
COMBINED REMEDIAL INVESTIGATION/FINAL ACT 2 REPORT

**RIGHT-OF-WAY-3 RELEASE ON 6/22/23 AREA
FORMER PHILADELPHIA ENERGY
SOLUTIONS REFINERY
3144 West Passyunk Avenue, Philadelphia, PA
Philadelphia, Philadelphia County**

Prepared for:

**Bellwether District Holdings, LLC formerly known as Philadelphia
Energy Solutions Refining and Marketing LLC
3144 West Passyunk Avenue
Philadelphia, PA 19145**

Prepared by:

**Langan Engineering and Environmental Services, LLC.
1818 Market Street, Suite 3300
Philadelphia, PA 19103**



**Jeffrey A. Smith, P.G.
Senior Associate
Pennsylvania P.G. No. PG002755G**

**November 2024
220181803**

LANGAN

TABLE OF CONTENTS

	<u>Page No.</u>
1.0 INTRODUCTION	1
1.1 Objectives	2
1.2 Report Organization	2
2.0 SITE DESCRIPTION	3
2.1 Location of Act 2 Site	3
2.2 Past Operations	3
2.3 Physical Setting	4
2.3.1 Topography and Drainage	4
2.3.2 Site Geology and Hydrogeology	4
3.0 OVERVIEW OF THE RELEASE AND INVESTIGATION/RESPONSE ACTIONS	5
4.0 POST EXCAVATION ATTAINMENT SAMPLING	7
4.1 Selection of Remediation Standards	7
4.2 Attainment Sampling	8
4.3 Attainment Sampling Results	9
4.4 Post-Excavation Soil Sample Vapor Intrusion Evaluation	10
4.5 Quality Assurance and Quality Control	10
4.5.1 Equipment Decontamination and Calibration	11
4.5.2 Laboratory Quality Assurance/Quality Control	11
4.5.3 Documentation	11
4.5.4 Data Usability Assessment	11
5.0 WASTE DISPOSAL INFORMATION	12
6.0 CONCEPTUAL SITE MODEL	12
6.1 Release, Migration Path, and Nature and Extent of Impacts	12
7.0 EXPOSURE PATHWAY ASSESSMENT AND RECEPTOR EVALUATION	13
7.1 Potential Human Receptors and Exposure Pathways	13
7.2 Potential Ecological Receptors and Exposure Pathways	13
8.0 DEMONSTRATION OF ATTAINMENT	15
9.0 PUBLIC NOTICE	15
10.0 SIGNATURES	17
11.0 REFERENCES	18

FIGURES

- Figure 1** Site Location Map
Figure 2 June 22, 2023 One-Time Release Area
Figure 3 Release Area Limits of Excavation

TABLES

- Table 1** Selection of Statewide Health Standards
Table 2 Summary of Soil Sample Analytical Results
Table 3 Summary of Attainment Sample Locations and Depths
Table 4 Summary of Soil Sample Analytical Results - Vapor Intrusion Screening

APPENDICES

Appendix A	Documentation of NIR and Public Notification
Appendix B	Prior Reporting
Appendix C	Photograph Log
Appendix D	Soil Management Plan & Approval
Appendix E	Lab Report for Post-Excavation Soil Sampling
Appendix F	PADEP Systematic Random Sampling Calculation
Appendix G	Disposal Documentation
Appendix H	PADEP Wetland and Geography Mapping

1.0 INTRODUCTION

Langan Engineering and Environmental Services, LLC. (Langan) has prepared this combined Pennsylvania Land Recycling Program Remedial Investigation Report and Final Report (RIR/Final Report) on behalf of the site owner, Bellwether District Holdings, LLC (BDH) formerly known as Philadelphia Energy Solutions Refining and Marketing LLC for a specific release that occurred on June 22, 2023. The release affected a distinct localized area in Right-of-Way (ROW) 3 ("Act 2 Site") of the former Philadelphia Energy Solutions Refinery (the Facility) located at 3144 West Passyunk Avenue in Philadelphia, Pennsylvania (Figure 1). BDH is conducting the remediation of the Act 2 Site impacted by this one-time release that occurred on June 22, 2023.

Refinery operations at the Facility ceased in 2019. At the time of this reporting, portions of the Facility are undergoing site preparation for redevelopment, including removal of remnant subsurface piping associated with former refinery operations. Also, ongoing remediation activities are being conducted at the Facility under the Land Recycling and Environmental Standards Act, the Act of May 19, 1995, P.L. 4, No. 2 (Act 2) by both BDH and Evergreen Resources Group, LLC (Evergreen)¹ in accordance with the 2012 Buyer-Seller Agreement and the 2020 First Amendment to that Agreement.

During site preparation activities for redevelopment and removal of a subsurface pipe on June 22, 2023, a one-time release of approximately 30-40 gallons of petroleum liquids locally affected soils. The release was verbally reported to the Pennsylvania Department of Environmental Protection (PADEP) on June 22, 2023, by the site owner, BDH. Based on a review of past operations in the area, BDH concluded that the piping which was the source of the release was not related to a regulated storage tank system. No waterways were affected by the release.

Following the excavation of visually impacted soils at the Act 2 Site, post-excavation soil samples were collected on July 13, 2023, and August 14, 2023. Locations for sampling within the limits of the excavated area were determined using systematic random sampling as required by 25 Pennsylvania Code Chapter 250 Administration of the Land Recycling Program ("Chapter 250") § 205.703(c). Results for each of the post excavation soil samples collected at each systematic random sampling location were below Non-Residential Statewide Health Standards (SWHS) for

¹ Evergreen Resources Management Operations, a series of Evergreen Resources Group, LLC, is managing the legacy remedial work for Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC ("Evergreen") and Sunoco (R&M), LLC. For clarity, Sunoco, Inc. n/k/a ETC Sunoco Holdings LLC, Sunoco, Inc. (R&M) f/k/a Sunoco (R&M), LLC n/k/a Energy Transfer (R&M), LLC effective 4/19/2021 and Evergreen shall be referred to collectively as "Evergreen" in this Report.

the petroleum hydrocarbon constituents that were analyzed. The post-excavation soil sample analytical results demonstrate attainment of the non-residential SWHS for soil and confirm that the effects of the release did not extend to the groundwater table; therefore, no further action is warranted for groundwater relating to the June 22, 2023, release.

Accordingly, the remediation and subsequent reporting was performed following the procedures and requirements of Act 2. A Notice of Intent to Remediate (NIR) was published in the Philadelphia Inquirer on April 12, 2024, and submitted to the PADEP on April 17, 2024. Notification of Filing of a Final Report was submitted to the PADEP on November 18, 2024, and published in the Philadelphia Inquirer on November 14, 2024. Documentation for the NIR and required notices is included in Appendix A.

1.1 Objectives

The purpose of this report is to document the demonstration of attainment of the Non-Residential SWHS and to obtain a release of environmental liability from the PADEP under the provisions of Pennsylvania Act 2 and the Land Recycling Program. The interim and final response actions taken to address the release were successful at remediating the soil impacts related to the June 22, 2023, release. Considering the analytical results for remedial investigation and post excavation soil samples, attainment of the Non-Residential SWHS for soil has been demonstrated. As presented in greater detail herein, because of the timeliness of the response and remediation of this localized, one-time release and the soil sampling that reveals a separation distance between soil that was removed, and the underlying groundwater table, groundwater is not a media of concern for this release. The data and conclusions supporting the final Act 2 demonstration of attainment of SWHS are further detailed throughout this report.

1.2 Report Organization

This Combined Remedial Investigation/ Final Report is organized into the following major sections:

Section 1.0 - Introduction

Section 2.0 - Site Description

Section 3.0 – Overview of the Release and Investigation/Response Actions

Section 4.0 – Post Excavation Soil Sampling Attainment Sampling

Section 5.0 – Waste Disposal Information

Section 6.0 - Conceptual Site Model

Section 7.0 - Exposure Pathway Assessment and Receptor Evaluation

Section 8.0 – Demonstration of Attainment

Section 9.0 – Public Notification

Section 10.0 – Signatures

Section 11.0 – References

2.0 SITE DESCRIPTION

This section describes the Act 2 Site and vicinity physical features and provides site ownership and operational information. A Site Location Map based on the United States Geological Survey Philadelphia Quadrangle (April 2023) is included as Figure 1, and an aerial Site Plan based on May 14, 2023, Nearmap imagery is included as Figure 2.

2.1 Location of Act 2 Site

The Act 2 Site is located approximately 0.45 miles south of Frontage Road. The four corners of the remediation area are located at the following geographic coordinates:

- Northeast corner N 39°54'49.356" latitude and W 75°11'51.261" longitude.
- Northwest corner N 39°54'49.378" latitude and W 75°11'51.464" longitude.
- Southeast corner N 39°54'49.053" latitude and W 75°11'51.316" longitude.
- Southwest corner N 39°54'49.075" latitude and W 75°11'51.520" longitude.

2.2 Past Operations

The Facility was first used for petroleum related operations as far back as 1866. The Facility produced mainly transportation fuels such as gasoline and diesel fuel, as well as heating fuels, until operations ceased in June 2019. The Act 2 Site is in the former 867 Process Unit area and is also located within the portion of the Facility designated by Evergreen as Area of Interest 2 (AOI 2), known as the Point Breeze Processing Area. AOI 2 was used for petroleum product processing, storage, and contained active docks for loading and offloading refined petroleum products. AOI 2 encompasses approximately 111 acres.

Groundwater and soil contamination related to some of the past Facility operations are being addressed separately under the larger Facility-wide efforts being performed by Evergreen.

2.3 Physical Setting

This section details the physical setting and hydrogeological characteristics of the portion of Facility near the Act 2 Site.

2.3.1 Topography and Drainage

Ground surface elevation at the Act 2 Site at the time of the release was flat due to the broader site wide earthwork. The approximate ground surface elevation prior to construction and the release, ranged from a high of 23 feet above mean sea level (amsl) at the northeast corner to a low of 18 feet amsl at the southern end. This topography at the time was indicative of a soil mound or berm that had been present in this area prior to construction and the release, related to previous Site operations. The closest surface water feature is the Schuylkill River, which is located approximately 1650 feet west of the Act 2 Site. The Schuylkill River flows north to south.

Based on review of historical maps and publicly available reporting through the Evergreen website², much of the land area occupied by the present-day Facility was formerly tidal marsh and lowlands of the Schuylkill River.

2.3.2 Site Geology and Hydrogeology

Langan reviewed previous Facility-specific data and state and federal databases to describe the geologic conditions at the Facility and in the vicinity of the Act 2 Site. Facility-specific geology, as reported in Evergreen's July 2017 Remedial Investigation Report for AOI 2, consists of several units from deep to shallow: Wissahickon formation (bedrock), Farrington Sand unit, Middle/Lower Clay, Trenton Gravel, and recent anthropogenic fill and alluvium. The Middle/Lower Clay separates the shallow and deeper aquifers. Historical investigations conducted at the Facility have primarily focused on two saturated zones, including shallow groundwater (occurring within the Trenton Gravel/alluvium unit) and deep groundwater (occurring within the Farrington Sand unit). The Farrington Sand unit consists of green, brown, orange and/or red, fine gravel and coarse sand that grades upward into medium to fine sands and contains thin layers of silts and clays. The Middle/Lower Clay ranges in thickness from 5 to 65 feet and the Farrington Sand ranges in thickness from 10 to 70 feet across the Facility.

² Evergreen Resources Group, LLC (Evergreen). (2024). *Philadelphia Refinery Legacy Remediation*. <https://phillyrefinerycleanup.info/>.

Shallow groundwater in the vicinity of the Act 2 Site naturally flows to the southwest towards the Schuylkill River, but local groundwater flow conditions vary across the Facility and are influenced by active fluids recovery systems, bulkheads along the Schuylkill River, and tidal influences of the Schuylkill River marshes and creeks.

Based on a review of gauging data provided in the July 2017 RIR for AOI 2, monitoring wells near the Act 2 Site reveal an average groundwater elevation of 1.44 feet (ft). Wells in the area were last gauged twice in 2016 including monitoring wells S-311, S-360, S-361, S-362, and S-363. The location of these wells is shown on Figures 7 and 8 in the July 2017 RIR for AOI 2. A copy of Figures 7 and 8 are included in Appendix B. In the July 27, 2023, Groundwater Remediation Status Report by Evergreen, a water table groundwater contour map was included as Figure 4 of the Status Report. The water table groundwater contours showed groundwater elevations within the approximate area of the release between 1 and 0 feet. Groundwater elevations for wells closer to the immediate area of the release were not included in the groundwater elevations depicted on Figure 4 of the Status Report. For completeness, a copy of Figure 4 from the Status Report is included in Appendix B.

3.0 OVERVIEW OF THE RELEASE AND INVESTIGATION/RESPONSE ACTIONS

On June 22, 2023, Langan was on site to observe subsurface pipe removal and demolition activities on BDH's behalf. Accordingly, Langan was on site as the release occurred and was able to promptly observe conditions. The area of the release is shown on Figure 2. A photo log of observed conditions at the Act 2 Site and the associated response actions is included in Appendix C.

During pipe removal, while the pipe was still partially underground, approximately 9 gallons of a water and petroleum product mixture was released into the excavated area below the pipe through a defect in the pipe. The released liquids were visibly observed to be locally contained at the piping defect area within the excavation below the pipe. Based on field observations, Langan estimated the 9 gallons of liquid mixture to be comprised of approximately 8 gallons of water and 1 gallon of petroleum product.

Following the release, Environmental Maintenance Company (EMC), a subcontractor for James D. Morrissey (JDM), the company contracted for removing the pipe and its contents, performed immediate response actions which included the removal of pooled liquids within the area via vacuum truck and placing oil absorbent pads in the area. After the liquid was removed, EMC directed an operator to remove the remaining pipe within the vicinity of the work area to determine the origin of the release. As the operator uncovered more piping to the north, approximately 30 to 40 more gallons (in addition to the approximately 9 gallons originally released) of a water and petroleum product mixture was released in the same area and immediately vacuumed from the localized area of the release. EMC was able to determine the origin of the release as a 4-inch oval-shaped hole on the underside of the pipe near the elbow bend of the pipe. Photographs of the release and the immediate response actions taken are included in Appendix C.

In summary, a total of approximately 40-50 gallons of petroleum product and other liquids were estimated to have been released in the exaction area during these events on June 22, 2023.

The pipe in the release area was removed and staged in the Lot 9 scrap metal staging area. Before removing additional piping in this area, precautions were taken such as pumping residual liquids from the pipes and placing poly sheeting underneath them before removal. The liquids removed from the release area were contained in frac tanks on site. Details on the disposal of the contained liquid in the frac tanks on site is included in Section 5.0.

Impacted soil from the June 22, 2023, release area was excavated on June 22, July 11, and July 13, 2023. Langan oversaw the excavation of impacted soils performed by JDM. Langan guided JDM on the extent of the excavation based on field observations (odor or staining) and field screening of soils for volatile organic compounds (VOCs) using a photoionization detector (PID). A total of 165 cubic yards (CY) of impacted soils were removed from the release area. The excavated soil was staged on and covered by plastic sheeting in the Temporary Stockpile Staging Area (TSSA) in Lot 9. The location of the TSSA is shown on Figure 2. The impacted soil that was staged in the TSSA was transported off-site for disposal on March 19 and 20, 2024. Details on the disposal of the impacted soil staged in the TSSA is included in Section 5.0.

Post-excavation soil sampling was conducted on July 14 and August 15, 2023, by Langan following the PADEP Systematic Random Sampling Workbook guidance in accordance with 25 Pa. Code § 250.707 as described in Section 4.0. After evaluating post excavation soil sample

results in support of a final demonstration of attainment of Act 2 SWHS (discussed in Section 7.0), the excavation was backfilled with soil sourced from Lot 11 (at the Facility) that was eligible for reuse as described in the *June 2020 Soil Management Plan* prepared by Terraphase Engineering Inc. for BDH. The SMP was filed with the PADEP in 2020 and is established as the protocol for soil reuse during redevelopment activities at the site. The soil type used as backfill was Category A described as soil with concentrations of target analytes that are below non-residential soil direct contact and soil-to groundwater Medium-Specific Concentrations (MSCs). A copy of the Soil Management Plan is included as Appendix D.

4.0 POST EXCAVATION ATTAINMENT SAMPLING

Langan sampled soil at the excavation limits in July and August 2023 to demonstrate attainment of non-residential SWHS at the Act 2 Site. These attainment sampling activities were completed in accordance with Act 2 and the Land Recycling Program Technical Guidance Manual, dated January 2019, as amended March 26, 2021 (TGM). The ensuing sections summarize the selection of the appropriate remediation standards, the attainment sampling procedures, analytical results and associated quality assurance/quality control (QA/QC) measures.

4.1 Selection of Remediation Standards

Soil analytical results from samples collected on July 14 and August 15, 2023, were compared to the current PADEP non-residential SWHS. In accordance with the methodology described in Chapter 250 §305 for soil, Langan selected the appropriate MSC for each petroleum compound that was analyzed. As a part of the larger, ongoing Act 2 remediation at the Facility, Evergreen, the United States Environmental Protection Agency (USEPA) and the PADEP have developed a specific target list of regulated substances that will be considered during remedial decision-making. A copy of the Philadelphia Refinery Target Compound List and Associated Act 2 Soil Cleanup Standards is included in Appendix E. The soil analytical results discussed in this report were compared to the following:

- PADEP non-residential direct contact (0-2 feet below ground surface [ft bgs]) MSCs as published in the second and third MSC column of Chapter 250, Appendix A, Tables 3a (organics) and 4a (inorganics).
- PADEP non-residential direct contact (2-15 ft bgs) MSCs as published in the second and third MSC column of Chapter 250, Appendix A, Tables 3a (organics) and 4a (inorganics).

- PADEP non-residential Soil-to-Groundwater MSCs for a Used Aquifer (Total Dissolved Solids (TDS) < 2,500 milligrams per liter [mg/L]), which is the higher of the 100x Groundwater and Generic Soil-to-Groundwater MSCs as published in the third and fourth MSC columns of Chapter 250, Appendix A, Tables 3b (organics) and 4b (inorganics).
- PADEP non-residential Soil Statewide Health Standard vapor intrusion screening values.

As an initial screening, soil analytical results were compared to both the direct contact and soil-to-groundwater MSCs for soils. Soil samples were collected above 15 ft bgs so both direct contact and soil-to-groundwater MSCs were initially considered as applicable remediation standards. After the initial screening, the more stringent (lower value) of the direct contact and soil-to-groundwater MSCs were selected as the appropriate “non-residential SWHS” (SWHS MSC) comparison criterion for each petroleum compound analyzed. Table 1 provides a comparison of the screening value options and the selected SWHS values that are further detailed in Table 2. Soil sample analytical results for demonstrating attainment of the selected non-residential SWHS are discussed in the next section.

4.2 Attainment Sampling

On July 14, 2023, fourteen soil samples were collected from the Act 2 Site excavation. Sample locations were determined using the PADEP Systematic Random Sampling Workbook in accordance with 25 Pa. Code § 250.707. The Systematic Random Sampling Workbook uses a triangular systematic random sampling approach that utilizes a grid sampling design with a random starting point to provide better coverage of the soil area than simple random sampling. The spreadsheet was designed for a 3-dimensional feature but because the excavation is considered a 2-dimensional sampling scenario, multiple iterations of the Systematic Random Sampling Workbook were generated to accommodate for the sidewalls, base, and dimensions of the excavation. The depths of the excavation were based on visible impacts observed and extended to a maximum depth of 7 ft bgs. The post-excavation sample depths ranged between 1.5 ft bgs to 7 ft bgs. The final iteration of the Systematic Random Sampling Workbook and sample locations are included in Appendix F.

Fourteen soil samples collected on July 14, 2023, were analyzed for the Philadelphia Refinery Target Compound List of select volatile organic compounds (VOCs) by USEPA Method 8260D, select semi-VOCs (SVOCs) by USEPA 8270E, and lead by USEPA Method 3050B by Alpha Analytical, Massachusetts laboratory (PADEP laboratory certification number 68-03671). A copy of the Philadelphia Refinery Target Compound List is included as Table 1 in Appendix E.

On August 15, 2023, fourteen soil samples were again collected from the same locations previously sampled on July 14, 2023, to re-analyze them for 1,2-Dibromoethane (EDB) because of elevated method detection limits (MDL) for that constituent in the initial fourteen samples collected on July 14, 2023 (further detailed in Section 4.3 below). Before collecting the samples from the pre-determined locations on August 15, 2023, the top six inches of soil cover was removed from the four sides and the bottom of the excavation, where applicable, to re-collect representative soil samples that had not been directly exposed to the atmosphere since the prior samples were collected in July. Due to on-site conditions, sandy soil and saturation, the sidewall samples were accessed with a hand auger and bottom samples were accessed using an excavator bucket. Slight variations in sample depths were caused by variable access conditions. Sample locations were biased towards elevated PID readings. The July 14, 2023, sample and August 15, 2023, re-sample locations are depicted on Figure 3 and depths are detailed in Table 3. Samples re-collected on August 15, 2023, were re-analyzed for EDB to achieve desired detection limits via USEPA Method SW846 8011 by Eurofins Lancaster Laboratories Environment Testing, LLC, Pennsylvania laboratory (PADEP laboratory certification number 019-006).

Duplicate and field blank samples were collected during the attainment sampling. Quality assurance/quality control measures are discussed in Section 4.4 below.

4.3 Attainment Sampling Results

The soil analytical results were screened against the applicable non-residential MSCs and Non-residential SWHS Vapor Intrusion Screening Values (see Section 4.4). The soil sample analytical results are summarized in Table 2 and Table 4. A summary of the analytical results findings is provided below:

- None of the VOCs from the Philadelphia Refinery Target Compound List were detected at concentrations greater than the non-residential MSCs.
 - For certain samples (10 out of the 14 samples initially analyzed, including the duplicate) collected on July 14, 2023, the reported MDL for EDB was above the non-residential MSC. On August 15, 2023, 14 samples were recollected, and re-analyzed for EDB to achieve desired MDLs and analytical results were all below the non-residential MSC.
- None of the SVOCs from the Philadelphia Refinery Target Compound List were detected at concentrations greater than the non-residential MSCs.

- Lead was not detected at concentrations greater than the non-residential MSCs.

4.4 Post-Excavation Soil Sample Vapor Intrusion Evaluation

The soil analytical results were screened against the applicable PADEP Act 2 Non-residential SWHS Vapor Intrusion Screening Values for soil. The soil sample analytical results are compared to VI screening values are summarized in Table 4. A summary of the findings is provided below:

- Benzene was detected above the SWHS Vapor Intrusion Screening Value of 0.13 mg/kg in the following samples collected on July 14, 2023:
 - PEB-C_4.5-5.0 at 0.22 mg/kg
 - DUP-1 (parent sample PEB-D_4.5-5.0) at 0.3 mg/kg
 - PEB- H_4.5-5.0 at 0.18 mg/kg
 - PEB-I_4.5-5.0 at 0.21 mg/kg
 - PEB-J_6.0-6.5 at 0.19 mg/kg.

4.5 Quality Assurance and Quality Control

Quality assurance/quality control (QA/QC) measures were taken, and samples were collected during the characterization and response action activities to assure data of sufficient quality and usability. Quality assurance/quality control measures included equipment decontamination and calibration, sample preservation, chain of custody documentation, and data usability review and assessment. The QA/QC analytical measures included the collection and analysis of duplicate samples and field blanks:

- Field duplicate samples were collected at the same time as the original field sample at a rate of at least 1 per 20 field samples for soil. The results of the duplicate samples are summarized in Table 2. Duplicate results were similar to the parent sample results, indicating good laboratory performance.
- Field blank samples were collected during soil sampling events by pouring laboratory-provided deionized water over a decontaminated sampling apparatus directly into the appropriate laboratory-supplied bottles. Field blank samples were collected at a rate of at least 1 per 20 field samples. The results of the field blank samples are summarized in Table 2. Field blanks were non-detect for the compounds included in the Philadelphia Refinery Target Compound List.

4.5.1 Equipment Decontamination and Calibration

The equipment used to collect field measurements, such as the PIDs, were calibrated in the field before use each day following the manufacturer's instructions. All non-dedicated sampling equipment was decontaminated during sampling prior to and after its use to prevent potential for cross-contamination. The sampling equipment utilized for sample collection included stainless steel hand trowels, and stainless-steel hand augers. Equipment was decontaminated between use and at the start of each day using a three-step wash. The decontamination procedure included scrubbing the equipment vigorously with a solution of laboratory-grade detergent and tap water, then rinsing the equipment with tap water followed by a final deionized water rinse.

4.5.2 Laboratory Quality Assurance/Quality Control

The analytical laboratory furnished complete written reports for all soil analytical results to document quality control. Analyses were performed using USEPA or PADEP-approved methodologies. Laboratory data qualifications are summarized in the conformance summaries included with the laboratory deliverable packages, which are provided in Appendix E. Specific laboratory analytical qualifiers are included in the data tables next to the respective sample results. Laboratory analytical data have been summarized and are presented in Table 2 and Table 4.

4.5.3 Documentation

Chain-of-custody protocol was maintained throughout the sampling program. A chain-of-custody form accompanied all samples from the field to the laboratory. The chain-of-custody also documented the specific analytical methods and reporting for each sample. Copies of the chains-of-custody are included with the laboratory analytical data packages provided in Appendix E.

4.5.4 Data Usability Assessment

A Data Usability Assessment (DUA) was completed by Langan's internal Data Validation team and as guided by 25 Pa. Code § 250.701. The data for both the July 14, 2023, and the August 15, 2023, sampling is considered of sufficient quality and usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%. The required spreadsheets and memorandum detailing the validation

outcome for the DUA are included in Appendix E.

5.0 WASTE DISPOSAL INFORMATION

Following the release, the water and petroleum product mixture were removed from the release area and contained in frac tanks on site. The water was pumped into an assigned water tank, and was treated via the on-site Point Breeze wastewater treatment plant (PB WWTP) system on December 15, 2023. The petroleum product was disposed of by VLS Environmental Solutions in Lancaster, Pennsylvania on April 18 and 19, 2024 and by Separation and Recovery Systems in West Deptford, New Jersey on May 1, 2024. Copies of the associated manifests and Bill of Ladings are included in Appendix G.

Additionally, the excavated soil from the release area was staged on and covered by plastic sheeting in the TSSA in Lot 9. The location of the TSSA is shown on Figure 2. The impacted soil that was staged in the TSSA was transported off-site for disposal on March 19 and 20, 2024. The excavated soils from the release area were included in the off-site transport of a larger volume of various impacted soil staged at the TSSA from the separate construction redevelopment project. Soil was transported to Clean Earth of New Castle in New Castle, Delaware. A copy of the TSSA Transportation and Disposal Tracking Sheet, the signed manifest and the Clean Earth Profile Detail Report are included in Appendix G.

6.0 CONCEPTUAL SITE MODEL

The Conceptual Site Model provides physical site conditions (e.g., geology and hydrogeology), the nature and extent of the release and effects, and consideration of sources and potential exposure pathways. The physical setting of the Facility is described in more detail in Section 2.3 above.

6.1 Release, Migration Path, and Nature and Extent of Impacts

The release involved approximately 40-50 gallons of a water and petroleum product mixture from a defect discovered on the underside of underground piping associated with former refinery operations. The pipe defect was identified during pipe removal activities at the Facility. The extent of the release was limited and restricted by topography and extents of excavation activities associated with the release area. The Act 2 Site is shown on Figure 3.

Immediate response actions were taken following the discovery of the release to effectively remove the visible extents of the soils affected and included the removal of pooled petroleum products and other liquids within the area via vacuum truck. After the petroleum products and other liquids were removed, the remaining pipe, determined to be the origin of the release, was removed along with surrounding affected soils. The post excavation soil sample results document the effectiveness of the cleanup actions and demonstrate that the impacts did not extend to groundwater, and support attainment of the non-residential MSCs for soils affected by the release.

7.0 EXPOSURE PATHWAY ASSESSMENT AND RECEPTOR EVALUATION

The following discussion provides a summary of an exposure pathway assessment performed to determine if complete exposure pathways may exist between known Act 2 Site constituents of concern and identified potential receptors.

7.1 Potential Human Receptors and Exposure Pathways

Response actions and cleanup via excavation and removal of soil impacts was completed and supports the demonstration of attainment of non-residential soil MSCs. Potential human health exposures related to the Act 2 Site release area are not a concern.

7.2 Potential Ecological Receptors and Exposure Pathways

Langan completed an evaluation of potential ecological receptors in accordance with 25 Pa. Code § 250.311. As a first step, Langan determined whether potential ecological receptors are present at the Act 2 Site. The PADEP defines applicable ecological receptors as:

- a) Individuals of threatened or endangered species as designated by the United States Fish and Wildlife Service (US FWS) under the Endangered Species Act (16 U.S.C.A. § § 1531—1544).

Langan completed a search of the Pennsylvania Natural Heritage Program (PNHP) inventory of threatened and endangered species and species of special concern which involves records via the Pennsylvania Natural Diversity Inventory (PNDI) database of rare and threatened species in Pennsylvania. PNHP compiles records retained by three state governmental agencies, including the Pennsylvania Game Commission (PGC), the

Pennsylvania Department of Conservation and Natural Resources (DCNR), and the Pennsylvania Fish and Boat Commission (PFBC). Based on the PNHP map, no PGC, PFBC or DCNR threatened or endangered species or species of special concern are mapped on or adjacent to the Act 2 Site.

- b) Exceptional value wetlands as defined in § 105.17 (relating to wetlands).

According to the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory mapping application, wetlands are not located at the Act 2 Site release area. The USFWS National Wetlands Inventory map is included as part of Appendix H. Wetlands are not potentially affected by the Act 2 Site.

- c) Habitats of concern.

The PNHP map also includes Natural Heritage Areas, which are core habitats and supporting landscapes for species of special concern. Natural Heritage Areas are not mapped on or adjacent to the Act 2 Site. According to the DCNR Conservation Planning Report, which is included as part of Appendix H, supporting landscape areas were not identified on the Act 2 Site. No additional conservation planning areas of interest were identified.

Copies of the USFWS national wetlands map, the PNHP map and the DCNR Conservation Planning Report are included as Appendix H.

Further ecological evaluation is not warranted for the Act 2 Site pursuant to Title 25, Chapter 250, Section 311(b) because the following information supports a determination that no additional evaluation is required:

- The area of impacted soil is less than two acres and the documented effects of the release and extents had not sufficiently migrated to affect surface water, sediments, and/or groundwater.
- The release area of impacted soil currently does not have features such as buildings, parking lots or graveled paved areas, and unpaved roadways. The future design plans for the larger Facility will feature these design elements in this area, which would eliminate potential specific exposure pathways, such as soil exposures (250.311.b.3).

8.0 DEMONSTRATION OF ATTAINMENT

As presented in Section 4.2, the post-excavation sample analytical results for samples collected after immediate response and excavation activities in the Act 2 Site on June 22, 2023, demonstrate attainment of non-residential SWHS (Soil MSCs) for Philadelphia Refinery Target Compound List of constituents analyzed in post excavation soil samples. Post-excavation soil samples were collected at locations generated using systematic random sampling methods consistent with 25 Pennsylvania Code § 205.703. The samples are considered systematically random and representative both horizontally and vertically of the excavated area. The maximum excavation depth was between 4 and 6 ft bgs, and unsaturated, post-excavation soil samples were collected at depths ranging between 1.5 ft bgs and 7 ft bgs. The post-excavation soil sample analytical results not only demonstrate attainment of the non-residential SWHS but also confirm that the remediated Act 2 Site soils did not extend to the groundwater table which is documented to be encountered at elevations of about 1.44 ft in the vicinity of the release area.

As an institutional control, prior to their construction and occupancy, on-facility buildings which could be occupied in the future will be subject to vapor intrusion investigation and evaluation to determine if conditions (i.e., volatilization of COPC from soil, groundwater, and/or light non-aqueous phase liquid) could pose an unacceptable risk to occupants. As needed, vapor mitigation systems will be incorporated into the design and construction of such buildings as engineering controls where potentially unacceptable vapor intrusion risks are identified. These activities and use limitations will eliminate the potential for future unacceptable exposures to COPC at the Site via vapor intrusion.

Langan for BDH hereby submits this Combined Remedial Investigation Report/Final Act 2 Report for Soil to the Pennsylvania Department of Environmental Protection, Southeast Regional Office, for their review and approval in demonstrating attainment of the non-residential SWHS under the Land Recycling and Environmental Remediation Standards Act. This submittal and request for approval is made under the provision of the Land Recycling and Environmental Remediation Standards Act, the Act of May 19, 1995, P.L. #4, No. 2.

9.0 PUBLIC NOTICE

The public was notified of the submission of a NIR by publication of a notice in the April 12, 2024, issue of the Philadelphia Inquirer. The public was notified of the Final Report submission by

publication of a notice in the November 14, 2024, issue of the Philadelphia Inquirer. The City of Philadelphia was notified of BDH's submission of a NIR by certified letter dated and sent on April 17, 2024, and the submission of the RI/Final Report by certified letter dated and sent November 12, 2024. A copy of the letter sent to the city and the proof of publication are included in Appendix A, with the full NIR submission and the Final Report publication.

10.0 SIGNATURES

By affixing my seal to this letter, I am certifying that the information within the report is true and correct. I further certify I am licensed to practice in the Commonwealth of Pennsylvania and that it is within my professional expertise to verify the correctness of the information.

A handwritten signature in black ink that reads "Jeffrey A. Smith". The signature is written in a cursive style with a large initial "J" and "S".

Jeffrey A. Smith, P.G.
Senior Associate
Pennsylvania P.G. No. PG002755G

10.0 SIGNATURES

By affixing my seal to this letter, I am certifying that the information within the report is true and correct. I further certify I am licensed to practice in the Commonwealth of Pennsylvania and that it is within my professional expertise to verify the correctness of the information.



Jeffrey A. Smith, P.G.
Senior Associate
Pennsylvania P.G. No. PG002755G

11.0 REFERENCES

Pennsylvania Department of Conservation and Natural Resources (PA DCNR). Bureau of Topographic and Geologic Survey. Pennsylvania Groundwater Information System. <http://www.dcnr.pa.gov/Conservation/Water/Groundwater/PAGroundwaterInformationSystem/Pages/default.aspx>.

Pennsylvania Department of Environmental Protection (PADEP). 2002. Pennsylvania's Land Recycling Program Technical Guidance Manual, Document # 253-0300-100.

PADEP. eMapPA. <http://www.depgis.state.pa.us/emappa/>.

Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2). 2001. 25 Pa. Code Chapter 250.

PNHP Pennsylvania Conservation Explorer – Conservation Planning and PNDI Environmental Review, <https://conservationexplorer.dcnr.pa.gov/>.

U.S. Department of Agriculture. Natural Resources Conservation Service (NRCS). National Cooperative Soil Survey. Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

US Fish & Wildlife Service. National Wetlands Inventory. <http://www.fws.gov/wetlands/Data/Mapper.html>

Langan Engineering and Environmental Services, Inc. Remedial Investigation Report, Area of Interest 2. Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC. July 20, 2017.



LANGAN
 1818 Market Street, Suite 3300
 Philadelphia, PA 19103-3638
 T: 215.845.8946 F: 215.845.8901 www.langan.com

Langan Engineering & Environmental Services, LLC
 Langan Engineering, Environmental, Surveying and
 Landscape Architecture, D.P.C.
 Langan International LLC
 Collectively known as Langan

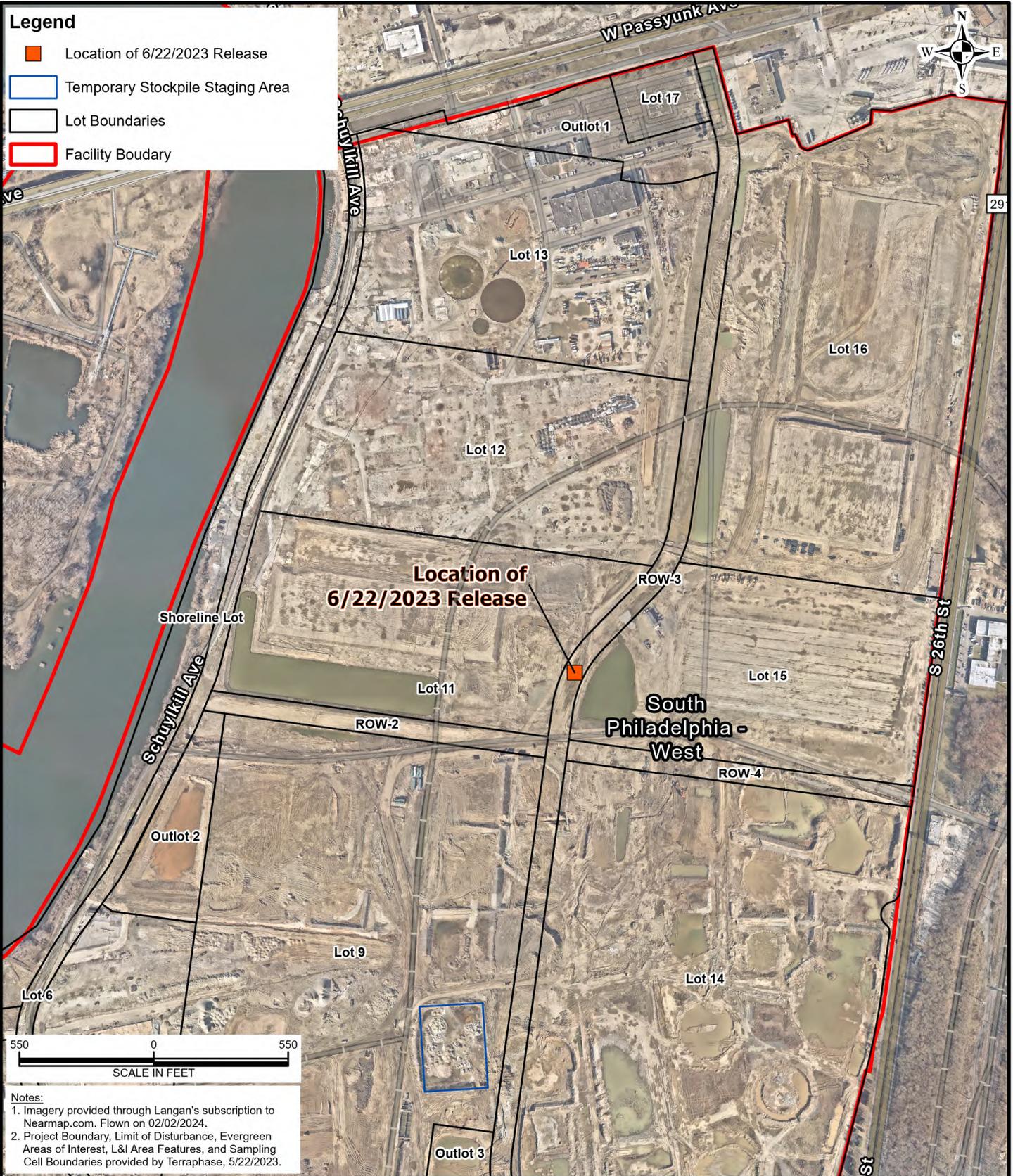
Project
BELLWETHER DISTRICT HOLDINGS, LLC
 PHILADELPHIA
 PHILADELPHIA COUNTY PENNSYLVANIA

Figure Title
SITE LOCATION MAP

Project No. 220181801	Figure 1
Date 9/23/2024	
Scale 1"=2,000'	
Drawn By CH	

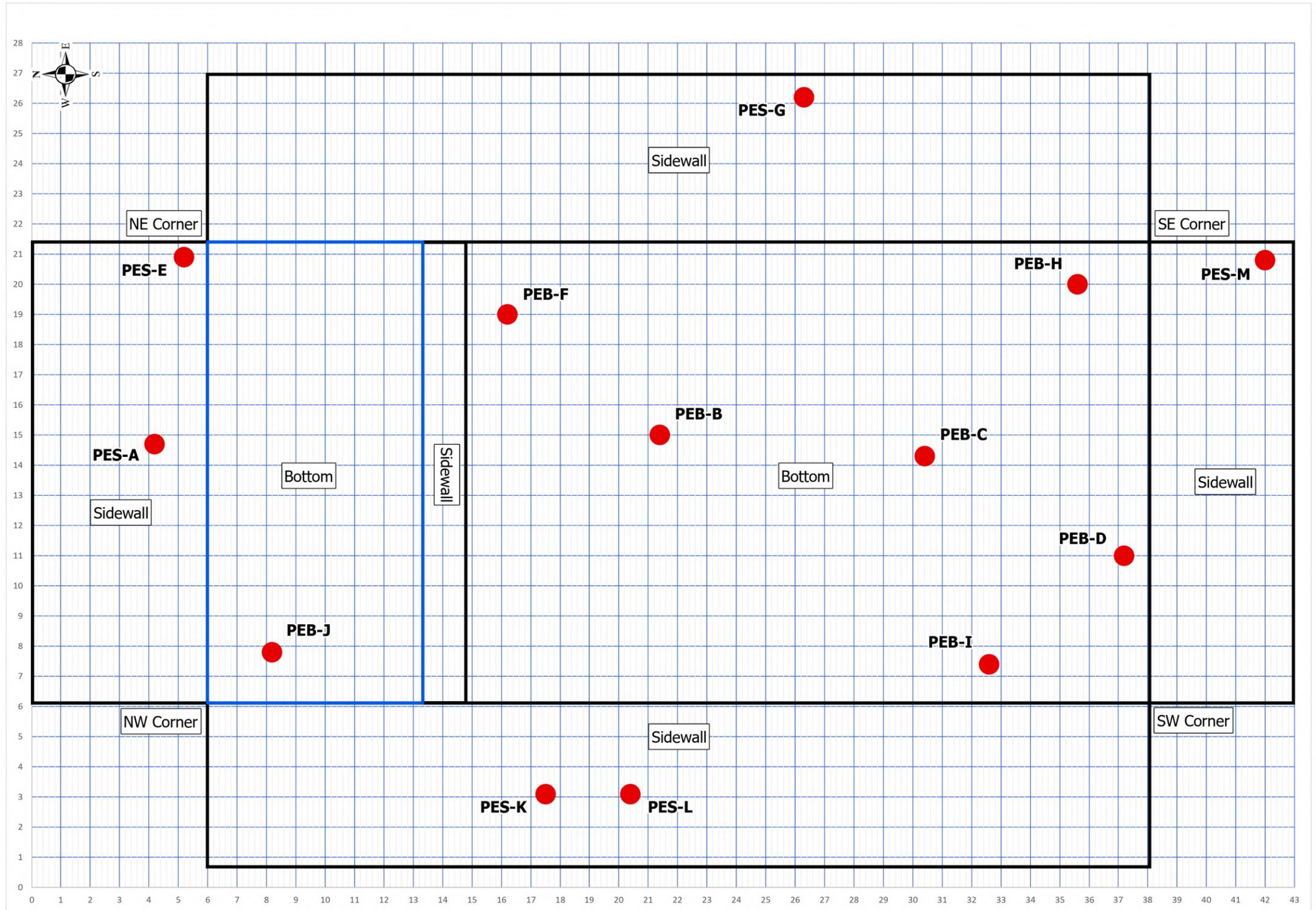
Legend

- Location of 6/22/2023 Release
- Temporary Stockpile Staging Area
- Lot Boundaries
- Facility Boundary



- Notes:**
1. Imagery provided through Langan's subscription to Nearmap.com. Flown on 02/02/2024.
 2. Project Boundary, Limit of Disturbance, Evergreen Areas of Interest, L&I Area Features, and Sampling Cell Boundaries provided by Terraphase, 5/22/2023.

<p>LANGAN 1818 Market Street, Suite 3300 Philadelphia, PA 19103-3638 T: 215.845.8946 F: 215.845.8901 www.langan.com</p> <p>Langan Engineering & Environmental Services, LLC Langan Engineering, Environmental, Surveying and Landscape Architecture, D.P.C. Langan International LLC Collectively known as Langan</p>	<p>Project BELLWETHER DISTRICT HOLDINGS, LLC PHILADELPHIA PHILADELPHIA COUNTY PENNSYLVANIA</p>	<p>Figure Title JUNE 22, 2023 ONE-TIME RELEASE AREA</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Project No. 220181801</td> <td rowspan="4" style="text-align: center; vertical-align: middle; font-size: 2em;">2</td> </tr> <tr> <td>Date 9/23/2024</td> </tr> <tr> <td>Scale 1"=550'</td> </tr> <tr> <td>Drawn By CH</td> </tr> </table>	Project No. 220181801	2	Date 9/23/2024	Scale 1"=550'	Drawn By CH
Project No. 220181801	2							
Date 9/23/2024								
Scale 1"=550'								
Drawn By CH								



Legend

- Location of 6/22/2023 Release
- Sample Location
- Excavation Extent
- Facility Boundary
- Lot Boundaries
- Excavation Area at 6 Feet Below Ground Surface

Notes:
 1. Imagery provided through Langan's subscription to Nearmap.com. Flown on 5/14/2023.
 2. Project Boundary, Limit of Disturbance, Evergreen Areas of Interest, and L&I Area Features provided by Terraphase, 5/22/2023.

LANGAN

1818 Market Street, Suite 3300
 Philadelphia, PA 19103-3638
 T: 215.845.8946 F: 215.845.8901 www.langan.com

Langan Engineering & Environmental Services, LLC
 Langan Engineering, Environmental, Surveying and
 Landscape Architecture, D.P.C.
 Langan International LLC
 Collectively known as Langan

Project

**BELLWETHER DISTRICT
 HOLDINGS, LLC**

PHILADELPHIA

PHILADELPHIA COUNTY PENNSYLVANIA

Drawing Title

**RELEASE AREA LIMITS
 OF EXCAVATION
 AND SAMPLE
 LOCATION MAP**

Project No.
220181801

Date
6/21/2024

Scale
See Map

Drawn By
SH

Figure

3

Table 1
Selection of Statewide Health Standards
Bellwether District Holdings, LLC.
Philadelphia, PA

Compound Name	PADEP Non-Residential Direct Contact 0-2 Ft	PADEP Non-Residential Direct Contact 2-15 Ft	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated 100X MSC	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated Generic Value
Benzene	280	330	0.5	0.13
1,2-Dibromoethane (EDB)	3.7	4.2	0.005	0.0012
1,2-Dichloroethane (EDC)	85	98	0.5	0.1
Ethylbenzene	880	1000	70	46
Isopropylbenzene	10000	10000	350	2500
Methyl Tertiary Butyl Ether (MTBE)	8500	9800	2	0.28
Naphthalene	66	77	10	25
Toluene	10000	10000	100	44
1,2,4-Trimethylbenzene	4700	5400	53	300
1,3,5-Trimethylbenzene	4700	5400	53	93
Xylenes (Total)	7900	9100	1000	990
Anthracene	190000	190000	6.6	350
Benzo(a)anthracene	130	190000	0.39	340
Benzo(a)pyrene	91	190000	0.02	46
Benzo(b)fluoranthene	76	190000	0.055	610
Benzo(g,h,i)perylene	190000	190000	0.026	180
Chrysene	760	190000	0.19	230
Fluorene	130000	190000	190	3800
Phenanthrene	190000	190000	110	10000
Pyrene	96000	190000	13	2200
Lead	1000	190000	0.5	450

Bold represents the Non-Residential Statewide Health Standards (SWHS) used.

Table 2
Summary of Soil Sample Analytical Results
Post Excavation Soil Sampling
Bellwether District Holdings, LLC.
Philadelphia, PA

Analyte	CAS Number	PADEP Non-Residential Direct Contact 0-2 Ft	PADEP Non-Residential Direct Contact 2-15 Ft	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated	0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					
					PEB-B					PEB-C					PEB-D					PEB-D					
					PEB-B 4.5-5.0_071423					PEB-C 4.5-5.0_071423					PEB-D 4.5-5.0_071423					DUP-1_071423					
					Sample Name					Sample Name					Sample Name					Sample Name					
					Sample Date					Sample Date					Sample Date					Sample Date					
					Sample Depth					Sample Depth					Sample Depth					Sample Depth					
4.5-5					4.5-5					4.5-5					4.5-5										
Saturation					Saturation					Saturation					Saturation										
Unsaturated					Unsaturated					Unsaturated					Unsaturated										
Unit					Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	
Volatile Organic Compounds																									
1,2,4-Trimethylbenzene	95-63-6	4700	5400	300	mg/kg	0.91	J	0.021	0.12	1	12	J	0.02	0.12	1	1.2	J	0.02	0.12	1	2.6	J	0.018	0.11	1
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	3.7	4.2	0.005	mg/kg	ND	U	0.00028	0.00048	1	ND	U	0.017	0.03	1	ND	U	0.018	0.03	1	ND	U	0.016	0.027	1
1,2-Dichloroethane	107-06-2	85	98	0.5	mg/kg	ND	U	0.016	0.062	1	ND	U	0.015	0.059	1	ND	U	0.015	0.06	1	ND	U	0.014	0.054	1
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	4700	5400	93	mg/kg	0.28		0.012	0.12	1	3.7	J	0.011	0.12	1	0.4	J	0.012	0.12	1	0.88	J	0.01	0.11	1
Benzene	71-43-2	280	330	0.5	mg/kg	0.065		0.01	0.031	1	0.22	J	0.0099	0.03	1	0.082	J	0.01	0.03	1	0.3	J	0.009	0.027	1
Ethylbenzene	100-41-4	880	1000	70	mg/kg	0.55		0.0088	0.062	1	6.7	J	0.0084	0.059	1	0.69	J	0.0085	0.06	1	2.2	J	0.0077	0.054	1
Isopropylbenzene (Cumene)	98-82-8	10000	10000	2500	mg/kg	0.79		0.0068	0.062	1	3.3	J	0.0065	0.059	1	1.2	J	0.0065	0.06	1	3.9	J	0.0059	0.054	1
M,P-Xylene	179601-23-1	NS	NS	NS	mg/kg	0.22		0.035	0.12	1	4.2	J	0.033	0.12	1	0.64	J	0.034	0.12	1	1.9	J	0.03	0.11	1
Naphthalene	91-20-3	66	77	25	mg/kg	1.7		0.04	0.25	1	9	J	0.039	0.24	1	0.59	J	0.039	0.24	1	1.4	J	0.035	0.22	1
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	NS	mg/kg	0.036	J	0.018	0.062	1	0.17	J	0.017	0.059	1	0.14	J	0.017	0.06	1	0.33	J	0.016	0.054	1
Tert-Butyl Methyl Ether	1634-04-4	8500	9800	2	mg/kg	0.00039	J	0.00019	0.0019	1	ND	U	0.012	0.12	1	ND	U	0.012	0.12	1	ND	U	0.011	0.11	1
Toluene	108-88-3	10000	10000	100	mg/kg	0.034	J	0.034	0.062	1	0.043	J	0.032	0.059	1	0.057	J	0.032	0.06	1	0.11	J	0.03	0.054	1
Total Xylenes	1330-20-7	7900	9100	1000	mg/kg	0.26	J	0.018	0.062	1	4.4	J	0.017	0.059	1	0.78	J	0.017	0.06	1	2.2	J	0.016	0.054	1
Semi-Volatile Organic Compounds																									
Anthracene	120-12-7	190000	190000	350	mg/kg	0.67		0.19	0.57	5	1.1		0.18	0.56	5	0.37	J	0.038	0.12	1	0.048	J	0.037	0.11	1
Benzo(a)anthracene	56-55-3	130	190000	340	mg/kg	0.22	J	0.11	0.57	5	0.29	J	0.1	0.56	5	0.29	J	0.022	0.12	1	0.026	J	0.021	0.11	1
Benzo(a)pyrene	50-32-8	91	190000	46	mg/kg	ND	U	0.23	0.76	5	ND	U	0.23	0.75	5	0.14	J	0.047	0.15	1	ND	U	0.046	0.15	1
Benzo(b)fluoranthene	205-99-2	76	190000	170	mg/kg	ND	U	0.16	0.57	5	0.2	J	0.16	0.56	5	0.16		0.032	0.12	1	ND	U	0.032	0.11	1
Benzo(g,h,i)Perylene	191-24-2	190000	190000	180	mg/kg	ND	U	0.11	0.76	5	0.14	J	0.11	0.75	5	0.079	J	0.023	0.15	1	ND	U	0.022	0.15	1
Chrysene	218-01-9	760	190000	230	mg/kg	0.42	J	0.1	0.57	5	0.5	J	0.097	0.56	5	0.43	J	0.02	0.12	1	0.069	J	0.02	0.11	1
Fluorene	86-73-7	130000	190000	3800	mg/kg	2.8		0.093	0.96	5	4.7		0.091	0.93	5	1.5	J	0.019	0.19	1	0.24	J	0.018	0.19	1
Phenanthrene	85-01-8	190000	190000	10000	mg/kg	6.1		0.12	0.57	5	9.8		0.11	0.56	5	2.8	J	0.023	0.12	1	0.62	J	0.023	0.11	1
Pyrene	129-00-0	96000	190000	2200	mg/kg	0.78		0.095	0.57	5	1.2		0.093	0.56	5	0.63	J	0.019	0.12	1	0.064	J	0.019	0.11	1
Metals																									
Lead	7439-92-1	1000	190000	450	mg/kg	24.4		0.119	2.22	1	9.96		0.114	2.14	1	25.3		0.121	2.26	1	42.1		0.118	2.21	1
General Chemistry																									
Solids, Percent	SOLID	NS	NS	NS	Percent	86.7		0	0	1	88.7		0	0	1	84.7		0	0	1	87.5		0	0	1

Table 2
Summary of Soil Sample Analytical Results
Post Excavation Soil Sampling
Bellwether District Holdings, LLC.
Philadelphia, PA

Analyte	CAS Number	PADEP Non-Residential Direct Contact 0-2 Ft	PADEP Non-Residential Direct Contact 2-15 Ft	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated	0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					
					PEB-F					PEB-H					PEB-I					PEB-J					
					PEB-F_4.5-5.0_071423					PEB-H_4.5-5.0_071423					PEB-I_4.5-5.0_071423					PEB-J_6.0-6.5_071423					
					Sample Date					07/14/2023					07/14/2023					07/14/2023					
					Sample Depth					4.5-5					4.5-5					4.5-5					
					Saturation					Unsaturated					Unsaturated					Unsaturated					
Unit					Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	
Volatile Organic Compounds																									
1,2,4-Trimethylbenzene	95-63-6	4700	5400	300	mg/kg	1.1		0.019	0.11	1	1.9	J	0.033	0.2	1	1.9	J	0.017	0.1	1	0.075	J	0.03	0.18	1
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	3.7	4.2	0.005	mg/kg	ND	U	0.016	0.028	1	ND	U	0.029	0.049	1	ND	U	0.015	0.026	1	ND	U	0.00038	0.00064	1
1,2-Dichloroethane	107-06-2	85	98	0.5	mg/kg	ND	U	0.014	0.056	1	ND	U	0.025	0.098	1	ND	U	0.013	0.052	1	ND	U	0.023	0.088	1
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	4700	5400	93	mg/kg	0.23		0.011	0.11	1	0.82	J	0.019	0.2	1	0.58	J	0.01	0.1	1	0.017	J	0.017	0.18	1
Benzene	71-43-2	280	330	0.5	mg/kg	0.017	J	0.0094	0.028	1	0.18	J	0.016	0.049	1	0.21	J	0.0086	0.026	1	0.19	J	0.015	0.044	1
Ethylbenzene	100-41-4	880	1000	70	mg/kg	2.7		0.008	0.056	1	0.49	J	0.014	0.098	1	1.3	J	0.0073	0.052	1	0.12	J	0.012	0.088	1
Isopropylbenzene (Cumene)	98-82-8	10000	10000	2500	mg/kg	2.3		0.0062	0.056	1	1.2	J	0.011	0.098	1	2.6	J	0.0056	0.052	1	2.8	J	0.0096	0.088	1
M,P-Xylene	179601-23-1	NS	NS	NS	mg/kg	0.23		0.032	0.11	1	0.82	J	0.055	0.2	1	1.6	J	0.029	0.1	1	0.12	J	0.05	0.18	1
Naphthalene	91-20-3	66	77	25	mg/kg	0.48		0.037	0.23	1	2.1	J	0.064	0.39	1	0.85	J	0.034	0.21	1	0.3	J	0.058	0.35	1
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	NS	mg/kg	0.042	J	0.016	0.056	1	0.15	J	0.028	0.098	1	0.46	J	0.015	0.052	1	0.03	J	0.026	0.088	1
Tert-Butyl Methyl Ether	1634-04-4	8500	9800	2	mg/kg	ND	U	0.011	0.11	1	ND	U	0.02	0.2	1	ND	U	0.01	0.1	1	0.00045	J	0.00026	0.0026	1
Toluene	108-88-3	10000	10000	100	mg/kg	ND	U	0.031	0.056	1	0.087	J	0.053	0.098	1	0.13	J	0.028	0.052	1	0.068	J	0.048	0.088	1
Total Xylenes	1330-20-7	7900	9100	1000	mg/kg	0.27	J	0.016	0.056	1	0.97	J	0.028	0.098	1	2.1	J	0.015	0.052	1	0.15	J	0.026	0.088	1
Semi-Volatile Organic Compounds																									
Anthracene	120-12-7	190000	190000	350	mg/kg	0.098	J	0.04	0.12	1	ND	U	0.043	0.13	1	ND	U	0.038	0.12	1	0.096	J	0.038	0.12	1
Benzo(a)anthracene	56-55-3	130	190000	340	mg/kg	0.13		0.023	0.12	1	ND	U	0.025	0.13	1	ND	U	0.022	0.12	1	0.056	J	0.022	0.12	1
Benzo(a)pyrene	50-32-8	91	190000	46	mg/kg	0.055	J	0.05	0.16	1	ND	U	0.054	0.18	1	ND	U	0.048	0.16	1	ND	U	0.048	0.16	1
Benzo(b)fluoranthene	205-99-2	76	190000	170	mg/kg	0.071	J	0.034	0.12	1	ND	U	0.037	0.13	1	ND	U	0.033	0.12	1	ND	U	0.033	0.12	1
Benzo(g,h,i)Perylene	191-24-2	190000	190000	180	mg/kg	ND	U	0.024	0.16	1	ND	U	0.026	0.18	1	ND	U	0.023	0.16	1	ND	U	0.023	0.16	1
Chrysene	218-01-9	760	190000	230	mg/kg	0.16		0.021	0.12	1	0.045	J	0.023	0.13	1	0.045	J	0.02	0.12	1	0.15	J	0.02	0.12	1
Fluorene	86-73-7	130000	190000	3800	mg/kg	0.32		0.02	0.2	1	0.26		0.021	0.22	1	0.11	J	0.019	0.2	1	0.6	J	0.019	0.2	1
Phenanthrene	85-01-8	190000	190000	10000	mg/kg	0.84		0.025	0.12	1	0.49		0.027	0.13	1	0.26		0.024	0.12	1	1.7	J	0.024	0.12	1
Pyrene	129-00-0	96000	190000	2200	mg/kg	0.33		0.02	0.12	1	0.041	J	0.022	0.13	1	0.044	J	0.02	0.12	1	0.13	J	0.019	0.12	1
Metals																									
Lead	7439-92-1	1000	190000	450	mg/kg	57.1		0.13	2.44	1	9.83		0.134	2.5	1	46.5		0.122	2.27	1	7.4		0.121	2.26	1
General Chemistry																									
Solids, Percent	SOLID	NS	NS	NS	Percent	80.6		0	0	1	75.2		0	0	1	84.6		0	0	1	84.1		0	0	1

Table 2
Summary of Soil Sample Analytical Results
Post Excavation Soil Sampling
Bellwether District Holdings, LLC.
Philadelphia, PA

Analyte	CAS Number	PADEP Non-Residential Direct Contact 0-2 Ft	PADEP Non-Residential Direct Contact 2-15 Ft	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated	AOC					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA				
					Location					PES-A					PES-E					PES-G					PES-K				
					Sample Name					PES-A 4.2-4.7_071423					PES-E 5.2-5.7_071423					PES-G 1.7-2.2_071423					PES-K 3.1-3.6_071423				
					Sample Date					07/14/2023					07/14/2023					07/14/2023					07/14/2023				
					Sample Depth					4.2-4.7					5.2-5.7					1.7-2.2					3.1-3.6				
					Saturation					Unsaturated					Unsaturated					Unsaturated					Unsaturated				
Unit					Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF
Volatile Organic Compounds																													
1,2,4-Trimethylbenzene	95-63-6	4700	5400	300	mg/kg	12	J	0.021	0.13	1	0.052	J	0.019	0.11	1	0.39	J	0.099	0.59	5	0.1	J	0.021	0.13	1				
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	3.7	4.2	0.005	mg/kg	ND	U	0.019	0.032	1	ND	U	0.00031	0.00052	1	ND	U	0.086	0.15	5	ND	U	0.018	0.032	1				
1,2-Dichloroethane	107-06-2	85	98	0.5	mg/kg	ND	U	0.016	0.064	1	ND	U	0.015	0.057	1	ND	U	0.076	0.3	5	ND	U	0.016	0.063	1				
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	4700	5400	93	mg/kg	1	J	0.012	0.13	1	0.00031	J	0.0002	0.0021	1	0.42	J	0.057	0.59	5	0.046	J	0.012	0.13	1				
Benzene	71-43-2	280	330	0.5	mg/kg	0.073	J	0.011	0.032	1	0.038	J	0.0094	0.028	1	0.11	J	0.049	0.15	5	ND	U	0.01	0.032	1				
Ethylbenzene	100-41-4	880	1000	70	mg/kg	7.6	J	0.009	0.064	1	0.089	J	0.008	0.057	1	13	J	0.042	0.3	5	0.053	J	0.0089	0.063	1				
Isopropylbenzene (Cumene)	98-82-8	10000	10000	2500	mg/kg	4.4	J	0.007	0.064	1	1.5	J	0.0062	0.057	1	27	J	0.032	0.3	5	4.5	J	0.0069	0.063	1				
M,P-Xylene	179601-23-1	NS	NS	NS	mg/kg	2.7	J	0.036	0.13	1	0.0025	J	0.00058	0.0021	1	0.66	J	0.16	0.59	5	0.17	J	0.035	0.13	1				
Naphthalene	91-20-3	66	77	25	mg/kg	4.2	J	0.042	0.26	1	0.13	J	0.037	0.23	1	1.3	J	0.19	1.2	5	0.38	J	0.041	0.25	1				
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	NS	mg/kg	0.072	J	0.019	0.064	1	0.0046	J	0.0003	0.001	1	0.27	J	0.086	0.3	5	0.057	J	0.018	0.063	1				
Tert-Butyl Methyl Ether	1634-04-4	8500	9800	2	mg/kg	ND	U	0.013	0.13	1	0.11	J	0.011	0.11	1	ND	U	0.059	0.59	5	ND	U	0.013	0.13	1				
Toluene	108-88-3	10000	10000	100	mg/kg	0.036	J	0.035	0.064	1	0.0024	J	0.00057	0.001	1	0.39	J	0.16	0.3	5	0.038	J	0.034	0.063	1				
Total Xylenes	1330-20-7	7900	9100	1000	mg/kg	2.8	J	0.019	0.064	1	0.0071	J	0.0003	0.001	1	0.93	J	0.086	0.3	5	0.23	J	0.018	0.063	1				
Semi-Volatile Organic Compounds																													
Anthracene	120-12-7	190000	190000	350	mg/kg	ND	U	0.041	0.13	1	0.041	J	0.04	0.12	1	0.15	J	0.038	0.12	1	ND	U	0.039	0.12	1				
Benzo(a)anthracene	56-55-3	130	190000	340	mg/kg	ND	U	0.024	0.13	1	ND	U	0.023	0.12	1	ND	U	0.022	0.12	1	ND	U	0.022	0.12	1				
Benzo(a)pyrene	50-32-8	91	190000	46	mg/kg	ND	U	0.051	0.17	1	ND	U	0.05	0.16	1	ND	U	0.048	0.16	1	ND	U	0.049	0.16	1				
Benzo(b)fluoranthene	205-99-2	76	190000	170	mg/kg	ND	U	0.035	0.13	1	ND	U	0.034	0.12	1	ND	U	0.033	0.12	1	ND	U	0.034	0.12	1				
Benzo(g,h,i)Perylene	191-24-2	190000	190000	180	mg/kg	ND	U	0.025	0.17	1	ND	U	0.024	0.16	1	ND	U	0.023	0.16	1	ND	U	0.023	0.16	1				
Chrysene	218-01-9	760	190000	230	mg/kg	0.033	J	0.022	0.13	1	0.058	J	0.021	0.12	1	ND	U	0.02	0.12	1	0.04	J	0.021	0.12	1				
Fluorene	86-73-7	130000	190000	3800	mg/kg	0.11	J	0.02	0.21	1	0.26	J	0.02	0.2	1	1.1	J	0.019	0.2	1	0.1	J	0.019	0.2	1				
Phenanthrene	85-01-8	190000	190000	10000	mg/kg	0.32	J	0.026	0.13	1	0.69	J	0.025	0.12	1	2.5	J	0.024	0.12	1	0.27	J	0.024	0.12	1				
Pyrene	129-00-0	96000	190000	2200	mg/kg	0.026	J	0.021	0.13	1	0.051	J	0.02	0.12	1	0.14	J	0.02	0.12	1	0.027	J	0.02	0.12	1				
Metals																													
Lead	7439-92-1	1000	190000	450	mg/kg	7.24	J	0.129	2.41	1	7.04	J	0.129	2.4	1	6.99	J	0.123	2.3	1	14.2	J	0.125	2.32	1				
General Chemistry																													
Solids, Percent	SOLID	NS	NS	NS	Percent	78.4	J	0	0	1	80	J	0	0	1	84.3	J	0	0	1	82.7	J	0	0	1				

Table 2
Summary of Soil Sample Analytical Results
Post Excavation Soil Sampling
Bellwether District Holdings, LLC.
Philadelphia, PA

Analyte	CAS Number	PADEP Non-Residential Direct Contact 0-2 Ft	PADEP Non-Residential Direct Contact 2-15 Ft	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated	AOC					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					062223 INCIDENT 1					062223 INCIDENT 1				
					Location	PES-L				PES-M				PEB-2B				PEB-2C											
					Sample Name	PES-L_3.1-3.6_071423				PES-M_1.0-1.5_071423				PEB-2B_5.0-5.5_081523				PEB-2C_5.0-5.5_081523											
					Sample Date	07/14/2023				07/14/2023				08/15/2023				08/15/2023											
					Sample Depth	3.1-3.6				1-1.5				5-5.5				5-5.5											
					Saturation	Unsaturated				Unsaturated				Unsaturated				Unsaturated											
Unit	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF				
Volatile Organic Compounds																													
1,2,4-Trimethylbenzene	95-63-6	4700	5400	300	mg/kg	0.058	J	0.017	0.1	1	0.088	J	0.019	0.11	1	NA					NA								
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	3.7	4.2	0.005	mg/kg	ND	U	0.014	0.025	1	ND	U	0.017	0.028	1	ND	U	0.00025	0.0006	1	ND	U	0.00025	0.00059	1				
1,2-Dichloroethane	107-06-2	85	98	0.5	mg/kg	ND	U	0.013	0.05	1	ND	U	0.015	0.057	1	NA					NA								
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	4700	5400	93	mg/kg	0.017	J	0.0096	0.1	1	0.11	J	0.011	0.11	1	NA					NA								
Benzene	71-43-2	280	330	0.5	mg/kg	ND	U	0.0083	0.025	1	0.05	J	0.0095	0.028	1	NA					NA								
Ethylbenzene	100-41-4	880	1000	70	mg/kg	0.031	J	0.007	0.05	1	0.23	J	0.0081	0.057	1	NA					NA								
Isopropylbenzene (Cumene)	98-82-8	10000	10000	2500	mg/kg	2.6	J	0.0054	0.05	1	5.1	J	0.0062	0.057	1	NA					NA								
M,P-Xylene	179601-23-1	NS	NS	NS	mg/kg	0.036	J	0.028	0.1	1	0.4	J	0.032	0.11	1	NA					NA								
Naphthalene	91-20-3	66	77	25	mg/kg	0.23	J	0.032	0.2	1	0.49	J	0.037	0.23	1	NA					NA								
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	NS	mg/kg	0.022	J	0.014	0.05	1	0.16	J	0.017	0.057	1	NA					NA								
Tert-Butyl Methyl Ether	1634-04-4	8500	9800	2	mg/kg	ND	U	0.01	0.1	1	ND	U	0.011	0.11	1	NA					NA								
Toluene	108-88-3	10000	10000	100	mg/kg	ND	U	0.027	0.05	1	0.079	J	0.031	0.057	1	NA					NA								
Total Xylenes	1330-20-7	7900	9100	1000	mg/kg	0.058	J	0.014	0.05	1	0.56	J	0.017	0.057	1	NA					NA								
Semi-Volatile Organic Compounds																													
Anthracene	120-12-7	190000	190000	350	mg/kg	0.077	J	0.039	0.12	1	0.099	J	0.038	0.12	1	NA					NA								
Benzo(a)anthracene	56-55-3	130	190000	340	mg/kg	0.024	J	0.022	0.12	1	0.055	J	0.022	0.12	1	NA					NA								
Benzo(a)pyrene	50-32-8	91	190000	46	mg/kg	ND	U	0.049	0.16	1	ND	U	0.048	0.16	1	NA					NA								
Benzo(b)fluoranthene	205-99-2	76	190000	170	mg/kg	ND	U	0.034	0.12	1	ND	U	0.033	0.12	1	NA					NA								
Benzo(g,h,i)Perylene	191-24-2	190000	190000	180	mg/kg	ND	U	0.023	0.16	1	ND	U	0.023	0.16	1	NA					NA								
Chrysene	218-01-9	760	190000	230	mg/kg	0.076	J	0.021	0.12	1	0.15		0.02	0.12	1	NA					NA								
Fluorene	86-73-7	130000	190000	3800	mg/kg	0.27		0.019	0.2	1	0.88		0.019	0.2	1	NA					NA								
Phenanthrene	85-01-8	190000	190000	10000	mg/kg	0.78		0.024	0.12	1	1.8		0.024	0.12	1	NA					NA								
Pyrene	129-00-0	96000	190000	2200	mg/kg	0.088	J	0.02	0.12	1	0.14		0.02	0.12	1	NA					NA								
Metals																													
Lead	7439-92-1	1000	190000	450	mg/kg	7.4		0.125	2.34	1	30.4	J	0.127	2.37	1	NA					NA								
General Chemistry																													
Solids, Percent	SOLID	NS	NS	NS	Percent	82.9		0	0	1	82.7		0	0	1	NA					NA								

Table 2
Summary of Soil Sample Analytical Results
Post Excavation Soil Sampling
Bellwether District Holdings, LLC.
Philadelphia, PA

Analyte	CAS Number	PADEP Non-Residential Direct Contact 0-2 Ft	PADEP Non-Residential Direct Contact 2-15 Ft	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated	AOC	062223 INCIDENT 1					062223 INCIDENT 1					062223 INCIDENT 1					062223 INCIDENT 1				
					Location	PEB-2D					PEB-2D					PEB-2F					PEB-2H				
					Sample Name	PEB-2D_5.0-5.5_081523					DUP-1_081523					PEB-2F_5.0-5.5_081523					PEB-2H_5.0-5.5_081523				
					Sample Date	08/15/2023					08/15/2023					08/15/2023					08/15/2023				
					Sample Depth	5-5.5					5-5.5					5-5.5					5-5.5				
					Saturation	Unsaturated					Unsaturated					Unsaturated					Unsaturated				
Unit	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF
Volatile Organic Compounds																									
1,2,4-Trimethylbenzene	95-63-6	4700	5400	300	mg/kg	NA					NA					NA					NA				
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	3.7	4.2	0.005	mg/kg	ND	U	0.00025	0.00061	1	ND	U	0.00025	0.0006	1	ND	U	0.00026	0.00062	1	ND	U	0.00024	0.00058	1
1,2-Dichloroethane	107-06-2	85	98	0.5	mg/kg	NA					NA					NA					NA				
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	4700	5400	93	mg/kg	NA					NA					NA					NA				
Benzene	71-43-2	280	330	0.5	mg/kg	NA					NA					NA					NA				
Ethylbenzene	100-41-4	880	1000	70	mg/kg	NA					NA					NA					NA				
Isopropylbenzene (Cumene)	98-82-8	10000	10000	2500	mg/kg	NA					NA					NA					NA				
M,P-Xylene	179601-23-1	NS	NS	NS	mg/kg	NA					NA					NA					NA				
Naphthalene	91-20-3	66	77	25	mg/kg	NA					NA					NA					NA				
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	NS	mg/kg	NA					NA					NA					NA				
Tert-Butyl Methyl Ether	1634-04-4	8500	9800	2	mg/kg	NA					NA					NA					NA				
Toluene	108-88-3	10000	10000	100	mg/kg	NA					NA					NA					NA				
Total Xylenes	1330-20-7	7900	9100	1000	mg/kg	NA					NA					NA					NA				
Semi-Volatile Organic Compounds																									
Anthracene	120-12-7	190000	190000	350	mg/kg	NA					NA					NA					NA				
Benzo(a)anthracene	56-55-3	130	190000	340	mg/kg	NA					NA					NA					NA				
Benzo(a)pyrene	50-32-8	91	190000	46	mg/kg	NA					NA					NA					NA				
Benzo(b)fluoranthene	205-99-2	76	190000	170	mg/kg	NA					NA					NA					NA				
Benzo(g,h,i)Perylene	191-24-2	190000	190000	180	mg/kg	NA					NA					NA					NA				
Chrysene	218-01-9	760	190000	230	mg/kg	NA					NA					NA					NA				
Fluorene	86-73-7	130000	190000	3800	mg/kg	NA					NA					NA					NA				
Phenanthrene	85-01-8	190000	190000	10000	mg/kg	NA					NA					NA					NA				
Pyrene	129-00-0	96000	190000	2200	mg/kg	NA					NA					NA					NA				
Metals																									
Lead	7439-92-1	1000	190000	450	mg/kg	NA					NA					NA					NA				
General Chemistry																									
Solids, Percent	SOLID	NS	NS	NS	Percent	NA					NA					NA					NA				

Table 2
Summary of Soil Sample Analytical Results
Post Excavation Soil Sampling
Bellwether District Holdings, LLC.
Philadelphia, PA

Analyte	CAS Number	PADEP Non-Residential Direct Contact 0-2 Ft	PADEP Non-Residential Direct Contact 2-15 Ft	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated	062223 INCIDENT 1					062223 INCIDENT 1					062223 INCIDENT 1					062223 INCIDENT 1					
					PEB-2I					PEB-2J					PES-2A					PES-2E					
					PEB-2I_5.0-5.5_081523					PEB-2J_6.5-7.0_081523					PES-2A_4.2-4.7_081523					PES-2E_5.2-5.7_081523					
					08/15/2023					08/15/2023					08/15/2023					08/15/2023					
					5-5.5					6.5-7					4.2-4.7					5.2-5.7					
					Unsaturated					Unsaturated					Unsaturated					Unsaturated					
Unit	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF					
Volatile Organic Compounds																									
1,2,4-Trimethylbenzene	95-63-6	4700	5400	300	mg/kg	NA					NA					NA									
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	3.7	4.2	0.005	mg/kg	ND	U	0.00024	0.00056	1	ND	U	0.00026	0.00061	1	ND	U	0.00025	0.00059	1	ND	U	0.00027	0.00064	1
1,2-Dichloroethane	107-06-2	85	98	0.5	mg/kg	NA					NA					NA									
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	4700	5400	93	mg/kg	NA					NA					NA									
Benzene	71-43-2	280	330	0.5	mg/kg	NA					NA					NA									
Ethylbenzene	100-41-4	880	1000	70	mg/kg	NA					NA					NA									
Isopropylbenzene (Cumene)	98-82-8	10000	10000	2500	mg/kg	NA					NA					NA									
M,P-Xylene	179601-23-1	NS	NS	NS	mg/kg	NA					NA					NA									
Naphthalene	91-20-3	66	77	25	mg/kg	NA					NA					NA									
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	NS	mg/kg	NA					NA					NA									
Tert-Butyl Methyl Ether	1634-04-4	8500	9800	2	mg/kg	NA					NA					NA									
Toluene	108-88-3	10000	10000	100	mg/kg	NA					NA					NA									
Total Xylenes	1330-20-7	7900	9100	1000	mg/kg	NA					NA					NA									
Semi-Volatile Organic Compounds																									
Anthracene	120-12-7	190000	190000	350	mg/kg	NA					NA					NA									
Benzo(a)anthracene	56-55-3	130	190000	340	mg/kg	NA					NA					NA									
Benzo(a)pyrene	50-32-8	91	190000	46	mg/kg	NA					NA					NA									
Benzo(b)fluoranthene	205-99-2	76	190000	170	mg/kg	NA					NA					NA									
Benzo(g,h,i)Perylene	191-24-2	190000	190000	180	mg/kg	NA					NA					NA									
Chrysene	218-01-9	760	190000	230	mg/kg	NA					NA					NA									
Fluorene	86-73-7	130000	190000	3800	mg/kg	NA					NA					NA									
Phenanthrene	85-01-8	190000	190000	10000	mg/kg	NA					NA					NA									
Pyrene	129-00-0	96000	190000	2200	mg/kg	NA					NA					NA									
Metals																									
Lead	7439-92-1	1000	190000	450	mg/kg	NA					NA					NA									
General Chemistry																									
Solids, Percent	SOLID	NS	NS	NS	Percent	NA					NA					NA									

Table 2
Summary of Soil Sample Analytical Results
Post Excavation Soil Sampling
Bellwether District Holdings, LLC.
Philadelphia, PA

Analyte	CAS Number	PADEP Non-Residential Direct Contact 0-2 Ft	PADEP Non-Residential Direct Contact 2-15 Ft	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated	062223 INCIDENT 1					062223 INCIDENT 1					062223 INCIDENT 1					062223 INCIDENT 1									
					AOC					PES-2G					PES-2K					PES-2L					PES-2M				
					Location					PES-2G_1.7-2.2_081523					PES-2K_3.1-3.6_081523					PES-2L_3.1-3.6_081523					PES-2M_1.0-1.5_081523				
					Sample Name					08/15/2023					08/15/2023					08/15/2023					08/15/2023				
					Sample Date					1.7-2.2					3.1-3.6					3.1-3.6					1-1.5				
					Sample Depth					Unsaturated					Unsaturated					Unsaturated					Unsaturated				
Saturation					Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF					
Unit																													
Volatile Organic Compounds																													
1,2,4-Trimethylbenzene	95-63-6	4700	5400	300	mg/kg	NA					NA					NA					NA								
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	3.7	4.2	0.005	mg/kg	ND	U	0.00025	0.00058	1	ND	U	0.00025	0.0006	1	ND	U	0.00024	0.00057	1	ND	U	0.00027	0.00064	1				
1,2-Dichloroethane	107-06-2	85	98	0.5	mg/kg	NA					NA					NA					NA								
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	4700	5400	93	mg/kg	NA					NA					NA					NA								
Benzene	71-43-2	280	330	0.5	mg/kg	NA					NA					NA					NA								
Ethylbenzene	100-41-4	880	1000	70	mg/kg	NA					NA					NA					NA								
Isopropylbenzene (Cumene)	98-82-8	10000	10000	2500	mg/kg	NA					NA					NA					NA								
M,P-Xylene	179601-23-1	NS	NS	NS	mg/kg	NA					NA					NA					NA								
Naphthalene	91-20-3	66	77	25	mg/kg	NA					NA					NA					NA								
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	NS	NS	mg/kg	NA					NA					NA					NA								
Tert-Butyl Methyl Ether	1634-04-4	8500	9800	2	mg/kg	NA					NA					NA					NA								
Toluene	108-88-3	10000	10000	100	mg/kg	NA					NA					NA					NA								
Total Xylenes	1330-20-7	7900	9100	1000	mg/kg	NA					NA					NA					NA								
Semi-Volatile Organic Compounds																													
Anthracene	120-12-7	190000	190000	350	mg/kg	NA					NA					NA					NA								
Benzo(a)anthracene	56-55-3	130	190000	340	mg/kg	NA					NA					NA					NA								
Benzo(a)pyrene	50-32-8	91	190000	46	mg/kg	NA					NA					NA					NA								
Benzo(b)fluoranthene	205-99-2	76	190000	170	mg/kg	NA					NA					NA					NA								
Benzo(g,h,i)Perylene	191-24-2	190000	190000	180	mg/kg	NA					NA					NA					NA								
Chrysene	218-01-9	760	190000	230	mg/kg	NA					NA					NA					NA								
Fluorene	86-73-7	130000	190000	3800	mg/kg	NA					NA					NA					NA								
Phenanthrene	85-01-8	190000	190000	10000	mg/kg	NA					NA					NA					NA								
Pyrene	129-00-0	96000	190000	2200	mg/kg	NA					NA					NA					NA								
Metals																													
Lead	7439-92-1	1000	190000	450	mg/kg	NA					NA					NA					NA								
General Chemistry																													
Solids, Percent	SOLID	NS	NS	NS	Percent	NA					NA					NA					NA								

Table 2
Summary of Soil Sample Analytical Results
Post Excavation Soil Sampling
Bellwether District Holdings, LLC.
Philadelphia, PA

Notes:

Sample Nomenclature: PES-A_4.2-4.7_071423 - Post-Excavation Side Sample, Sample ID, Depth, and Sample Date
Sample Nomenclature: PEB-B_4.5-5.0_071423 - Post-Excavation Bottom Sample, Sample ID, Depth, and Sample Date
Soil samples were compared to the PADEP MSCs (November 2021)
PADEP - Pennsylvania Department of Environmental Protection
MSC - Medium Specific Concentrations
TDS - Total Dissolved Solids
CAS - Chemical Abstract Service
NS - No standard
mg/kg - Milligrams per kilogram
ND - Not detected
Q - Qualifier
MDL - Method detection limit
RL - Reporting Limit
DF - Dilution factor

Qualifiers:

J – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
U – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Exceedance Summary:

- 10 - Result exceeds PADEP Non-Residential Direct Contact 0-2 Ft
- 10** - Result exceeds PADEP Non-Residential Direct Contact 2-15 Ft
- 10** - Result exceeds PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated
- 10* - MDL or RL greater than the applicable standard

Table 3
Summary of Attainment Sample Locations and Depths
Post-Excavation Soil Sampling
Bellwether District Holdings, LLC.
Philadelphia, PA

Location ID	X Measurement (feet)	Y Measurement (feet)	Sidewall or Bottom Location	Feet Below Ground Surface (ft bgs)	Instructions	Sample ID	Depth (ft bgs)	Sample Date	PID Reading (PPM)	Notes
7/15/2023 - Sample Locations										
PES-A	4.2	14.7	Northern Sidewall	4.2	8.7 ft east of NW corner	PES-A_3.0-3.5_071423	3.0-3.5	7/14/2023	8.3	Soil lithology noted as sand with some clay
PES-B	21.4	15	Bottom	4.5	15.4 ft south of NW corner, 9 ft east	PES-B_2.7-3.2_071423	2.7-3.2	7/14/2023	3.2	Soil lithology noted as sand with some clay
PES-C	30.4	14.3	Bottom	4.5	6.6 ft north of SW corner, 8.3 ft east	PES-C_3.5-4.0_071523	3.5-4.0	7/14/2023	14.8	Soil lithology noted as sand with some clay
PEB-D	37.2	11	Bottom	4.5	5 ft east of SW corner	PEB-D_4.5-5.0_071423	4.5-5.0	7/14/2023	45.3	Soil lithology noted as sand with some clay
PEB-E	5.2	20.9	Northern Sidewall	5.2	1.1 ft west of NE corner	PEB-E_4.5-5.0_071423	4.5-5.0	7/14/2023	9.4	Soil lithology noted as sand with some clay
PEB-F	16.2	19	Bottom	4.5	3 ft east of NE corner, 10.2 ft south	PEB-F_4.5-5.0_071423	4.5-5.0	7/14/2023	3.6	Soil lithology noted as sand with some clay
PES-G	26.3	26.2	Eastern Sidewall	1.7	10.7 ft north of SE corner	PES-G_2.6-3.1_071423	2.6-3.1	7/14/2023	15.8	Soil lithology noted as sand with some clay
PES-H	35.6	20	Bottom	4.5	1.4 ft north of SE corner	PES-H_3.3-3.8_071423	3.3-3.8	7/14/2023	67.9	Soil lithology noted as sand with some clay
PES-I	32.6	7.4	Bottom	4.5	4.4 ft south of SW corner, 1.4 ft east of SW corner	PES-I_3.8-4.3_071423	3.8-4.3	7/14/2023	12.3	Soil lithology noted as sand with some clay
PEB-J	8.2	7.8	Bottom	6.0	2.2 ft south of NW corner, 1.8 ft east	PEB-J_4.5-5.0_071423	4.5-5.0	7/14/2023	82	Soil lithology noted as sand with some clay
PEB-K	17.5	3.1	Western Sidewall	3.1	11.5 ft south of NW corner	PEB-K_4.5-5.0_071423	4.5-5.0	7/14/2023	27.9	Soil lithology noted as sand with some clay
PES-L	20.4	3.1	Western Sidewall	3.1	14.4 ft south of NW corner	PES-L_0.8-1.3_071423	0.8-1.3	7/14/2023	128.1	Soil lithology noted as sand with some clay
PES-M	42	20.8	Southern Sidewall	1.0	1.2 ft west of SE corner	PES_M_1.0-1.5_071423	1.0-1.5	7/14/2023	20.4	Soil lithology noted as sand with some clay
8/15/2023 - Re-Sampled Locations to Achieve EDB Detection Limits*										
PES-A	4.2	14.7	Northern Sidewall	4.2	8.7 ft east of NW corner	PES-2A_4.2-4.7_081523	4.2-4.7	8/15/2023	3.2	Soil lithology noted as sand with some clay
PES-B	21.4	15	Bottom	5.0	15.4 ft south of NW corner, 9 ft east	PEB-2B_5.0-5.5_081523	5.0-5.5	8/15/2023	69.4	Soil lithology noted as sand with some clay
PES-C	30.4	14.3	Bottom	5.0	6.6 ft north of SW corner, 8.3 ft east	PEB-2C_5.0-5.5_081523	5.0-5.5	8/15/2023	6.8	Soil lithology noted as sand with some clay
PEB-D	37.2	11	Bottom	5.0	5 ft east of SW corner	PEB-2D_5.0-5.5_081523	5.0-5.5	8/15/2023	67.7	Soil lithology noted as sand with some clay
PEB-E	5.2	20.9	Northern Sidewall	5.2	1.1 ft west of NE corner	PES-2E_5.2-5.7_081523	5.2-5.7	8/15/2023	2.7	Soil lithology noted as sand with some clay
PEB-F	16.2	19	Bottom	5.0	3 ft east of NE corner, 10.2 ft south	PEB-2F_5.0-5.5_081523	5.0-5.5	8/15/2023	67.5	Soil lithology noted as sand with some clay
PES-G	26.3	26.2	Eastern Sidewall	1.7	10.7 ft north of SE corner	PES-2G_1.7-2.2_081523	1.7-2.2	8/15/2023	242.5	Soil lithology noted as sand with some clay
PES-H	35.6	20	Bottom	5.0	1.4 ft north of SE corner	PEB-2H_5.0-5.5_081523	5.0-5.5	8/15/2023	94	Soil lithology noted as sand with some clay
PES-I	32.6	7.4	Bottom	5.0	4.4 ft south of SW corner, 1.4 ft east of SW corner	PEB-2I_5.0-5.5_081523	5.0-5.5	8/15/2023	56.5	Soil lithology noted as sand with some clay
PEB-J	8.2	7.8	Bottom	6.5	2.2 ft south of NW corner, 1.8 ft east	PEB-2J_6.5-7.0_081523	6.5-7.0	8/15/2023	104.7	Soil lithology noted as sand with some clay
PEB-K	17.5	3.1	Western Sidewall	3.1	11.5 ft south of NW corner	PES-2K_3.1-3.6_081523	3.1-3.6	8/15/2023	6.4	Soil lithology noted as sand with some clay
PES-L	20.4	3.1	Western Sidewall	3.1	14.4 ft south of NW corner	PES-2L_3.1-3.6_081523	3.1-3.6	8/15/2023	67.4	Soil lithology noted as sand with some clay
PES-M	42	20.8	Southern Sidewall	1.0	1.2 ft west of SE corner	PES-2M_1.0-1.5_081523	1.0-1.5	8/15/2023	93.2	Soil lithology noted as sand with some clay
						DUP-1	-	7/14/2023		Parent Sample: PEB-D_4.5-5.0_071423
						FB-1_071423	-	7/14/2023		Field Blank - stainless steel trowel
						DUP-1	-	8/15/2023		Parent Sample: PEB-2D_5.0-5.5_081523
						FB-1_071423	-	8/15/2023		Field Blank - stainless steel trowel

Notes:

* = Samples collected during the 8/15/2023 sampling event were collected for EDB due to elevated MDLs reported during the 7/14/2023 sampling event, above the applicable PADEP Statewide Health Standards.

PADEP - Pennsylvania Department of Environmental Protection

MDL - Method

EDB - 1,2-Dibromoethane

ft bgs - Feet below ground surface.

PPM - Parts per million.

NW - Northwest

SW- Southwest

NE - Northeast

SE - Southeast

SW - Southwest

**Table 4
Summary of Soil Results - Vapor Intrusion Screening
Post-Excavation Sampling Event
Bellwether District Holdings, LLC.
Philadelphia, PA**

Analyte	CAS Number	PADEP Act 2 Non-Residential Soil Statewide Health Standard Vapor Intrusion Screening Values	0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA									
			Location					PEB-B					PEB-C					PEB-D									
			Sample Name					PEB-B_4.5-5.0_071423					PEB-C_4.5-5.0_071423					PEB-D_4.5-5.0_071423					DUP-1_071423				
			Sample Date					07/14/2023					07/14/2023					07/14/2023					07/14/2023				
			Sample Depth					4.5-5					4.5-5					4.5-5					4.5-5				
			Saturation					Unsaturated					Unsaturated					Unsaturated					Unsaturated				
Unit					Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF			
Volatile Organic Compounds																											
1,2,4-Trimethylbenzene	95-63-6	300	mg/kg	0.91	J	0.021	0.12	1	12	J	0.02	0.12	1	1.2	J	0.02	0.12	1	2.6	J	0.018	0.11	1				
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0013	mg/kg	ND	U	0.00028	0.00048	1	ND	U	0.017	0.03	1	ND	U	0.018	0.03	1	ND	U	0.016	0.027	1				
1,2-Dichloroethane	107-06-2	0.1	mg/kg	ND	U	0.016	0.062	1	ND	U	0.015	0.059	1	ND	U	0.015	0.06	1	ND	U	0.014	0.054	1				
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	93	mg/kg	0.28		0.012	0.12	1	3.7	J	0.011	0.12	1	0.4	J	0.012	0.12	1	0.88	J	0.01	0.11	1				
Benzene	71-43-2	0.13	mg/kg	0.065		0.01	0.031	1	0.22	J	0.0099	0.03	1	0.082	J	0.01	0.03	1	0.3	J	0.009	0.027	1				
Ethylbenzene	100-41-4	46	mg/kg	0.55		0.0088	0.062	1	6.7	J	0.0084	0.059	1	0.69	J	0.0085	0.06	1	2.2	J	0.0077	0.054	1				
Isopropylbenzene (Cumene)	98-82-8	2500	mg/kg	0.79		0.0068	0.062	1	3.3	J	0.0065	0.059	1	1.2	J	0.0065	0.06	1	3.9	J	0.0059	0.054	1				
M,P-Xylene	179601-23-1	NS	mg/kg	0.22		0.035	0.12	1	4.2	J	0.033	0.12	1	0.64	J	0.034	0.12	1	1.9	J	0.03	0.11	1				
Naphthalene	91-20-3	25	mg/kg	1.7		0.04	0.25	1	9	J	0.039	0.24	1	0.59	J	0.039	0.24	1	1.4	J	0.035	0.22	1				
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	mg/kg	0.036	J	0.018	0.062	1	0.17	J	0.017	0.059	1	0.14	J	0.017	0.06	1	0.33	J	0.016	0.054	1				
Tert-Butyl Methyl Ether	1634-04-4	1.4	mg/kg	0.00039	J	0.00019	0.0019	1	ND	U	0.012	0.12	1	ND	U	0.012	0.12	1	ND	U	0.011	0.11	1				
Toluene	108-88-3	44	mg/kg	0.034	J	0.034	0.062	1	0.043	J	0.032	0.059	1	0.057	J	0.032	0.06	1	0.11	J	0.03	0.054	1				
Total Xylenes	1330-20-7	990	mg/kg	0.26	J	0.018	0.062	1	4.4	J	0.017	0.059	1	0.78	J	0.017	0.06	1	2.2	J	0.016	0.054	1				
Semi-Volatile Organic Compounds																											
Anthracene	120-12-7	NS	mg/kg	0.67		0.19	0.57	5	1.1		0.18	0.56	5	0.37	J	0.038	0.12	1	0.048	J	0.037	0.11	1				
Benzo(a)anthracene	56-55-3	NS	mg/kg	0.22	J	0.11	0.57	5	0.29	J	0.1	0.56	5	0.29	J	0.022	0.12	1	0.026	J	0.021	0.11	1				
Benzo(a)pyrene	50-32-8	NS	mg/kg	ND	U	0.23	0.76	5	ND	U	0.23	0.75	5	0.14	J	0.047	0.15	1	ND	U	0.046	0.15	1				
Benzo(b)fluoranthene	205-99-2	NS	mg/kg	ND	U	0.16	0.57	5	0.2	J	0.16	0.56	5	0.16		0.032	0.12	1	ND	U	0.032	0.11	1				
Benzo(g,h,i)Perylene	191-24-2	NS	mg/kg	ND	U	0.11	0.76	5	0.14	J	0.11	0.75	5	0.079	J	0.023	0.15	1	ND	U	0.022	0.15	1				
Chrysene	218-01-9	NS	mg/kg	0.42	J	0.1	0.57	5	0.5	J	0.097	0.56	5	0.43	J	0.02	0.12	1	0.069	J	0.02	0.11	1				
Fluorene	86-73-7	NS	mg/kg	2.8		0.093	0.96	5	4.7		0.091	0.93	5	1.5	J	0.019	0.19	1	0.24	J	0.018	0.19	1				
Phenanthrene	85-01-8	NS	mg/kg	6.1		0.12	0.57	5	9.8		0.11	0.56	5	2.8	J	0.023	0.12	1	0.62	J	0.023	0.11	1				
Pyrene	129-00-0	NS	mg/kg	0.78		0.095	0.57	5	1.2		0.093	0.56	5	0.63	J	0.019	0.12	1	0.064	J	0.019	0.11	1				
Metals																											
Lead	7439-92-1	NS	mg/kg	24.4		0.119	2.22	1	9.96		0.114	2.14	1	25.3		0.121	2.26	1	42.1		0.118	2.21	1				
General Chemistry																											
Solids, Percent	SOLID	NS	Percent	86.7		0	0	1	88.7		0	0	1	84.7		0	0	1	87.5		0	0	1				

Table 4
Summary of Soil Results - Vapor Intrusion Screening
Post-Excavation Sampling Event
Bellwether District Holdings, LLC.
Philadelphia, PA

Analyte	CAS Number	PADEP Act 2 Non-Residential Soil Statewide Health Standard Vapor Intrusion Screening Values	AOC	0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA				
			Location	PEB-F					PEB-H					PEB-I					PEB-J				
			Sample Name	PEB-F_4.5-5.0_071423					PEB-H_4.5-5.0_071423					PEB-I_4.5-5.0_071423					PEB-J_6.0-6.5_071423				
			Sample Date	07/14/2023					07/14/2023					07/14/2023					07/14/2023				
			Sample Depth	4.5-5					4.5-5					4.5-5					6-6.5				
			Saturation	Unsaturated					Unsaturated					Unsaturated					Unsaturated				
Unit	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF			
Volatile Organic Compounds																							
1,2,4-Trimethylbenzene	95-63-6	300	mg/kg	1.1		0.019	0.11	1	1.9	J	0.033	0.2	1	1.9	J	0.017	0.1	1	0.075	J	0.03	0.18	1
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0013	mg/kg	ND	U	0.016	0.028	1	ND	U	0.029	0.049	1	ND	U	0.015	0.026	1	ND	U	0.00038	0.00064	1
1,2-Dichloroethane	107-06-2	0.1	mg/kg	ND	U	0.014	0.056	1	ND	U	0.025	0.098	1	ND	U	0.013	0.052	1	ND	U	0.023	0.088	1
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	93	mg/kg	0.23		0.011	0.11	1	0.82	J	0.019	0.2	1	0.58	J	0.01	0.1	1	0.017	J	0.017	0.18	1
Benzene	71-43-2	0.13	mg/kg	0.017	J	0.0094	0.028	1	0.18	J	0.016	0.049	1	0.21	J	0.0086	0.026	1	0.19		0.015	0.044	1
Ethylbenzene	100-41-4	46	mg/kg	2.7		0.008	0.056	1	0.49	J	0.014	0.098	1	1.3	J	0.0073	0.052	1	0.12		0.012	0.088	1
Isopropylbenzene (Cumene)	98-82-8	2500	mg/kg	2.3		0.0062	0.056	1	1.2	J	0.011	0.098	1	2.6	J	0.0056	0.052	1	2.8		0.0096	0.088	1
M,P-Xylene	179601-23-1	NS	mg/kg	0.23		0.032	0.11	1	0.82	J	0.055	0.2	1	1.6	J	0.029	0.1	1	0.12	J	0.05	0.18	1
Naphthalene	91-20-3	25	mg/kg	0.48		0.037	0.23	1	2.1	J	0.064	0.39	1	0.85	J	0.034	0.21	1	0.3	J	0.058	0.35	1
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	mg/kg	0.042	J	0.016	0.056	1	0.15	J	0.028	0.098	1	0.46	J	0.015	0.052	1	0.03	J	0.026	0.088	1
Tert-Butyl Methyl Ether	1634-04-4	1.4	mg/kg	ND	U	0.011	0.11	1	ND	U	0.02	0.2	1	ND	U	0.01	0.1	1	0.00045	J	0.00026	0.0026	1
Toluene	108-88-3	44	mg/kg	ND	U	0.031	0.056	1	0.087	J	0.053	0.098	1	0.13	J	0.028	0.052	1	0.068	J	0.048	0.088	1
Total Xylenes	1330-20-7	990	mg/kg	0.27	J	0.016	0.056	1	0.97	J	0.028	0.098	1	2.1	J	0.015	0.052	1	0.15	J	0.026	0.088	1
Semi-Volatile Organic Compounds																							
Anthracene	120-12-7	NS	mg/kg	0.098	J	0.04	0.12	1	ND	U	0.043	0.13	1	ND	U	0.038	0.12	1	0.096	J	0.038	0.12	1
Benzo(a)anthracene	56-55-3	NS	mg/kg	0.13		0.023	0.12	1	ND	U	0.025	0.13	1	ND	U	0.022	0.12	1	0.056	J	0.022	0.12	1
Benzo(a)pyrene	50-32-8	NS	mg/kg	0.055	J	0.05	0.16	1	ND	U	0.054	0.18	1	ND	U	0.048	0.16	1	ND	U	0.048	0.16	1
Benzo(b)fluoranthene	205-99-2	NS	mg/kg	0.071	J	0.034	0.12	1	ND	U	0.037	0.13	1	ND	U	0.033	0.12	1	ND	U	0.033	0.12	1
Benzo(g,h,i)Perylene	191-24-2	NS	mg/kg	ND	U	0.024	0.16	1	ND	U	0.026	0.18	1	ND	U	0.023	0.16	1	ND	U	0.023	0.16	1
Chrysene	218-01-9	NS	mg/kg	0.16		0.021	0.12	1	0.045	J	0.023	0.13	1	0.045	J	0.02	0.12	1	0.15		0.02	0.12	1
Fluorene	86-73-7	NS	mg/kg	0.32		0.02	0.2	1	0.26		0.021	0.22	1	0.11	J	0.019	0.2	1	0.6		0.019	0.2	1
Phenanthrene	85-01-8	NS	mg/kg	0.84		0.025	0.12	1	0.49		0.027	0.13	1	0.26		0.024	0.12	1	1.7		0.024	0.12	1
Pyrene	129-00-0	NS	mg/kg	0.33		0.02	0.12	1	0.041	J	0.022	0.13	1	0.044	J	0.02	0.12	1	0.13		0.019	0.12	1
Metals																							
Lead	7439-92-1	NS	mg/kg	57.1		0.13	2.44	1	9.83		0.134	2.5	1	46.5		0.122	2.27	1	7.4		0.121	2.26	1
General Chemistry																							
Solids, Percent	SOLID	NS	Percent	80.6		0	0	1	75.2		0	0	1	84.6		0	0	1	84.1		0	0	1

Table 4
Summary of Soil Results - Vapor Intrusion Screening
Post-Excavation Sampling Event
Bellwether District Holdings, LLC.
Philadelphia, PA

Analyte	CAS Number	PADEP Act 2 Non-Residential Soil Statewide Health Standard Vapor Intrusion Screening Values	0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA						
			Location					Location					Location					Location						
			Sample Name					Sample Name					Sample Name					Sample Name						
			Sample Date					Sample Date					Sample Date					Sample Date						
			Sample Depth					Sample Depth					Sample Depth					Sample Depth						
			Saturation					Saturation					Saturation					Saturation						
			Unit					Unit					Unit					Unit						
					Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF
Volatile Organic Compounds																								
1,2,4-Trimethylbenzene	95-63-6	300	mg/kg	12	J	0.021	0.13	1	0.052	J	0.019	0.11	1	0.39	J	0.099	0.59	5	0.1	J	0.021	0.13	1	
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0013	mg/kg	ND	U	0.019	0.032	1	ND	U	0.00031	0.00052	1	ND	U	0.086	0.15	5	ND	U	0.018	0.032	1	
1,2-Dichloroethane	107-06-2	0.1	mg/kg	ND	U	0.016	0.064	1	ND	U	0.015	0.057	1	ND	U	0.076	0.3	5	ND	U	0.016	0.063	1	
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	93	mg/kg	1	J	0.012	0.13	1	0.00031	J	0.0002	0.0021	1	0.42	J	0.057	0.59	5	0.046	J	0.012	0.13	1	
Benzene	71-43-2	0.13	mg/kg	0.073	J	0.011	0.032	1	0.038	J	0.0094	0.028	1	0.11	J	0.049	0.15	5	ND	U	0.01	0.032	1	
Ethylbenzene	100-41-4	46	mg/kg	7.6	J	0.009	0.064	1	0.089	J	0.008	0.057	1	13	J	0.042	0.3	5	0.053	J	0.0089	0.063	1	
Isopropylbenzene (Cumene)	98-82-8	2500	mg/kg	4.4	J	0.007	0.064	1	1.5	J	0.0062	0.057	1	27	J	0.032	0.3	5	4.5	J	0.0069	0.063	1	
M,P-Xylene	179601-23-1	NS	mg/kg	2.7	J	0.036	0.13	1	0.0025	J	0.00058	0.0021	1	0.66	J	0.16	0.59	5	0.17	J	0.035	0.13	1	
Naphthalene	91-20-3	25	mg/kg	4.2	J	0.042	0.26	1	0.13	J	0.037	0.23	1	1.3	J	0.19	1.2	5	0.38	J	0.041	0.25	1	
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	mg/kg	0.072	J	0.019	0.064	1	0.0046	J	0.0003	0.001	1	0.27	J	0.086	0.3	5	0.057	J	0.018	0.063	1	
Tert-Butyl Methyl Ether	1634-04-4	1.4	mg/kg	ND	U	0.013	0.13	1	0.11	J	0.011	0.11	1	ND	U	0.059	0.59	5	ND	U	0.013	0.13	1	
Toluene	108-88-3	44	mg/kg	0.036	J	0.035	0.064	1	0.0024	J	0.00057	0.001	1	0.39	J	0.16	0.3	5	0.038	J	0.034	0.063	1	
Total Xylenes	1330-20-7	990	mg/kg	2.8	J	0.019	0.064	1	0.0071	J	0.0003	0.001	1	0.93	J	0.086	0.3	5	0.23	J	0.018	0.063	1	
Semi-Volatile Organic Compounds																								
Anthracene	120-12-7	NS	mg/kg	ND	U	0.041	0.13	1	0.041	J	0.04	0.12	1	0.15	J	0.038	0.12	1	ND	U	0.039	0.12	1	
Benzo(a)anthracene	56-55-3	NS	mg/kg	ND	U	0.024	0.13	1	ND	U	0.023	0.12	1	ND	U	0.022	0.12	1	ND	U	0.022	0.12	1	
Benzo(a)pyrene	50-32-8	NS	mg/kg	ND	U	0.051	0.17	1	ND	U	0.05	0.16	1	ND	U	0.048	0.16	1	ND	U	0.049	0.16	1	
Benzo(b)fluoranthene	205-99-2	NS	mg/kg	ND	U	0.035	0.13	1	ND	U	0.034	0.12	1	ND	U	0.033	0.12	1	ND	U	0.034	0.12	1	
Benzo(g,h,i)Perylene	191-24-2	NS	mg/kg	ND	U	0.025	0.17	1	ND	U	0.024	0.16	1	ND	U	0.023	0.16	1	ND	U	0.023	0.16	1	
Chrysene	218-01-9	NS	mg/kg	0.033	J	0.022	0.13	1	0.058	J	0.021	0.12	1	ND	U	0.02	0.12	1	0.04	J	0.021	0.12	1	
Fluorene	86-73-7	NS	mg/kg	0.11	J	0.02	0.21	1	0.26	J	0.02	0.2	1	1.1	J	0.019	0.2	1	0.1	J	0.019	0.2	1	
Phenanthrene	85-01-8	NS	mg/kg	0.32	J	0.026	0.13	1	0.69	J	0.025	0.12	1	2.5	J	0.024	0.12	1	0.27	J	0.024	0.12	1	
Pyrene	129-00-0	NS	mg/kg	0.026	J	0.021	0.13	1	0.051	J	0.02	0.12	1	0.14	J	0.02	0.12	1	0.027	J	0.02	0.12	1	
Metals																								
Lead	7439-92-1	NS	mg/kg	7.24	J	0.129	2.41	1	7.04	J	0.129	2.4	1	6.99	J	0.123	2.3	1	14.2	J	0.125	2.32	1	
General Chemistry																								
Solids, Percent	SOLID	NS	Percent	78.4	J	0	0	1	80	J	0	0	1	84.3	J	0	0	1	82.7	J	0	0	1	

**Table 4
Summary of Soil Results - Vapor Intrusion Screening
Post-Excavation Sampling Event
Bellwether District Holdings, LLC.
Philadelphia, PA**

Analyte	CAS Number	PADEP Act 2 Non-Residential Soil Statewide Health Standard Vapor Intrusion Screening Values	0623 INCIDENT 1 AREA					0623 INCIDENT 1 AREA					062223 INCIDENT 1					062223 INCIDENT 1									
			Location					Location					PEB-2B					PEB-2C									
			Sample Name					Sample Name					PEB-2B_5.0-5.5_081523					PEB-2C_5.0-5.5_081523									
			Sample Date					Sample Date					08/15/2023					08/15/2023									
			Sample Depth					Sample Depth					5-5.5					5-5.5									
			Saturation					Saturation					Unsaturated					Unsaturated									
Unit					Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF			
Volatile Organic Compounds																											
1,2,4-Trimethylbenzene	95-63-6	300	mg/kg	0.058	J	0.017	0.1	1	0.088	J	0.019	0.11	1	NA					NA								
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0013	mg/kg	ND	U	0.014	0.025	1	ND	U	0.017	0.028	1	ND	U	0.00025	0.0006	1	ND	U	0.00025	0.00059	1				
1,2-Dichloroethane	107-06-2	0.1	mg/kg	ND	U	0.013	0.05	1	ND	U	0.015	0.057	1	NA					NA								
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	93	mg/kg	0.017	J	0.0096	0.1	1	0.11	J	0.011	0.11	1	NA					NA								
Benzene	71-43-2	0.13	mg/kg	ND	U	0.0083	0.025	1	0.05	J	0.0095	0.028	1	NA					NA								
Ethylbenzene	100-41-4	46	mg/kg	0.031	J	0.007	0.05	1	0.23	J	0.0081	0.057	1	NA					NA								
Isopropylbenzene (Cumene)	98-82-8	2500	mg/kg	2.6	J	0.0054	0.05	1	5.1	J	0.0062	0.057	1	NA					NA								
M,P-Xylene	179601-23-1	NS	mg/kg	0.036	J	0.028	0.1	1	0.4	J	0.032	0.11	1	NA					NA								
Naphthalene	91-20-3	25	mg/kg	0.23	J	0.032	0.2	1	0.49	J	0.037	0.23	1	NA					NA								
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	mg/kg	0.022	J	0.014	0.05	1	0.16	J	0.017	0.057	1	NA					NA								
Tert-Butyl Methyl Ether	1634-04-4	1.4	mg/kg	ND	U	0.01	0.1	1	ND	U	0.011	0.11	1	NA					NA								
Toluene	108-88-3	44	mg/kg	ND	U	0.027	0.05	1	0.079	J	0.031	0.057	1	NA					NA								
Total Xylenes	1330-20-7	990	mg/kg	0.058	J	0.014	0.05	1	0.56	J	0.017	0.057	1	NA					NA								
Semi-Volatile Organic Compounds																											
Anthracene	120-12-7	NS	mg/kg	0.077	J	0.039	0.12	1	0.099	J	0.038	0.12	1	NA					NA								
Benzo(a)anthracene	56-55-3	NS	mg/kg	0.024	J	0.022	0.12	1	0.055	J	0.022	0.12	1	NA					NA								
Benzo(a)pyrene	50-32-8	NS	mg/kg	ND	U	0.049	0.16	1	ND	U	0.048	0.16	1	NA					NA								
Benzo(b)fluoranthene	205-99-2	NS	mg/kg	ND	U	0.034	0.12	1	ND	U	0.033	0.12	1	NA					NA								
Benzo(g,h,i)Perylene	191-24-2	NS	mg/kg	ND	U	0.023	0.16	1	ND	U	0.023	0.16	1	NA					NA								
Chrysene	218-01-9	NS	mg/kg	0.076	J	0.021	0.12	1	0.15		0.02	0.12	1	NA					NA								
Fluorene	86-73-7	NS	mg/kg	0.27		0.019	0.2	1	0.88		0.019	0.2	1	NA					NA								
Phenanthrene	85-01-8	NS	mg/kg	0.78		0.024	0.12	1	1.8		0.024	0.12	1	NA					NA								
Pyrene	129-00-0	NS	mg/kg	0.088	J	0.02	0.12	1	0.14		0.02	0.12	1	NA					NA								
Metals																											
Lead	7439-92-1	NS	mg/kg	7.4		0.125	2.34	1	30.4	J	0.127	2.37	1	NA					NA								
General Chemistry																											
Solids, Percent	SOLID	NS	Percent	82.9		0	0	1	82.7		0	0	1	NA					NA								

**Table 4
Summary of Soil Results - Vapor Intrusion Screening
Post-Excavation Sampling Event
Bellwether District Holdings, LLC.
Philadelphia, PA**

Analyte	CAS Number	PADEP Act 2 Non-Residential Soil Statewide Health Standard Vapor Intrusion Screening Values	062223 INCIDENT 1					062223 INCIDENT 1					062223 INCIDENT 1					062223 INCIDENT 1				
			Location					Location					Location					Location				
			Sample Name					Sample Name					Sample Name					Sample Name				
			Sample Date					Sample Date					Sample Date					Sample Date				
			Sample Depth					Sample Depth					Sample Depth					Sample Depth				
			Saturation					Saturation					Saturation					Saturation				
			Unit	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL
Volatile Organic Compounds																						
1,2,4-Trimethylbenzene	95-63-6	300	mg/kg	NA							NA											
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0013	mg/kg	ND	U	0.00025	0.00061	1			ND	U	0.00025	0.0006	1			ND	U	0.00024	0.00058	1
1,2-Dichloroethane	107-06-2	0.1	mg/kg	NA							NA											
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	93	mg/kg	NA							NA											
Benzene	71-43-2	0.13	mg/kg	NA							NA											
Ethylbenzene	100-41-4	46	mg/kg	NA							NA											
Isopropylbenzene (Cumene)	98-82-8	2500	mg/kg	NA							NA											
M,P-Xylene	179601-23-1	NS	mg/kg	NA							NA											
Naphthalene	91-20-3	25	mg/kg	NA							NA											
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	mg/kg	NA							NA											
Tert-Butyl Methyl Ether	1634-04-4	1.4	mg/kg	NA							NA											
Toluene	108-88-3	44	mg/kg	NA							NA											
Total Xylenes	1330-20-7	990	mg/kg	NA							NA											
Semi-Volatile Organic Compounds																						
Anthracene	120-12-7	NS	mg/kg	NA							NA											
Benzo(a)anthracene	56-55-3	NS	mg/kg	NA							NA											
Benzo(a)pyrene	50-32-8	NS	mg/kg	NA							NA											
Benzo(b)fluoranthene	205-99-2	NS	mg/kg	NA							NA											
Benzo(g,h,i)Perylene	191-24-2	NS	mg/kg	NA							NA											
Chrysene	218-01-9	NS	mg/kg	NA							NA											
Fluorene	86-73-7	NS	mg/kg	NA							NA											
Phenanthrene	85-01-8	NS	mg/kg	NA							NA											
Pyrene	129-00-0	NS	mg/kg	NA							NA											
Metals																						
Lead	7439-92-1	NS	mg/kg	NA							NA											
General Chemistry																						
Solids, Percent	SOLID	NS	Percent	NA							NA											

**Table 4
Summary of Soil Results - Vapor Intrusion Screening
Post-Excavation Sampling Event
Bellwether District Holdings, LLC.
Philadelphia, PA**

Analyte	CAS Number	PADEP Act 2 Non-Residential Soil Statewide Health Standard Vapor Intrusion Screening Values	062223 INCIDENT 1					062223 INCIDENT 1					062223 INCIDENT 1					062223 INCIDENT 1							
			Location					Location					Location					Location							
			Sample Name					Sample Name					Sample Name					Sample Name							
			Sample Date					Sample Date					Sample Date					Sample Date							
			Sample Depth					Sample Depth					Sample Depth					Sample Depth							
			Saturation					Saturation					Saturation					Saturation							
			Unit	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF	Result	Q	MDL	RL	DF		
Volatile Organic Compounds																									
1,2,4-Trimethylbenzene	95-63-6	300	mg/kg	NA							NA					NA									
1,2-Dibromoethane (Ethylene Dibromide)	106-93-4	0.0013	mg/kg	ND	U	0.00025	0.00058	1			ND	U	0.00025	0.0006	1	ND	U	0.00024	0.00057	1	ND	U	0.00027	0.00064	1
1,2-Dichloroethane	107-06-2	0.1	mg/kg	NA							NA					NA									
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	93	mg/kg	NA							NA					NA									
Benzene	71-43-2	0.13	mg/kg	NA							NA					NA									
Ethylbenzene	100-41-4	46	mg/kg	NA							NA					NA									
Isopropylbenzene (Cumene)	98-82-8	2500	mg/kg	NA							NA					NA									
M,P-Xylene	179601-23-1	NS	mg/kg	NA							NA					NA									
Naphthalene	91-20-3	25	mg/kg	NA							NA					NA									
o-Xylene (1,2-Dimethylbenzene)	95-47-6	NS	mg/kg	NA							NA					NA									
Tert-Butyl Methyl Ether	1634-04-4	1.4	mg/kg	NA							NA					NA									
Toluene	108-88-3	44	mg/kg	NA							NA					NA									
Total Xylenes	1330-20-7	990	mg/kg	NA							NA					NA									
Semi-Volatile Organic Compounds																									
Anthracene	120-12-7	NS	mg/kg	NA							NA					NA									
Benzo(a)anthracene	56-55-3	NS	mg/kg	NA							NA					NA									
Benzo(a)pyrene	50-32-8	NS	mg/kg	NA							NA					NA									
Benzo(b)fluoranthene	205-99-2	NS	mg/kg	NA							NA					NA									
Benzo(g,h,i)Perylene	191-24-2	NS	mg/kg	NA							NA					NA									
Chrysene	218-01-9	NS	mg/kg	NA							NA					NA									
Fluorene	86-73-7	NS	mg/kg	NA							NA					NA									
Phenanthrene	85-01-8	NS	mg/kg	NA							NA					NA									
Pyrene	129-00-0	NS	mg/kg	NA							NA					NA									
Metals																									
Lead	7439-92-1	NS	mg/kg	NA							NA					NA									
General Chemistry																									
Solids, Percent	SOLID	NS	Percent	NA							NA					NA									

Table 4
Summary of Soil Results - Vapor Intrusion Screening
Post-Excavation Sampling Event
Bellwether District Holdings, LLC.
Philadelphia, PA

Notes:

Sample Nomenclature: PES-A_4.2-4.7_071423 - Post-Excavation Side Sample, Sample ID, Depth, and Sample Date
 Sample Nomenclature: PEB-B_4.5-5.0_071423 - Post-Excavation Bottom Sample, Sample ID, Depth, and Sample Date
 Soil samples were compared to the PADEP MSCs (November 2021)
 PADEP - Pennsylvania Department of Environmental Protection
 MSC - Medium Specific Concentrations
 TDS - Total Dissolved Solids
 CAS - Chemical Abstract Service
 NS - No standard
 mg/kg - Milligrams per kilogram
 ND - Not detected
 Q - Qualifier
 MDL - Method detection limit
 RL - Reporting Limit
 DF - Dilution factor
 Samples collected on 8/15/2023 are re-sampled locations to achieve proper detection limits for EDB in samples originally collected on 7/14/2023.

Qualifiers:

J – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
 U – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

Exceedance Summary:

- 10** - Result exceeds PADEP Act 2 Non-Residential Soil Statewide Health Standard Vapor Intrusion Screening Values
- 10** - MDL or RL greater than the applicable standard

The Philadelphia Inquirer

100 S. INDEPENDENCE MALL W, STE 600, PHILADELPHIA, PA 19106

Affidavit of Publication

On Behalf of:

LANGAN

1818 Market St

Suite 3300

PHILADELPHIA, PA 19103

STATE OF PENNSYLVANIA COUNTY OF PHILADELPHIA:

Before the undersigned authority personally appeared the undersigned who, on oath represented a and say: that I am an employee of The Philadelphia Inquirer, LLC, and am authorized to make this affidavit of publication, and being duly sworn, I depose and say:

1. The Philadelphia Inquirer, LLC is the publisher of the Philadelphia Inquirer, with its headquarters at 100 S. Independence Mall West, Suite 600, Philadelphia, PA 19106.
2. The Philadelphia Inquirer is a newspaper that which was established in in the year 1829, since which date said daily newspaper has been continuously published and distributed daily in the City of Philadelphia, count and state aforesaid.
3. The printed notice or publication attached hereto set forth on attached hereto was published in all regular print editions of The Philadelphia Inquirer on

Legal Notices

as published in [Inquirer Legals](#) in the issue(s) of:

4/12/2024

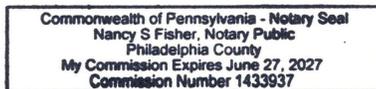
4. Under oath, I state that the following is true and correct, and that neither I nor The Philadelphia Inquirer, LLC have any is interest in the subject matter of the aforesaid notice or advertisement.





Notary Public

My Commission Expires:



Ad No: 161245

Customer No: 110234

COPY OF ADVERTISEMENT

Notice of an Intent to Remediate to an Environmental Standard (Section 304(n)(2)(I))

(Sections 302(e)(1)(II), 303(h)(1)(II),
304(n)(1)(I), and 305(c)(1))

Pursuant to the Land Recycling and Environmental Remediation Standards Act, the act of May 19, 1995, P.L. 4, No. 1995-2, notice is hereby given that Philadelphia Energy Solutions Refining and Marketing LLC will submit to the Pennsylvania Department of Environmental Protection a Notice of Intent to Remediate a site located at 3144 West Passyunk Avenue, Philadelphia, PA. This Notice of Intent to Remediate states the site is Right-of-Way 3 (ROW-3) Release on 6/22/23 Area at the Former Philadelphia Energy Solutions Refinery. The site remediated to Statewide Health Standards pertains to petroleum-impacted soils related to a limited-area release of petroleum products. Philadelphia Energy Solutions Refining and Marketing LLC has indicated that the remediation measures consisted of soil excavation. The site will be used for non-residential commercial/industrial use.

April 17, 2024

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Leigh Anne Rainford
Environmental Health Services
7801 Essington Avenue, 2nd Floor
Philadelphia, PA 19153

RE: Notice of Intent to Remediate
Right-of-Way 3 (ROW-3) Release on 6/22/23 Area
The Bellwether District Redevelopment Project
aka Former Philadelphia Energy Solutions (PES) Refinery
3144 West Passyunk Avenue
Philadelphia, Pennsylvania

Dear Ms. Rainford:

The Land Recycling and Environmental Remediation Standards Act (Act 2) requires that a Notice of Intent to Remediate (NIR) be provided to the municipality in which the site is located. In accordance with this provision of Act 2, Langan Engineering and Environmental Services, Inc. (Langan) on behalf of Philadelphia Energy Solutions Refining and Marketing LLC (PESRM), is formally notifying you of PESRM's intent to remediate the ROW-3 Release on 6/22/23 Area of the Former Philadelphia Energy Solutions Refinery Property (site). A copy of the NIR form, which will be sent to the Department of Environmental Protection (DEP), is enclosed. The following notice will be published in the Pennsylvania Bulletin, and a summary of the notice has been published in a local newspaper, proof of publication is attached.

Pursuant to the Land Recycling and Environmental Remediation Standards Act, the act of May 19, 1995, P.L. 4, No. 1995-2, notice is hereby given that Philadelphia Energy Solutions Refining and Marketing LLC will submit to the Pennsylvania Department of Environmental Protection a Notice of Intent to Remediate a site located at 3144 West Passyunk Avenue, Philadelphia, PA. This Notice of Intent to Remediate states the site is Right-of-Way 3 (ROW-3) Release on 6/22/23 Area at the Former Philadelphia Energy Solutions Refinery. The site remediated to Statewide Health Standards pertains to petroleum-impacted soils

related to a limited-area release of petroleum products. Philadelphia Energy Solutions Refining and Marketing LLC has indicated that the remediation measures consisted of soil excavation. The site will be used for non-residential commercial/industrial use.

If you have any questions concerning the proposed remediation you may contact Adam Goldberg at (215) 845-8946.

Sincerely,

Langan Engineering & Environmental Services, Inc.



Adam Goldberg, LSRP
Senior Project Manager

enclosures:

Notice of Intent to Remediate Form
Draft of Newspaper Publication

cc.

Amy Piccone – PESRM
Julianna Connolly – PESRM
Jason Hanna, CHMM – Langan
Cortney Savidge, CHMM - Langan
Jeff Smith, PG – Langan
C. David Brown, PG – PADEP



NOTICE OF INTENT TO REMEDIATE

For DEP Use Only	
PF #	_____
Rem ID #	_____

Date: <u>4/10/2024</u>	NIR Status: <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised
------------------------	--

Act 1995-2 requires four general information items to be included in the NIR: the general location, listing of contaminants, intended use of property, and proposed remediation measures. In addition, indicate the standard(s) to be obtained and attach a scaled site map (if available). Certain project amendments or changes will require submission of a revised NIR, a new public notice, and a new notification to the municipality. Changes to information marked by (**) or (††) indicate when a new NIR and new public and municipal notices are needed. DEP should also be notified of any significant changes to the initial NIR submission, including the change of future use of the property, contaminants added or removed, change of standards from site-specific to background or Statewide health, any change in the media being investigated, or change of any contact information.

Property Name Right-of-Way- 3 (ROW-3) Release on 6/22/23 Area

Former Name(s)/AKA Former Philadelphia Energy Solutions Refinery

Address/Location 3144 West Passyunk Avenue

City Philadelphia Zip Code 19145

**Municipality(s) Philadelphia County(ies) Philadelphia

Tax Parcel ID# (if known) _____

Latitude 39 ° (deg). 54 ' (min) 48.8 " (sec)

Longitude 75 ° (deg). 11 ' (min) 51.9 " (sec)

Horizontal Collection Method Geographic Information Systems

Horizontal Reference Datum NAD83 Reference Point See attached Figure 1.

**Wish to participate in the DEP/EPA [One Cleanup Program](#).

Contact the Land Recycling Program Manager for details at landrecycling@pa.gov.

EPA ID#, if known _____

DEP ID#(s), if known 51-33620

(i.e., eFACTs primary facility ID#, storage tank facility ID#, water quality permit #, etc.)

Date Release Occurred (if known) June 22, 2023

Date each municipality was notified of any plan or report submitted under any remediation standard
Philadelphia Department of Public Health, 4/10/2024

Place the newspaper name and date that your notice of your plan/report submission was published
The Philidelphia Inquirer, to be published on 4/12/2024

** A change in municipality, the addition of a new municipality, or deciding to participate in the DEP/EPA One Cleanup Program requires a new NIR to be submitted with new public and municipal notifications.

Contamination, Land Usage, and Proposed Remediation Section

Provide a brief description of the site contamination, to the extent known, in plain language (e.g., fuel oil spill, historical chemical industrial area, etc.), the current and intended future use of the property in the box below.

During removal of subgrade pipe as part of the demolition of the former refinery, a mixture that was estimated by Langan to be 40 gallons of a petroleum product and 8 gallons of water was spilled to the ground surface of Right-of-Way 3 (ROW-3) on 6/22/23. Liquids from this release were contained, controlled, and removed, and 30 cubic yards (CY) of visually impacted soil was excavated, staged, and transported off site for disposal. The primary contaminants to be addressed are petroleum hydrocarbons. The intended future use of the property is commercial/industrial.

Provide a general description of proposed remediation measures.

Remediation will be direct excavation and off-site disposal of soil and collection of post-excavation samples to verify compliance with non-residential statewide health standards. Samples will be tested for the Philadelphia Refinery Target Compound list agreed upon with the PADEP.

Standards Selection Section

Check all the boxes that apply for the appropriate contaminant groups according to the standard(s) and media of the remediation to be performed.

NOTE: Either the site-specific standard or a special industrial area requires a 30-day public and municipal comment period.

Contaminant Groups	Background		Statewide Health– Residential		Statewide Health– Non-Residential		††Site-Specific Standard		††Special Industrial Area	
	Soil	GW	Soil	GW	Soil	GW	Soil	GW	Soil	GW
Aviation Gasoline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diesel Fuel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fuel Oil No. 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fuel Oil No. 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fuel Oil No. 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fuel Oil No. 5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fuel Oil No. 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kerosene	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jet Fuel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leaded Gasoline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Motor Oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unleaded Gasoline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used Motor Oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chlorinated Solvents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inorganics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lead	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MTBE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Organics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAHs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCBs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pesticides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PFAS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

GW: groundwater

†† Changing the selected standard from either background or Statewide health to the site-specific standard, changing to a combination of standards that includes the site-specific standard, or choosing the special industrial area designation requires a new NIR submission with new public and municipal notifications.

Please list individual contaminants here, by environmental medium and cleanup standard (optional):

Statewide Health Standards (Soil): benzene, 1,2-Dibromoethane, 1,2-dichloroethane, ethylbenzene, isopropylbenzene, methy tertiary butyl ether, naphthalene, toluene, 1,2,4-trimethylbenzene, 1,3,4-trimethylbenzene xylenes, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo (g,h,i)perylene, chrysene, fluoranthene, phenanthrene, pyrene, lead

Property Owner, Remediator/Participant, and Consultant

Complete the form below for each recipient obtaining a release of liability upon approval of the final report. Attach additional sheets as necessary.

Property Owner

Contact Person/Title Anne Garr/Assistant Secretary eFACTs Client ID(If Known) 51-33620

Phone Number 312-283-4469 Email Address agarr@hilcoglobal.com

Company Name Philadelphia Energy Solutions Refining and Marketing LLC EIN or Federal ID # _____

Address (street, city, state, zip) 111 South Wacker Drive, Suite 3000, Chicago, IL 60606

Client Type (choose from list below) Limited Liability company

Client Types:

Association/Organization

- | | | |
|---------------------------|-------------------------------|--------------------------|
| Authority | Limited Liability Partnership | Partnership-General |
| County | Municipality | Partnership-Limited |
| Estate/Trust | Non-Pennsylvania | Pennsylvania Corporation |
| Federal Agency | Government | School District |
| Individual | Other (Government) | Sole Proprietorship |
| Limited Liability company | Other (Non-Government) | State Agency |

Consultant

Contact Person/Title Jeff Smith Email Address JSmith@langan.com

Phone Number 215-845-8915 Company Name Langan Engineering and Environmental Services

Address (street, city, state, zip) 1818 Market Street, Suite 3300, Philadelphia, PA 19103

Other Participant (Remediator)

Contact Person/Title Anne Garr/Assistant Secretary

Relationship to Site Remediator
(e.g. remediator, participant in cleanup if other than owner, etc.)

Phone Number 312-283-4469 Email Address agarr@hilcoglobal.com

Company Name Philadelphia Energy Solutions Refining and Marketing LLC EIN or Federal ID # _____

Address (street, city, state, zip) 111 South Wacker Drive, Suite 3000, Chicago, IL 60606

Preparer of Notice of Intent to Remediate

Name Adam Goldberg Title Senior Project Manager

Phone Number 215.845.8946 Email Address agoldberg@langan.com

Company Name Langan Engineering and Environmental Services

Address (street, city, state, zip) 1818 Market Street, Suite 3300, Philadelphia, PA 19103

Submission Details

Details have been submitted successfully. Please review and print the Transaction Receipt for your records.

Reference : 227989

Form Name : LAND RECYCLING NOTICE OF INTENT TO REMEDIATE

Submitter Name : Adam Goldberg

Submitter Organization : Langan Engineering and Environmental Services

Submitter Email : Agoldberg@langan.com

Phone Number : (215) 845-8946

Submitted To : Southeast Regional Office

Date Submitted : 04/18/2024

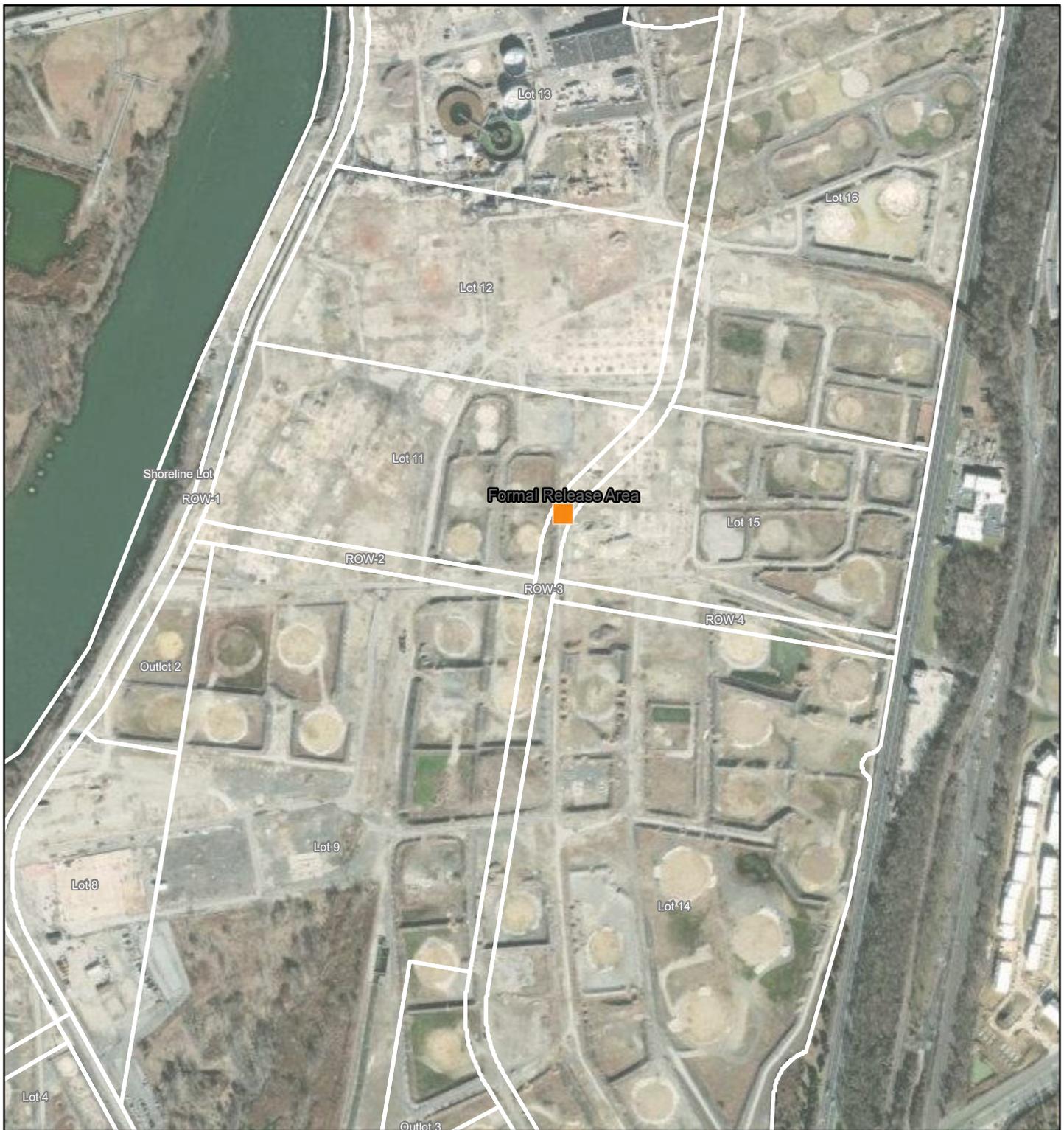
[Print Confirmation](#)

Need help? Contact Us (<https://greenport.pa.gov/gpl/GpLogin/ContactUs>)

Pennsylvania Department of Environmental Protection

Rachel Carson Building | 400 Market Street | Harrisburg, PA 17101

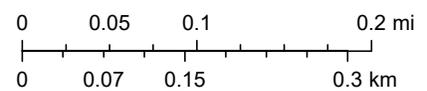
Figure 1 - Right-of-Way- 3 (ROW-3) Release on 6/22/23 Area



4/3/2024, 4:21:28 PM

1:9,028

■ Location of Right-of-Way- 3 (ROW-3)
Release on 6/22/23 Area



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

The Philadelphia Inquirer

100 S. INDEPENDENCE MALL W, STE 600, PHILADELPHIA, PA 19106

Affidavit of Publication

On Behalf of:

LANGAN

1818 Market St

Suite 3300

PHILADELPHIA, PA 19103

STATE OF PENNSYLVANIA COUNTY OF PHILADELPHIA:

Before the undersigned authority personally appeared the undersigned who, on oath represented a and say: that I am an employee of The Philadelphia Inquirer, LLC, and am authorized to make this affidavit of publication, and being duly sworn, I depose and say:

1. The Philadelphia Inquirer, LLC is the publisher of the Philadelphia Inquirer, with its headquarters at 100 S. Independence Mall West, Suite 600, Philadelphia, PA 19106.
2. The Philadelphia Inquirer is a newspaper that which was established in in the year 1829, since which date said daily newspaper has been continuously published and distributed daily in the City of Philadelphia, count and state aforesaid.
3. The printed notice or publication attached hereto set forth on attached hereto was published in all regular print editions of The Philadelphia Inquirer on

Legal Notices

as published in [Inquirer Legals](#) in the issue(s) of:

4/12/2024

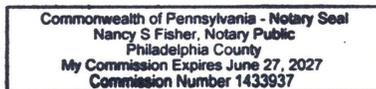
4. Under oath, I state that the following is true and correct, and that neither I nor The Philadelphia Inquirer, LLC have any is interest in the subject matter of the aforesaid notice or advertisement.





Notary Public

My Commission Expires:



Ad No: 161245

Customer No: 110234

COPY OF ADVERTISEMENT

Notice of an Intent to Remediate to an Environmental Standard (Section 304(n)(2)(I))

(Sections 302(e)(1)(II), 303(h)(1)(II),
304(n)(1)(I), and 305(c)(1))

Pursuant to the Land Recycling and Environmental Remediation Standards Act, the act of May 19, 1995, P.L. 4, No. 1995-2, notice is hereby given that Philadelphia Energy Solutions Refining and Marketing LLC will submit to the Pennsylvania Department of Environmental Protection a Notice of Intent to Remediate a site located at 3144 West Passyunk Avenue, Philadelphia, PA. This Notice of Intent to Remediate states the site is Right-of-Way 3 (ROW-3) Release on 6/22/23 Area at the Former Philadelphia Energy Solutions Refinery. The site remediated to Statewide Health Standards pertains to petroleum-impacted soils related to a limited-area release of petroleum products. Philadelphia Energy Solutions Refining and Marketing LLC has indicated that the remediation measures consisted of soil excavation. The site will be used for non-residential commercial/industrial use.

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$

Extra Services & Fees (check box, add fee as appropriate)

- | | | |
|--|----|-------|
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ | _____ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ | _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ | _____ |
| <input type="checkbox"/> Adult Signature Required | \$ | _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ | _____ |

Postage

\$

Total Postage and Fees

\$

Sent To

Leigh Anne Rainford

Street and Apt. No., or PO Box No.

7801 Essington Avenue, 2nd floor

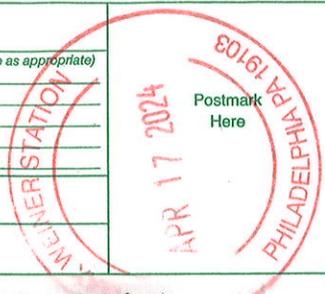
City, State, ZIP+4®

Philadelphia, PA 19153

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

6889 9E28 1000 2022 1670 0001 8736 6889



SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Attn: Leigh Anne Rainford
 Environmental Health Services
 7801 Essington Avenue, 2nd floor
 Philadelphia, PA 19153



9590 9402 5367 9189 8345 79

2. Article Number (Transfer from service label)

7022 1670 0001 8736 6389

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

[Handwritten Signature]

- Agent
- Addressee

B. Received by (Printed Name)

[Handwritten Name]

C. Date of Delivery

[Handwritten Date: 7/19]

- D. Is delivery address different from item 1?** Yes
 If YES, enter delivery address below: No

3. Service Type

- Adult Signature
- Adult Signature Restricted Delivery
- Certified Mail®
- Certified Mail Restricted Delivery
- Collect on Delivery
- Collect on Delivery Restricted Delivery
- Insured Mail
- Insured Mail Restricted Delivery (over \$500)
- Priority Mail Express®
- Registered Mail™
- Registered Mail Restricted Delivery
- Return Receipt for Merchandise
- Signature Confirmation™
- Signature Confirmation Restricted Delivery

Domestic Return Receipt

November 12, 2024

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Leigh Anne Rainford
Environmental Health Services
7801 Essington Avenue, 2nd Floor
Philadelphia, PA 19153

RE: Final Report Submission
Right-of-Way 3 (ROW-3) Release on 6/22/23 Area
The Bellwether District Redevelopment Project
aka Former Philadelphia Energy Solutions (PES) Refinery
3144 West Passyunk Avenue
Philadelphia, Pennsylvania

Dear Ms. Rainford:

Notice is hereby given that Bellwether District Holdings, LLC formerly known as Philadelphia Energy Solutions Refining and Marketing LLC is submitting a final report to the Department of Environmental Protection for a distinct localized area in Right-of-Way (ROW) 3 of the former Philadelphia Energy Solutions Refinery site located at 3144 West Passyunk Avenue, Philadelphia, PA. The report indicates that the remediation performed has attained compliance with the Statewide health cleanup standard.

This notice is made under the provision of the Land Recycling and Environmental Standards Act, the Act of May 19, 1995, P.L. 4, No. 2.

If you have any questions concerning the proposed remediation you may contact Adam Goldberg at (215) 845-8946.

Sincerely,
Langan Engineering & Environmental Services, Inc.



Adam Goldberg, LSRP
Senior Project Manager

enclosures:

Draft of Newspaper Publication
Final Report Summary

cc.

Amy Piccone – PESRM
Julianna Connolly – PESRM
Jason Hanna, CHMM – Langan
Cortney Savidge ,CHMM - Langan
Jeff Smith, PG – Langan
C. David Brown, PG – PADEP

**Notification of Receipt
of a Final Report for
Statewide Health Standard
(Sections 302(e)(2), 303(h)(2))**

Notice is hereby given that Bellwether District Holdings, LLC formerly known as Philadelphia Energy Solutions Refining and Marketing LLC is submitting a final report to the Department of Environmental Protection, Southeast Regional Office, to demonstrate attainment of the Statewide health standard for a distinct localized area in Right-of-Way (ROW) 3 of the former Philadelphia Energy Solutions Refinery site located at 3144 West Passyunk Avenue, Philadelphia, PA. Bellwether District Holdings, LLC. formerly known as Philadelphia Energy Solutions Refining and Marketing LLC has indicated that the remediation measures taken have attained compliance with the Statewide health cleanup standard established under the Land Recycling and Environmental Remediation Standards Act.

This notice is made under the provision of the Land Recycling and Environmental Remediation Standards Act, the Act of May 19, 1995, P.L. #4, No. 2.



For DEP Use Only PF # _____ Rem ID # _____

FINAL REPORT SUMMARY

The Final Report Summary (FRS) is a brief report consisting of set of data required in addition to the Act 2 Final Report. The summary is used in part as a reference to the Final Report Approval Letter which conveys liability relief to the remediator and other applicable persons. It is of value long after the remediation to be used by the public and Department in understanding key information about the site and remediation.

This use is increased by the fact that it will ultimately be merged into the Department's eFACTS system, which allows the public to have the ease of computer access to environmental information at sites. For more information, see www.ahs.dep.pa.gov/eFACTSWeb/default.aspx. Finally, the summary will be used by the Department to help to better assess the status and the level of success of the program. In the past, numbers of sites remediated has been tracked. With the inclusion of this summary information, progress can be tracked in many specific ways, including identification of individual chemical constituents, and the mass treated, removed or managed safely in place.

Identification

Property Name Right-of-Way- 3 (ROW-3) Release on 6/22/23 Area

Property Descriptor _____

Address / Location

Address 3144 West Passyunk Avenue

City Philadelphia Zip Code 19145

Municipality(s) Philadelphia County(ies) Philadelphia

Latitude 39 ° (deg). 54 ' (min) 48.8 " (sec) Longitude 75 ° (deg). 11 ' (min) 51.9 " (sec)

Horizontal Collection Method Geographic Information Systems

Horizontal Reference Datum NAD83 Reference Point See attached Figure 1

Property Specifics

Size of Property 0.08 acres Number of Sites 1

Combined acreage of sites 0.08 acres

Remediation

Standards attained or special industrial area attainment. (Check all that apply. Can use multiple.)

- Background
 Statewide Health
 Site-Specific
 Special Industrial Area

Proposed future property use - scenario for which the attainment of Statewide Health standard is demonstrated

- Residential
 Non-residential

List of contaminants

Soils

Chemical Name	CAS Number	Mass Contaminant Treated or Removed (lbs.)	Mass Contaminant Managed on Site (lbs.)
See Table 1 - PADEP SWHS Selection, attached.			

Groundwater

Chemical Name	CAS Number	Mass Contaminant Treated or Removed (lbs.)	Mass Contaminant Managed on Site (lbs.)
N/A			

Remediation

Number of sampling rounds for groundwater attainment: N/A

Special Features

Non-use aquifer approval date: _____

Area-wide background approval date: _____

Amount of waste removed other than soil or groundwater (cubic yards): _____

Municipal ordinance prohibiting groundwater use:

Post remediation care plan:

Other Programs

- Key Site
- Multi-site Agreement; Date: _____
- Enterprise Zone
- Keystone Opportunity Zone

Administrative

- Municipality request for public involvement plan

Deed notification

- Deed acknowledgment:

- Environmental covenant:

Cleanup cost (\$): 100,000

Jobs created/saved: Not Applicable

Narrative: Provide property history and description, site characterization findings, site description, summary of remediation, summary of attainment demonstration, description of pathway elimination, engineering and institutional controls, and benefits of land reuse, when applicable.

The post-excavation soil sample analytical results demonstrate attainment of the non-residential SWHS but also confirm that the remediated Act 2 Site soils did not extend to the groundwater table which is documented to be encountered at an elevation of about 1.44 feet in the vicinity of the release area. As part of Facility wide redevelopment activities, the ROW-3 Release Area will be under a paved area.

As an institutional control, prior to their construction and occupancy, on-facility buildings which could be occupied in the future will be subject to vapor intrusion investigation and evaluation to determine if conditions (i.e., volatilization of COPC from soil, groundwater, and/or light non-aqueous phase liquid) could pose an unacceptable risk to occupants. As needed, vapor mitigation systems will be incorporated into the design and construction of such buildings as engineering controls where potentially unacceptable vapor intrusion risks are identified. These activities and use limitations will eliminate the potential for future unacceptable exposures to contaminants of potential concern at the Site via vapor intrusion.

Remediator / Property Owner / Consultant. Complete the form below for each recipient obtaining a release of liability upon approval of the final report. Attach additional sheets as necessary.

Remediator

Contact Person/Title Anne Garr/Assistant Secretary eFACTS Client ID* 51-33620
 Relationship to Site Remediator/Property Owner Client Type* Limited Liability Company
 (e.g. owner, remediator, participant in cleanup, consultant, etc.)
 Phone Number 312-283-4469 Email Address agarr@hilcoglobal.com
 Company Name Bellwether District Holdings, LLC EIN or Federal ID # _____
formerly known as Philadelphia Energy Solutions
Refining and Marketing LLC
 Street Address 111 South Wacker Drive, Suite 3000
 City Chicago State IL Zip Code 60606

Property Owner

Contact Person/Title Anne Garr/Assistant Secretary eFACTS Client ID* 51-33620
 Relationship to Site Remediator/Property Owner Client Type* Limited Liability Company
 (e.g. owner, remediator, participant in cleanup, consultant, etc.)
 Phone Number 312-283-4469 Email Address agarr@hilcoglobal.com
 Company Name Bellwether District Holdings, LLC EIN or Federal ID # _____
formerly known as Philadelphia Energy Solutions
Refining and Marketing LLC
 Street Address 111 South Wacker Drive, Suite 3000
 City Chicago State IL Zip Code 60606

Consultant

Contact Person/Title Jeff Smith/Senior Associate eFACTS Client ID* _____
 Relationship to Site Consultant Client Type* _____
 (e.g. owner, remediator, participant in cleanup, consultant, etc.)
 Phone Number 215-845-8919 Email Address JSmith@langan.com
 Company Name Langan Engineering and EIN or Federal ID # _____
Environmental Services, LLC
 Street Address 1818 Market Street, Suite 3300
 City Philadelphia State PA Zip Code 19103

*Include eFACTS Client ID (if known) – “Client Types” below:

Association/Organization	Limited Liability Company	Partnership-General
Authority	Limited Liability Partnership	Partnership-Limited
County	Municipality	School District
Estate/Trust	Non-Pennsylvania Government	Sole Proprietorship
Federal Agency	Other (Non-Government)	State Agency
Individual	Pennsylvania Corporation	

Attachments: In addition to the data entered in this FRS, the Department requests scanned image(s) of a map view of the site indicating, at a minimum, the boundaries of the "site" relative to the locations of the adjacent property boundaries. The location of the site (as defined by Act 2) is that which will receive the liability relief conveyed by Act 2, Chapter 5. The maps may portray other features but should clearly show the Act 2 site boundaries. You may also attach other applicable image files or attachments. These files should be in Adobe Acrobat (*.pdf), GIF (*.gif) or JPEG file interchange format (*.jpg).

Table 1
Selection of Statewide Health Standards
Bellwether District Holdings, LLC.
Philadelphia, PA

Compound Name	PADEP Non-Residential Direct Contact 0-2 Ft	PADEP Non-Residential Direct Contact 2-15 Ft	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated 100X MSC	PADEP Non-Residential Soil to Groundwater MSC Used Aquifer TDS <=2500 mg/l Unsaturated Generic Value
Benzene	280	330	0.5	0.13
1,2-Dibromoethane (EDB)	3.7	4.2	0.005	0.0012
1,2-Dichloroethane (EDC)	85	98	0.5	0.1
Ethylbenzene	880	1000	70	46
Isopropylbenzene	10000	10000	350	2500
Methyl Tertiary Butyl Ether (MTBE)	8500	9800	2	0.28
Naphthalene	66	77	10	25
Toluene	10000	10000	100	44
1,2,4-Trimethylbenzene	4700	5400	53	300
1,3,5-Trimethylbenzene	4700	5400	53	93
Xylenes (Total)	7900	9100	1000	990
Anthracene	190000	190000	6.6	350
Benzo(a)anthracene	130	190000	0.39	340
Benzo(a)pyrene	91	190000	0.02	46
Benzo(b)fluoranthene	76	190000	0.055	610
Benzo(g,h,i)perylene	190000	190000	0.026	180
Chrysene	760	190000	0.19	230
Fluorene	130000	190000	190	3800
Phenanthrene	190000	190000	110	10000
Pyrene	96000	190000	13	2200
Lead	1000	190000	0.5	450

Bold represents the Non-Residential Statewide Health Standards (SWHS) used.



LANGAN
 1818 Market Street, Suite 3300
 Philadelphia, PA 19103-3638
 T: 215.845.8946 F: 215.845.8901 www.langan.com

Langan Engineering & Environmental Services, LLC
 Langan Engineering, Environmental, Surveying and
 Landscape Architecture, D.P.C.
 Langan International LLC
 Collectively known as Langan

Project
BELLWETHER DISTRICT HOLDINGS, LLC
 PHILADELPHIA
 PHILADELPHIA COUNTY PENNSYLVANIA

Figure Title
SITE LOCATION MAP

Project No. 220181801	Figure
Date 9/23/2024	1
Scale 1"=2,000'	
Drawn By CH	

7019 0140 0000 9573 6253

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee \$ _____

Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$ _____
<input type="checkbox"/> Return Receipt (electronic)	\$ _____
<input type="checkbox"/> Certified Mail Restricted Delivery	\$ _____
<input type="checkbox"/> Adult Signature Required	\$ _____
<input type="checkbox"/> Adult Signature Restricted Delivery	\$ _____

Postage \$ _____

Total Postage and Fees \$ _____

Sent To: Leigh Anne Rainford
 Environmental Health Services
 Street and Apt. No., or PO Box: 7801 Essington Avenue, 2nd Floor
 City, State, ZIP+4®: Philadelphia, PA 19153

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



MIDDLE CITY
 2037 CHESTNUT ST FL 1
 PHILADELPHIA, PA 19103-9997
 (800)275-8777

11/12/2024 01:09 PM

Product	Qty	Unit Price	Price
First-Class Mail® Letter	1		\$1.01
Philadelphia, PA 19153 Weight: 0 lb 1.80 oz Estimated Delivery Date Thu 11/14/2024			
Certified Mail®			\$4.85
Tracking #: 70190140000095736253			
Return Receipt			\$4.10
Tracking #: 9590 9402 5367 9189 8308 61			
Total			\$9.96
Prepaid Mail	1		\$0.00

Grand Total: \$9.96

Credit Card Remit \$9.96
 Card Name: AMEX
 Account #: XXXXXXXXXXX1292
 Approval #: 885291
 Transaction #: 868
 AID: A000000025010801 Contactless
 AL: AMERICAN EXPRESS
 PIN: Not Required

The Philadelphia Inquirer

100 S. INDEPENDENCE MALL W, STE 600, PHILADELPHIA, PA 19106

Affidavit of Publication

On Behalf of:

LANGAN

1818 Market St

Suite 3300

PHILADELPHIA, PA 19103

STATE OF PENNSYLVANIA COUNTY OF PHILADELPHIA:

Before the undersigned authority personally appeared the undersigned who, on oath represented a and say: that I am an employee of The Philadelphia Inquirer, LLC, and am authorized to make this affidavit of publication, and being duly sworn, I depose and say:

1. The Philadelphia Inquirer, LLC is the publisher of the Philadelphia Inquirer, with its headquarters at 100 S. Independence Mall West, Suite 600, Philadelphia, PA 19106.
2. The Philadelphia Inquirer is a newspaper that which was established in in the year 1829, since which date said daily newspaper has been continuously published and distributed daily in the City of Philadelphia, count and state aforesaid.
3. The printed notice or publication attached hereto set forth on attached hereto was published in all regular print editions of The Philadelphia Inquirer on

Legal Notices

as published in [Inquirer Legals](#) in the issue(s) of:

11/14/2024

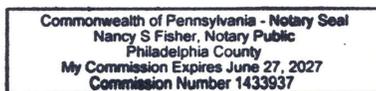
4. Under oath, I state that the following is true and correct, and that neither I nor The Philadelphia Inquirer, LLC have any is interest in the subject matter of the aforesaid notice or advertisement.





Notary Public

My Commission Expires:



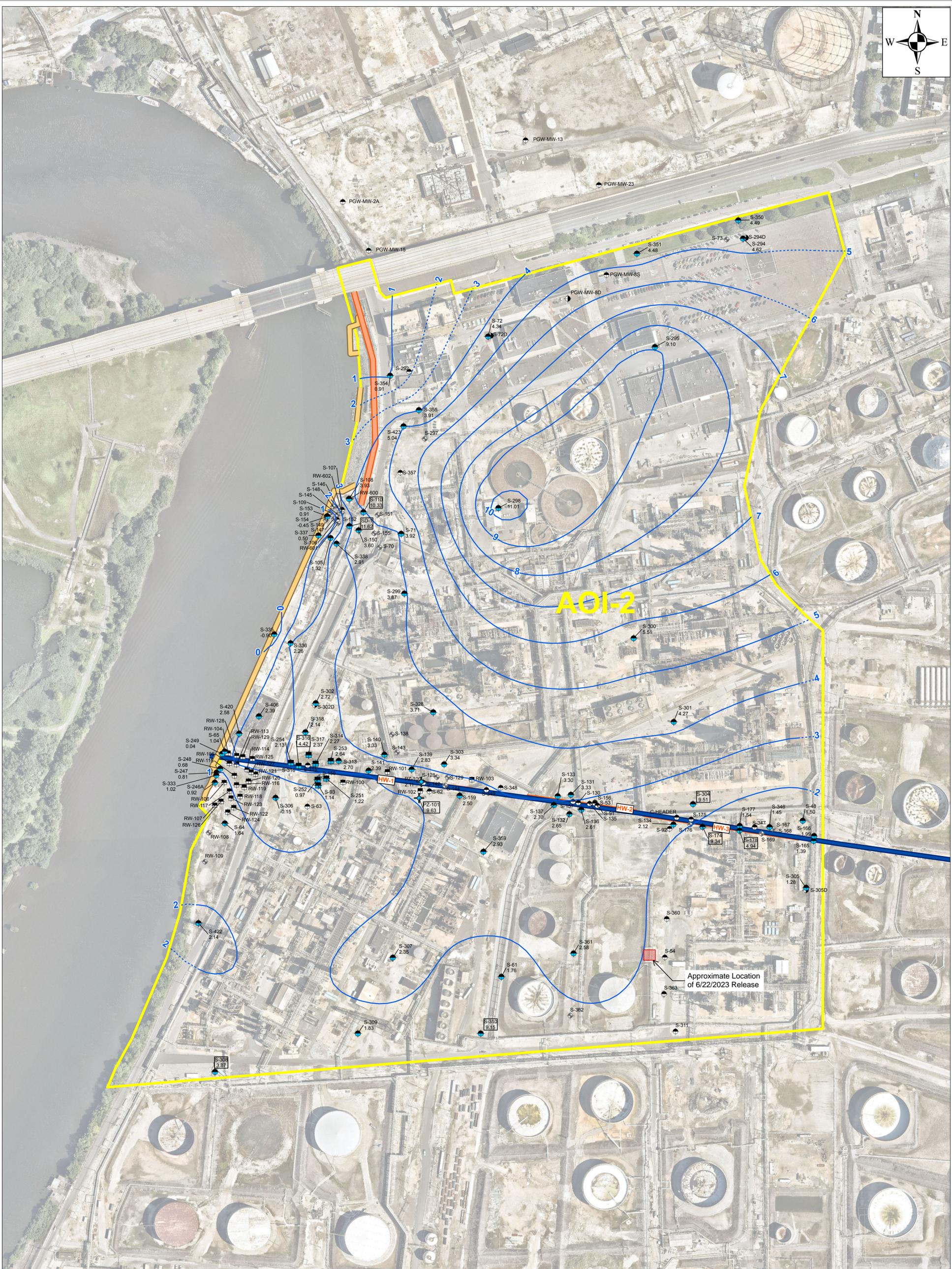
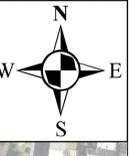
Ad No: 175489

Customer No: 110234

COPY OF ADVERTISEMENT

Notification of Receipt of a Final Report for Statewide Health Standard (Sections 302(e)(2), 303(h)(2))

Notice is hereby given that Bellwether District Holdings, LLC formerly known as Philadelphia Energy Solutions Refining and Marketing LLC is submitting a final report to the Department of Environmental Protection, Southeast Regional Office, to demonstrate attainment of the Statewide health standard for a distinct localized area in Right-of-Way (ROW) 3 of the former Philadelphia Energy Solutions Refinery site located at 3144 West Passyunk Avenue, Philadelphia, PA. Bellwether District Holdings, LLC, formerly known as Philadelphia Energy Solutions Refining and Marketing LLC has indicated that the remediation measures taken have attained compliance with the Statewide health cleanup standard established under the Land Recycling and Environmental Remediation Standards Act. This notice is made under the provision of the Land Recycling and Environmental Remediation Standards Act, the Act of May 19, 1995, P.L. #4, No. 2.



Legend

- S-131 3.33 Unconfined Aquifer Monitoring Well and Groundwater Elevation (ft. amsl)
- S-93 1.14 Unconfined Aquifer Recovery Well and Groundwater Elevation (ft. amsl)
- PZ-101 9.63 Unconfined Aquifer Piezometer and Groundwater Elevation (ft. amsl)
- Well Abandoned/Destroyed/Unable to Locate
- Lower Aquifer Monitoring Well
- Unconfined Aquifer Monitoring Well
- Unconfined Aquifer Recovery Well
- Unconfined Aquifer Piezometer
- Unconfined Aquifer Groundwater Contours (ft. amsl)
- Inferred Unconfined Aquifer Groundwater Contours (ft. amsl)
- Vertical Wall
- Bulkhead
- Pollock Street Sewer
- Horizontal Well
- AOI Boundary
- Well Not Used in Contouring

- Notes:
1. Aerial imagery provided by Nearmap.com, dated 7/29/2015.
 2. Area of Interest boundaries referenced from 2011 ALTA/ACSM Land Title Survey, prepared for Sunoco Inc. (R&S).
 3. Groundwater elevations were obtained from the August 2016 gauging event performed by Aquaterra Technologies, Incorporated.
 4. ft. amsl = feet above mean sea level

Reprinted from July 2017 Remedial Investigation Report for AOI 2, Evergreen, additions in red added by Langan.

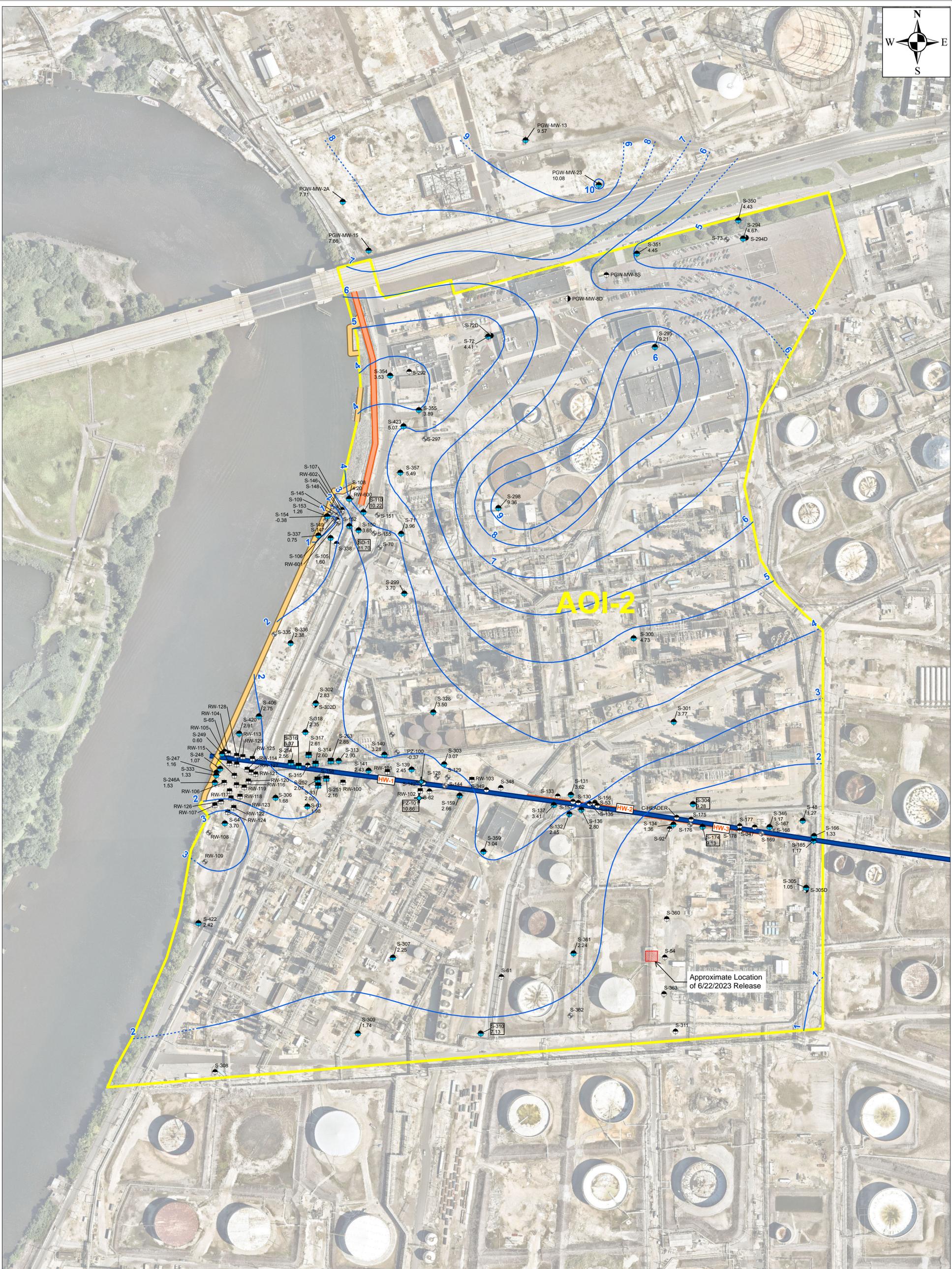
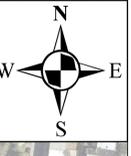
Figure 7: Groundwater Elevations (August 2016) Unconfined Aquifer Wells AOI-2 Remedial Investigation Report PES Philadelphia Refining Complex Philadelphia, Pennsylvania



Philadelphia Refinery Operations
A Series of Evergreen Resources Group, LLC.
2 Righter Parkway, Suite 200
Wilmington, DE 19803

0 75 150 300 Feet

SCALE: 1" = 150'
DATE: March 3, 2017
DRN: BY: HD
CDD: BY: EDJ
JOB#: 2574602



Legend

- S-131 3.33 Unconfined Aquifer Monitoring Well and Groundwater Elevation (ft. amsl)
- S-93 1.14 Unconfined Aquifer Recovery Well and Groundwater Elevation (ft. amsl)
- PZ-101 9.63 Unconfined Aquifer Piezometer and Groundwater Elevation (ft. amsl)
- Well Abandoned/Destroyed/Unable to Locate
- Lower Aquifer Monitoring Well
- Unconfined Aquifer Monitoring Well
- Unconfined Aquifer Recovery Well
- Unconfined Aquifer Piezometer
- Horizontal Well
- Unconfined Aquifer Groundwater Contours (ft. amsl)
- Inferred Unconfined Aquifer Groundwater Contours (ft. amsl)
- Vertical Wall
- Bulkhead
- Pollock Street Sewer
- AOI Boundary
- Well Not Used in Contouring

Notes:
 1. Aerial imagery provided by Nearmap.com, dated 7/29/2015.
 2. Area of Interest boundaries referenced from 2011 ALTA/ACSM Land Title Survey, prepared for Sunoco Inc. (R&S).
 3. Groundwater elevations were obtained from the October 2016 gauging event performed by Aquaterra Technologies, incorporated.
 4. ft. amsl = feet above mean sea level
 5. Philadelphia Gas Works (PGW) wells were gauged by Environmental Alliance, Inc. on October 26, 2016.

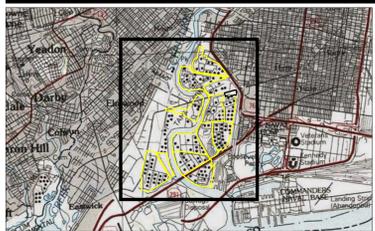
Reprinted from July 2017 Remedial Investigation Report for AOI 2, Evergreen Additions in red added by Langan.

Figure 8: Groundwater Elevations (October 2016) Unconfined Aquifer Wells AOI-2 Remedial Investigation Report PES Philadelphia Refining Complex Philadelphia, Pennsylvania



Philadelphia Refinery Operations
 A Series of Evergreen Resources Group, LLC.
 2 Righter Parkway, Suite 200
 Wilmington, DE 19803

SCALE: 1" = 150'
 DATE: March 3, 2017
 DRN: BY: HD
 CKD: BY: EDJ
 JOB#: 2574602



- Notes**
1. Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet, North American Vertical Datum of 1988 (NAVD 88)
 2. Source: Stantec
 3. Contours denote corrected groundwater elevation in feet. Depth to groundwater was measured in each well to the nearest one-hundredth of a foot using an interface probe. Groundwater remediation systems were in operation during well gauging.
 4. Groundwater elevation data was interpolated using block gridding with a linear variogram model in Surfer.
 5. Wells not measured during the April/May 2023 event are not displayed and include (but are not limited to) damaged wells, destroyed wells, inaccessible wells, wells with pumps, and wells that were poached out city.
 6. Wells gauged during April/May 2023 but not utilized for water-table contouring include those containing measurable light non-aqueous phase liquids, wells screened across a flow barrier or other barrier, wells intersecting more than one water-bearing unit, wells with fouled screens, a subset of the remediation system wells, and wells excluded from contouring in recent Remedial Investigation Reports. Wells not used for contouring are not displayed.
 7. Contour interval = 1 foot
 8. Aerial & Topo Copyright © 2013 National Geographic Society, Inc. Used by permission.

- Legend**
- ◆ PIEZOMETER
 - ◆ RECOVERY WELL
 - ◆ WATER-TABLE MONITORING WELL
 - WATER-TABLE ELEVATION CONTOUR (FEET NAVD 88)
 - APPROXIMATE LOCATION OF PHILADELPHIA WATER DEPARTMENT SEWER
 - LIMITS OF WATER-TABLE WELL CONTROL
 - AREA OF INTEREST (AOI)
 - BELMONT TERMINAL
 - VERIZON SOUTH DISTRICT WORK CENTER (SDWC) PROPERTY
 - PHILADELPHIA GAS WORKS (PGW) PASSYUNK FACILITY PROPERTY BOUNDARY
 - 4.82 WATER-TABLE ELEVATION (FEET NAVD 88)

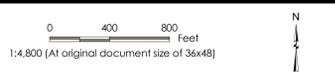


Figure No. **4**
WATER-TABLE GROUNDWATER ELEVATION MAP
APRIL/MAY 2023
 Client/Project
 PHILADELPHIA REFINERY OPERATIONS, A SERIES OF
 EVERGREEN RESOURCES GROUP, LLC
 FORMER PHILADELPHIA REFINERY
 3144 PASSYUNK AVENUE, PHILADELPHIA, PA 19145
 Project Location
 City of Philadelphia, Philadelphia County, Pennsylvania
 Prepared by GWC on 7/14/2023
 Technical Review by ADK on 7/14/2023
 Independent Review by AJW on 7/14/2023
 213403343

Reprinted from July 2023 Groundwater Remediation Status Report, First Half of 2023, additions in red added by Langan.



Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

Client Name: Philadelphia Energy Solutions Refining and Marketing LLC	Site Location: 3144 West Passyunk Avenue, Philadelphia, PA	Project No.: 220181801
---	--	----------------------------------

Date 6/22/2023	Photo No. 1
Direction Photo Taken: North	
Description: View upon discovery of Act 2 Site area where water and a petroleum product mixture were observed in the excavation area.	



Date 6/22/2023	Photo No. 2
Direction Photo Taken: East	
Description: View of pipe removal after first indication of a release to better visually determine the nature and extent of impacted soil.	



Client Name:

Philadelphia Energy Solutions Refining and Marketing LLC

Site Location:

3144 West Passyunk Avenue, Philadelphia, PA

Project No.

220181801

Date 6/22/2023	Photo No. 3
Direction Photo Taken: North	
Description: View of immediate response liquids removal efforts after pipe removal.	



Date 6/22/2023	Photo No. 4
Direction Photo Taken: NA	
Description: View of defective section of piping removed from the Act 2 Site Area.	



Client Name: Philadelphia Energy Solutions Refining and Marketing LLC	Site Location: 3144 West Passyunk Avenue, Philadelphia, PA	Project No.: 220181801
---	--	----------------------------------

Date 6/22/2023	Photo No. 5
Direction Photo Taken: North	
Description: View of excavation area after immediate response efforts but before the over excavation of visually impacted soils.	



Date 7/14/2023	Photo No. 6
Direction Photo Taken: North	
Description: View of excavation area after immediate response efforts, additional excavation of visibly impacted soils and additional excavation before post excavation sampling.	



Client Name:

Philadelphia Energy Solutions Refining and Marketing LLC

Site Location:

3144 West Passyunk Avenue, Philadelphia, PA

Project No.

220181801

Date 7/14/2023	Photo No. 7
Direction Photo Taken: Southeast	
Description: Additional view of completed excavation area following the completion of post-excitation sampling.	



Date 7/14/2023	Photo No. 8
Direction Photo Taken: Southeast	
Description: View of stockpiled soil removed from the 6/22/23 Release Area and staged in the Temporary Soil Staging Area (TSSA).	



Client Name:

Philadelphia Energy Solutions Refining and Marketing LLC

Site Location:

3144 West Passyunk Avenue, Philadelphia, PA

Project No.

220181801

Date 3/19/2024	Photo No. 9
Direction Photo Taken: Southeast	
Description: View of stockpiled soil removed from the 6/22/23 Release Area being loaded into trucks for off-site disposal at Clean Earth – New Castle.	



FINAL

SOIL MANAGEMENT PLAN

3144 Passyunk Avenue, Pennsylvania, PA

Prepared by HRP Philadelphia Holdings, LLC

June 15, 2020

HRP Philadelphia Holdings, LLC (“HRP”) has prepared this Soil Management Plan (the “Plan”) for review and approval by the Pennsylvania Department of Environmental Protection (“PADEP”) and the United States Environmental Protection Agency (“EPA”).

This Plan describes HRP’s anticipated pre-excavation characterization, soil grading, and soil reuse activities during redevelopment of the PES Facility, commonly referred to as the Philadelphia Refinery (the “Site”), and HRP’s approach for managing soils at the Site during redevelopment. The Site contains approximately 1,300 acres of land with an address of 3144 Passyunk Avenue, Philadelphia, Pennsylvania 19145. This Plan describes how onsite soils will be sampled prior to grading, relocation, and disturbance, and how decisions will be made about where such soils can be placed at the Site as part of the bulk movement of soil during redevelopment activities.

HRP has prepared this Plan not only to describe its approach to soil management in connection with its redevelopment activities but also to be consistent with Sunoco’s site-wide remediation activities pursuant to the following two agreements: (1) the Settlement Agreement and Covenant Not To Sue among EPA, Philadelphia Energy Solutions Refining and Marketing LLC (“PESRM”), and Philadelphia Energy Solutions LLC, Docket Number CERC/RCRA-03-2012-0224DC (“Settlement Agreement”), and (2) the Consent Order and Agreement among PADEP, Sunoco, Inc. (R&M) n/k/a Sunoco (R&M), LLC, and PESRM dated August 14, 2012 (“CO&A”).¹ The CO&A is commonly referred to as the Buyer/Seller Agreement and provides that Sunoco will have the sole authority to address “Pre-Existing Contamination” as that term is defined in the Buyer/Seller Agreement at the Site in accordance with the Pennsylvania Land Recycling and Environmental Remediation Standards Act (“Act 2”).² The Settlement Agreement recognizes that the Site is being addressed in accordance with the One Cleanup Program Memorandum of Agreement (the “MOA”) between PADEP and EPA dated April 21, 2004.³ Thus, HRP understands that PADEP is coordinating its review of Sunoco’s characterization and remediation activities at the Site with EPA, so that

¹ While we understand that Evergreen Resources Management Operations, a series of Evergreen Resources Group, LLC, is now managing the legacy remedial work for Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC (“Evergreen”) and Sunoco (R&M), LLC, for clarity, Sunoco, Inc. n/k/a ETC Sunoco Holdings LLC, Sunoco, Inc. (R&M) n/k/a Sunoco (R&M), LLC and Evergreen shall be referred to collectively as “Sunoco” in this Plan.

² Sunoco, Inc. (R&M) originally entered the Site in Pennsylvania’s Land Recycling Program in October 2006 through the submission of a Notice of Intent to Remediate (“NIR”).

³ Settlement Agreement, Para. 17.

Sunoco can integrate and harmonize remedial obligations under the corrective action program pursuant to the Resource Conservation and Recovery Act (“RCRA”) with the environmental work that it is performing under Act 2.⁴ Sunoco intends to utilize a combination of the statewide health and site-specific cleanup standards under Act 2 in implementing the Buyer/Seller Agreement. As part of its work under Act 2, Sunoco and PADEP have developed a specific target list of regulated substances as set forth in Table 1 that are the focal point of characterization and future remediation activities at the Site.

HRP and/or its affiliates anticipate acquiring the ownership interests in PES Holdings, LLC, which is the single owner of PESRM, the current owner of the Site. The “Effective Date” of this Plan is the date on which (1) HRP has acquired the ownership interests in PES Holdings, LLC, (2) this Plan, in a form acceptable to Sunoco and HRP, has been approved by PADEP and EPA, (3) PADEP shall have agreed to an amendment to the Buyer/Seller Agreement acceptable to Sunoco and HRP and consistent with this Plan, and (4) Sunoco and HRP shall have entered into a separate agreement further defining their rights and obligations relating to the Site. As of the Effective Date of this Plan, HRP⁵ will be required to follow the terms of the Soil Management Plan pursuant to Section 5.c of the Buyer/Seller Agreement. Final approval of this Plan is subject to PADEP’s, Sunoco’s, and HRP’s approval of an amendment to the Buyer/Seller Agreement,⁶ Sunoco’s and HRP’s approval of amendments to the vesting deeds, and Sunoco and HRP entering a separate agreement further defining their rights and obligations relating to the Site.

1. Background and Objectives

HRP intends to redevelop the Site into a state of the art, multimodal industrial park with ancillary rail infrastructure, energy infrastructure, marine capabilities, and commercial uses. A conceptual master plan for redevelopment of the Site is shown on Figure 1. HRP is aware of the known soil and groundwater impacts at the Site associated with the Site’s use for petroleum refining and,

⁴ See EPA Region 3/Pennsylvania Department of Environmental Protection “Streamlining the Process for the One Cleanup Program Under RCRA,” September 2005.

⁵ For ease of reference, we refer to HRP in this Plan; however, from and after the acquisition of PES Holdings, LLC by HRP and/or an affiliate thereof of HRP, HRP as used herein shall mean PESRM and any other person or entity which owns all or any portion of the Site, together with HRP and/or its affiliates which are responsible for the redevelopment and/or operations at the Site.

⁶ Section 17 of the Consent Order and Agreement dated January 15, 2020, by and among PADEP and PESRM provides that: “The Department acknowledges that PESRM or the New Facility Owner, as applicable, may seek redevelopment of the Facility for alternative purposes, including other commercial or industrial uses, and agrees to work as expeditiously as possible and in good faith with PESRM or the New Facility Owner in the approval, if required, of a commercially reasonable soil management work plan or similar approvals that permits and is otherwise consistent with any such redevelopment. Accordingly, the Department will not object to any amendments to the Consent Order and Agreement entered into on August 14, 2012, by and among the Department, Sunoco, Inc. (R&M), and PESRM (hereinafter, the “Buyer-Seller Agreement”), as necessary to effect the foregoing. Except as set forth above, nothing in this Consent Order and Agreement is intended, nor shall it be construed, to modify the Buyer-Seller Agreement, which shall remain in full force and effect, unless modified per its terms.”

accordingly, will use the Site only for non-residential purposes. This use restriction will be reflected in one or more environmental covenants for the Site. HRP's redevelopment approach introduces an opportunity to integrate cleanup activities with redevelopment of the Site. Specifically, many of the anticipated development components (e.g., building slabs, drive aisles, parking lots, new roadways, and other paved areas as described in cleanup plans to be submitted to PADEP) will serve as barriers to exposure and/or infiltration, and will be used to achieve the site-specific standard under Act 2 for soils at the Site. Table 2 lists examples of anticipated development components and the functions that they will serve in connection with use of the site-specific standard under Act 2 for soils at the Site.

A key element of HRP's redevelopment plan involves raising the ground surface elevations on the portion of the Site east of the Schuylkill River above base flood elevations. Some of the ground surface elevations at the Site are currently below base flood elevations while other areas are above base flood elevations. As such, HRP intends to move soils from locations with higher ground surface elevations to areas with lower ground surface elevations so that the final grades for all areas of the Site east of the Schuylkill River achieve the design standard of being above the base flood elevation ("BFE") as established by the Federal Emergency Management Agency ("FEMA"). Specifically, all parking lots will be above the BFE and all building floor slabs will be more than 4 feet above the BFE. All building floor slabs will also be above the 500-year floodplain. None of the soils that are moved as part of the regrading process will be placed in areas below the groundwater table. Key objectives of the Soil Management Plan are:

1. To retain and reuse all soils that are excavated or disturbed by HRP at the Site in order to balance grades and achieve elevations necessary for redevelopment.
2. To facilitate movement of soils by HRP within each of the portions of the Site on the east and west sides of the Schuylkill River, respectively (i.e. no movement of soils will occur between the east and west sides of the Schuylkill River).
3. To establish requirements for HRP's sample collection and analysis for determining the manner in which excavated soils will be placed and reused onsite and for ensuring that sufficient data for future work under Act 2 is available to substantially limit the need for additional sampling by Sunoco (i.e., for purposes of site characterization, risk assessments and cleanup plans).

HRP understands that Sunoco's anticipated cleanup approach for the Site may rely on the assumption that certain impacted soils would remain at depths where they would not be accessible by relevant receptors at the Site and/or would be subject to different cleanup standards under Act 2 for subsurface soils at nonresidential properties (i.e., soils at depths of greater than two feet below ground surface ("bgs")). To ensure that this Plan is fully aligned with Sunoco's anticipated cleanup approach, if such impacted soils are relocated by HRP to achieve

necessary redevelopment elevations, those soils will be placed in accordance with the reuse options specified in Table 3.

Based on the planned redevelopment of the Site, most soils at the Site will ultimately be located beneath a development component that will serve as an exposure barrier (i.e., placed under building pads, drive aisles, parking lots, roadways or other features that will function as exposure barriers). Accessible surface soils will only be present in limited areas of the Site (e.g., landscape areas). Surface soils in these accessible areas will consist of either (1) imported material or (2) soils from the Site that have been identified as appropriate for this use in accordance with Table 3. Imported soil used as surface soil will be either clean fill or regulated fill under PADEP's Management of Fill Policy (PADEP, 2020), as appropriate, and soils from the Site will only be considered appropriate for use as surface soil if a risk assessment demonstrates attainment of the site-specific standard. To the extent that soils are transported offsite for disposal, such soils will be managed in accordance with applicable legal requirements.

Anticipated cut and fill areas at the Site are shown on [Figure 2](#). HRP has taken care to avoid known areas of light nonaqueous phase liquid ("LNAPL") in the anticipated cut areas. Specifically, HRP's final cut and fill plan will be designed to leave a minimum two foot buffer between the bottom of cut areas and the top of known LNAPL plumes.

2. Sequencing and Coordination – Decommissioning and Bulk Soil Movement

Decommissioning, demolition, soil grading, and redevelopment will occur in phases across the Site. Timing of the soil pre-excitation sampling described in this Plan and subsequent bulk soil movement will be coordinated with decommissioning and demolition schedules in each phase. During decommissioning and demolition, areas of the Site that were previously inaccessible will become accessible (e.g., areas currently beneath process units). Sunoco has reviewed the extensive sampling activities that have been completed at the Site to date and has identified 17 areas where the presence of process units or other features have precluded sampling from being performed beneath those process units or other features. These areas are shown on [Figure 3](#) and have been divided into 20 cells. HRP will coordinate with Sunoco to allow Sunoco to visually inspect these areas as they become accessible.

Based on the results of its visual assessment, Sunoco will complete additional investigation and sampling in the areas shown on [Figure 3](#), as follows:

- Soil borings will be advanced in each cell in accordance with 25 Pa. Code 250.408. We expect the number of borings to be between one and four borings per cell, though the actual number of borings will be based on visual observations of the ground surface and visual and field screening observations during boring installation. Sunoco will make the determination of the location and number of soil borings in each cell based on the field conditions that are encountered. Borings will be completed to the observed groundwater table.

- In areas that will be filled by HRP (i.e., soil will be added) as part of redevelopment of the Site or will be left undisturbed, one surface soil sample and one subsurface soil sample will be collected from each soil boring. The depth of the subsurface sample will be selected based on visual observations and field screening results.
- In areas that will be cut by HRP (i.e., soil will be removed) as part redevelopment of the Site, one surface soil sample, one soil sample from the depth interval representing the new surface soil stratum that will be created by soil removal, and one soil sample from the depth interval representing the new subsurface soil stratum that will be created by soil removal will collected from each boring. The depth of the subsurface sample will be selected based on visual observations and field screening results.
- The soil samples will be analyzed for the regulated substances on the target compound list included in Table 1.

In areas where storage tanks are present that will be removed as part of decommissioning and demolition activities, HRP will proceed with closure and removal of storage tanks in accordance with requirements under 25 Pa. Code Chapter 245 and technical guidance issued by PADEP entitled Closure Requirements for Aboveground Storage Tank Systems (PADEP, 2017). HRP will also complete the appropriate soil assessment activities pursuant to PADEP's tank closure requirements.

In each phase of the redevelopment process, assessment of newly accessible areas by Sunoco as described above and soil characterization by HRP in connection with removal of storage tanks as described above will be completed prior to bulk soil movement in such areas so that the results of such assessment activities can be used in conjunction with planning for redevelopment and remediation. For example, information from the assessment activities may help inform whether newly accessible soils will need to be placed under caps as part of the redevelopment process. Information from the assessment activities may also help inform how soil from newly accessible areas will be reused at the Site.

If discrete regulated waste materials that are separate from soil or groundwater are identified during the pre-excavation characterization sampling described in this Plan, HRP will coordinate with Sunoco, PADEP, and EPA so that such waste materials (e.g., drums containing regulated waste or leaded tank bottoms) can be properly addressed in accordance with applicable requirements as described in Section V.A of the Pennsylvania Land Recycling Program Technical Guidance Manual (PADEP, 2019). HRP will use reasonable efforts to identify and address such waste materials prior to the start of bulk soil movement in any discrete area. HRP recognizes that such waste materials could also be discovered during soil movement. If this occurs, HRP will coordinate with Sunoco, PADEP, and EPA regarding the manner in which the waste materials will be addressed. HRP also understands that leaded tank bottoms are classified as a listed hazardous

waste. If leaded tank bottoms are discovered outside of tanks, HRP will promptly notify Sunoco so that Sunoco can handle the leaded tank bottoms in accordance with EPA's approved leaded tank bottom procedures for the Site.

3. Soil Pre-Excavation Characterization Sampling

Pre-excavation characterization of soils (i.e., sampling of soils in place before such soils are excavated or disturbed) is an important component of this Plan. Pre-excavation characterization of soils by HRP will allow the soils to be managed consistent with Sunoco's cleanup approach for the Site. For example, by characterizing soils before they are excavated or disturbed, HRP will manage soils with lead concentrations above the approved site-specific direct contact standard by placing them beneath development components that will serve as exposure barriers (e.g., building slabs, drive aisles, parking lots, new roadways, and other paved areas as described in cleanup plans to be submitted to PADEP) rather than placing such soils in areas where future users of the Site are likely to come into contact with such soils. Alternatively, pre-excavation characterization sampling by HRP may identify soils that should remain in place rather than being excavated and moved. The pre-excavation characterization process by HRP will provide important information that will be used in tandem with the extensive soil sampling results that have already been obtained by Sunoco to avoid encountering unanticipated conditions during the excavation process and to refine the grading plans for the Site to ensure that soils that are excavated can be reused on-site.

Prior to the start of mass grading activities, HRP will collect soil samples for laboratory analysis in the areas where soils are targeted to be cut (see [Figure 2](#)). As mentioned above, HRP has intentionally designed the cut/fill plan for the Site to avoid known areas of LNAPL, and HRP will ensure that any revisions to its cut/fill plan will likewise avoid known areas of LNAPL. For pre-excavation characterization sampling purposes prior to bulk soil movement, the soil that is proposed to be excavated will be divided into 3-dimensional "cells" of approximately 2,000 cubic yards each. [Figure 4](#) shows a conceptual layout of pre-characterized sampling cells.

HRP will submit one discrete and one composite soil sample from each cell for laboratory analysis. Consistent with the sampling protocols in PADEP's January 2020 Management of Fill Policy (PADEP, 2020), HRP will use discrete samples for analysis of volatile organic compounds ("VOCs") and composite samples for analysis of semi-volatile organic compounds ("SVOCs") and lead. This pre-excavation characterization sampling frequency and approach was selected by HRP to maintain general consistency with PADEP's January 2020 Management of Fill Policy (PADEP, 2020), while also taking into account the extensive soil sampling that has already been completed at the Site.⁷ Movement of impacted soil at the Site is not subject to either the Management of

⁷ There are several reasons why a pre-excavation characterization sampling frequency of one soil sample per 2,000 cubic yards is appropriate for the anticipated soil movement that is planned at the Site:

Fill Policy or General Permit No. WMGR096 (Beneficial Use of Regulated Fill) because the work will be undertaken entirely on-site (i.e., within a “project area”) and conditions at the Site are being addressed under Act 2. HRP selected this pre-excavation characterization sampling frequency to be generally consistent with the way that other similar soils are evaluated for use as either clean fill or regulated fill in Pennsylvania and to maintain consistency and alignment with Sunoco’s Act 2 activities. Pre-excavation characterization soil sampling results will be shared with Sunoco to be integrated into Sunoco’s Act 2 work as appropriate in accordance with 25 Pa. Code § 250.408.

A 4-point composite soil sample will be collected from each pre-characterization “cell” using a direct push drill rig or other similar sample collection method. Soil collected from the four composite soil sample locations will be screened in the field using a photoionization detector (“PID”), and a discrete soil sample will be collected from the location with the highest PID response. The discrete sample from each cell will be analyzed for the VOCs on the target compound list included in Table 1, and the composite sample from each cell will be analyzed for the SVOCs and metals on the target compound list included in Table 1. Based on initial pre-excavation sample results, some samples may also be analyzed via the Synthetic Precipitation Leaching Procedure (“SPLP”) to support the development of alternative standards for the soil-to-groundwater pathway, as needed.

In addition to the pre-excavation characterization soil samples described above, HRP will collect a discrete soil sample from the next two feet of soil underlying each cell in accordance with Act 2 to evaluate conditions in the stratum of soil that will be uncovered through excavation activities. This sampling will be performed so that the underlying soils in the cut areas (i.e., soils from approximately 0 to 2 feet below the bottom of a cut) are fully characterized for purposes of Act 2. The discrete soil samples will be analyzed for the regulated substances on the target compound list included in Table 1. Based on its plans for redeveloping the Site, HRP anticipates that most soils that are relocated at the Site will be placed under development components (e.g., building slabs, drive aisles, parking lots, new roadways, and other paved areas as described in cleanup plans to be submitted to PADEP) that will serve as barriers to exposure and/or infiltration. In addition, HRP anticipates that most soils that are uncovered through bulk soil removal will likewise ultimately be covered by development components. To the extent certain soils are identified as potentially suitable for use in an area not covered by a barrier, additional

-
- a. Extensive analytical results are already available for soils at the Site based on previously completed sampling undertaken by Sunoco. The proposed pre-excavation characterization sampling will further characterize the soils to be relocated during redevelopment but will not constitute the complete data set of chemical sampling results available to understand the nature of soil impacts.
 - b. The number of pre-excavation characterization samples will be significant given the volume of soil to be managed, so there will be sufficient data to evaluate concentration statistics.
 - c. Because of the planned redevelopment of the Site, most soils that are moved will ultimately be located under development components that will serve as exposure barriers.

sampling, analysis, and risk assessment will be conducted by HRP to confirm that the soils do not pose an unacceptable risk and will attain the site-specific standard. Likewise, to the extent that soils that are uncovered through bulk soil removal will remain exposed upon completion of redevelopment and not covered by a barrier, additional sampling and analysis will be conducted of those soils by HRP to confirm that they may remain uncovered without posing unacceptable risks.

Pre-excavation characterization soil sampling results will be promptly provided to Sunoco for use in conjunction with its remediation activities under Act 2, including completion of remedial investigations and risk assessments after such soils are moved to their final location. As described in Section 2 of this Plan, if evidence of discrete regulated waste materials separate from soil or groundwater are identified during the pre-excavation characterization sampling, HRP will coordinate with Sunoco, PADEP and EPA so that such waste materials can be properly addressed in accordance with applicable requirements as described in Section V.A of the Pennsylvania Land Recycling Program Technical Guidance Manual (PADEP, 2019).

4. Development of Soil Categories

The pre-excavation characterization data will be used to divide the soils into categories that will dictate how the soils will be managed. The actual soil categories will depend on the pre-excavation characterization sampling results. However, Table 3 summarizes the soil categories which may be relevant to soil management at the Site in connection with the anticipated redevelopment activities. These categories use the various numeric values for soils that PADEP has developed based on direct contact and soil-to-groundwater pathways to implement the statewide health standard for soils under Act 2 as found in 25 Pa. Code Chapter 250, Tables 3 and 4. The lower of the direct contact and soil-to-groundwater numeric values are used to determine the medium specific concentrations (“MSCs”) for soils which in turn are dependent on whether the soils are present at residential or nonresidential properties, whether those properties are located overlying groundwater qualifying as used aquifers, and, for soils at nonresidential properties, whether the soils qualify as surface soils or subsurface soils. As used in Table 3, non-residential soil MSCs refer to the MSCs for surface soils at nonresidential properties overlying used aquifers, direct contact numeric values are the values for regulated substances set forth in Tables 3.A and 4.A of 25 Pa. Code Chapter 250, and soil-to-groundwater numeric values are the values for regulated substances set forth in Tables 3.B and 4.B of 25 Pa. Code Chapter 250.

Table 3 refers to two types of caps – caps that serve as exposure barriers and caps that serve as impervious barriers. As described in Table 2, building slabs, drive aisles, parking lots, new roadways, and other paved areas as described in cleanup plans to be submitted to PADEP constitute impervious barriers and also serve as exposure barriers. By contrast, caps consisting of soils and porous paving can serve as exposure barriers but not impervious barriers. Table 3 describes the use of the two different categories of caps in a manner that meets the requirements of Act 2 for purposes of attaining the site-specific standard under Act 2. HRP anticipates that most soils that are relocated at the Site will be placed under development components that will serve

as caps adequate as engineering controls. If soils are used as a cap, these soils will consist only of either (1) imported material, which will be either clean fill or regulated fill under PADEP's Management of Fill Policy (PADEP, 2020), or (2) soils from the Site that have been identified as appropriate for use as surface soil, using a risk assessment to demonstrate attainment of the site-specific standard.

5. Soil Relocation Planning

The existing soil characterization results, the characterization results associated with decommissioning activities, and the pre-excavation characterization results will be used to assign each "cell" of soil to a soil category. If the pre-excavation characterization results indicate that the cell qualifies for a different soil category than the existing soil characterization results, the more heavily impacted category will be assigned to that cell. For example, if the pre-excavation characterization results indicate a cell should be classified as containing soils in Category B, but the existing soil characterization results indicate that the soils in the same cell should be classified as Category E, the soils in the cell will be managed as Category E. Likewise, if during bulk soil movement, visual observations or field screening results indicate that a cell appears to be more heavily contaminated than anticipated based on the pre-excavation characterization results and the existing soil characterization results, the soils exhibiting visual or field screening evidence of greater contamination will be re-assigned to the most heavily impacted soil category or additional sampling will be conducted to re-assign a soil category, if warranted based on those sampling results. Because most soils will be located under development components that will serve as caps, this conservative approach to soil categorization is not expected to impede HRP's ability to manage soils at the Site.

After pre-excavation characterization data are evaluated and soil categories are assigned to each cell, color-coded plans will be prepared by HRP and promptly provided to Sunoco showing how the soil in each cut area is categorized. These plans will be used by HRP to manage movement of soil from cut to fill areas. Movement of impacted soils will be conducted by HRP under the oversight of a licensed environmental professional who will ensure that soils are managed consistent with this Plan. Figure 5 shows a conceptualized depiction of pre-excavation characterization sampling results.

When redevelopment is complete, HRP anticipates that most soils at the Site will be located under development components (e.g., building slabs, drive aisles, parking lots, new roadways, and other paved areas as described in cleanup plans to be submitted to PADEP) that will serve as barriers to exposure and/or infiltration. If certain soils at the Site are identified as potentially suitable for use in an area not covered by a barrier, additional sampling and analysis will be conducted to support a demonstration that such an area does not pose any unacceptable risk and will attain the site-specific standard consistent with the requirements of Act 2.

6. Additional Issues Relating to Redevelopment Process

(a) Remediation Equipment

Soil excavation and relocation has the potential to disrupt existing remediation equipment (e.g., monitoring wells, extraction wells, pipelines and treatment units) and existing utility infrastructure (e.g., stormwater infrastructure). HRP will make sure that necessary remediation equipment is protected, relocated, or replaced, as needed. HRP intends to decommission the existing wastewater treatment plants at the Site as new stormwater management infrastructure is constructed, in accordance with applicable local and state requirements. The transition to new stormwater infrastructure will be coordinated with the phasing of decommissioning, demolition, soil grading, and development, and HRP will coordinate this transition with Sunoco, which currently relies on operation of the wastewater treatment plants to process effluent from remediation systems.

(b) Potential Vapor Intrusion

While not the subject of this Plan, HRP recognizes the potential for regulated substances present in soil and groundwater and subsurface LNAPL to act as vapor intrusion sources into new buildings constructed at the Site. HRP will install vapor barriers or other vapor mitigation controls (such as subslab venting systems) as part of constructing any buildings or structures at the Site, or, alternatively, will conduct sampling and analysis to demonstrate that such controls are not needed to mitigate potential vapor intrusion into such buildings or structures in accordance with PADEP guidance.

7. Documentation and Next Steps

This Plan presents HRP's approach for soil management during redevelopment at the Site. At least 30 days prior to the start of any soil disturbance, excavation or grading activities, HRP will submit to Sunoco and PADEP the results (including but not limited to the laboratory data reports) of pre-excavation characterization sampling, updated redevelopment plans, and figures showing pre-excavation characterization sampling locations and soil categorization that is consistent with the approach described herein.

HRP will track and document movement of soil at the Site, including but not limited to cubic yards of soil moved, coordinates and depths of the existing locations of the soil to be moved, and coordinates of the new soil locations. Such documentation will enable pre-excavation characterization sampling results coupled with soil sampling results collected by Sunoco as part of evaluating areas of concern under Act 2 to be used to demonstrate conditions in areas where soils are moved and placed.

The development components that will serve as surface caps as described in Table 2 of the Plan and that are constructed during redevelopment will be documented as adequate engineering controls in a subsequent cleanup plan (or plans) for the Site. HRP understands that plans and descriptions of surface caps will need to be included in the cleanup plan(s) and that the cleanup

plan(s) will be subject to the Act 2 public involvement process and will coordinate with Sunoco concerning the same.

References

Commonwealth of Pennsylvania Department of Environmental Protection (2020). Management of Fill Policy; Document Number 258-2182-773.

Commonwealth of Pennsylvania Department of Environmental Protection (2019). Land Recycling Program Technical Guidance Manual; Document Number 261-0300-101.

Commonwealth of Pennsylvania Department of Environmental Protection (2017). Technical Document; Closure Requirements for Above Ground Storage Tank Systems; Technical Guidance Number 263-4200-001.

Commonwealth of Pennsylvania Department of Environmental Protection (2012). Consent Order and Agreement, in the Matter of: Sunoco, Inc. (R&M) – Seller, Philadelphia Energy Solutions Refining and Marketing LLC – Buyer, Buyer-Seller Agreement re: Philadelphia Refinery.

Langan Engineering & Environmental Services, Inc. (2015). Human Health Risk Assessment Report, Philadelphia Refinery, Philadelphia, Pennsylvania, and Belmont Terminal, Philadelphia, Pennsylvania, and Marcus Hook Industrial Complex, Marcus Hook, Pennsylvania.

TABLE 1
Philadelphia Refinery Target Compound List and Associated Act 2 Soil Cleanup Standards

Target Compound	EPA Analytical Method	CAS No.	Non-Residential Direct Contact Numeric Value (0-2 ft bgs)	Non-Residential Soil to Groundwater Numeric Value
Volatile Compounds				
Benzene	8260	71-43-2	290	0.50
1,2-Dibromoethane (EDB)	8260	106-93-4	3.7	0.0050
1,2-Dichloroethane (EDC)	8260	107-06-2	86	0.5
Ethylbenzene	8260	100-41-4	890	70
Isopropylbenzene (Cumene)	8260	98-82-8	10,000	2,500
Methyl Tertiary Butyl Ether	8260	1634-04-4	8,600	2
Naphthalene	8270	91-20-3	760	25
Toluene	8260	108-88-3	10,000	100
1,2,4-Trimethylbenzene	8260	95-63-6	560	35
1,3,5-Trimethylbenzene	8260	108-67-8	10,000	210
Xylenes (Total)	8260	1330-20-7	8,000	1,000
Semi-Volatile Compounds				
Anthracene	8270	120-12-7	190,000	350
Benzo(a)anthracene	8270	56-55-3	130	430
Benzo(a)pyrene	8270	50-32-8	12	46
Benzo(b)fluoranthene	8270	205-99-2	76	170
Benzo(g,h,i)perylene	8270	191-24-2	190,000	180
Chrysene	8270	218-01-9	760	230
Fluorene	8270	86-73-7	130,000	3,800
Phenanthrene	8270	85-01-8	190,000	10,000
Pyrene	8270	129-00-0	96,000	2,200
Metals				
Lead	6010/6020	7439-92-1	1,000	450

Notes:

1. The Act 2 Standards are subject to change, and the Standards in effect at the time of an Act 2 report submittal will apply.

TABLE 2
Development Component Functions

Development Component	Exposure Barrier	Impervious Barrier
<p>Surface Soil Layer Imported soil used in accessible areas at the ground surface will be subject to PADEP's Management of Fill Policy (PADEP, 2020). Before using site soil in accessible areas at the ground surface, a risk assessment will be conducted to demonstrate attainment of the site-specific standard.</p>	X	
<p>Building Slab Minimum section will consist of 4 inches of concrete over 4 inches of aggregate subbase</p>	X	X
<p>Parking Lot Minimum section will consist of 3.75 inches of concrete or asphalt over 4 inches of aggregate subbase</p>	X	X
<p>Roadway Minimum section will consist of 5 inches of concrete and/or asphalt over 4 inches of aggregate subbase</p>	X	X
<p>Drive Aisle Minimum section will consist of 5 inches of concrete or asphalt over 4 inches of aggregate subbase</p>	X	X

TABLE 3
Soil Reuse Categories

Category	Description	Reuse Options
A	Concentrations of target analytes below non-residential soil MSCs.	Soil can be reused: ¹ (1) in areas beneath a surface cap that provides an exposure barrier (e.g., building slabs, parking lots, roadways, or imported soil) that will serve as an engineering control under Act 2 or (2) in areas not beneath a surface cap (e.g., as backfill in utility corridors or in landscaped areas) as long as a risk assessment demonstrates attainment of the site-specific standard.
B	Concentrations of target analytes above nonresidential soil-to-groundwater numeric values but below the nonresidential direct contact numeric values/site-specific lead standard, where direct contact values are higher than the nonresidential soil-to-groundwater numeric values.	Soil can be reused: (1) in areas beneath an impervious surface cap (e.g., building slabs, parking lots, or roadways) that will serve as an engineering control under Act 2 at elevations above the groundwater table or (2) in areas not beneath a surface cap that are more than 500 ft. from a shoreline (i.e., the edge of the Schuylkill River) as long as a risk assessment demonstrates attainment of the site-specific standard.
C	Concentrations of target analytes above the nonresidential direct contact numeric values but below the nonresidential soil-to-groundwater numeric values, where the soil-to-groundwater numeric values are higher than the nonresidential direct contact numeric values.	Soil can be reused in areas beneath a surface cap that provides an exposure barrier (e.g., building slabs, parking lots, roadways, imported soil, or appropriate Site soil) that will serve as an engineering control under Act 2. ^{1,2}
D	Concentrations of target analytes above the nonresidential direct contact numeric values/site-specific lead standard (Langan, 2015) but below site-specific leaching based standards (to be calculated by HRP).	Soil can be reused in areas beneath a surface cap that provides an exposure barrier (e.g., building slabs, parking lots, roadways, imported soil, or appropriate Site soil) that will serve as an engineering control under Act 2. ^{1,2}
E	Concentrations of target analytes above the nonresidential direct contact numeric values/site-specific lead standard and above both nonresidential soil-to-groundwater numeric values and site-specific leaching-based standards (to be calculated by HRP).	Soil can be reused beneath an impervious surface cap (e.g., building slabs, parking lots, or roadways) that will serve as an engineering control under Act 2 at elevations above the groundwater table.

Notes:

1. Imported soil used as an exposure barrier will be subject to PADEP's Management of Fill Policy (PADEP, 2020).
2. Site soil will only be considered appropriate for use as an exposure barrier if a risk assessment demonstrates attainment of the site-specific standard.
3. Relocated soil will likely all be placed at elevations above the groundwater table because existing grades are above the groundwater table and the objective of soil relocation is to raise grades in areas of current relative lower elevation.

Figure 1

Conceptual Master Plan

CONCEPTUAL MASTER PLAN C FOR **PES REDEVELOPMENT** PHILADELPHIA, PENNSYLVANIA



LOCATION MAP

SITE DATA

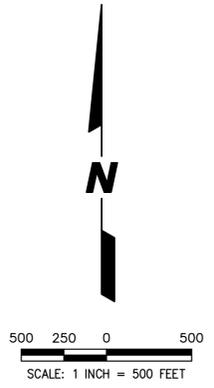
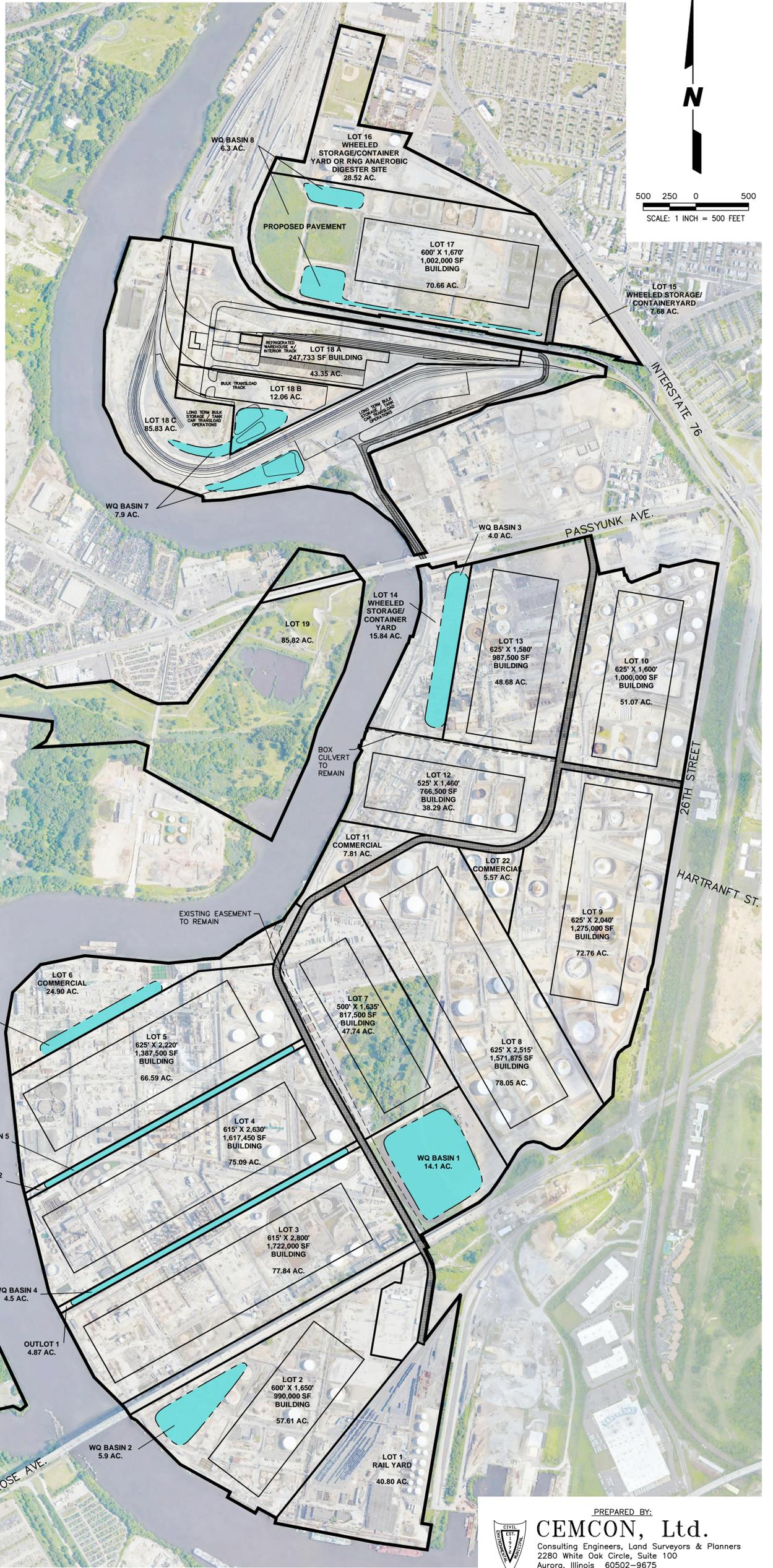
LOT NO	ACRES	BLDG. SQ. FT.	DEVEL. CATEGORY
LOT 1	40.80 AC.	-----	RAIL
LOT 2	57.61 AC.	990,000 SQ. FT.	LOGISTICS CENTER
LOT 3	77.84 AC.	1,722,000 SQ. FT.	LOGISTICS CENTER
LOT 4	75.09 AC.	1,617,450 SQ. FT.	LOGISTICS CENTER
LOT 5	66.59 AC.	1,387,500 SQ. FT.	LOGISTICS CENTER
LOT 6	24.90 AC.	-----	COMMERCIAL
LOT 7	47.74 AC.	817,500 SQ. FT.	LOGISTICS CENTER
LOT 8	78.05 AC.	1,571,875 SQ. FT.	LOGISTICS CENTER
LOT 9	72.76 AC.	1,275,000 SQ. FT.	LOGISTICS CENTER
LOT 10	51.07 AC.	1,000,000 SQ. FT.	LOGISTICS CENTER
LOT 11	7.81 AC.	-----	COMMERCIAL
LOT 12	28.29 AC.	766,500 SQ. FT.	LOGISTICS CENTER
LOT 13	48.68 AC.	987,500 SQ. FT.	LOGISTICS CENTER
LOT 14	15.84 AC.	-----	WHEELED STORAGE/CONTAINER YARD
LOT 15	7.68 AC.	-----	WHEELED STORAGE/CONTAINER YARD
LOT 16	28.52 AC.	-----	WHEELED STORAGE/CONTAINER YARD
LOT 17	70.66 AC.	1,002,000 SQ. FT.	LOGISTICS CENTER
LOT 18A	43.35 AC.	247,733 SQ. FT.	RAIL
LOT 18B	12.06 AC.	-----	RAIL
LOT 18C	85.83 AC.	-----	RAIL
LOT 19	85.82 AC.	-----	UNDEVELOPABLE
LOT 20	38.53 AC.	-----	UNDEVELOPABLE
LOT 21	177.62 AC.	-----	TANKAGE
LOT 22	5.57 AC.	-----	COMMERCIAL
OUTLOT 1	4.87 AC.	-----	-----
OUTLOT 2	4.52 AC.	-----	-----
WQ BASINS	40.9 AC.	-----	-----
ROW	21.83 AC.	-----	-----
TOTAL	1,330.83 AC.	13,385,058 SQ. FT.	-----

LINEAL FEET INTERIOR ROADWAY 15,228 L.F.

THE AREA FOR WQ BASINS NOS. 4 & 5 ARE INCLUDED IN OUTLOT NOS. 1 & 2 AREA, RESPECTIVELY.

DEVELOPMENT PHASING PLAN

PHASE	LOTS	MONTH STARTED POST CLOSING	CUMUL. ACREAGE	CUMUL. BLDG. SQ. FT.
1	1, 16, 17, 18	18	281.22	1,249,733
2	9, 10, 15	30	131.51	2,275,000
3	7, 8, 22	42	131.36	2,389,375
4	11, 12, 13, 14	54	110.62	1,754,000
5	5, 6	66	91.49	1,387,500
6	4	78	75.09	1,617,450
7	2, 3	90	135.45	2,712,000



PLOT FILE CREATED: 2/24/2020 BY: KRISTIN STAEKEL DRAWING PATH: P:\442003\DWG\CONCEPT\CONCEPT_2020-03-23_CONCEPT_C.DWG

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502-9675
PH: 630.862.2100 FAX: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

DISC NO.: 842003 FILE NAME: 2020-03-23 CONCEPT C
DRAWN BY: KMS FLD. BK. / PG. NO.: -----
COMPLETION DATE: 03-23-20 JOB NO.: 842.003
XREF : PROJECT MANAGER : MMW

Copyright © 2020 Cemcon, Ltd. All rights reserved.

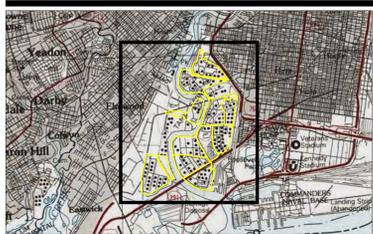
PREPARED FOR:
HILCO DEVELOPMENT PARTNERS
401 N. MICHIGAN AVE., SUITE 1630
CHICAGO, ILLINOIS 60611
(312) 796-0920

Figure 2

Anticipated Cut Fill

Figure 3

Refinery Unit Locations and Soil Sample Results



Notes
 1. Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
 2. Sources: Stantec
 3. Aerial & Topo Source: Copyright© 2013 National Geographic Society, i-cubed
 FEMA Philadelphia County 2018 Aerial Imagery

- Legend**
- SHALLOW SOIL EXCEEDANCE OF THE PADEP NON-RESIDENTIAL, UNSATURATED STATEWIDE HEALTH STANDARD 0-2'
 - NO SHALLOW SOIL EXCEEDANCE OF THE PADEP NON-RESIDENTIAL, UNSATURATED STATEWIDE HEALTH STANDARD 0-2'
 - DEEP SOIL EXCEEDANCE OF THE PADEP NON-RESIDENTIAL, UNSATURATED STATEWIDE HEALTH STANDARD GREATER THAN 2'
 - NO DEEP SOIL EXCEEDANCE OF THE PADEP NON-RESIDENTIAL, UNSATURATED STATEWIDE HEALTH STANDARD GREATER THAN 2'
 - WELL LOCATION
 - DESTROYED WELL LOCATION
 - APPROXIMATE LOCATION OF PHILADELPHIA WATER DEPARTMENT SEWER
 - ▭ PROPOSED SOIL SAMPLING AREA WITHIN REFINERY UNIT
 - ▭ PROPOSED SOIL SAMPLING AREAS WITHIN DIVIDED REFINERY UNIT
 - ▭ AREA OF INTEREST (AOI)
 - ▭ PHILADELPHIA GAS WORKS PROPERTY BOUNDARY

0 400 800 Feet
 1:4,800 (At original document size of 36x48)

Figure No.
3
 Title
REFINERY UNIT LOCATIONS AND SOIL SAMPLE RESULTS

Client/Project
 PHILADELPHIA REFINERY OPERATIONS, A SERIES OF
 EVERGREEN RESOURCES GROUP, LLC
 PHILADELPHIA REFINING COMPLEX
 3144 PASSYUNK AVENUE, PHILADELPHIA, PA 19145

Project Location
 City of Philadelphia, Philadelphia County, Pennsylvania
 Prepared by GWC on 4/12/2020
 Technical Review by JK on 4/21/2020
 Independent Review by ASD on 4/21/2020
 213402454



Figure 4

Conceptual Soil Pre-Characterization Sampling
Cell Layout

FIGURE 4
Conceptual Soil Pre-Characterization Sampling Cell Layout

Conceptual Plan View

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

Conceptual Vertical Cross-Section

0-3 ft bgs	1	2	3	4
3-6 ft bgs	21	22	23	24
6-9 ft bgs	41	42	43	44

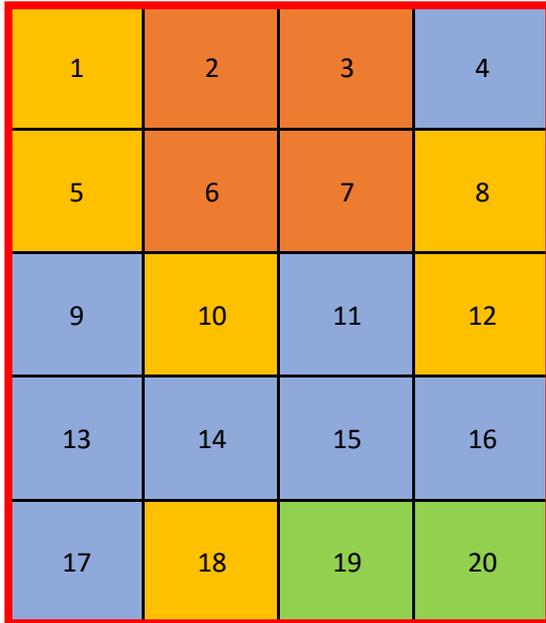
-  Conceptual cut area
-  Conceptual precharacterization sample "cell"

Figure 5

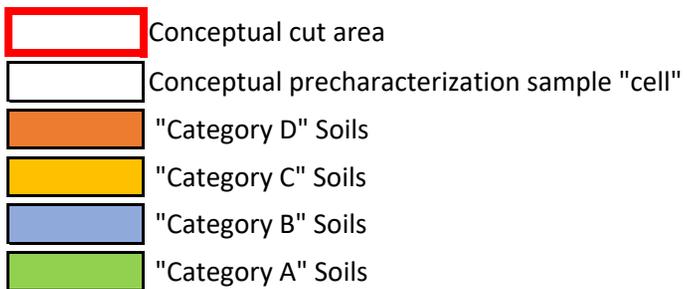
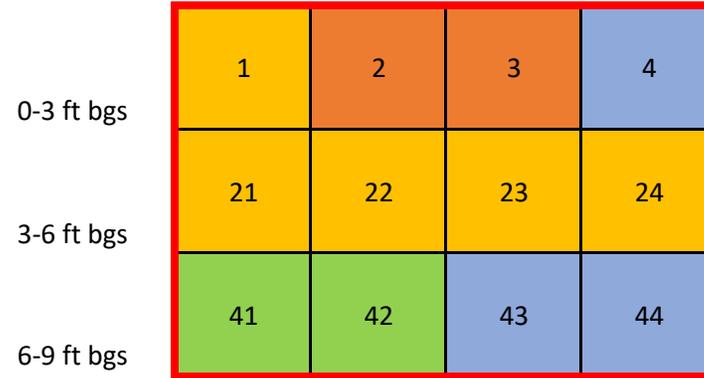
Hypothetical Pre-Characterization Sampling
Results Summary

FIGURE 5
Hypothetical Pre-Characterization Sampling Results Summary

Conceptual Plan View



Conceptual Vertical Cross-Section





pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

June 18, 2020

Mr. Jeremy Grey
Hilco Redevelopment Partners
111 S. Wacker Dr., Suite 3000
Chicago, IL 60606

Re: Soil Management Plan Approval
eFACTS PF No. 780190
PES Philadelphia Refinery
3144 Passyunk Avenue
City of Philadelphia
Philadelphia County

Dear Mr. Grey:

The Department of Environmental Protection (DEP) reviewed the June 15, 2020 document titled "Soil Management Plan," (plan) for the property referenced above. The plan was prepared by HRP Philadelphia Holdings, LLC (HRP). The Philadelphia Energy Solutions (PES) site entered DEP's Land Recycling Program, administered through the Land Recycling and Environmental Remediation Standards Act (Act 2), in 2006. The Act 2 cleanup is being performed by Evergreen Resources Management. Evergreen is also participating in DEP's and U.S. EPA's One Cleanup Program.

The Soil Management Plan describes how HRP will further characterize contamination in soil, categorize soil for reuse at the site, manage contaminated soil and waste, integrate site grading with remedy implementation, and perform this work in a manner compatible with Act 2 cleanup requirements.

DEP has reviewed the Soil Management Plan in cooperation with U.S. EPA. DEP hereby approves the plan for the PES Philadelphia Refinery site.

Insofar as the plan describes anticipated Act 2 remedies for the site, the approval expressed herein does not represent an approval of any future Act 2 cleanup plan.

Thank you for your cooperation in working with DEP in the remediation of this site. If you have any questions or need further information regarding this matter, please contact C. David Brown at cdbrown@pa.gov or by telephone at 484.250.5792.

Sincerely,

Ragesh R. Patel
Regional Manager
Environmental Cleanup and Brownfields

cc: Mr. Cullinan—Evergreen
Mr. Barksdale—PES
Mr. Gotthold—EPA Region 3
Philadelphia Health Department
Philadelphia L&I
Philadelphia Law Department
Mr. Brown, P.G.
Mr. Shankar, P.E.
Mr. Glass, Esq.
Regional File

TABLE 1
Philadelphia Refinery Target Compound List and Associated Act 2 Soil Cleanup Standards

Target Compound	EPA Analytical Method	CAS No.	Non-Residential Direct Contact Numeric Value (0-2 ft bgs)	Non-Residential Soil to Groundwater Numeric Value
Volatile Compounds				
Benzene	8260	71-43-2	290	0.50
1,2-Dibromoethane (EDB)	8260	106-93-4	3.7	0.0050
1,2-Dichloroethane (EDC)	8260	107-06-2	86	0.5
Ethylbenzene	8260	100-41-4	890	70
Isopropylbenzene (Cumene)	8260	98-82-8	10,000	2,500
Methyl Tertiary Butyl Ether	8260	1634-04-4	8,600	2
Naphthalene	8270	91-20-3	760	25
Toluene	8260	108-88-3	10,000	100
1,2,4-Trimethylbenzene	8260	95-63-6	560	35
1,3,5-Trimethylbenzene	8260	108-67-8	10,000	210
Xylenes (Total)	8260	1330-20-7	8,000	1,000
Semi-Volatile Compounds				
Anthracene	8270	120-12-7	190,000	350
Benzo(a)anthracene	8270	56-55-3	130	430
Benzo(a)pyrene	8270	50-32-8	12	46
Benzo(b)fluoranthene	8270	205-99-2	76	170
Benzo(g,h,i)perylene	8270	191-24-2	190,000	180
Chrysene	8270	218-01-9	760	230
Fluorene	8270	86-73-7	130,000	3,800
Phenanthrene	8270	85-01-8	190,000	10,000
Pyrene	8270	129-00-0	96,000	2,200
Metals				
Lead	6010/6020	7439-92-1	1,000	450

Notes:

1. The Act 2 Standards are subject to change, and the Standards in effect at the time of an Act 2 report submittal will apply.



ANALYTICAL REPORT

Lab Number:	L2340632
Client:	Langan Engineering & Environmental 1818 Market Street Suite 3300 Philadelphia, PA 19103-3638
ATTN:	Adam Goldberg
Phone:	(215) 845-8946
Project Name:	PESRM
Project Number:	220181801
Report Date:	04/03/24

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OH (CL108), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930).

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



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2340632-01	FIELD BLANK	WATER	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 13:35	07/14/23
L2340632-02	PES-M_1.0-1.5_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 13:30	07/14/23
L2340632-03	PES-G_1.7-2.2_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 13:35	07/14/23
L2340632-04	PEB-D_4.5-5.0_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 14:00	07/14/23
L2340632-05	PEB-H_4.5-5.0_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 14:05	07/14/23
L2340632-06	PEB-I_4.5-5.0_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 14:15	07/14/23
L2340632-07	PEB-C_4.5-5.0_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 14:20	07/14/23
L2340632-08	PEB-B_4.5-5.0_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 14:25	07/14/23
L2340632-09	PEB-F_4.5-5.0_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 14:30	07/14/23
L2340632-10	PEB-J_6.0-6.5_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 14:45	07/14/23
L2340632-11	PES-K_3.1-3.6_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 14:50	07/14/23
L2340632-12	PES-L_3.1-3.6_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 14:55	07/14/23
L2340632-13	PES-A_4.2-4.7_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 14:55	07/14/23
L2340632-14	PES-E_5.2-5.7_071423	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 15:00	07/14/23
L2340632-15	DUP-1	SOIL	3144 W. PASSYUNK PHILADELPHIA, PA	07/14/23 00:00	07/14/23

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Case Narrative

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

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

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Case Narrative (continued)

Report Revision

April 03, 2024: The Volatile Organics analyte list has been amended on L2340632-01 through -15.

August 09, 2023: This report includes the results of the Volatile Organics Low-Level analysis performed on L2340632-04, -05, -06, -09, and -12, performed at the client's request.

Report Submission

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

Volatile Organics

L2340632-02: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (154%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-03D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

L2340632-03D: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (148%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-04, -05, -06, -09, and -12: The Low-Level analysis was performed with the method required holding time exceeded.

L2340632-04: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (142%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-04 Low-Level: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (293%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-05: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (133%);

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Case Narrative (continued)

however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-05 Low-Level: The surrogate recoveries were outside the acceptance criteria for toluene-d8 (156%) and 4-bromofluorobenzene (2058%) due to obvious interferences. A copy of the chromatogram is included as an attachment to this report. The sample was analyzed as a High Level Methanol in order to quantitate result(s) within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial Low Level analysis. The results of both analyses are reported. Differences were noted between the results of the Volatile Organics by EPA Method 5035/8260 High and Low Level analyses which have been attributed to sample non-homogeneity.

L2340632-06: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (134%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-06 Low-Level: The surrogate recovery is outside the acceptance criteria for toluene-d8 (137%) and 4-bromofluorobenzene (443%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-07: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (138%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-08 and -10: The sample was analyzed as a High Level Methanol based upon screen results. The sample was then analyzed as a Low Level in order to achieve lower reporting limits. The results of both analyses are reported. Differences were noted between the results of the analyses which have been attributed to vial discrepancies.

L2340632-08 Low-Level: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (323%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-09 Low-Level: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (201%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Case Narrative (continued)

chromatogram is included as an attachment to this report.

L2340632-10 Low-Level: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (276%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-11: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (166%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-12: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (185%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-12 Low-Level: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (787%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-13: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (143%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L2340632-14 Low-Level: The surrogate recoveries were outside the acceptance criteria for toluene-d8 (529%) and 4-bromofluorobenzene (384%) due to obvious interferences. A copy of the chromatogram is included as an attachment to this report. The sample was analyzed as a High Level Methanol in order to quantitate result(s) within the calibration range. The result should be considered estimated, and is qualified with an E flag, for any compound that exceeded the calibration on the initial Low Level analysis. The results of both analyses are reported.

L2340632-15: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (151%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Case Narrative (continued)

Semivolatile Organics

L2340632-07D and -08D: The sample has elevated detection limits due to the dilution required by the sample matrix.

Total Metals

The WG1804158-4 Laboratory Duplicate RPD for lead (65%), performed on L2340632-02, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

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

Authorized Signature:

 Caitlin Walukevich

Title: Technical Director/Representative

Date: 04/03/24

ORGANICS

VOLATILES

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-01
 Client ID: FIELD BLANK
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:35
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8011
 Analytical Date: 07/17/23 18:34
 Analyst: JKH/G

Extraction Method: EPA 8011
 Extraction Date: 07/17/23 13:40

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.005	1	A

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-01
 Client ID: FIELD BLANK
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:35
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260D
 Analytical Date: 07/18/23 16:57
 Analyst: MJV

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
Toluene	ND		ug/l	0.75	0.20	1
Ethylbenzene	ND		ug/l	0.50	0.17	1
p/m-Xylene	ND		ug/l	1.0	0.33	1
o-Xylene	ND		ug/l	1.0	0.39	1
Xylenes, Total	ND		ug/l	1.0	0.33	1
Isopropylbenzene	ND		ug/l	0.50	0.19	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19	1
Naphthalene	ND		ug/l	1.0	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	128		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	102		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-02
 Client ID: PES-M_1.0-1.5_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:30
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 11:53
 Analyst: AJK
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.11	0.011	1
Benzene	0.050		mg/kg	0.028	0.0095	1
1,2-Dichloroethane	ND		mg/kg	0.057	0.015	1
Toluene	0.079		mg/kg	0.057	0.031	1
1,2-Dibromoethane	ND		mg/kg	0.028	0.017	1
Ethylbenzene	0.23		mg/kg	0.057	0.0081	1
p/m-Xylene	0.40		mg/kg	0.11	0.032	1
o-Xylene	0.16		mg/kg	0.057	0.017	1
Xylenes, Total	0.56		mg/kg	0.057	0.017	1
Isopropylbenzene	5.1		mg/kg	0.057	0.0062	1
1,3,5-Trimethylbenzene	0.11		mg/kg	0.11	0.011	1
1,2,4-Trimethylbenzene	0.088	J	mg/kg	0.11	0.019	1
Naphthalene	0.49		mg/kg	0.23	0.037	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	154	Q	70-130
Dibromofluoromethane	78		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-03 D
 Client ID: PES-G_1.7-2.2_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:35
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 12:16
 Analyst: AJK
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.59	0.059	5
Benzene	0.11	J	mg/kg	0.15	0.049	5
1,2-Dichloroethane	ND		mg/kg	0.30	0.076	5
Toluene	0.39		mg/kg	0.30	0.16	5
1,2-Dibromoethane	ND		mg/kg	0.15	0.086	5
Ethylbenzene	13.		mg/kg	0.30	0.042	5
p/m-Xylene	0.66		mg/kg	0.59	0.16	5
o-Xylene	0.27	J	mg/kg	0.30	0.086	5
Xylenes, Total	0.93	J	mg/kg	0.30	0.086	5
Isopropylbenzene	27.		mg/kg	0.30	0.032	5
1,3,5-Trimethylbenzene	0.42	J	mg/kg	0.59	0.057	5
1,2,4-Trimethylbenzene	0.39	J	mg/kg	0.59	0.099	5
Naphthalene	1.3		mg/kg	1.2	0.19	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	79		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	148	Q	70-130
Dibromofluoromethane	75		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-04
 Client ID: PEB-D_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 12:39
 Analyst: AJK
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.12	0.012	1
Benzene	0.082		mg/kg	0.030	0.010	1
1,2-Dichloroethane	ND		mg/kg	0.060	0.015	1
Toluene	0.057	J	mg/kg	0.060	0.032	1
1,2-Dibromoethane	ND		mg/kg	0.030	0.018	1
Ethylbenzene	0.69		mg/kg	0.060	0.0085	1
p/m-Xylene	0.64		mg/kg	0.12	0.034	1
o-Xylene	0.14		mg/kg	0.060	0.017	1
Xylenes, Total	0.78		mg/kg	0.060	0.017	1
Isopropylbenzene	1.2		mg/kg	0.060	0.0065	1
1,3,5-Trimethylbenzene	0.40		mg/kg	0.12	0.012	1
1,2,4-Trimethylbenzene	1.2		mg/kg	0.12	0.020	1
Naphthalene	0.59		mg/kg	0.24	0.039	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	142	Q	70-130
Dibromofluoromethane	88		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-04
 Client ID: PEB-D_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 08/07/23 18:20
 Analyst: JIC
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methyl tert butyl ether	0.00075	J	mg/kg	0.0020	0.00020	1
Benzene	0.0016		mg/kg	0.00050	0.00017	1
1,2-Dichloroethane	ND		mg/kg	0.0010	0.00026	1
Toluene	0.0013		mg/kg	0.0010	0.00055	1
1,2-Dibromoethane	ND		mg/kg	0.00050	0.00029	1
Ethylbenzene	0.011		mg/kg	0.0010	0.00014	1
p/m-Xylene	0.018		mg/kg	0.0020	0.00056	1
o-Xylene	0.012		mg/kg	0.0010	0.00029	1
Xylenes, Total	0.030		mg/kg	0.0010	0.00029	1
Isopropylbenzene	0.032		mg/kg	0.0010	0.00011	1
1,3,5-Trimethylbenzene	0.022		mg/kg	0.0020	0.00019	1
1,2,4-Trimethylbenzene	0.016		mg/kg	0.0020	0.00034	1
Naphthalene	0.019		mg/kg	0.0040	0.00065	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	293	Q	70-130
Dibromofluoromethane	92		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-05
 Client ID: PEB-H_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:05
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 13:03
 Analyst: AJK
 Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.20	0.020	1
Benzene	0.18		mg/kg	0.049	0.016	1
1,2-Dichloroethane	ND		mg/kg	0.098	0.025	1
Toluene	0.087	J	mg/kg	0.098	0.053	1
1,2-Dibromoethane	ND		mg/kg	0.049	0.029	1
Ethylbenzene	0.49		mg/kg	0.098	0.014	1
p/m-Xylene	0.82		mg/kg	0.20	0.055	1
o-Xylene	0.15		mg/kg	0.098	0.028	1
Xylenes, Total	0.97		mg/kg	0.098	0.028	1
Isopropylbenzene	1.2		mg/kg	0.098	0.011	1
1,3,5-Trimethylbenzene	0.82		mg/kg	0.20	0.019	1
1,2,4-Trimethylbenzene	1.9		mg/kg	0.20	0.033	1
Naphthalene	2.1		mg/kg	0.39	0.064	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	133	Q	70-130
Dibromofluoromethane	98		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-05
 Client ID: PEB-H_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:05
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 08/07/23 17:54
 Analyst: JIC
 Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methyl tert butyl ether	0.00051	J	mg/kg	0.0024	0.00024	1
Benzene	0.030		mg/kg	0.00061	0.00020	1
1,2-Dichloroethane	ND		mg/kg	0.0012	0.00031	1
Toluene	0.010		mg/kg	0.0012	0.00066	1
1,2-Dibromoethane	ND		mg/kg	0.00061	0.00036	1
Ethylbenzene	0.083		mg/kg	0.0012	0.00017	1
p/m-Xylene	0.23		mg/kg	0.0024	0.00068	1
o-Xylene	0.030		mg/kg	0.0012	0.00035	1
Xylenes, Total	0.26		mg/kg	0.0012	0.00035	1
Isopropylbenzene	0.82	E	mg/kg	0.0012	0.00013	1
1,3,5-Trimethylbenzene	0.37	E	mg/kg	0.0024	0.00023	1
1,2,4-Trimethylbenzene	0.84	E	mg/kg	0.0024	0.00040	1
Naphthalene	0.035		mg/kg	0.0048	0.00079	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	156	Q	70-130
4-Bromofluorobenzene	2060	Q	70-130
Dibromofluoromethane	79		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-06
 Client ID: PEB-I_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:15
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 13:26
 Analyst: AJK
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.10	0.010	1
Benzene	0.21		mg/kg	0.026	0.0086	1
1,2-Dichloroethane	ND		mg/kg	0.052	0.013	1
Toluene	0.13		mg/kg	0.052	0.028	1
1,2-Dibromoethane	ND		mg/kg	0.026	0.015	1
Ethylbenzene	1.3		mg/kg	0.052	0.0073	1
p/m-Xylene	1.6		mg/kg	0.10	0.029	1
o-Xylene	0.46		mg/kg	0.052	0.015	1
Xylenes, Total	2.1		mg/kg	0.052	0.015	1
Isopropylbenzene	2.6		mg/kg	0.052	0.0056	1
1,3,5-Trimethylbenzene	0.58		mg/kg	0.10	0.010	1
1,2,4-Trimethylbenzene	1.9		mg/kg	0.10	0.017	1
Naphthalene	0.85		mg/kg	0.21	0.034	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	134	Q	70-130
Dibromofluoromethane	87		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-06
 Client ID: PEB-I_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:15
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 08/07/23 17:28
 Analyst: JIC
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methyl tert butyl ether	0.00050	J	mg/kg	0.00085	0.00008	1
Benzene	0.0040		mg/kg	0.00021	0.00007	1
1,2-Dichloroethane	ND		mg/kg	0.00042	0.00011	1
Toluene	0.0022		mg/kg	0.00042	0.00023	1
1,2-Dibromoethane	ND		mg/kg	0.00021	0.00012	1
Ethylbenzene	0.017		mg/kg	0.00042	0.00006	1
p/m-Xylene	0.022		mg/kg	0.00085	0.00024	1
o-Xylene	0.0087		mg/kg	0.00042	0.00012	1
Xylenes, Total	0.031		mg/kg	0.00042	0.00012	1
Isopropylbenzene	0.054		mg/kg	0.00042	0.00004	1
1,3,5-Trimethylbenzene	0.011		mg/kg	0.00085	0.00008	1
1,2,4-Trimethylbenzene	0.026		mg/kg	0.00085	0.00014	1
Naphthalene	0.0083		mg/kg	0.0017	0.00028	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	137	Q	70-130
4-Bromofluorobenzene	443	Q	70-130
Dibromofluoromethane	100		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-07
 Client ID: PEB-C_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:20
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 13:49
 Analyst: AJK
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.12	0.012	1
Benzene	0.22		mg/kg	0.030	0.0099	1
1,2-Dichloroethane	ND		mg/kg	0.059	0.015	1
Toluene	0.043	J	mg/kg	0.059	0.032	1
1,2-Dibromoethane	ND		mg/kg	0.030	0.017	1
Ethylbenzene	6.7		mg/kg	0.059	0.0084	1
p/m-Xylene	4.2		mg/kg	0.12	0.033	1
o-Xylene	0.17		mg/kg	0.059	0.017	1
Xylenes, Total	4.4		mg/kg	0.059	0.017	1
Isopropylbenzene	3.3		mg/kg	0.059	0.0065	1
1,3,5-Trimethylbenzene	3.7		mg/kg	0.12	0.011	1
1,2,4-Trimethylbenzene	12.		mg/kg	0.12	0.020	1
Naphthalene	9.0		mg/kg	0.24	0.039	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	90		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	138	Q	70-130
Dibromofluoromethane	92		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-08
 Client ID: PEB-B_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:25
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 14:13
 Analyst: AJK
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.12	0.012	1
Benzene	0.065		mg/kg	0.031	0.010	1
1,2-Dichloroethane	ND		mg/kg	0.062	0.016	1
Toluene	0.034	J	mg/kg	0.062	0.034	1
1,2-Dibromoethane	ND		mg/kg	0.031	0.018	1
Ethylbenzene	0.55		mg/kg	0.062	0.0088	1
p/m-Xylene	0.22		mg/kg	0.12	0.035	1
o-Xylene	0.036	J	mg/kg	0.062	0.018	1
Xylenes, Total	0.26	J	mg/kg	0.062	0.018	1
Isopropylbenzene	0.79		mg/kg	0.062	0.0068	1
1,3,5-Trimethylbenzene	0.28		mg/kg	0.12	0.012	1
1,2,4-Trimethylbenzene	0.91		mg/kg	0.12	0.021	1
Naphthalene	1.7		mg/kg	0.25	0.040	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	130		70-130
Dibromofluoromethane	95		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-08
 Client ID: PEB-B_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:25
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/21/23 02:20
 Analyst: JIC
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methyl tert butyl ether	0.00039	J	mg/kg	0.0019	0.00019	1
Benzene	0.00032	J	mg/kg	0.00048	0.00016	1
1,2-Dichloroethane	ND		mg/kg	0.00096	0.00025	1
Toluene	0.00062	J	mg/kg	0.00096	0.00052	1
1,2-Dibromoethane	ND		mg/kg	0.00048	0.00028	1
Ethylbenzene	0.023		mg/kg	0.00096	0.00014	1
p/m-Xylene	0.010		mg/kg	0.0019	0.00054	1
o-Xylene	0.0036		mg/kg	0.00096	0.00028	1
Xylenes, Total	0.014		mg/kg	0.00096	0.00028	1
Isopropylbenzene	0.037		mg/kg	0.00096	0.00010	1
1,3,5-Trimethylbenzene	0.017		mg/kg	0.0019	0.00018	1
1,2,4-Trimethylbenzene	0.033		mg/kg	0.0019	0.00032	1
Naphthalene	0.046		mg/kg	0.0038	0.00062	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	126		70-130
4-Bromofluorobenzene	323	Q	70-130
Dibromofluoromethane	99		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-09
 Client ID: PEB-F_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:30
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 14:36
 Analyst: AJK
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.11	0.011	1
Benzene	0.017	J	mg/kg	0.028	0.0094	1
1,2-Dichloroethane	ND		mg/kg	0.056	0.014	1
Toluene	ND		mg/kg	0.056	0.031	1
1,2-Dibromoethane	ND		mg/kg	0.028	0.016	1
Ethylbenzene	2.7		mg/kg	0.056	0.0080	1
p/m-Xylene	0.23		mg/kg	0.11	0.032	1
o-Xylene	0.042	J	mg/kg	0.056	0.016	1
Xylenes, Total	0.27	J	mg/kg	0.056	0.016	1
Isopropylbenzene	2.3		mg/kg	0.056	0.0062	1
1,3,5-Trimethylbenzene	0.23		mg/kg	0.11	0.011	1
1,2,4-Trimethylbenzene	1.1		mg/kg	0.11	0.019	1
Naphthalene	0.48		mg/kg	0.23	0.037	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	122		70-130
Dibromofluoromethane	90		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-09
 Client ID: PEB-F_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:30
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 08/08/23 10:07
 Analyst: AJK
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methyl tert butyl ether	0.00022	J	mg/kg	0.0017	0.00017	1
Benzene	0.00038	J	mg/kg	0.00042	0.00014	1
1,2-Dichloroethane	ND		mg/kg	0.00084	0.00022	1
Toluene	ND		mg/kg	0.00084	0.00046	1
1,2-Dibromoethane	ND		mg/kg	0.00042	0.00025	1
Ethylbenzene	0.071		mg/kg	0.00084	0.00012	1
p/m-Xylene	0.0037		mg/kg	0.0017	0.00047	1
o-Xylene	0.0022		mg/kg	0.00084	0.00024	1
Xylenes, Total	0.0059		mg/kg	0.00084	0.00024	1
Isopropylbenzene	0.061		mg/kg	0.00084	0.00009	1
1,3,5-Trimethylbenzene	0.0053		mg/kg	0.0017	0.00016	1
1,2,4-Trimethylbenzene	0.022		mg/kg	0.0017	0.00028	1
Naphthalene	0.034		mg/kg	0.0034	0.00055	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	201	Q	70-130
Dibromofluoromethane	108		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-10
 Client ID: PEB-J_6.0-6.5_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:45
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 15:00
 Analyst: JIC
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.18	0.018	1
Benzene	0.19		mg/kg	0.044	0.015	1
1,2-Dichloroethane	ND		mg/kg	0.088	0.023	1
Toluene	0.068	J	mg/kg	0.088	0.048	1
1,2-Dibromoethane	ND		mg/kg	0.044	0.026	1
Ethylbenzene	0.12		mg/kg	0.088	0.012	1
p/m-Xylene	0.12	J	mg/kg	0.18	0.050	1
o-Xylene	0.030	J	mg/kg	0.088	0.026	1
Xylenes, Total	0.15	J	mg/kg	0.088	0.026	1
Isopropylbenzene	2.8		mg/kg	0.088	0.0096	1
1,3,5-Trimethylbenzene	0.017	J	mg/kg	0.18	0.017	1
1,2,4-Trimethylbenzene	0.075	J	mg/kg	0.18	0.030	1
Naphthalene	0.30	J	mg/kg	0.35	0.058	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	99		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-10
 Client ID: PEB-J_6.0-6.5_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:45
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/20/23 11:10
 Analyst: JIC
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methyl tert butyl ether	0.00045	J	mg/kg	0.0026	0.00026	1
Benzene	0.00051	J	mg/kg	0.00064	0.00021	1
1,2-Dichloroethane	ND		mg/kg	0.0013	0.00033	1
Toluene	ND		mg/kg	0.0013	0.00070	1
1,2-Dibromoethane	ND		mg/kg	0.00064	0.00038	1
Ethylbenzene	0.0019		mg/kg	0.0013	0.00018	1
p/m-Xylene	0.0012	J	mg/kg	0.0026	0.00072	1
o-Xylene	0.00099	J	mg/kg	0.0013	0.00037	1
Xylenes, Total	0.0022	J	mg/kg	0.0013	0.00037	1
Isopropylbenzene	0.073		mg/kg	0.0013	0.00014	1
1,3,5-Trimethylbenzene	0.00091	J	mg/kg	0.0026	0.00025	1
1,2,4-Trimethylbenzene	0.0018	J	mg/kg	0.0026	0.00043	1
Naphthalene	0.0051		mg/kg	0.0051	0.00083	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	121		70-130
4-Bromofluorobenzene	276	Q	70-130
Dibromofluoromethane	88		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-11
 Client ID: PES-K_3.1-3.6_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:50
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 15:23
 Analyst: JIC
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.13	0.013	1
Benzene	ND		mg/kg	0.032	0.010	1
1,2-Dichloroethane	ND		mg/kg	0.063	0.016	1
Toluene	0.038	J	mg/kg	0.063	0.034	1
1,2-Dibromoethane	ND		mg/kg	0.032	0.018	1
Ethylbenzene	0.053	J	mg/kg	0.063	0.0089	1
p/m-Xylene	0.17		mg/kg	0.13	0.035	1
o-Xylene	0.057	J	mg/kg	0.063	0.018	1
Xylenes, Total	0.23	J	mg/kg	0.063	0.018	1
Isopropylbenzene	4.5		mg/kg	0.063	0.0069	1
1,3,5-Trimethylbenzene	0.046	J	mg/kg	0.13	0.012	1
1,2,4-Trimethylbenzene	0.10	J	mg/kg	0.13	0.021	1
Naphthalene	0.38		mg/kg	0.25	0.041	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	166	Q	70-130
Dibromofluoromethane	89		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-12
 Client ID: PES-L_3.1-3.6_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:55
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 15:46
 Analyst: JIC
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.10	0.010	1
Benzene	ND		mg/kg	0.025	0.0083	1
1,2-Dichloroethane	ND		mg/kg	0.050	0.013	1
Toluene	ND		mg/kg	0.050	0.027	1
1,2-Dibromoethane	ND		mg/kg	0.025	0.014	1
Ethylbenzene	0.031	J	mg/kg	0.050	0.0070	1
p/m-Xylene	0.036	J	mg/kg	0.10	0.028	1
o-Xylene	0.022	J	mg/kg	0.050	0.014	1
Xylenes, Total	0.058	J	mg/kg	0.050	0.014	1
Isopropylbenzene	2.6		mg/kg	0.050	0.0054	1
1,3,5-Trimethylbenzene	0.017	J	mg/kg	0.10	0.0096	1
1,2,4-Trimethylbenzene	0.058	J	mg/kg	0.10	0.017	1
Naphthalene	0.23		mg/kg	0.20	0.032	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	185	Q	70-130
Dibromofluoromethane	88		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-12
 Client ID: PES-L_3.1-3.6_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:55
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 08/07/23 16:36
 Analyst: JIC
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.0018	0.00018	1
Benzene	0.00035	J	mg/kg	0.00044	0.00015	1
1,2-Dichloroethane	ND		mg/kg	0.00089	0.00023	1
Toluene	0.00056	J	mg/kg	0.00089	0.00048	1
1,2-Dibromoethane	ND		mg/kg	0.00044	0.00026	1
Ethylbenzene	ND		mg/kg	0.00089	0.00012	1
p/m-Xylene	ND		mg/kg	0.0018	0.00050	1
o-Xylene	0.00090		mg/kg	0.00089	0.00026	1
Xylenes, Total	0.00090		mg/kg	0.00089	0.00026	1
Isopropylbenzene	0.081		mg/kg	0.00089	0.00009	1
1,3,5-Trimethylbenzene	0.00088	J	mg/kg	0.0018	0.00017	1
1,2,4-Trimethylbenzene	ND		mg/kg	0.0018	0.00030	1
Naphthalene	0.00060	J	mg/kg	0.0036	0.00058	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	787	Q	70-130
Dibromofluoromethane	104		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-13
 Client ID: PES-A_4.2-4.7_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:55
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 16:10
 Analyst: JIC
 Percent Solids: 78%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.13	0.013	1
Benzene	0.073		mg/kg	0.032	0.011	1
1,2-Dichloroethane	ND		mg/kg	0.064	0.016	1
Toluene	0.036	J	mg/kg	0.064	0.035	1
1,2-Dibromoethane	ND		mg/kg	0.032	0.019	1
Ethylbenzene	7.6		mg/kg	0.064	0.0090	1
p/m-Xylene	2.7		mg/kg	0.13	0.036	1
o-Xylene	0.072		mg/kg	0.064	0.019	1
Xylenes, Total	2.8		mg/kg	0.064	0.019	1
Isopropylbenzene	4.4		mg/kg	0.064	0.0070	1
1,3,5-Trimethylbenzene	1.0		mg/kg	0.13	0.012	1
1,2,4-Trimethylbenzene	12.		mg/kg	0.13	0.021	1
Naphthalene	4.2		mg/kg	0.26	0.042	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	143	Q	70-130
Dibromofluoromethane	89		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-14
 Client ID: PES-E_5.2-5.7_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 15:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 16:33
 Analyst: JIC
 Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	0.11		mg/kg	0.11	0.011	1
Benzene	0.038		mg/kg	0.028	0.0094	1
1,2-Dichloroethane	ND		mg/kg	0.057	0.015	1
Toluene	ND		mg/kg	0.057	0.031	1
1,2-Dibromoethane	ND		mg/kg	0.028	0.017	1
Ethylbenzene	0.089		mg/kg	0.057	0.0080	1
p/m-Xylene	ND		mg/kg	0.11	0.032	1
o-Xylene	ND		mg/kg	0.057	0.016	1
Xylenes, Total	ND		mg/kg	0.057	0.016	1
Isopropylbenzene	1.5		mg/kg	0.057	0.0062	1
1,3,5-Trimethylbenzene	ND		mg/kg	0.11	0.011	1
1,2,4-Trimethylbenzene	0.052	J	mg/kg	0.11	0.019	1
Naphthalene	0.13	J	mg/kg	0.23	0.037	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	118		70-130
Dibromofluoromethane	86		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-14
 Client ID: PES-E_5.2-5.7_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 15:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/20/23 11:36
 Analyst: JIC
 Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methyl tert butyl ether	0.094		mg/kg	0.0021	0.00021	1
Benzene	0.020		mg/kg	0.00052	0.00017	1
1,2-Dichloroethane	ND		mg/kg	0.0010	0.00027	1
Toluene	0.0024		mg/kg	0.0010	0.00057	1
1,2-Dibromoethane	ND		mg/kg	0.00052	0.00031	1
Ethylbenzene	0.020		mg/kg	0.0010	0.00015	1
p/m-Xylene	0.0025		mg/kg	0.0021	0.00058	1
o-Xylene	0.0046		mg/kg	0.0010	0.00030	1
Xylenes, Total	0.0071		mg/kg	0.0010	0.00030	1
Isopropylbenzene	0.39	E	mg/kg	0.0010	0.00011	1
1,3,5-Trimethylbenzene	0.00031	J	mg/kg	0.0021	0.00020	1
1,2,4-Trimethylbenzene	ND		mg/kg	0.0021	0.00035	1
Naphthalene	0.0021	J	mg/kg	0.0042	0.00068	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	529	Q	70-130
4-Bromofluorobenzene	384	Q	70-130
Dibromofluoromethane	78		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-15
 Client ID: DUP-1
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 00:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260D
 Analytical Date: 07/19/23 16:57
 Analyst: JIC
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methyl tert butyl ether	ND		mg/kg	0.11	0.011	1
Benzene	0.30		mg/kg	0.027	0.0090	1
1,2-Dichloroethane	ND		mg/kg	0.054	0.014	1
Toluene	0.11		mg/kg	0.054	0.030	1
1,2-Dibromoethane	ND		mg/kg	0.027	0.016	1
Ethylbenzene	2.2		mg/kg	0.054	0.0077	1
p/m-Xylene	1.9		mg/kg	0.11	0.030	1
o-Xylene	0.33		mg/kg	0.054	0.016	1
Xylenes, Total	2.2		mg/kg	0.054	0.016	1
Isopropylbenzene	3.9		mg/kg	0.054	0.0059	1
1,3,5-Trimethylbenzene	0.88		mg/kg	0.11	0.010	1
1,2,4-Trimethylbenzene	2.6		mg/kg	0.11	0.018	1
Naphthalene	1.4		mg/kg	0.22	0.035	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	83		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	151	Q	70-130
Dibromofluoromethane	81		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8011
Analytical Date: 07/17/23 16:31
Analyst: JKH/G

Extraction Method: EPA 8011
Extraction Date: 07/17/23 13:40

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG1804145-1						
1,2-Dibromoethane	ND		ug/l	0.010	0.005	A

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/18/23 10:38
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1804985-5					
Methyl tert butyl ether	ND		ug/l	1.0	0.17
Benzene	ND		ug/l	0.50	0.16
1,2-Dichloroethane	ND		ug/l	0.50	0.13
Toluene	ND		ug/l	0.75	0.20
Ethylbenzene	ND		ug/l	0.50	0.17
p/m-Xylene	ND		ug/l	1.0	0.33
o-Xylene	ND		ug/l	1.0	0.39
Xylenes, Total	ND		ug/l	1.0	0.33
Isopropylbenzene	ND		ug/l	0.50	0.19
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.22
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.19
Naphthalene	0.28	J	ug/l	1.0	0.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	101		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260D
Analytical Date: 07/19/23 09:01
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 02-15 Batch: WG1805480-5					
Methyl tert butyl ether	ND		mg/kg	0.10	0.010
Benzene	ND		mg/kg	0.025	0.0083
1,2-Dichloroethane	ND		mg/kg	0.050	0.013
Toluene	ND		mg/kg	0.050	0.027
1,2-Dibromoethane	ND		mg/kg	0.025	0.015
Ethylbenzene	ND		mg/kg	0.050	0.0070
p/m-Xylene	ND		mg/kg	0.10	0.028
o-Xylene	ND		mg/kg	0.050	0.014
Xylenes, Total	ND		mg/kg	0.050	0.014
Isopropylbenzene	ND		mg/kg	0.050	0.0054
1,3,5-Trimethylbenzene	ND		mg/kg	0.10	0.0096
1,2,4-Trimethylbenzene	ND		mg/kg	0.10	0.017
Naphthalene	ND		mg/kg	0.20	0.032

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	120		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 07/20/23 10:44
Analyst: JIC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 10,14 Batch: WG1805621-5					
Methyl tert butyl ether	ND		mg/kg	0.0020	0.00020
Benzene	ND		mg/kg	0.00050	0.00017
1,2-Dichloroethane	ND		mg/kg	0.0010	0.00026
Toluene	ND		mg/kg	0.0010	0.00054
1,2-Dibromoethane	ND		mg/kg	0.00050	0.00029
Ethylbenzene	ND		mg/kg	0.0010	0.00014
p/m-Xylene	ND		mg/kg	0.0020	0.00056
o-Xylene	ND		mg/kg	0.0010	0.00029
Xylenes, Total	ND		mg/kg	0.0010	0.00029
Isopropylbenzene	ND		mg/kg	0.0010	0.00011
1,3,5-Trimethylbenzene	ND		mg/kg	0.0020	0.00019
1,2,4-Trimethylbenzene	ND		mg/kg	0.0020	0.00033
Naphthalene	ND		mg/kg	0.0040	0.00065

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	94		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8260D
Analytical Date: 07/20/23 19:45
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 08 Batch: WG1805927-5					
Methyl tert butyl ether	ND		mg/kg	0.0020	0.00020
Benzene	ND		mg/kg	0.00050	0.00017
1,2-Dichloroethane	ND		mg/kg	0.0010	0.00026
Toluene	ND		mg/kg	0.0010	0.00054
1,2-Dibromoethane	ND		mg/kg	0.00050	0.00029
Ethylbenzene	ND		mg/kg	0.0010	0.00014
p/m-Xylene	ND		mg/kg	0.0020	0.00056
o-Xylene	ND		mg/kg	0.0010	0.00029
Xylenes, Total	ND		mg/kg	0.0010	0.00029
Isopropylbenzene	ND		mg/kg	0.0010	0.00011
1,3,5-Trimethylbenzene	ND		mg/kg	0.0020	0.00019
1,2,4-Trimethylbenzene	ND		mg/kg	0.0020	0.00033
Naphthalene	ND		mg/kg	0.0040	0.00065

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/08/23 09:40
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 09 Batch: WG1813743-5					
Methyl tert butyl ether	ND		mg/kg	0.0020	0.00020
Benzene	ND		mg/kg	0.00050	0.00017
1,2-Dichloroethane	ND		mg/kg	0.0010	0.00026
Toluene	ND		mg/kg	0.0010	0.00054
1,2-Dibromoethane	ND		mg/kg	0.00050	0.00029
Ethylbenzene	ND		mg/kg	0.0010	0.00014
p/m-Xylene	ND		mg/kg	0.0020	0.00056
o-Xylene	ND		mg/kg	0.0010	0.00029
Xylenes, Total	ND		mg/kg	0.0010	0.00029
Isopropylbenzene	ND		mg/kg	0.0010	0.00011
1,3,5-Trimethylbenzene	ND		mg/kg	0.0020	0.00019
1,2,4-Trimethylbenzene	ND		mg/kg	0.0020	0.00033
Naphthalene	ND		mg/kg	0.0040	0.00065

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	106		70-130

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 08/07/23 09:14
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04-06,12 Batch: WG1813902-5					
Methyl tert butyl ether	ND		mg/kg	0.0020	0.00020
Benzene	ND		mg/kg	0.00050	0.00017
1,2-Dichloroethane	ND		mg/kg	0.0010	0.00026
Toluene	ND		mg/kg	0.0010	0.00054
1,2-Dibromoethane	ND		mg/kg	0.00050	0.00029
Ethylbenzene	ND		mg/kg	0.0010	0.00014
p/m-Xylene	ND		mg/kg	0.0020	0.00056
o-Xylene	ND		mg/kg	0.0010	0.00029
Xylenes, Total	ND		mg/kg	0.0010	0.00029
Isopropylbenzene	ND		mg/kg	0.0010	0.00011
1,3,5-Trimethylbenzene	ND		mg/kg	0.0020	0.00019
1,2,4-Trimethylbenzene	ND		mg/kg	0.0020	0.00033
Naphthalene	ND		mg/kg	0.0040	0.00065

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG1804145-2									
1,2-Dibromoethane	80		-		80-120	-		20	A

Lab Control Sample Analysis Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1804985-3 WG1804985-4								
Methyl tert butyl ether	100		110		63-130	10		20
Benzene	100		100		70-130	0		20
1,2-Dichloroethane	110		110		70-130	0		20
Toluene	99		99		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	100		105		70-130	5		20
Isopropylbenzene	99		97		70-130	2		20
1,3,5-Trimethylbenzene	100		99		64-130	1		20
1,2,4-Trimethylbenzene	100		99		70-130	1		20
Naphthalene	110		120		70-130	9		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	118		121		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	97		97		70-130
Dibromofluoromethane	98		99		70-130



Lab Control Sample Analysis

Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02-15 Batch: WG1805480-3 WG1805480-4								
Methyl tert butyl ether	109		106		66-130	3		30
Benzene	108		111		70-130	3		30
1,2-Dichloroethane	106		105		70-130	1		30
Toluene	94		95		70-130	1		30
1,2-Dibromoethane	85		81		70-130	5		30
Ethylbenzene	100		101		70-130	1		30
p/m-Xylene	109		110		70-130	1		30
o-Xylene	106		107		70-130	1		30
Isopropylbenzene	83		89		70-130	7		30
1,3,5-Trimethylbenzene	97		102		70-130	5		30
1,2,4-Trimethylbenzene	94		99		70-130	5		30
Naphthalene	80		81		70-130	1		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	102		101		70-130
Toluene-d8	94		94		70-130
4-Bromofluorobenzene	86		87		70-130
Dibromofluoromethane	99		98		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 10,14 Batch: WG1805621-3 WG1805621-4								
Methyl tert butyl ether	110		107		66-130	3		30
Benzene	99		96		70-130	3		30
1,2-Dichloroethane	108		108		70-130	0		30
Toluene	101		98		70-130	3		30
1,2-Dibromoethane	95		93		70-130	2		30
Ethylbenzene	103		100		70-130	3		30
p/m-Xylene	101		98		70-130	3		30
o-Xylene	100		97		70-130	3		30
Isopropylbenzene	101		98		70-130	3		30
1,3,5-Trimethylbenzene	98		95		70-130	3		30
1,2,4-Trimethylbenzene	98		96		70-130	2		30
Naphthalene	95		94		70-130	1		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	94		95		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	105		105		70-130
Dibromofluoromethane	90		90		70-130



Lab Control Sample Analysis Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 08 Batch: WG1805927-3 WG1805927-4								
Methyl tert butyl ether	104		106		66-130	2		30
Benzene	97		98		70-130	1		30
1,2-Dichloroethane	98		100		70-130	2		30
Toluene	91		92		70-130	1		30
1,2-Dibromoethane	90		91		70-130	1		30
Ethylbenzene	95		97		70-130	2		30
p/m-Xylene	93		94		70-130	1		30
o-Xylene	93		93		70-130	0		30
Isopropylbenzene	93		94		70-130	1		30
1,3,5-Trimethylbenzene	96		95		70-130	1		30
1,2,4-Trimethylbenzene	94		93		70-130	1		30
Naphthalene	83		83		70-130	0		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	100		103		70-130
Toluene-d8	100		99		70-130
4-Bromofluorobenzene	105		101		70-130
Dibromofluoromethane	96		96		70-130



Lab Control Sample Analysis Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 09 Batch: WG1813743-3 WG1813743-4								
Methyl tert butyl ether	101		95		66-130	6		30
Benzene	104		99		70-130	5		30
1,2-Dichloroethane	89		86		70-130	3		30
Toluene	96		93		70-130	3		30
1,2-Dibromoethane	86		86		70-130	0		30
Ethylbenzene	98		94		70-130	4		30
p/m-Xylene	100		97		70-130	3		30
o-Xylene	98		94		70-130	4		30
Isopropylbenzene	96		94		70-130	2		30
1,3,5-Trimethylbenzene	96		94		70-130	2		30
1,2,4-Trimethylbenzene	96		94		70-130	2		30
Naphthalene	86		88		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	97		99		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	89		86		70-130
Dibromofluoromethane	105		104		70-130



Lab Control Sample Analysis Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04-06,12 Batch: WG1813902-3 WG1813902-4								
Methyl tert butyl ether	95		94		66-130	1		30
Benzene	95		94		70-130	1		30
1,2-Dichloroethane	94		93		70-130	1		30
Toluene	89		86		70-130	3		30
1,2-Dibromoethane	95		92		70-130	3		30
Ethylbenzene	94		91		70-130	3		30
p/m-Xylene	96		93		70-130	3		30
o-Xylene	95		92		70-130	3		30
Isopropylbenzene	97		95		70-130	2		30
1,3,5-Trimethylbenzene	98		95		70-130	3		30
1,2,4-Trimethylbenzene	97		95		70-130	2		30
Naphthalene	93		90		70-130	3		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	101		100		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	103		103		70-130
Dibromofluoromethane	99		98		70-130



SEMIVOLATILES

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-01
 Client ID: FIELD BLANK
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:35
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8270E
 Analytical Date: 07/21/23 12:40
 Analyst: JG

Extraction Method: EPA 3510C
 Extraction Date: 07/20/23 23:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	ND		ug/l	2.0	0.41	1
Phenanthrene	ND		ug/l	2.0	0.33	1
Anthracene	ND		ug/l	2.0	0.33	1
Pyrene	ND		ug/l	2.0	0.28	1
Benzo(a)anthracene	ND		ug/l	2.0	0.32	1
Chrysene	ND		ug/l	1.4	0.34	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35	1
Benzo(a)pyrene	ND		ug/l	2.0	0.41	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.30	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	62		15-120
4-Terphenyl-d14	62		41-149

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-02
 Client ID: PES-M_1.0-1.5_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:30
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 05:54
 Analyst: MG
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	0.88		mg/kg	0.20	0.019	1
Phenanthrene	1.8		mg/kg	0.12	0.024	1
Anthracene	0.099	J	mg/kg	0.12	0.038	1
Pyrene	0.14		mg/kg	0.12	0.020	1
Benzo(a)anthracene	0.055	J	mg/kg	0.12	0.022	1
Chrysene	0.15		mg/kg	0.12	0.020	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	0.033	1
Benzo(a)pyrene	ND		mg/kg	0.16	0.048	1
Benzo(ghi)perylene	ND		mg/kg	0.16	0.023	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	74		30-120
4-Terphenyl-d14	79		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-03
 Client ID: PES-G_1.7-2.2_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:35
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 06:11
 Analyst: MG
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	1.1		mg/kg	0.20	0.019	1
Phenanthrene	2.5		mg/kg	0.12	0.024	1
Anthracene	0.15		mg/kg	0.12	0.038	1
Pyrene	0.14		mg/kg	0.12	0.020	1
Benzo(a)anthracene	ND		mg/kg	0.12	0.022	1
Chrysene	ND		mg/kg	0.12	0.020	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	0.033	1
Benzo(a)pyrene	ND		mg/kg	0.16	0.048	1
Benzo(ghi)perylene	ND		mg/kg	0.16	0.023	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	155	Q	23-120
2-Fluorobiphenyl	84		30-120
4-Terphenyl-d14	87		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-04
 Client ID: PEB-D_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/20/23 01:05
 Analyst: IM
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	1.5		mg/kg	0.19	0.019	1
Phenanthrene	2.8		mg/kg	0.12	0.023	1
Anthracene	0.37		mg/kg	0.12	0.038	1
Pyrene	0.63		mg/kg	0.12	0.019	1
Benzo(a)anthracene	0.29		mg/kg	0.12	0.022	1
Chrysene	0.43		mg/kg	0.12	0.020	1
Benzo(b)fluoranthene	0.16		mg/kg	0.12	0.032	1
Benzo(a)pyrene	0.14	J	mg/kg	0.15	0.047	1
Benzo(ghi)perylene	0.079	J	mg/kg	0.15	0.023	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	101		23-120
2-Fluorobiphenyl	77		30-120
4-Terphenyl-d14	72		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-05
 Client ID: PEB-H_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:05
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 06:44
 Analyst: MG
 Percent Solids: 75%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	0.26		mg/kg	0.22	0.021	1
Phenanthrene	0.49		mg/kg	0.13	0.027	1
Anthracene	ND		mg/kg	0.13	0.043	1
Pyrene	0.041	J	mg/kg	0.13	0.022	1
Benzo(a)anthracene	ND		mg/kg	0.13	0.025	1
Chrysene	0.045	J	mg/kg	0.13	0.023	1
Benzo(b)fluoranthene	ND		mg/kg	0.13	0.037	1
Benzo(a)pyrene	ND		mg/kg	0.18	0.054	1
Benzo(ghi)perylene	ND		mg/kg	0.18	0.026	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	70		30-120
4-Terphenyl-d14	81		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-06
 Client ID: PEB-I_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:15
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 07:01
 Analyst: MG
 Percent Solids: 85%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	0.11	J	mg/kg	0.20	0.019	1
Phenanthrene	0.26		mg/kg	0.12	0.024	1
Anthracene	ND		mg/kg	0.12	0.038	1
Pyrene	0.044	J	mg/kg	0.12	0.020	1
Benzo(a)anthracene	ND		mg/kg	0.12	0.022	1
Chrysene	0.045	J	mg/kg	0.12	0.020	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	0.033	1
Benzo(a)pyrene	ND		mg/kg	0.16	0.048	1
Benzo(ghi)perylene	ND		mg/kg	0.16	0.023	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	86		30-120
4-Terphenyl-d14	95		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-07 D
 Client ID: PEB-C_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:20
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/20/23 17:35
 Analyst: LJG
 Percent Solids: 89%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	4.7		mg/kg	0.93	0.091	5
Phenanthrene	9.8		mg/kg	0.56	0.11	5
Anthracene	1.1		mg/kg	0.56	0.18	5
Pyrene	1.2		mg/kg	0.56	0.093	5
Benzo(a)anthracene	0.29	J	mg/kg	0.56	0.10	5
Chrysene	0.50	J	mg/kg	0.56	0.097	5
Benzo(b)fluoranthene	0.20	J	mg/kg	0.56	0.16	5
Benzo(a)pyrene	ND		mg/kg	0.75	0.23	5
Benzo(ghi)perylene	0.14	J	mg/kg	0.75	0.11	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	70		30-120
4-Terphenyl-d14	71		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-08 D
 Client ID: PEB-B_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:25
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/20/23 17:58
 Analyst: LJG
 Percent Solids: 87%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	2.8		mg/kg	0.96	0.093	5
Phenanthrene	6.1		mg/kg	0.57	0.12	5
Anthracene	0.67		mg/kg	0.57	0.19	5
Pyrene	0.78		mg/kg	0.57	0.095	5
Benzo(a)anthracene	0.22	J	mg/kg	0.57	0.11	5
Chrysene	0.42	J	mg/kg	0.57	0.10	5
Benzo(b)fluoranthene	ND		mg/kg	0.57	0.16	5
Benzo(a)pyrene	ND		mg/kg	0.76	0.23	5
Benzo(ghi)perylene	ND		mg/kg	0.76	0.11	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	81		30-120
4-Terphenyl-d14	79		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-09
 Client ID: PEB-F_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:30
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 07:52
 Analyst: MG
 Percent Solids: 81%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	0.32		mg/kg	0.20	0.020	1
Phenanthrene	0.84		mg/kg	0.12	0.025	1
Anthracene	0.098	J	mg/kg	0.12	0.040	1
Pyrene	0.33		mg/kg	0.12	0.020	1
Benzo(a)anthracene	0.13		mg/kg	0.12	0.023	1
Chrysene	0.16		mg/kg	0.12	0.021	1
Benzo(b)fluoranthene	0.071	J	mg/kg	0.12	0.034	1
Benzo(a)pyrene	0.055	J	mg/kg	0.16	0.050	1
Benzo(ghi)perylene	ND		mg/kg	0.16	0.024	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	90		30-120
4-Terphenyl-d14	96		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-10
 Client ID: PEB-J_6.0-6.5_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:45
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 08:09
 Analyst: MG
 Percent Solids: 84%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	0.60		mg/kg	0.20	0.019	1
Phenanthrene	1.7		mg/kg	0.12	0.024	1
Anthracene	0.096	J	mg/kg	0.12	0.038	1
Pyrene	0.13		mg/kg	0.12	0.019	1
Benzo(a)anthracene	0.056	J	mg/kg	0.12	0.022	1
Chrysene	0.15		mg/kg	0.12	0.020	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	0.033	1
Benzo(a)pyrene	ND		mg/kg	0.16	0.048	1
Benzo(ghi)perylene	ND		mg/kg	0.16	0.023	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	77		30-120
4-Terphenyl-d14	79		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-11
 Client ID: PES-K_3.1-3.6_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:50
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 08:26
 Analyst: MG
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	0.10	J	mg/kg	0.20	0.019	1
Phenanthrene	0.27		mg/kg	0.12	0.024	1
Anthracene	ND		mg/kg	0.12	0.039	1
Pyrene	0.027	J	mg/kg	0.12	0.020	1
Benzo(a)anthracene	ND		mg/kg	0.12	0.022	1
Chrysene	0.040	J	mg/kg	0.12	0.021	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	0.034	1
Benzo(a)pyrene	ND		mg/kg	0.16	0.049	1
Benzo(ghi)perylene	ND		mg/kg	0.16	0.023	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	77		30-120
4-Terphenyl-d14	87		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-12
 Client ID: PES-L_3.1-3.6_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:55
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 22:41
 Analyst: IM
 Percent Solids: 83%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	0.27		mg/kg	0.20	0.019	1
Phenanthrene	0.78		mg/kg	0.12	0.024	1
Anthracene	0.077	J	mg/kg	0.12	0.039	1
Pyrene	0.088	J	mg/kg	0.12	0.020	1
Benzo(a)anthracene	0.024	J	mg/kg	0.12	0.022	1
Chrysene	0.076	J	mg/kg	0.12	0.021	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	0.034	1
Benzo(a)pyrene	ND		mg/kg	0.16	0.049	1
Benzo(ghi)perylene	ND		mg/kg	0.16	0.023	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	69		30-120
4-Terphenyl-d14	70		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-13
 Client ID: PES-A_4.2-4.7_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:55
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 22:58
 Analyst: IM
 Percent Solids: 78%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	0.11	J	mg/kg	0.21	0.020	1
Phenanthrene	0.32		mg/kg	0.13	0.026	1
Anthracene	ND		mg/kg	0.13	0.041	1
Pyrene	0.026	J	mg/kg	0.13	0.021	1
Benzo(a)anthracene	ND		mg/kg	0.13	0.024	1
Chrysene	0.033	J	mg/kg	0.13	0.022	1
Benzo(b)fluoranthene	ND		mg/kg	0.13	0.035	1
Benzo(a)pyrene	ND		mg/kg	0.17	0.051	1
Benzo(ghi)perylene	ND		mg/kg	0.17	0.025	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	79		30-120
4-Terphenyl-d14	78		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-14
 Client ID: PES-E_5.2-5.7_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 15:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 23:15
 Analyst: IM
 Percent Solids: 80%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	0.26		mg/kg	0.20	0.020	1
Phenanthrene	0.69		mg/kg	0.12	0.025	1
Anthracene	0.041	J	mg/kg	0.12	0.040	1
Pyrene	0.051	J	mg/kg	0.12	0.020	1
Benzo(a)anthracene	ND		mg/kg	0.12	0.023	1
Chrysene	0.058	J	mg/kg	0.12	0.021	1
Benzo(b)fluoranthene	ND		mg/kg	0.12	0.034	1
Benzo(a)pyrene	ND		mg/kg	0.16	0.050	1
Benzo(ghi)perylene	ND		mg/kg	0.16	0.024	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	86		30-120
4-Terphenyl-d14	84		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-15
 Client ID: DUP-1
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 00:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270E
 Analytical Date: 07/18/23 23:32
 Analyst: IM
 Percent Solids: 88%

Extraction Method: EPA 3546
 Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluorene	0.24		mg/kg	0.19	0.018	1
Phenanthrene	0.62		mg/kg	0.11	0.023	1
Anthracene	0.048	J	mg/kg	0.11	0.037	1
Pyrene	0.064	J	mg/kg	0.11	0.019	1
Benzo(a)anthracene	0.026	J	mg/kg	0.11	0.021	1
Chrysene	0.069	J	mg/kg	0.11	0.020	1
Benzo(b)fluoranthene	ND		mg/kg	0.11	0.032	1
Benzo(a)pyrene	ND		mg/kg	0.15	0.046	1
Benzo(ghi)perylene	ND		mg/kg	0.15	0.022	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	73		30-120
4-Terphenyl-d14	69		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270E
Analytical Date: 07/18/23 00:00
Analyst: MG

Extraction Method: EPA 3546
Extraction Date: 07/15/23 18:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-15 Batch: WG1803733-1					
Fluorene	ND		mg/kg	0.16	0.016
Phenanthrene	ND		mg/kg	0.098	0.020
Anthracene	ND		mg/kg	0.098	0.032
Pyrene	ND		mg/kg	0.098	0.016
Benzo(a)anthracene	ND		mg/kg	0.098	0.018
Chrysene	ND		mg/kg	0.098	0.017
Benzo(b)fluoranthene	ND		mg/kg	0.098	0.028
Benzo(a)pyrene	ND		mg/kg	0.13	0.040
Benzo(ghi)perylene	ND		mg/kg	0.13	0.019

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	83		30-120
4-Terphenyl-d14	88		18-120

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

**Method Blank Analysis
Batch Quality Control**

Analytical Method: 1,8270E
Analytical Date: 07/21/23 08:45
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 07/20/23 23:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1805780-1					
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Anthracene	ND		ug/l	2.0	0.33
Pyrene	ND		ug/l	2.0	0.28
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Chrysene	ND		ug/l	1.4	0.34
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(ghi)perylene	ND		ug/l	2.0	0.30

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	74		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-15 Batch: WG1803733-2 WG1803733-3								
Fluorene	76		75		40-140	1		50
Phenanthrene	77		77		40-140	0		50
Anthracene	82		82		40-140	0		50
Pyrene	75		74		35-142	1		50
Benzo(a)anthracene	82		81		40-140	1		50
Chrysene	80		78		40-140	3		50
Benzo(b)fluoranthene	74		76		40-140	3		50
Benzo(a)pyrene	82		83		40-140	1		50
Benzo(ghi)perylene	73		72		40-140	1		50

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	91		87		23-120
2-Fluorobiphenyl	77		75		30-120
4-Terphenyl-d14	72		70		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1805780-2 WG1805780-3								
Fluorene	86		71		40-140	19		30
Phenanthrene	90		75		40-140	18		30
Anthracene	92		76		40-140	19		30
Pyrene	86		70		26-127	21		30
Benzo(a)anthracene	91		78		40-140	15		30
Chrysene	93		78		40-140	18		30
Benzo(b)fluoranthene	85		72		40-140	17		30
Benzo(a)pyrene	96		78		40-140	21		30
Benzo(ghi)perylene	97		79		40-140	20		30

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	74		59		21-120
Phenol-d6	63		50		10-120
Nitrobenzene-d5	77		62		23-120
2-Fluorobiphenyl	73		60		15-120
2,4,6-Tribromophenol	72		58		10-120
4-Terphenyl-d14	77		64		41-149

METALS

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-01
 Client ID: FIELD BLANK
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:35
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	ND		ug/l	1.000	0.3430	1	07/17/23 17:25	07/20/23 18:33	EPA 3005A	1,6020B	SMV



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-02
 Client ID: PES-M_1.0-1.5_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:30
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	30.4		mg/kg	2.37	0.127	1	07/20/23 05:40	07/20/23 18:40	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-03
 Client ID: PES-G_1.7-2.2_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:35
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	6.99		mg/kg	2.30	0.123	1	07/20/23 05:40	07/20/23 18:31	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-04
 Client ID: PEB-D_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	25.3		mg/kg	2.26	0.121	1	07/20/23 05:40	07/20/23 18:34	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-05
 Client ID: PEB-H_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:05
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 75%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	9.83		mg/kg	2.50	0.134	1	07/20/23 05:40	07/20/23 18:37	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-06
 Client ID: PEB-I_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:15
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	46.5		mg/kg	2.27	0.122	1	07/20/23 05:40	07/20/23 19:23	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-07
 Client ID: PEB-C_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:20
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	9.96		mg/kg	2.14	0.114	1	07/20/23 05:40	07/20/23 19:26	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-08
 Client ID: PEB-B_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:25
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	24.4		mg/kg	2.22	0.119	1	07/20/23 05:40	07/20/23 19:29	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-09
 Client ID: PEB-F_4.5-5.0_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:30
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	57.1		mg/kg	2.44	0.130	1	07/20/23 05:40	07/20/23 19:31	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-10
 Client ID: PEB-J_6.0-6.5_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:45
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	7.40		mg/kg	2.26	0.121	1	07/20/23 05:40	07/20/23 19:34	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-11
 Client ID: PES-K_3.1-3.6_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:50
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	14.2		mg/kg	2.32	0.125	1	07/20/23 05:40	07/20/23 19:37	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-12
 Client ID: PES-L_3.1-3.6_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:55
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	7.40		mg/kg	2.34	0.125	1	07/20/23 05:40	07/20/23 19:40	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-13
 Client ID: PES-A_4.2-4.7_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:55
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 78%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	7.24		mg/kg	2.41	0.129	1	07/20/23 05:40	07/20/23 19:42	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-14
 Client ID: PES-E_5.2-5.7_071423
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 15:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	7.04		mg/kg	2.40	0.129	1	07/20/23 05:40	07/20/23 19:45	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-15
 Client ID: DUP-1
 Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 00:00
 Date Received: 07/14/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Lead, Total	42.1		mg/kg	2.21	0.118	1	07/20/23 05:40	07/20/23 19:48	EPA 3050B	1,6010D	MRC



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1804106-1									
Lead, Total	ND	ug/l	1.000	0.3430	1	07/17/23 17:25	07/20/23 17:33	1,6020B	SMV

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02-15 Batch: WG1804158-1									
Lead, Total	ND	mg/kg	2.00	0.107	1	07/20/23 05:40	07/20/23 18:26	1,6010D	MRC

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1804106-2								
Lead, Total	100		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 02-15 Batch: WG1804158-2 SRM Lot Number: D119-540								
Lead, Total	110		-		82-118	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1804106-3 QC Sample: L2340476-01 Client ID: MS Sample												
Lead, Total	1.100	530	508.7	96	-	-	-	-	75-125	-	-	20
Total Metals - Mansfield Lab Associated sample(s): 02-15 QC Batch ID: WG1804158-3 QC Sample: L2340632-02 Client ID: PES-M_1.0-1.5_071423												
Lead, Total	30.4	48.1	78.8	100	-	-	-	-	75-125	-	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1804106-4 QC Sample: L2340476-01 Client ID: DUP Sample						
Lead, Total	1.100	1.129	ug/l	3		20
Total Metals - Mansfield Lab Associated sample(s): 02-15 QC Batch ID: WG1804158-4 QC Sample: L2340632-02 Client ID: PES-M_1.0-1.5_071423						
Lead, Total	30.4	15.5	mg/kg	65	Q	20

INORGANICS & MISCELLANEOUS

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-02
Client ID: PES-M_1.0-1.5_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:30
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.7		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-03
Client ID: PES-G_1.7-2.2_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 13:35
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.3		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-04
Client ID: PEB-D_4.5-5.0_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.7		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-05
Client ID: PEB-H_4.5-5.0_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:05
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	75.2		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-06
Client ID: PEB-I_4.5-5.0_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:15
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.6		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-07
Client ID: PEB-C_4.5-5.0_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:20
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.7		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-08
Client ID: PEB-B_4.5-5.0_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:25
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.7		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-09
Client ID: PEB-F_4.5-5.0_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:30
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.6		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-10
Client ID: PEB-J_6.0-6.5_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:45
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.1		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-11
Client ID: PES-K_3.1-3.6_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:50
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.7		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-12
Client ID: PES-L_3.1-3.6_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:55
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.9		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-13
Client ID: PES-A_4.2-4.7_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 14:55
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	78.4		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-14
Client ID: PES-E_5.2-5.7_071423
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 15:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.0		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

SAMPLE RESULTS

Lab ID: L2340632-15
Client ID: DUP-1
Sample Location: 3144 W. PASSYUNK PHILADELPHIA, PA

Date Collected: 07/14/23 00:00
Date Received: 07/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.5		%	0.100	NA	1	-	07/15/23 13:12	121,2540G	ROI



Lab Duplicate Analysis

Batch Quality Control

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-15 QC Batch ID: WG1803618-1 QC Sample: L2340632-02 Client ID: PES-M_1.0-1.5_071423						
Solids, Total	82.7	81.8	%	1		20

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340632-01A	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260(14)
L2340632-01B	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260(14)
L2340632-01C	Vial HCl preserved	A	NA		3.1	Y	Absent		PA-8260(14)
L2340632-01D	Vial Na2S2O3 preserved	A	NA		3.1	Y	Absent		8011(14)
L2340632-01E	Vial Na2S2O3 preserved	A	NA		3.1	Y	Absent		8011(14)
L2340632-01F	Plastic 250ml HNO3 preserved	A	<2	<2	3.1	Y	Absent		PB-6020T-PPB(180)
L2340632-01G	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		PA-8270-LVI(7)
L2340632-01H	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		PA-8270-LVI(7)
L2340632-02A	Vial MeOH preserved	A	NA		3.1	Y	Absent		PA-8260HLW(14)
L2340632-02B	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-02C	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-02D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L2340632-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		PB-TI(180)
L2340632-02F	Glass 120ml/4oz unpreserved	A	NA		3.1	Y	Absent		PA-8270(14)
L2340632-03A	Vial MeOH preserved	B	NA		2.9	Y	Absent		PA-8260HLW(14)
L2340632-03B	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-03C	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-03D	Plastic 2oz unpreserved for TS	B	NA		2.9	Y	Absent		TS(7)
L2340632-03E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.9	Y	Absent		PB-TI(180)
L2340632-03F	Glass 120ml/4oz unpreserved	B	NA		2.9	Y	Absent		PA-8270(14)
L2340632-04A	Vial MeOH preserved	B	NA		2.9	Y	Absent		PA-8260H(14),PA-8260HLW(14)
L2340632-04B	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340632-04C	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-04D	Plastic 2oz unpreserved for TS	B	NA		2.9	Y	Absent		TS(7)
L2340632-04E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.9	Y	Absent		PB-TI(180)
L2340632-04F	Glass 120ml/4oz unpreserved	B	NA		2.9	Y	Absent		PA-8270(14)
L2340632-05A	Vial MeOH preserved	B	NA		2.9	Y	Absent		PA-8260H(14),PA-8260HLW(14)
L2340632-05B	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-05C	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-05D	Plastic 2oz unpreserved for TS	B	NA		2.9	Y	Absent		TS(7)
L2340632-05E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.9	Y	Absent		PB-TI(180)
L2340632-05F	Glass 120ml/4oz unpreserved	B	NA		2.9	Y	Absent		PA-8270(14)
L2340632-06A	Vial MeOH preserved	B	NA		2.9	Y	Absent		PA-8260H(14),PA-8260HLW(14)
L2340632-06B	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-06C	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-06D	Plastic 2oz unpreserved for TS	B	NA		2.9	Y	Absent		TS(7)
L2340632-06E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.9	Y	Absent		PB-TI(180)
L2340632-06F	Glass 120ml/4oz unpreserved	B	NA		2.9	Y	Absent		PA-8270(14)
L2340632-07A	Vial MeOH preserved	B	NA		2.9	Y	Absent		PA-8260HLW(14)
L2340632-07B	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-07C	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-07D	Plastic 2oz unpreserved for TS	B	NA		2.9	Y	Absent		TS(7)
L2340632-07E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.9	Y	Absent		PB-TI(180)
L2340632-07F	Glass 120ml/4oz unpreserved	B	NA		2.9	Y	Absent		PA-8270(14)
L2340632-08A	Vial MeOH preserved	B	NA		2.9	Y	Absent		PA-8260H(14),PA-8260HLW(14)
L2340632-08B	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-08C	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-08D	Plastic 2oz unpreserved for TS	B	NA		2.9	Y	Absent		TS(7)
L2340632-08E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.9	Y	Absent		PB-TI(180)
L2340632-08F	Glass 120ml/4oz unpreserved	B	NA		2.9	Y	Absent		PA-8270(14)

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340632-09A	Vial MeOH preserved	B	NA		2.9	Y	Absent		PA-8260H(14),PA-8260HLW(14)
L2340632-09B	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-09C	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-09D	Plastic 2oz unpreserved for TS	B	NA		2.9	Y	Absent		TS(7)
L2340632-09E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.9	Y	Absent		PB-TI(180)
L2340632-09F	Glass 120ml/4oz unpreserved	B	NA		2.9	Y	Absent		PA-8270(14)
L2340632-10A	Vial MeOH preserved	A	NA		3.1	Y	Absent		PA-8260H(14),PA-8260HLW(14)
L2340632-10B	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-10C	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-10D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L2340632-10E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		PB-TI(180)
L2340632-10F	Glass 120ml/4oz unpreserved	A	NA		3.1	Y	Absent		PA-8270(14)
L2340632-11A	Vial MeOH preserved	A	NA		3.1	Y	Absent		PA-8260HLW(14)
L2340632-11B	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-11C	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-11D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L2340632-11E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		PB-TI(180)
L2340632-11F	Glass 120ml/4oz unpreserved	A	NA		3.1	Y	Absent		PA-8270(14)
L2340632-12A	Vial MeOH preserved	A	NA		3.1	Y	Absent		PA-8260H(14),PA-8260HLW(14)
L2340632-12B	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-12C	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-12D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L2340632-12E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		PB-TI(180)
L2340632-12F	Glass 120ml/4oz unpreserved	A	NA		3.1	Y	Absent		PA-8270(14)
L2340632-13A	Vial MeOH preserved	B	NA		2.9	Y	Absent		PA-8260HLW(14)
L2340632-13B	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-13C	Vial water preserved	B	NA		2.9	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-13D	Plastic 2oz unpreserved for TS	B	NA		2.9	Y	Absent		TS(7)

Project Name: PESRM
Project Number: 220181801

Serial_No:04032413:14
Lab Number: L2340632
Report Date: 04/03/24

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2340632-13E	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.9	Y	Absent		PB-TI(180)
L2340632-13F	Glass 120ml/4oz unpreserved	B	NA		2.9	Y	Absent		PA-8270(14)
L2340632-14A	Vial MeOH preserved	A	NA		3.1	Y	Absent		PA-8260H(14),PA-8260HLW(14)
L2340632-14B	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-14C	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260H(14),PA-8260HLW(14)
L2340632-14D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L2340632-14E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		PB-TI(180)
L2340632-14F	Glass 120ml/4oz unpreserved	A	NA		3.1	Y	Absent		PA-8270(14)
L2340632-15A	Vial MeOH preserved	A	NA		3.1	Y	Absent		PA-8260HLW(14)
L2340632-15B	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-15C	Vial water preserved	A	NA		3.1	Y	Absent	15-JUL-23 08:25	PA-8260HLW(14)
L2340632-15D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L2340632-15E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		PB-TI(180)
L2340632-15F	Glass 120ml/4oz unpreserved	A	NA		3.1	Y	Absent		PA-8270(14)

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

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

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

Report Format: DU Report with 'J' Qualifiers



Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

Data Qualifiers

Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: PESRM
Project Number: 220181801

Lab Number: L2340632
Report Date: 04/03/24

REFERENCES

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

LIMITATION OF LIABILITIES

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

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



Certification Information

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

Westborough Facility

EPA 624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625.1: alpha-Terpineol

EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270E: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.

Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

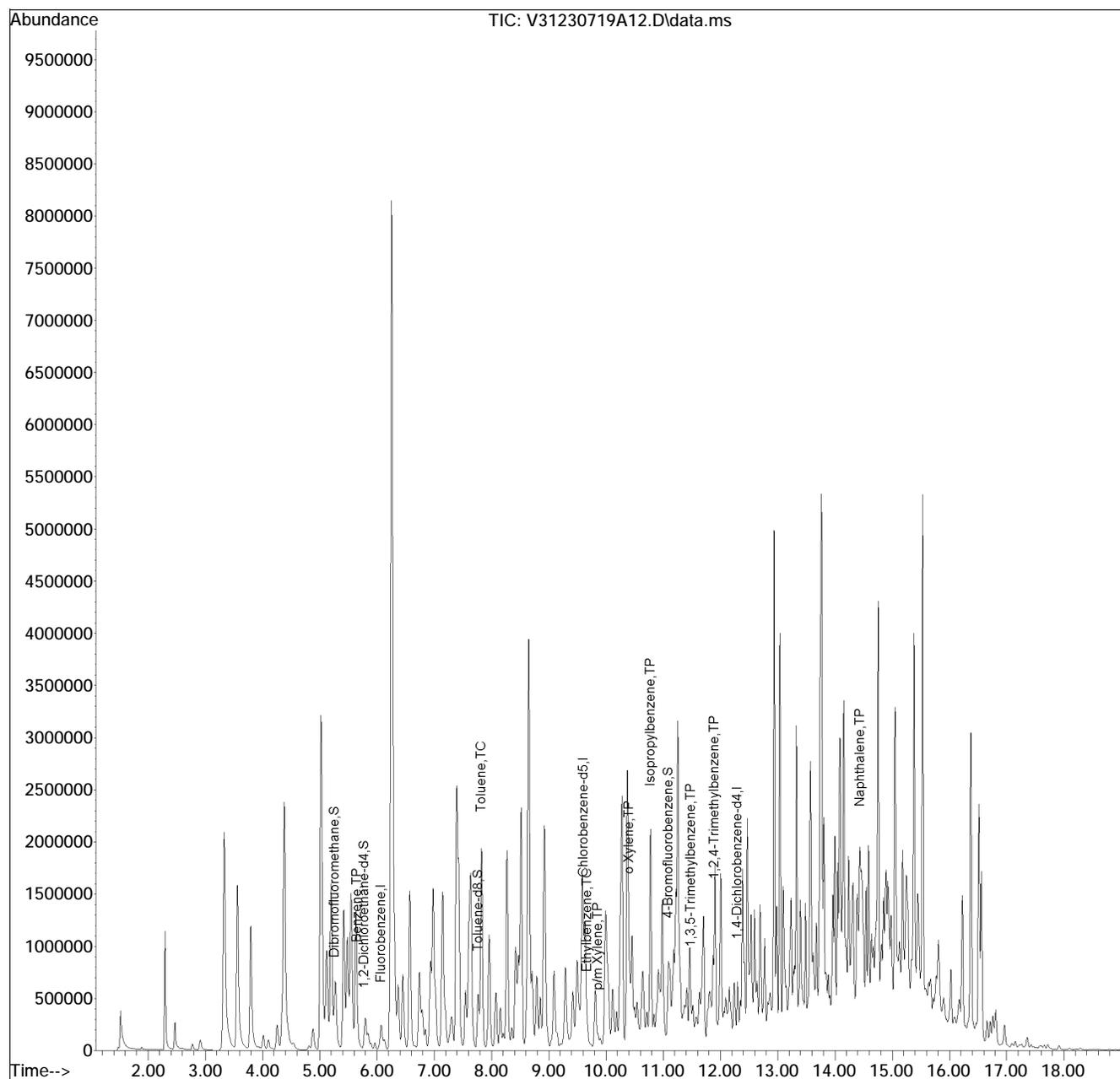
For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA131\2023\230719A\
Data File : V31230719A12.D
Acq On : 19 Jul 2023 11:53 am
Operator : VOA131:AJK
Sample : L2340632-02,31H,6.47,5,0.100,,A
Misc : WG1805480,ICAL19865
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 20 12:56:15 2023
Quant Method : K:\VOA131\2023\230719A\V31_230328A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Mar 29 10:40:23 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+102.D•

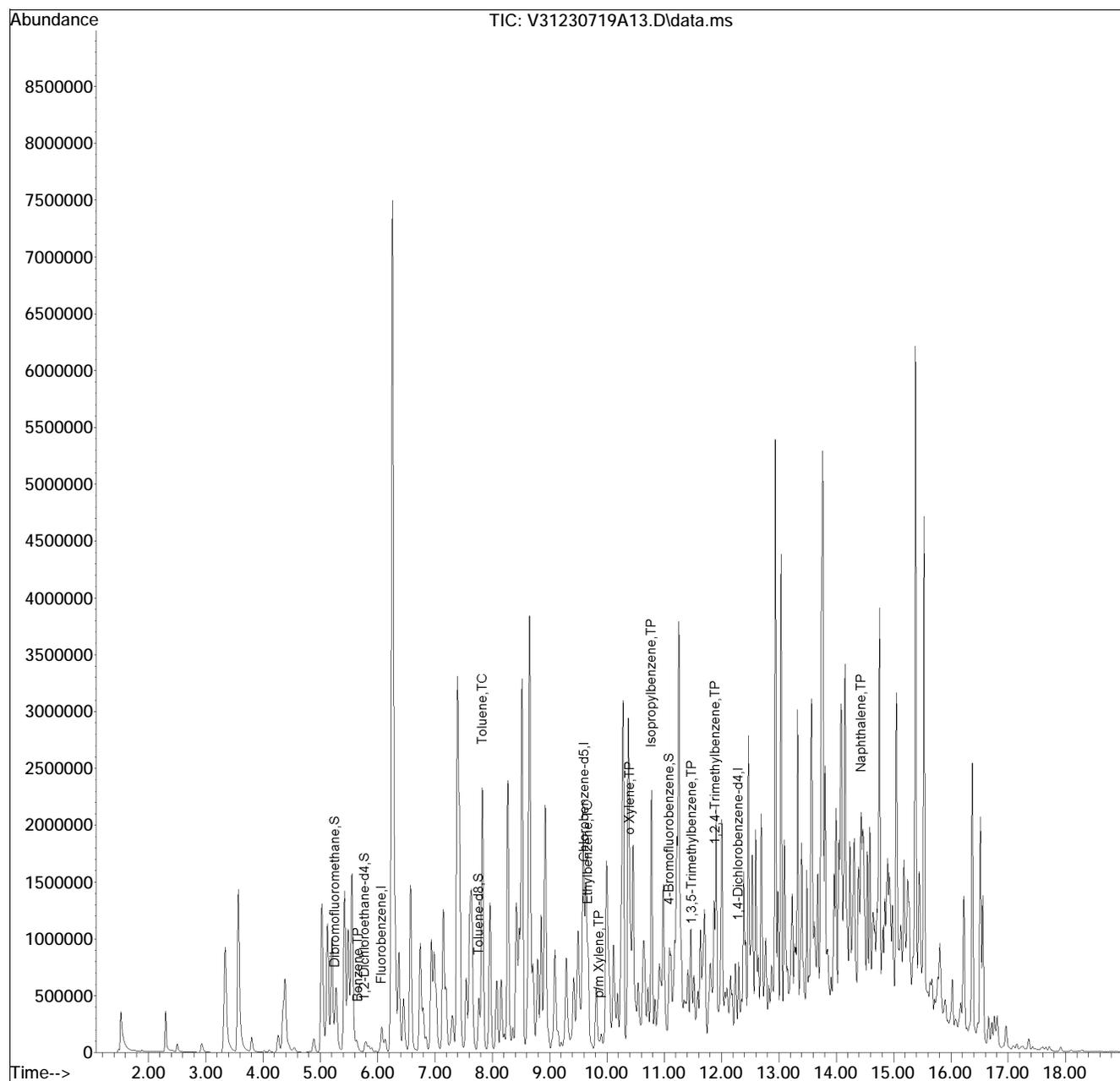


Quantitation Report (QT Reviewed)

Data Path : K:\VOA131\2023\230719A\
 Data File : V31230719A13.D
 Acq On : 19 Jul 2023 12:16 pm
 Operator : VOA131:AJK
 Sample : L2340632-03D,31H,5.96,5,0.02,,A
 Misc : WG1805480,ICAL19865
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 20 12:56:20 2023
 Quant Method : K:\VOA131\2023\230719A\V31_230328A_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Mar 29 10:40:23 2023
 Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+102.D•

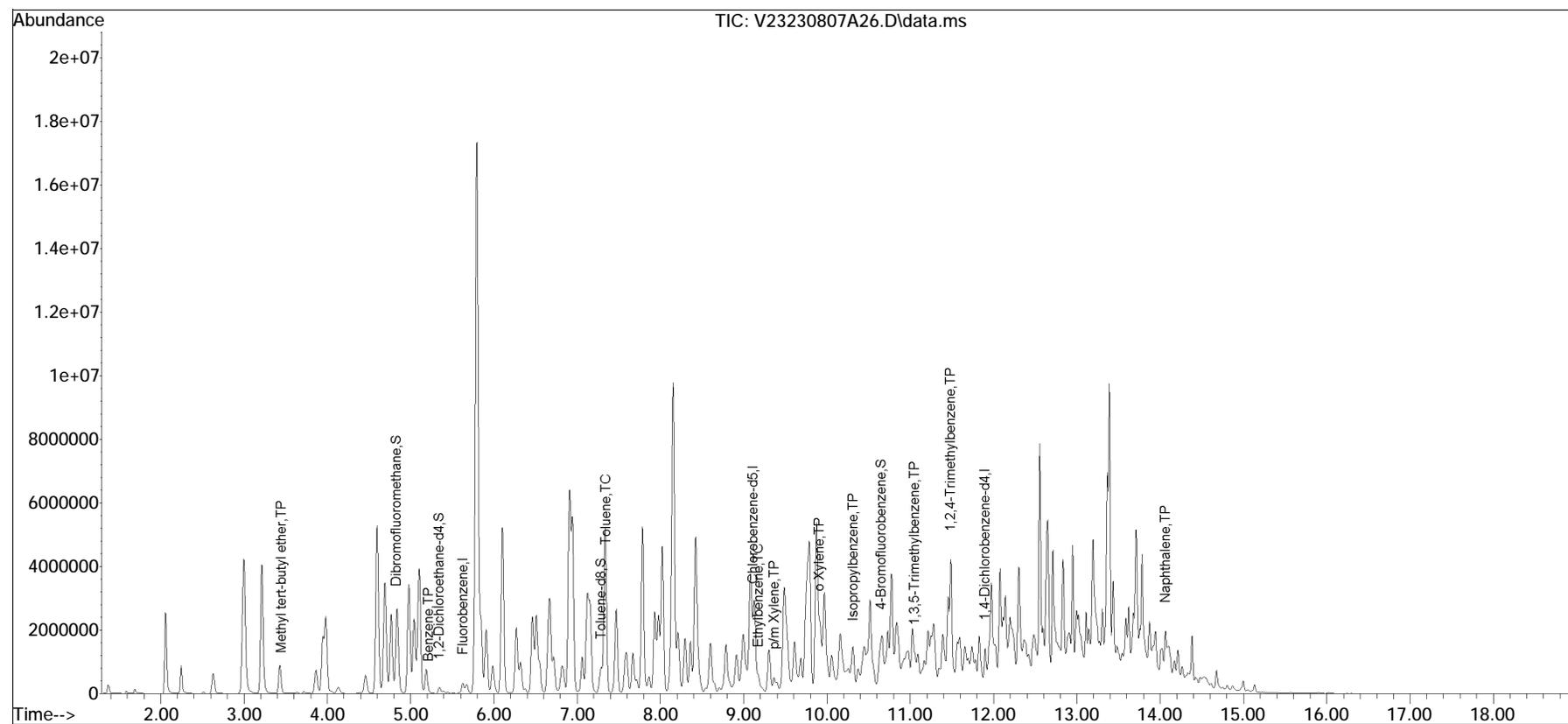


Quantitation Report (QT Reviewed)

Data Path : K:\VOA123\2023\230807A\
Data File : V23230807A26.D
Acq On : 07 Aug 2023 06:20 pm
Operator : VOA123:JIC
Sample : 12340632-04,31,5.87,5,,c
Misc : WG1813902,ICAL20232
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 08 11:55:57 2023
Quant Method : K:\VOA123\2023\230807A\V123_230803A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 04 10:23:20 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList - PA Short list807A01.D•

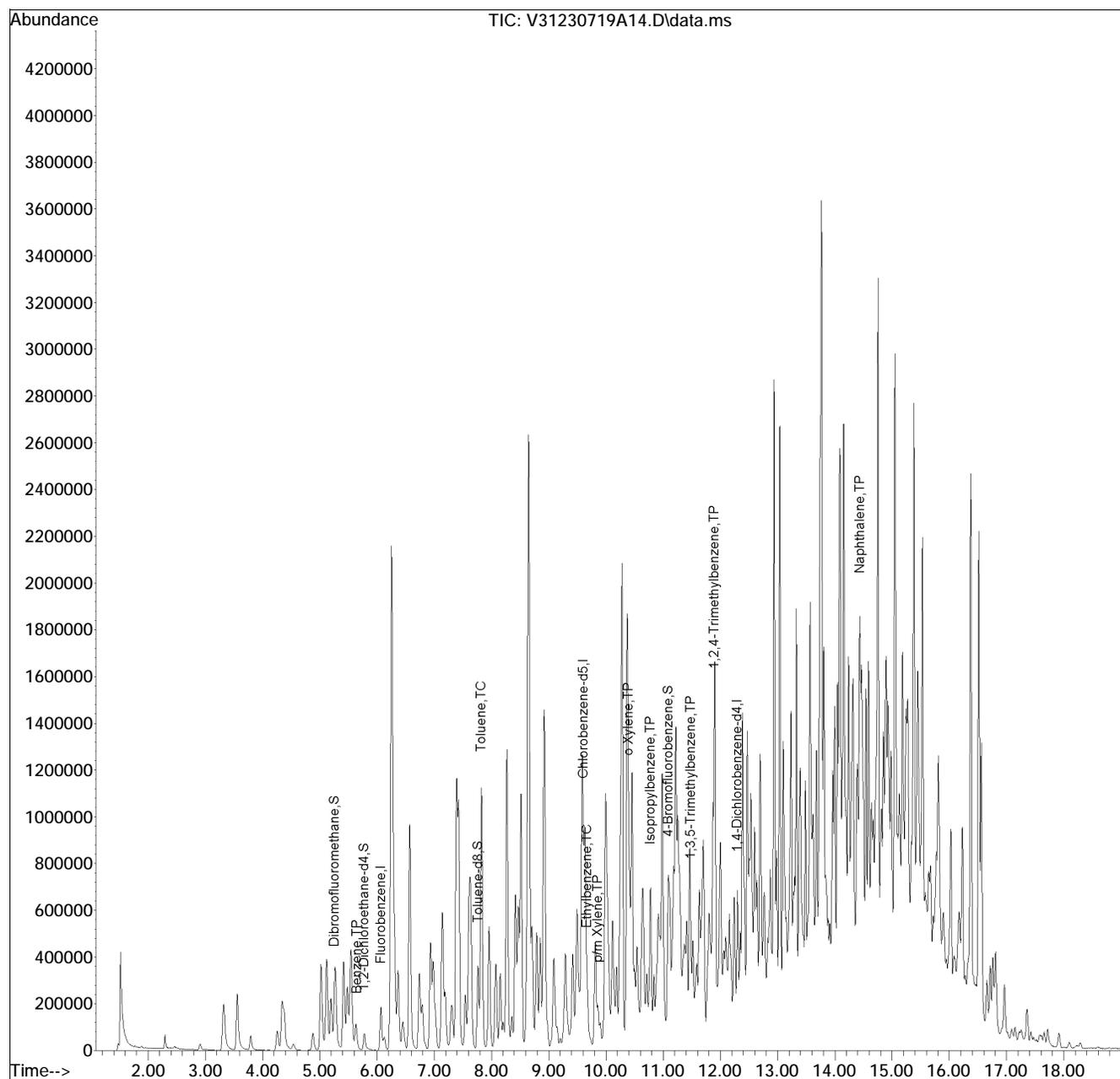


Quantitation Report (QT Reviewed)

Data Path : K:\VOA131\2023\230719A\
Data File : V31230719A14.D
Acq On : 19 Jul 2023 12:39 pm
Operator : VOA131:AJK
Sample : L2340632-04,31H,5.79,5,0.100,,A
Misc : WG1805480,ICAL19865
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 20 12:56:27 2023
Quant Method : K:\VOA131\2023\230719A\V31_230328A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Mar 29 10:40:23 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+102.D•

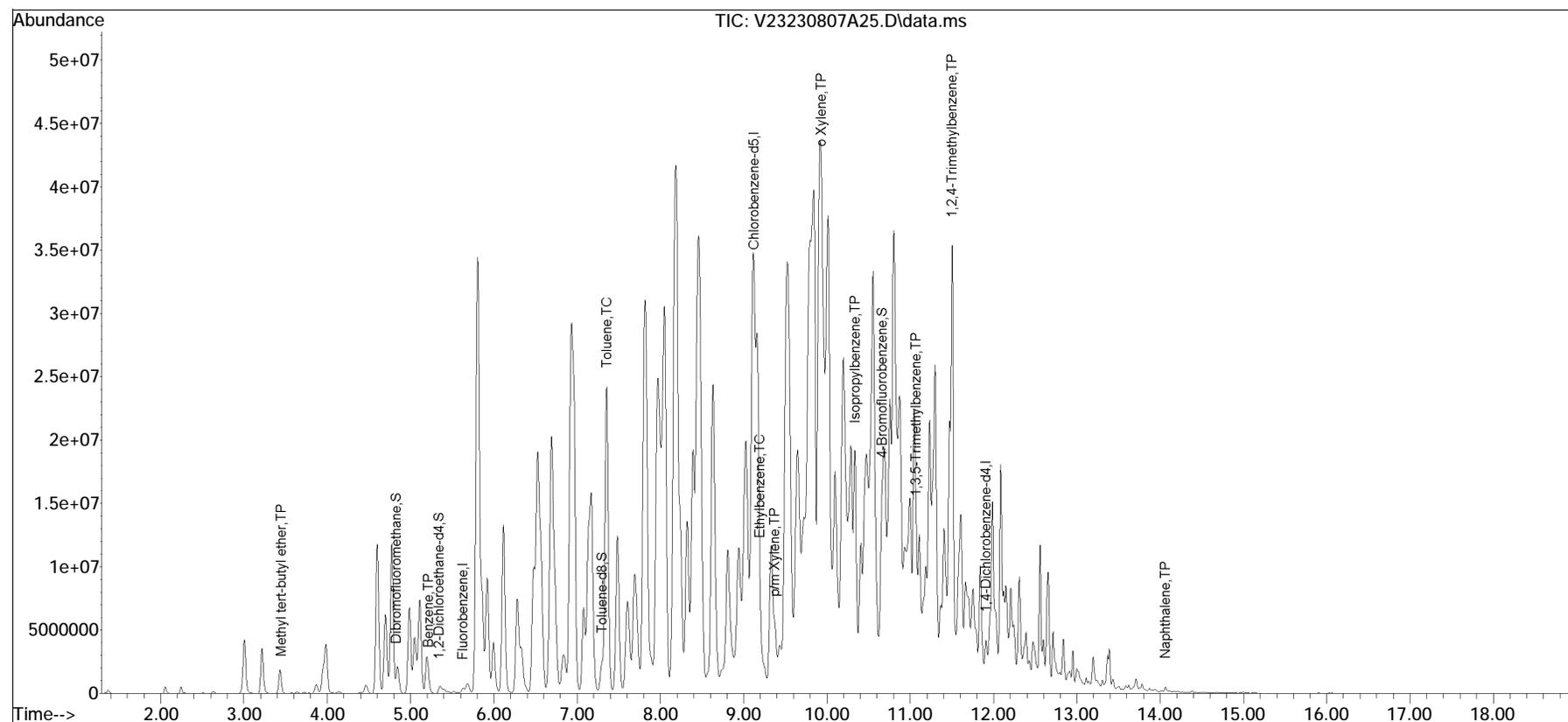


Quantitation Report (QT Reviewed)

Data Path : K:\VOA123\2023\230807A\
Data File : V23230807A25.D
Acq On : 07 Aug 2023 05:54 pm
Operator : VOA123:JIC
Sample : 12340632-05,31,5.48,5,,c
Misc : WG1813902,ICAL20232
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 08 11:55:46 2023
Quant Method : K:\VOA123\2023\230807A\V123_230803A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 04 10:23:20 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList - PA Short list807A01.D•

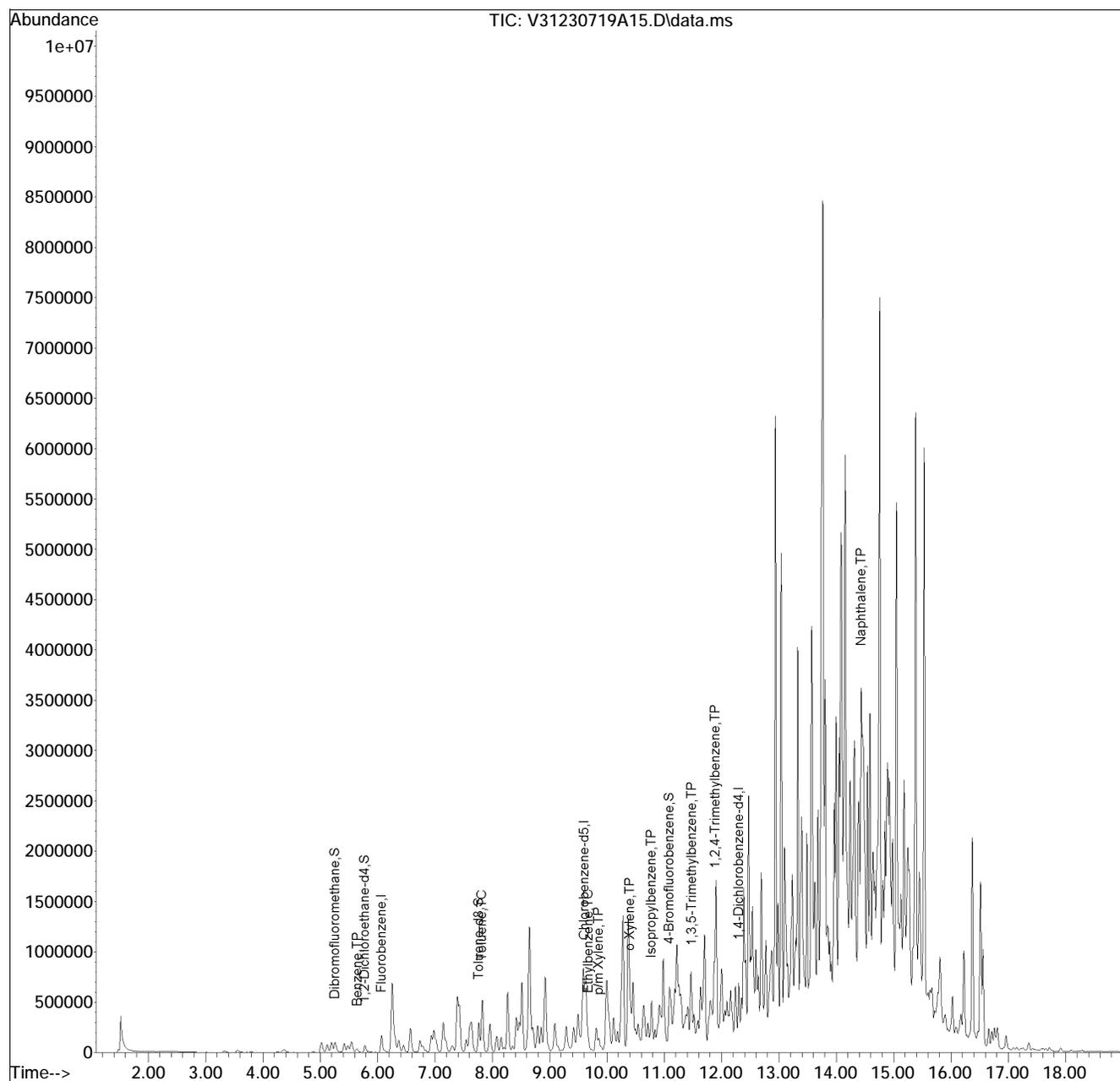


Quantitation Report (QT Reviewed)

Data Path : K:\VOA131\2023\230719A\
 Data File : V31230719A15.D
 Acq On : 19 Jul 2023 01:03 pm
 Operator : VOA131:AJK
 Sample : L2340632-05,31H,4.08,5,0.100,,A
 Misc : WG1805480,ICAL19865
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 20 12:56:44 2023
 Quant Method : K:\VOA131\2023\230719A\V31_230328A_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Mar 29 10:40:23 2023
 Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+102.D•

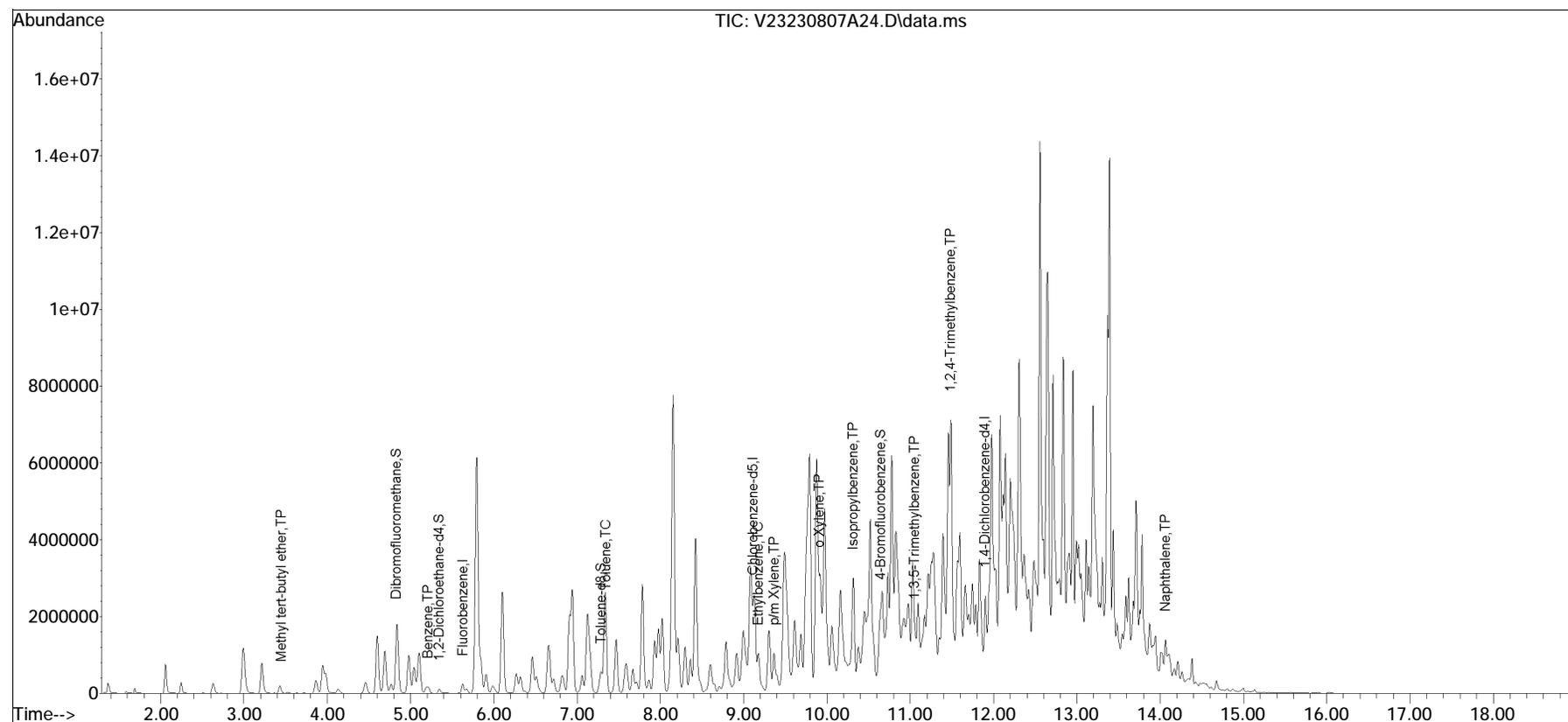


Quantitation Report (QT Reviewed)

Data Path : K:\VOA123\2023\230807A\
Data File : V23230807A24.D
Acq On : 07 Aug 2023 05:28 pm
Operator : VOA123:JIC
Sample : 12340632-06,31,13.95,5,,c
Misc : WG1813902,ICAL20232
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 08 07:12:46 2023
Quant Method : K:\VOA123\2023\230807A\V123_230803A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 04 10:23:20 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList - PA Short list807A01.D•

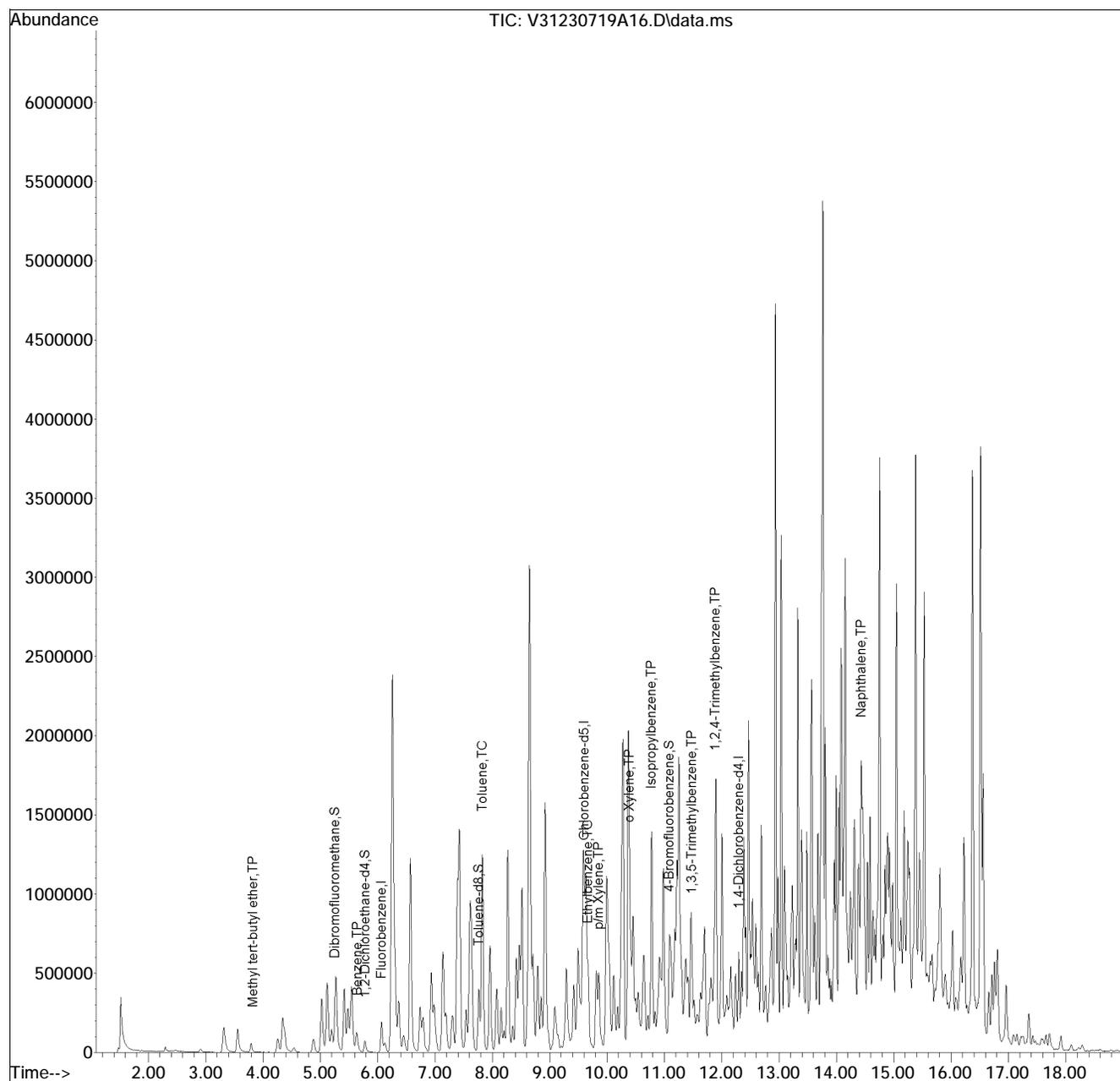


Quantitation Report (QT Reviewed)

Data Path : K:\VOA131\2023\230719A\
 Data File : V31230719A16.D
 Acq On : 19 Jul 2023 01:26 pm
 Operator : VOA131:AJK
 Sample : L2340632-06,31H,6.96,5,0.100,,A
 Misc : WG1805480,ICAL19865
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 20 12:56:47 2023
 Quant Method : K:\VOA131\2023\230719A\V31_230328A_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Mar 29 10:40:23 2023
 Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+102.D•

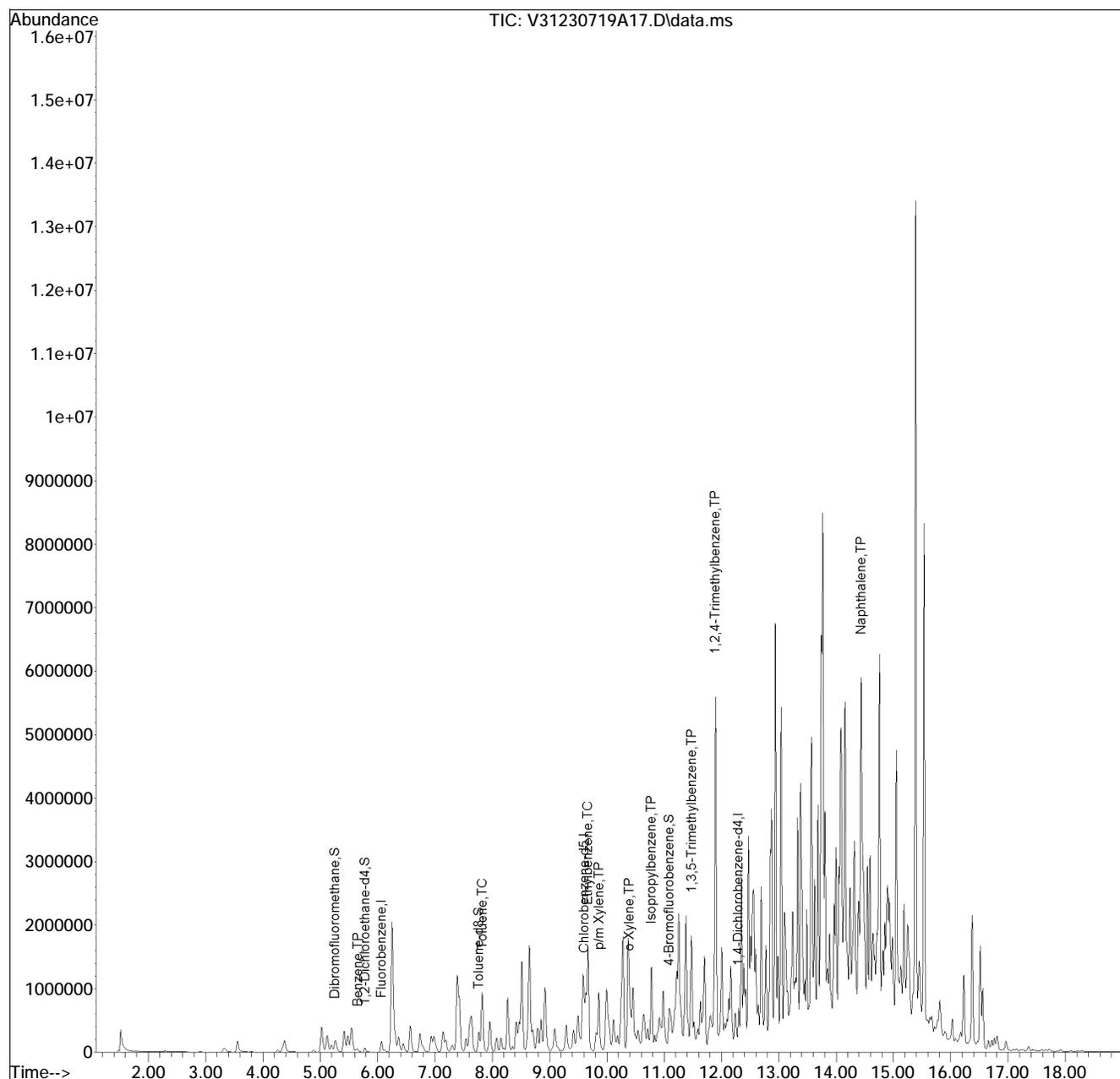


Quantitation Report (QT Reviewed)

Data Path : K:\VOA131\2023\230719\
 Data File : V31230719A17.D
 Acq On : 19 Jul 2023 01:49 pm
 Operator : VOA131:AJK
 Sample : L2340632-07,31H,5.31,5,0.100,,A
 Misc : WG1805480,ICAL19865
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jul 20 13:13:18 2023
 Quant Method : K:\VOA131\2023\230719A\V31_230328A_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Mar 29 10:40:23 2023
 Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+102.D•

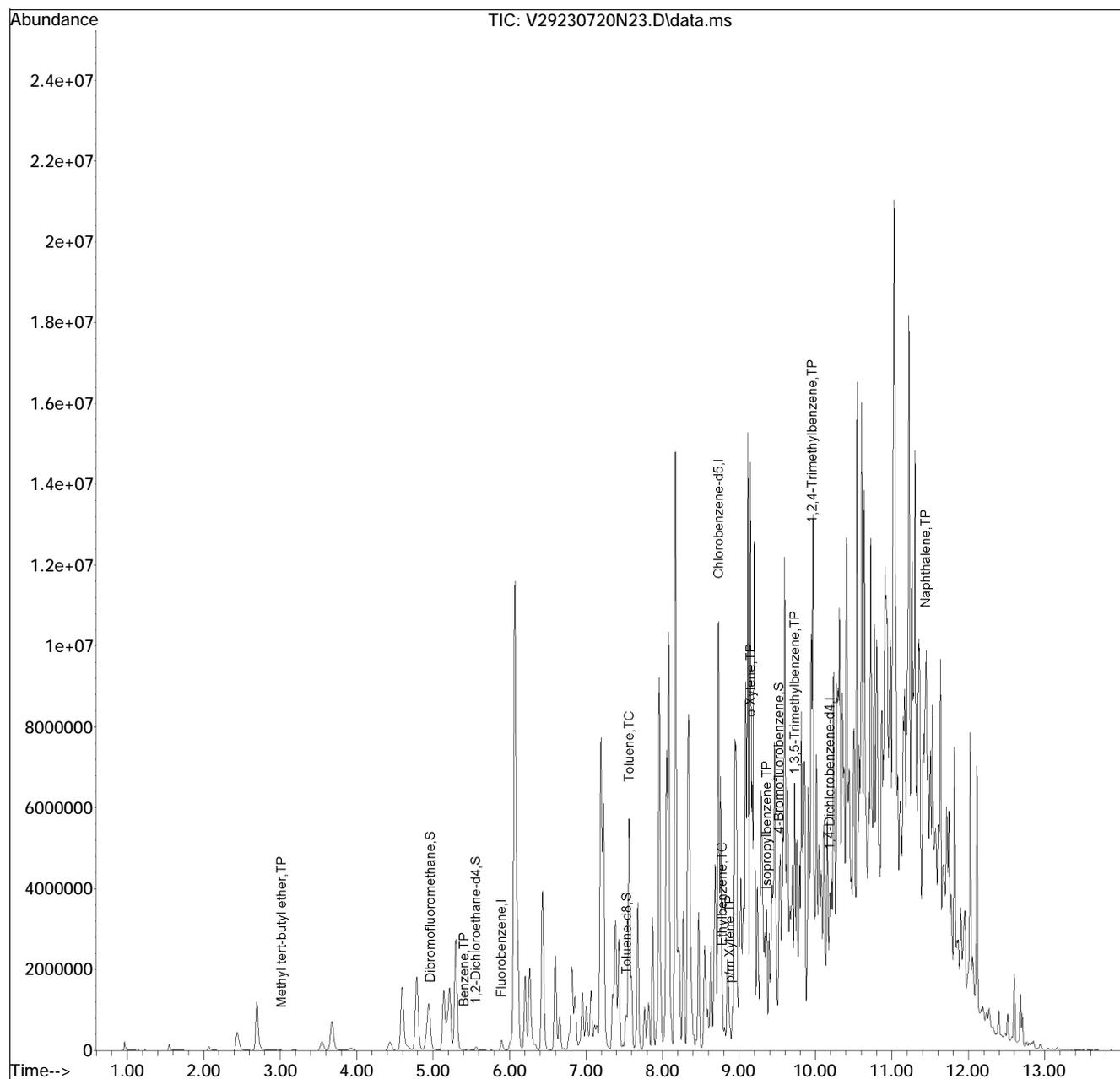


Quantitation Report (QT Reviewed)

Data Path : K:\VOA129\2023\230720N\
 Data File : V29230720N23.D
 Acq On : 21 Jul 2023 02:20 am
 Operator : VOA129:JIC
 Sample : 12340632-08,31,5.99,5,,b
 Misc : WG1805927,ICAL19799
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 21 07:20:52 2023
 Quant Method : K:\VOA129\2023\230720N\V129_230308N_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Thu Mar 09 17:16:29 2023
 Response via : Initial Calibration

Sub List : 8260-PA_ShortList - PA Short list720N01.D•

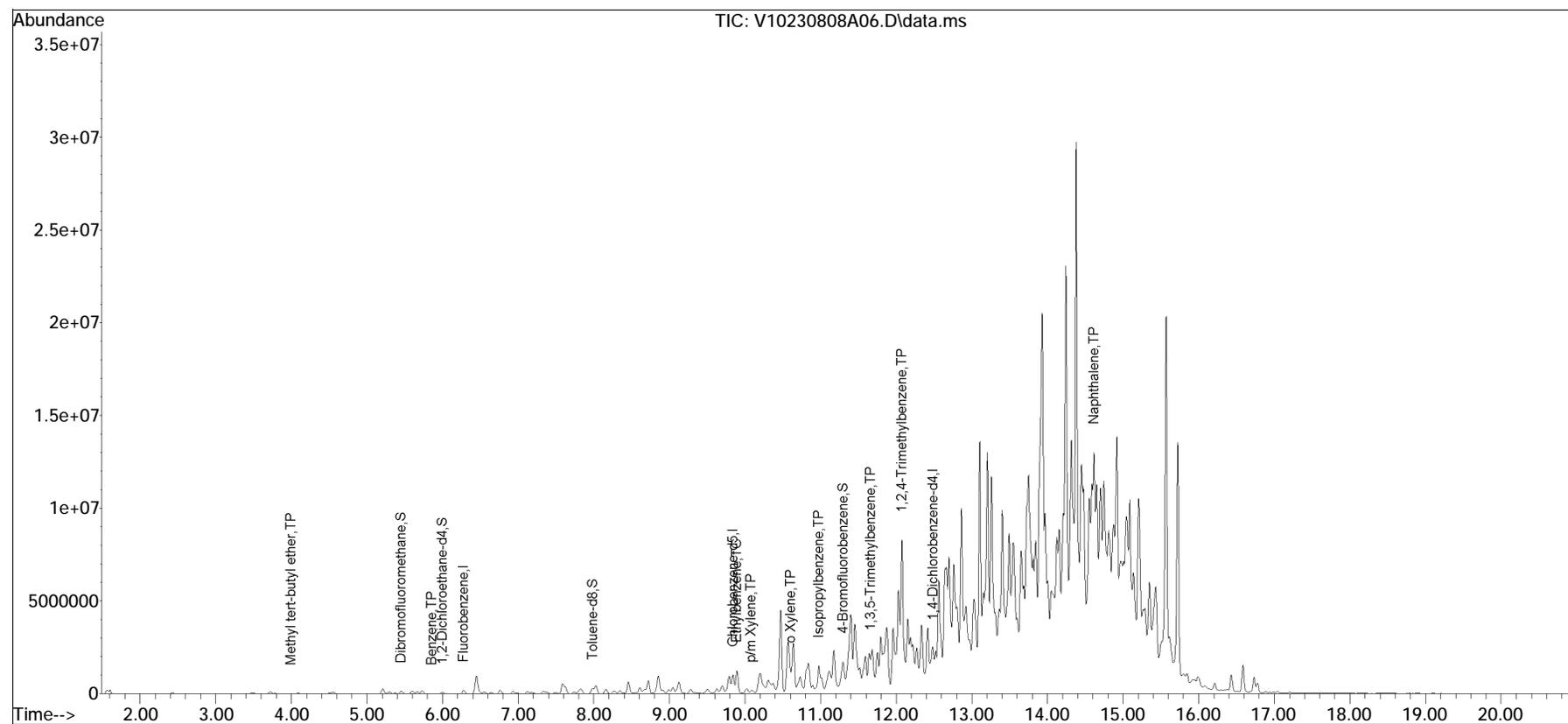


Quantitation Report (QT Reviewed)

Data Path : K:\VOA110\2023\230808A\
Data File : V10230808A06.D
Acq On : 8 Aug 2023 10:07 am
Operator : VOA110:AJK
Sample : L2340632-09,31,7.35,5,,B
Misc : WG1813743,ICAL20119
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 08 12:04:28 2023
Quant Method : K:\VOA110\2023\230808A\V110_230622A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Jun 22 09:59:23 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList - PA Short list808A01.D•

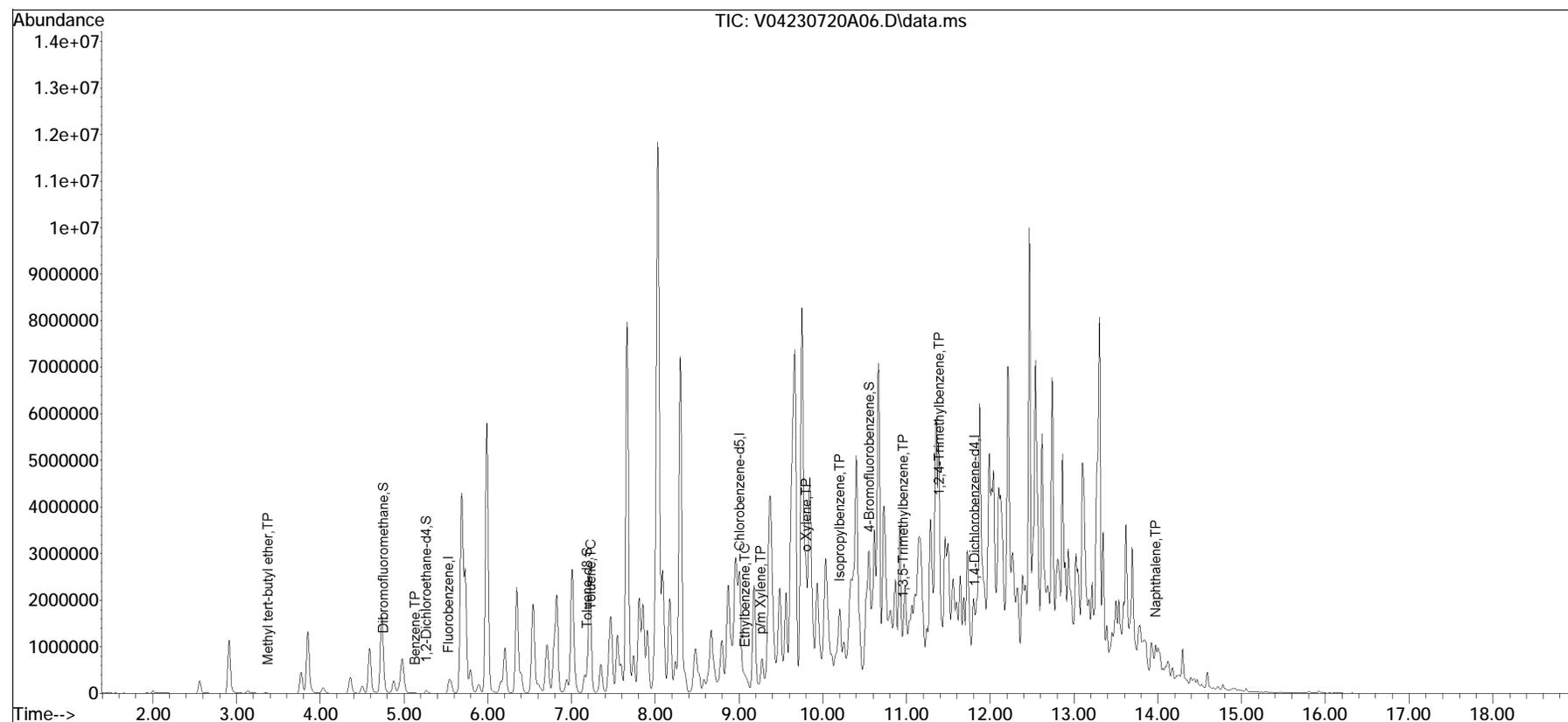


Quantitation Report (QT Reviewed)

Data Path : K:\VOA104\2023\230720A\
Data File : V04230720A06.D
Acq On : 20 Jul 2023 11:10 am
Operator : VOA104:JIC
Sample : L2340632-10,31,4.63,5,,C
Misc : WG1805621,ICAL19908
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 20 12:52:32 2023
Quant Method : K:\VOA104\2023\230720A\V104_230407N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Apr 11 16:51:00 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+101.D•

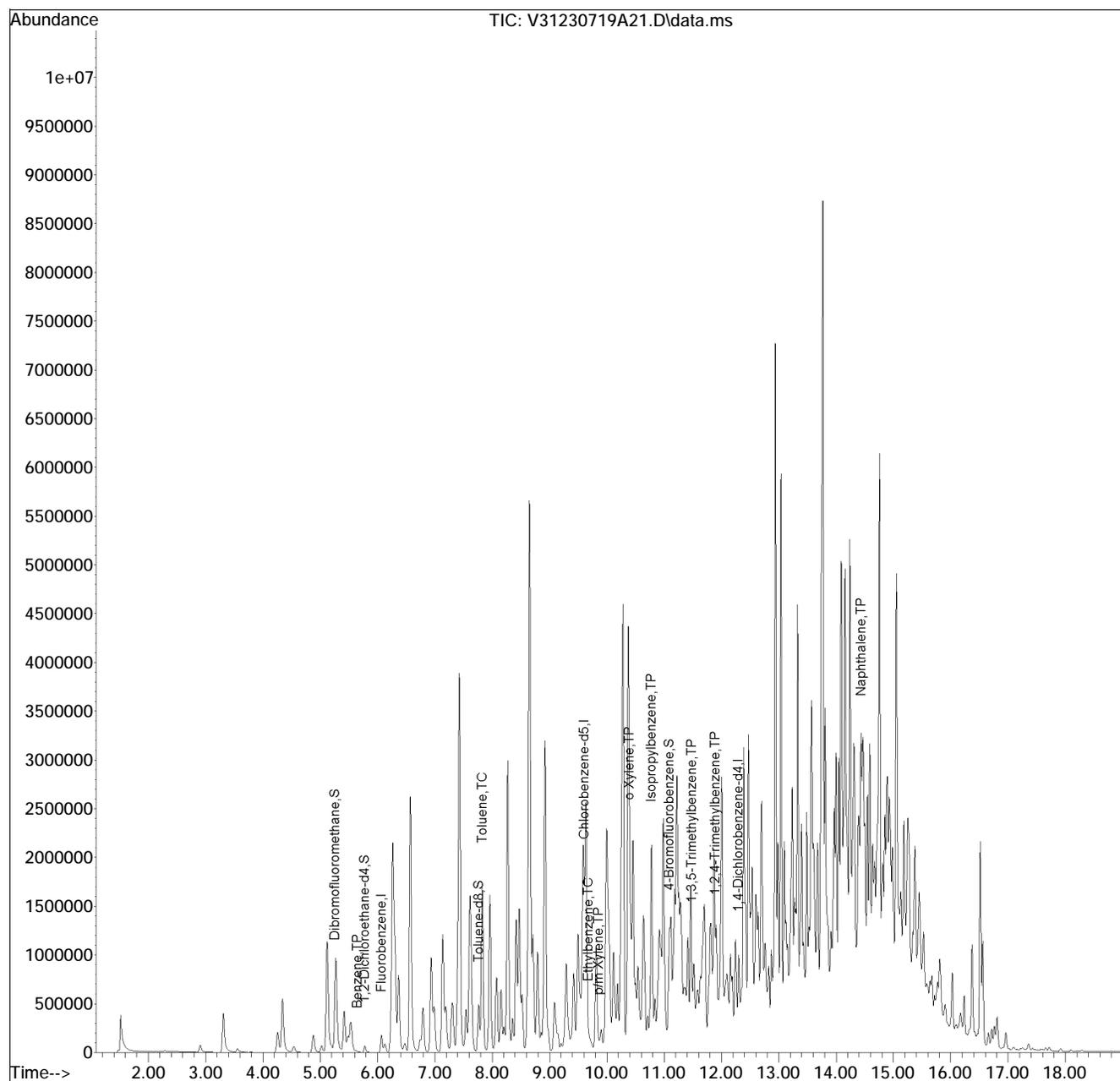


Quantitation Report (QT Reviewed)

Data Path : K:\VOA131\2023\230719\
 Data File : V31230719A21.D
 Acq On : 19 Jul 2023 03:23 pm
 Operator : VOA131:JIC
 Sample : L2340632-11,31H,5.75,5,0.100,,A
 Misc : WG1805480,ICAL19865
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 20 12:57:07 2023
 Quant Method : K:\VOA131\2023\230719A\V31_230328A_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Mar 29 10:40:23 2023
 Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+102.D•

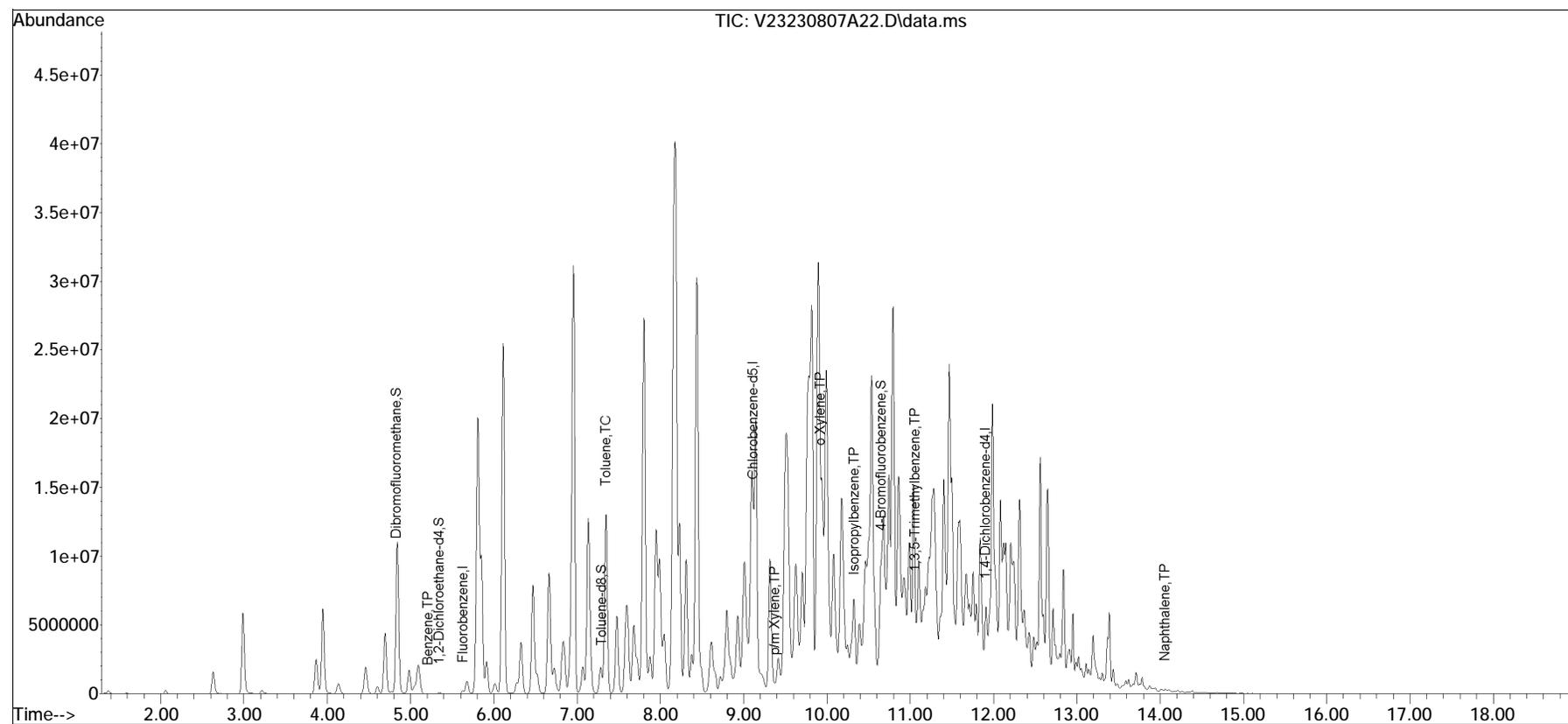


Quantitation Report (QT Reviewed)

Data Path : K:\VOA123\2023\230807A\
Data File : V23230807A22.D
Acq On : 07 Aug 2023 04:36 pm
Operator : VOA123:JIC
Sample : 12340632-12,31,6.79,5,,c
Misc : WG1813902,ICAL20232
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 08 11:55:13 2023
Quant Method : K:\VOA123\2023\230807A\V123_230803A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Fri Aug 04 10:23:20 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList - PA Short list807A01.D•

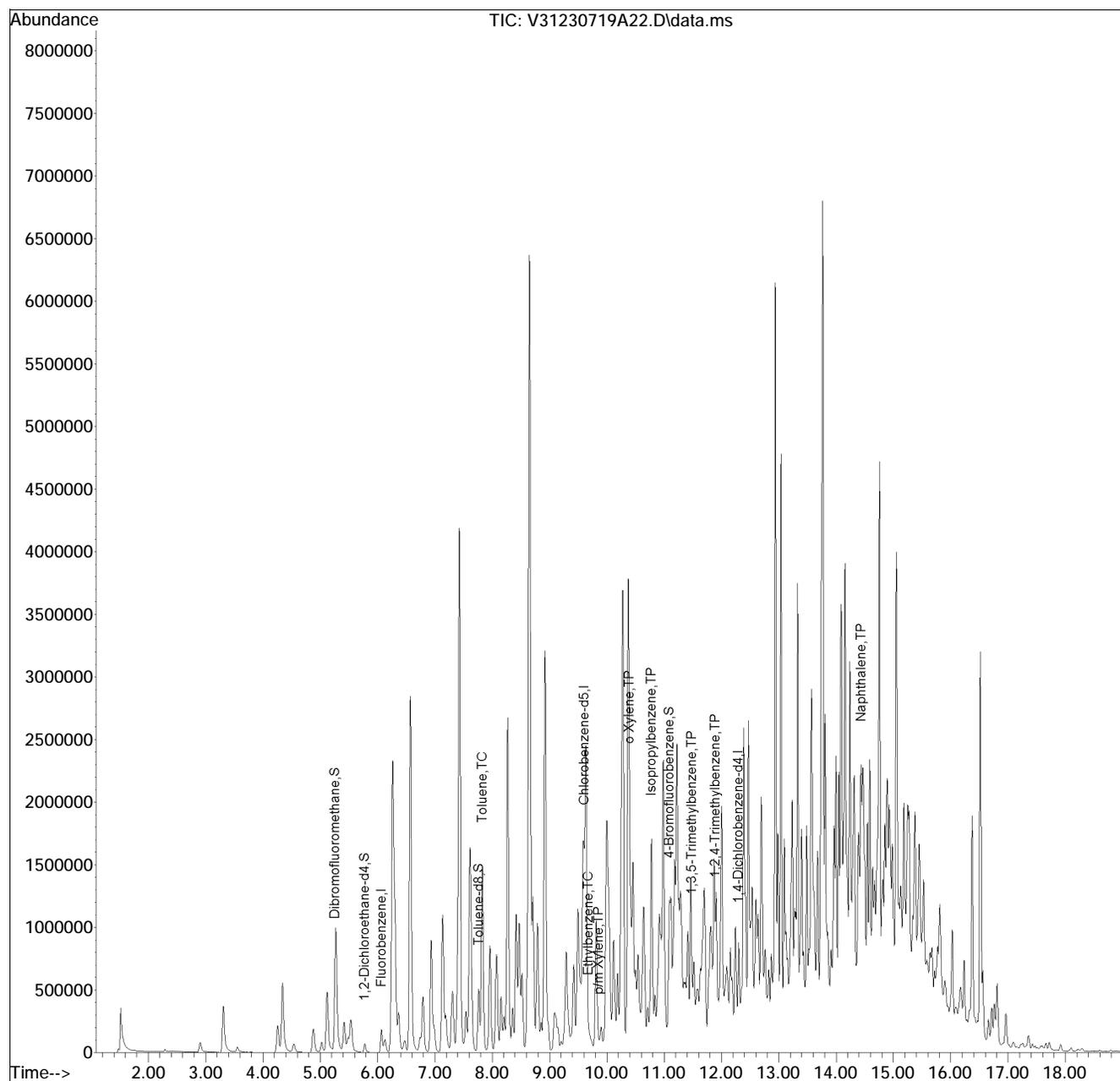


Quantitation Report (QT Reviewed)

Data Path : K:\VOA131\2023\230719\
Data File : V31230719A22.D
Acq On : 19 Jul 2023 03:46 pm
Operator : VOA131:JIC
Sample : L2340632-12,31H,7.64,5,0.100,,A
Misc : WG1805480,ICAL19865
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 20 12:57:11 2023
Quant Method : K:\VOA131\2023\230719A\V31_230328A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Mar 29 10:40:23 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+102.D•

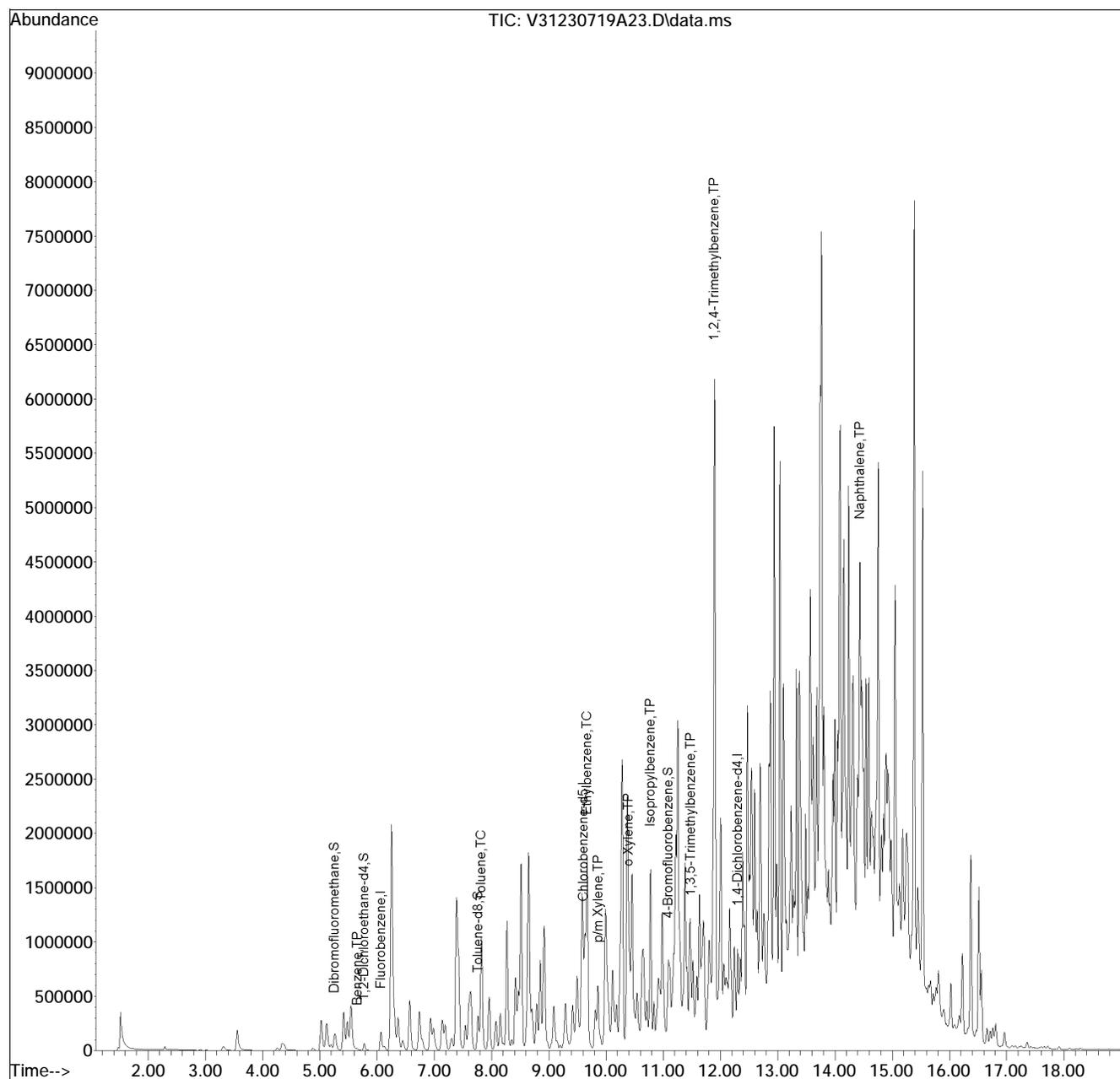


Quantitation Report (QT Reviewed)

Data Path : K:\VOA131\2023\230719\
Data File : V31230719A23.D
Acq On : 19 Jul 2023 04:10 pm
Operator : VOA131:JIC
Sample : L2340632-13,31H,6.33,5,0.100,,A
Misc : WG1805480,ICAL19865
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 20 12:57:17 2023
Quant Method : K:\VOA131\2023\230719A\V31_230328A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Mar 29 10:40:23 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+102.D•

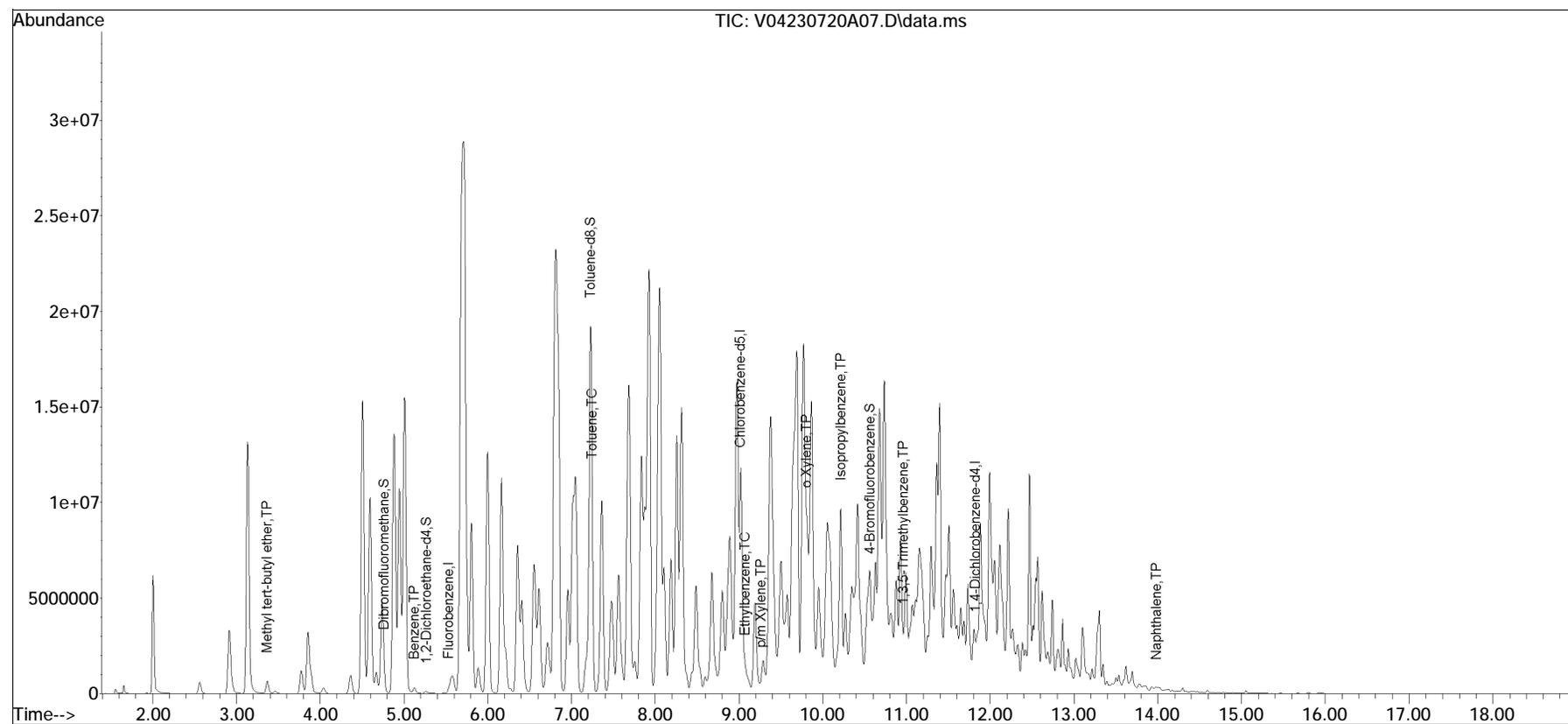


Quantitation Report (QT Reviewed)

Data Path : K:\VOA104\2023\230720\
Data File : V04230720A07.D
Acq On : 20 Jul 2023 11:36 am
Operator : VOA104:JIC
Sample : L2340632-14,31,5.98,5,,B
Misc : WG1805621,ICAL19908
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 20 12:52:38 2023
Quant Method : K:\VOA104\2023\230720A\V104_230407N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Tue Apr 11 16:51:00 2023
Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+101.D•

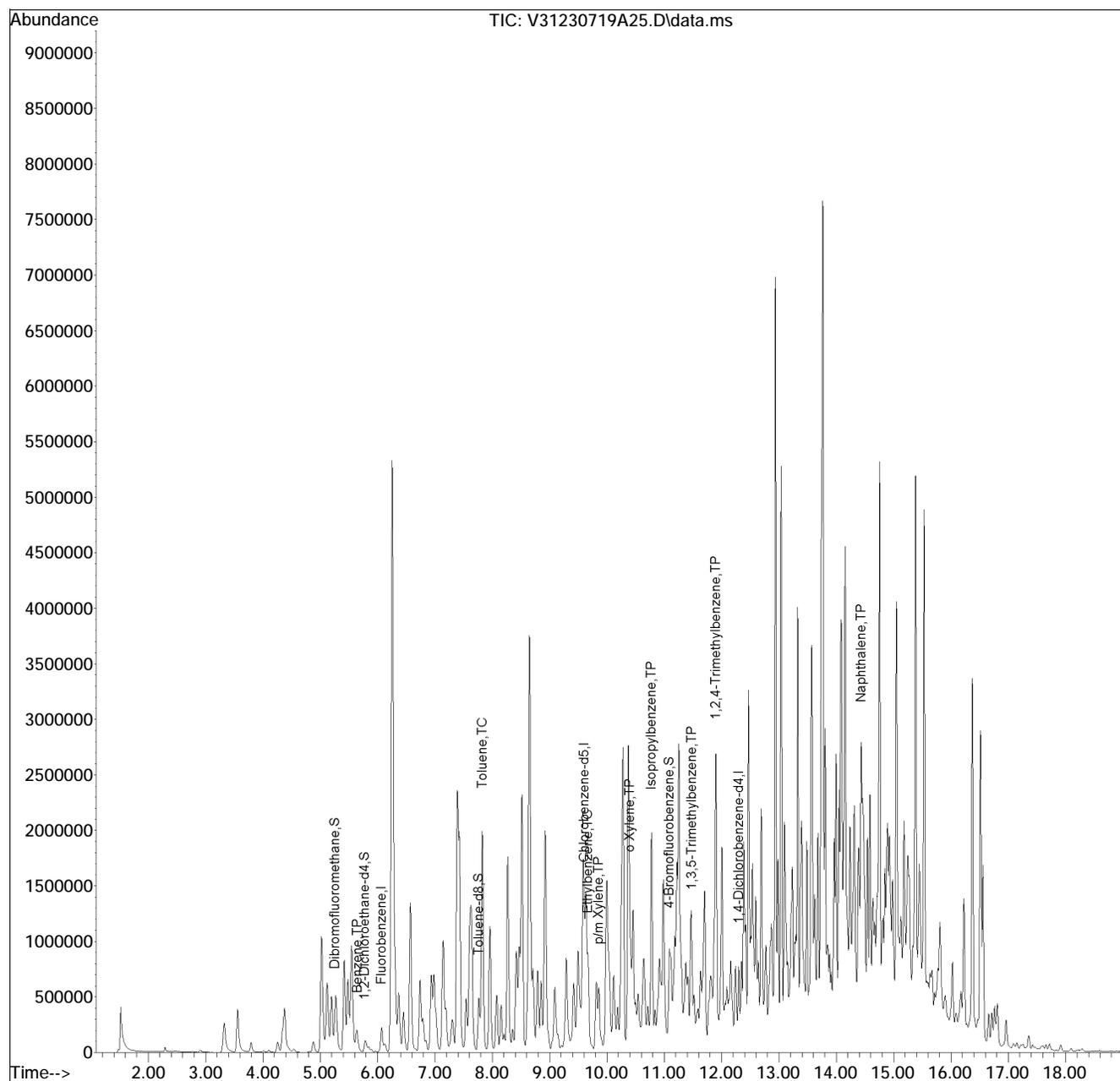


Quantitation Report (QT Reviewed)

Data Path : K:\VOA131\2023\230719\
 Data File : V31230719A25.D
 Acq On : 19 Jul 2023 04:57 pm
 Operator : VOA131:JIC
 Sample : L2340632-15,31H,6.04,5,0.100,,A
 Misc : WG1805480,ICAL19865
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 20 12:57:27 2023
 Quant Method : K:\VOA131\2023\230719A\V31_230328A_8260.m
 Quant Title : VOLATILES BY GC/MS
 QLast Update : Wed Mar 29 10:40:23 2023
 Response via : Initial Calibration

Sub List : 8260-PA_ShortList+1 - PA Short list+102.D•



 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Adam Goldberg
Langan Engineering & Environmental Svcs
1818 Market St.
Suite 3300
Philadelphia, Pennsylvania 19103-3638

Generated 8/21/2023 9:08:42 AM

JOB DESCRIPTION

HILCO/PES

JOB NUMBER

410-139186-1

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
8/21/2023 9:08:42 AM

Authorized for release by
Vanessa Badman, Project Manager
Vanessa.Badman@et.eurofinsus.com
(717)556-9762

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.





Table of Contents

Cover Page	1
Table of Contents	4
Definitions/Glossary	5
Case Narrative	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	13
QC Sample Results	14
QC Association Summary	16
Lab Chronicle	18
Certification Summary	23
Method Summary	24
Sample Summary	25
Chain of Custody	26
Receipt Checklists	28

Definitions/Glossary

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Job ID: 410-139186-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-139186-1

Receipt

The samples were received on 8/16/2023 2:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.2°C

Receipt Exceptions

Per client request, the following sample IDs were updated as follows:

410-139186-8 - PEB-2H_5.0-5.5_081523

410-139186-9 - PEB-2I_5.0-5.5_081523

GC Semi VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.



Detection Summary

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: PES-2A_4.2-4.7_081523	Lab Sample ID: 410-139186-1
No Detections.	
Client Sample ID: PEB-2B_5.0-5.5_081523	Lab Sample ID: 410-139186-2
No Detections.	
Client Sample ID: PEB-2C_5.0-5.5_081523	Lab Sample ID: 410-139186-3
No Detections.	
Client Sample ID: PEB-2D_5.0-5.5_081523	Lab Sample ID: 410-139186-4
No Detections.	
Client Sample ID: PES-2E_5.2-5.7_081523	Lab Sample ID: 410-139186-5
No Detections.	
Client Sample ID: PEB-2F_5.0-5.5_081523	Lab Sample ID: 410-139186-6
No Detections.	
Client Sample ID: PES-2G_1.7-2.2_081523	Lab Sample ID: 410-139186-7
No Detections.	
Client Sample ID: PEB-2H_5.0-5.5_081523	Lab Sample ID: 410-139186-8
No Detections.	
Client Sample ID: PEB-2I_5.0-5.5_081523	Lab Sample ID: 410-139186-9
No Detections.	
Client Sample ID: PEB-2J_6.5-7.0_081523	Lab Sample ID: 410-139186-10
No Detections.	
Client Sample ID: PES-2K_3.1-3.6_081523	Lab Sample ID: 410-139186-11
No Detections.	
Client Sample ID: PES-2L_3.1-3.6_081523	Lab Sample ID: 410-139186-12
No Detections.	
Client Sample ID: PES-2M_1.0-1.5_081523	Lab Sample ID: 410-139186-13
No Detections.	
Client Sample ID: DUP-1_081523	Lab Sample ID: 410-139186-14
No Detections.	
Client Sample ID: FB-1_081523	Lab Sample ID: 410-139186-15
No Detections.	

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: PES-2A_4.2-4.7_081523

Lab Sample ID: 410-139186-1

Date Collected: 08/15/23 13:05

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 82.1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (2C)	ND		0.59	0.25	ug/Kg	☼	08/17/23 11:32	08/17/23 17:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	132		60 - 140				08/17/23 11:32	08/17/23 17:33	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	129		60 - 140				08/17/23 11:32	08/17/23 17:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	17.9		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PEB-2B_5.0-5.5_081523

Lab Sample ID: 410-139186-2

Date Collected: 08/15/23 12:22

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 80.7

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.60	0.25	ug/Kg	☼	08/17/23 11:32	08/17/23 17:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	105		60 - 140				08/17/23 11:32	08/17/23 17:50	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	140		60 - 140				08/17/23 11:32	08/17/23 17:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	19.3		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PEB-2C_5.0-5.5_081523

Lab Sample ID: 410-139186-3

Date Collected: 08/15/23 13:35

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 81.4

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.59	0.25	ug/Kg	☼	08/17/23 11:32	08/17/23 18:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	113		60 - 140				08/17/23 11:32	08/17/23 18:07	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	130		60 - 140				08/17/23 11:32	08/17/23 18:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	18.6		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PEB-2D_5.0-5.5_081523

Lab Sample ID: 410-139186-4

Date Collected: 08/15/23 12:00

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 79.4

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.61	0.25	ug/Kg	☼	08/17/23 11:32	08/17/23 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	128		60 - 140				08/17/23 11:32	08/17/23 18:24	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	147	S1+	60 - 140				08/17/23 11:32	08/17/23 18:24	1

Client Sample Results

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: PEB-2D_5.0-5.5_081523

Lab Sample ID: 410-139186-4

Date Collected: 08/15/23 12:00

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 79.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	20.6		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PES-2E_5.2-5.7_081523

Lab Sample ID: 410-139186-5

Date Collected: 08/15/23 13:25

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 76.0

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (2C)	ND		0.64	0.27	ug/Kg	☼	08/17/23 11:32	08/17/23 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	114		60 - 140				08/17/23 11:32	08/17/23 18:41	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	135		60 - 140				08/17/23 11:32	08/17/23 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	24.0		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PEB-2F_5.0-5.5_081523

Lab Sample ID: 410-139186-6

Date Collected: 08/15/23 12:30

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 78.5

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.62	0.26	ug/Kg	☼	08/17/23 11:32	08/17/23 18:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	127		60 - 140				08/17/23 11:32	08/17/23 18:58	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	140		60 - 140				08/17/23 11:32	08/17/23 18:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	21.5		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PES-2G_1.7-2.2_081523

Lab Sample ID: 410-139186-7

Date Collected: 08/15/23 12:40

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 82.3

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.58	0.25	ug/Kg	☼	08/17/23 11:32	08/17/23 19:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	131		60 - 140				08/17/23 11:32	08/17/23 19:15	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	132		60 - 140				08/17/23 11:32	08/17/23 19:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	17.7		1.0	1.0	%			08/17/23 07:56	1

Client Sample Results

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: PEB-2H_5.0-5.5_081523

Lab Sample ID: 410-139186-8

Date Collected: 08/15/23 12:10

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 82.1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.58	0.24	ug/Kg	☼	08/17/23 11:32	08/17/23 19:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	103		60 - 140				08/17/23 11:32	08/17/23 19:32	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	132		60 - 140				08/17/23 11:32	08/17/23 19:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	17.9		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PEB-2I_5.0-5.5_081523

Lab Sample ID: 410-139186-9

Date Collected: 08/15/23 12:15

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 84.8

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.56	0.24	ug/Kg	☼	08/17/23 11:32	08/17/23 19:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	109		60 - 140				08/17/23 11:32	08/17/23 19:49	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	148	S1+	60 - 140				08/17/23 11:32	08/17/23 19:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	15.2		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PEB-2J_6.5-7.0_081523

Lab Sample ID: 410-139186-10

Date Collected: 08/15/23 13:20

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 79.6

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.61	0.26	ug/Kg	☼	08/17/23 11:32	08/17/23 20:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	85		60 - 140				08/17/23 11:32	08/17/23 20:06	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	103		60 - 140				08/17/23 11:32	08/17/23 20:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	20.4		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PES-2K_3.1-3.6_081523

Lab Sample ID: 410-139186-11

Date Collected: 08/15/23 12:45

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 82.9

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.60	0.25	ug/Kg	☼	08/17/23 11:32	08/17/23 20:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	117		60 - 140				08/17/23 11:32	08/17/23 20:24	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	127		60 - 140				08/17/23 11:32	08/17/23 20:24	1

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: PES-2K_3.1-3.6_081523

Lab Sample ID: 410-139186-11

Date Collected: 08/15/23 12:45

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 82.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	17.1		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PES-2L_3.1-3.6_081523

Lab Sample ID: 410-139186-12

Date Collected: 08/15/23 11:55

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 83.3

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.57	0.24	ug/Kg	☼	08/17/23 11:32	08/17/23 20:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	124		60 - 140				08/17/23 11:32	08/17/23 20:41	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	139		60 - 140				08/17/23 11:32	08/17/23 20:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	16.7		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: PES-2M_1.0-1.5_081523

Lab Sample ID: 410-139186-13

Date Collected: 08/15/23 11:50

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 78.4

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.64	0.27	ug/Kg	☼	08/17/23 11:32	08/17/23 20:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	96		60 - 140				08/17/23 11:32	08/17/23 20:58	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	124		60 - 140				08/17/23 11:32	08/17/23 20:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	21.6		1.0	1.0	%			08/17/23 07:56	1

Client Sample ID: DUP-1_081523

Lab Sample ID: 410-139186-14

Date Collected: 08/15/23 00:00

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 79.2

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.60	0.25	ug/Kg	☼	08/17/23 11:32	08/17/23 21:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	119		60 - 140				08/17/23 11:32	08/17/23 21:15	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	136		60 - 140				08/17/23 11:32	08/17/23 21:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	20.8		1.0	1.0	%			08/17/23 07:56	1

Client Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: FB-1_081523

Lab Sample ID: 410-139186-15

Date Collected: 08/15/23 07:45

Matrix: Water

Date Received: 08/16/23 14:40

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.029	0.0096	ug/L		08/18/23 07:44	08/19/23 15:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	111		46 - 136				08/18/23 07:44	08/19/23 15:45	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	116		46 - 136				08/18/23 07:44	08/19/23 15:45	1



Surrogate Summary

Client: Langan Engineering & Environmental Svcs
 Project/Site: HILCO/PES

Job ID: 410-139186-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1122TCA1 (60-140)	1122TCA2 (60-140)
410-139186-1	PES-2A_4.2-4.7_081523	132	129
410-139186-2	PEB-2B_5.0-5.5_081523	105	140
410-139186-3	PEB-2C_5.0-5.5_081523	113	130
410-139186-4	PEB-2D_5.0-5.5_081523	128	147 S1+
410-139186-5	PES-2E_5.2-5.7_081523	114	135
410-139186-6	PEB-2F_5.0-5.5_081523	127	140
410-139186-7	PES-2G_1.7-2.2_081523	131	132
410-139186-8	PEB-2H_5.0-5.5_081523	103	132
410-139186-9	PEB-2I_5.0-5.5_081523	109	148 S1+
410-139186-10	PEB-2J_6.5-7.0_081523	85	103
410-139186-11	PES-2K_3.1-3.6_081523	117	127
410-139186-12	PES-2L_3.1-3.6_081523	124	139
410-139186-13	PES-2M_1.0-1.5_081523	96	124
410-139186-14	DUP-1_081523	119	136
LCS 410-409302/2-A	Lab Control Sample	108	110
MB 410-409302/1-A	Method Blank	114	133

Surrogate Legend
 1122TCA = 1,1,2,2-Tetrachloroethane (Surr)

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1122TCA1 (46-136)	1122TCA2 (46-136)
410-139186-15	FB-1_081523	111	116
LCS 410-409806/2-A	Lab Control Sample	109	110
LCSD 410-409806/3-A	Lab Control Sample Dup	110	110
MB 410-409806/1-A	Method Blank	108	108

Surrogate Legend
 1122TCA = 1,1,2,2-Tetrachloroethane (Surr)

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: HILCO/PES

Job ID: 410-139186-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 410-409302/1-A
Matrix: Solid
Analysis Batch: 409543

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.50	0.21	ug/Kg		08/17/23 11:32	08/17/23 14:59	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	114		60 - 140				08/17/23 11:32	08/17/23 14:59	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	133		60 - 140				08/17/23 11:32	08/17/23 14:59	1

Lab Sample ID: LCS 410-409302/2-A
Matrix: Solid
Analysis Batch: 409543

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409302

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylene Dibromide (1C)	4.48	4.20		ug/Kg		94	60 - 140
Surrogate	%Recovery	LCS Qualifier	Limits				
1,1,2,2-Tetrachloroethane (Surr) (1C)	108		60 - 140				
1,1,2,2-Tetrachloroethane (Surr) (2C)	110		60 - 140				

Lab Sample ID: MB 410-409806/1-A
Matrix: Water
Analysis Batch: 410208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409806

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	ND		0.030	0.010	ug/L		08/18/23 07:44	08/19/23 09:03	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	108		46 - 136				08/18/23 07:44	08/19/23 09:03	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	108		46 - 136				08/18/23 07:44	08/19/23 09:03	1

Lab Sample ID: LCS 410-409806/2-A
Matrix: Water
Analysis Batch: 410208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylene Dibromide (1C)	0.128	0.146		ug/L		114	60 - 140
Surrogate	%Recovery	LCS Qualifier	Limits				
1,1,2,2-Tetrachloroethane (Surr) (1C)	109		46 - 136				
1,1,2,2-Tetrachloroethane (Surr) (2C)	110		46 - 136				

QC Sample Results

Client: Langan Engineering & Environmental Svcs
 Project/Site: HILCO/PES

Job ID: 410-139186-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 410-409806/3-A

Matrix: Water

Analysis Batch: 410208

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 409806

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD
									Limit
Ethylene Dibromide (1C)	0.128	0.145		ug/L		113	60 - 140	1	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,1,2,2-Tetrachloroethane (Surr) (1C)	110		46 - 136
1,1,2,2-Tetrachloroethane (Surr) (2C)	110		46 - 136



QC Association Summary

Client: Langan Engineering & Environmental Svcs
 Project/Site: HILCO/PES

Job ID: 410-139186-1

GC Semi VOA

Prep Batch: 409302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-139186-1	PES-2A_4.2-4.7_081523	Total/NA	Solid	8011	
410-139186-2	PEB-2B_5.0-5.5_081523	Total/NA	Solid	8011	
410-139186-3	PEB-2C_5.0-5.5_081523	Total/NA	Solid	8011	
410-139186-4	PEB-2D_5.0-5.5_081523	Total/NA	Solid	8011	
410-139186-5	PES-2E_5.2-5.7_081523	Total/NA	Solid	8011	
410-139186-6	PEB-2F_5.0-5.5_081523	Total/NA	Solid	8011	
410-139186-7	PES-2G_1.7-2.2_081523	Total/NA	Solid	8011	
410-139186-8	PEB-2H_5.0-5.5_081523	Total/NA	Solid	8011	
410-139186-9	PEB-2I_5.0-5.5_081523	Total/NA	Solid	8011	
410-139186-10	PEB-2J_6.5-7.0_081523	Total/NA	Solid	8011	
410-139186-11	PES-2K_3.1-3.6_081523	Total/NA	Solid	8011	
410-139186-12	PES-2L_3.1-3.6_081523	Total/NA	Solid	8011	
410-139186-13	PES-2M_1.0-1.5_081523	Total/NA	Solid	8011	
410-139186-14	DUP-1_081523	Total/NA	Solid	8011	
MB 410-409302/1-A	Method Blank	Total/NA	Solid	8011	
LCS 410-409302/2-A	Lab Control Sample	Total/NA	Solid	8011	

Analysis Batch: 409543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-139186-1	PES-2A_4.2-4.7_081523	Total/NA	Solid	8011	409302
410-139186-2	PEB-2B_5.0-5.5_081523	Total/NA	Solid	8011	409302
410-139186-3	PEB-2C_5.0-5.5_081523	Total/NA	Solid	8011	409302
410-139186-4	PEB-2D_5.0-5.5_081523	Total/NA	Solid	8011	409302
410-139186-5	PES-2E_5.2-5.7_081523	Total/NA	Solid	8011	409302
410-139186-6	PEB-2F_5.0-5.5_081523	Total/NA	Solid	8011	409302
410-139186-7	PES-2G_1.7-2.2_081523	Total/NA	Solid	8011	409302
410-139186-8	PEB-2H_5.0-5.5_081523	Total/NA	Solid	8011	409302
410-139186-9	PEB-2I_5.0-5.5_081523	Total/NA	Solid	8011	409302
410-139186-10	PEB-2J_6.5-7.0_081523	Total/NA	Solid	8011	409302
410-139186-11	PES-2K_3.1-3.6_081523	Total/NA	Solid	8011	409302
410-139186-12	PES-2L_3.1-3.6_081523	Total/NA	Solid	8011	409302
410-139186-13	PES-2M_1.0-1.5_081523	Total/NA	Solid	8011	409302
410-139186-14	DUP-1_081523	Total/NA	Solid	8011	409302
MB 410-409302/1-A	Method Blank	Total/NA	Solid	8011	409302
LCS 410-409302/2-A	Lab Control Sample	Total/NA	Solid	8011	409302

Prep Batch: 409806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-139186-15	FB-1_081523	Total/NA	Water	8011	
MB 410-409806/1-A	Method Blank	Total/NA	Water	8011	
LCS 410-409806/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-409806/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 410208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-139186-15	FB-1_081523	Total/NA	Water	8011	409806
MB 410-409806/1-A	Method Blank	Total/NA	Water	8011	409806
LCS 410-409806/2-A	Lab Control Sample	Total/NA	Water	8011	409806
LCSD 410-409806/3-A	Lab Control Sample Dup	Total/NA	Water	8011	409806

QC Association Summary

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

General Chemistry

Analysis Batch: 409271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-139186-1	PES-2A_4.2-4.7_081523	Total/NA	Solid	Moisture	
410-139186-2	PEB-2B_5.0-5.5_081523	Total/NA	Solid	Moisture	
410-139186-3	PEB-2C_5.0-5.5_081523	Total/NA	Solid	Moisture	
410-139186-4	PEB-2D_5.0-5.5_081523	Total/NA	Solid	Moisture	
410-139186-5	PES-2E_5.2-5.7_081523	Total/NA	Solid	Moisture	
410-139186-6	PEB-2F_5.0-5.5_081523	Total/NA	Solid	Moisture	
410-139186-7	PES-2G_1.7-2.2_081523	Total/NA	Solid	Moisture	
410-139186-8	PEB-2H_5.0-5.5_081523	Total/NA	Solid	Moisture	
410-139186-9	PEB-2I_5.0-5.5_081523	Total/NA	Solid	Moisture	
410-139186-10	PEB-2J_6.5-7.0_081523	Total/NA	Solid	Moisture	
410-139186-11	PES-2K_3.1-3.6_081523	Total/NA	Solid	Moisture	
410-139186-12	PES-2L_3.1-3.6_081523	Total/NA	Solid	Moisture	
410-139186-13	PES-2M_1.0-1.5_081523	Total/NA	Solid	Moisture	
410-139186-14	DUP-1_081523	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: PES-2A_4.2-4.7_081523

Lab Sample ID: 410-139186-1

Date Collected: 08/15/23 13:05

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Client Sample ID: PES-2A_4.2-4.7_081523

Lab Sample ID: 410-139186-1

Date Collected: 08/15/23 13:05

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 17:33

Client Sample ID: PEB-2B_5.0-5.5_081523

Lab Sample ID: 410-139186-2

Date Collected: 08/15/23 12:22

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Client Sample ID: PEB-2B_5.0-5.5_081523

Lab Sample ID: 410-139186-2

Date Collected: 08/15/23 12:22

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 17:50

Client Sample ID: PEB-2C_5.0-5.5_081523

Lab Sample ID: 410-139186-3

Date Collected: 08/15/23 13:35

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Client Sample ID: PEB-2C_5.0-5.5_081523

Lab Sample ID: 410-139186-3

Date Collected: 08/15/23 13:35

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 18:07

Client Sample ID: PEB-2D_5.0-5.5_081523

Lab Sample ID: 410-139186-4

Date Collected: 08/15/23 12:00

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Lab Chronicle

Client: Langan Engineering & Environmental Svcs
 Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: PEB-2D_5.0-5.5_081523

Lab Sample ID: 410-139186-4

Date Collected: 08/15/23 12:00

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 18:24

Client Sample ID: PES-2E_5.2-5.7_081523

Lab Sample ID: 410-139186-5

Date Collected: 08/15/23 13:25

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Client Sample ID: PES-2E_5.2-5.7_081523

Lab Sample ID: 410-139186-5

Date Collected: 08/15/23 13:25

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 76.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 18:41

Client Sample ID: PEB-2F_5.0-5.5_081523

Lab Sample ID: 410-139186-6

Date Collected: 08/15/23 12:30

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Client Sample ID: PEB-2F_5.0-5.5_081523

Lab Sample ID: 410-139186-6

Date Collected: 08/15/23 12:30

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 18:58

Client Sample ID: PES-2G_1.7-2.2_081523

Lab Sample ID: 410-139186-7

Date Collected: 08/15/23 12:40

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Lab Chronicle

Client: Langan Engineering & Environmental Svcs
 Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: PES-2G_1.7-2.2_081523

Lab Sample ID: 410-139186-7

Date Collected: 08/15/23 12:40

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 19:15

Client Sample ID: PEB-2H_5.0-5.5_081523

Lab Sample ID: 410-139186-8

Date Collected: 08/15/23 12:10

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Client Sample ID: PEB-2H_5.0-5.5_081523

Lab Sample ID: 410-139186-8

Date Collected: 08/15/23 12:10

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 19:32

Client Sample ID: PEB-2I_5.0-5.5_081523

Lab Sample ID: 410-139186-9

Date Collected: 08/15/23 12:15

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Client Sample ID: PEB-2I_5.0-5.5_081523

Lab Sample ID: 410-139186-9

Date Collected: 08/15/23 12:15

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 19:49

Client Sample ID: PEB-2J_6.5-7.0_081523

Lab Sample ID: 410-139186-10

Date Collected: 08/15/23 13:20

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Lab Chronicle

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: PEB-2J_6.5-7.0_081523

Lab Sample ID: 410-139186-10

Date Collected: 08/15/23 13:20

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 20:06

Client Sample ID: PES-2K_3.1-3.6_081523

Lab Sample ID: 410-139186-11

Date Collected: 08/15/23 12:45

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Client Sample ID: PES-2K_3.1-3.6_081523

Lab Sample ID: 410-139186-11

Date Collected: 08/15/23 12:45

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 20:24

Client Sample ID: PES-2L_3.1-3.6_081523

Lab Sample ID: 410-139186-12

Date Collected: 08/15/23 11:55

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Client Sample ID: PES-2L_3.1-3.6_081523

Lab Sample ID: 410-139186-12

Date Collected: 08/15/23 11:55

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 20:41

Client Sample ID: PES-2M_1.0-1.5_081523

Lab Sample ID: 410-139186-13

Date Collected: 08/15/23 11:50

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Lab Chronicle

Client: Langan Engineering & Environmental Svcs
 Project/Site: HILCO/PES

Job ID: 410-139186-1

Client Sample ID: PES-2M_1.0-1.5_081523

Lab Sample ID: 410-139186-13

Date Collected: 08/15/23 11:50

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 20:58

Client Sample ID: DUP-1_081523

Lab Sample ID: 410-139186-14

Date Collected: 08/15/23 00:00

Matrix: Solid

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	409271	UVJN	ELLE	08/17/23 07:56

Client Sample ID: DUP-1_081523

Lab Sample ID: 410-139186-14

Date Collected: 08/15/23 00:00

Matrix: Solid

Date Received: 08/16/23 14:40

Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409302	U7CG	ELLE	08/17/23 11:32
Total/NA	Analysis	8011		1	409543	URS0	ELLE	08/17/23 21:15

Client Sample ID: FB-1_081523

Lab Sample ID: 410-139186-15

Date Collected: 08/15/23 07:45

Matrix: Water

Date Received: 08/16/23 14:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	8011			409806	UMAD	ELLE	08/18/23 07:44
Total/NA	Analysis	8011		1	410208	WN7O	ELLE	08/19/23 15:45

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8011	8011	Solid	Ethylene Dibromide (1C)
8011	8011	Solid	Ethylene Dibromide (2C)
8011	8011	Water	Ethylene Dibromide (1C)
Moisture		Solid	Percent Moisture



Method Summary

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Method	Method Description	Protocol	Laboratory
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	ELLE
Moisture	Percent Moisture	EPA	ELLE
8011	Microextraction	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300



Sample Summary

Client: Langan Engineering & Environmental Svcs
Project/Site: HILCO/PES

Job ID: 410-139186-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-139186-1	PES-2A_4.2-4.7_081523	Solid	08/15/23 13:05	08/16/23 14:40
410-139186-2	PEB-2B_5.0-5.5_081523	Solid	08/15/23 12:22	08/16/23 14:40
410-139186-3	PEB-2C_5.0-5.5_081523	Solid	08/15/23 13:35	08/16/23 14:40
410-139186-4	PEB-2D_5.0-5.5_081523	Solid	08/15/23 12:00	08/16/23 14:40
410-139186-5	PES-2E_5.2-5.7_081523	Solid	08/15/23 13:25	08/16/23 14:40
410-139186-6	PEB-2F_5.0-5.5_081523	Solid	08/15/23 12:30	08/16/23 14:40
410-139186-7	PES-2G_1.7-2.2_081523	Solid	08/15/23 12:40	08/16/23 14:40
410-139186-8	PEB-2H_5.0-5.5_081523	Solid	08/15/23 12:10	08/16/23 14:40
410-139186-9	PEB-2I_5.0-5.5_081523	Solid	08/15/23 12:15	08/16/23 14:40
410-139186-10	PEB-2J_6.5-7.0_081523	Solid	08/15/23 13:20	08/16/23 14:40
410-139186-11	PES-2K_3.1-3.6_081523	Solid	08/15/23 12:45	08/16/23 14:40
410-139186-12	PES-2L_3.1-3.6_081523	Solid	08/15/23 11:55	08/16/23 14:40
410-139186-13	PES-2M_1.0-1.5_081523	Solid	08/15/23 11:50	08/16/23 14:40
410-139186-14	DUP-1_081523	Solid	08/15/23 00:00	08/16/23 14:40
410-139186-15	FB-1_081523	Water	08/15/23 07:45	08/16/23 14:40



Eurofins Lancaster Laboratories Environme

2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record



410-139186 Chain of Custody

eurofins

Environment Testing

Client Information		Sampler: Samantha Chubb		Lab PM: Badman, Vanessa		SOC No: 410-95296-27048 1			
Client Contact: Samantha Chubb Adam Goldberg		Phone: 215-845-8945		E-Mail: Vanessa.Badman@et.eurofinsus.com		Page: Page 1 of 2			
Company: Langan Engineering & Environmental Svcs		PWSID		State of Origin: PA		Job #:			
Address: 1818 Market St. Suite 3300		Due Date Requested: 30 Day TAT		Analysis Requested Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8011 - Ethylene Dibromide Moisture - Percent Moisture 8011 - Ethylene Dibromide				Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)	
City: Philadelphia		TAT Requested (days): 3 Day TAT							
State, Zip: PA, 19103-3638		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Phone: 215-845-8900		PO #							
Email: SChubb@Langan.com ; AGoldberg@langan.com		Purchase Order Requested							
Project Name: HILCO/PES		Project #: 41016272		WO #		Special Instructions/Note:			
Site: Philadelphia, PA		SSOW#		Matrix (W=water, S=solid, D=waste/dirt, BT=Tissue, A=Air)		Total Number of containers			
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)			
						Preservation Code:			
PFS-2A-4.2-4.7-081523		8/15/23		1305		G Solid			
PEB-2B-5.0-5.5-081523		8/15/23		12:22		G Solid			
PEB-2C-5.0-5.5-081523		8/15/23		13:35		G Solid			
PEB-2D-5.0-5.5-081523		8/15/23		12:00		G Solid			
PES-2E-5.2-5.7-081523		8/15/23		13:25		G Solid			
PEB-2F-5.0-5.5-081523		8/15/23		12:30		G Solid			
PES-2G-1.7-2.2-081523		8/15/23		12:40		G Solid			
PEB-2H-5.0-5.5-081523		8/15/23		12:10		G Solid			
PEB-2I-5.0-5.5-081523		8/15/23		12:15		G Solid			
PEB-2J-6.5-7.0-081523		8/15/23		13:20		G Solid			
PES-2K-3.1-3.6-081523		8/15/23		12:45		G Solid			
Possible Hazard Identification				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements: BCrisera@langan.com					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: Rebeka Hahn		Date/Time: 8/16/23 11:40		Company: Langan		Received by: Jessie			
Relinquished by: Jessie		Date/Time: 8.16.23 14:40		Company: Eurofins		Date/Time: 8/16/23 11:40			
Relinquished by: _____		Date/Time: _____		Company: _____		Date/Time: _____			
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature (°C and Other Remarks):		8/16/23 14:40 2000 Seal 0.2			

NK

JK

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Login Sample Receipt Checklist

Client: Langan Engineering & Environmental Svcs

Job Number: 410-139186-1

Login Number: 139186

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Kanagy, Nicholas

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

1 University Square Drive Princeton, NJ 08540 T: 609.282.8000
Mailing Address: 1 University Square Drive Princeton, NJ 08540

To: Adam Goldberg, Langan Project Scientist
From: Joe Conboy, Langan Senior Staff Chemist
Date: July 31, 2023
Re: Data Usability Assessment
For PESRM EP Consulting Additional Services
July 2023 Soil Samples
Langan Project No.: 220181805

This memorandum presents the findings of an analytical data validation from the analysis of soil samples collected in July 2023 by Langan Engineering and Environmental Services at PESRM EP Consulting Additional Services. The samples were analyzed by Alpha Analytical Laboratories, Inc. (NYSDOH NELAP registration # 11148) for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and metals by the methods specified below.

- VOCs by SW-846 Method 8260D
- SVOCs by SW-846 Method 8270E
- Metals by SW-846 Method 6010D

Table 1, attached, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

VALIDATION OVERVIEW

This data validation was performed in accordance with the following guidelines, where applicable:

- USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA 540- R-20-005, November 2020)
- USEPA Contract Laboratory Program "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA 540- R-20-005, November 2020), and
- published analytical methodologies.

Technical Memorandum

The following acronyms may be used in the discussion of data-quality issues:

%D	Percent Difference	MB	Method Blank
CCV	Continuing Calibration Verification	MDL	Method Detection Limit
FB	Field Blank	MS	Matrix Spike
FD	Field Duplicate	MSD	Matrix Spike Duplicate
ICAL	Initial Calibration	RF	Response Factor
ICV	Initial Calibration Verification	RL	Reporting Limit
ISTD	Internal Standard	RPD	Relative Percent Difference
LCL	Lower Control Limit	RSD	Relative Standard Deviation
LCS	Laboratory Control Sample	TB	Trip Blank
LCSD	Laboratory Control Sample Duplicate	UCL	Upper Control Limit

Tier 1 data validation is based on completeness and compliance checks of sample-related QC results including: sample receipt documentation; analytical holding times; sample preservation; blank results (method, field, and trip); surrogate recoveries; MS/MSD recoveries and RPDs values; field duplicate RPDs, laboratory duplicate RPDs, and LCS/LCSD recoveries and RPDs. SDG L2340632 underwent Tier 1 validation review.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items subject to review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified and listed in Table 2 (attached).

Technical Memorandum

Data Usability Assessment
For PESRM EP Consulting Additional Services
July 2023 Soil Samples
Langan Project No.: 220181805
July 31, 2023 Page 3 of 6

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

VOCs by SW-846 Method 8260D

L2340632

The sample PES-M_1.0-1.5_071423 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (154%). The associated results are qualified as J because of potential high bias.

The sample PES-G_1.7-2.2_071423 (Dilution) exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (148%). The associated results are qualified as J because of potential high bias.

The sample PEB-D_4.5-5.0_071423 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (142%). The associated results are qualified as J because of potential high bias.

The sample PEB-H_4.5-5.0_071423 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (133%). The associated results are qualified as J because of potential high bias.

The sample PEB-I_4.5-5.0_071423 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (134%). The associated results are qualified as J because of potential high bias.

The sample PEB-C_4.5-5.0_071423 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (138%). The associated results are qualified as J because of potential high bias.

Technical Memorandum

Data Usability Assessment
For PESRM EP Consulting Additional Services
July 2023 Soil Samples
Langan Project No.: 220181805
July 31, 2023 Page 4 of 6

The sample PEB-B_4.5-5.0_071423 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (323%). The associated results are qualified as J because of potential high bias.

The sample PEB-J_6.0-6.5_071423 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (276%). The associated results are qualified as J because of potential high bias.

The sample PES-K_3.1-3.6_071423 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (166%). The associated results are qualified as J because of potential high bias.

The sample PES-L_3.1-3.6_071423 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (185%). The associated results are qualified as J because of potential high bias.

The sample PES-A_4.2-4.7_071423 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (143%). The associated results are qualified as J because of potential high bias.

The sample PES-E_5.2-5.7_071423 exhibited percent recoveries above the UCL for the surrogates 4-bromofluorobenzene (384%) and toluene-d8 (529%). The associated results are qualified as J because of potential high bias.

The sample DUP-1 exhibited a percent recovery above the UCL for the surrogate 4-bromofluorobenzene (151%). The associated results are qualified as J because of potential high bias.

Metals by SW-846 Method 6010D

L2340632

The laboratory duplicate and parent sample (PES-M_1.0-1.5_071423) exhibited a RPD above the control limit for total lead (65%). The associated results are qualified as J because of potential indeterminate bias.

Technical Memorandum

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

SVOCs by SW-846 Method 8270E

L2340632

The sample PES-G_1.7-2.2_071423 exhibited a percent recovery above the UCL for the surrogate nitrobenzene-d5 (155 %). No more than one surrogate from a single fraction recovered outside of the control limits. No qualification is necessary.

FIELD DUPLICATES:

One field duplicate and parent sample pair was collected and analyzed for all parameters. For results less than 5X the RL, analytes meet the precision criteria if the absolute difference is less than $\pm 2X$ the RL. For results greater than 5X the RL, analytes meet the precision criteria if the RPD is less than or equal to 50% for soil. The following field duplicate and parent sample pair was compared to the precision criteria:

- DUP-1 and PEB-D_4.5-5.0_071423

The field duplicate and parent sample (DUP-1 and PEB-D_4.5-5.0_071423) exhibited RPDs above the control limit for 1,2,4-trimethylbenzene (73.7%), ethylbenzene (104.5%), isopropylbenzene (105.9%), total xylenes (95.3%), p/m-xylene (99.2%), and phenanthrene (127.5%). The associated results are qualified as J because of potential indeterminate bias.

The field duplicate and parent sample (DUP-1 and PEB-D_4.5-5.0_071423) exhibited absolute differences above the RL for 1,3,5-trimethylbenzene (0.48 mg/kg), benzene (0.218 mg/kg), naphthalene (0.81 mg/kg), o-xylene (0.19 mg/kg), anthracene (0.322 mg/kg), benzo(a)anthracene (0.264 mg/kg), chrysene (0.361 mg/kg), fluorene (1.26 mg/kg), and pyrene (0.566 mg/kg). The associated results are qualified as J because of potential indeterminate bias.

Technical Memorandum

Data Usability Assessment
For PESRM EP Consulting Additional Services
July 2023 Soil Samples
Langan Project No.: 220181805
July 31, 2023 Page 6 of 6

CONCLUSION:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter. All of the data packages met ASP Category B requirements.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Joe Conboy
Senior Staff Chemist

**Data Usability Assessment
For PESRM EP Consulting Additional Services
July 2023 Soil Samples
Table 1: Sample Summary**

SDG	Lab Sample ID	Client Sample ID	Sample Date	Validation Level	Analytical Parameters
L2340632	L2340632-01	FIELD BLANK	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-02	PES-M_1.0-1.5_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-03	PES-G_1.7-2.2_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-04	PEB-D_4.5-5.0_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-05	PEB-H_4.5-5.0_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-06	PEB-I_4.5-5.0_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-07	PEB-C_4.5-5.0_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-08	PEB-B_4.5-5.0_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-09	PEB-F_4.5-5.0_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-10	PEB-J_6.0-6.5_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-11	PES-K_3.1-3.6_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-12	PES-L_3.1-3.6_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-13	PES-A_4.2-4.7_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-14	PES-E_5.2-5.7_071423	7/14/2023	Tier 1	VOCs, SVOCs, and Metals
L2340632	L2340632-15	DUP-1	7/14/2023	Tier 1	VOCs, SVOCs, and Metals

**Data Usability Assessment
For PESRM EP Consulting Additional Services
July 2023 Soil Samples**

Table 2: Validator-Applied Qualification

Client Sample ID	Analysis	CAS #	Analyte	Validator Qualifier
PES-M_1.0-1.5_071423	SW6010D	7439-92-1	Lead, Total	J
PES-M_1.0-1.5_071423	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J
PES-M_1.0-1.5_071423	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
PES-M_1.0-1.5_071423	SW8260D	71-43-2	Benzene	J
PES-M_1.0-1.5_071423	SW8260D	100-41-4	Ethylbenzene	J
PES-M_1.0-1.5_071423	SW8260D	98-82-8	Isopropylbenzene	J
PES-M_1.0-1.5_071423	SW8260D	91-20-3	Naphthalene	J
PES-M_1.0-1.5_071423	SW8260D	108-88-3	Toluene	J
PES-M_1.0-1.5_071423	SW8260D	1330-20-7	Xylenes, Total	J
PES-M_1.0-1.5_071423	SW8260D	95-47-6	o-Xylene	J
PES-M_1.0-1.5_071423	SW8260D	179601-23-1	p/m-Xylene	J
PES-G_1.7-2.2_071423	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J
PES-G_1.7-2.2_071423	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
PES-G_1.7-2.2_071423	SW8260D	71-43-2	Benzene	J
PES-G_1.7-2.2_071423	SW8260D	100-41-4	Ethylbenzene	J
PES-G_1.7-2.2_071423	SW8260D	98-82-8	Isopropylbenzene	J
PES-G_1.7-2.2_071423	SW8260D	91-20-3	Naphthalene	J
PES-G_1.7-2.2_071423	SW8260D	108-88-3	Toluene	J
PES-G_1.7-2.2_071423	SW8260D	1330-20-7	Xylenes, Total	J
PES-G_1.7-2.2_071423	SW8260D	95-47-6	o-Xylene	J
PES-G_1.7-2.2_071423	SW8260D	179601-23-1	p/m-Xylene	J
PEB-D_4.5-5.0_071423	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J
PEB-D_4.5-5.0_071423	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
PEB-D_4.5-5.0_071423	SW8260D	71-43-2	Benzene	J
PEB-D_4.5-5.0_071423	SW8260D	100-41-4	Ethylbenzene	J
PEB-D_4.5-5.0_071423	SW8260D	98-82-8	Isopropylbenzene	J
PEB-D_4.5-5.0_071423	SW8260D	91-20-3	Naphthalene	J
PEB-D_4.5-5.0_071423	SW8260D	108-88-3	Toluene	J
PEB-D_4.5-5.0_071423	SW8260D	1330-20-7	Xylenes, Total	J
PEB-D_4.5-5.0_071423	SW8260D	95-47-6	o-Xylene	J
PEB-D_4.5-5.0_071423	SW8260D	179601-23-1	p/m-Xylene	J
PEB-D_4.5-5.0_071423	SW8270E	120-12-7	Anthracene	J
PEB-D_4.5-5.0_071423	SW8270E	56-55-3	Benzo(a)anthracene	J
PEB-D_4.5-5.0_071423	SW8270E	218-01-9	Chrysene	J
PEB-D_4.5-5.0_071423	SW8270E	86-73-7	Fluorene	J
PEB-D_4.5-5.0_071423	SW8270E	85-01-8	Phenanthrene	J
PEB-D_4.5-5.0_071423	SW8270E	129-00-0	Pyrene	J
PEB-H_4.5-5.0_071423	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J
PEB-H_4.5-5.0_071423	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
PEB-H_4.5-5.0_071423	SW8260D	71-43-2	Benzene	J
PEB-H_4.5-5.0_071423	SW8260D	100-41-4	Ethylbenzene	J
PEB-H_4.5-5.0_071423	SW8260D	98-82-8	Isopropylbenzene	J
PEB-H_4.5-5.0_071423	SW8260D	91-20-3	Naphthalene	J
PEB-H_4.5-5.0_071423	SW8260D	108-88-3	Toluene	J

**Data Usability Assessment
For PESRM EP Consulting Additional Services
July 2023 Soil Samples**

Table 2: Validator-Applied Qualification

Client Sample ID	Analysis	CAS #	Analyte	Validator Qualifier
PEB-H_4.5-5.0_071423	SW8260D	1330-20-7	Xylenes, Total	J
PEB-H_4.5-5.0_071423	SW8260D	95-47-6	o-Xylene	J
PEB-H_4.5-5.0_071423	SW8260D	179601-23-1	p/m-Xylene	J
PEB-I_4.5-5.0_071423	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J
PEB-I_4.5-5.0_071423	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
PEB-I_4.5-5.0_071423	SW8260D	71-43-2	Benzene	J
PEB-I_4.5-5.0_071423	SW8260D	100-41-4	Ethylbenzene	J
PEB-I_4.5-5.0_071423	SW8260D	98-82-8	Isopropylbenzene	J
PEB-I_4.5-5.0_071423	SW8260D	91-20-3	Naphthalene	J
PEB-I_4.5-5.0_071423	SW8260D	108-88-3	Toluene	J
PEB-I_4.5-5.0_071423	SW8260D	1330-20-7	Xylenes, Total	J
PEB-I_4.5-5.0_071423	SW8260D	95-47-6	o-Xylene	J
PEB-I_4.5-5.0_071423	SW8260D	179601-23-1	p/m-Xylene	J
PEB-C_4.5-5.0_071423	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J
PEB-C_4.5-5.0_071423	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
PEB-C_4.5-5.0_071423	SW8260D	71-43-2	Benzene	J
PEB-C_4.5-5.0_071423	SW8260D	100-41-4	Ethylbenzene	J
PEB-C_4.5-5.0_071423	SW8260D	98-82-8	Isopropylbenzene	J
PEB-C_4.5-5.0_071423	SW8260D	91-20-3	Naphthalene	J
PEB-C_4.5-5.0_071423	SW8260D	108-88-3	Toluene	J
PEB-C_4.5-5.0_071423	SW8260D	1330-20-7	Xylenes, Total	J
PEB-C_4.5-5.0_071423	SW8260D	95-47-6	o-Xylene	J
PEB-C_4.5-5.0_071423	SW8260D	179601-23-1	p/m-Xylene	J
PEB-B_4.5-5.0_071423	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J
PEB-B_4.5-5.0_071423	SW8260D	1634-04-4	Methyl tert butyl ether	J
PEB-J_6.0-6.5_071423	SW8260D	1634-04-4	Methyl tert butyl ether	J
PES-K_3.1-3.6_071423	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J
PES-K_3.1-3.6_071423	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
PES-K_3.1-3.6_071423	SW8260D	100-41-4	Ethylbenzene	J
PES-K_3.1-3.6_071423	SW8260D	98-82-8	Isopropylbenzene	J
PES-K_3.1-3.6_071423	SW8260D	91-20-3	Naphthalene	J
PES-K_3.1-3.6_071423	SW8260D	108-88-3	Toluene	J
PES-K_3.1-3.6_071423	SW8260D	1330-20-7	Xylenes, Total	J
PES-K_3.1-3.6_071423	SW8260D	95-47-6	o-Xylene	J
PES-K_3.1-3.6_071423	SW8260D	179601-23-1	p/m-Xylene	J
PES-L_3.1-3.6_071423	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J
PES-L_3.1-3.6_071423	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
PES-L_3.1-3.6_071423	SW8260D	100-41-4	Ethylbenzene	J
PES-L_3.1-3.6_071423	SW8260D	98-82-8	Isopropylbenzene	J
PES-L_3.1-3.6_071423	SW8260D	91-20-3	Naphthalene	J
PES-L_3.1-3.6_071423	SW8260D	1330-20-7	Xylenes, Total	J
PES-L_3.1-3.6_071423	SW8260D	95-47-6	o-Xylene	J
PES-L_3.1-3.6_071423	SW8260D	179601-23-1	p/m-Xylene	J
PES-A_4.2-4.7_071423	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J

**Data Usability Assessment
For PESRM EP Consulting Additional Services
July 2023 Soil Samples**

Table 2: Validator-Applied Qualification

Client Sample ID	Analysis	CAS #	Analyte	Validator Qualifier
PES-A_4.2-4.7_071423	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
PES-A_4.2-4.7_071423	SW8260D	71-43-2	Benzene	J
PES-A_4.2-4.7_071423	SW8260D	100-41-4	Ethylbenzene	J
PES-A_4.2-4.7_071423	SW8260D	98-82-8	Isopropylbenzene	J
PES-A_4.2-4.7_071423	SW8260D	91-20-3	Naphthalene	J
PES-A_4.2-4.7_071423	SW8260D	108-88-3	Toluene	J
PES-A_4.2-4.7_071423	SW8260D	1330-20-7	Xylenes, Total	J
PES-A_4.2-4.7_071423	SW8260D	95-47-6	o-Xylene	J
PES-A_4.2-4.7_071423	SW8260D	179601-23-1	p/m-Xylene	J
PES-E_5.2-5.7_071423	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
PES-E_5.2-5.7_071423	SW8260D	108-88-3	Toluene	J
PES-E_5.2-5.7_071423	SW8260D	1330-20-7	Xylenes, Total	J
PES-E_5.2-5.7_071423	SW8260D	95-47-6	o-Xylene	J
PES-E_5.2-5.7_071423	SW8260D	179601-23-1	p/m-Xylene	J
DUP-1	SW8260D	95-63-6	1,2,4-Trimethylbenzene	J
DUP-1	SW8260D	108-67-8	1,3,5-Trimethylbenzene	J
DUP-1	SW8260D	71-43-2	Benzene	J
DUP-1	SW8260D	100-41-4	Ethylbenzene	J
DUP-1	SW8260D	98-82-8	Isopropylbenzene	J
DUP-1	SW8260D	91-20-3	Naphthalene	J
DUP-1	SW8260D	108-88-3	Toluene	J
DUP-1	SW8260D	1330-20-7	Xylenes, Total	J
DUP-1	SW8260D	95-47-6	o-Xylene	J
DUP-1	SW8260D	179601-23-1	p/m-Xylene	J
DUP-1	SW8270E	120-12-7	Anthracene	J
DUP-1	SW8270E	56-55-3	Benzo(a)anthracene	J
DUP-1	SW8270E	218-01-9	Chrysene	J
DUP-1	SW8270E	86-73-7	Fluorene	J
DUP-1	SW8270E	85-01-8	Phenanthrene	J
DUP-1	SW8270E	129-00-0	Pyrene	J

1 University Square Drive Princeton, NJ 08540 T: 609.282.8000
Mailing Address: 1 University Square Drive Princeton, NJ 08540

To: Adam Goldberg, Langan Senior Project Scientist
From: Joe Conboy, Langan Senior Staff Chemist
Date: August 25, 2023
Re: Data Usability Assessment
For Philadelphia Energy Solutions, Philadelphia, PA
August 2023 Soil Samples
Langan Project No.: 220181806

This memorandum presents the findings of an analytical data validation from the analysis of soil samples collected in August 2023 by Langan Engineering and Environmental Services at the Philadelphia Energy Solutions site located in Philadelphia, Pennsylvania. The samples were analyzed by Eurofins Lancaster Laboratories Environment Testing, LLC (HSCA registration #019-006 (PA cert)) for volatile organic compounds (VOCs) using the analytical methods specified below.

- VOCs by SW-846 Method 8011

Table 1, attached, summarizes the laboratory and client sample identification numbers, sample collection dates, and analytical parameters subject to review.

VALIDATION OVERVIEW

This data validation was performed in accordance with the following guidelines, where applicable:

- USEPA Contract Laboratory Program "National Functional Guidelines for Organic Superfund Methods Data Review" (EPA 540- R-20-005, November 2020)
- USEPA Contract Laboratory Program "National Functional Guidelines for Inorganic Superfund Methods Data Review" (EPA 540- R-20-005, November 2020), and
- published analytical methodologies.

Technical Memorandum

The following acronyms may be used in the discussion of data-quality issues:

%D	Percent Difference	MB	Method Blank
CCV	Continuing Calibration Verification	MDL	Method Detection Limit
FB	Field Blank	MS	Matrix Spike
FD	Field Duplicate	MSD	Matrix Spike Duplicate
ICAL	Initial Calibration	RF	Response Factor
ICV	Initial Calibration Verification	RL	Reporting Limit
ISTD	Internal Standard	RPD	Relative Percent Difference
LCL	Lower Control Limit	RSD	Relative Standard Deviation
LCS	Laboratory Control Sample	TB	Trip Blank
LCSD	Laboratory Control Sample Duplicate	UCL	Upper Control Limit

Tier 1 data validation is based on completeness and compliance checks of sample-related QC results including: sample receipt documentation; analytical holding times; sample preservation; blank results (method, field, and trip); surrogate recoveries; MS/MSD recoveries and RPDs values; field duplicate RPDs, laboratory duplicate RPDs, and LCS/LCSD recoveries and RPDs. The SDG 410-139186-1 underwent Tier 1 validation review.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- R** – The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- J** – The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** – The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- U** – The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.
- NJ** – The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned these qualifiers supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items subject to review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified and listed in Table 2 (attached).

Technical Memorandum

Data Usability Assessment
For Philadelphia Energy Solutions, Philadelphia, PA
August 2023 Soil Samples
Langan Project No.: 220181806
August 25, 2023 Page 3 of 4

MAJOR DEFICIENCIES:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

MINOR DEFICIENCIES:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. No minor deficiencies were identified.

OTHER DEFICIENCIES:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by SW-846 Method 8011

410-139186-1

The sample PEB-2D_5.0-5.5_081523 exhibited a percent recovery above the UCL for the surrogate 1,1,2,2-tetrachloroethane (147%). The associated results are non-detect. No qualification is necessary.

The sample PEB-2I_5.0-5.5_081523 exhibited a percent recovery above the UCL for the surrogate 1,1,2,2-tetrachloroethane (148%). The associated results are non-detect. No qualification is necessary.

FIELD DUPLICATE:

One field duplicate and parent sample pair was collected and analyzed for all parameters. For results less than 5X the RL, analytes meet the precision criteria if the absolute difference is less than $\pm 2X$ the RL. For results greater than 5X the RL, analytes meet the precision criteria if the RPD is less than or equal to 50% for soil. The following field duplicate and parent sample pair was compared to and met the precision criteria:

- SBDUP01_041519 and SB06_0-2

Technical Memorandum

Data Usability Assessment
For Philadelphia Energy Solutions, Philadelphia, PA
August 2023 Soil Samples
Langan Project No.: 220181806
August 25, 2023 Page 4 of 4

CONCLUSION:

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:



Joe Conboy
Senior Staff Chemist

**Data Usability Assessment
For Philadelphia Energy Solutions, Philadelphia, PA
August 2023 Soil Samples
Table 1: Sample Summary**

SDG	Lab Sample ID	Client Sample ID	Sample Date	Validation Level	Analytical Parameters
410-139186-1	410-139186-14	DUP-1_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-15	FB-1_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-2	PEB-2B_5.0-5.5_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-3	PEB-2C_5.0-5.5_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-4	PEB-2D_5.0-5.5_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-6	PEB-2F_5.0-5.5_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-8	PEB-2H_5.0-5.5_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-9	PEB-2I_5.0-5.5_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-10	PEB-2J_6.5-7.0_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-1	PES-2A_4.2-4.7_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-5	PES-2E_5.2-5.7_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-7	PES-2G_1.7-2.2_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-11	PES-2K_3.1-3.6_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-12	PES-2L_3.1-3.6_081523	8/15/2023	Tier 1	VOCs
410-139186-1	410-139186-13	PES-2M_1.0-1.5_081523	8/15/2023	Tier 1	VOCs

Data Usability Assessment
For Philadelphia Energy Solutions, Philadelphia, PA
August 2023 Soil Samples
Table 2: Validator-Applied Qualification

Client Sample ID	Analysis	CAS #	Analyte	Validator Qualifier
No qualifications required.				

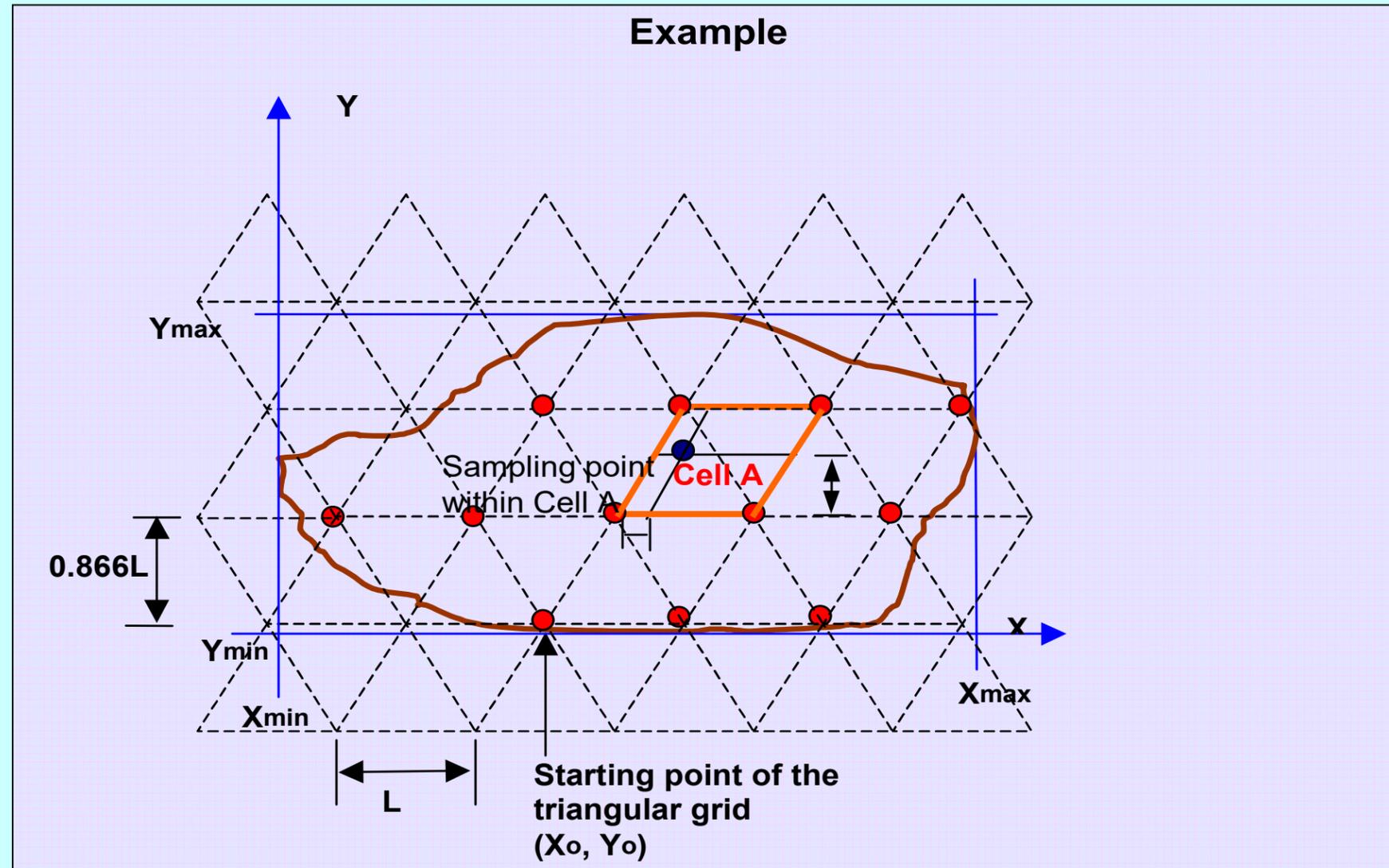
Systematic Random Sampling Workbook

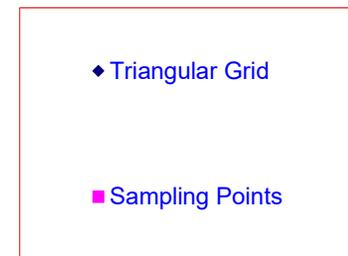
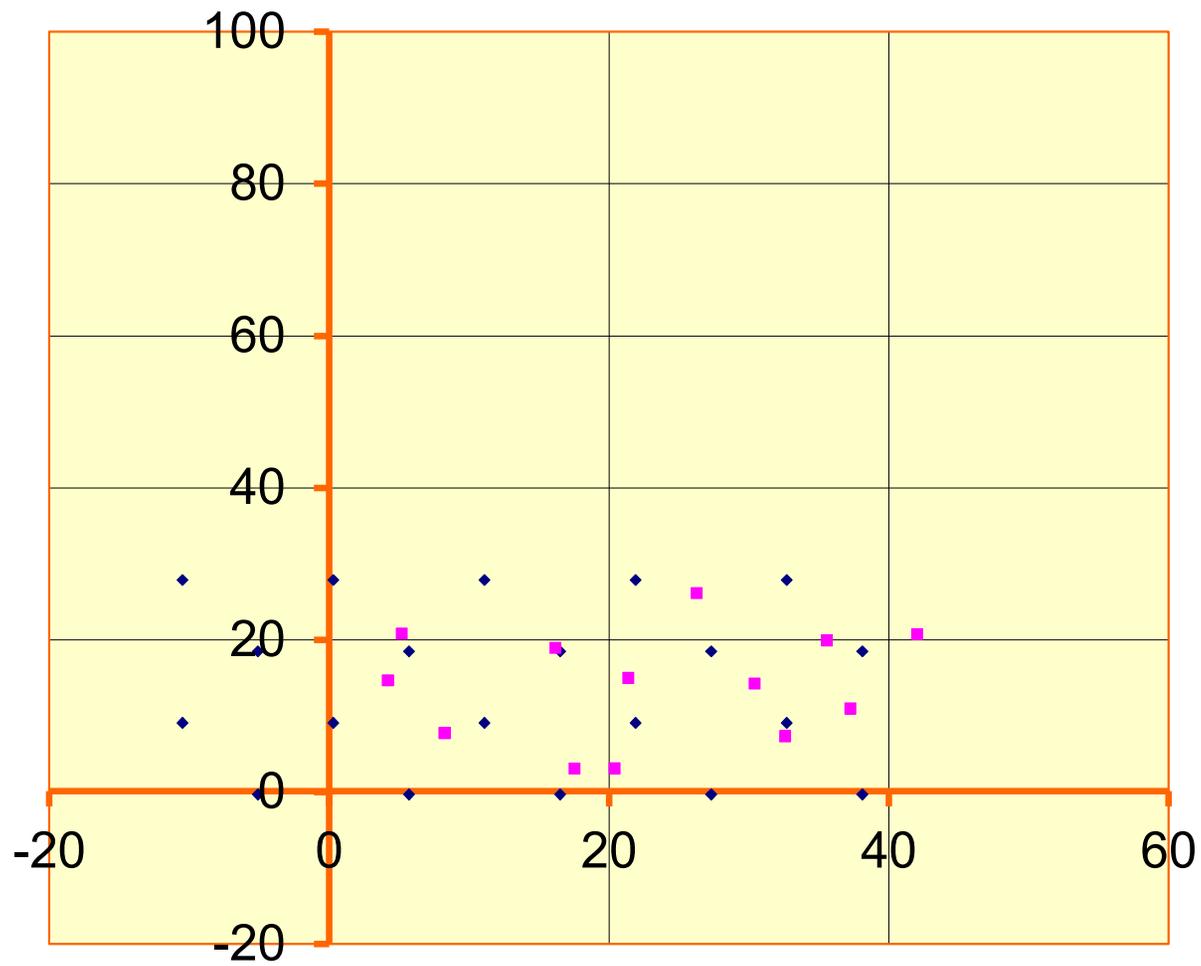
Pennsylvania Department of Environmental Protection
Land Recycling Program

Please forward comments or suggestions to Frank Nemeč at fnemec@pa.gov

Systematic Random Sampling Workbook

Area of Contamination (Sq. feet.):	1204
Depth Zone (feet.):	0 - 0
Volume of Contaminated Soil (Cubic Yards):	110.22
Number of Soil Samples: (If you are applying 75%/10X or 75%/2X rule, the spreadsheet will determine the minimum number of samples for you. Otherwise, please specify the number of samples here. Limitations: The maximum number of samples per row is ten. The maximum number of rows is ten. =====>)	12
Number of Soil Samples:	12
L= Cell Spacing (feet):	10.8
0.866*L(feet):	9.4
Xmin (feet):	0
Xmax (feet):	43
Ymin (feet):	0
Ymax (feet):	28
Xo (feet):	0.3
Yo (feet):	9.1





NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number
PAD 049 781 088

2. Page 1 of 1
3. Emergency Response Phone
781-600-1125

4. Waste Tracking Number
4-15-21

5. Generator's Name and Mailing Address
Philadelphia Energy Solutions Refining and Marketing LLC
3144 Passyunk Ave., Philadelphia, PA 19153
Generator's Phone: 781-600-1125 Attn: Joseph Jeray

Generator's Site Address (if different than mailing address)
Philadelphia Energy Solutions Refining and Marketing LLC
SAME

6. Transporter 1 Company Name
VLS Lancaster LLC
U.S. EPA ID Number
PAD 987 286 749

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
VLS Lancaster LLC
1070 Old Manheim Pike, Lancaster, PA 17601
Facility's Phone: 717-393-2627
U.S. EPA ID Number
PAD 987 286 749

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit WL/Vol.
	No.	Type		
1. Non DOT, Non RCRA, Non-Hazardous Pumpable Oil-Water		TT	5275	G
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information
1. App#: 2404-01140-PRE NH Pumpable Oil-Water
Job# WLM-KSWA-

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offor's Printed/Typed Name
GEORGE R. TOTH
Signature
Month Day Year

15. International Shipments
 Import to U.S. Export from U.S.
Port of entry/exit:
Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter Signature (for exports only):
Date leaving U.S.:

Transporter 1 Printed/Typed Name
Casey - [Signature]
Signature
Month Day Year

Transporter 2 Printed/Typed Name
Signature
Month Day Year

17. Discrepancy
17a. Discrepancy Indication Space
 Quantity Type Residue Partial Rejection Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator)
Facility's Phone:
U.S. EPA ID Number

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name
Signature
Month Day Year

GENERATOR
TRANSPORTER INT'L
TRANSPORTER
DESIGNATED FACILITY

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number PAD 049 791 098	2. Page 1 of 1	3. Emergency Response Phone 781-590-1125	4. Waste Tracking Number 4-15 25
5. Generator's Name and Mailing Address Philadelphia Energy Solutions Refining and Marketing LLC 3144 Passyunk Ave., Philadelphia, PA 19153			Generator's Site Address (if different than mailing address) Philadelphia Energy Solutions Refining and Marketing LLC SAME		
Generator's Phone: 781-590-1125 Attn: Joseph Jeray					
6. Transporter 1 Company Name VLS Lancaster LLC				U.S. EPA ID Number PAD 987 286 749	
7. Transporter 2 Company Name				U.S. EPA ID Number	
8. Designated Facility Name and Site Address VLS Lancaster LLC 1076 Old Manheim Pike, Lancaster, PA 17601				U.S. EPA ID Number PAD 987 286 749	
Facility's Phone: 717-393-2627					
GENERATOR	9. Waste Shipping Name and Description		10. Containers		11. Total Quantity
			No.	Type	12. Unit Wt./Vol.
	1.	Non DOT, Non RCRA, Non-Hazardous Pumpable Oil-Water	xx1	TT	6,000
	2.				G
	3.				
4.					
13. Special Handling Instructions and Additional Information 1. App#: 2404-01140-PRE NH Pumpable Oil-Water Job#: WILM-KSWA-					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offoror's Printed/Typed Name GEORGE K. TOTH			Signature <i>[Signature]</i>		Month Day Year 11 10 11
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: Date leaving U.S.:					
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name Kob Jones			Signature <i>[Signature]</i>		Month Day Year 11 19 11
Transporter 2 Printed/Typed Name			Signature		Month Day Year
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number: U.S. EPA ID Number					
17b. Alternate Facility (or Generator) Facility's Phone:					
17c. Signature of Alternate Facility (or Generator) Month Day Year					
18. Designated Facility Owner or Operator. Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name			Signature		Month Day Year

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number PAD 049 791 098	2. Page 1 of 1	3. Emergency Response Phone 781-500-1125	4. Waste Tracking Number 41-15-24		
5. Generator's Name and Mailing Address Philadelphia Energy Solutions Refining and Marketing LLC 3144 Passyunk Ave., Philadelphia, PA 19153		Generator's Site Address (if different than mailing address) Philadelphia Energy Solutions Refining and Marketing LLC SAME				
Generator's Phone: 781-500-1125 Attn: Joseph Jaray		U.S. EPA ID Number Not Required				
6. Transporter 1 Company Name Lary's Express Inc.		U.S. EPA ID Number				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address VLS Lancaster LLC 1076 Old Manheim Pike, Lancaster, PA 17601		U.S. EPA ID Number PAD 987 286 749				
Facility's Phone: 717-393-2627						
GENERATOR	9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
		No.	Type			
	1. Non DOT, Non RCRA, Non-Hazardous Pumpable Oil-Water	XX1	TT	5,000	G	
	2.					
	3.					
13. Special Handling Instructions and Additional Information 1. App#: 2404-01140-PRE NH Pumpable Oil-Water Job# WILM-KSWA-4166						
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.						
Generator's/Offoror's Printed/Typed Name GEORGE R. TOTH		Signature <i>[Signature]</i>		Month 11	Day 19	Year 2011
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____						
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name KEN WILLIAMS		Signature <i>[Signature]</i>		Month 09	Day 19	Year 2011
Transporter 2 Printed/Typed Name		Signature		Month	Day	Year
17. Discrepancy						
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection						
Manifest Reference Number: _____						
17b. Alternate Facility (or Generator)		U.S. EPA ID Number				
Facility's Phone:						
17c. Signature of Alternate Facility (or Generator)				Month	Day	Year
18. Designated Facility Owner or Operator. Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name		Signature		Month	Day	Year

THIS MEMORANDUM

is an acknowledgement that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy, or duplicate, covering the property named herein, and is intended solely for filing or record.

SHIPPER NO. 0001274

CARRIER NO. _____

DATE 5-1-2024

SCAC

CARRIER		FROM SHIPPER	
TO CONSIGNEE	Separation and Recovery Systems, LLC	Philadelphia Energy Solutions Refining & Marketing, LLC	
STREET	2 Paradise Road	3144 Passyunk Ave.	
DESTINATION	West Deptford NJ 08086	Philadelphia, PA 19153	
ROUTE	856-846-3719 STATE ZIP	ORIGIN STATE ZIP	
VEHICLE NUMBER		U.S. DOT Hazmat Reg. No.	
4149		052221600029 D	

Number and Type of Packages	HM	Description of Articles	Total Quantity (mass, volume, or activity)	Weight (subject to correction)	Class or Rate
1 TT	X	RQ, UN1993, Flammable Liquids, N.O.S., 3, PG II (Gasoline) 5000 Gal	G	X	3
CESI Job# KSWANN					

Remit COD to: Address: City: <u>N/A</u> State: _____ Zip: _____	Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. <u>N/A</u> (Signature of Consignor)	COD AMT: \$ <u>N/A</u> TOTAL CHARGES: \$ _____	COD FEE: Prepaid <input type="checkbox"/> Collect <input checked="" type="checkbox"/> <u>N/A</u> FREIGHT CHARGES: <input type="checkbox"/> Prepaid <input type="checkbox"/> Collect
---	--	---	---

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request, and all applicable state and federal regulations; the Property described above, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to delivery at said destination, if on its route, or otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said Property over all or any portion of said route to destination and as to each party at any time interested in all or any of said Property that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

NOTE: Liability Limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B).

This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation PER:

SHIPPER: Philadelphia Energy Solutions Refining & Marketing LLC	CARRIER: Lacy's Express, Inc.
PER: <u>[Signature]</u>	PER: <u>[Signature]</u>
DATE: <u>5-1-24</u>	DATE: <u>05.01.2024</u>

EMERGENCY RESPONSE TELEPHONE NUMBER: <u>302-540-0283</u>	NAME OR CONTRACT NUMBER OR OTHER UNIQUE IDENTIFIER:
--	---

STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

Driver Name: Firth, John
 Tractor: 155
 Trailer: 4149



Shipper's No. 0001274
 Carrier's No. 39020
 Manifest No. _____
 Date: 04/30/2024

P.O. Box 130
 Pedricktown, NJ 08067
 (856) 299-2569

TO CONSIGNEE - DESTINATION	FROM SHIPPER - ORIGIN
Name: SEPARATION AND RECOVERY SYSTEMS LLC Address: 2 PARADISE RD City/State/Zip: WEST DEPTFORD, NJ 08086	Name: PES Address: LANIER AVE City/State/Zip: PHILADELPHIA, PA 19092

Number of Shipping Units	HM	Kind of Packaging, Description of Articles, Special Marks and Exceptions	WEIGHT (subject to correction)	RATE	CHARGES (for Carrier use only)
001 TII	X	SEE BILL OF LADING FOR PROPER DIScription OF MATERIAL RR UN999 FLAMMABLE LIQUID NOS (GASOLINE) 3 P612 ERG 128 5000 GAL	Gross Wt. Tare Wt. Net Wt.		

Special Instructions & Explain Delay	Bill To:
EMERGENCY RESPONSE PHONE # 302.540.0293 (KIM)	CAPITOL ENVIRONMENTAL PO No. 300 CREEK VIEW RD NEWARK, DE 19702 Contact: IMAGING Phone:
P/U Date <u>05/01/2024</u> Del. Date _____/_____/_____ PU Time In <u>08:00</u> Out <u>09:00</u> Del. Time In : Out :	Consignee: SEPARATION AND RECOVERY SYSTEMS LLC Date _____/_____/_____ Date _____/_____/_____

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

Shipper: PES	Carrier: LACY'S EXPRESS, INC.
Per: <u>[Signature]</u> Date: <u>05/01/24</u>	Per: <u>[Signature]</u> Date: <u>05/01/2024</u>

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE
 CALL CHEMTREC TOLL FREE 1-800-424-9300 DAY OR NIGHT

THIS MEMORANDUM

is an acknowledgment that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

SHIPPER NO. 0001275
 CARRIER NO. _____
 DATE 5-1-2024

CARRIER _____ SCAC _____

TO CONSIGNEE Separation and Recovery Systems, LLC 2 Paradise Road West Deptford NJ 08086 856-848-3719	FROM SHIPPER Philadelphia Energy Solutions Refining & Marketing, LLC 3144 Passyunk Ave. Philadelphia, PA 19153
STREET West Deptford NJ 08086	STREET 3144 Passyunk Ave.
DESTINATION 856-848-3719 STATE ZIP	ORIGIN Philadelphia, PA 19153 STATE ZIP
ROUTE	VEHICLE NUMBER 4149
	U.S. DOT Hazmat Reg. No. 052221600029 D.

Number and Type of Packages	HM	Description of Articles	Total Quantity (mass, volume, or activity)	Weight (subject to correction)	Class or Rate
1 TT	X	RQ, UN1993, Flammable Liquids, N.O.S., 3, PG II (Gasoline) 5000 Gal ERG 128 CESI Job# KSWANN	G		3

Remit COD to: Address: City: <u>N/A</u> State: _____ Zip: _____	Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. <u>N/A</u> (Signature of Consignor)	COD AMT: \$ <u>N/A</u> TOTAL CHARGES: \$ _____	COD FEE: Prepaid <input type="checkbox"/> Collect <input checked="" type="checkbox"/> <u>N/A</u> FREIGHT CHARGES: <input type="checkbox"/> Prepaid <input type="checkbox"/> Collect
---	--	---	---

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request; and all applicable state and federal regulations, the Property described above, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to delivery at said destination, if on its route, or otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said Property over all or any portion of said route to destination and as to each party at any time interested in all or any of said Property that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

NOTE: Liability Limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B).

This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation PER:

SHIPPER: <u>Philadelphia Energy Solutions Refining & Marketing LLC</u>	CARRIER: <u>Lacy's Express, Inc.</u>
PER: <u>[Signature]</u>	PER: <u>[Signature]</u>
DATE: <u>5-1-24</u>	DATE: <u>05-01-2024</u>
EMERGENCY RESPONSE TELEPHONE NUMBER: <u>302-540-0283</u>	NAME OR CONTRACT NUMBER OR OTHER UNIQUE IDENTIFIER: _____

STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

Driver Name: Firth, John
 Tractor: 155
 Trailer: 4149



Shipper's No. 0001275
 Carrier's No. 39021
 Manifest No. _____
 Date: 05/01/2024

P.O. Box 130
 Pedricktown, NJ 08067
 (856) 299-2569

TO CONSIGNEE - DESTINATION	FROM SHIPPER - ORIGIN
Name: SEPARATION AND RECOVERY SYSTEMS LLC Address: 2 PARADISE RD City/State/Zip: WEST DEPTFORD, NJ 08086	Name: PES Address: LANIER AVE City/State/Zip: PHILADELPHIA, PA 19092

Number of Shipping Units	HM	Kind of Packaging, Description of Articles, Special Marks and Exceptions	WEIGHT (subject to correction)	RATE	CHARGES (for Carrier use only)
001 TIT	X	SEE BILL OF LADING FOR PROPER DISCRIPTION OF MATERIAL 20, 1/2 1993 FLAMMABLE LIQUID, NOS (GASOLINE), 3, PGT ERG 123 5000 GA	Gross Wt Tare Wt. Net Wt.		

Special Instructions & Explain Delay	Bill To:
EMERGENCY RESPONSE PHONE # 702. 540. 0283 (Kin)	CAPITOL ENVIRONMENTAL PO No. 300 CREEK VIEW RD NEWARK, DE 19702 Contact: IMAGING Phone: Consignee: SEPARATION AND RECOVERY SYSTEMS LLC Date
P/U Date <u>05/01/2024</u> Del. Date <u>05/01/2024</u> PU Time In <u>12:00</u> Out <u>12:45</u> Del. Time In : Out :	_____/_____/_____

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

Shipper: PES	Carrier: LACY'S EXPRESS, INC.
Per: <u>[Signature]</u>	Per: <u>[Signature]</u>
Date: <u>05/01/24</u>	Date: <u>05/01/2024</u>

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE
 CALL CHEMTREC TOLL FREE 1-800-424-9300 DAY OR NIGHT

THIS MEMORANDUM is an acknowledgement that a bill of lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

SHIPPER NO. 0001276

CARRIER NO. _____

DATE 5-3-24

CARRIER		SCAC	
TO CONSIGNEE	Separation and Recovery Systems, LLC	FROM SHIPPER	Philadelphia Energy Solutions Refining & Marketing, LLC
STREET	2 Paradise Road	STREET	3144 Passayunk Ave.
DESTINATION	West Deptford NJ 08086	ORIGIN	Philadelphia, PA 19153
ROUTE	856-848-3719 STATE _____ ZIP _____	VEHICLE NUMBER	U.S. DOT Hazmat Reg. No. 052221600029 D

Number and Type of Packages	HM	Description of Articles	Total Quantity (mass, volume, or activity)	Weight (subject to correction)	Class or Rate
1 TT	X	RQ, UN1993, Flammable Liquids, N.O.S., 3, PG II (Gasoline) <i>5000 Gal</i>	G <i>5000</i>	<i>X</i>	3
<i>CAP 24DGC1 H16</i>					
CESI Job# KSWANN					

Remit COD to:	Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.	COD AMT:	COD FEE:
Address:		\$ <i>N/A</i>	Prepaid <input type="checkbox"/> Collect <input checked="" type="checkbox"/> <i>N/A</i>
City: <i>N/A</i> State: _____ Zip: _____	N/A <small>(Signature of Consignor)</small>	TOTAL CHARGES:	FREIGHT CHARGES:
NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ _____ Per _____		\$ _____	<input type="checkbox"/> Prepaid <input type="checkbox"/> Collect

RECEIVED, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications and rules that have been established by the carrier and are available to the shipper, on request; and all applicable state and federal regulations; the Property described above, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to delivery at said destination, if on its route, or otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said Property over all or any portion of said route to destination and as to each party at any time interested in all or any of said Property that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on the back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

NOTE: Liability Limitation for loss or damage in this shipment may be applicable. See 49 U.S.C. 14706(c)(1)(A) and (B).

This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation PER:

Philadelphia Energy Solutions Refining & Marketing LLC	Lacy's Express, Inc.
SHIPPER:	CARRIER:
PER: <i>[Signature]</i>	PER: <i>Ken Willard</i>
	DATE: <i>5-3-24</i>

EMERGENCY RESPONSE TELEPHONE NUMBER: <i>302-546-33</i>	NAME OR CONTRACT NUMBER OR OTHER UNIQUE IDENTIFIER:
--	---

Copyright 2017 J. J. Keller & Associates, Inc. • Neenah, WI • JKeller.com • (800) 327-6868 • Printed in the USA

STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

Driver Name: WILLIAMS, KENNETH
 Tractor: 152
 Trailer: 4149



Shipper's No. 1276
 Carrier's No. 39051
 Manifest No. _____
 Date: 05/03/2024

P.O. Box 130
 Pedricktown, NJ 08067
 (856) 299-2569

TO CONSIGNEE - DESTINATION	FROM SHIPPER - ORIGIN
Name: SEPARATION AND RECOVERY SYSTEMS LLC Address: 2 PARADISE RD City/State/Zip: WEST DEPTFORD, NJ 08086	Name: PES Address: LANIER AVE City/State/Zip: PHILADELPHIA, PA 19092

Number of Shipping Units	HM	Kind of Packaging, Description of Articles, Special Marks and Exceptions	WEIGHT (subject to correction)	RATE	CHARGES (for Carrier use only)
17/T	X	SEE BILL OF LADING FOR PROPER DISCRPTION OF MATERIAL UN1993, FLAMMABLE LIQUID N.J.S. 13:27, Pg II (RADUW) ERG # 128	Gross Wt. Tare Wt. Net Wt.	5000	SALE

Special Instructions & Explain Delay	Bill To:
	CAPITOL ENVIRONMENTAL PO No. 300 CREEK VIEW RD NEWARK, DE 19702 Contact: IMAGING Phone: Consignee: SEPARATION AND RECOVERY SYSTEMS LLC Date:
P/U Date <u>5/3/24</u> Del. Date ____/____/____ PU Time Del. Time In <u>10:41</u> Out : In : Out :	____/____/____

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

Shipper: PES	Carrier: LACY'S EXPRESS, INC.
Per: <u>[Signature]</u>	Per: <u>[Signature]</u>
Date: <u>5/3/24</u>	Date: <u>5/3/24</u>

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE
 CALL CHEMTREC TOLL FREE 1-800-424-9300 DAY OR NIGHT

GLOBAL JOB NUMBER: 1017406 PROFILE NUMBER: 243020034

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520
- Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700
- Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: <u>Joseph Jerny (781) 590-1125</u>	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOBH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/19/24

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
 Driver: John Gosh SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-19-24 8:00am

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: _____
 I hereby certify that the above named material has been accepted at the above referenced facility.
 Authorized Signature: _____ Date and Time: _____

SITE

GLOBAL JOB NUMBER: 1017405

PROFILE NUMBER: _____

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520
- Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700
- Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: KEVIN R. TOH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3-19-24 3:40

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fallow Hill Lane, Jamison PA 18928 Truck # and License Plate: AD 3182
 Driver: _____ SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-19-24 7:36

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

SITE

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: KECKAN R. JOTH Title: V.P. of SITE OPERATIONS
Signature: [Signature] Date and Time: 3/19/24 7:45

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2683 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: AG 40023
Driver: CHARLES MCCARTNEY SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3/19/24 7:45

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

SITE

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520
- Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700
- Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u>	GROSS WEIGHT:	09:37 am 03-19-24 63450
<u>3144 Passyunk Ave.</u>	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
<u>Philadelphia, PA 19153</u>	TARE WEIGHT:	27800
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
	NET WEIGHT:	20.33
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: CEPAT P TOOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3-19-24

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2883 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: #701 AG99804
 Driver: John Gash SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-19-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 3-19-24

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passunk Ave</u> <u>Philadelphia, PA 19153</u>		GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>09:44 am 03-19-24 69920</u>
GENERATOR'S PHONE: <u>Joseph Jerry (781) 590-1125</u>		TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards <u>27490</u>
DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION <u>Petroleum contaminated soil - Non DOT, Non RCRA Regulated</u>		NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>21.24</u>

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.
I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: Michael R. Toth Title: V.P. of Site Operations
Signature: [Signature] Date and Time: _____

TRANSPORTER
Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2683 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
Driver: Mark [Name] SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.
Driver Signature: [Signature] Date and Time: 3-19-24 7:03

DESTINATION
I hereby certify that the above named material was delivered without incident to the facility noted above.
Driver Signature: _____ Date and Time: _____
I hereby certify that the above named material has been accepted at the above referenced facility.
Authorized Signature: _____ Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards <u>09:49 am 03-19-24 87280</u>
GENERATOR'S PHONE: <u>Joseph Jerry (781) 590-1125</u>	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>28460</u>
	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>19.4</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE L. TOTH Title: V.P. SITE OPERATIONS
Signature: [Signature] Date and Time: _____

TRANSPORTER
Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2683 Follow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
Driver: [Signature] SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520
- Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700
- Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>10.57</u> 2005-12-21 67710
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards <u>27800</u>
	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards <u>19.97</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE K. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/19/24

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: 701 AG99804
 Driver: John Gash SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-19-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

GLOBAL JOB NUMBER: 1017405

PROFILE NUMBER: 243020034

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520
- Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700
- Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>11:04 am 03-19-24 70160</u>
GENERATOR'S PHONE: <u>Joseph Jerry (781) 590-1125</u>	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>27440</u>
	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>21.36</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: Gregory R. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: _____

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
 Driver: [Signature] SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-19-24 11:04

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520
- Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700
- Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	11:10 am 03-19-24 68260
GENERATOR'S PHONE: <u>Joseph Jerry (781) 590-1125</u>	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards	22460
DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION <u>Petroleum contaminated soil - Non DOT, Non RCRA Regulated</u>	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	19.89
GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected. I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.		
Name: <u>MICHAEL R. TOTH</u> Title: <u>V.P. of SITE OPERATIONS</u> Signature: <u>[Signature]</u> Date and Time: <u>[Signature]</u>		
TRANSPORTER Company: <u>Kevin Ryder, Inc.</u> Phone Number: <u>(215) 491-0415</u> Address: <u>2883 Fellow Hill Lane, Jamieson PA 18929</u> Truck # and License Plate: _____ Driver: <u>[Signature]</u> SW Haulers Permit #: <u>DESW-1717</u> (Type or Print Clearly) (applicable state permit#)		
I hereby certify that the above named material was picked up at the site listed above. Driver Signature: <u>[Signature]</u> Date and Time: _____		
DESTINATION I hereby certify that the above named material was delivered without incident to the facility noted above. Driver Signature: <u>[Signature]</u> Date and Time: _____ I hereby certify that the above named material has been accepted at the above referenced facility. Authorized Signature: <u>[Signature]</u> Date and Time: _____		

SITE

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT:	<u>12:15 PM 03-19-24</u> <u>64500</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
GENERATOR'S PHONE: <u>Joseph Jerry (781) 590-1125</u>	TARE WEIGHT:	<u>27200</u>
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards	
	NET WEIGHT:	<u>18.35</u>
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: Michael R. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3-19-24 12:19

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2083 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: 701 AG 99804 PA
 Driver: John Gash SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.
 Driver Signature: [Signature] Date and Time: 3-19-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.
 Driver Signature: _____ Date and Time: _____
 I hereby certify that the above named material has been accepted at the above referenced facility.
 Authorized Signature: _____ Date and Time: _____

SITE

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>124.27 8/03-19-24 69760</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>27440</u>
	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>21.16</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. of SITE OPERATIONS
Signature: [Signature] Date and Time: _____

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2683 Fallow Hill Lane, Jamison PA 18928 Truck # and License Plate: _____
Driver: [Signature] SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-13-24 12:25

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT:	<u>12:36 PM 03-19-24 64820</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
GENERATOR'S PHONE: <u>Joseph Jeray (781) 500-1125</u>	TARE WEIGHT:	<u>2.8460</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
	NET WEIGHT:	<u>18.18</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GERALD R. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/19/24 12:34

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2883 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
 Driver: CG McLaughlin SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.
 Driver Signature: [Signature] Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.
 Driver Signature: _____ Date and Time: _____
 I hereby certify that the above named material has been accepted at the above referenced facility.
 Authorized Signature: _____ Date and Time: _____

SITE

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: <u>Joseph Jaray (781) 580-1125</u>	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: KEVIN R. TOOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/19/09 1:30

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: 701 AG 99804 PA
 Driver: John Gash SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.
 Driver Signature: [Signature] Date and Time: 3-19-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.
 Driver Signature: _____ Date and Time: _____
 I hereby certify that the above named material has been accepted at the above referenced facility.
 Authorized Signature: _____ Date and Time: _____

GLOBAL JOB NUMBER: 1017405

PROFILE NUMBER: 243020034

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520
- Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700
- Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: _____

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
 Driver: _____ SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

SITE

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: <u>Joseph Jerry (781) 590-1125</u>	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: MICHAEL R. TOTH Title: V.P. of SITE OPERATIONS
Signature: [Signature] Date and Time: 3/19/21

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2983 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
Driver: CGM CONTACT (Type or Print Clearly) SW Haulers Permit #: DESW-1717
(applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>		GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>07:19 on 03-20-24 72960</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>		TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>27440</u>
		NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>22.76</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R TOTH Title: V.P. OF SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/20/24

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2883 Follow Hill Lane, Jamison PA 18928 Truck # and License Plate: _____
 Driver: [Signature] SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-20-24 7:11

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

SITE

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>07:39 am 03-20-24 73500</u>
	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>28460</u>
GENERATOR'S PHONE: <u>Joseph Leray (781) 590-1125</u>	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>22.53</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. of SITE OPERATIONS
Signature: [Signature] Date and Time: 3/20/24 7:15

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2883 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
Driver: CG MCINTYRE SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT:	<u>07:22 am 03-20-24 71580</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT:	<u>27800</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
	NET WEIGHT:	<u>21.89</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3-20-24 9:00

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: 701 AG 99804 PA
 Driver: John Gosh SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-20-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>07:34 0003-20-24 60300</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards <u>28460 AL</u>
	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>17.385.96 AL</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. of SITE OPERATIONS
Signature: [Signature] Date and Time: 3/21/24 09

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2683 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: 7301
Driver: [Signature] SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3/21/24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 3/21/24

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>09:06 am 03-20-24 76540</u>
GENERATOR'S PHONE: <u>Joseph Jersey (781) 590-1125</u>	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>27140</u>
	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>24.55</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOSTH Title: V.P. of SITE OPERATIONS
Signature: [Signature] Date and Time: 3/20/24

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2683 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
Driver: Mark Young SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-20-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards 09:08 am 03-20-24 74180
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards 27800
	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards 23.19

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. of SITE OPERATIONS
Signature: [Signature] Date and Time: 3/20/24 9:05

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2083 Fallow Hill Lane, Jamison PA 18928 Truck # and License Plate: 701 AG99804 PA
Driver: John Gush SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-20-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____

_____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>		GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>09:22 am 03-20-24 59420</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>		TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards <u>2 5620</u>
DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION <u>Petroleum contaminated soil - Non DOT, Non RCRA Regulated</u>		NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>16.9</u>
GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected. I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations. Name: <u>GEORGE R. TOTH</u> Title: <u>V.P. OF SITE OPERATIONS</u> Signature: <u>[Signature]</u> Date and Time: <u>3/20/24</u>		
TRANSPORTER Company: <u>Kevin Ryder, Inc.</u> Phone Number: <u>(215) 491-0415</u> Address: <u>2983 Fellow Hill Lane, Jamison PA 18929</u> Truck # and License Plate: _____ Driver: <u>[Signature]</u> SW Haulers Permit #: <u>DESW-1717</u> (Type or Print Clearly) (applicable state permit#) I hereby certify that the above named material was picked up at the site listed above. Driver Signature: <u>[Signature]</u> Date and Time: <u>3/20/24</u>		
DESTINATION I hereby certify that the above named material was delivered without incident to the facility noted above. Driver Signature: _____ Date and Time: _____ I hereby certify that the above named material has been accepted at the above referenced facility. Authorized Signature: <u>[Signature]</u> Date and Time: <u>3/20/24</u>		

SITE

GLOBAL JOB NUMBER: 1017406 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>09:25 am 03-20-24 73520</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards <u>22460</u>
	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards <u>22.53</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. OF SITE OPERATIONS
Signature: [Signature] Date and Time: 3/20/24

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2983 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
Driver: CG McCarty SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>10:39 am 03-20-24 75360</u>
<u>3144 Passyunk Ave.</u>	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>27440</u>
<u>Philadelphia, PA 19153</u>	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards <u>23.96</u>
GENERATOR'S PHONE: <u>Joseph Jerry (781) 590-1125</u>	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: George R. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/20/24 10:30

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2883 Follow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
 Driver: Mark [Signature] SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-20-24 10:31

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT:	<u>10:44 am 03-20-24 74120</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
GENERATOR'S PHONE: <u>Joseph Jaray (781) 590-1125</u>	TARE WEIGHT:	<u>21800</u>
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards	
	NET WEIGHT:	<u>23.16</u>
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/20/24 11:40

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2883 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
 Driver: John Gosh SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-20-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u>		GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>10:56 am 03-20-24 67720</u>
<u>3144 Passyunk Ave.</u>		TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>2 slt 20</u>
<u>Philadelphia, PA 19153</u>		NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>21.05</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>			

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. OF SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/20/24

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
 Driver: [Signature] SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3/20/24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: 3/20/24

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017406 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	11:01 am 03-20-24 84520
<u>3144 Passyunk Ave.</u>	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>28460</u>
<u>Philadelphia, PA 19153</u>	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>28.03</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>		

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. JOTH Title: V.P. of SITE OPERATIONS
Signature: [Signature] Date and Time: _____

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2883 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
Driver: CG McCARTNEY SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017406 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>12:08 PM 03-20-24</u> <u>79700</u>
	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>27440</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>25.63</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/20/24 2:08

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2693 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
 Driver: [Signature] SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3/20/24 11:30

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19159</u>	GROSS WEIGHT:	<u>12:14 PM 03-20-24 76540</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>27800</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT:	
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards	
	NET WEIGHT:	<u>24.37</u>
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: Michael R. Toth Title: V.P. of S&E OPERATIONS
Signature: [Signature] Date and Time: 3/20/24 12:15

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2683 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: 701 AG99084 PA
Driver: John Gosh SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-20-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT:	<u>12:26 pm 03-20-24 64180</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
GENERATOR'S PHONE: <u>Joseph Jersey (781) 580-1125</u>	TARE WEIGHT:	<u>25620</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
	NET WEIGHT:	<u>19.28</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/20/24

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fallow Hill Lane, Jamison PA 18928 Truck # and License Plate: _____
 Driver: [Signature] SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3/20/24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 3/20/24

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u>		GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	12:30 PM 03-20-24 83060
<u>3144 Passyunk Ave.</u>		TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>28460</u>
<u>Philadelphia, PA 19153</u>		NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>30.3</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 560-1125</u>			

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/20/24 12:25

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
 Driver: CG McARTNEY SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: <u>Joseph Jersey (781) 580-1125</u>	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION <u>Petroleum contaminated soil - Non DOT, Non RCRA Regulated</u>	
GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected. I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations. Name: <u>GEORGE R. JOTH</u> Title: <u>V.P. of SITE OPERATIONS</u> Signature: <u>[Signature]</u> Date and Time: <u>3/20/24</u>	
TRANSPORTER Company: <u>Kevin Ryder, Inc.</u> Phone Number: <u>(215) 491-0415</u> Address: <u>2883 Fallow Hill Lane, Jamison PA 18929</u> Truck # and License Plate: _____ Driver: _____ SW Haulers Permit #: <u>DESW-1717</u> (Type or Print Clearly) (applicable state permit#) I hereby certify that the above named material was picked up at the site listed above. Driver Signature: _____ Date and Time: _____	
DESTINATION I hereby certify that the above named material was delivered without incident to the facility noted above. Driver Signature: _____ Date and Time: _____ I hereby certify that the above named material has been accepted at the above referenced facility. Authorized Signature: _____ Date and Time: _____	

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. FATH Title: V.P. of SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/20/24

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2883 Fellow Hill Lane, Jamison PA 18929 Truck # and License Plate: _____
 Driver: [Signature] SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3/20/24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: 3/20/24

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
<u>3144 Passyunk Ave.</u>	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards
<u>Philadelphia, PA 19153</u>	
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	NET WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. OF SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/20/24

TRANSPORTER

Company: Kevin Rydor, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fallow Hill Lane, Jamison PA 18928 Truck # and License Plate: 701 AG99804 PA
 Driver: John Goh SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-20-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: _____ Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

GLOBAL JOB NUMBER: 1017405 PROFILE NUMBER: 243020034

Please Check One:

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909 | <input type="checkbox"/> Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220 | <input checked="" type="checkbox"/> Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633 | <input type="checkbox"/> Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394 |
| <input type="checkbox"/> Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520 | <input type="checkbox"/> Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004 | <input type="checkbox"/> Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700 | <input type="checkbox"/> Other _____ |

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT:	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards
	TARE WEIGHT:	<input type="checkbox"/> Tons <input type="checkbox"/> Yards
	NET WEIGHT:	<input type="checkbox"/> Tons <input type="checkbox"/> Yards
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>		

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE B. TOTH Title: V.P. OF OPERATIONS
Signature: [Signature] Date and Time: 5/20/24 1:30

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
Address: 2883 Fallow Hill Lane, Jamison PA 18922 Truck # and License Plate: _____
Driver: [Signature] SW Haulers Permit #: DESW-1717
(Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-20-24 1:25

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____ Date and Time: _____

GLOBAL JOB NUMBER: 1017405

PROFILE NUMBER: _____

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520

- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004

- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700

Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394

Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS:
Philadelphia Energy Solutions Refining and Marketing, LLC
3144 Passyunk Ave
Philadelphia, PA 19153

GENERATOR'S PHONE: Joseph Jeray (781) 590-1125

GROSS WEIGHT:	01:54 PM 03-20-24 71240
<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	25620
TARE WEIGHT:	
<input type="checkbox"/> Tons <input type="checkbox"/> Yards	
NET WEIGHT:	22.81
<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATIONPetroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. JOTH
Signature: [Signature]

Title: V.P. of SITE OPERATIONS
Date and Time: 3/20/24

TRANSPORTER

Company: Kevin Ryder, Inc.
Address: 2883 Fallow Hill Lane, Jamison PA 18929
Driver: Kevin Ryder
(Type or Print Clearly)

Phone Number: (215) 491-0415
Truck # and License Plate: _____
SW Haulers Permit #: DESW-1717
(applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3/20/24

DELIVERY

I hereby certify that the above named material was delivered without incident to the facility noted above.

Signature: [Signature] Date and Time: 3/20/24

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

GLOBAL JOB NUMBER: 1017405

PROFILE NUMBER: _____

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520

- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004

- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700

Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394

Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS:
Philadelphia Energy Solutions Refining and Marketing, LLC
3144 Passyunk Ave
Philadelphia, PA 19163

GENERATOR'S PHONE: Joseph Jeray (781) 590-1125

GROSS WEIGHT:
 Tons Yards

TARE WEIGHT:
 Tons Yards

NET WEIGHT:
 Tons Yards

28460

22.95

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: MEGHE R. JOTH

Signature: [Signature]

Title: V.P. OF SITE OPERATION

Date and Time: 3/20/24

TRANSPORTER

Company: Kevin Ryder, Inc.

Address: 2683 Fallow Hill Lane, Jamison PA 18929

Driver: CG M. CARTWAY
(Type or Print Clearly)

Phone Number: (215) 491-0415

Truck # and License Plate: _____

SW Haulers Permit #: DESW-1717
(applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: _____

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Receiver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

TRANSPORTER

GLOBAL JOB NUMBER: 1017405

PROFILE NUMBER: _____

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520

- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of North Jersey
115 Jacobus Avenue
Kearny, NJ 07032
Ph: 973-344-4004

- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700

- Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394

Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT:	<u>01:27 PM 05-20-24</u> <u>81260</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	TARE WEIGHT:	<u>27440</u>
	<input type="checkbox"/> Tons <input type="checkbox"/> Yards	
	NET WEIGHT:	<u>26.91</u>
	<input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. JOTH
Signature: [Signature]

Title: V.P. OF OPERATIONS
Date and Time: 5/20/24 1:30

TRANSPORTER

Company: Kevin Ryder, Inc.
Address: 2683 Fallow Hill Lane, Jamison PA 18929
Driver: Mack [Signature]
(Type or Print Clearly)

Phone Number: (215) 491-0415
Truck # and License Plate: _____
SW Haulers Permit #: DESW-1717
(applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature]

Date and Time: 3-20-24 1:2

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Driver Signature: [Signature]

Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: _____

Date and Time: _____

TRANSPORTER

GLOBAL JOB NUMBER: 1017405

PROFILE NUMBER: _____

Please Check One:

- Clean Earth of Carteret
24 Middlesex Avenue
Carteret, NJ 07008
Ph: 732-541-8909
- Clean Earth of Maryland
1469 Oak Ridge Place
Hagerstown, MD 21740
Ph: 301-791-6220
- Clean Earth of New Castle
94 Pyles Lane
New Castle, DE 19720
Ph: 302-427-6633
- Clean Earth of Philadelphia
3201 S. 61st Street
Philadelphia, PA 19153
Ph: 215-724-5520
- Clean Earth of North Jersey
115 Jacobus Avenue
Keamy, NJ 07032
Ph: 973-344-4004
- Clean Earth of Southeast Pennsylvania
7 Steel Road East
Morrisville, PA 19067
Ph: 215-428-1700
- Clean Earth of Brandywine
16301 Gardner Road
Waldorf, MD 20601
PH: 240-389-6394
- Other _____

Non-Hazardous Material Manifest

(Type or Print Clearly)

GENERATOR'S NAME & SITE ADDRESS: <u>Philadelphia Energy Solutions Refining and Marketing, LLC</u> <u>3144 Passyunk Ave.</u> <u>Philadelphia, PA 19153</u>	GROSS WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>01:35 PM 03-20-24</u> <u>77660</u>
	TARE WEIGHT: <input type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>27800</u>
GENERATOR'S PHONE: <u>Joseph Jeray (781) 590-1125</u>	NET WEIGHT: <input checked="" type="checkbox"/> Tons <input type="checkbox"/> Yards	<u>24.93</u>

DESCRIPTION OF MATERIAL/SAMPLE ID AND LOCATION

Petroleum contaminated soil - Non DOT, Non RCRA Regulated

GENERATOR'S CERTIFICATION/AUTHORIZED AGENT - Incomplete and/or unsigned manifests will cause the load to be delayed and/or rejected.

I hereby certify that the above named material does not contain free liquid as defined by 40CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, is not a DOT hazardous substance as defined by 49 CFR Part 172 or any applicable state law, has been fully and accurately described above, classified, packaged and is in proper condition for transportation according to all applicable state and federal regulations.

Name: GEORGE R. TOTH Title: V.P. OF SITE OPERATIONS
 Signature: [Signature] Date and Time: 3/20/24

TRANSPORTER

Company: Kevin Ryder, Inc. Phone Number: (215) 491-0415
 Address: 2683 Fallow Hill Lane, Jamison PA 18929 Truck # and License Plate: 701 AG99804 PA
 Driver: John Goh SW Haulers Permit #: DESW-1717
 (Type or Print Clearly) (applicable state permit#)

I hereby certify that the above named material was picked up at the site listed above.

Driver Signature: [Signature] Date and Time: 3-20-24

DESTINATION

I hereby certify that the above named material was delivered without incident to the facility noted above.

Receiver Signature: [Signature] Date and Time: _____

I hereby certify that the above named material has been accepted at the above referenced facility.

Authorized Signature: [Signature] Date and Time: _____

TRANSPORTER



Profile Detail Report

Job ID 1017405

3/18/2024 - 3/21/2024

Capitol Environmental Services
Philadelphia Energy Solutions-The Bellwether

Approval	243020034	Clean Earth of New Castle							
Ticket	Date		Truck	Plate	Manifest	Gross	Tare	Net	Units
3382884	3/19/2024	8:45 AM	02KR701	AG-01708	2504124	36.72	13.90	22.82	T
3385899	3/19/2024	8:47 AM	02KR1601	AG-31822PA	2504123	39.36	13.72	25.64	T
3385901	3/19/2024	8:48 AM	02KR2001	AG-90033PA	2504122	35.23	14.23	21.00	T
3386061	3/19/2024	10:16 AM	02KR701	AG-01708	2504121	34.23	13.90	20.33	T
3386074	3/19/2024	10:22 AM	02KR1601	AG-31822PA	2504120	34.96	13.72	21.24	T
3386085	3/19/2024	10:28 AM	02KR2001	AG-90033PA	2504119	33.63	14.23	19.40	T
3386219	3/19/2024	11:36 AM	02KR701	AG-01708	2504118	33.87	13.90	19.97	T
3386230	3/19/2024	11:42 AM	02KR1601	AG-31822PA	2504117	35.08	13.72	21.36	T
3386245	3/19/2024	11:50 AM	02KR2001	AG-90033PA	2504116	34.12	14.23	19.89	T
3386383	3/19/2024	12:54 PM	02KR701	AG-01708	2504115	32.25	13.90	18.35	T
3386396	3/19/2024	1:01 PM	02KR1601	AG-31822PA	2504114	34.88	13.72	21.16	T
3386426	3/19/2024	1:15 PM	02KR2001	AG-90033PA	2504113	32.41	14.23	18.18	T
3386568	3/19/2024	2:12 PM	02KR701	AG-01708	2504112	36.81	13.90	22.91	T
3386574	3/19/2024	2:17 PM	02KR1601	AG-31822PA	2504111	35.50	13.72	21.78	T
3386594	3/19/2024	2:27 PM	02KR2001	AG-90033PA	2504110	39.44	14.23	25.21	T
3382885	3/20/2024	7:58 AM	02KR1601	AG-31822PA	2504109	36.48	13.72	22.76	T
3386898	3/20/2024	8:01 AM	02KR701	AG-01708	2504107	35.79	13.90	21.89	T
3386966	3/20/2024	8:20 AM	02KR2301	PA	2504106	30.19	12.81	17.38	T
3386970	3/20/2024	8:22 AM	02KR2001	AG-90033PA	2504108	36.76	14.23	22.53	T
3387139	3/20/2024	9:45 AM	02KR1601	AG-31822PA	2504105	38.27	13.72	24.55	T
3387141	3/20/2024	9:47 AM	02KR701	AG-01708	2504104	37.09	13.90	23.19	T
3387171	3/20/2024	10:01 AM	02KR2301	PA	2504103	29.71	12.81	16.90	T

connect Profile Detail Report

Job ID 1017405
3/18/2024 - 3/21/2024

Capitol Environmental Services
Philadelphia Energy Solutions-The Bellwether

3387177	3/20/2024	10:04 AM	02KR2001	AG-90033PA	2504102	36.76	14.23	22.53	T
3387311	3/20/2024	11:17 AM	02KR1601	AG-31822PA	2504101	37.68	13.72	23.96	T
3387317	3/20/2024	11:23 AM	02KR701	AG-01708	2504100	37.06	13.90	23.16	T
3387330	3/20/2024	11:34 AM	02KR2301	PA	2504099	33.86	12.81	21.05	T
3387335	3/20/2024	11:39 AM	02KR2001	AG-90033PA	2504098	42.26	14.23	28.03	T
3387439	3/20/2024	12:47 PM	02KR1601	AG-31822PA	2504097	39.35	13.72	25.63	T
3387451	3/20/2024	12:53 PM	02KR701	AG-01708	2504096	38.27	13.90	24.37	T
3387474	3/20/2024	1:05 PM	02KR2301	PA	2504095	32.09	12.81	19.28	T
3387482	3/20/2024	1:09 PM	02KR2001	AG-90033PA	2504094	44.53	14.23	30.30	T
3387574	3/20/2024	2:06 PM	02KR1601	AG-31822PA	2504093	40.63	13.72	26.91	T
3387592	3/20/2024	2:13 PM	02KR701	AG-01708	2504092	38.83	13.90	24.93	T
3387623	3/20/2024	2:32 PM	02KR2301	PA	2504091	35.62	12.81	22.81	T
3387640	3/20/2024	2:38 PM	02KR2001	AG-90033PA	2504090	37.18	14.23	22.95	T

Number of Loads	35	Sub Total	784.35
Total Number of Loads	35	Total	784.35

Report Created 3/21/2024 3:26:15 PM



U.S. Fish and Wildlife Service, National Standards and Support Team,
wetlands_team@fws.gov

September 22, 2023

Wetlands

- | | | |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland |  Lake |
|  Estuarine and Marine Wetland |  Freshwater Forested/Shrub Wetland |  Other |
| |  Freshwater Pond |  Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Introduction

This Conservation Planning Report compiles names, descriptions, maps, locations, measurements, links and references for Natural Heritage Areas (core and supporting habitats), Important Bird Areas, State Lands, and agency designated water resources that are coincident with an area of interest defined by the user of the Pennsylvania Conservation Explorer tool. For an overview and additional details, please be sure to visit the website at www.naturalheritage.state.pa.us and download the applicable County Natural Heritage Inventory report(s).

Site Area: 0.24 acres

County(s): Philadelphia

Township/Municipality(s): PHILADELPHIA

Quadrangle Name(s): PHILADELPHIA

Watersheds HUC 8: Schuylkill

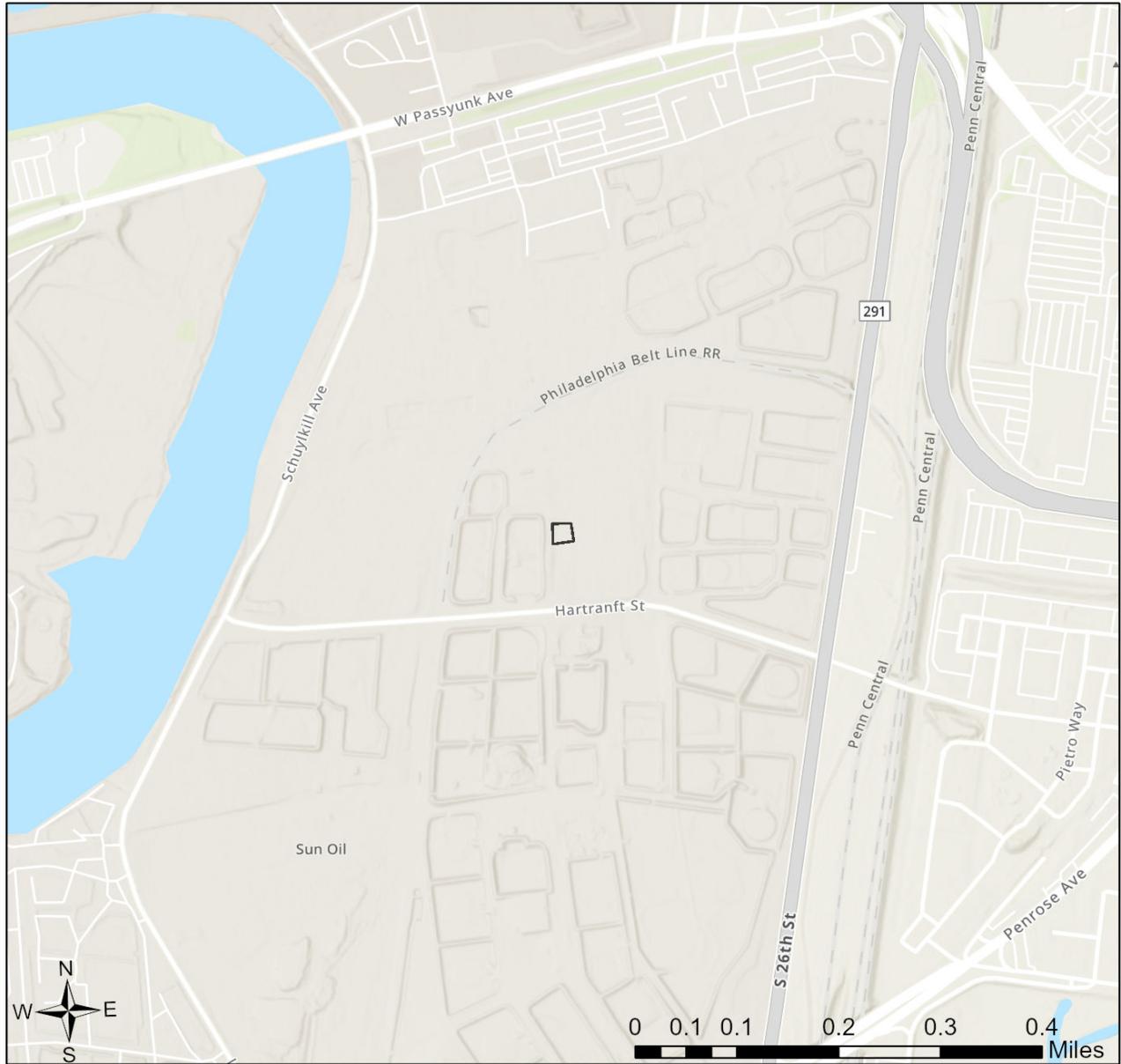
Watersheds HUC 12: City of Philadelphia-Schuylkill River

Decimal Degrees: 39.914058 N, -75.197365 W

Degrees Minutes Seconds: 39° 54' 50.6104" N, 75° 11' 50.5126" W

No conservation planning areas of interest have been detected.

Conservation Report



Project_Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

For additional information about the Pennsylvania Natural Heritage Program, visit the website at www.naturalheritage.state.pa.us or you can email your questions and comments to RA-HeritageReview@pa.gov.

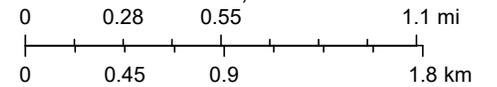
PA DCNR PNHP Map



September 22, 2023

- | | | |
|--|---|---|
|  Quads |  PA Counties |  State Parks |
|  Municipalities |  Local Parks |  State Forests |
|  HUC 8 (Large) |  Gamelands |  WNA |

1:44,312



Pennsylvania Game Commission. Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen,