | 0  | 0      | 510 | 60     | 10 | 10     | 10 | 10     | 0 | 0     | 90  | 10     | 50 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 50 | 10     | 20 | 10     | 2690 | 50     | 0    | 0      | 0    | 0      | 50 | 10 | 0  | 0     | 20 | 10    | 110 | 10    | 220  | 10     |     |        |     |    |
| Hallowell Park      | 0  | 0      | 0  | 0      | 0  | 0      | 550 | 60     | 3240 | 100    | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 30 | 10     | 25130 | 530    | 0   | 0     | 0  | 10     | 7420  | 190   | 0   | 0      | 0  | 0      | 410 | 60     | 10 | 10     | 10 | 10     | 0 | 0     | 100 | 10     | 60 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 70     | 10 | 30     | 10   | 2810   | 60   | 0      | 0    | 0      | 0  | 50 | 10 | 0     | 0  | 20    | 10  | 120   | 10   | 280    | 10  |        |     |    |
| Walnut Ave - Home 2 | 0  | 0      | 0  | 0      | 0  | 0      | 300 | 60     | 2030 | 90     | 0  | 0      | 0  | 0      | 0  | 0      | 30 | 10     | 0  | 0      | 20 | 10     | 21770 | 510    | 0   | 0     | 0  | 10     | 6700  | 200   | 0   | 0      | 0  | 0      | 610 | 80     | 20 | 10     | 10 | 10     | 0 | 0     | 150 | 10     | 60 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 50 | 10     | 30 | 20     | 3310 | 70     | 0    | 0      | 0    | 0      | 60 | 10 | 0  | 0     | 50 | 10    | 390 | 20    | 500  | 10     |     |        |     |    |
| Walnut Ave - Home 2 | 0  | 0      | 0  | 0      | 0  | 0      | 410 | 50     | 9670 | 160    | 0  | 0      | 0  | 0      | 0  | 0      | 80 | 10     | 0  | 0      | 60 | 10     | 18670 | 400    | 0   | 0     | 0  | 10     | 5330  | 150   | 0   | 0      | 0  | 0      | 400 | 60     | 10 | 10     | 20 | 10     | 0 | 0     | 140 | 10     | 50 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 100    | 10 | 30     | 10   | 5410   | 70   | 0      | 0    | 0      | 0  | 70 | 10 | 0     | 0  | 50    | 10  | 110   | 10   | 700    | 20  |        |     |    |
| Walnut Ave - Home 2 | 0  | 0      | 0  | 0      | 0  | 0      | 340 | 60     | 3200 | 110    | 0  | 0      | 0  | 0      | 0  | 0      | 30 | 10     | 0  | 0      | 20 | 10     | 16990 | 400    | 0   | 0     | 0  | 0      | 6070  | 200   | 0   | 0      | 0  | 0      | 370 | 60     | 10 | 10     | 20 | 10     | 0 | 0     | 160 | 10     | 60 | 10     | 0 | 0     | 0  | 0      | 0  | 40     | 10 | 100    | 10 | 20     | 10   | 3050   | 70   | 0      | 0    | 0      | 0  | 50 | 10 | 0     | 0  | 40    | 10  | 120   | 10   | 390    | 10  |        |     |    |
| Walnut Ave - Home 2 | 0  | 0      | 0  | 0      | 0  | 0      | 300 | 60     | 2710 | 100    | 0  | 0      | 0  | 0      | 0  | 0      | 30 | 10     | 0  | 0      | 40 | 10     | 19250 | 420    | 0   | 0     | 10 | 10     | 6590  | 190   | 0   | 0      | 0  | 0      | 480 | 70     | 20 | 10     | 10 | 10     | 0 | 0     | 200 | 10     | 60 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 60 | 10     | 30 | 10     | 3420 | 60     | 0    | 0      | 0    | 0      | 60 | 10 | 0  | 0     | 50 | 10    | 110 | 10    | 480  | 10     |     |        |     |    |
| Jenkintown Schools  | 0  | 0      | 0  | 0      | 0  | 0      | 400 | 60     | 2110 | 90     | 0  | 0      | 0  | 0      | 0  | 0      | 50 | 10     | 0  | 0      | 20 | 10     | 15900 | 350    | 0   | 0     | 0  | 0      | 12810 | 250   | 0   | 0      | 0  | 0      | 300 | 50     | 10 | 10     | 10 | 10     | 0 | 0     | 50  | 10     | 80 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 60     | 10 | 20     | 10   | 3120   | 60   | 0      | 0    | 0      | 0  | 50 | 10 | 0     | 0  | 30    | 10  | 70    | 10   | 450    | 10  |        |     |    |
| Jenkintown Schools  | 0  | 0      | 0  | 0      | 0  | 0      | 360 | 60     | 1780 | 80     | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 0  | 0      | 17290 | 400    | 0   | 0     | 0  | 10     | 10780 | 240   | 0   | 0      | 0  | 0      | 820 | 80     | 20 | 10     | 20 | 10     | 0 | 0     | 40  | 10     | 70 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 70 | 10     | 30 | 10     | 5410 | 80     | 0    | 0      | 0    | 0      | 70 | 10 | 0  | 0     | 50 | 10    | 70  | 10    | 1060 | 20     |     |        |     |    |
| Jenkintown Schools  | 0  | 0      | 0  | 0      | 0  | 0      | 300 | 50     | 2590 | 80     | 0  | 0      | 0  | 0      | 0  | 0      | 20 | 10     | 0  | 0      | 30 | 10     | 14630 | 330    | 0   | 0     | 0  | 10     | 6500  | 160   | 0   | 0      | 0  | 0      | 390 | 60     | 10 | 10     | 20 | 10     | 0 | 0     | 60  | 10     | 60 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 60 | 10     | 0  | 0      | 3080 | 50     | 0    | 0      | 0    | 0      | 50 | 10 | 0  | 0     | 40 | 10    | 60  | 10    | 860  | 20     |     |        |     |    |
| Jenkintown Schools  | 0  | 0      | 0  | 0      | 0  | 0      | 370 | 50     | 2060 | 80     | 0  | 0      | 0  | 0      | 0  | 0      | 30 | 10     | 0  | 0      | 20 | 10     | 16270 | 360    | 0   | 0     | 0  | 10     | 7730  | 190   | 0   | 0      | 0  | 0      | 430 | 60     | 20 | 10     | 20 | 10     | 0 | 0     | 110 | 10     | 60 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 60 | 10     | 20 | 10     | 4930 | 70     | 0    | 0      | 0    | 0      | 70 | 10 | 0  | 0     | 40 | 10    | 70  | 10    | 890  | 20     |     |        |     |    |
| Jenkintown Schools  | 0  | 0      | 0  | 0      | 0  | 0      | 370 | 50     | 2530 | 90     | 0  | 0      | 0  | 0      | 0  | 0      | 20 | 10     | 0  | 0      | 30 | 10     | 18750 | 410    | 0   | 0     | 0  | 10     | 7860  | 200   | 0   | 0      | 0  | 0      | 460 | 60     | 10 | 10     | 10 | 10     | 0 | 0     | 80  | 10     | 60 | 10     | 0 | 0     | 0  | 0      | 0  | 0      | 0  | 70     | 10 | 20     | 10   | 3550   | 60   | 0      | 0    | 0      | 0  | 50 | 10 | 0     | 0  | 40    | 10  | 70    | 10   | 570    | 10  |        |     |    |
| Jenkintown Schools  | 0  | 0      | 0  | 0      | 0  | 0      | 610 | 60     | 3150 | 110    | 0  | 0      | 0  | 0      | 0  | 70     | 40 | 40     | 10 | 0      | 0  | 30     | 10    | 17750  | 430 | 0     | 0  | 0      | 10    | 7650  | 210 | 0      | 0  | 0      | 0   | 560    | 70 | 30     | 10 | 20     |   |       |     |        |    |        |   |       |    |        |    |        |    |        |    |        |      |        |      |        |      |        |    |    |    |       |    |       |     |       |      |        |     |        |     |    |





**SPS Technologies Fire**  
Abington Township  
Montgomery County

**SAMPLING AND ANALYSIS PLAN**

**March 14, 2025**

**Prepared by:**

Colin R. Wade  
Environmental Protection Specialist  
Environmental Cleanup and Brownfields

**I. LOCATION**

SPS Technologies operates a manufacturing facility (facility) that produces fasteners and other materials for the aviation industry at 301 Highland Avenue, in Abington Township, Montgomery County.

The area surrounding the facility is mixed use and includes residential and commercial properties. The Jenkintown Middle and High School is located approximately 0.25 miles to the southeast. The Tookany and Tacony creeks border the facility to the east and south. The Tookany joins the Tacony creek just south of the facility, and the Tacony flows southeast for approximately 10 miles before joining with the Delaware River.

**II. BACKGROUND**

On February 17<sup>th</sup>, 2025, a fire started at SPS Technologies, a manufacturing company in Jenkintown that produces fasteners and other materials for the aviation industry. Emergency responders from several dozen fire companies extinguished the fire on February 22<sup>nd</sup>, 2025.

SPS used a variety of chemicals in their manufacturing processes, including heavy metals, cyanide salts, and zinc containing compounds. A list of chemicals reported by SPS to have been used in the facility as part of its manufacturing is included as [Appendix A](#).

**III. OBJECTIVE**

DEP will collect soil samples from multiple locations in public areas or areas where access has been granted to determine if contaminants were released during the fire and evaluate the presence or absence of contaminants of concern in soil near the facility to inform further actions.

#### IV. SAMPLING and ANALYSIS PLAN

This Sampling and Analysis Plan is intended to document the sampling procedures and methods to be used by DEP staff in the collection of samples, and to ensure that data provides accurate and precise information.

#### V. SAMPLING LOCATIONS

DEP will seek to collect soil samples from several properties and areas: Hallowell Park, Ralph Morgan Park, the Lightbridge Academy, Jenkintown Elementary, and Middle/High School, and from Rights-of-Ways (RoW) of several avenues (See Table 1).

Aerial deposition is the assumed potential mechanism that contaminants from the fire could have potentially been transferred to these properties, and therefore contaminants from the fire are expected to be present in the uppermost surface soil layer (0 – 1 inch, “surface soil layer”). Therefore, samples will be collected at all locations from this surface soil layer.

At least one sample will be collected from each property from a depth greater than 1 inch up to 6 inches to aid in the evaluation of the potential contaminants present at the locations that are natural occurring or from historical anthropogenic sources, such as vehicle emissions. Additionally, samples may be collected from soil beneath structures that would have been shielded from aerial deposition during the time-period of the fire, if present, at the properties.

Individual sample locations on each property will be selected in the field, based on consideration of both likely exposure location (i.e. used playground areas, trails, etc.) and further biased based on X-ray fluorescence (XRF) analyzer readings. Exact locations will be determined and recorded during sample collection. Tentative locations are listed in **Table 1** and shown in [Figure 1](#).

**Table 1: Tentative Sampling Locations: Soil Matrix**

| Sample ID | Location          | Depth (in.) | Tentative Location Description:        |
|-----------|-------------------|-------------|----------------------------------------|
| A         | Hallowell Park    | 0-1         | North baseball field, homeplate        |
| B         | Hallowell Park    | 1-6         | North baseball field, homeplate - Deep |
| C         | Ralph Morgan Park | 0-1         | Playground Area                        |
| D         | Ralph Morgan Park | 1-6         | Playground Area - Deep                 |
| E         | Runnymede Ave S   | 0-1         | RoW of Avenue                          |
| F         | Runnymede Ave S   | 1-6         | RoW of Avenue - Deep                   |
| G         | Paxson Ave        | 0-1         | RoW of Avenue                          |
| H         | Paxson Ave        | 1-6         | RoW of Avenue - Deep                   |
| I         | Rodman Ave        | 0-1         | RoW of Avenue                          |

| Sample ID | Location                      | Depth (in.) | Tentative Location Description:          |
|-----------|-------------------------------|-------------|------------------------------------------|
| J         | Rodman Ave                    | 1-6         | RoW of Avenue - Deep                     |
| K         | Jenkintown Elementary School  | 0-1         | Playground area near Florence Ave        |
| L         | Jenkintown Elementary School  | 1-6         | Playground area near Florence Ave - Deep |
| M         | Jenkintown Middle/High School | 0-1         | Soccer Field                             |
| N         | Jenkintown Middle/High School | 1-6         | Soccer Field - Deep                      |
| O         | Lightbridge Academy           | 0-1         | Play area                                |
| P         | Lightbridge Academy           | 1-6         | Play area- deep                          |

## VI. SAMPLE ANALYTICAL METHODS

Samples will be submitted to Pace Analytical, a laboratory that holds PA NELAP accreditation for requested methods as outlined in Table 2. A complete list of analytes is provided as [Appendix B](#).

**Table 2: Sample Analyses**

| Matrix: Soil |                          |                          |                                                                                                             |              |
|--------------|--------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------|--------------|
| USEPA Method | Test Description         | Preservative             | Expected Container (lab dependent)                                                                          | Hold Time    |
| 8270 SIM     | Low PAHs                 | $\leq 6^{\circ}\text{C}$ | 500 mL amber jar                                                                                            | 7 days       |
| 6020/6010    | Metals                   | $\leq 6^{\circ}\text{C}$ | 500 mL amber jar                                                                                            | 180 days     |
| 9012         | Total $\text{CN}^{-}$    | $\leq 6^{\circ}\text{C}$ | Plastic/HDPE                                                                                                | 14 days      |
| SM 4500-CN G | Amenable $\text{CN}^{-}$ | $\leq 6^{\circ}\text{C}$ | Plastic/HDPE                                                                                                | 14 days      |
| 7471         | Mercury                  | $\leq 6^{\circ}\text{C}$ | HPDE 250 mL                                                                                                 | 28 days      |
| 600-R-93-116 | Asbestos                 | No Ice                   | Preferred double bagged in Ziploc/plastic; will accept plastic or glass jars; no more than 8 oz of material | No Hold time |

Note: Large debris from the fire has been reported to have been deposited on properties from the fire. This discrete non-soil debris, if present at a sampling location will not be intentionally included for PAH, metals (including mercury), cyanide analysis to avoid biasing soil concentration data. Debris can be collected for asbestos analysis as those results are used to determine the presence of asbestos-containing material (ACM).



## VII. QA/QC

Laboratories contracted for all analyses will be NELAP accredited by DEP as listed on [Lab Certification - Report Viewer](#). The lab can also provide a Certificate and Scope of accreditation for each method and analyte per requested matrix. The lab's reporting limits will be requested and reviewed ensure they can meet the Act 2 standards.

The following QA/QC samples will be collected:

- (1) Triplicate sample per twenty samples to allow for the determination of sampling precision.

## VIII. SAMPLING PROCEDURES

### Sampling Equipment

Equipment to be used in the field is provided as [Appendix C](#). Equipment will be operated per the vendor and/or manufacture's specifications. Staff will reserve a state vehicle at least 24 hrs. prior to the sampling event through DEP's Vehicle Reservation System. [IntraDEP - VRS](#)

### Safety Procedures

DEP personnel will wear proper PPE (i.e., nitrile gloves, high visibility clothing, safety toed boots) while collecting samples. Gloves will be changed and discarded between each sample. Sampling should be conducted in two person teams, at a minimum.

Sample collection efforts should be performed in a manner that minimizes the potential for the creation of dust or airborne particles. All field personnel have the right and duty to stop sampling activities if hazardous conditions are observed to exist.

### General Sample Collection

PAHs, cyanide, and metals samples collected will promptly be placed on wet ice in a cooler. Asbestos samples will be placed in a dry cooler or box apart from the rest of the samples. Care will be taken to seal the plastic bags and prevent water from contacting the asbestos samples. The sampling team shall take due care to leave the sampling area in the same general condition as it was prior to sample collection.

### Soil Sampling Procedure

Soil samples will be collected in a manner consistent with the considerations in the ***Quality Assurance Program Plan for the Bureau of Environmental Cleanup and Brownfields Hazardous Sites Cleanup Act Section***.

Prior to sampling, an X-Ray Fluorescence (XRF) analyzer ([X-550 XRF Analyzer](#)) maybe be used to screen the area. In such case, XRF readings will be recorded of selected sample locations. Follow all manufacture instructions or vendor procedures on how to operate and maintain the equipment.

A shallow soil sample will be collected using disposable scoops for each unique sample. For each sample, the scoop will be used to disturb enough surface soil to fill all sample containers. The soil will be mixed before the sample containers are filled. For triplicate samples, enough soil must be well mixed to fill all necessary sample bottle/ware in triplicate to ensure precision. Asbestos samples will be double bagged as instructed by Pace.

A shovel or auger may be used to access soil in desired sampling locations. Any reusable equipment will be decontaminated as necessary between samples.

#### Investigation Derived Waste (IDW)

IDW will be handled and disposed of in a manner consistent with the considerations in the ***Quality Assurance Program Plan for the Bureau of Environmental Cleanup and Brownfields Hazardous Sites Cleanup Act Section***.

Used disposable items will be bagged and returned to DEP's Southeast Regional Office. Used disposable items are assumed to contain, at most, de minimis quantities of RCRA hazardous wastes, and can be disposed of as municipal waste.

#### Record Keeping

Field notes will be recorded in the site Field logbook following sampling events. Chain of Custody (COC) forms will be scanned into the site folder on the server. Maps, figures, and photographs will also be saved in the site folder.

At a minimum, the following information will be recorded in the field logbook during the collection of the samples:

- Team members and their responsibilities
- Time of arrival/entry on site and time of site departure
- Other personnel on site
- Deviations from sampling plans
- Sample location and description
- Date and time of sample collection
- Field observations and details related to analysis or integrity of samples (e.g., weather conditions, noticeable odors, colors, etc.)
- The use of field equipment, readings and/or calibration and use notes.

Photographs will be taken at the sampling locations and at other areas of interest on the site or sampling area. For each photograph taken, the following information will be recorded in the Field logbook or Photo Log.

- Date and location
- Description of the subject photographed

### Sample Labels

Soil Samples will be labeled as “SPS-Location ID (ex: A, B, C) - MMDDYY”. Additional information to include on each sample label is listed below.

- Collector’s name or initials
- Sample ID as described above
- Date and time of collection
- Preservative type and sample matrix
- Requested analysis
- Organization (DEP)

Staff will follow Pace’s COC procedures included in the bottle order or found on the [Chain of Custody Forms – Pace Analytical](#) website. Samples collected will be listed on an analytical lab (COC) form provided by Pace. COCs shall be filled completely per labs guidelines with information including but not limited to:

- sample collection times and dates (ensure to match labels)
- sample location or ID (ensure to match labels)
- preservation and bottle type
- laboratory methods requested per quote and analyte lists
- sample matrix or matrix code
- number of containers, type of samples (grab or composite)
- collector’s name, email, and signature
- any items required by the lab (requested turnaround time, data deliverables, permit or regulatory samples)
- project name, site, or number
- Purchase Order/Request number and Quote number
- client or organization (DEP)
- state of origin of samples

Also list any comments that would inform the lab including but not limited to strong odors, sample color, etc. Line out or “N/A” unused spaces. It is recommended to use a black ballpoint pen to prevent ink smearing if paperwork gets wet. Pace also provides an electronic COC form that can be pre-populated with header information like project name and contact information.

Ensure to add QC samples to the COC including DUP, Field Blanks and Trip Blanks. If the lab provides a temperature blank, leave in the cooler and do not record in the COC. Sample labels for QA/QC samples may exclude identifying information such as sampling location and collection time to ensure unbiased sample processing. This identifying information will be recorded in the field logbook.



### Sample Shipping

PAH, cyanide, and metals samples will be kept cold at  $< 6^{\circ}\text{C}$  with wet ice. The asbestos samples will be kept dry in a separate container. The sample coolers will be picked up from the DEP SERO office following collection. Schedule the courier with Pace at least 24 hrs. prior to the sampling event. Provide the office address and guidance on using the front entrance and parking. Also provide and contact information for the staff coordinating the event as the Pace courier may call to confirm pick up location and time.

Standard turnaround time will be requested of results. Data deliverables requested will be Level II CLP equivalent lab reports.

## **IX. REPORTING**

Upon receipt of analytical results, DEP will prepare a summary of the results. The sample locations will be mapped using GIS software and figures will be updated as needed. The information gathered will be referenced in possible further actions.

PAH, metals, and cyanide results will be compared to residential soils, Direct Contact Medium Specific Concentrations (MSC) [Statewide Health Standards](#) (SHS). There is no MSC for asbestos: those results will be used to determine if there is asbestos containing material, defined as 1% or greater asbestos present in the material.

### Local Contact Information

| Organization                                       | Phone Number | E-Mail                        |
|----------------------------------------------------|--------------|-------------------------------|
| Abington Township Municipal Office                 | 267.536.1000 | info@abingtonpa.gov           |
| Abington Township Police                           | 267.536.1100 | AbingtonPolice@abingtonpa.gov |
| Cheltenham Township Administration Building        | 215.887.1000 | manager@cheltenhampa.gov      |
| Cheltenham Township Police Administration Building | 215.885.1600 |                               |

## **X. REFERENCES**

1. [4500-CN– CYANIDE - Standard Methods For the Examination of Water and Wastewater](#)
2. [EPA Method 6010D \(SW-846\): Inductively Coupled Plasma - Atomic Emission Spectrometry](#)
3. [EPA Method 7471B \(SW-846\): Mercury in Solid or Semisolid Wastes \(Manual Cold-Vapor Technique\)](#)
4. [EPA Method 8270E \(SW-846\): Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry \(GC-MS\)](#)
5. [DEP HSCA Health and Safety Plan](#)
6. [DEP Statewide Health Standards | Department of Environmental Protection | Commonwealth of Pennsylvania](#)
7. DEP Quality Assurance Program Plan for the Bureau of Environmental Cleanup and Brownfields Hazardous Sites Cleanup Act Section
8. [SW-846 Test Method 9012B: Total and Amenable Cyanide \(Automated Colorimetric, With Off-Line Distillation\)](#)
9. [SW-846 Test Method 6200: Field Portable X-Ray Fluorescence Spectrometry for the Determination of Elemental Concentrations in Soil and Sediment | US EPA](#)

## **FIGURES**



**Figure 1: Tentative DEP Sampling Locations**



## **APPENDICES**

**Appendix A: Chemicals used in the Facility**

Albatex 5.1%

Ammonium Fluoroborate 3.4% to 6%

Boric Acid 1.7% to 2.5%

Cadmium Cyanide 0.2% to 5.4%

Cadmium Fluoroborate 20.1% to 20.2%

Caustic Soap 4.3% to 6.9%

Chromic Acid 1.1% to 3.9%

E-Chrome 8511 0.1%

Free Chloride 2.8% to 9.4%

Hydrochloric Acid 5.1% to 5.8%

Interlox 2325mciz 2.7%

Kenvert 11 0.7%

Nickel Sulfamate 5.1% to 5.7%

Nitric Concentrate 4.2% to 6.8%

Potassium Copper Cyanide 7.5% to 8.8%

Potassium Cyanide 0.7% to 7.9%

Potassium Permanganate 2.2%

Silver Cyanide 0.1% to 0.8%

Sodium Cyanide 5.9% to 7.9%

Sodium Dichromate 1.2%

Sodium Hydroxide 0.5% to 9.2%

Sulfuric Acid Concentrate 0.2%

Zil 906 Solution 1.9%



**Appendix B: List of Analytes (all units in mg/Kg)**

| Analyte                     | CAS Number | Soil MSC DC 0-15 ft | Reporting Limit (RL) | Method Detection Limit (MDL) |
|-----------------------------|------------|---------------------|----------------------|------------------------------|
| Aluminum                    | 7429-90-5  | 190,000             | 5                    | 0.7781                       |
| Antimony                    | 7440-36-0  | 88                  | 5                    | 0.732                        |
| Arsenic                     | 7440-38-2  | 12                  | 5                    | 1.000                        |
| Barium                      | 7440-39-3  | 44,000              | -                    | -                            |
| Beryllium                   | 7440-41-7  | 440                 | 0.5                  | 0.0481                       |
| Boron                       | 7440-42-8  | 44,000              | 5                    | 0.6848                       |
| Cadmium                     | 7440-43-9  | 110                 | 1                    | 0.1402                       |
| Calcium                     | 7440-70-2  |                     | 50                   | 18.6022                      |
| Total Chromium <sup>1</sup> | 7440-47-3  | 190,000             | 5                    | 0.6297                       |
| Cobalt                      | 7440-48-4  | 66                  | 5                    | 0.3784                       |
| Copper                      | 7440-50-8  | 7200                | 5                    | 1.4848                       |
| Iron                        | 7439-89-6  | 150,000             | 20                   | 1.8915                       |
| Lead                        | 7439-92-1  | 500                 | 5                    | 0.5137                       |
| Lithium                     | 7439-93-2  | 440                 | 5                    | 1.4169                       |
| Magnesium                   | 7439-95-4  |                     | 25                   | 2.2584                       |
| Manganese                   | 7439-96-5  | 31,000              | 5                    | 0.3688                       |
| Mercury                     | 7439-97-6  | 35                  | 0.02                 | 0.019                        |
| Molybdenum                  | 7439-98-7  | 1,100               | -                    | -                            |
| Nickel                      | 7440-02-0  | 4,400               | 5                    | 0.3562                       |
| Potassium                   | 7440-09-7  |                     | 25                   | 5.8747                       |
| Selenium                    | 7782-49-2  | 1,100               | 5                    | 0.9999                       |
| Silver                      | 7440-22-4  | 1,100               | 2.5                  | 0.3562                       |
| Thallium                    | 7440-28-0  | 2.2                 | 5                    | 0.7003                       |
| Tin                         | 7440-31-5  | 130,000             | -                    | -                            |
| Titanium                    | 7440-32-6  |                     | 5                    | 0.484                        |
| Vanadium                    | 7440-62-2  | 1,100               | 5                    | 0.4256                       |
| Zinc                        | 7440-66-6  | 66,000              | 5                    | 2.6876                       |
| Total Cyanide               | 57-12-5    | 130                 | -                    | 0.2991                       |
| Amenable Cyanide            | E-10275    | -                   | -                    | -                            |
| Acenaphthene                | 83-32-9    | 13000               | 6700                 | 1765                         |
| Acenaphthylene              | 208-96-8   | 13000               | 6700                 | 1378                         |
| Anthracene                  | 120-12-7   | 66000               | 6700                 | 1330.9                       |
| Fluoranthene                | 206-44-0   | 8800                | -                    | -                            |
| Naphthalene                 | 91-20-3    | 13                  | 6700                 | 2856                         |
| Benzo[a]pyrene              | 50-32-8    | 4.2                 | 6700                 | 2925                         |
| Benzo(a)anthracene          | 56-55-3    | 6.1                 | 6700                 | 1766.2                       |
| Benzo(b)fluoranthene        | 205-99-2   | 3.5                 | 6700                 | 1911                         |
| Benzo(k)fluoranthene        | 207-08-9   | 3.5                 | 6700                 | 1123.9                       |

| Analyte                 | CAS Number | Soil MSC DC 0-15 ft     | Reporting Limit (RL) | Method Detection Limit (MDL) |
|-------------------------|------------|-------------------------|----------------------|------------------------------|
| Benzo(ghi)perylene      | 191-24-2   | 13000                   | 6700                 | 1009.5                       |
| Phenanthrene            | 85-01-8    | 66000                   | 13340                | 4024.3                       |
| Chrysene                | 218-01-9   | 35                      | 6700                 | 1054                         |
| 2-Chloronaphthalene     | 91-58-7    | 18000                   | -                    | -                            |
| Dibenzo(a,h)anthracene  | 53-70-3    | 1                       | 6700                 | 1303.7                       |
| Indeno(1,2,3-cd) pyrene | 193-39-5   | 3.5                     | 6700                 | 2587                         |
| 2-Methylnaphthalene     | 91-57-6    | 57                      | -                    | -                            |
| Pyrene                  | 129-00-0   | 220                     | -                    | -                            |
| Asbestos                | 1332-21-4  | None; Presence above 1% | NA                   | NA                           |

<sup>1</sup> Total Cr includes both Cr<sup>3+</sup> and Cr<sup>6+</sup>.

**Appendix C: Sampling Equipment**

| Quantity | Item                   | Notes                                                                                                   |
|----------|------------------------|---------------------------------------------------------------------------------------------------------|
| 3        | Business Cards         | For each team member                                                                                    |
| 1        | Employee ID            | For each team member                                                                                    |
| 1        | Field Notebook/Logbook | Kept by Project Officer                                                                                 |
| 1        | Chain of Custody       | Sufficient for all samples                                                                              |
| -        | Cooler (s)             | As needed, to transport samples                                                                         |
| -        | Disposal Shovel        | As needed to collect samples                                                                            |
| 1        | Ice                    | For each cooler, except asbestos samples                                                                |
| 1        | Trash Bag              | For each team                                                                                           |
| -        | Bottleware and labels  | Provided by lab                                                                                         |
| -        | Extra Bottleware       | In case of breakage or need for additional samples                                                      |
| 1        | Camera                 |                                                                                                         |
| 1        | Nitrile Gloves - Box   | For each team                                                                                           |
| -        | Ziplock Bag(s)         | As needed for asbestos sample collection, soil mixing, chain of custody, cell phones, electronics, etc. |





## NARRATIVE REPORT FORM

Facility Name: SPS Technologies Fire Investigation Primary Facility ID: n/a

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                        |                                                    |                              |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------|----------------------------------------------------|------------------------------|--|
| Inspection Date: 3/18/2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | Inspection Time: see below             |                                                    | Lat/Long:                    |  |
| Inspecting Program:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | <input type="checkbox"/> Storage Tanks | <input checked="" type="checkbox"/> HSCA           | <input type="checkbox"/> LRP |  |
| Owner Name: SPS Technologies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Inspection Number: n/a                 |                                                    | Site ID:                     |  |
| Facility Location (911) Address:<br>301 HIGHLAND AVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                        | Municipality: Abington Twp                         |                              |  |
| JENKINTOWN, PA 19046-2630                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                        | County: Montgomery                                 |                              |  |
| Responsible Official Name: Kenneth Sorensen<br>Responsible Official Title: Sr. Global EHS Director of Airframe/Structural                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                        | Responsible Official Address:<br>_____<br>_____    |                              |  |
| Responsible Official Telephone: 425-495-9870                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                        | Email Address: <u>ken.sorensen@pccairframe.com</u> |                              |  |
| <p><b>Narrative:</b></p> <p>D. Semmens (DEP) and I, C. Wade, went to the Site collect soil samples from residential, park, and school properties to aid in the determination if the fire that occurred at the SPS Technologies facility in February 2025 deposited contaminants on to nearby properties.</p> <p>We arrived at Hallowell Park at 0915 to begin sampling. In total, we collected samples from two locations in Hallowell Park, one location each at three residential properties, and two locations from the Jenkintown Schools property. Sample locations selected based on: proximity to locations SPS Technologies' consultant TRC had previously collected samples, XRF analyzer readings, and property owner information. XRF readings were taken from each sample location in-situ of the surface soil, and ex-situ of each sample. Detailed information on the collection of samples is included in Table 1. A total of 16 soil samples were collected for PAH, cyanide, metals, and asbestos analysis by Pace Analytical.</p> <p>We left the Site at 1505.</p> |  |                                        |                                                    |                              |  |

|                                                                                                                                                                                                                 |                                                      |                              |                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------|--------------------------------------------|
| DEP Representative Name<br>Colin R. Wade                                                                                                                                                                        | DEP Representative Signature<br><i>Colin R. Wade</i> | Title<br>Env Protection Spec | Date: 3/20/2025<br>Telephone: 484.250.5722 |
| Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person. |                                                      |                              |                                            |
| Name of Person Interviewed<br>n/a                                                                                                                                                                               | Signature of Person Interviewed                      | Title                        | Date:<br>Telephone:                        |

***Attachment B: March 18, 2025, DEP Site Visit Narrative***



## NARRATIVE REPORT FORM

Facility Name: SPS Technologies Fire Investigation
 Primary Facility ID: n/a

Table 1.) Sample Information

| Time | Sample ID       | Type | Location             | Location Description                                    | Lat        | Long       | Notes                                                   |
|------|-----------------|------|----------------------|---------------------------------------------------------|------------|------------|---------------------------------------------------------|
| 0930 | SPS-A-03182025  | 0-1" | Hallowell Park       | B/t baseball fields,                                    | 40 06.0075 | 75 08.5080 | Near TRC sample location                                |
| 0942 | SPS-B-031825    | 1-6" | Hallowell Park       | Bare dirt b/t baseball fields, near TRC sample location | 40 06.0075 | 75 08.5080 |                                                         |
| 1020 | SPS-C-031825    | 0-1" | Residential Property | Backyard                                                |            |            | Resident reported finding fire debris at this location. |
| 1025 | SPS-D-031825    | 1-6" | Residential Property | Backyard                                                |            |            |                                                         |
| 1115 | SPS-E-031825    | 0-1" | Hallowell Park       | Soccer field                                            | 40 06.0260 | 75 08.5874 | Based on Cr, Pb XRF results                             |
| 1125 | SPS-F-031825    | 1-6" | Hallowell Park       | Soccer field                                            | 40 06.0260 | 75 08.5874 |                                                         |
| 1128 | SPS-TRI-031825  | 1-6" | Hallowell Park       | Soccer field                                            | 40 06.0260 | 75 08.5874 | Triplicate                                              |
| 1130 | SPS-TRI2-031825 | 1-6" | Hallowell Park       | Soccer field                                            | 40 06.0260 | 75 08.5874 | Triplicate                                              |
| 1235 | SPS-G-031825    | 0-1" | Residential Property | Yard, near shed                                         |            |            | Based on Cr, Pb XRF Results Previously sampled by TRC.  |
| 1245 | SPS-H-031825    | 1-6" | Residential Property | Yard, near shed                                         |            |            |                                                         |
| 1325 | SPS-I-0318-2025 | 0-1" | Jenkintown Schools   | Back courtyard                                          | 40 05.7369 | 75 07.9891 | Uphill of mulched are                                   |
| 1335 | SPS-J-031825    | 1-6" | Jenkintown Schools   | Back courtyard                                          | 40 05.7369 | 75 07.9891 |                                                         |
| 1325 | SPS-K-031825    | 0-1" | Jenkintown Schools   | Playground                                              | 40 05.6998 | 75 08.0627 | Based on Cr, Pb XRF Results Previously sampled by TRC.  |

|                                                                                                                                                                                                                        |                                                             |                                     |                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------|----------------------------------------------------------|
| <b>DEP Representative Name</b><br>Colin R. Wade                                                                                                                                                                        | <b>DEP Representative Signature</b><br><i>Colin R. Wade</i> | <b>Title</b><br>Env Protection Spec | <b>Date:</b> 3/20/2025<br><b>Telephone:</b> 484.250.5722 |
| <i>Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.</i> |                                                             |                                     |                                                          |
| <b>Name of Person Interviewed</b><br>n/a                                                                                                                                                                               | <b>Signature of Person Interviewed</b>                      | <b>Title</b>                        | <b>Date:</b>                                             |
|                                                                                                                                                                                                                        |                                                             |                                     | <b>Telephone:</b>                                        |



## NARRATIVE REPORT FORM

Facility Name: SPS Technologies Fire Investigation Primary Facility ID: n/a

|      |              |      |                    |            |            |            |  |
|------|--------------|------|--------------------|------------|------------|------------|--|
| 1335 | SPS-L-031825 | 1-6" | Jenkintown Schools | Playground | 40 05.6998 | 75 08.0627 |  |
|------|--------------|------|--------------------|------------|------------|------------|--|

Table 1.) Sample Information

| Time | Sample ID    | Type | Location             | Location Description | Lat | Long | Notes                                                     |
|------|--------------|------|----------------------|----------------------|-----|------|-----------------------------------------------------------|
| 1445 | SPS-M-031825 | 0-1" | Residential Property | Backyard             |     |      | Based on Cr, Pb XRF Results<br>Previously sampled by TRC. |
| 1450 | SPS-N-031825 | 1-6" | Residential Property | Backyard             |     |      |                                                           |

|                                                                                                                                                                                                                 |                                                      |                                     |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------|-------------------------|
| DEP Representative Name<br><b>Colin R. Wade</b>                                                                                                                                                                 | DEP Representative Signature<br><b>Colin R. Wade</b> | Title<br><b>Env Protection Spec</b> | Date: <b>3/20/2025</b>  |
|                                                                                                                                                                                                                 |                                                      |                                     | Telephone: 484.250.5722 |
| Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person. |                                                      |                                     |                         |
| Name of Person Interviewed<br><b>n/a</b>                                                                                                                                                                        | Signature of Person Interviewed                      | Title                               | Date:                   |
|                                                                                                                                                                                                                 |                                                      |                                     | Telephone:              |





## NARRATIVE REPORT FORM

Facility Name: SPS Technologies Fire Investigation

Primary Facility ID: n/a

### MAPS / PHOTOGRAPHS / ATTACHMENTS



|                                                                                                                                                                                                                 |                                                      |                                     |                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------|----------------------------------------------------------|
| DEP Representative Name<br><b>Colin R. Wade</b>                                                                                                                                                                 | DEP Representative Signature<br><b>Colin R. Wade</b> | Title<br><b>Env Protection Spec</b> | Date: <b>3/20/2025</b><br>Telephone: <b>484.250.5722</b> |
| Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person. |                                                      |                                     |                                                          |
| Name of Person Interviewed<br><b>n/a</b>                                                                                                                                                                        | Signature of Person Interviewed                      | Title                               | Date:                                                    |
|                                                                                                                                                                                                                 |                                                      |                                     | Telephone:                                               |



## NARRATIVE REPORT FORM

Facility Name: SPS Technologies Fire Investigation

Primary Facility ID: n/a



3/18/2025 Hallowell Park Sample ID A/B Location



3/18/2025 Residential Property C/D Location

|                                                                                                                                                                                                                 |                                                      |                              |                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------|--------------------------------------------|
| DEP Representative Name<br>Colin R. Wade                                                                                                                                                                        | DEP Representative Signature<br><i>Colin R. Wade</i> | Title<br>Env Protection Spec | Date: 3/20/2025<br>Telephone: 484.250.5722 |
| Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person. |                                                      |                              |                                            |
| Name of Person Interviewed<br>n/a                                                                                                                                                                               | Signature of Person Interviewed                      | Title                        | Date:                                      |
|                                                                                                                                                                                                                 |                                                      |                              | Telephone:                                 |





## NARRATIVE REPORT FORM

Facility Name: SPS Technologies Fire Investigation

Primary Facility ID: n/a



3/18/2025 Hallowell Park Sample ID E/F/TRI/TRI2



3/18/2025 Residential Property Sample ID G/H

|                                                                                                                                                                                                                 |                                                      |                              |                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------|--------------------------------------------|
| DEP Representative Name<br>Colin R. Wade                                                                                                                                                                        | DEP Representative Signature<br><i>Colin R. Wade</i> | Title<br>Env Protection Spec | Date: 3/20/2025<br>Telephone: 484.250.5722 |
| Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person. |                                                      |                              |                                            |
| Name of Person Interviewed<br>n/a                                                                                                                                                                               | Signature of Person Interviewed                      | Title                        | Date:                                      |
|                                                                                                                                                                                                                 |                                                      |                              | Telephone:                                 |



## NARRATIVE REPORT FORM

Facility Name: SPS Technologies Fire Investigation

Primary Facility ID: n/a



3/18/2025 Jenkintown Schools Sample ID I/J



3/18/2025 Jenkintown Schools Sample ID K/L



3/18/2025 Residential Property Sample ID M/N

|                                                                                                                                                                                                                 |                                                      |                              |                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------|--------------------------------------------|
| DEP Representative Name<br>Colin R. Wade                                                                                                                                                                        | DEP Representative Signature<br><i>Colin R. Wade</i> | Title<br>Env Protection Spec | Date: 3/20/2025<br>Telephone: 484.250.5722 |
| Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person. |                                                      |                              |                                            |
| Name of Person Interviewed<br>n/a                                                                                                                                                                               | Signature of Person Interviewed                      | Title                        | Date:                                      |
|                                                                                                                                                                                                                 |                                                      |                              | Telephone:                                 |



SAMPLING EVALUATION REPORT  
SPS Tech Fire Investigation

***Attachment C: Pace Analytical Services Inc. Laboratory Reports***



April 07, 2025

Colin Wade  
PADEP  
2 E. Main Street  
Norristown, PA 19401

RE: Project: Abington Site  
Pace Project No.: 30764913

Dear Colin Wade:

Enclosed are the analytical results for sample(s) received by the laboratory on March 19, 2025. 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.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

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

The samples will be subcontracted to Pace Altoona for analysis. Results of the analysis are reported on the Pace Altoona data tables.

The samples will be subcontracted to Pace Golden for analysis. Results of the analysis are reported on the Pace Golden data tables.

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

Sincerely,

Nikayla M. Yasurek  
nikayla.yasurek@pacelabs.com  
(724)850-5600  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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



## CERTIFICATIONS

Project: Abington Site

Pace Project No.: 30764913

---

### **Pace Analytical Services Pennsylvania**

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

ANAB DOD-ELAP Rad Accreditation #: L2417

ANABISO/IEC 17025:2017 Rad Cert#: L24170

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 2950

Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification

Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA010

Louisiana DEQ/TNI Certification #: 04086

Maine Certification #: 2023021

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 #: PA014572023-03

New Hampshire/TNI Certification #: 297622

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 #: PA200002-015

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457

Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN02867

Texas/TNI Certification #: T104704188-22-18

Utah/TNI Certification #: PA014572223-14

USDA Soil Permit #: 525-23-67-77263

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

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### **Pace Analytical Services Beaver**

225 Industrial Park Road, Beaver, WV 25813

New York DOH Lab ID12167 SN69208

Virginia VELAP 460148

West Virginia DEP 060

West Virginia DHHR 00412CM

North Carolina DEQ 466

Kentucky Wastewater Certification KY90039

Pennsylvania DEP 68-00839

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Abington Site

Pace Project No.: 30764913

| Lab ID      | Sample ID       | Matrix | Date Collected | Date Received  |
|-------------|-----------------|--------|----------------|----------------|
| 30764913001 | SPS-A-031825    | Solid  | 03/18/25 09:30 | 03/19/25 21:00 |
| 30764913002 | SPS-B-031825    | Solid  | 03/18/25 09:42 | 03/19/25 21:00 |
| 30764913003 | SPS-C-031825    | Solid  | 03/18/25 10:20 | 03/19/25 21:00 |
| 30764913004 | SPS-D-031825    | Solid  | 03/18/25 10:25 | 03/19/25 21:00 |
| 30764913005 | SPS-E-031825    | Solid  | 03/18/25 11:15 | 03/19/25 21:00 |
| 30764913006 | SPS-F-031825    | Solid  | 03/18/25 11:25 | 03/19/25 21:00 |
| 30764913007 | SPS-TRI-031825  | Solid  | 03/18/25 11:28 | 03/19/25 21:00 |
| 30764913008 | SPS-TRI2-031825 | Solid  | 03/18/25 11:30 | 03/19/25 21:00 |
| 30764913009 | SPS-G-031825    | Solid  | 03/18/25 12:35 | 03/19/25 21:00 |
| 30764913010 | SPS-H-031825    | Solid  | 03/18/25 12:45 | 03/19/25 21:00 |
| 30764913011 | SPS-I-031825    | Solid  | 03/18/25 13:25 | 03/19/25 21:00 |
| 30764913012 | SPS-J-031825    | Solid  | 03/18/25 13:35 | 03/19/25 21:00 |
| 30764913013 | SPS-K-031825    | Solid  | 03/18/25 14:00 | 03/19/25 21:00 |
| 30764913014 | SPS-L-031825    | Solid  | 03/18/25 14:05 | 03/19/25 21:00 |
| 30764913015 | SPS-M-031825    | Solid  | 03/18/25 14:45 | 03/19/25 21:00 |
| 30764913016 | SPS-N-031825    | Solid  | 03/18/25 14:50 | 03/19/25 21:00 |

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## SAMPLE ANALYTE COUNT

Project: Abington Site

Pace Project No.: 30764913

| Lab ID      | Sample ID       | Method           | Analysts | Analytes Reported | Laboratory |
|-------------|-----------------|------------------|----------|-------------------|------------|
| 30764913001 | SPS-A-031825    | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |                 | EPA 7471B        | SLT      | 1                 | PASI-BV    |
|             |                 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |                 | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |                 | EPA 9012B        | CMT      | 1                 | PASI-PA    |
| 30764913003 | SPS-C-031825    | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |                 | EPA 7471B        | SLT      | 1                 | PASI-BV    |
|             |                 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |                 | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |                 | EPA 9012B        | CMT      | 1                 | PASI-PA    |
| 30764913004 | SPS-D-031825    | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |                 | EPA 7471B        | SLT      | 1                 | PASI-BV    |
|             |                 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |                 | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |                 | EPA 9012B        | CMT      | 1                 | PASI-PA    |
| 30764913005 | SPS-E-031825    | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |                 | EPA 7471B        | SLT      | 1                 | PASI-BV    |
|             |                 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |                 | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |                 | EPA 9012B        | CMT      | 1                 | PASI-PA    |
| 30764913006 | SPS-F-031825    | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |                 | EPA 7471B        | SLT      | 1                 | PASI-BV    |
|             |                 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |                 | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |                 | EPA 9012B        | CMT      | 1                 | PASI-PA    |
| 30764913007 | SPS-TRI-031825  | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |                 | EPA 7471B        | SLT      | 1                 | PASI-BV    |
|             |                 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |                 | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |                 | EPA 9012B        | CMT      | 1                 | PASI-PA    |
| 30764913008 | SPS-TRI2-031825 | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |                 | EPA 7471B        | SLT      | 1                 | PASI-BV    |
|             |                 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |                 | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |                 | EPA 9012B        | CMT      | 1                 | PASI-PA    |
| 30764913009 | SPS-G-031825    | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |                 | EPA 7471B        | SLT      | 1                 | PASI-BV    |

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## SAMPLE ANALYTE COUNT

Project: Abington Site  
Pace Project No.: 30764913

| Lab ID      | Sample ID    | Method           | Analysts | Analytes Reported | Laboratory |
|-------------|--------------|------------------|----------|-------------------|------------|
| 30764913010 | SPS-H-031825 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |              | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |              | EPA 9012B        | CMT      | 1                 | PASI-PA    |
|             |              | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |              | EPA 7471B        | SLT      | 1                 | PASI-BV    |
| 30764913011 | SPS-I-031825 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |              | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |              | EPA 9012B        | CMT      | 1                 | PASI-PA    |
|             |              | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |              | EPA 7471B        | SLT      | 1                 | PASI-BV    |
| 30764913012 | SPS-J-031825 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |              | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |              | EPA 9012B        | CMT      | 1                 | PASI-PA    |
|             |              | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |              | EPA 7471B        | SLT      | 1                 | PASI-BV    |
| 30764913013 | SPS-K-031825 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |              | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |              | EPA 9012B        | CMT      | 1                 | PASI-PA    |
|             |              | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |              | EPA 7471B        | SLT      | 1                 | PASI-BV    |
| 30764913014 | SPS-L-031825 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |              | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |              | EPA 9012B        | CMT      | 1                 | PASI-PA    |
|             |              | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |              | EPA 7471B        | SLT      | 1                 | PASI-BV    |
| 30764913015 | SPS-M-031825 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |              | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |              | EPA 9012B        | CMT      | 1                 | PASI-PA    |
|             |              | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |              | EPA 7471B        | SLT      | 1                 | PASI-BV    |
| 30764913016 | SPS-N-031825 | EPA 8270D by SIM | SJG      | 18                | PASI-PA    |
|             |              | SM 2540G-2015    | ALH1     | 1                 | PASI-PA    |
|             |              | EPA 9012B        | CMT      | 1                 | PASI-PA    |
|             |              | EPA 6010D        | JLH1     | 24                | PASI-BV    |
|             |              | EPA 7471B        | SLT      | 1                 | PASI-BV    |

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## SAMPLE ANALYTE COUNT

Project: Abington Site

Pace Project No.: 30764913

| Lab ID | Sample ID | Method    | Analysts | Analytes Reported | Laboratory |
|--------|-----------|-----------|----------|-------------------|------------|
|        |           | EPA 9012B | CMT      | 1                 | PASI-PA    |

PASI-BV = Pace Analytical Services - Beaver

PASI-PA = Pace Analytical Services - Greensburg

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## PROJECT NARRATIVE

Project: Abington Site

Pace Project No.: 30764913

**Method:** EPA 6010D

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

**Client:** PADEP Norristown

**Date:** April 07, 2025

### General Information:

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

### Hold Time:

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

### Sample Preparation:

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

### Initial Calibrations (including MS Tune as applicable):

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

### Continuing Calibration:

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

### Internal Standards:

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

### Surrogates:

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

### Method Blank:

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

### Laboratory Control Spike:

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

### Matrix Spikes:

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

QC Batch: 734415

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30764437001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3575069)

- Aluminum
- Antimony
- Arsenic
- Beryllium
- Boron
- Cadmium
- Calcium
- Cobalt

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: Abington Site

Pace Project No.: 30764913

**Method:** EPA 6010D

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

**Client:** PADEP Norristown

**Date:** April 07, 2025

QC Batch: 734415

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30764437001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Copper
- Iron
- Lead
- Manganese
- Nickel
- Potassium
- Selenium
- Silver
- Thallium
- Zinc
- MSD (Lab ID: 3575070)
  - Aluminum
  - Antimony
  - Arsenic
  - Beryllium
  - Cadmium
  - Calcium
  - Cobalt
  - Iron
  - Manganese
  - Nickel
  - Potassium
  - Selenium
  - Thallium
  - Zinc

R1: RPD value was outside control limits.

- MSD (Lab ID: 3575070)
  - Antimony
  - Chromium
  - Copper

QC Batch: 734715

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30764263001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 3576618)
  - Aluminum
  - Antimony
  - Calcium
  - Iron
  - Magnesium
  - Manganese
  - Titanium
- MSD (Lab ID: 3576619)

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## PROJECT NARRATIVE

Project: Abington Site

Pace Project No.: 30764913

---

**Method:** EPA 6010D

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

**Client:** PADEP Norristown

**Date:** April 07, 2025

QC Batch: 734715

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30764263001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Aluminum
- Antimony
- Cadmium
- Calcium
- Chromium
- Cobalt
- Iron
- Lead
- Magnesium
- Manganese
- Nickel
- Potassium
- Sodium
- Titanium
- Vanadium

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: Abington Site  
Pace Project No.: 30764913

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**Method:** EPA 7471B  
**Description:** BVR 7471B Mercury  
**Client:** PADEP Norristown  
**Date:** April 07, 2025

### General Information:

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

### Hold Time:

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

### Sample Preparation:

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

### Initial Calibrations (including MS Tune as applicable):

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

### Continuing Calibration:

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

### Internal Standards:

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

### Surrogates:

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

### Method Blank:

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

### Laboratory Control Spike:

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

### Matrix Spikes:

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

QC Batch: 734518

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30764263001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 3575418)
- Mercury

### Additional Comments:

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## PROJECT NARRATIVE

Project: Abington Site

Pace Project No.: 30764913

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** PADEP Norristown

**Date:** April 07, 2025

### General Information:

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

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

- SPS-A-031825 (Lab ID: 30764913001)
- SPS-C-031825 (Lab ID: 30764913003)
- SPS-D-031825 (Lab ID: 30764913004)
- SPS-E-031825 (Lab ID: 30764913005)
- SPS-F-031825 (Lab ID: 30764913006)
- SPS-G-031825 (Lab ID: 30764913009)
- SPS-H-031825 (Lab ID: 30764913010)
- SPS-I-031825 (Lab ID: 30764913011)
- SPS-J-031825 (Lab ID: 30764913012)
- SPS-K-031825 (Lab ID: 30764913013)
- SPS-L-031825 (Lab ID: 30764913014)
- SPS-M-031825 (Lab ID: 30764913015)
- SPS-N-031825 (Lab ID: 30764913016)
- SPS-TRI-031825 (Lab ID: 30764913007)
- SPS-TRI2-031825 (Lab ID: 30764913008)

### Hold Time:

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

H2: Extraction or preparation conducted outside EPA method holding time.

- SPS-M-031825 (Lab ID: 30764913015)

### Sample Preparation:

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

### Initial Calibrations (including MS Tune as applicable):

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

### Continuing Calibration:

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

### Internal Standards:

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

QC Batch: 734739

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

- SPS-TRI-031825 (Lab ID: 30764913007)
  - Benzo(a)pyrene
  - Benzo(b)fluoranthene
  - Benzo(g,h,i)perylene

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## PROJECT NARRATIVE

Project: Abington Site

Pace Project No.: 30764913

**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** PADEP Norristown

**Date:** April 07, 2025

QC Batch: 734739

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

- Benzo(k)fluoranthene
- Dibenz(a,h)anthracene
- Indeno(1,2,3-cd)pyrene

### Surrogates:

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

QC Batch: 734739

SR: Surrogate recovery was below laboratory control limits. Results may be biased low.

- SPS-M-031825 (Lab ID: 30764913015)
- 2-Fluorobiphenyl (S)
- Terphenyl-d14 (S)

### Method Blank:

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

### Laboratory Control Spike:

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

### Matrix Spikes:

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

QC Batch: 737163

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30766929004

R1: RPD value was outside control limits.

- MSD (Lab ID: 3587966)
- Acenaphthene
- Acenaphthylene
- Anthracene
- Benzo(a)anthracene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Benzo(g,h,i)perylene
- Benzo(k)fluoranthene
- Chrysene
- Dibenz(a,h)anthracene
- Fluoranthene
- Fluorene
- Indeno(1,2,3-cd)pyrene
- Naphthalene
- Phenanthrene
- Pyrene

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: Abington Site

Pace Project No.: 30764913

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**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV PAH by SIM

**Client:** PADEP Norristown

**Date:** April 07, 2025

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Abington Site  
Pace Project No.: 30764913

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**Method:** EPA 9012B  
**Description:** 9012B Cyanide, Total  
**Client:** PADEP Norristown  
**Date:** April 07, 2025

### General Information:

15 samples were analyzed for EPA 9012B by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

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

### Sample Preparation:

The samples were prepared in accordance with EPA 9012B with any exceptions noted below.

### Method Blank:

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

### Laboratory Control Spike:

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

### Matrix Spikes:

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

QC Batch: 734488

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30763414001,30764913015

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

- MS (Lab ID: 3575300)
  - Cyanide
- MS (Lab ID: 3575302)
  - Cyanide
- MSD (Lab ID: 3575303)
  - Cyanide

R1: RPD value was outside control limits.

- MSD (Lab ID: 3575303)
  - Cyanide

QC Batch: 734489

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30764913016

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

- MS (Lab ID: 3575306)
  - Cyanide
- MSD (Lab ID: 3575307)
  - Cyanide

### Additional Comments:

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

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-A-031825 Lab ID: 30764913001 Collected: 03/18/25 09:30 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 21900   | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-36-0 |        |
| Arsenic                                                                                                                                | 13.3    | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.72         | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.4          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-43-9 |        |
| Calcium                                                                                                                                | 2650    | mg/kg | 72.4         | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-70-2 |        |
| Chromium                                                                                                                               | 31.9    | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 9.2     | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-48-4 |        |
| Copper                                                                                                                                 | 36.5    | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-50-8 |        |
| Iron                                                                                                                                   | 29100   | mg/kg | 290          | 10 | 03/21/25 08:03 | 03/24/25 10:15 | 7439-89-6 |        |
| Lead                                                                                                                                   | 61.5    | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7439-92-1 |        |
| Lithium                                                                                                                                | 12.1    | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 3610    | mg/kg | 36.2         | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7439-95-4 |        |
| Manganese                                                                                                                              | 370     | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 15.5    | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-02-0 |        |
| Potassium                                                                                                                              | 2310    | mg/kg | 36.2         | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.6          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-22-4 |        |
| Sodium                                                                                                                                 | 79.3    | mg/kg | 72.4         | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-28-0 |        |
| Titanium                                                                                                                               | 519     | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 50.4    | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 112     | mg/kg | 7.2          | 1  | 03/21/25 08:03 | 03/24/25 08:58 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.13    | mg/kg | 0.029        | 1  | 03/21/25 12:06 | 03/24/25 06:15 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | ND      | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | ND      | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 125     | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 289     | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | ND      | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 265     | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 124     | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 276     | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 192          | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | ND      | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-A-031825 Lab ID: 30764913001 Collected: 03/18/25 09:30 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | ND      | ug/kg | 192          | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 85-01-8   | ED   |
| Pyrene                                                           | 235     | ug/kg | 96.6         | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 62      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 70      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/26/25 20:08 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 31.7    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.3          | 1  | 03/21/25 10:11 | 03/21/25 17:09 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site  
Pace Project No.: 30764913

Sample: SPS-C-031825 Lab ID: 30764913003 Collected: 03/18/25 10:20 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 15400   | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-36-0 |        |
| Arsenic                                                                                                                                | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.66         | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.3          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-43-9 |        |
| Calcium                                                                                                                                | 1750    | mg/kg | 66.5         | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-70-2 |        |
| Chromium                                                                                                                               | 19.3    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-48-4 |        |
| Copper                                                                                                                                 | 25.1    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-50-8 |        |
| Iron                                                                                                                                   | 18900   | mg/kg | 266          | 10 | 03/21/25 08:03 | 03/24/25 10:17 | 7439-89-6 |        |
| Lead                                                                                                                                   | 130     | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7439-92-1 |        |
| Lithium                                                                                                                                | 14.9    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 2490    | mg/kg | 33.2         | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7439-95-4 |        |
| Manganese                                                                                                                              | 297     | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 15.3    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-02-0 |        |
| Potassium                                                                                                                              | 1960    | mg/kg | 33.2         | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.3          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-22-4 |        |
| Sodium                                                                                                                                 | 67.4    | mg/kg | 66.5         | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-28-0 |        |
| Titanium                                                                                                                               | 426     | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 27.0    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 96.2    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:01 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.083   | mg/kg | 0.028        | 1  | 03/21/25 12:06 | 03/24/25 06:17 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | ND      | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 176     | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 195     | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 464     | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | ND      | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 425     | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 203     | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 408     | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 186          | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | ND      | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-C-031825 Lab ID: 30764913003 Collected: 03/18/25 10:20 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | ND      | ug/kg | 186          | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 85-01-8   | ED   |
| Pyrene                                                           | 324     | ug/kg | 93.4         | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 60      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 79      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/26/25 21:07 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 28.3    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | 1.5     | mg/kg | 1.3          | 1  | 03/21/25 10:11 | 03/21/25 17:11 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-D-031825 Lab ID: 30764913004 Collected: 03/18/25 10:25 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 22000   | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-36-0 |        |
| Arsenic                                                                                                                                | 11.2    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.64         | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.3          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-43-9 |        |
| Calcium                                                                                                                                | 3870    | mg/kg | 63.7         | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-70-2 |        |
| Chromium                                                                                                                               | 26.6    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 52.4    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-48-4 |        |
| Copper                                                                                                                                 | 33.9    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-50-8 |        |
| Iron                                                                                                                                   | 64700   | mg/kg | 255          | 10 | 03/21/25 08:03 | 03/24/25 10:20 | 7439-89-6 |        |
| Lead                                                                                                                                   | 131     | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7439-92-1 |        |
| Lithium                                                                                                                                | 23.1    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 4250    | mg/kg | 31.8         | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7439-95-4 |        |
| Manganese                                                                                                                              | 2830    | mg/kg | 63.7         | 10 | 03/21/25 08:03 | 03/24/25 10:20 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 21.3    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-02-0 |        |
| Potassium                                                                                                                              | 2650    | mg/kg | 31.8         | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.2          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-22-4 |        |
| Sodium                                                                                                                                 | 116     | mg/kg | 63.7         | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-28-0 |        |
| Titanium                                                                                                                               | 491     | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 42.5    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 159     | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:03 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.12    | mg/kg | 0.026        | 1  | 03/21/25 12:06 | 03/24/25 06:19 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | ND      | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 148     | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 163     | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 382     | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | ND      | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 350     | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 169     | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 351     | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 170          | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | ND      | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-D-031825 Lab ID: 30764913004 Collected: 03/18/25 10:25 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | ND      | ug/kg | 170          | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 85-01-8   | ED   |
| Pyrene                                                           | 284     | ug/kg | 85.3         | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 68      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 80      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/26/25 21:26 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 23.0    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | 1.3     | mg/kg | 1.3          | 1  | 03/21/25 10:11 | 03/21/25 17:12 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-E-031825 Lab ID: 30764913005 Collected: 03/18/25 11:15 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 22900   | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-36-0 |        |
| Arsenic                                                                                                                                | ND      | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.78         | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.6          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-43-9 |        |
| Calcium                                                                                                                                | 5100    | mg/kg | 77.9         | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-70-2 |        |
| Chromium                                                                                                                               | 25.3    | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 9.2     | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-48-4 |        |
| Copper                                                                                                                                 | 39.1    | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-50-8 |        |
| Iron                                                                                                                                   | 27300   | mg/kg | 312          | 10 | 03/21/25 08:03 | 03/24/25 10:22 | 7439-89-6 |        |
| Lead                                                                                                                                   | 91.5    | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7439-92-1 |        |
| Lithium                                                                                                                                | 17.2    | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 5000    | mg/kg | 39.0         | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7439-95-4 |        |
| Manganese                                                                                                                              | 389     | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 18.2    | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-02-0 |        |
| Potassium                                                                                                                              | 3680    | mg/kg | 39.0         | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.9          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-22-4 |        |
| Sodium                                                                                                                                 | 132     | mg/kg | 77.9         | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-28-0 |        |
| Titanium                                                                                                                               | 628     | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 43.9    | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 127     | mg/kg | 7.8          | 1  | 03/21/25 08:03 | 03/24/25 09:05 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.12    | mg/kg | 0.031        | 1  | 03/21/25 12:06 | 03/24/25 06:22 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | 214     | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | 181     | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 1110    | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 1310    | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 2810    | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | 397     | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 2580    | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 1250    | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | 133     | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 2340    | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 210          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | 385     | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-E-031825 Lab ID: 30764913005 Collected: 03/18/25 11:15 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | 940     | ug/kg | 210          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 85-01-8   | ED   |
| Pyrene                                                           | 2090    | ug/kg | 106          | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 71      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 81      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/26/25 21:46 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 37.1    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.4          | 1  | 03/21/25 10:11 | 03/21/25 17:13 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-F-031825 Lab ID: 30764913006 Collected: 03/18/25 11:25 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 22700   | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-36-0 |        |
| Arsenic                                                                                                                                | ND      | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.87         | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-43-9 |        |
| Calcium                                                                                                                                | 3090    | mg/kg | 87.0         | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-70-2 |        |
| Chromium                                                                                                                               | 27.4    | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 9.1     | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-48-4 |        |
| Copper                                                                                                                                 | 39.7    | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-50-8 |        |
| Iron                                                                                                                                   | 26500   | mg/kg | 348          | 10 | 03/21/25 08:03 | 03/24/25 10:24 | 7439-89-6 |        |
| Lead                                                                                                                                   | 94.6    | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7439-92-1 |        |
| Lithium                                                                                                                                | 16.9    | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 4790    | mg/kg | 43.5         | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7439-95-4 |        |
| Manganese                                                                                                                              | 396     | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 18.0    | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-02-0 |        |
| Potassium                                                                                                                              | 3350    | mg/kg | 43.5         | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 4.3          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-22-4 |        |
| Sodium                                                                                                                                 | 134     | mg/kg | 87.0         | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-28-0 |        |
| Titanium                                                                                                                               | 656     | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 43.2    | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 125     | mg/kg | 8.7          | 1  | 03/21/25 08:03 | 03/24/25 09:12 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.17    | mg/kg | 0.036        | 1  | 03/21/25 12:06 | 03/24/25 06:24 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | 122     | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | 229     | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 1070    | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 1030    | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 2280    | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | 271     | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 2090    | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 1110    | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 2450    | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 240          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | 272     | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-F-031825 Lab ID: 30764913006 Collected: 03/18/25 11:25 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | 1150    | ug/kg | 240          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 85-01-8   | ED   |
| Pyrene                                                           | 2090    | ug/kg | 120          | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 88      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 101     | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/26/25 22:05 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 44.7    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.5          | 1  | 03/21/25 10:11 | 03/21/25 17:18 | 57-12-5   |      |

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Abington Site  
Pace Project No.: 30764913

Sample: SPS-TRI-031825 Lab ID: 30764913007 Collected: 03/18/25 11:28 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual     |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|----------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |          |
| Aluminum                                                                                                                               | 24500   | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7429-90-5 |          |
| Antimony                                                                                                                               | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-36-0 |          |
| Arsenic                                                                                                                                | 6.9     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-38-2 |          |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.69         | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-41-7 |          |
| Boron                                                                                                                                  | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-42-8 |          |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.4          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-43-9 |          |
| Calcium                                                                                                                                | 2770    | mg/kg | 68.6         | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-70-2 |          |
| Chromium                                                                                                                               | 28.2    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-47-3 |          |
| Cobalt                                                                                                                                 | 9.9     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-48-4 |          |
| Copper                                                                                                                                 | 43.2    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-50-8 |          |
| Iron                                                                                                                                   | 29800   | mg/kg | 274          | 10 | 03/21/25 08:03 | 03/24/25 10:27 | 7439-89-6 |          |
| Lead                                                                                                                                   | 107     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7439-92-1 |          |
| Lithium                                                                                                                                | 19.0    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7439-93-2 |          |
| Magnesium                                                                                                                              | 5090    | mg/kg | 34.3         | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7439-95-4 |          |
| Manganese                                                                                                                              | 420     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7439-96-5 |          |
| Nickel                                                                                                                                 | 19.8    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-02-0 |          |
| Potassium                                                                                                                              | 3520    | mg/kg | 34.3         | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-09-7 |          |
| Selenium                                                                                                                               | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7782-49-2 |          |
| Silver                                                                                                                                 | ND      | mg/kg | 3.4          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-22-4 |          |
| Sodium                                                                                                                                 | 134     | mg/kg | 68.6         | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-23-5 |          |
| Thallium                                                                                                                               | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-28-0 |          |
| Titanium                                                                                                                               | 657     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-32-6 |          |
| Vanadium                                                                                                                               | 47.5    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-62-2 |          |
| Zinc                                                                                                                                   | 142     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:15 | 7440-66-6 |          |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |          |
| Mercury                                                                                                                                | 0.16    | mg/kg | 0.027        | 1  | 03/21/25 12:06 | 03/24/25 06:27 | 7439-97-6 |          |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |          |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 83-32-9   | ED       |
| Acenaphthylene                                                                                                                         | 313     | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 208-96-8  | ED       |
| Anthracene                                                                                                                             | 192     | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 120-12-7  | ED       |
| Benzo(a)anthracene                                                                                                                     | 1360    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 56-55-3   | ED       |
| Benzo(a)pyrene                                                                                                                         | 1630    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 50-32-8   | ED,IS    |
| Benzo(b)fluoranthene                                                                                                                   | 3580    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 205-99-2  | ED,IS,Ip |
| Benzo(g,h,i)perylene                                                                                                                   | 452     | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 191-24-2  | ED,IS    |
| Benzo(k)fluoranthene                                                                                                                   | 3280    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 207-08-9  | ED,IS,Ip |
| Chrysene                                                                                                                               | 1510    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 218-01-9  | ED       |
| Dibenz(a,h)anthracene                                                                                                                  | 141     | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 53-70-3   | ED,IS    |
| Fluoranthene                                                                                                                           | 2780    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 206-44-0  | ED       |
| Fluorene                                                                                                                               | ND      | ug/kg | 182          | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 86-73-7   | ED       |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | 444     | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 193-39-5  | ED,IS    |
| Naphthalene                                                                                                                            | ND      | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 91-20-3   | ED       |

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-TRI-031825 Lab ID: 30764913007 Collected: 03/18/25 11:28 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | 944     | ug/kg | 182          | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 85-01-8   | ED   |
| Pyrene                                                           | 2480    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 77      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 90      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/26/25 22:25 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 27.8    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.4          | 1  | 03/21/25 10:11 | 03/21/25 17:20 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-TRI2-031825 Lab ID: 30764913008 Collected: 03/18/25 11:30 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 25200   | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-36-0 |        |
| Arsenic                                                                                                                                | 7.2     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.69         | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.4          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-43-9 |        |
| Calcium                                                                                                                                | 3090    | mg/kg | 68.7         | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-70-2 |        |
| Chromium                                                                                                                               | 27.9    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 10.3    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-48-4 |        |
| Copper                                                                                                                                 | 46.2    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-50-8 |        |
| Iron                                                                                                                                   | 30000   | mg/kg | 275          | 10 | 03/21/25 08:03 | 03/24/25 10:29 | 7439-89-6 |        |
| Lead                                                                                                                                   | 105     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7439-92-1 |        |
| Lithium                                                                                                                                | 21.2    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 5610    | mg/kg | 34.3         | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7439-95-4 |        |
| Manganese                                                                                                                              | 414     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 20.3    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-02-0 |        |
| Potassium                                                                                                                              | 3650    | mg/kg | 34.3         | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.4          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-22-4 |        |
| Sodium                                                                                                                                 | 150     | mg/kg | 68.7         | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-28-0 |        |
| Titanium                                                                                                                               | 672     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 49.5    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 146     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:17 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.15    | mg/kg | 0.027        | 1  | 03/21/25 12:06 | 03/24/25 06:29 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | 266     | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | 251     | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 1520    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 1640    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 3510    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | 500     | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 3220    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 1560    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | 154     | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 3190    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 182          | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | 487     | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-TRI2-031825 Lab ID: 30764913008 Collected: 03/18/25 11:30 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | 1330    | ug/kg | 182          | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 85-01-8   | ED   |
| Pyrene                                                           | 2730    | ug/kg | 91.4         | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 67      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 76      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/26/25 22:44 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 27.2    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.3          | 1  | 03/21/25 10:11 | 03/21/25 17:21 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-G-031825 Lab ID: 30764913009 Collected: 03/18/25 12:35 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 14800   | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-36-0 |        |
| Arsenic                                                                                                                                | ND      | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.70         | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.4          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-43-9 |        |
| Calcium                                                                                                                                | 2200    | mg/kg | 70.2         | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-70-2 |        |
| Chromium                                                                                                                               | 21.4    | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 7.8     | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-48-4 |        |
| Copper                                                                                                                                 | 25.2    | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-50-8 |        |
| Iron                                                                                                                                   | 17900   | mg/kg | 281          | 10 | 03/21/25 08:03 | 03/24/25 10:41 | 7439-89-6 |        |
| Lead                                                                                                                                   | 158     | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7439-92-1 |        |
| Lithium                                                                                                                                | 11.3    | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 2060    | mg/kg | 35.1         | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7439-95-4 |        |
| Manganese                                                                                                                              | 383     | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 14.1    | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-02-0 |        |
| Potassium                                                                                                                              | 1390    | mg/kg | 35.1         | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.5          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-22-4 |        |
| Sodium                                                                                                                                 | ND      | mg/kg | 70.2         | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-28-0 |        |
| Titanium                                                                                                                               | 388     | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 33.4    | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 121     | mg/kg | 7.0          | 1  | 03/21/25 08:03 | 03/24/25 09:19 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.31    | mg/kg | 0.027        | 1  | 03/21/25 12:06 | 03/24/25 06:31 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | ND      | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 212     | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 229     | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 465     | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | 172     | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 426     | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 221     | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 462     | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 183          | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | 135     | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-G-031825 Lab ID: 30764913009 Collected: 03/18/25 12:35 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | ND      | ug/kg | 183          | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 85-01-8   | ED   |
| Pyrene                                                           | 393     | ug/kg | 92.0         | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 77      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 87      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/27/25 14:01 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 28.8    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.3          | 1  | 03/21/25 10:11 | 03/21/25 17:22 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-H-031825 Lab ID: 30764913010 Collected: 03/18/25 12:45 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 21900   | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-36-0 |        |
| Arsenic                                                                                                                                | 9.9     | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.64         | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.3          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-43-9 |        |
| Calcium                                                                                                                                | 1930    | mg/kg | 64.1         | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-70-2 |        |
| Chromium                                                                                                                               | 30.0    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 11.5    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-48-4 |        |
| Copper                                                                                                                                 | 35.4    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-50-8 |        |
| Iron                                                                                                                                   | 27000   | mg/kg | 257          | 10 | 03/21/25 08:03 | 03/24/25 10:44 | 7439-89-6 |        |
| Lead                                                                                                                                   | 205     | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7439-92-1 |        |
| Lithium                                                                                                                                | 17.9    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 2810    | mg/kg | 32.1         | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7439-95-4 |        |
| Manganese                                                                                                                              | 518     | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 20.5    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-02-0 |        |
| Potassium                                                                                                                              | 2040    | mg/kg | 32.1         | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.2          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-22-4 |        |
| Sodium                                                                                                                                 | 80.9    | mg/kg | 64.1         | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-28-0 |        |
| Titanium                                                                                                                               | 487     | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 50.1    | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 151     | mg/kg | 6.4          | 1  | 03/21/25 08:03 | 03/24/25 09:22 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.32    | mg/kg | 0.026        | 1  | 03/21/25 12:06 | 03/24/25 06:34 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | ND      | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 184     | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 193     | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 398     | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | 139     | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 365     | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 197     | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 432     | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 177          | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | 112     | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-H-031825 Lab ID: 30764913010 Collected: 03/18/25 12:45 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | ND      | ug/kg | 177          | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 85-01-8   | ED   |
| Pyrene                                                           | 360     | ug/kg | 89.1         | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 71      | %     | 46-99        | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 81      | %     | 48-118       | 10 | 03/24/25 08:40 | 03/27/25 14:21 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 25.0    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.1          | 1  | 03/21/25 10:11 | 03/21/25 17:24 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-I-031825 Lab ID: 30764913011 Collected: 03/18/25 13:25 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 17600   | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-36-0 |        |
| Arsenic                                                                                                                                | 8.9     | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.66         | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.3          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-43-9 |        |
| Calcium                                                                                                                                | 1600    | mg/kg | 66.2         | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-70-2 |        |
| Chromium                                                                                                                               | 22.9    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-48-4 |        |
| Copper                                                                                                                                 | 35.2    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-50-8 |        |
| Iron                                                                                                                                   | 20100   | mg/kg | 265          | 10 | 03/21/25 08:03 | 03/24/25 10:46 | 7439-89-6 |        |
| Lead                                                                                                                                   | 63.3    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7439-92-1 |        |
| Lithium                                                                                                                                | 14.4    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 2460    | mg/kg | 33.1         | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7439-95-4 |        |
| Manganese                                                                                                                              | 426     | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 13.3    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-02-0 |        |
| Potassium                                                                                                                              | 1880    | mg/kg | 33.1         | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.3          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-22-4 |        |
| Sodium                                                                                                                                 | ND      | mg/kg | 66.2         | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-28-0 |        |
| Titanium                                                                                                                               | 426     | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 32.7    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 68.5    | mg/kg | 6.6          | 1  | 03/21/25 08:03 | 03/24/25 09:24 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.078   | mg/kg | 0.026        | 1  | 03/21/25 12:06 | 03/24/25 06:41 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | ND      | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 141     | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 136     | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 287     | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | 102     | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 263     | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 152     | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 304     | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 172          | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | ND      | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-I-031825 Lab ID: 30764913011 Collected: 03/18/25 13:25 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | ND      | ug/kg | 172          | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 85-01-8   | ED   |
| Pyrene                                                           | 259     | ug/kg | 86.3         | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 78      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 92      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/27/25 14:40 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 23.7    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.3          | 1  | 03/21/25 10:11 | 03/21/25 17:25 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-J-031825 Lab ID: 30764913012 Collected: 03/18/25 13:35 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 20900   | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-36-0 |        |
| Arsenic                                                                                                                                | 10.7    | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.63         | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-43-9 |        |
| Calcium                                                                                                                                | 1470    | mg/kg | 62.6         | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-70-2 |        |
| Chromium                                                                                                                               | 25.8    | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 7.3     | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-48-4 |        |
| Copper                                                                                                                                 | 37.7    | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-50-8 |        |
| Iron                                                                                                                                   | 25800   | mg/kg | 251          | 10 | 03/21/25 08:03 | 03/24/25 10:49 | 7439-89-6 |        |
| Lead                                                                                                                                   | 68.7    | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7439-92-1 |        |
| Lithium                                                                                                                                | 15.9    | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 2760    | mg/kg | 31.3         | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7439-95-4 |        |
| Manganese                                                                                                                              | 639     | mg/kg | 62.6         | 10 | 03/21/25 08:03 | 03/24/25 10:49 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 15.1    | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-02-0 |        |
| Potassium                                                                                                                              | 1940    | mg/kg | 31.3         | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.1          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-22-4 |        |
| Sodium                                                                                                                                 | ND      | mg/kg | 62.6         | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-28-0 |        |
| Titanium                                                                                                                               | 449     | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 39.3    | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 78.7    | mg/kg | 6.3          | 1  | 03/21/25 08:03 | 03/24/25 09:26 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.088   | mg/kg | 0.024        | 1  | 03/21/25 12:06 | 03/24/25 06:43 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | ND      | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 117     | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 115     | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 227     | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | 83.1    | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 208     | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 122     | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 243     | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 163          | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | ND      | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-J-031825 Lab ID: 30764913012 Collected: 03/18/25 13:35 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | ND      | ug/kg | 163          | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 85-01-8   | ED   |
| Pyrene                                                           | 210     | ug/kg | 81.8         | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 90      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 101     | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/27/25 15:00 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 19.4    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.2          | 1  | 03/21/25 10:11 | 03/21/25 17:26 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site  
Pace Project No.: 30764913

Sample: SPS-K-031825 Lab ID: 30764913013 Collected: 03/18/25 14:00 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 20000   | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-36-0 |        |
| Arsenic                                                                                                                                | 9.6     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.69         | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.4          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-43-9 |        |
| Calcium                                                                                                                                | 3490    | mg/kg | 69.2         | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-70-2 |        |
| Chromium                                                                                                                               | 30.1    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 8.5     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-48-4 |        |
| Copper                                                                                                                                 | 34.7    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-50-8 |        |
| Iron                                                                                                                                   | 24700   | mg/kg | 277          | 10 | 03/21/25 08:03 | 03/24/25 10:51 | 7439-89-6 |        |
| Lead                                                                                                                                   | 112     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7439-92-1 |        |
| Lithium                                                                                                                                | 17.9    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 3620    | mg/kg | 34.6         | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7439-95-4 |        |
| Manganese                                                                                                                              | 465     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 19.2    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-02-0 |        |
| Potassium                                                                                                                              | 2850    | mg/kg | 34.6         | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.5          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-22-4 |        |
| Sodium                                                                                                                                 | 95.6    | mg/kg | 69.2         | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-28-0 |        |
| Titanium                                                                                                                               | 541     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 37.2    | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 134     | mg/kg | 6.9          | 1  | 03/21/25 08:03 | 03/24/25 09:29 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.12    | mg/kg | 0.027        | 1  | 03/21/25 12:06 | 03/24/25 06:46 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | ND      | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 172     | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 190     | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 388     | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | 140     | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 355     | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 199     | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 387     | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 183          | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | 115     | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-K-031825 Lab ID: 30764913013 Collected: 03/18/25 14:00 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | ND      | ug/kg | 183          | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 85-01-8   | ED   |
| Pyrene                                                           | 322     | ug/kg | 91.9         | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 56      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 80      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/27/25 15:19 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 27.7    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.2          | 1  | 03/21/25 10:11 | 03/21/25 17:27 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-L-031825 Lab ID: 30764913014 Collected: 03/18/25 14:05 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 18200   | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-36-0 |        |
| Arsenic                                                                                                                                | 9.2     | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-38-2 |        |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.60         | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.2          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-43-9 |        |
| Calcium                                                                                                                                | 3740    | mg/kg | 60.3         | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-70-2 |        |
| Chromium                                                                                                                               | 28.1    | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 8.3     | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-48-4 |        |
| Copper                                                                                                                                 | 32.2    | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-50-8 |        |
| Iron                                                                                                                                   | 21400   | mg/kg | 241          | 10 | 03/21/25 08:03 | 03/24/25 10:53 | 7439-89-6 |        |
| Lead                                                                                                                                   | 106     | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7439-92-1 |        |
| Lithium                                                                                                                                | 17.1    | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 3790    | mg/kg | 30.1         | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7439-95-4 |        |
| Manganese                                                                                                                              | 469     | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 17.2    | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-02-0 |        |
| Potassium                                                                                                                              | 2530    | mg/kg | 30.1         | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-22-4 |        |
| Sodium                                                                                                                                 | 87.7    | mg/kg | 60.3         | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-28-0 |        |
| Titanium                                                                                                                               | 489     | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 33.4    | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 121     | mg/kg | 6.0          | 1  | 03/21/25 08:03 | 03/24/25 09:31 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.13    | mg/kg | 0.024        | 1  | 03/21/25 12:06 | 03/24/25 06:48 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | ND      | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 202     | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 216     | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 422     | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | 151     | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 386     | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 218     | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 449     | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 161          | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | 119     | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 91-20-3   | ED     |

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-L-031825 Lab ID: 30764913014 Collected: 03/18/25 14:05 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | 162     | ug/kg | 161          | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 85-01-8   | ED   |
| Pyrene                                                           | 374     | ug/kg | 80.7         | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 58      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 78      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/27/25 15:39 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 19.5    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.0          | 1  | 03/21/25 10:11 | 03/21/25 17:29 | 57-12-5   |      |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-M-031825 Lab ID: 30764913015 Collected: 03/18/25 14:45 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual     |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|----------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |          |
| Aluminum                                                                                                                               | 17100   | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7429-90-5 |          |
| Antimony                                                                                                                               | ND      | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-36-0 |          |
| Arsenic                                                                                                                                | ND      | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-38-2 |          |
| Beryllium                                                                                                                              | ND      | mg/kg | 0.83         | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-41-7 |          |
| Boron                                                                                                                                  | ND      | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-42-8 |          |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.7          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-43-9 |          |
| Calcium                                                                                                                                | 9160    | mg/kg | 82.9         | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-70-2 |          |
| Chromium                                                                                                                               | 27.6    | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-47-3 |          |
| Cobalt                                                                                                                                 | 9.5     | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-48-4 |          |
| Copper                                                                                                                                 | 57.2    | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-50-8 |          |
| Iron                                                                                                                                   | 21000   | mg/kg | 332          | 10 | 03/21/25 08:03 | 03/24/25 10:56 | 7439-89-6 |          |
| Lead                                                                                                                                   | 524     | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7439-92-1 |          |
| Lithium                                                                                                                                | 26.0    | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7439-93-2 |          |
| Magnesium                                                                                                                              | 2730    | mg/kg | 41.5         | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7439-95-4 |          |
| Manganese                                                                                                                              | 333     | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7439-96-5 |          |
| Nickel                                                                                                                                 | 22.9    | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-02-0 |          |
| Potassium                                                                                                                              | 2480    | mg/kg | 41.5         | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-09-7 |          |
| Selenium                                                                                                                               | ND      | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7782-49-2 |          |
| Silver                                                                                                                                 | ND      | mg/kg | 4.1          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-22-4 |          |
| Sodium                                                                                                                                 | 116     | mg/kg | 82.9         | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-23-5 |          |
| Thallium                                                                                                                               | ND      | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-28-0 |          |
| Titanium                                                                                                                               | 509     | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-32-6 |          |
| Vanadium                                                                                                                               | 36.7    | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-62-2 |          |
| Zinc                                                                                                                                   | 304     | mg/kg | 8.3          | 1  | 03/21/25 08:03 | 03/24/25 09:33 | 7440-66-6 |          |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |          |
| Mercury                                                                                                                                | 0.70    | mg/kg | 0.034        | 1  | 03/21/25 12:06 | 03/24/25 06:50 | 7439-97-6 |          |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |          |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 83-32-9   |          |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 83-32-9   | ED,H2    |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 208-96-8  |          |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 208-96-8  | ED,H2    |
| Anthracene                                                                                                                             | ND      | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 120-12-7  |          |
| Anthracene                                                                                                                             | ND      | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 120-12-7  | ED,H2    |
| Benzo(a)anthracene                                                                                                                     | 24.6    | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 56-55-3   |          |
| Benzo(a)anthracene                                                                                                                     | 136     | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 56-55-3   | ED,H2    |
| Benzo(a)pyrene                                                                                                                         | 25.2    | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 50-32-8   |          |
| Benzo(a)pyrene                                                                                                                         | 135     | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 50-32-8   | ED,H2    |
| Benzo(b)fluoranthene                                                                                                                   | 47.8    | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 205-99-2  | lp       |
| Benzo(b)fluoranthene                                                                                                                   | 282     | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 205-99-2  | ED,H2,lp |
| Benzo(g,h,i)perylene                                                                                                                   | 16.3    | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 191-24-2  |          |
| Benzo(g,h,i)perylene                                                                                                                   | ND      | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 191-24-2  | ED,H2    |

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## ANALYTICAL RESULTS

Project: Abington Site  
Pace Project No.: 30764913

Sample: SPS-M-031825 Lab ID: 30764913015 Collected: 03/18/25 14:45 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual       |
|-----------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------------|
| <b>8270D MSSV PAH by SIM</b>                                                                              |         |       |              |    |                |                |           |            |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |            |
| Benzo(k)fluoranthene                                                                                      | 43.8    | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 207-08-9  | lp         |
| Benzo(k)fluoranthene                                                                                      | 258     | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 207-08-9  | ED, H2, lp |
| Chrysene                                                                                                  | 25.6    | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 218-01-9  |            |
| Chrysene                                                                                                  | 175     | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 218-01-9  | ED, H2     |
| Dibenz(a,h)anthracene                                                                                     | ND      | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 53-70-3   |            |
| Dibenz(a,h)anthracene                                                                                     | ND      | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 53-70-3   | ED, H2     |
| Fluoranthene                                                                                              | 52.4    | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 206-44-0  |            |
| Fluoranthene                                                                                              | 367     | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 206-44-0  | ED, H2     |
| Fluorene                                                                                                  | ND      | ug/kg | 22.4         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 86-73-7   |            |
| Fluorene                                                                                                  | ND      | ug/kg | 225          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 86-73-7   | ED, H2     |
| Indeno(1,2,3-cd)pyrene                                                                                    | 13.4    | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 193-39-5  |            |
| Indeno(1,2,3-cd)pyrene                                                                                    | ND      | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 193-39-5  | ED, H2     |
| Naphthalene                                                                                               | ND      | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 91-20-3   |            |
| Naphthalene                                                                                               | ND      | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 91-20-3   | ED, H2     |
| Phenanthrene                                                                                              | ND      | ug/kg | 22.4         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 85-01-8   |            |
| Phenanthrene                                                                                              | ND      | ug/kg | 225          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 85-01-8   | ED, H2     |
| Pyrene                                                                                                    | 45.1    | ug/kg | 11.3         | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 129-00-0  |            |
| Pyrene                                                                                                    | 304     | ug/kg | 113          | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 129-00-0  | ED, H2     |
| <b>Surrogates</b>                                                                                         |         |       |              |    |                |                |           |            |
| 2-Fluorobiphenyl (S)                                                                                      | 0       | %     | 46-99        | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 321-60-8  | SR         |
| 2-Fluorobiphenyl (S)                                                                                      | 62      | %     | 46-99        | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 321-60-8  |            |
| Terphenyl-d14 (S)                                                                                         | 59      | %     | 48-118       | 10 | 04/03/25 12:16 | 04/04/25 15:56 | 1718-51-0 |            |
| Terphenyl-d14 (S)                                                                                         | 0       | %     | 48-118       | 1  | 03/24/25 08:40 | 03/27/25 15:58 | 1718-51-0 | SR         |

### Percent Moisture

Analytical Method: SM 2540G-2015  
Pace Analytical Services - Greensburg

|                  |      |   |      |   |  |                |  |
|------------------|------|---|------|---|--|----------------|--|
| Percent Moisture | 41.5 | % | 0.10 | 1 |  | 03/25/25 19:47 |  |
|------------------|------|---|------|---|--|----------------|--|

### 9012B Cyanide, Total

Analytical Method: EPA 9012B Preparation Method: EPA 9012B  
Pace Analytical Services - Greensburg

|         |    |       |     |   |                |                |         |        |
|---------|----|-------|-----|---|----------------|----------------|---------|--------|
| Cyanide | ND | mg/kg | 1.5 | 1 | 03/21/25 10:11 | 03/21/25 17:30 | 57-12-5 | ML, R1 |
|---------|----|-------|-----|---|----------------|----------------|---------|--------|

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-N-031825 Lab ID: 30764913016 Collected: 03/18/25 14:50 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                                                                                             | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual   |
|----------------------------------------------------------------------------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|--------|
| <b>BVR 6010D MET ICP,Solid,3050B</b> Analytical Method: EPA 6010D Preparation Method: EPA 3050B<br>Pace Analytical Services - Beaver   |         |       |              |    |                |                |           |        |
| Aluminum                                                                                                                               | 22100   | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7429-90-5 |        |
| Antimony                                                                                                                               | ND      | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-36-0 |        |
| Arsenic                                                                                                                                | 8.5     | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-38-2 |        |
| Beryllium                                                                                                                              | 0.80    | mg/kg | 0.71         | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-41-7 |        |
| Boron                                                                                                                                  | ND      | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-42-8 |        |
| Cadmium                                                                                                                                | ND      | mg/kg | 1.4          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-43-9 |        |
| Calcium                                                                                                                                | 9640    | mg/kg | 71.4         | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-70-2 |        |
| Chromium                                                                                                                               | 47.3    | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-47-3 |        |
| Cobalt                                                                                                                                 | 10      | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-48-4 |        |
| Copper                                                                                                                                 | 98.3    | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-50-8 |        |
| Iron                                                                                                                                   | 30000   | mg/kg | 286          | 10 | 03/24/25 08:10 | 03/25/25 13:03 | 7439-89-6 |        |
| Lead                                                                                                                                   | 704     | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7439-92-1 |        |
| Lithium                                                                                                                                | 32.6    | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7439-93-2 |        |
| Magnesium                                                                                                                              | 3280    | mg/kg | 35.7         | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7439-95-4 |        |
| Manganese                                                                                                                              | 327     | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7439-96-5 |        |
| Nickel                                                                                                                                 | 23.5    | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-02-0 |        |
| Potassium                                                                                                                              | 2880    | mg/kg | 35.7         | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-09-7 |        |
| Selenium                                                                                                                               | ND      | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7782-49-2 |        |
| Silver                                                                                                                                 | ND      | mg/kg | 3.6          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-22-4 |        |
| Sodium                                                                                                                                 | 140     | mg/kg | 71.4         | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-23-5 |        |
| Thallium                                                                                                                               | ND      | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-28-0 |        |
| Titanium                                                                                                                               | 530     | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-32-6 |        |
| Vanadium                                                                                                                               | 46.7    | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-62-2 |        |
| Zinc                                                                                                                                   | 387     | mg/kg | 7.1          | 1  | 03/24/25 08:10 | 03/25/25 11:02 | 7440-66-6 |        |
| <b>BVR 7471B Mercury</b> Analytical Method: EPA 7471B Preparation Method: EPA 7471B<br>Pace Analytical Services - Beaver               |         |       |              |    |                |                |           |        |
| Mercury                                                                                                                                | 0.60    | mg/kg | 0.029        | 1  | 03/21/25 12:06 | 03/24/25 06:53 | 7439-97-6 |        |
| <b>8270D MSSV PAH by SIM</b> Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546<br>Pace Analytical Services - Greensburg |         |       |              |    |                |                |           |        |
| Acenaphthene                                                                                                                           | ND      | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 83-32-9   | ED     |
| Acenaphthylene                                                                                                                         | ND      | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 208-96-8  | ED     |
| Anthracene                                                                                                                             | ND      | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 120-12-7  | ED     |
| Benzo(a)anthracene                                                                                                                     | 122     | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 56-55-3   | ED     |
| Benzo(a)pyrene                                                                                                                         | 127     | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 50-32-8   | ED     |
| Benzo(b)fluoranthene                                                                                                                   | 268     | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 205-99-2  | ED, lp |
| Benzo(g,h,i)perylene                                                                                                                   | ND      | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 191-24-2  | ED     |
| Benzo(k)fluoranthene                                                                                                                   | 246     | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 207-08-9  | ED, lp |
| Chrysene                                                                                                                               | 138     | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 218-01-9  | ED     |
| Dibenz(a,h)anthracene                                                                                                                  | ND      | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 53-70-3   | ED     |
| Fluoranthene                                                                                                                           | 277     | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 206-44-0  | ED     |
| Fluorene                                                                                                                               | ND      | ug/kg | 196          | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 86-73-7   | ED     |
| Indeno(1,2,3-cd)pyrene                                                                                                                 | ND      | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 193-39-5  | ED     |
| Naphthalene                                                                                                                            | ND      | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 91-20-3   | ED     |

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## ANALYTICAL RESULTS

Project: Abington Site

Pace Project No.: 30764913

Sample: SPS-N-031825 Lab ID: 30764913016 Collected: 03/18/25 14:50 Received: 03/19/25 21:00 Matrix: Solid

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

| Parameters                                                       | Results | Units | Report Limit | DF | Prepared       | Analyzed       | CAS No.   | Qual |
|------------------------------------------------------------------|---------|-------|--------------|----|----------------|----------------|-----------|------|
| <b>8270D MSSV PAH by SIM</b>                                     |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 8270D by SIM Preparation Method: EPA 3546 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Phenanthrene                                                     | ND      | ug/kg | 196          | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 85-01-8   | ED   |
| Pyrene                                                           | 241     | ug/kg | 98.2         | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 129-00-0  | ED   |
| <b>Surrogates</b>                                                |         |       |              |    |                |                |           |      |
| 2-Fluorobiphenyl (S)                                             | 61      | %.    | 46-99        | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 321-60-8  |      |
| Terphenyl-d14 (S)                                                | 67      | %.    | 48-118       | 10 | 03/24/25 08:40 | 03/27/25 16:18 | 1718-51-0 |      |
| <b>Percent Moisture</b>                                          |         |       |              |    |                |                |           |      |
| Analytical Method: SM 2540G-2015                                 |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Percent Moisture                                                 | 32.7    | %     | 0.10         | 1  |                | 03/25/25 19:47 |           |      |
| <b>9012B Cyanide, Total</b>                                      |         |       |              |    |                |                |           |      |
| Analytical Method: EPA 9012B Preparation Method: EPA 9012B       |         |       |              |    |                |                |           |      |
| Pace Analytical Services - Greensburg                            |         |       |              |    |                |                |           |      |
| Cyanide                                                          | ND      | mg/kg | 1.3          | 1  | 03/21/25 10:11 | 03/21/25 17:40 | 57-12-5   | ML   |

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## QUALITY CONTROL DATA

Project: Abington Site  
Pace Project No.: 30764913

|                  |           |                       |                                   |
|------------------|-----------|-----------------------|-----------------------------------|
| QC Batch:        | 734415    | 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: 30764913001, 30764913003, 30764913004, 30764913005, 30764913006, 30764913007, 30764913008, 30764913009, 30764913010, 30764913011, 30764913012, 30764913013, 30764913014, 30764913015

METHOD BLANK: 3575067 Matrix: Solid  
Associated Lab Samples: 30764913001, 30764913003, 30764913004, 30764913005, 30764913006, 30764913007, 30764913008, 30764913009, 30764913010, 30764913011, 30764913012, 30764913013, 30764913014, 30764913015

| Parameter | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Aluminum  | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Antimony  | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Arsenic   | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Beryllium | mg/kg | ND           | 0.50            | 03/24/25 08:24 |            |
| Boron     | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Cadmium   | mg/kg | ND           | 1.0             | 03/24/25 08:24 |            |
| Calcium   | mg/kg | ND           | 50.0            | 03/24/25 08:24 |            |
| Chromium  | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Cobalt    | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Copper    | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Iron      | mg/kg | ND           | 20.0            | 03/24/25 08:24 |            |
| Lead      | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Lithium   | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Magnesium | mg/kg | ND           | 25.0            | 03/24/25 08:24 |            |
| Manganese | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Nickel    | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Potassium | mg/kg | ND           | 25.0            | 03/24/25 08:24 |            |
| Selenium  | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Silver    | mg/kg | ND           | 2.5             | 03/24/25 08:24 |            |
| Sodium    | mg/kg | ND           | 50.0            | 03/24/25 08:24 |            |
| Thallium  | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Titanium  | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Vanadium  | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |
| Zinc      | mg/kg | ND           | 5.0             | 03/24/25 08:24 |            |

LABORATORY CONTROL SAMPLE: 3575068

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Aluminum  | mg/kg | 101         | 88.9       | 88        | 80-120       |            |
| Antimony  | mg/kg | 101         | 91.7       | 91        | 80-120       |            |
| Arsenic   | mg/kg | 101         | 89.2       | 88        | 80-120       |            |
| Beryllium | mg/kg | 25.3        | 23.3       | 92        | 80-120       |            |
| Boron     | mg/kg | 101         | 92.6       | 92        | 80-120       |            |
| Cadmium   | mg/kg | 50.5        | 44.4       | 88        | 80-120       |            |
| Calcium   | mg/kg | 2020        | 1820       | 90        | 80-120       |            |
| Chromium  | mg/kg | 101         | 93.3       | 92        | 80-120       |            |
| Cobalt    | mg/kg | 101         | 92.8       | 92        | 80-120       |            |

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## QUALITY CONTROL DATA

Project: Abington Site

Pace Project No.: 30764913

LABORATORY CONTROL SAMPLE: 3575068

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Copper    | mg/kg | 101         | 93.4       | 92        | 80-120       |            |
| Iron      | mg/kg | 101         | 106        | 105       | 80-120       |            |
| Lead      | mg/kg | 101         | 93.1       | 92        | 80-120       |            |
| Lithium   | mg/kg | 101         | 96.1       | 95        | 80-120       |            |
| Magnesium | mg/kg | 1010        | 905        | 90        | 80-120       |            |
| Manganese | mg/kg | 101         | 93.9       | 93        | 80-120       |            |
| Nickel    | mg/kg | 101         | 92.8       | 92        | 80-120       |            |
| Potassium | mg/kg | 1010        | 938        | 93        | 80-120       |            |
| Selenium  | mg/kg | 101         | 90.1       | 89        | 80-120       |            |
| Silver    | mg/kg | 25.3        | 23.4       | 92        | 80-120       |            |
| Sodium    | mg/kg | 1010        | 931        | 92        | 80-120       |            |
| Thallium  | mg/kg | 101         | 90.2       | 89        | 80-120       |            |
| Titanium  | mg/kg | 101         | 91.8       | 91        | 80-120       |            |
| Vanadium  | mg/kg | 101         | 93.6       | 93        | 80-120       |            |
| Zinc      | mg/kg | 101         | 92.1       | 91        | 80-120       |            |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3575069 3575070

| Parameter | Units | 30764437001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual  |
|-----------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|-------|
| Aluminum  | mg/kg | 11200              | 120            | 123             | 21600     | 20400      | 8610     | 7470      | 75-125       | 6   | 20      | M1    |
| Antimony  | mg/kg | ND                 | 120            | 123             | 29.7      | 38.2       | 24       | 30        | 75-125       | 25  | 20      | M1,R1 |
| Arsenic   | mg/kg | 10.9               | 120            | 123             | 88.6      | 98.1       | 65       | 71        | 75-125       | 10  | 20      | M1    |
| Beryllium | mg/kg | ND                 | 30             | 30.6            | 20.5      | 22.5       | 67       | 72        | 75-125       | 9   | 20      | M1    |
| Boron     | mg/kg | ND                 | 120            | 123             | 88.6      | 98.0       | 69       | 76        | 75-125       | 10  | 20      | M1    |
| Cadmium   | mg/kg | ND                 | 60.2           | 61.3            | 38.6      | 42.9       | 64       | 70        | 75-125       | 10  | 20      | M1    |
| Calcium   | mg/kg | 3120               | 2400           | 2450            | 4450      | 4810       | 56       | 69        | 75-125       | 8   | 20      | M1    |
| Chromium  | mg/kg | 31.6               | 120            | 123             | 176       | 125        | 120      | 76        | 75-125       | 34  | 20      | R1    |
| Cobalt    | mg/kg | 13.4               | 120            | 123             | 90.2      | 100        | 64       | 71        | 75-125       | 10  | 20      | M1    |
| Copper    | mg/kg | 34.8               | 120            | 123             | 113       | 150        | 65       | 94        | 75-125       | 27  | 20      | M1,R1 |
| Iron      | mg/kg | 28200              | 120            | 123             | 17000     | 18300      | -9290    | -8080     | 75-125       | 7   | 20      | M1    |
| Lead      | mg/kg | 32.7               | 120            | 123             | 115       | 125        | 68       | 75        | 75-125       | 8   | 20      | M1    |
| Lithium   | mg/kg | 14.2               | 120            | 123             | 114       | 122        | 83       | 88        | 75-125       | 7   | 20      |       |
| Magnesium | mg/kg | 1180               | 1200           | 1230            | 2190      | 2320       | 84       | 92        | 75-125       | 5   | 20      |       |
| Manganese | mg/kg | 271                | 120            | 123             | 326       | 352        | 46       | 66        | 75-125       | 8   | 20      | M1    |
| Nickel    | mg/kg | 30.3               | 120            | 123             | 110       | 116        | 66       | 70        | 75-125       | 5   | 20      | M1    |
| Potassium | mg/kg | 1580               | 1200           | 1230            | 4150      | 4020       | 214      | 199       | 75-125       | 3   | 20      | M1    |
| Selenium  | mg/kg | ND                 | 120            | 123             | 84.6      | 93.2       | 68       | 74        | 75-125       | 10  | 20      | M1    |
| Silver    | mg/kg | ND                 | 30             | 30.6            | 22.0      | 23.9       | 73       | 78        | 75-125       | 8   | 20      | M1    |
| Sodium    | mg/kg | 96.2               | 1200           | 1230            | 1020      | 1140       | 77       | 85        | 75-125       | 11  | 20      |       |
| Thallium  | mg/kg | ND                 | 120            | 123             | 75.7      | 83.5       | 63       | 68        | 75-125       | 10  | 20      | M1    |
| Titanium  | mg/kg | 51.1               | 120            | 123             | 162       | 187        | 92       | 111       | 75-125       | 14  | 20      |       |
| Vanadium  | mg/kg | 25.0               | 120            | 123             | 131       | 120        | 89       | 78        | 75-125       | 9   | 20      |       |
| Zinc      | mg/kg | 104                | 120            | 123             | 166       | 182        | 51       | 63        | 75-125       | 9   | 20      | M1    |

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## QUALITY CONTROL DATA

Project: Abington Site

Pace Project No.: 30764913

QC Batch: 734715

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: 30764913016

METHOD BLANK: 3576579

Matrix: Solid

Associated Lab Samples: 30764913016

| Parameter | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Aluminum  | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Antimony  | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Arsenic   | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Beryllium | mg/kg | ND           | 0.50            | 03/25/25 10:07 |            |
| Boron     | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Cadmium   | mg/kg | ND           | 1.0             | 03/25/25 10:07 |            |
| Calcium   | mg/kg | ND           | 50.0            | 03/25/25 10:07 |            |
| Chromium  | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Cobalt    | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Copper    | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Iron      | mg/kg | ND           | 20.0            | 03/25/25 10:07 |            |
| Lead      | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Lithium   | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Magnesium | mg/kg | ND           | 25.0            | 03/25/25 10:07 |            |
| Manganese | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Nickel    | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Potassium | mg/kg | ND           | 25.0            | 03/25/25 10:07 |            |
| Selenium  | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Silver    | mg/kg | ND           | 2.5             | 03/25/25 10:07 |            |
| Sodium    | mg/kg | ND           | 50.0            | 03/25/25 10:07 |            |
| Thallium  | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Titanium  | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Vanadium  | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |
| Zinc      | mg/kg | ND           | 5.0             | 03/25/25 10:07 |            |

LABORATORY CONTROL SAMPLE: 3576580

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Aluminum  | mg/kg | 100         | 95.4       | 95        | 80-120       |            |
| Antimony  | mg/kg | 100         | 91.3       | 91        | 80-120       |            |
| Arsenic   | mg/kg | 100         | 89.8       | 90        | 80-120       |            |
| Beryllium | mg/kg | 25          | 23.7       | 95        | 80-120       |            |
| Boron     | mg/kg | 100         | 93.5       | 93        | 80-120       |            |
| Cadmium   | mg/kg | 50          | 45.4       | 91        | 80-120       |            |
| Calcium   | mg/kg | 2000        | 1830       | 91        | 80-120       |            |
| Chromium  | mg/kg | 100         | 95.9       | 96        | 80-120       |            |
| Cobalt    | mg/kg | 100         | 94.6       | 95        | 80-120       |            |
| Copper    | mg/kg | 100         | 98.7       | 99        | 80-120       |            |
| Iron      | mg/kg | 100         | 99.9       | 100       | 80-120       |            |

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## QUALITY CONTROL DATA

Project: Abington Site

Pace Project No.: 30764913

LABORATORY CONTROL SAMPLE: 3576580

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Lead      | mg/kg | 100         | 91.7       | 92        | 80-120       |            |
| Lithium   | mg/kg | 100         | 99.3       | 99        | 80-120       |            |
| Magnesium | mg/kg | 1000        | 915        | 91        | 80-120       |            |
| Manganese | mg/kg | 100         | 94.3       | 94        | 80-120       |            |
| Nickel    | mg/kg | 100         | 93.6       | 94        | 80-120       |            |
| Potassium | mg/kg | 1000        | 949        | 95        | 80-120       |            |
| Selenium  | mg/kg | 100         | 87.9       | 88        | 80-120       |            |
| Silver    | mg/kg | 25          | 23.3       | 93        | 80-120       |            |
| Sodium    | mg/kg | 1000        | 956        | 96        | 80-120       |            |
| Thallium  | mg/kg | 100         | 92.0       | 92        | 80-120       |            |
| Titanium  | mg/kg | 100         | 94.0       | 94        | 80-120       |            |
| Vanadium  | mg/kg | 100         | 94.2       | 94        | 80-120       |            |
| Zinc      | mg/kg | 100         | 93.8       | 94        | 80-120       |            |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3576618 3576619

| Parameter | Units | 30764263001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| Aluminum  | mg/kg | 77200              | 100            | 100             | 75400     | 74100      | -1790    | -3050     | 75-125       | 2   | 20      | M1   |
| Antimony  | mg/kg | ND                 | 100            | 100             | 16.8J     | 16.5J      | 17       | 17        | 75-125       |     | 20      | M1   |
| Arsenic   | mg/kg | ND                 | 100            | 100             | 80.9      | 77.6       | 80       | 76        | 75-125       | 4   | 20      |      |
| Beryllium | mg/kg | 1.4J               | 25             | 25              | 21.6      | 20.2       | 81       | 75        | 75-125       | 7   | 20      |      |
| Boron     | mg/kg | 174                | 100            | 100             | 259       | 251        | 84       | 77        | 75-125       | 3   | 20      |      |
| Cadmium   | mg/kg | ND                 | 50             | 50              | 38.8      | 36.5       | 77       | 73        | 75-125       | 6   | 20      | M1   |
| Calcium   | mg/kg | 114000             | 2000           | 2000            | 114000    | 111000     | -30      | -169      | 75-125       | 2   | 20      | M1   |
| Chromium  | mg/kg | 43.4J              | 100            | 100             | 122       | 117        | 79       | 74        | 75-125       | 4   | 20      | M1   |
| Cobalt    | mg/kg | 9.5J               | 100            | 100             | 87.5      | 82.1       | 78       | 73        | 75-125       | 6   | 20      | M1   |
| Copper    | mg/kg | 40.4J              | 100            | 100             | 125       | 119        | 85       | 78        | 75-125       | 5   | 20      |      |
| Iron      | mg/kg | 26600              | 100            | 100             | 26100     | 25800      | -481     | -823      | 75-125       | 1   | 20      | M1   |
| Lead      | mg/kg | 6.1J               | 100            | 100             | 88.0      | 80.4       | 82       | 74        | 75-125       | 9   | 20      | M1   |
| Lithium   | mg/kg | 34.9J              | 100            | 100             | 127       | 121        | 92       | 86        | 75-125       | 5   | 20      |      |
| Magnesium | mg/kg | 22000              | 1000           | 1000            | 22200     | 21900      | 22       | -10       | 75-125       | 1   | 20      | M1   |
| Manganese | mg/kg | 213                | 100            | 100             | 285       | 281        | 73       | 68        | 75-125       | 2   | 20      | M1   |
| Nickel    | mg/kg | 16.8J              | 100            | 100             | 94.4      | 88.6       | 78       | 72        | 75-125       | 6   | 20      | M1   |
| Potassium | mg/kg | 1740               | 1000           | 1000            | 2580      | 2450       | 84       | 71        | 75-125       | 5   | 20      | M1   |
| Selenium  | mg/kg | ND                 | 100            | 100             | 81.4      | 77.0       | 81       | 76        | 75-125       | 6   | 20      |      |
| Silver    | mg/kg | ND                 | 25             | 25              | 22.8J     | 21.8J      | 89       | 85        | 75-125       |     | 20      |      |
| Sodium    | mg/kg | 6420               | 1000           | 1000            | 7180      | 6960       | 76       | 54        | 75-125       | 3   | 20      | M1   |
| Thallium  | mg/kg | ND                 | 100            | 100             | 85.5      | 79.8       | 85       | 80        | 75-125       | 7   | 20      |      |
| Titanium  | mg/kg | 3630               | 100            | 100             | 4050      | 4050       | 419      | 418       | 75-125       | 0   | 20      | M1   |
| Vanadium  | mg/kg | 124                | 100            | 100             | 202       | 196        | 78       | 72        | 75-125       | 3   | 20      | M1   |
| Zinc      | mg/kg | ND                 | 100            | 100             | 88.2      | 83.6       | 84       | 79        | 75-125       | 5   | 20      |      |

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## QUALITY CONTROL DATA

Project: Abington Site  
Pace Project No.: 30764913

|                  |           |                       |                                   |
|------------------|-----------|-----------------------|-----------------------------------|
| QC Batch:        | 734518    | Analysis Method:      | EPA 7471B                         |
| QC Batch Method: | EPA 7471B | Analysis Description: | BVR 7471B Mercury                 |
|                  |           | Laboratory:           | Pace Analytical Services - Beaver |

Associated Lab Samples: 30764913001, 30764913003, 30764913004, 30764913005, 30764913006, 30764913007, 30764913008, 30764913009, 30764913010, 30764913011, 30764913012, 30764913013, 30764913014, 30764913015, 30764913016

|               |         |         |       |
|---------------|---------|---------|-------|
| METHOD BLANK: | 3575415 | Matrix: | Solid |
|---------------|---------|---------|-------|

Associated Lab Samples: 30764913001, 30764913003, 30764913004, 30764913005, 30764913006, 30764913007, 30764913008, 30764913009, 30764913010, 30764913011, 30764913012, 30764913013, 30764913014, 30764913015, 30764913016

| Parameter | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Mercury   | mg/kg | ND           | 0.020           | 03/24/25 05:46 |            |

LABORATORY CONTROL SAMPLE: 3575416

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Mercury   | mg/kg | 0.5         | 0.42       | 84        | 80-120       |            |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3575417 3575418

| Parameter | Units | 30764263001 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                 | 0.5            | 0.5             | 0.40      | 0.40       | 80       | 79        | 80-120       | 2   | 20      | M1   |

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## QUALITY CONTROL DATA

Project: Abington Site  
Pace Project No.: 30764913

QC Batch: 734739 Analysis Method: EPA 8270D by SIM  
QC Batch Method: EPA 3546 Analysis Description: 8270D/3546 MSSV PAH by SIM  
Laboratory: Pace Analytical Services - Greensburg  
Associated Lab Samples: 30764913001, 30764913003, 30764913004, 30764913005, 30764913006, 30764913007, 30764913008, 30764913009, 30764913010, 30764913011, 30764913012, 30764913013, 30764913014, 30764913015, 30764913016

METHOD BLANK: 3576706 Matrix: Solid  
Associated Lab Samples: 30764913001, 30764913003, 30764913004, 30764913005, 30764913006, 30764913007, 30764913008, 30764913009, 30764913010, 30764913011, 30764913012, 30764913013, 30764913014, 30764913015, 30764913016

| Parameter              | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|------------------------|-------|--------------|-----------------|----------------|------------|
| Acenaphthene           | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Acenaphthylene         | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Anthracene             | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Benzo(a)anthracene     | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Benzo(a)pyrene         | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Benzo(b)fluoranthene   | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Benzo(g,h,i)perylene   | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Benzo(k)fluoranthene   | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Chrysene               | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Dibenz(a,h)anthracene  | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Fluoranthene           | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Fluorene               | ug/kg | ND           | 13.3            | 03/26/25 11:41 |            |
| Indeno(1,2,3-cd)pyrene | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Naphthalene            | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| Phenanthrene           | ug/kg | ND           | 13.3            | 03/26/25 11:41 |            |
| Pyrene                 | ug/kg | ND           | 6.7             | 03/26/25 11:41 |            |
| 2-Fluorobiphenyl (S)   | %.    | 58           | 46-99           | 03/26/25 11:41 |            |
| Terphenyl-d14 (S)      | %.    | 90           | 48-118          | 03/26/25 11:41 |            |

LABORATORY CONTROL SAMPLE: 3576707

| Parameter              | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------|------------|-----------|--------------|------------|
| Acenaphthene           | ug/kg | 132         | 80.6       | 61        | 45-109       |            |
| Acenaphthylene         | ug/kg | 132         | 94.2       | 71        | 44-115       |            |
| Anthracene             | ug/kg | 132         | 88.1       | 67        | 55-114       |            |
| Benzo(a)anthracene     | ug/kg | 132         | 92.8       | 70        | 66-123       |            |
| Benzo(a)pyrene         | ug/kg | 132         | 96.6       | 73        | 63-120       |            |
| Benzo(b)fluoranthene   | ug/kg | 132         | 94.5       | 72        | 61-138       |            |
| Benzo(g,h,i)perylene   | ug/kg | 132         | 104        | 79        | 62-135       |            |
| Benzo(k)fluoranthene   | ug/kg | 132         | 100        | 76        | 65-129       |            |
| Chrysene               | ug/kg | 132         | 92.0       | 70        | 65-117       |            |
| Dibenz(a,h)anthracene  | ug/kg | 132         | 106        | 81        | 62-133       |            |
| Fluoranthene           | ug/kg | 132         | 96.8       | 73        | 63-121       |            |
| Fluorene               | ug/kg | 132         | 88.4       | 67        | 51-113       |            |
| Indeno(1,2,3-cd)pyrene | ug/kg | 132         | 105        | 79        | 61-141       |            |

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## QUALITY CONTROL DATA

Project: Abington Site

Pace Project No.: 30764913

LABORATORY CONTROL SAMPLE: 3576707

| Parameter            | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|----------------------|-------|-------------|------------|-----------|--------------|------------|
| Naphthalene          | ug/kg | 132         | 68.8       | 52        | 40-104       |            |
| Phenanthrene         | ug/kg | 132         | 86.2       | 65        | 54-112       |            |
| Pyrene               | ug/kg | 132         | 99.7       | 76        | 63-121       |            |
| 2-Fluorobiphenyl (S) | %     |             |            | 67        | 46-99        |            |
| Terphenyl-d14 (S)    | %     |             |            | 89        | 48-118       |            |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3576708 3576709

| Parameter              | Units | 30764913001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|------------------------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| Acenaphthene           | ug/kg | ND                 | 192            | 193             | 155       | 135        | 80       | 70        | 11-154       | 13  | 20      |      |
| Acenaphthylene         | ug/kg | ND                 | 192            | 193             | 183       | 161        | 95       | 83        | 21-143       | 13  | 20      |      |
| Anthracene             | ug/kg | ND                 | 192            | 193             | 177       | 152        | 85       | 72        | 10-175       | 15  | 20      |      |
| Benzo(a)anthracene     | ug/kg | ND                 | 192            | 193             | 326       | 287        | 137      | 116       | 10-175       | 13  | 20      |      |
| Benzo(a)pyrene         | ug/kg | 125                | 192            | 193             | 341       | 309        | 113      | 96        | 10-175       | 10  | 20      |      |
| Benzo(b)fluoranthene   | ug/kg | 289                | 192            | 193             | 456       | 431        | 87       | 74        | 10-175       | 6   | 20      |      |
| Benzo(g,h,i)perylene   | ug/kg | ND                 | 192            | 193             | 135       | 118        | 70       | 61        | 10-175       | 14  | 20      |      |
| Benzo(k)fluoranthene   | ug/kg | 265                | 192            | 193             | 316       | 298        | 27       | 17        | 10-175       | 6   | 20      |      |
| Chrysene               | ug/kg | 124                | 192            | 193             | 343       | 315        | 114      | 99        | 10-175       | 8   | 20      |      |
| Dibenz(a,h)anthracene  | ug/kg | ND                 | 192            | 193             | 102       | 91.1J      | 53       | 47        | 10-155       |     | 20      |      |
| Fluoranthene           | ug/kg | 276                | 192            | 193             | 546       | 517        | 141      | 125       | 10-175       | 6   | 20      |      |
| Fluorene               | ug/kg | ND                 | 192            | 193             | 168J      | 142J       | 87       | 74        | 11-165       |     | 20      |      |
| Indeno(1,2,3-cd)pyrene | ug/kg | ND                 | 192            | 193             | 148       | 136        | 60       | 54        | 10-175       | 8   | 20      |      |
| Naphthalene            | ug/kg | ND                 | 192            | 193             | 145       | 131        | 75       | 68        | 10-175       | 10  | 20      |      |
| Phenanthrene           | ug/kg | ND                 | 192            | 193             | 289       | 265        | 105      | 93        | 10-175       | 8   | 20      |      |
| Pyrene                 | ug/kg | 235                | 192            | 193             | 493       | 462        | 134      | 118       | 10-175       | 7   | 20      |      |
| 2-Fluorobiphenyl (S)   | %     |                    |                |                 |           |            | 81       | 72        | 46-99        |     |         |      |
| Terphenyl-d14 (S)      | %     |                    |                |                 |           |            | 98       | 84        | 48-118       |     |         |      |

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## QUALITY CONTROL DATA

Project: Abington Site  
Pace Project No.: 30764913

|                  |          |                       |                                       |
|------------------|----------|-----------------------|---------------------------------------|
| QC Batch:        | 737163   | Analysis Method:      | EPA 8270D by SIM                      |
| QC Batch Method: | EPA 3546 | Analysis Description: | 8270D/3546 MSSV PAH by SIM            |
|                  |          | Laboratory:           | Pace Analytical Services - Greensburg |

Associated Lab Samples: 30764913015

METHOD BLANK: 3587963 Matrix: Solid

Associated Lab Samples: 30764913015

| Parameter              | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|------------------------|-------|--------------|-----------------|----------------|------------|
| Acenaphthene           | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Acenaphthylene         | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Anthracene             | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Benzo(a)anthracene     | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Benzo(a)pyrene         | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Benzo(b)fluoranthene   | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Benzo(g,h,i)perylene   | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Benzo(k)fluoranthene   | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Chrysene               | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Dibenz(a,h)anthracene  | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Fluoranthene           | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Fluorene               | ug/kg | ND           | 13.2            | 04/04/25 15:16 |            |
| Indeno(1,2,3-cd)pyrene | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Naphthalene            | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| Phenanthrene           | ug/kg | ND           | 13.2            | 04/04/25 15:16 |            |
| Pyrene                 | ug/kg | ND           | 6.6             | 04/04/25 15:16 |            |
| 2-Fluorobiphenyl (S)   | %     | 74           | 46-99           | 04/04/25 15:16 |            |
| Terphenyl-d14 (S)      | %     | 95           | 48-118          | 04/04/25 15:16 |            |

LABORATORY CONTROL SAMPLE: 3587964

| Parameter              | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------|------------|-----------|--------------|------------|
| Acenaphthene           | ug/kg | 132         | 83.1       | 63        | 45-109       |            |
| Acenaphthylene         | ug/kg | 132         | 92.9       | 71        | 44-115       |            |
| Anthracene             | ug/kg | 132         | 91.5       | 70        | 55-114       |            |
| Benzo(a)anthracene     | ug/kg | 132         | 95.8       | 73        | 66-123       |            |
| Benzo(a)pyrene         | ug/kg | 132         | 98.1       | 75        | 63-120       |            |
| Benzo(b)fluoranthene   | ug/kg | 132         | 97.3       | 74        | 61-138       |            |
| Benzo(g,h,i)perylene   | ug/kg | 132         | 101        | 77        | 62-135       |            |
| Benzo(k)fluoranthene   | ug/kg | 132         | 101        | 76        | 65-129       |            |
| Chrysene               | ug/kg | 132         | 96.7       | 74        | 65-117       |            |
| Dibenz(a,h)anthracene  | ug/kg | 132         | 106        | 80        | 62-133       |            |
| Fluoranthene           | ug/kg | 132         | 98.3       | 75        | 63-121       |            |
| Fluorene               | ug/kg | 132         | 88.2       | 67        | 51-113       |            |
| Indeno(1,2,3-cd)pyrene | ug/kg | 132         | 104        | 79        | 61-141       |            |
| Naphthalene            | ug/kg | 132         | 72.6       | 55        | 40-104       |            |
| Phenanthrene           | ug/kg | 132         | 88.5       | 67        | 54-112       |            |
| Pyrene                 | ug/kg | 132         | 100        | 76        | 63-121       |            |
| 2-Fluorobiphenyl (S)   | %     |             |            | 68        | 46-99        |            |

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## QUALITY CONTROL DATA

Project: Abington Site

Pace Project No.: 30764913

LABORATORY CONTROL SAMPLE: 3587964

| Parameter         | Units | Spike<br>Conc. | LCS<br>Result | LCS<br>% Rec | % Rec<br>Limits | Qualifiers |
|-------------------|-------|----------------|---------------|--------------|-----------------|------------|
| Terphenyl-d14 (S) | %.    |                |               | 85           | 48-118          |            |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3587965 3587966

| Parameter              | Units | 30766929004<br>Result | MS<br>Spike<br>Conc. | MSD<br>Spike<br>Conc. | MS<br>Result | MSD<br>Result | MS<br>% Rec | MSD<br>% Rec | % Rec<br>Limits | RPD | Max<br>RPD | Qual |
|------------------------|-------|-----------------------|----------------------|-----------------------|--------------|---------------|-------------|--------------|-----------------|-----|------------|------|
| Acenaphthene           | ug/kg | ND                    | 146                  | 144                   | 90.3         | 69.8          | 61          | 47           | 11-154          | 26  | 20         | R1   |
| Acenaphthylene         | ug/kg | ND                    | 146                  | 144                   | 102          | 78.3          | 70          | 54           | 21-143          | 26  | 20         | R1   |
| Anthracene             | ug/kg | ND                    | 146                  | 144                   | 104          | 78.8          | 68          | 51           | 10-175          | 28  | 20         | R1   |
| Benzo(a)anthracene     | ug/kg | 16.7                  | 146                  | 144                   | 121          | 88.8          | 71          | 50           | 10-175          | 30  | 20         | R1   |
| Benzo(a)pyrene         | ug/kg | 15.4                  | 146                  | 144                   | 125          | 92.2          | 75          | 53           | 10-175          | 30  | 20         | R1   |
| Benzo(b)fluoranthene   | ug/kg | 29.8                  | 146                  | 144                   | 125          | 94.1          | 65          | 44           | 10-175          | 28  | 20         | R1   |
| Benzo(g,h,i)perylene   | ug/kg | 11.7                  | 146                  | 144                   | 122          | 95.0          | 75          | 58           | 10-175          | 24  | 20         | R1   |
| Benzo(k)fluoranthene   | ug/kg | 27.2                  | 146                  | 144                   | 121          | 86.7          | 64          | 41           | 10-175          | 33  | 20         | R1   |
| Chrysene               | ug/kg | 16.0                  | 146                  | 144                   | 118          | 87.1          | 70          | 49           | 10-175          | 30  | 20         | R1   |
| Dibenz(a,h)anthracene  | ug/kg | ND                    | 146                  | 144                   | 123          | 95.4          | 83          | 64           | 10-155          | 25  | 20         | R1   |
| Fluoranthene           | ug/kg | 37.0                  | 146                  | 144                   | 124          | 95.5          | 59          | 40           | 10-175          | 26  | 20         | R1   |
| Fluorene               | ug/kg | ND                    | 146                  | 144                   | 100          | 75.9          | 69          | 53           | 11-165          | 28  | 20         | R1   |
| Indeno(1,2,3-cd)pyrene | ug/kg | 9.1                   | 146                  | 144                   | 124          | 98.2          | 79          | 62           | 10-175          | 23  | 20         | R1   |
| Naphthalene            | ug/kg | ND                    | 146                  | 144                   | 78.0         | 62.4          | 53          | 43           | 10-175          | 22  | 20         | R1   |
| Phenanthrene           | ug/kg | 17.8                  | 146                  | 144                   | 102          | 77.7          | 58          | 41           | 10-175          | 27  | 20         | R1   |
| Pyrene                 | ug/kg | 31.1                  | 146                  | 144                   | 129          | 97.2          | 67          | 46           | 10-175          | 28  | 20         | R1   |
| 2-Fluorobiphenyl (S)   | %.    |                       |                      |                       |              |               | 64          | 50           | 46-99           |     |            |      |
| Terphenyl-d14 (S)      | %.    |                       |                      |                       |              |               | 90          | 66           | 48-118          |     |            |      |

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## QUALITY CONTROL DATA

Project: Abington Site

Pace Project No.: 30764913

QC Batch: 735021

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: 30764913001, 30764913003, 30764913004, 30764913005, 30764913006, 30764913007, 30764913008, 30764913009, 30764913010, 30764913011, 30764913012, 30764913013, 30764913014, 30764913015, 30764913016

SAMPLE DUPLICATE: 3577768

| Parameter        | Units | 30764913001<br>Result | Dup<br>Result | RPD | Max<br>RPD | Qualifiers |
|------------------|-------|-----------------------|---------------|-----|------------|------------|
| Percent Moisture | %     | 31.7                  | 31.8          | 0   | 10         |            |

SAMPLE DUPLICATE: 3577769

| Parameter        | Units | 30764913003<br>Result | Dup<br>Result | RPD | Max<br>RPD | Qualifiers |
|------------------|-------|-----------------------|---------------|-----|------------|------------|
| Percent Moisture | %     | 28.3                  | 30.8          | 8   | 10         |            |

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

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Abington Site  
Pace Project No.: 30764913

QC Batch: 734488 Analysis Method: EPA 9012B  
QC Batch Method: EPA 9012B Analysis Description: 9012B Cyanide  
Laboratory: Pace Analytical Services - Greensburg  
Associated Lab Samples: 30764913001, 30764913003, 30764913004, 30764913005, 30764913006, 30764913007, 30764913008, 30764913009, 30764913010, 30764913011, 30764913012, 30764913013, 30764913014, 30764913015

METHOD BLANK: 3575298 Matrix: Solid  
Associated Lab Samples: 30764913001, 30764913003, 30764913004, 30764913005, 30764913006, 30764913007, 30764913008, 30764913009, 30764913010, 30764913011, 30764913012, 30764913013, 30764913014, 30764913015

| Parameter | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Cyanide   | mg/kg | ND           | 0.95            | 03/21/25 16:55 |            |

LABORATORY CONTROL SAMPLE: 3575299

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Cyanide   | mg/kg | 5.9         | 5.6        | 95        | 90-110       |            |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3575300 3575301

| Parameter | Units | 30763414001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| Cyanide   | mg/kg | ND                 | 16.3           | 15.1            | 17.7      | 18.2       | 82       | 90        | 90-110       | 3   | 20      | ML   |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3575302 3575303

| Parameter | Units | 30764913015 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual  |
|-----------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|-------|
| Cyanide   | mg/kg | ND                 | 4.6            | 4.3             | 4.7       | 3.7        | 86       | 69        | 90-110       | 23  | 20      | ML,R1 |

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## QUALITY CONTROL DATA

Project: Abington Site

Pace Project No.: 30764913

QC Batch: 734489

Analysis Method: EPA 9012B

QC Batch Method: EPA 9012B

Analysis Description: 9012B Cyanide

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 30764913016

METHOD BLANK: 3575304

Matrix: Solid

Associated Lab Samples: 30764913016

| Parameter | Units | Blank Result | Reporting Limit | Analyzed       | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Cyanide   | mg/kg | ND           | 0.99            | 03/21/25 17:42 |            |

LABORATORY CONTROL SAMPLE: 3575305

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Cyanide   | mg/kg | 5.9         | 5.7        | 96        | 90-110       |            |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3575306 3575307

| Parameter | Units | 30764913016 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| Cyanide   | mg/kg | ND                 | 4              | 3.7             | 4.0       | 3.8        | 86       | 86        | 90-110       | 6   | 20      | ML   |

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

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## QUALIFIERS

Project: Abington Site  
Pace Project No.: 30764913

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### 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.

### ANALYTE QUALIFIERS

|    |                                                                                                                                                                                                                                                                                           |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ED | Due to the extract's physical characteristics, the analysis was performed at dilution.                                                                                                                                                                                                    |
| H2 | Extraction or preparation conducted outside EPA method holding time.                                                                                                                                                                                                                      |
| IS | The internal standard response is below criteria. Results may be biased high.                                                                                                                                                                                                             |
| Ip | Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria specified in the test method. Sample results included are reported as individual isomers, but the lab and the client must recognize them as an isomeric pair. |
| M1 | Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.                                                                                                                                                                               |
| 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.                                                                                                                                                                                                                                                     |
| SR | Surrogate recovery was below laboratory control limits. Results may be biased low.                                                                                                                                                                                                        |

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Abington Site

Pace Project No.: 30764913

| Lab ID      | Sample ID       | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|-----------------|-----------------|----------|-------------------|------------------|
| 30764913001 | SPS-A-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913003 | SPS-C-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913004 | SPS-D-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913005 | SPS-E-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913006 | SPS-F-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913007 | SPS-TRI-031825  | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913008 | SPS-TRI2-031825 | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913009 | SPS-G-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913010 | SPS-H-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913011 | SPS-I-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913012 | SPS-J-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913013 | SPS-K-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913014 | SPS-L-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913015 | SPS-M-031825    | EPA 3050B       | 734415   | EPA 6010D         | 734722           |
| 30764913016 | SPS-N-031825    | EPA 3050B       | 734715   | EPA 6010D         | 735043           |
| 30764913001 | SPS-A-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913003 | SPS-C-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913004 | SPS-D-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913005 | SPS-E-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913006 | SPS-F-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913007 | SPS-TRI-031825  | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913008 | SPS-TRI2-031825 | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913009 | SPS-G-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913010 | SPS-H-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913011 | SPS-I-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913012 | SPS-J-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913013 | SPS-K-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913014 | SPS-L-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913015 | SPS-M-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913016 | SPS-N-031825    | EPA 7471B       | 734518   | EPA 7471B         | 734694           |
| 30764913001 | SPS-A-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913003 | SPS-C-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913004 | SPS-D-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913005 | SPS-E-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913006 | SPS-F-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913007 | SPS-TRI-031825  | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913008 | SPS-TRI2-031825 | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913009 | SPS-G-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913010 | SPS-H-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913011 | SPS-I-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913012 | SPS-J-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913013 | SPS-K-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913014 | SPS-L-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913015 | SPS-M-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |
| 30764913015 | SPS-M-031825    | EPA 3546        | 737163   | EPA 8270D by SIM  | 737329           |
| 30764913016 | SPS-N-031825    | EPA 3546        | 734739   | EPA 8270D by SIM  | 734912           |

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Abington Site

Pace Project No.: 30764913

| Lab ID      | Sample ID       | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|-----------------|-----------------|----------|-------------------|------------------|
| 30764913001 | SPS-A-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913003 | SPS-C-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913004 | SPS-D-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913005 | SPS-E-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913006 | SPS-F-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913007 | SPS-TRI-031825  | SM 2540G-2015   | 735021   |                   |                  |
| 30764913008 | SPS-TRI2-031825 | SM 2540G-2015   | 735021   |                   |                  |
| 30764913009 | SPS-G-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913010 | SPS-H-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913011 | SPS-I-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913012 | SPS-J-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913013 | SPS-K-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913014 | SPS-L-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913015 | SPS-M-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913016 | SPS-N-031825    | SM 2540G-2015   | 735021   |                   |                  |
| 30764913001 | SPS-A-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913003 | SPS-C-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913004 | SPS-D-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913005 | SPS-E-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913006 | SPS-F-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913007 | SPS-TRI-031825  | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913008 | SPS-TRI2-031825 | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913009 | SPS-G-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913010 | SPS-H-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913011 | SPS-I-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913012 | SPS-J-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913013 | SPS-K-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913014 | SPS-L-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913015 | SPS-M-031825    | EPA 9012B       | 734488   | EPA 9012B         | 734622           |
| 30764913016 | SPS-N-031825    | EPA 9012B       | 734489   | EPA 9012B         | 734623           |

## REPORT OF LABORATORY ANALYSIS

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DC# Title: ENV-FRM-GBUR-0088 v07\_Sample  
Greensburg  
Effective Date: 01/04/2024

MO#: 30764913  
PM: NMY Due Date: 04/03/25  
CLIENT: PADEP\_NORRIS

Client Name: PaDep

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

Tracking Number: \_\_\_\_\_

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No  
Thermometer Used: 22 Type of Ice: ☒ Wet ☐ Blue ☐ None

Cooler Temperature: Observed Temp 4.9 °C Correction Factor: 0 °C Final Temp: 4.9 °C  
Temp should be above freezing to 6°C

| Comments:                               | Yes                                 | No                       | NA                       | pH paper Lot# | D.P.D. Residual Chlorine Lot # |
|-----------------------------------------|-------------------------------------|--------------------------|--------------------------|---------------|--------------------------------|
| Chain of Custody Present                | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |               |                                |
| Chain of Custody Filled Out:            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |               |                                |
| -Were client corrections present on COC | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |               |                                |
| Chain of Custody Relinquished           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |               |                                |
| Sampler Name & Signature on COC:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |               |                                |
| Sample Labels match COC:                | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |               |                                |
| -Includes date/time/ID                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |               |                                |
| Matrix: <u>SL</u>                       |                                     |                          |                          |               |                                |

|                                               |                                     |                          |                          |     |  |
|-----------------------------------------------|-------------------------------------|--------------------------|--------------------------|-----|--|
| Samples Arrived within Hold Time:             | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6.  |  |
| Short Hold Time Analysis (<72hr remaining):   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 7.  |  |
| Rush Turn Around Time Requested:              | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8.  |  |
| Sufficient Volume:                            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 9.  |  |
| Correct Containers Used:                      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 10. |  |
| -Pace Containers Used                         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 11. |  |
| Containers intact:                            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 12. |  |
| Orthophosphate field filtered:                | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 13. |  |
| Hex Cr Aqueous samples field filtered:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 14. |  |
| Organic Samples checked for dichlorination    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 15. |  |
| Filtered volume received for dissolved tests: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 16. |  |

|                                                                           |                                     |                          |                          |                        |                           |
|---------------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------------|------------------------|---------------------------|
| All containers checked for preservation:                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Initial when completed | Date/Time of Preservation |
| exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix |                                     |                          |                          |                        |                           |
| All containers meet method preservation requirements:                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Initial when completed | Date/Time of Preservation |

|                                         |                                     |                          |                          |     |  |
|-----------------------------------------|-------------------------------------|--------------------------|--------------------------|-----|--|
| 8260C/D: Headspace in VOA Vials (> 6mm) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 17. |  |
| 624.1: Headspace in VOA Vials (0mm)     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 18. |  |
| Radon: Headspace in RAD Vials (0mm)     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 19. |  |
| Trip Blank Present:                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |     |  |
| Rad Samples Screened <.05 mrem/hr.      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |     |  |

Comments: Cooler with Asbestos Not on Ice 9.4c  
All Cores were Custody Sealed  
SPS - B-63825 Contaminated with Cores water



**Pace Altoona**  
2019 Ninth Avenue  
Altoona, PA 16602  
(814) 946-4306

EPA Lab ID: PA01737

NELAP  
PA 07-00062  
VA 460212

State Certifications:  
MD 275  
WV WW/SCM 364  
WV DW 9963 CM

**Pace DuBois**  
40 Hoover Avenue  
DuBois, PA 15801  
(814) 371-6030

EPA Lab ID: PA01735

PA DEP Chapter 252  
PA 33-00258

**Pace Erie**  
1920 East 38th Street  
Erie, PA 16510  
(814) 315-4343

EPA Lab ID: PA01736

NELAP  
PA 25-05907  
NY 12175

**Pace Wysox**  
1851 Golden Mile Road  
Wysox, PA 18854  
(570) 265-5040

EPA Lab ID: PA01733

NELAP  
PA 08-05622  
NY 12127



Pace Analytical Services Inc. Greensburg, PA  
1638 Roseytown Rd., Suites 2, 3, 4  
Greensburg, PA 15601

Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

### ANALYTICAL REPORT FOR SAMPLES

| Sample ID   | Laboratory ID | Matrix | Sample Type | Date Sampled   | Date Received  |
|-------------|---------------|--------|-------------|----------------|----------------|
| 30764913001 | AZC4086-01    | Solid  | Grab        | 03/18/25 09:30 | 03/20/25 18:50 |
| 30764913002 | AZC4086-02    | Solid  | Grab        | 03/18/25 09:42 | 03/20/25 18:50 |
| 30764913003 | AZC4086-03    | Solid  | Grab        | 03/18/25 10:20 | 03/20/25 18:50 |
| 30764913004 | AZC4086-04    | Solid  | Grab        | 03/18/25 10:25 | 03/20/25 18:50 |
| 30764913005 | AZC4086-05    | Solid  | Grab        | 03/18/25 11:15 | 03/20/25 18:50 |
| 30764913006 | AZC4086-06    | Solid  | Grab        | 03/18/25 11:25 | 03/20/25 18:50 |
| 30764913007 | AZC4086-07    | Solid  | Grab        | 03/18/25 11:28 | 03/20/25 18:50 |
| 30764913008 | AZC4086-08    | Solid  | Grab        | 03/18/25 11:30 | 03/20/25 18:50 |
| 30764913009 | AZC4086-09    | Solid  | Grab        | 03/18/25 12:35 | 03/20/25 18:50 |
| 30764913010 | AZC4086-10    | Solid  | Grab        | 03/18/25 12:45 | 03/20/25 18:50 |
| 30764913011 | AZC4086-11    | Solid  | Grab        | 03/18/25 13:25 | 03/20/25 18:50 |
| 30764913012 | AZC4086-12    | Solid  | Grab        | 03/18/25 13:35 | 03/20/25 18:50 |
| 30764913013 | AZC4086-13    | Solid  | Grab        | 03/18/25 14:00 | 03/20/25 18:50 |
| 30764913014 | AZC4086-14    | Solid  | Grab        | 03/18/25 14:05 | 03/20/25 18:50 |
| 30764913015 | AZC4086-15    | Solid  | Grab        | 03/18/25 14:45 | 03/20/25 18:50 |
| 30764913016 | AZC4086-16    | Solid  | Grab        | 03/18/25 14:50 | 03/20/25 18:50 |

Pace Analytical Services, LLC

Reviewed and Submitted by:

Ron Bollman

Project Manager

*Pace Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.*

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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PA 08-05622  
NY 12127



Pace Analytical Services Inc. Greensburg, PA  
1638 Roseytown Rd., Suites 2, 3, 4  
Greensburg, PA 15601

Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913001**

**Date/Time Sampled: 03/18/25 09:30**

**Laboratory Sample ID: AZC4086-01 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

#### Calculated Analytes

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.720 | 0.720 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

#### Conventional Chemistry Parameters by SM/EPA Methods

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 68.8 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

#### Cyanide by Preparation Method EPA 9010

|                 |        |       |           |                |          |     |
|-----------------|--------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | <0.720 | 0.720 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|--------|-------|-----------|----------------|----------|-----|



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Greensburg, PA 15601

Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913002**

**Date/Time Sampled: 03/18/25 09:42**

**Laboratory Sample ID: AZC4086-02 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

#### Calculated Analytes

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.775 | 0.775 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

#### Conventional Chemistry Parameters by SM/EPA Methods

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 63.9 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

#### Cyanide by Preparation Method EPA 9010

|                 |        |       |           |                |          |     |
|-----------------|--------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | <0.775 | 0.775 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|--------|-------|-----------|----------------|----------|-----|



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Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913003**

**Date/Time Sampled: 03/18/25 10:20**

**Laboratory Sample ID: AZC4086-03 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

**Calculated Analytes**

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.689 | 0.689 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

**Conventional Chemistry Parameters by SM/EPA Methods**

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 71.2 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

**Cyanide by Preparation Method EPA 9010**

|                 |      |       |           |                |          |     |
|-----------------|------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | 1.03 | 0.689 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|------|-------|-----------|----------------|----------|-----|





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Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913004**

**Date/Time Sampled: 03/18/25 10:25**

**Laboratory Sample ID: AZC4086-04 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

**Calculated Analytes**

|                  |       |       |           |                |                 |     |
|------------------|-------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | 0.640 | 0.640 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|-------|-------|-----------|----------------|-----------------|-----|

**Conventional Chemistry Parameters by SM/EPA Methods**

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 76.6 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

**Cyanide by Preparation Method EPA 9010**

|                 |       |       |           |                |          |     |
|-----------------|-------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | 0.640 | 0.640 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|-------|-------|-----------|----------------|----------|-----|



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Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913005**

**Date/Time Sampled: 03/18/25 11:15**

**Laboratory Sample ID: AZC4086-05 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

#### Calculated Analytes

|                  |       |       |           |                |                 |     |
|------------------|-------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | 0.916 | 0.763 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|-------|-------|-----------|----------------|-----------------|-----|

#### Conventional Chemistry Parameters by SM/EPA Methods

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 63.6 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

#### Cyanide by Preparation Method EPA 9010

|                 |       |       |           |                |          |     |
|-----------------|-------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | 0.916 | 0.763 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|-------|-------|-----------|----------------|----------|-----|



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Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913006**

**Date/Time Sampled: 03/18/25 11:25**

**Laboratory Sample ID: AZC4086-06 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

**Calculated Analytes**

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.830 | 0.830 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

**Conventional Chemistry Parameters by SM/EPA Methods**

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 59.7 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

**Cyanide by Preparation Method EPA 9010**

|                 |        |       |           |                |          |     |
|-----------------|--------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | <0.830 | 0.830 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|--------|-------|-----------|----------------|----------|-----|



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Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913007**

**Date/Time Sampled: 03/18/25 11:28**

**Laboratory Sample ID: AZC4086-07 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

**Calculated Analytes**

|                  |      |       |           |                |                 |     |
|------------------|------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | 1.09 | 0.680 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|------|-------|-----------|----------------|-----------------|-----|

**Conventional Chemistry Parameters by SM/EPA Methods**

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 72.1 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

**Cyanide by Preparation Method EPA 9010**

|                 |      |       |           |                |          |     |
|-----------------|------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | 1.09 | 0.680 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|------|-------|-----------|----------------|----------|-----|



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Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913008**

**Date/Time Sampled: 03/18/25 11:30**

**Laboratory Sample ID: AZC4086-08 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

**Calculated Analytes**

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.657 | 0.657 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

**Conventional Chemistry Parameters by SM/EPA Methods**

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 73.9 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

**Cyanide by Preparation Method EPA 9010**

|                 |        |       |           |                |          |     |
|-----------------|--------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | <0.657 | 0.657 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|--------|-------|-----------|----------------|----------|-----|





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Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913009**

**Date/Time Sampled: 03/18/25 12:35**

**Laboratory Sample ID: AZC4086-09 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

#### Calculated Analytes

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.710 | 0.710 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

#### Conventional Chemistry Parameters by SM/EPA Methods

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 69.7 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

#### Cyanide by Preparation Method EPA 9010

|                 |        |       |           |                |          |     |
|-----------------|--------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | <0.710 | 0.710 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|--------|-------|-----------|----------------|----------|-----|



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Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913010**

**Date/Time Sampled: 03/18/25 12:45**

**Laboratory Sample ID: AZC4086-10 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

#### Calculated Analytes

|                  |       |       |           |                |                 |     |
|------------------|-------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | 0.791 | 0.659 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|-------|-------|-----------|----------------|-----------------|-----|

#### Conventional Chemistry Parameters by SM/EPA Methods

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 74.4 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

#### Cyanide by Preparation Method EPA 9010

|                 |       |       |           |                |          |     |
|-----------------|-------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | 0.791 | 0.659 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|-------|-------|-----------|----------------|----------|-----|



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PA 25-05907  
NY 12175

**Pace Wysox**  
1851 Golden Mile Road  
Wysox, PA 18854  
(570) 265-5040

EPA Lab ID: PA01733

NELAP  
PA 08-05622  
NY 12127



Pace Analytical Services Inc. Greensburg, PA  
1638 Roseytown Rd., Suites 2, 3, 4  
Greensburg, PA 15601

Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

Reported:

03/28/25 16:21

Client Sample ID: 30764913011

Date/Time Sampled: 03/18/25 13:25

Laboratory Sample ID: AZC4086-11 (Solid/Grab)

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

#### Calculated Analytes

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.643 | 0.643 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

#### Conventional Chemistry Parameters by SM/EPA Methods

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 76.2 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

#### Cyanide by Preparation Method EPA 9010

|                 |        |       |           |                |          |     |
|-----------------|--------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | <0.643 | 0.643 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|--------|-------|-----------|----------------|----------|-----|



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NELAP  
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VA 460212

State Certifications:  
MD 275  
WV WW/SCM 364  
WV DW 9963 CM

**Pace DuBois**  
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DuBois, PA 15801  
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EPA Lab ID: PA01735

PA DEP Chapter 252  
PA 33-00258

**Pace Erie**  
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Greensburg, PA 15601

Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913012**

**Date/Time Sampled: 03/18/25 13:35**

**Laboratory Sample ID: AZC4086-12 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

**Calculated Analytes**

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.619 | 0.619 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

**Conventional Chemistry Parameters by SM/EPA Methods**

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 80.0 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

**Cyanide by Preparation Method EPA 9010**

|                 |        |       |           |                |          |     |
|-----------------|--------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | <0.619 | 0.619 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|--------|-------|-----------|----------------|----------|-----|



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Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913013**

**Date/Time Sampled: 03/18/25 14:00**

**Laboratory Sample ID: AZC4086-13 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

**Calculated Analytes**

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.660 | 0.660 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

**Conventional Chemistry Parameters by SM/EPA Methods**

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 74.3 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

**Cyanide by Preparation Method EPA 9010**

|                 |        |       |           |                |          |     |
|-----------------|--------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | <0.660 | 0.660 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|--------|-------|-----------|----------------|----------|-----|





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Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913014**

**Date/Time Sampled: 03/18/25 14:05**

**Laboratory Sample ID: AZC4086-14 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

#### Calculated Analytes

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.617 | 0.617 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

#### Conventional Chemistry Parameters by SM/EPA Methods

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 78.7 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

#### Cyanide by Preparation Method EPA 9010

|                 |        |       |           |                |          |     |
|-----------------|--------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | <0.617 | 0.617 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|--------|-------|-----------|----------------|----------|-----|



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Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913015**

**Date/Time Sampled: 03/18/25 14:45**

**Laboratory Sample ID: AZC4086-15 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

#### Calculated Analytes

|                  |        |       |           |                |                 |     |
|------------------|--------|-------|-----------|----------------|-----------------|-----|
| Amenable Cyanide | <0.848 | 0.848 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |
|------------------|--------|-------|-----------|----------------|-----------------|-----|

#### Conventional Chemistry Parameters by SM/EPA Methods

|          |      |       |   |                |              |     |
|----------|------|-------|---|----------------|--------------|-----|
| % Solids | 58.4 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers |
|----------|------|-------|---|----------------|--------------|-----|

#### Cyanide by Preparation Method EPA 9010

|                 |        |       |           |                |          |     |
|-----------------|--------|-------|-----------|----------------|----------|-----|
| Cyanide (total) | <0.848 | 0.848 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |
|-----------------|--------|-------|-----------|----------------|----------|-----|



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Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

**Client Sample ID: 30764913016**

**Date/Time Sampled: 03/18/25 14:50**

**Laboratory Sample ID: AZC4086-16 (Solid/Grab)**

| Analyte | Result | MDL | RL | Units | Date / Time Analyzed | Analytical Method | * Analyst | Note |
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|
|---------|--------|-----|----|-------|----------------------|-------------------|-----------|------|

#### Calculated Analytes

|                  |        |       |           |                |                 |     |  |
|------------------|--------|-------|-----------|----------------|-----------------|-----|--|
| Amenable Cyanide | <0.607 | 0.607 | mg/kg dry | 03/27/25 18:35 | SM 4500 CN G-16 | jtd |  |
|------------------|--------|-------|-----------|----------------|-----------------|-----|--|

#### Conventional Chemistry Parameters by SM/EPA Methods

|          |      |       |   |                |              |     |   |
|----------|------|-------|---|----------------|--------------|-----|---|
| % Solids | 80.0 | 0.100 | % | 03/25/25 10:19 | SM 2540 G-11 | ers | K |
|----------|------|-------|---|----------------|--------------|-----|---|

#### Cyanide by Preparation Method EPA 9010

|                 |        |       |           |                |          |     |  |
|-----------------|--------|-------|-----------|----------------|----------|-----|--|
| Cyanide (total) | <0.607 | 0.607 | mg/kg dry | 03/27/25 18:35 | EPA 9014 | jtd |  |
|-----------------|--------|-------|-----------|----------------|----------|-----|--|



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Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

### Notes

- K The RPD result exceeded the quality control limits for the duplicate, Laboratory Control Sample Duplicate (LCSD), or Matrix Spike Duplicate (MSD) sample analyzed with the preparation batch.



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Project Number: 30764913

**Reported:**

03/28/25 16:21

#### Definitions:

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

+ MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Pace Labs' personnel are done so in accordance with Standard Operating Procedures established by Pace Labs.

# The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory; and should be considered as analyzed outside the EPA holding time.

^ The following analytes are to be filtered immediately upon sampling: Hexavalent Chromium. Filtration through a 0.45 micron filter within 15 minutes of sampling is required for compliance with the Clean Water Act (CWA) for reporting of hexavalent chromium to prevent interconversion of chromium species.

#### \* Analysis location indicator:

**D:** Indicates analysis performed by Pace Analytical Laboratories, LLC, 40 Hoover Ave., DuBois, PA 15801. PA DEP Chapter 252 certification: PA 33-00258.

**E:** Indicates analysis performed by Pace Analytical Laboratories, LLC, 1920 East 38th Street, Erie, PA 16510. NELAP certification: PA 25-05907.

**W:** Indicates analysis performed by Pace Analytical Laboratories, LLC, 1851 Golden Mile Rd., Wysox, PA 18854. NELAP certification: PA 08-05622 and NY 12127.

< Represents "less than" - indicates that the result was less than the RL, or the MDL if indicated for the parameter.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values. If Radiological results are reported, the MDC - Minimum Detectable Concentration is shown in the MDL column.

#### Definitions Continued:

Pace Analytical Services, LLC

*Pace Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.*

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*





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Pace Analytical Services Inc. Greensburg, PA  
1638 Roseytown Rd., Suites 2, 3, 4  
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Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

|        |                                                                                                                 |
|--------|-----------------------------------------------------------------------------------------------------------------|
| RL     | Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.                        |
| [CALC] | Indicates a calculated result. Calculations use results from other analyses performed under accredited methods. |
| ND     | Non Detect. The noted analyte was not detected in the sample.                                                   |

**(-) Method Revision Indicator - West Virginia Samples**

CALC- : Indicates analysis by SM2340 B-2011. This method appears on the WV DEP List of Certified Parameters but the PA DEP does not offer accreditation for this method.

EPA 8270D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8270E.

EPA 8260B - : Indicates that samples collected in West Virginia are analyzed by Method SW 8260D.

EPA 8015D - : Indicates that samples collected in West Virginia are analyzed by Method SW 8015C.

EPA 1010 - : Indicates that samples collected in West Virginia are analyzed by Method SW 1010B.

EPA 6010B - : Indicates that samples collected in West Virginia are analyzed by Method SW 6010D.



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Pace Analytical Services Inc. Greensburg, PA  
1638 Roseytown Rd., Suites 2, 3, 4  
Greensburg, PA 15601

Project Manager: Nikayla Yasurek

Project: General

Project Number: 30764913

**Reported:**

03/28/25 16:21

#### Terms & Conditions

Services provided by Pace Analytical Services, LLC are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

**CHAIN OF CUSTODY** Pace Analytical Services, LLC ("Pace", "us", or "we") will provide, upon client request, chain of custody forms for use.

**CONFIDENTIALITY** Pace maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

**CONTRACTS** All contracts are subject to review and approval by Pace's legal council. Each contract must be signed by a corporate officer.

**PAYMENT/BILLING** Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Pace reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

**SAMPLE COLLECTION AND SUBMISSION** Clients not requesting collection services from Pace are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Pace shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Pace. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody. Samples received at the laboratory after business hours are verified on the next business day. Discrepancies are documented on the Receiving Document.

**SUBCONTRACTING** Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Pace. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

**RETURN OF RESULTS** Pace routinely provides verbal or email results within 10 working days of receipt of sample(s). If requested, a hard copy of the data results are routinely sent via US Postal Service within 10 working days. At the request of the client, Pace may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Pace. Pace reserves the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Pace in accordance with their retention policy.

**SAMPLE DISPOSAL** Pace will maintain samples for four (4) weeks after the sample receipt date. Pace will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Pace reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

**HAZARD COMMUNICATION** The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

**WARRANTY AND LIMITATION OF LIABILITY** For services rendered, Pace warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Pace does not accept any legal responsibility for the purposes for which client uses the test results.

**LITIGATION** All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Pace Analytical Services, LLC shall be invoiced by Pace and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

Pace Analytical Services, LLC

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Chain of Custody

PASI Pittsburgh Laboratory



AZC4086



AZC4086

Workorder: 30764913

Workorder Name: Abington Site

Results Requested By: 4/3/2025

Report / Invoice To

Subcontract To

Requested Analysis

Nikayla M. Yasurek

Pace Analytical Pittsburgh

1638 Roseytown Road

Suites 2,3,4

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Phone (724)850-5600

Email: nikayla.yasurek@pacelabs.com

Pace Altoona

P.O.

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| Item | Sample ID | Collect Date/Time | Lab ID | Matrix | Unpreserved |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Transfers                     |             |           |             |              |  | Comments        |        |
|-------------------------------|-------------|-----------|-------------|--------------|--|-----------------|--------|
| Transfers                     | Released By | Date/Time | Received By | Date/Time    |  |                 |        |
| 1                             |             |           | GP          | 2-26-25 1700 |  |                 |        |
| 2                             |             |           | GP          | 3-26-25 1850 |  |                 |        |
| 3                             |             |           |             |              |  |                 |        |
| Cooler Temperature on Receipt |             |           |             |              |  | °C              |        |
|                               |             |           |             |              |  | Custody Seal    | Y or N |
|                               |             |           |             |              |  | Received on Ice | Y or N |
|                               |             |           |             |              |  | Samples Intact  | Y or N |



30764913

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| CLIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | DATE    | TIME | WORK ORDER | PAGE | OF |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------|------|------------|------|----|
| Page 26                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | 3/26/25 | 2:44 | ATC 4056   | 5    | OF |
| SAMPLE CONDITION UPON RECEIPT (SCUR)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |         |      |            |      |    |
| <div> <div>WERE TEMPS ACCEPTABLE BASED ON SAMPLE DATE/TIME?</div> <div> <div>Y</div> <div>N</div> </div> </div> <div> <div>IF NO, EXPLAIN: CLIENT NOTIFICATION REQUIRED</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |         |      |            |      |    |
| <div> <div>RECEIVED TEMP (°C)</div> <div>44</div> </div> <div> <div>RECEIVED ON ICE?</div> <div>Y</div> </div> <div> <div>AM TEMP GUN ID</div> <div>27015</div> </div> <div> <div>AM TEMP &lt;6°C</div> <div>Y</div> </div> <div> <div>CUSTODY SEALS?</div> <div>Y</div> </div> <div> <div>SEALS INTACT?</div> <div>Y</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                |  |         |      |            |      |    |
| <div> <div>CHAIN OF CUSTODY (COC)</div> <div> <div>SAMPLE LOCATION/DESCRIPTION/ID?</div> <div>Y</div> </div> <div> <div>NAME or INITIALS of SAMPLE COLLECTOR?</div> <div>Y</div> </div> <div> <div>COMPLETE DATES/TIMES?</div> <div>Y</div> </div> <div> <div>GRAB/COMPOSITE NOTED?</div> <div>Y</div> </div> <div> <div>RELINQUISHED SIGNATURE?</div> <div>Y</div> </div> <div> <div>RECEIVED SIGNATURE?</div> <div>Y</div> </div> <div> <div>"NUMBER OF CONTAINERS PER SAMPLE?"</div> <div>Y</div> </div> <div> <div>"PRESERVATION TYPE(S)?"</div> <div>Y</div> </div> <div> <div>IS SAMPLE REPORTABLE?</div> <div>Y</div> </div> <div> <div>7-DIGIT PWS ID &amp; PWS SAMPLE ID MUST BE RECORDED ON COC</div> <div>Y</div> </div> </div>                        |  |         |      |            |      |    |
| <div> <div>IF NO TO ANY QUESTION, COC IS INCOMPLETE AND REQUIRES ATTENTION!</div> <div>IF PWS, DOES COC CONTAIN:</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |         |      |            |      |    |
| <div> <div>7-DIGIT PWS ID?</div> <div>Y</div> </div> <div> <div>PWS SAMPLE ID?</div> <div>Y</div> </div> <div> <div>CONTACT NAME?</div> <div>Y</div> </div> <div> <div>CONTACT NUMBER?</div> <div>Y</div> </div> <div> <div>IS SAMPLE REPORTABLE?</div> <div>Y</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |         |      |            |      |    |
| <div> <div>BOTTLEWARE &amp; PRESERVATION</div> <div> <div>SAMPLE BOTTLES INTACT?</div> <div>Y</div> </div> <div> <div>SAMPLE LABELS MATCH COC?</div> <div>Y</div> </div> <div> <div>(ID, DATE, TIME)</div> <div>Y</div> </div> <div> <div>CORRECT CONTAINERS?</div> <div>Y</div> </div> <div> <div>ADEQUATE VOLUME OF SAMPLE PROVIDED?</div> <div>Y</div> </div> <div> <div>HEADSPACE?</div> <div>Y</div> </div> <div> <div>Volatiles, Odor, Ignitability, Sulfide</div> <div>Y</div> </div> <div> <div>FIELD FILTERED?</div> <div>Y</div> </div> <div> <div>Disolved Analyses, Hex Cr, Ortho-Rhos</div> <div>Y</div> </div> <div> <div>TRIP BLANKS?</div> <div>Y</div> </div> <div> <div>Required for 524.2 Volatiles, EDB/DBCP</div> <div>Y</div> </div> </div> |  |         |      |            |      |    |
| <div> <div>ALL CONTAINER PRESERVATION MEETS REQUIREMENTS?</div> <div>Y</div> </div> <div> <div>PRESERVATION CHECKED</div> <div>DATE</div> </div> <div> <div>PRESERVATION ADDED</div> <div>DATE</div> </div> <div> <div>PH STRIPS ELEMENT ID</div> <div>DATE</div> </div> <div> <div>SAMPLES LABELED BY</div> <div>DATE</div> </div> <div> <div>INITIALS</div> <div>TIME</div> </div>                                                                                                                                                                                                                                                                                                                                                                              |  |         |      |            |      |    |
| <div> <div>CLIENT NOTIFICATION</div> <div> <div>PRESERVATIVE:</div> <div>ELEMENT ID:</div> </div> <div> <div>DATE/TIME</div> <div>REASON FOR CONTACT</div> <div>OUTCOME OF DISCUSSION</div> <div>ADDITIONAL NOTES</div> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |         |      |            |      |    |
| <div> <div>FILL OUT THE FOLLOWING:</div> <div> <div>DATE</div> <div>TIME</div> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |         |      |            |      |    |
| <div> <div>DATE/TIME</div> <div>REASON FOR CONTACT</div> <div>OUTCOME OF DISCUSSION</div> <div>ADDITIONAL NOTES</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |         |      |            |      |    |
| <div> <div>CIRCLE METHOD</div> <div>PHONE / EMAIL / OTHER</div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |         |      |            |      |    |

# Certificate of Analysis

Client Name: Pace Analytical Services, Inc  
Street Address: 1638 Roseytown Road, Suites 2,3, & 4  
City, State ZIP: Greensburg, PA 15601  
Attn: Nikayla M. Yasurek  
Client Project Name: 30764913 / Abington Site



TESTING  
NVLAP Lab Code 200860-0

Date Collected: 3/18/2025  
Date Received: 3/21/2025  
Date Analyzed: 4/4/2025  
Date Reported: 4/4/2025  
Project ID: 25009617

Test Requested: **3002, Asbestos in Bulk Samples**  
Method: EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

| Sample Identification |                   | Layer Percentage | Physical Description of Sample/Layer | Asbestos Detected | Asbestos Percentage | Non-Asbestos Fiber Percentage | Non-Fibrous Material Percentage | Matrix Material Composition | Homo-geneous (Y/N) |
|-----------------------|-------------------|------------------|--------------------------------------|-------------------|---------------------|-------------------------------|---------------------------------|-----------------------------|--------------------|
| Client                | Lab Sample Number |                  |                                      |                   |                     |                               |                                 |                             |                    |
| SPS-A-031825          | 25009617-1        | 100              | Brown Soil                           | ND                |                     | 3 CELL                        | 97                              | Q                           | N                  |
| SPS-B-031825          | 25009617-2        | 100              | Brown Soil                           | ND                |                     | 6 CELL                        | 94                              | Q                           | N                  |
| SPS-C-031825          | 25009617-3        | 100              | Brown Soil                           | ND                |                     | 5 CELL,SYN,FG                 | 95                              | Q                           | N                  |
| SPS-D-031825          | 25009617-4        | 100              | Brown Soil                           | ND                |                     | 5 CELL                        | 95                              | Q                           | N                  |
| SPS-E-031825          | 25009617-5        | 100              | Brown Soil                           | ND                |                     | 5 CELL                        | 95                              | Q                           | N                  |
| SPS-F-031825          | 25009617-6        | 100              | Brown Soil                           | ND                |                     | 3 CELL                        | 97                              | Q                           | N                  |
| SPS-TRI-031825        | 25009617-7        | 100              | Brown Soil                           | ND                |                     | 1 CELL                        | 99                              | Q                           | N                  |
| SPS-TRI2-031825       | 25009617-8A       | 100              | Brown Soil                           | ND                |                     | Tr CELL                       | 100                             | Q                           | N                  |
|                       | 25009617-8B       | Tr               | Black Tar                            | ND                |                     |                               | 100                             | T                           | Y                  |
| SPS-G-031825          | 25009617-9        | 100              | Brown Soil                           | ND                |                     | 3 CELL                        | 97                              | Q                           | N                  |



Anita Grigg  
Laboratory Analyst



Emily Thompson  
Asbestos Lab Supervisor

AC = Actinolite  
AM = Amosite  
AN = Anthophyllite  
CHRY = Chrysotile  
CR = Crocidolite  
TRM = Tremolite  
Tr = Trace  
ND = None Detected

AH = Animal Hair  
CELL = Cellulose  
FG = Fibrous Glass  
MW = Mineral Wool  
OT = Other  
SYN = Synthetic  
TL = Talc  
W = Wollastonite

B = Binder  
C = Calcite  
D = Diatoms  
G = Gypsum  
M = Mica  
OR = Organic  
OP = Opaques  
P = Perlite

Q = Quartz  
T = Tar  
V = Vermiculite

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TESTING  
NVLAP Lab Code 200860-0

Date Collected: 3/18/2025  
Date Received: 3/21/2025  
Date Analyzed: 4/4/2025  
Date Reported: 4/4/2025  
Project ID: 25009617

Test Requested: **3002, Asbestos in Bulk Samples**  
Method: EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

| Sample Identification |                   | Layer Percentage | Physical Description of Sample/Layer | Asbestos Detected | Asbestos Percentage | Non-Asbestos Fiber Percentage | Non-Fibrous Material Percentage | Matrix Material Composition | Homo-geneous (Y/N) |
|-----------------------|-------------------|------------------|--------------------------------------|-------------------|---------------------|-------------------------------|---------------------------------|-----------------------------|--------------------|
| Client                | Lab Sample Number |                  |                                      |                   |                     |                               |                                 |                             |                    |
| SPS-H-031825          | 25009617-10       | 100              | Brown Soil                           | ND                |                     | Tr CELL                       | 99                              | Q                           | N                  |
| SPS-I-031825          | 25009617-11       | 100              | Brown Soil                           | ND                |                     | Tr CELL                       | 99                              | Q                           | N                  |
| SPS-J-031825          | 25009617-12A      | 100              | Brown Soil                           | ND                |                     | Tr CELL                       | 99                              | Q                           | N                  |
|                       | 25009617-12B      | Tr               | Clear Glass                          | ND                |                     |                               | 100                             |                             | N                  |
| SPS-K-031825          | 25009617-13       | 100              | Brown Soil                           | ND                |                     | 3 CELL                        | 97                              | Q                           | N                  |
| SPS-L-031825          | 25009617-14       | 100              | Brown Soil                           | ND                |                     | Tr CELL                       | 99                              | Q                           | N                  |
| SPS-M-031825          | 25009617-15       | 100              | Brown Soil                           | ND                |                     | 3 CELL                        | 97                              | Q                           | N                  |
| SPS-N-031825          | 25009617-16       | 100              | Brown Soil                           | ND                |                     | 3 CELL                        | 97                              | Q                           | N                  |
|                       |                   |                  |                                      |                   |                     |                               |                                 |                             |                    |



Anita Grigg  
Laboratory Analyst



Emily Thompson  
Asbestos Lab Supervisor

|                    |                    |              |                 |
|--------------------|--------------------|--------------|-----------------|
| AC = Actinolite    | AH = Animal Hair   | B = Binder   | Q = Quartz      |
| AM = Amosite       | CELL = Cellulose   | C = Calcite  | T = Tar         |
| AN = Anthophyllite | FG = Fibrous Glass | D = Diatoms  | V = Vermiculite |
| CHRY = Chrysotile  | MW = Mineral Wool  | G = Gypsum   |                 |
| CR = Crocidolite   | OT = Other         | M = Mica     |                 |
| TRM = Tremolite    | SYN = Synthetic    | OR = Organic |                 |
| Tr = Trace         | TL = Talc          | OP = Opaques |                 |
| ND = None Detected | W = Wollastonite   | P = Perlite  |                 |

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TESTING  
NVLAP Lab Code 200860-0

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Test Requested: **3002, Asbestos in Bulk Samples**  
Method: EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

### General Notes

- **ND** indicates no asbestos was detected; the method detection limit is 1 %.
- **Trace** or "< 1" indicates asbestos was identified in the sample, but the concentration is less than 1% and cannot be quantified without point counting.
- Samples identified as inhomogeneous (more than one layer) are separated into individual layers, and each layer is analyzed and reported separately.
- All regulated asbestos minerals (i.e. chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite) were sought in every layer of each sample, but only those asbestos minerals detected are listed. Amosite is the common name for the asbestiform variety of the mineral grunerite. Crocidolite is the common name used for the asbestiform variety of the mineral riebeckite.
- Tile, vinyl, foam, plastic, and fine powder samples may contain asbestos fibers of such small diameter (< 0.25 microns in diameter) that these fibers cannot be detected by PLM. For such samples, more sensitive analytical methods (e.g. TEM, SEM, and XRD) are recommended if greater certainty about asbestos content is required. Semi-quantitative bulk TEM floor tile analysis is accepted under NESHAP regulations.
- These results are submitted pursuant to Pace Analytical Services' (PAS) current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted.
- Unless notified in writing to return the samples covered by this report, Pace Analytical Services will store the samples for a minimum period of thirty (30) days before discarding. A shipping and handling charge will be assessed for the return of any samples.
- PAS does not guarantee the results of tape lifts, microvac, wipe, and/or debris samples. Accurate analysis cannot be performed due to particle size, media used, and/or amount of material given. Analysis of these materials should be performed by a TEM. ***A result of ND does not indicate that the sample area does not contain asbestos. It means the analyst could not identify asbestos in the specific sample for the reasons listed above.***
- "When joint compound and/or tape is applied to a wallboard it becomes an integral part of the wallboard and in effect becomes one material forming a wall system." EPA 40 CFR Part 61 PAS cannot distinguish joint compound from the same material used as skim coat. Therefore, it is very important that individuals collecting the samples clearly describe the sample composition so PAS knows that the drywall system can be composited. If only joint sampling areas show layers with >1% asbestos, then material is joint compound. If samples from both joint sampling area and non-joint areas show layers with >1% asbestos, then the material should be considered "skim coat" or add-on material.

### Notes Required by NVLAP

- This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.
- This test report relates only to the items tested or calibrated.
- This report is not valid unless it bears the name of a NVLAP-approved signatory.
- Any reproduction of this document must include the entire document in order for the report to be valid.