Revised Subsurface Investigation and Vapor Intrusion Investigation Summary Report

Former Champion Products, Inc.
Perry, New York

PREPARED FOR

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NYSDEC Site No. V00189

Prepared by **AG Geology, D.P.C.**

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Introduction

This Revised Subsurface Investigation and Vapor Intrusion Investigation Summary Report (RSSI and VII Report) was prepared by AG Geology D.P.C. (AG Geology), on behalf of Hanesbrands, Inc. (Hanesbrands). This SSI and VII Report summarizes the results of the subsurface and vapor intrusion investigation efforts conducted at the former Champion Products facility (the "site") located at 200 North Main Street in Perry, New York in association with the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Agreement (VCA) V00189.

A work plan detailing the proposed work scope for this investigation was submitted to the NYSDEC and New York State Department of Health (NYSDOH) on September 8, 2021, with the objective to confirm what remaining contamination is left on site. Following comments from NYSDEC a work plan addendum was submitted on September 28, 2021. The proposed scope was approved via email response from the NYSDOH and NYSDEC, dated October 19, 2021.

The work summarized in this SSI and VII Report was performed in accordance with the *Subsurface Investigation and Vapor Intrusion Investigation Work Plan* dated September 8, 2021 and the Subsurface Investigation and Vapor Intrusion Investigation Work Plan Addendum dated September 28, 2021, the New York State Department of Health (NYSDOH) – Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (SVI Guidance), and NYSDEC DER-13 – Strategy for Evaluating Soil Vapor Intrusion at Remedial Sites in New York (NYSDEC DER-13). This SSI and VII Report was prepared in general accordance with the New York State Department of Environmental Conservation's (NYSDEC) Division of Environmental Remediation (DER-10) Technical Guidance for Site Investigation and Remediation.

Site Characterization

SITE DESCRIPTION

The Former Champion Products facility is located at 200 North Main Street in the Village of Perry, County of Wyoming, New York, and is approximately 26-acres in size (**Figure 1**). The site is bounded by North Main St., commercial properties and residential properties to the north, vacant wooded land to the south, farmland and residential properties to the east, and residential properties and North Genesee St. to the west. The main onsite building is approximately 150,000 s.f. in size with a section that is approximately 75,000 s.f., which is not part of the site. In 2014, a 9,600 s.f., three bay, steel frame construction, bus garage was constructed in the northeast corner of the site and is now utilized for parking of busses. The bus garage is located approximately 600 feet north-northeast of the main building in a paved parking area. The facility has been primarily used since 1955 for the manufacture of print screen apparel and custom sports apparel for sports teams and retail sales. The site location is presented in **Figure 1** and the site layout is depicted in **Figure 2**.

Geology and Hydrogeology

SITE GEOLOGY

There are no predominant geological surface features such as rock outcroppings on the subject site. Site-specific stratigraphy was gathered during previous subsurface investigations. Based on characterized soil samples collected via continuous direct push core sampling methods, the site is underlain by a mixture of approximately 14 feet to 16 feet of unconsolidated deposits consisting of sandy silts and clays to fine to medium sands and gravels. The unconsolidated deposits are underlain by a shale bedrock unit.

SITE HYDROLOGY

A shallow water table groundwater system is present at depths of between 4 feet and 12 feet below grade in the mixed unconsolidated deposits located beneath the site. Groundwater occurs in the bedrock at depths of approximately 24 feet to 34 feet below grade. Groundwater at the site is not utilized by the facility and there are no known water supply wells located within 1,000 feet of the site. An intermittent unnamed stream is located immediately west and south of the site. Flow in the stream varies with response to precipitation, melting snow and groundwater discharge. The stream is classified by NYSDEC as a Class D surface water body.

Site History

SITE BACKGROUND

The site was owned and operated from 1955 until 1998 by Champion, an affiliate of the Sara Lee Corporation. In 1998, the property was sold to SMG, the current owner of the site. Following the sale, Champion leased the building from SMG and continued operations at the site until December 2001. In January 2002, ACO was formed and has operated at the site as a tenant from January 2002 through November 30, 2009. ACO then sold its business to Liebe of New York which has continued the same type of operations as ACO and is the current tenant at the site. Irrespective of ownership, the main facility has been primarily used since 1955 for the manufacture of print screen apparel and custom sports apparel for sports teams and retail sale.

VOLUNTARY CLEANUP AGREEMENT

In March 2000, Champion entered into a Voluntary Cleanup Agreement (VCA) with NYSDEC for the remediation of soil and groundwater underlying the site, which was impacted by chlorinated and non-chlorinated volatile organic compounds (VOCs). Remediation activities included: excavation of impacted soils, installation, and operation of a dual phase vapor extraction system (DPVE) and installation and operation of a sub-slab depressurization system (SSDS). After completion of the remedial work described in the Final Remediation Work Plan dated February 11, 2000, some contamination was left in the subsurface at this site. A Site Management Plan (SMP) was prepared and submitted in March 2013 to manage remaining contamination at the site which included the implementation of engineering controls (EC) and institutional controls (ICs).

ECs at the site include cover systems and a sub-slab depressurization system (SSDS). In the former empty drum storage area, which is located outside of the south-central area of the building, the cover system is comprised of a minimum of 6 feet of soil backfill (**Figure 2**). In the interior of the building, the cover system is comprised of the building's existing 4 -inch to 6-inch-thick concrete floor slabs (**Figure 2**). The cover systems are permanent controls, and the quality and integrity of these systems is verified by quarterly and annual inspections, which evaluate the integrity of the cover materials.
SSDSs were installed in three areas (SSDS-3, SSDS-4, and SSDS-5) at the site to address sub-slab soil vapor in areas of the site where previous indoor air and sub-slab vapor sampling indicated the presence of VOCs at

concentrations in excess of the New York State Department of Health (NYSDOH) decision matrix recommended action levels for monitoring and/or mitigation (**Figure 2**). The SSDS at each area consists of a series of 2 to 3 sub-slab suction points (installed in high permeability material), which are connected by 3-inch PVC piping to exterior mounted low volume blower units. Each unit vents sub-slab vapor to the outdoor air. Vacuum at each suction point is measured by liquid filled U-tube manometers, which are installed on riser piping. The objective of the SSDS in each area is to create a vacuum field of at least 0.004" water column under the slab across each area to mitigate vapor intrusion. Each SSDS is designed to operate independently and continuously. Operation of the systems are verified by quarterly and annual inspections, which monitor the vacuum field and blower operations.

The site has a series of ICs in the form of site restrictions. Adherence to the ICs is required by the Declaration of Covenants and Restrictions. Restrictions that apply to the Controlled Property (property) are:

- Implement, maintain, and monitor EC systems.
- Prevent future exposure to remaining VOC impacts by controlling disturbances of the impacted subsurface media.
- Limit the use and development of the site to commercial or industrial type usages.
- Prohibit use of the groundwater underlying the property without treatment rendering it safe for drinking water or industrial purposes,
- Comply with the site restrictions in the Declaration of Covenants and Restrictions.

Compliance with the ICs is evaluated during quarterly and annual inspections.

Vapor Intrusion Investigation

The Vapor Intrusion Investigation was conducted in accordance with NYSDOH SVI Guidance, NYSDEC DER-13 and the Subsurface Investigation and Vapor Intrusion Investigation Work Plan dated September 8, 2021, and the Subsurface Investigation and Vapor Intrusion Investigation Work Plan Addendum dated September 28, 2021. The work plan, which included the installation of temporary sub-slab vapor points and subsequent vapor, indoor, and ambient air sampling, was executed on January 4, 2022.

PRE-SAMPLING BUILDING INSPECTION

On December 16, 2021, AG Geology was on site to perform a site walk and complete an Indoor Air Quality Questionnaire and Building Inventory at the Former Champion Products Facility. The inspection aimed to identify and minimize conditions that could interfere with the proposed testing methodology, identify, and propose sampling locations, visually inspect the physical condition of the building, floor layout, site use, and to screen the ambient air by collecting total volatile organic compound readings using a photo-ionization detector (PID). Additionally, during this visit the SDSS was shut-off and capped to allow the site to return to its equilibrium status prior to the vapor intrusion sampling activities.

The facility consists of a one-story industrial building with an open floor plan warehouse (with mezzanine areas) and an attached office area. The warehouse area is divided into a furniture storage area, computer room, screen rooms, printing area, sewing, and knitting floor, and a maintenance room. with a break room and office area. The facility is heated by natural gas with various ceiling mounted duct works throughout the production area. Air infiltration was noted through cracks in the windows. Fans are utilized in the main work areas. The mezzanine area is not currently used.

The facility uses various inks, paints, and various cleaning supplies in the screen rooms and printing area. The maintenance room stores joint compound, lubricants both oil-based and silicone-based, paint, and small

containers of kerosene/gasoline and diesel. All the products identified in the facility were in good condition and stored in safe locations. Photoionization detector (PID) readings did not exceed 0.1 parts per million (ppm) in the work area. In the maintenance room the highest PID reading was 96.5 ppm in the vicinity of the kerosene/ gasoline container. Sub-slab vapor and ambient air sampling locations are illustrated in **Figure 2**. A copy of the Pre-Inspection and Building Inventory Report and Building Layout is presented in **Appendix A**.

VAPOR INTRUSION SAMPLING

On January 4, 2022, AG Geology conducted sub-slab vapor sampling, indoor ambient air sampling, and outdoor ambient air sampling in and around the facility. Sub-slab vapor and ambient air sampling locations were located as close as possible to the original sample locations from 2007. Sub-slab vapor and ambient air sampling locations are illustrated in **Figure 2**. Sub-slab vapor and all ambient air samples were collected concurrently to evaluate indoor air results appropriately as per the NYSDOH SVI Guidance. The methodology implemented during the event is described in the paragraphs below.

SUB-SLAB VAPOR SAMPLING

As per the NYSDOH SVI Guidance, five (5) temporary vapor probes were installed, using inert tubing, into the sub-slab of the facility. The probe tip was covered with porous inert backfill material, and the implant was sealed using non-VOC containing and non-shrinking products.

Prior to the collection of the sub-slab vapor samples, one to three volumes of the sample probe and associated tubing were purged, while not exceeding 0.2 liters per minute. A helium tracer gas was used as a quality assurance measure to verify that no outside air diluted the soil vapor samples. Five (5) sub-slab vapor samples (SS-1, SS-2, SS-3, SS-4, and SS-5) were collected from the temporary vapor points via summa canister. Heat was on in the building during sampling and all doors and windows were closed during sampling and remained closed as much as possible during the sampling period. All of the samples were collected during a continuous eight-hour to be representative of an eight-hour work shift and subsequently submitted to Alpha Analytical, Inc. (Alpha) of Mansfield, MA. Alpha is a NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified laboratory (Certification Number 11627). The sub-slab vapor samples were analyzed for VOCs via USEPA method TO-15. The sub-slab vapor sample locations are illustrated in **Figure 2**.

During sample collection, cracks were observed in the concrete near SS-3, cleaning products including ink degradent were observed near SS-4, and a hydrocarbon odor was observed near SS-5.

INDOOR/OUTDOOR AMBIENT AIR SAMPLING

Five (5) indoor ambient air samples were collected via summa canister inside the facility (IA-1, IA-2, IA-3, IA-4, and IA-5). Samples IA-1 through IA-5 were collected next to the sub-slab samples of the same designation over the same sampling period. Heat was on in the building during sampling and all doors and windows were closed during sampling and remained closed as much as possible during the sampling period. All samples were submitted to Alpha for analysis of VOCs via USEPA method TO-15 and trichloroethene, cis -1,2-dichloroethene, 1,1-dichloroethene, carbon tetrachloride and vinyl chloride via EPA Method TO-15 Select Ion. Indoor ambient air sampling locations are illustrated in **Figure 2**. A copy of the Pre-Inspection and Building Inventory Report and Building Layout are presented in **Appendix A**.

One (1) outdoor ambient air sample (OA-1) was collected via summa canister to characterize site-specific background outdoor air conditions. Sample OA-1 was collected to the northwest of the building concurrently with sub-slab vapor and indoor ambient air samples during the same sampling period and were submitted to Alpha for analysis of VOCs via USEPA method TO-15. Ambient air sampling locations are illustrated in **Figure 2**. A copy of the Pre-Inspection and Building Inventory Report and Building Layout are presented in **Appendix A**.

VAPOR AND AIR SAMPLES – EVALUATION CRITERIA

The State of New York does not have any standards, criteria, or guidance values for concentrations of hydrocarbons in sub-surface vapors (either soil vapor or sub-slab vapor). In the absence of applicable regulatory standard concentrations, soil vapor sampling results are reviewed "as a whole," in conjunction with the results of other environmental sampling and the site conceptual model, as specified in the DOH Guidance document. More specifically, the DOH recommends that soil vapor sub-slab results be compared to background indoor and outdoor air concentrations, as well as with published databases detailing indoor air quality data in both commercial and residential buildings (NYSDOH, 2006).

Several studies have been conducted by the DOH and the USEPA, both nationally and in the State of New York, to provide information on indoor and outdoor air background levels in a variety of settings (e.g., residential, or commercial office buildings). The most applicable of these databases, given that it includes data collected from public and commercial buildings in New York State, is the Building Assessment and Survey Evaluation (BASE) Database published by the Environmental Protection Agency (EPA) in 2001. This database documents the occurrence of VOCs in the indoor air of 100 randomly selected public and commercial office buildings across the United States between 1994 and 1996. Each building was sampled for a one-week period in either winter or summer and air samples were collected into passivated, evacuated whole air canisters (Summa). Physical characteristics of the buildings such as size, age, construction, and heating and ventilation parameters were recorded. Ambient sources of VOCs were also characterized for the entire building and in the individual sample locations (NYSDOH Appendix C, 2006).

The BASE study includes a tabulation of mean, 25th, 50th, 75th, 90th, 95th, and 99th percentile values for the distribution of each compound. The DOH recommends the use of the 90th percentile value from the BASE database for indoor air in office and commercial buildings (NYSDOH Appendix C, 2006). The BASE database was used as the primary reference for indoor air concentrations in this investigation.

In addition to the BASE database, Appendix C of the NYSDOH guidance incorporates several other databases of indoor air quality data, including a Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes published by NYSDOH in 2003. This study compiled VOC data in single-family homes heated by fuel oil across New York State between 1997 and 2003. The study included basement, living space and outdoor air samples, with more than 600 total samples collected from 104 homes testing both during and outside the heating season. The Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th percentile value was used as the secondary reference for indoor air concentrations in this investigation on request of the NYSDEC.

LABORATORY ANALYTICAL RESULTS

The laboratory analytical results of the sub-slab vapor samples and indoor/outdoor ambient air samples were evaluated in accordance with NYSDOH guidance using 90th percentile values published in the EPA BASE Database and the Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th percentile database values. Compounds identified within the facility at concentrations exceeding these database values are discussed in detail below. Site specific factors such as site usage, occupancy, subject site remediation activities, source of contamination, historical and current storage, and uses of volatile chemicals were also considered when evaluating the data.

SUB-SLAB VAPOR SAMPLES

A total of 29 compounds were identified above reported detection limits in the five (5) sub-slab vapor samples. Nine of the compounds including 1,1-dichloroethane (1,1-DCA), acetone, benzene, chloroethane, cyclohexane, ethanol, ethyl acetate, methylene chloride, and n-hexane, were detected above their respective reference values. The laboratory analytical results from the sub-slab vapor samples collected on January 4, 2022, are summarized in the **Table 1** and the laboratory analytical report is provided in **Appendix B.**

INDOOR/OUTDOOR AMBIENT AIR SAMPLES

Analytical results for the five (5) indoor ambient air samples (IA-1, IA-2, IA-3, IA-4, IA-5) exhibited concentrations above reported detection limits for 20 compounds during the sampling event. With the exception of carbon tetrachloride, all of the detected compounds were also detected in at least one sub-slab sample. Two compounds, acetone and n-hexane, were detected above their respective reference values.

Samples collected from the one (1) outdoor ambient air sample exhibited concentrations above detection limits of 8 compounds during the sampling event including acetone, carbon tetrachloride, chloromethane, dichlorodifluoromethane, ethanol, n-hexane, tetrachloroethene, and trichlorofluoromethane. No compounds were detected above their respective reference. Laboratory analytical results for the vapor and air samples collected on January 4, 2022, are summarized in **Table 1** and the laboratory analytical report is provided in **Appendix B.**

LABORATORY ANALTICAL RESULTS – DATA ANALYSIS

NYSDOH has assigned eight volatile chemicals, including trichloroethene (TCE), cis-1,2-dichloroethene, 1,1-dichloroethene, carbon tetrachloride, tetrachloroethene (PCE), 1,1,1-trichloroethane, methylene chloride, and vinyl chloride, to a "soil vapor/indoor air decision matrix" to provide guidance on a case-by-case basis about actions that should be taken to address current and potential exposures related to soil vapor intrusion. Based on the results of the sampling on January 4, 2022, these decision matrixes indicated "no further action" was recommend to address these eight chemicals.

During the January 4, 2022, sampling events, two compounds were identified in at least one of the indoor air samples collected above their respective reference concentrations (90th percentile BASE database or 95th percentile Volatile Organic Chemicals in Air of Fuel Oil Heated Homes database values), which are considered representative of background levels found in office settings. These compounds are acetone and n-hexane. All other identified compounds were found at concentrations falling within the range commonly found in commercial buildings across New York State.

Acetone exceeded its respective reference value in one (SS-4) of the sub-slab vapor samples and four (IA-2 through IA-5) of the indoor air samples. All of the indoor air samples had higher concentrations of acetone than in their corresponding sub-slab vapor sample. Acetone is a solvent commonly used as a cleaning agent. Given the chemical inventory identified during the pre-investigation inspection, it is likely that the compounds originated from sources within the building (a comprehensive list of these items is included in **Appendix A, Pre-Inspection and Building Inventory Reports**) rather than from soil vapor impacts beneath the building. Specifically, KBG Technologies ink degradent, and Sprayon vinyl strippable protective coating found onsite listed acetone as an ingredient. Acetone is also present is many cleaning products for grease, oil, adhesives, and paint. Over 200 different containers of paint/ink was found onsite for screen printing of textiles. IA-2 and IA-4, the air samples closest to the stored paint/ink and screen printing area, had the high levels of acetone which correlates with the areas where ink/paint cleaners would be used the most.

n-Hexane exceeded its respective reference value in all of the sub-slab vapor samples and all of the indoor air samples. n-Hexane is a solvent commonly used as an extraction or cleaning agent as well as in a variety of petroleum products. Given the chemical inventory identified during the pre-investigation inspection, it is certainly possible that the compounds originated from sources within the building (a comprehensive list of these items is included in **Appendix A**). However, their presence in the sub-slab means that migration of soil vapor from impacts beneath the building cannot be ruled out either. Specifically, kerosene, machine oil, and oil lubricant were all found in the maintenance area onsite and are used in the maintenance of equipment onsite. These petroleum products all contain some level of n-hexane. Additionally, n-hexane is commonly used in the printing industry as a cleaner and as a component in some inks. IA-2 and IA-4, the air samples closest to the stored ink and screen printing area, had the high levels of n-hexane which correlates with the areas where ink

and ink cleaners would be used the most, as well as the area closest to the maintenance area where multiple petroleum products were stored.

To evaluate the potential VI risks associated with acetone and n-Hexane in indoor air, the EPA Vapor Intrusion Screening Level (VISL; November 2019) Calculator was utilized to calculate the cumulative VI risk associated with the compounds based on their highest indoor air screening results. The results of the VISL Calculator are summarized below:

Compound	Max Indoor Air Concentration From Vapor Investigation (ug/m3)	VISL Target Sub-Slab and Near-source Soil Gas Concentration (ug/m3)(HQ=1.0)	VISL Target Indoor Air Concentration (ug/m3)(HQ=1.0)	OSHA PEL (ug/m3)
Acetone	283	N/A	N/A	2,400,000
n-Hexane	238	102,000	3,070	180,000

Based on the results of the VISL Calculator, the concentrations measured in indoor air of n-Hexane are below the minimum indoor air concentrations that would potentially result in acute adverse health impacts to building occupants. No toxicity data for acetone was present in the VISL database so in order to evaluate the potential VI risks the highest indoor air screening was compared to the Occupational Safety and Health (OSHA) Permissible Exposure Limit (PEL) and acetone didn't exhibit concentrations exceeding the OSHA PEL.

Subsurface Surface Investigation

On January 13, 2022, Cascade Environmental (Cascade) of Schenectady, New York contracted by AG Geology, cleared two soil borings inside the facility. The soil borings were advanced to resample boring locations (GSB-3 and GSB-4) that previously exceeded the NYS Soil Cleanup Objectives (SCO). The locations of the soil borings and monitoring wells is provided in **Figure 2.**

SOIL BORING ADVANCEMENT

The borehole location was initially cleared with a vacuum and air-knife to 5 ft bgs. A Geoprobe was used to advance the remainder of the boring to clean endpoints below the groundwater table. The soil borings (SB-1 and SB-2) were advanced to 12.5 ft bgs and 12 ft bgs, respectively, and could not be advanced due to refusal. Soil samples were collected, and field screened with a PID at one-foot intervals throughout boring advancement. Although PID readings were collected every foot they were not recorded on the soil log. During the soil boring advancement, site-specific stratigraphy was observed to be predominantly light brown clay with some gravel. Groundwater was encountered between 10 and 12 ft bgs. All soil was classified in accordance with the Unified Soil Classification System.

Representative soil samples were collected from the soil boring at the groundwater-soil interface, and at the endpoint of the boring. An additional soil sample was collected at the interval exhibiting the highest PID reading above the groundwater interface in each boring for a total of six samples. Once collected, each sample was transferred to laboratory obtained glassware and placed on ice in a dedicated cooler. The soil samples were then submitted to Eurofins Lancaster Laboratories Env., LLC (Eurofins) of Lancaster, Pennsylvania. Eurofins is a NYSDOH certified laboratory (certification number 10670). The soil samples were analyzed for VOCs via USEPA Methods 8260. The analytical results for these soil samples are summarized in **Table 2.** The soil boring logs are included in **Appendix C.**

SOIL BORING RESULTS

AG Geology obtained a total of six soil samples during the subsurface investigation from the designated intervals SB-1 (8-10'), SB-1 (10-12'), SB-1 (12.5'), SB-2 (8-10'), SB-2 (10-12'), SB-2 (12'). A review of the laboratory analysis of the soil samples collected during this investigation identified all intervals had no VOC concentrations exceeding applicable NYSDEC SCOs for Gasoline and Fuel Oil Contaminated Soils, as shown in **Table 2.** The total VOC concentrations ranged from 23.76 micrograms per kilogram (ug/kg) in SB-1 (8-10') and 135 ug/kg in soil sample SB-2 (12').

Analytical results for these soil samples are summarized in **Table 2** and boring locations are illustrated on **Figure 2.** A copy of the Eurofins Laboratory Analytical Report for this soil sampling event is located in **Appendix B.**

GROUNDWATER MONITORING

On December 17, 2021, monitoring wells MW-101, MW-102, MW-106, MW-107, and CSW-06 were gauged for depth to water and monitored for the presence of LNAPL using an oil/water interface probe. LNAPL was not detected in the monitoring well during this assessment. CSW-01 and SCWR-05 were attempted to be sampled during this event as well but were found to be abandoned and no groundwater sample could be obtained.

AG Geology collected groundwater samples from monitoring wells MW-101, MW-102, MW-106, MW-107, and CSW-06 using dedicated disposable polyethylene bailers to both purge the well and collect groundwater sample. Since the wells have not been sampled since 2008 each of these monitoring wells were developed prior to sampling. A minimum of five casing volumes of groundwater were purged to remove the majority of the soil and silt captured in the well screen and to diminish the turbidity of the groundwater where able. CSW-06 ran dry before five casing volumes were able to be extracted so the well was sampled after being purged dry three times. A gauging and purge log is included as **Appendix D**. CSW-06 was recorded as CSW-08 on purge log however no CSW-08 exists onsite. Once collected, the groundwater samples were transferred to laboratory obtained glassware and placed on ice in a dedicated cooler to be sent to Eurofins for analysis. The groundwater samples were analyzed for VOCs via USEPA Method 8260.

GROUNDWATER RESULTS

The groundwater samples from MW-101, MW-102, MW-106, MW-107 and CSW-06 were compared to the applicable Groundwater Standards and Guidance Values listed in NYSDEC Technical & Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values (TOGS WQS).

Laboratory analytical results identified total VOC concentrations of 0.3 ug/L for MW-101 and total VOC concentrations of 0.6 ug/L for MW-106. No detected VOCs exceeded NYSDEC TOGS WQS at MW-101 and MW-106. No VOCs were detected above laboratory reporting limits at MW-102, MW-107, and CSW-06. The analytical results for groundwater samples collected are presented in **Table 3.**

WASTE DISPOSAL

During the subsurface investigation one 55-gallon drum was used to stage soil cuttings and one 55-gallon drum was used to stage purge water prior to disposal. Both drums were removal from site on May 10, 2022 by Lorco Petroleum Services (Lorco). The soil drum was disposed of at Clean Earth, Inc. in Kearny, NJ. And the purge water was disposed of at Lorco's facility in Elizabeth, NJ. Wate Manifests are included in **Appendix E**.

Conclusion

VAPOR INTRUSION CONCLUSION

Based on the analytical results of the vapor sampling, impacts exist within the sub slab. Carbon tetrachloride was detected above the lowest reference value in the indoor air and outdoor ambient air samples but was within the no further action range in the NYDOH Soil Vapor Intrusion decision matrix. Two compounds acetone and n-hexane exceeded reference concentrations in both sub-slab and indoor air samples. Given that there are concentrations of the two compounds in the indoor air were higher than in the sub-slab and present in items within the chemical inventory identified during pre-inspection inventories it is likely there are sources for these chemicals within the building .These results indicate that the indoor air exceedances originated from sources within the building or outdoor air rather than soil vapor impacts.

Based on the results of the VISL Calculator, the concentrations measured in indoor air of both acetone and n-Hexane are below the minimum indoor air concentrations that would potentially result in acute adverse health impacts to building occupants. Although no reference values were available for acetone in the VISL database, concentrations of acetone did not exceed OSHA PELs. Given that these compounds are not indicative of a health hazard and all have sources originating within the building or outdoor air, AG Geology is requesting that the use and quarterly inspections of the SDSS be discontinued.

SUBSURFACE INVESTIGATION CONCLUSION

Based on analytical results of the soil and groundwater samples collected during the December 2021 and January 2022 assessment activities, soil and groundwater VOC impacts at the site are below applicable NYS soil and groundwater standards.

Given these results, it is recommended that the remaining ECs and ICs be discontinued, and no further inspections are necessary.

Remarks

The recommendations contained in this report represent AG Geology D.P.C.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. The contract between AG Geology D.P.C. and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of AG Geology D.P.C.'s client and anyone else specifically identified in writing by AG Geology D.P.C. as a user of this report. AG Geology D.P.C. will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, AG Geology D.P.C. makes no express or implied warranty as to the contents of this report.

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Reviewed by:

Date: June 17, 2022

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New York State Department of Health, Center for Environmental Health, Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.

New York State Department of Environmental Conservation, Division of Hazardous Waste Remediation, Technical and Administrative Guidance Memorandum on Determination of Soil Cleanup Objectives and Cleanup Levels, dated January 24, 1994, revised August 22, 2001.

New York State Department of Environmental Conservation, Division of Water Resources, Water Quality Regulations, Surface Water and Groundwater Classifications and Standards, New York State, Codes, Rules and Regulations Title 6, Chapter X, Parts 700-706, through March 1998.

Figures

300 150 0 150 300 ft

Scale: One inch equals approximately three hundred feet

FIGURE 1 - SITE LOCATION MAP

FORMER CHAMPION PRODUCTS FACILITY
200 NORTH MAIN STREET
PERRY, NEW YORK

PROJECT NO.:	160276080A
DATE:	8/12/2016
PREPARED BY:	BR
DRAWN BY:	LKO
REVIEWED BY:	BR

anteagroup
5788 Widewaters Parkway
Syracuse, NY 13214

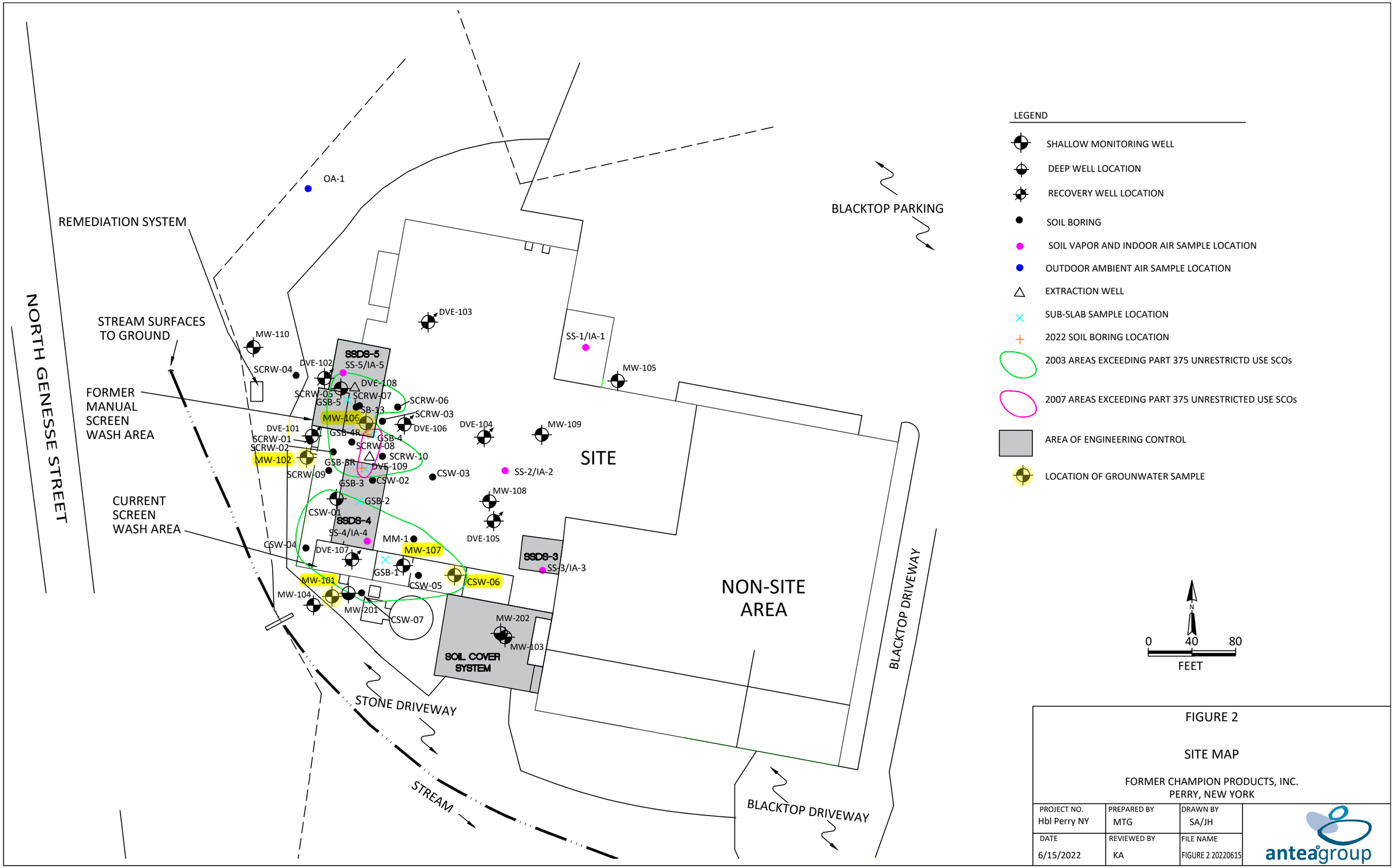


FIGURE 2

SITE MAP

FORMER CHAMPION PRODUCTS, INC.
PERRY, NEW YORK

PROJECT NO.	PREPARED BY	DRAWN BY
Hbl Perry NY	MTG	SA/JH
DATE	REVIEWED BY	FILE NAME
6/15/2022	KA	FIGURE 2 20220615

anteagroup

Tables

TABLE 1
Sub-Slab Vapor and Ambient Air Analytical Results
Former Champion Products, Inc.
Perry, New York

Compound	Indoor, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th Percentile Value[1]	Indoor, EPA 2001 BASE Database 90th Percentile Value[2]	Temporary Sub-Slab Vapor Samples									
			SS-1		SS-2		SS-3		SS-4		SS-5	
Date			3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022
1,1,1-Trichloroethane	6.9	20.6	98	<1.09	22	4.92	220	<1.09	7600	2.91	1200	1.13
1,1,2,2-Tetrachloroethane	<0.25	NGV	<2.1	<1.37	<5.5	<1.37	<4.1	<1.37	<89	<1.37	<8.2	<1.37
1,1,2-Trichloroethane	<0.25	<1.5	<1.6	<1.09	<4.4	<1.09	<3.3	<1.09	<71	<1.09	<6.5	<1.09
1,1-Dichloroethane	<0.25	<0.70	<1.2	<0.809	<3.2	<0.809	<2.4	<0.809	1300	<0.809	180	1.65
1,1-Dichloroethene	0.7	<1.4	<1.2	<0.793	<3.2	<0.793	<2.4	<0.793	59	<0.793	<4.8	<0.793
1,2,4-Trichlorobenzene	6.3	<6.8	<5.6	<1.48	<15	<1.48	11	<1.48	240	<1.48	22	<1.48
1,2,4-Trimethylbenzene	18	9.5	3.1	<0.983	<3.9	2.36	<2.9	4.37	<64	1.83	<5.9	1.46
1,2-Dibromoethane	<0.25	<1.5	<2.3	<1.54	<6.1	<1.54	<4.6	<1.54	<100	<1.54	<9.2	<1.54
1,2-Dichlorobenzene	1.0	<1.2	<1.8	<1.2	<4.8	<1.2	<3.6	<1.2	<78	<1.2	<7.2	<1.2
1,2-Dichloroethane	<0.25	<0.90	<1.2	<0.809	<3.2	<0.809	<2.4	<0.809	<53	<0.809	<4.9	<0.809
1,2-Dichloropropane	<0.25	<1.6	<1.4	<0.924	<3.7	<0.924	<2.8	<0.924	<60	<0.924	<5.5	<0.924
1,3,5-Trimethylbenzene	6.5	3.7	<1.5	<0.983	<3.9	<0.983	<2.9	0.983	<64	<0.983	<5.9	<0.983
1,3-Butadiene	NGV	<3.0	<1.7	<0.442	<4.4	1.57	<3.3	<0.442	<73	0.557	<6.6	0.661
1,3-Dichlorobenzene	0.9	<2.4	<1.8	<1.2	<4.8	<1.2	<3.6	<1.2	<78	<1.2	<7.2	<1.2
1,4-Dichlorobenzene	2.6	5.5	3.9	<1.2	5.1	<1.2	<3.6	<1.2	<78	<1.2	<7.2	<1.2
1,4-Dioxane	NGV	NGV	<27	<0.721	<72	<0.721	<54	<0.721	<1,200	<0.721	<110	<0.721
2,2,4-Trimethylpentane	NGV	NGV	<1.4	<0.934	<3.7	<0.934	<2.8	3.12	<61	<0.934	<5.6	1.25
2-Butanone (Methyl Ethyl Ketone)	39	12	11	<1.47	10	6.93	7.7	9.44	<97	4.87	14	2.06
2-Hexanone	NGV	NGV	210	<0.82	410	<0.82	94	<0.82	<140	<0.82	940	<0.82
3-Chloropropene	NGV	NGV	<2.3	<0.626	<6.3	<0.626	<4.7	<0.626	<100	<0.626	<9.4	<0.626
4-Ethyltoluene	NGV	3.6	2.1	<0.983	<3.9	<0.983	<2.9	<0.983	<64	<0.983	<5.9	<0.983
4-Methyl-2-pentanone	NGV	6	86	<2.05	82	<2.05	45	<2.05	<140	<2.05	140	<2.05
Acetone	140	98.9	55	31.4	62	90.7	81	89.3	<780	109	120	78.9
Benzene	29	9.4	2.6	1.73	<2.6	21.1	2.8	1.66	<42	7.83	<3.8	1.63
Benzyl chloride	NGV	<6.8	--	<1.04	--	<1.04	--	<1.04	--	<1.04	--	<1.04
Bromodichloromethane	NGV	NGV	5.1	<1.34	<5.4	<1.34	<4	<1.34	<87	<1.34	<8	<1.34
Bromoform	NGV	NGV	<3.1	<2.07	<8.3	<2.07	<6.2	<2.07	<130	<2.07	<12	<2.07
Bromomethane	0.9	<1.7	<1.2	<0.777	<3.1	<0.777	<2.3	<0.777	<50	<0.777	<4.7	<0.777
Carbon disulfide	NGV	4.2	3.7	<0.623	<6.2	2.48	<4.7	<0.623	<100	2.72	<9.3	<0.623
Carbon tetrachloride	1.1	<1.3	<1.9	<1.26	<5	<1.26	<3.8	<1.26	<82	<1.26	<7.5	<1.26
Chlorobenzene	<0.25	<0.90	<1.4	<0.921	<3.7	<0.921	<2.8	<0.921	<60	<0.921	<5.5	<0.921
Chloroethane	0.6	<1.1	<2.0	<0.528	<5.3	<0.528	<4	<0.528	<87	0.668	<7.9	<0.528
Chloroform	4.6	1.1	88	<0.977	27	<0.977	28	<0.977	<63	<0.977	41	<0.977
Chloromethane	5.2	3.7	<1.5	0.989	<4.1	0.845	<3.1	0.809	<68	1.37	<6.2	1.45
cis-1,2-Dichloroethene	1.2	<1.9	<1.2	<0.793	<3.2	<0.793	<2.4	<0.793	<52	<0.793	<4.8	<0.793
cis-1,3-Dichloropropene	<0.25	<2.3	<1.4	<0.908	<3.6	<0.908	<2.7	<0.908	<59	<0.908	<5.4	<0.908
Cyclohexane	19	NGV	4.1	4.23	<2.8	57.5	7.6	2.37	210	23.8	38	1.9
Dibromochloromethane	NGV	NGV	<2.6	<1.7	<6.8	<1.7	<5.1	<1.7	<110	<1.7	<10	<1.7
Dichlorodifluoromethane	26	16.5	<3.7	2.76	<9.9	3.15	<7.4	6.68	<160	2.81	<15	2.96
Ethanol (Ethyl Alcohol)	3,000	210	--	69	--	105	--	362	--	81.2	--	480

TABLE 1
Sub-Slab Vapor and Ambient Air Analytical Results
Former Champion Products, Inc.
Perry, New York

Compound	Indoor, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th Percentile Value[1]	Indoor, EPA 2001 BASE Database 90th Percentile Value[2]	Temporary Sub-Slab Vapor Samples									
			SS-1		SS-2		SS-3		SS-4		SS-5	
Date			3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022
Ethyl Acetate	NGV	5.4	--	<1.8	--	19.9	--	<1.8	--	16.7	--	3.09
Ethylbenzene	13	5.7	2.3	<0.869	4.8	1.79	2.7	2.02	<56	1.32	<5.2	1.13
Freon-113	NGV	NGV	<2.3	<1.53	<6.1	<1.53	<4.6	<1.53	<100	<1.53	<9.2	<1.53
Freon-114	NGV	NGV	<2.1	<1.4	<5.6	<1.4	<4.2	<1.4	<91	<1.4	<8.4	<1.4
Heptane	NGV	NGV	<1.2	2.06	<3.3	59.4	3.9	3.35	<53	25.1	4.9	2.29
Hexachlorobutadiene	11	<6.8	<3.2	<2.13	<8.5	<2.13	<6.4	<2.13	<140	<2.13	<13	<2.13
Isopropanol	NGV	NGV	<18	166	<49	240	<37	285	<810	202	<74	184
Methyl tert butyl ether	71	11.5	<2.7	<0.721	<7.2	<0.721	<5.4	<0.721	<120	<0.721	<11	<0.721
Methylene chloride	45	10	31	<1.74	59	1.87	270	<1.74	900	1.83	120	42
n-Hexane	35	10.2	<2.6	35.2	<7	318	6.7	140	<120	253	<11	171
o-Xylene	13	7.9	1.5	<0.869	<3.5	2.38	<2.6	3.05	<56	1.87	<5.2	1.52
p/m-Xylene	21	22.2	4.8	2.19	<8.7	6.08	7.8	8.21	<140	4.78	<13	4.16
Styrene	2.3	1.9	<1.3	<0.852	<3.4	<0.852	<2.6	<0.852	<55	<0.852	<5.1	<0.852
Tertiary butyl Alcohol	NGV	NGV	27	<1.52	<61	2.06	<45	<1.52	<1000	<1.52	<91	7.15
Tetrachloroethene	4.1	15.9	81	<1.36	660	2.35	630	<1.36	390	<1.36	1500	<1.36
Tetrahydrofuran	9.4	NGV	<22	<1.47	<59	5.46	<44	15.5	<970	3.01	<88	<1.47
Toluene	110	43	8.3	3.62	5.7	17.6	8.3	8.37	<49	10.2	7.2	7.24
trans-1,2-Dichloroethene	NGV	NGV	<1.2	<0.793	<3.2	<0.793	<2.4	<0.793	<52	<0.793	<4.8	<0.793
trans-1,3-Dichloropropene	<0.25	<1.3	<1.4	<0.908	<3.6	<0.908	<2.7	<0.908	<59	<0.908	<5.4	<0.908
Trichloroethene	0.8	4.2	16	2.94	<4.3	2.72	<3.2	3.98	<70	1.81	24	3.96
Trichlorofluoromethane	30	18.1	6.2	6.97	16	5.62	18	14.4	<73	3.64	15	3.47
Vinyl bromide	NGV	NGV	--	<0.874	--	<0.874	--	<0.874	--	<0.874	--	<0.874
Vinyl chloride	<0.25	<1.9	<0.77	<0.511	<2.0	<0.511	<1.5	<0.511	<33	<0.511	<3.1	<0.511
Xylenes, Total	NGV	NGV	6.3	2.19	ND	8.46	7.8	11.26	ND	6.65	ND	5.68
Total VOCs	NGV	NGV	750.7	329.09	1,363.6	981.79	1,444.5	964.61	10,699.0	764.83	4,366.1	1,006.06

Notes:
1. DOH SVI 2006, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes Upper Fence Value as a benchmark, Table C1
2. DOH SVI 2006, EPA 2001: Building Assessment and Survey Evaluation (BASE) Database 90th Percentile Value as a benchmark, Table C2
SS - Sub-Slab Vapor Sample
IA - Indoor Ambient Air Sample
OA - Outdoor Ambient Air Sample
NGV - No Guidance Value
ND - Not Detected
-- - Not Analyzed
< - Not detected at or above indicated laboratory reporting limit
All analytical results are in micrograms per cubic meter ($\mu g/m^3$)

TABLE 1
Sub-Slab Vapor and Ambient Air Analytical Results
Former Champion Products, Inc.
Perry, New York

Compound	Indoor, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th Percentile Value[1]	Indoor, EPA 2001 BASE Database 90th Percentile Value[2]	Indoor Ambient Air Samples										Outdoor, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th Percentile Value[1]	Outdoor, EPA 2001 BASE Database 90th Percentile Value[2]	Outdoor Ambient Air Sample	
			IA-1		IA-2		IA-3		IA-4		IA-5				UW-1	OA-1
Date			3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022			3/29/2007	1/4/2022
1,1,1-Trichloroethane	6.9	20.6	<0.87	0.207	<65	0.235	<87	0.147	<93	0.295	<44	0.278	0.7	2.6	<0.87	<0.109
1,1,2,2-Tetrachloroethane	<0.25	NGV	<1.1	<1.37	<82	<1.37	<110	<1.37	<120	<1.37	<55	<1.37	<0.25	NGV	<1.1	<1.37
1,1,2-Trichloroethane	<0.25	<1.5	<0.87	<1.09	<65	<1.09	<87	<1.09	<93	<1.09	<44	<1.09	<0.25	<1.6	<0.87	<1.09
1,1-Dichloroethane	<0.25	<0.70	<0.65	<0.809	<49	<0.809	<65	<0.809	<69	<0.809	<32	<0.809	<0.25	<0.6	<0.65	<0.809
1,1-Dichloroethene	0.7	<1.4	<0.63	<0.079	<48	<0.079	<63	<0.079	<67	<0.079	<32	<0.079	<0.25	<1.4	<0.63	<0.079
1,2,4-Trichlorobenzene	6.3	<6.8	<3.0	<1.48	**220**	<1.48	**300**	<1.48	<310	<1.48	**150**	<1.48	4.8	<6.4	3	<1.48
1,2,4-Trimethylbenzene	18	9.5	<0.79	<0.983	<59	1.58	<79	1.12	<84	1.55	<39	1.34	2.5	5.8	<0.79	<0.983
1,2-Dibromoethane	<0.25	<1.5	<1.2	<1.54	<92	<1.54	<120	<1.54	<130	<1.54	<61	<1.54	<0.25	<1.6	<1.2	<1.54
1,2-Dichlorobenzene	1.0	<1.2	<0.96	<1.2	<72	<1.2	<96	<1.2	<100	<1.2	<48	<1.2	0.9	<1.2	<0.96	<1.2
1,2-Dichloroethane	<0.25	<0.90	<0.65	<0.809	<49	<0.809	<65	<0.809	<69	<0.809	<32	<0.809	<0.25	<0.8	<0.65	<0.809
1,2-Dichloropropane	<0.25	<1.6	<0.74	<0.924	<55	<0.924	<74	<0.924	<79	<0.924	<37	<0.924	<0.25	<1.6	<0.74	<0.924
1,3,5-Trimethylbenzene	6.5	3.7	<0.79	<0.983	<59	<0.983	<79	<0.983	<84	<0.983	<39	<0.983	1.0	2.7	<0.79	<0.983
1,3-Butadiene	NGV	<3.0	<0.88	<0.442	<66	<0.442	<88	<0.442	<93	<0.442	<44	<0.442	NGV	<3.4	<0.88	<0.442
1,3-Dichlorobenzene	0.9	<2.4	<0.96	<1.2	<72	<1.2	<96	<1.2	<100	<1.2	<48	<1.2	0.7	<2.2	<0.96	<1.2
1,4-Dichlorobenzene	2.6	5.5	<0.96	<1.2	<72	<1.2	<96	<1.2	<100	<1.2	<48	<1.2	0.8	1.2	<0.96	<1.2
1,4-Dioxane	NGV	NGV	<14	<0.721	<1,100	<0.721	<1,400	<0.721	<1,500	<0.721	<720	<0.721	NGV	NGV	<14	<0.721
2,2,4-Trimethylpentane	NGV	NGV	<0.75	<0.934	<56	<0.934	<75	<0.934	<79	<0.934	<37	<0.934	NGV	NGV	<0.75	<0.934
2-Butanone (Methyl Ethyl Ketone)	39	12	3.8	<1.47	<88	<1.47	<120	<1.47	<120	<1.47	<59	1.52	17	11.3	<1.2	<1.47
2-Hexanone	NGV	NGV	<1.6	<0.82	<120	<0.82	<160	<0.82	<170	<0.82	<82	<0.82	NGV	NGV	<1.6	<0.82
3-Chloropropene	NGV	NGV	<1.3	<0.626	<94	<0.626	<130	<0.626	<130	<0.626	<63	<0.626	NGV	NGV	<1.3	<0.626
4-Ethyltoluene	NGV	3.6	<0.79	<0.983	<59	<0.983	<79	<0.983	<84	<0.983	<39	<0.983	NGV	3	<0.79	<0.983
4-Methyl-2-pentanone	NGV	6	<1.6	<2.05	<120	<2.05	<160	<2.05	<170	<2.05	<82	<2.05	NGV	1.9	<1.6	<2.05
Acetone	140	98.9	22	38.5	<710	**257**	<950	**192**	<1000	**283**	<480	**231**	58	43.7	<9.5	5.94
Benzene	29	9.4	<0.51	0.805	<38	0.933	<51	0.827	<54	0.923	<26	0.856	5.8	6.6	<0.51	<0.639
Benzyl chloride	NGV	<6.8	--	<1.04	--	<1.04	--	<1.04	--	<1.04	--	<1.04	NGV	<6.4	--	<1.04
Bromodichloromethane	NGV	NGV	<1.1	<1.34	<80	<1.34	<110	<1.34	<110	<1.34	<54	<1.34	NGV	NGV	<1.1	<1.34
Bromoform	NGV	NGV	<1.7	<2.07	<120	<2.07	<170	<2.07	<180	<2.07	<83	<2.07	NGV	NGV	<1.7	<2.07
Bromomethane	0.9	<1.7	<0.62	<0.777	<47	<0.777	<62	<0.777	<66	<0.777	<31	<0.777	0.9	<1.6	<0.62	<0.777
Carbon disulfide	NGV	4.2	<1.2	<0.623	<93	<0.623	<120	<0.623	<130	<0.623	<62	<0.623	NGV	3.7	<1.2	<0.623
Carbon tetrachloride	1.1	<1.3	<1	0.434	<75	0.415	<100	0.415	<110	0.44	<50	0.447	1.0	0.7	<1.0	0.465
Chlorobenzene	<0.25	<0.90	<0.74	<0.921	<55	<0.921	<74	<0.921	<78	<0.921	<37	<0.921	<0.25	<0.80	<0.74	<0.921
Chloroethane	0.6	<1.1	<1.1	<0.528	<79	<0.528	<110	<0.528	<110	<0.528	<53	<0.528	0.4	<1.2	<1.1	<0.528
Chloroform	4.6	1.1	<0.78	<0.977	<59	<0.977	<78	<0.977	<83	<0.977	<39	<0.977	0.5	0.6	<0.78	<0.977
Chloromethane	5.2	3.7	0.99	0.975	<62	1.04	<83	1.09	<87	1.05	<41	1.06	4.6	3.7	1.1	1.1
cis-1,2-Dichloroethene	1.2	<1.9	<0.63	<0.079	<48	<0.079	<63	<0.079	<67	<0.079	<32	<0.079	<0.25	<1.8	<0.63	<0.079
cis-1,3-Dichloropropene	<0.25	<2.3	<0.73	<0.908	<54	<0.908	<73	<0.908	<77	<0.908	<36	<0.908	<0.25	<2.2	<0.73	<0.908
Cyclohexane	19	NGV	<0.55	<0.688	<41	1.34	<55	0.995	<59	1.39	<28	1.13	3.0	NGV	<0.55	<0.688
Dibromochloromethane	NGV	NGV	<1.4	<1.7	<100	<1.7	<140	<1.7	<140	<1.7	<68	<1.7	NGV	NGV	<1.4	<1.7
Dichlorodifluoromethane	26	16.5	3.4	3.04	<150	3.23	<200	3.4	<210	2.99	<99	2.85	11	8.1	3.0	2.32
Ethanol (Ethyl Alcohol)	3,000	210	--	30.1	--	77.6	--	61	--	73.5	--	55.4	220	57	--	23.4

TABLE 1
Sub-Slab Vapor and Ambient Air Analytical Results
Former Champion Products, Inc.
Perry, New York

Compound	Indoor, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th Percentile Value[1]	Indoor, EPA 2001 BASE Database 90th Percentile Value[2]	Indoor Ambient Air Samples										Outdoor, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th Percentile Value[1]	Outdoor, EPA 2001 BASE Database 90th Percentile Value[2]	Outdoor Ambient Air Sample	
			IA-1		IA-2		IA-3		IA-4		IA-5				UW-1	OA-1
Date			3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022	3/29/2007	1/4/2022			3/29/2007	1/4/2022
Ethyl Acetate	NGV	5.4	--	<1.8	--	<1.8	--	<1.8	--	<1.8	--	<1.8	NGV	1.5	--	<1.8
Ethylbenzene	13	5.7	<0.69	<0.869	<52	1.08	<69	<0.869	<74	<0.869	<35	<0.869	1.9	3.5	<0.69	<0.869
Freon-113	NGV	NGV	<1.2	<1.53	<92	<1.53	<120	<1.53	<130	<1.53	<61	<1.53	NGV	NGV	<1.2	<1.53
Freon-114	NGV	NGV	<1.1	<1.4	<84	<1.4	<110	<1.4	<120	<1.4	<56	<1.4	NGV	NGV	<1.1	<1.4
Heptane	NGV	NGV	<0.66	0.832	<49	1.36	<66	0.979	<70	1.41	<33	1.22	NGV	NGV	<0.66	<0.82
Hexachlorobutadiene	11	<6.8	<1.7	<2.13	<130	<2.13	<170	<2.13	<180	<2.13	<85	<2.13	7.0	<6.4	<1.7	<2.13
Isopropanol	NGV	NGV	<9.8	10.2	<740	12.7	<980	14.9	<1000	8.41	<490	6.61	NGV	NGV	<9.8	<1.23
Methyl tert butyl ether	71	11.5	<1.4	<0.721	<110	<0.721	<140	<0.721	<150	<0.721	<72	<0.721	NGV	6.2	<1.4	<0.721
Methylene chloride	45	10	**35**	<1.74	**5200**	<1.74	**8700**	<1.74	**5900**	<1.74	**4900**	<1.74	2.9	6.1	2.0	<1.74
n-Hexane	35	10.2	<1.4	**43.3**	**110**	**235**	**160**	**171**	**160**	**238**	**250**	**191**	5.1	6.4	<1.4	3.02
o-Xylene	13	7.9	<0.69	<0.869	<52	1.26	<69	0.947	<74	1.12	<35	0.873	2.3	4.6	<0.69	<0.869
p/m-Xylene	21	22.2	<1.7	<1.74	<130	3.26	<170	2.19	<180	2.81	<87	2.15	3.1	12.8	<1.7	<1.74
Styrene	2.3	1.9	<0.68	<0.852	<51	<0.852	<68	<0.852	<72	<0.852	<34	<0.852	0.6	1.3	<0.68	<0.852
Tertiary butyl Alcohol	NGV	NGV	<12	<1.52	<910	<1.52	<1200	<1.52	<1300	<1.52	<610	<1.52	NGV	NGV	<12	<1.52
Tetrachloroethene	4.1	15.9	1.7	0.441	<81	1.25	**300**	0.882	<120	1.21	**220**	1.19	1.6	6.5	<1.1	0.183
Tetrahydrofuran	9.4	NGV	<12	<1.47	<880	<1.47	<1,200	<1.47	<1,200	<1.47	<590	<1.47	0.4	NGV	<12	<1.47
Toluene	110	43	1.5	2.76	<45	4.71	<60	3.77	<64	4.64	<30	3.84	21	33.7	<0.6	<0.754
trans-1,2-Dichloroethene	NGV	NGV	<0.63	<0.793	<48	<0.793	<63	<0.793	<67	<0.793	<32	<0.793	NGV	NGV	<0.63	<0.793
trans-1,3-Dichloropropene	<0.25	<1.3	<0.73	<0.908	<54	<0.908	<73	<0.908	<77	<0.908	<36	<0.908	<0.25	<1.4	<0.73	<0.908
Trichloroethene	0.8	4.2	<0.86	0.118	<64	0.177	<86	0.172	<91	0.124	<43	<0.107	0.5	1.3	<0.86	<0.107
Trichlorofluoromethane	30	18.1	14	10.5	<67	5.3	<90	5.73	<96	3.94	**45**	3.17	6.1	4.3	1.3	1.57
Vinyl bromide	NGV	NGV	--	<0.874	--	<0.874	--	<0.874	--	<0.874	--	<0.874	NGV	NGV	--	<0.874
Vinyl chloride	<0.25	<1.9	<0.41	<0.051	<31	<0.051	<41	<0.051	<43	<0.051	<20	<0.051	<0.25	<1.8	<0.41	<0.051
Xylenes, Total	NGV	NGV	ND	ND	ND	4.52	ND	3.137	ND	3.93	ND	3.023	NGV	NGV	ND	ND
Total VOCs	NGV	NGV	82.39	142.2	5,530.0	609.5	9,460.0	461.6	6,060.0	626.8	5,565.0	505.9	NGV	NGV	10.4	38.0

Notes:
1. OH SVI 2006, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes Upper Fence Value as a benchmark, Table C1
2. DOH SVI 2006, EPA 2001: Building Assessment and Survey Evaluation (BASE) Database 90th Percentile Value as a benchmark, Table C2
SS - Sub-Slab Vapor Sample
IA - Indoor Ambient Air Sample
OA - Outdoor Ambient Air Sample
NGV - No Guidance Value
ND - Not Detected
-- - Not Analyzed
< - Not detected at or above indicated laboratory reporting limit
All analytical results are in micrograms per cubic meter ($\mu g/m^3$)
Values shaded light grey are non-detected results above the NYSDOH 2003 air values
Values shaded dark grey are non-detected results above the EPA 2001 Base Values
BOLD - Exceeds NYSDOH 2003 Air Values
BOLD - Exceeds EPA 2001 Base Values

TABLE 2
Soil Analytical Results
Former Champion Products, Inc.
Perry, New York

Analytical Parameter	NYSDEC CP-51 Soil Cleanup Objectives (µg/kg)[1]	Commercial Soil Cleanup Objectives (µg/kg)[2]	SB-1 (8-10') 1/13/2022	SB-1 (10-12') 1/13/2022	SB-1 (12.5') 1/13/2022	SB-2 (8-10') 1/13/2022	SB-2 (10-12') 1/13/2022	SB-2 (12') 1/13/2022
Volatile Organic Compounds (VOCs) via EPA method 8260D								
Benzene	60	44,000	1.3 J	<28	5.4	2.8 J	<23	4.2
Toluene	700	500,000	2.6 J	<28	11	5.3	<27	7.4
Ethylbenzene	1,000	390,000	0.26 J	<28	1.3 J	0.57 J	<18	0.7 J
Xylene (Total)	260	500,000	2 J	<78	9.5	4.4 J	<46	5.2 J
Total BTEX	*NGV*	*NGV*	6.16	ND	27.2	13.07	ND	17.5
1,1,1-Trichloroethane	680	500,000	9.3	53 J	5.1	31	87 J	74
1,1-Dichloroethane	270	240,000	2.1 J	<28	<0.42	7.6	<23	35
1,2,3-Trimethylbenzene	*NGV*	*NGV*	<0.28	<28	0.73 J	<4.2	<23	<0.39
1,2,4-Trimethylbenzene	3,600	190,000	0.56 J	<28	3.3 J	1.2 J	<23	1.2 J
Acetone	50	500,000	4 J	**<330**	8.2 J	5.1 J	**<270**	6.6 J
Carbon disulfide	2,700	NGV	1.2 J	<33	<0.50	<4.2	<27	<0.47
Chloroethane	*NGV*	*NGV*	<0.56	<56	<0.84	<4.2	<46	<0.78
Chloroform	370	350,000	<0.34	<33	<0.50	<4.2	<27	<0.47
cis-1,2-Dichloroethene	250	500,000	<0.28	<28	<0.42	<4.2	<23	0.64 J
Methylene chloride	50	500,000	<1.1	**<110**	<1.7	<4.2	**<92**	<1.6
n-Butylbenzene	12,000	500,000	<1.7	<170	<2.5	<6.6	<140	<2.3
Styrene	300,000	NGV	<0.23	<22	<0.34	<4.2	<18	<0.31
Tetrachloroethene	1,300	150,000	0.44 J	<28	<0.42	<4.2	<23	<0.39
Vinyl chloride	20	13,000	<0.34	**<33**	<0.50	<4.2	**<27**	<0.47
Total VOCs	*NGV*	*NGV*	23.76	53.0	44.53	57.97	87	134.94

Notes:

1. Guidance value is the Soil Clean-up Levels for Soils based on NYSDEC's Final Commissioner Policy, CP-51/ Soil Clean-up Guidance (CP-51), dated October 21, 2010.

2. Restricted Use Soil Cleanup Objectives For Commercial Use, promulgated per Article 27, Title 14 of the Environmental Conservation Law (The Brownfield Cleanup Program), as referenced in CP-51

Total BTEX ,Total VOCs - Sum of all BTEX concentrations, sum of all VOCs concentrations rounded
µg/kg-micrograms
BOLD and Shaded - Non-Detect value exceeding NYSDEC-51 Soil Cleanup Levels
BOLD - Detection Exceeds NYSDEC CP-51 Soil Cleanup Levels
BOLD - Detection Exceeds Commercial Brownfield Soil Cleanup Objectives
ND - Not detected
< - Not detected at or above indicated laboratory reporting
-- Not sampled
J - Laboratory estimated value
NGV - No guidance value available for this parameter

TABLE 3
Groundwater Analytical Results
Former Champion Products, INC.
Perry, New York

Analytical Parameter	NY TOGS Class GA GW Standards[1] (µg/L)	CSW-06		MW-101		MW-102		MW-106		MW-107	
		3/11/2008	12/17/2021*	3/11/2008	12/17/2021	3/11/2008	12/17/2021	3/11/2008	12/17/2021	3/11/2008	12/17/2021
Volatile Organic Compounds (VOCs) via EPA method 8260C											
1,1,1-Trichloroethane	*5*	ND	<0.30	**6.7**	<0.30	ND	<0.30	ND	<0.30	**16**	<0.30
1,1-Dichloroethane	*5*	ND	<0.30	2.8	<0.30	ND	<0.30	**17**	0.6	**20**	<0.30
1,2,3-Trimethylbenzene	*5*	ND	<0.30	ND	<0.30	ND	<0.30	ND	<5.0	ND	<0.30
1,2,4-Trimethylbenzene	*5*	ND	<1.0	ND	<1.0	ND	<1.0	**73**	<1.0	ND	<1.0
Chloroethane	*5*	ND	<0.20	ND	<0.20	ND	<0.20	**12**	<0.20	ND	<0.20
Chloroform	*7*	ND	<0.30	ND	0.3	1.6	<0.30	ND	<0.30	ND	<0.30
cis-1,2-Dichloroethene	*5*	ND	<0.30	ND	<0.30	ND	<0.30	ND	<0.30	ND	<0.30
Methylene chloride	*5*	ND	<0.30	ND	<0.30	ND	<0.30	ND	<0.30	ND	<0.30
n-Butylbenzene	*5*	ND	<0.30	ND	<0.30	ND	<0.30	**6.4**	<0.30	ND	<0.30
Tetrachloroethene	*5*	ND	<0.30	3.9	<0.30	ND	<0.30	ND	<0.30	ND	<0.30
Vinyl chloride	*2*	ND	<0.20	ND	<0.20	ND	<0.20	ND	<0.20	ND	<0.20
Total VOCs	*NGV*	ND	ND	13.4	0.3	1.6	ND	108.4	0.6	36.0	ND

Notes:
1. Based on Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
Bold - Exceeds Applicable standard or guidance value.
ND - Not detected at or above indicated method detection limit
< - Not detected at or above indicated method detection limit
-- - Not analyzed
NGV - No standard or guidance value available for this analytical parameter.
ft bgs - feet below ground surface
µg/L - micrograms per liter (parts per billion)
*reported in lab report as CSW-08

Appendix A – Pre-Inspection and Building Inventory Report and Building Layout

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Ross Tomanelli Date/Time Prepared 12/16/21 900

Preparer's Affiliation Antea Group Phone No. 860 310 8784

Purpose of Investigation Vapor Intrusion Investigation

1. OCCUPANT:

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/persons at this location _____ Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: (Y) / N

Last Name: Gullo First Name: Adam

Address: _____

County: _____

Home Phone: 585 739 5230 Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

~~Residential~~ School (Commercial/Multi-use)

(Industrial) Church Other: Food Warehouse/textile warehous

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: N/A

If multiple units, how many? N/A

If the property is commercial, type?

Business Type(s) Food Warehouse (just storage), former champion plant, now textiles plant

Does it include residences (i.e., multi-use)? Y (N) If yes, how many? _____

Other characteristics:

Number of floors 2 Building age_____

Is the building insulated? (Y) N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

Little airflow between floors, as basement has active vents and heating, while first floor has no power and little ventilation. Lots of dust upstairs.

Airflow near source

Airflow near vapor points is mostly stagnant, as points are off to the side and away from fans or vents. Works run fans far away on main floor.

Outdoor air infiltration

Small amounts of air get in through cracks in windows, but large rooms, shelves, and walls block air from reaching vapor points.

Infiltration into air ducts

Unsure, air ducts not currently in use due to warm temps outside and inside.

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other Unsure, most likely Poured
g. Foundation walls:	unsealed	sealed	sealed with epoxy (unsure)	
h. The basement is:	wet	damp	dry	moldy very light mold in back rooms
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Electricity

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Ducts are across the ceiling on basement and up into first floor, but vents are running across all of ceiling on work floor/main floor.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time (Occasionally) Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	Workshop, regular work hours, sewing mostly
1st Floor	Not in use
2nd Floor	N/A
3rd Floor	N/A
4th Floor	N/A

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y / (N)

b. Does the garage have a separate heating unit? Y / N / (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify_____

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? (Y) / N Where & Type? Basement, textile shop

g. Is there smoking in the building? Y / (N) How frequently?_____

h. Have cleaning products been used recently? (Y) / N When & Type? Each week, disinfectant

i. Have cosmetic products been used recently? Y / (N) When & Type?_____

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? (Y) / N If yes, where vented? Unsure, small break room

n. Is there a bathroom exhaust fan? (Y) / N If yes, where vented? Outside

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / (N) When & Type? _____

Are there odors in the building? Y / (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)
Yes, use dry-cleaning infrequently (monthly or less)
Yes, work at a dry-cleaning service
No
(Unknown)

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: N/A

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

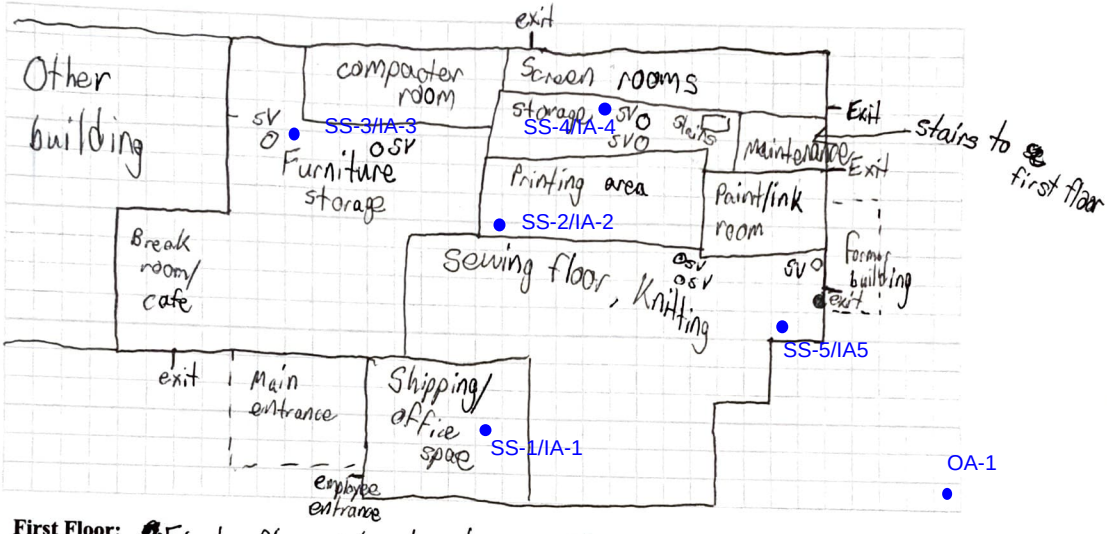
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



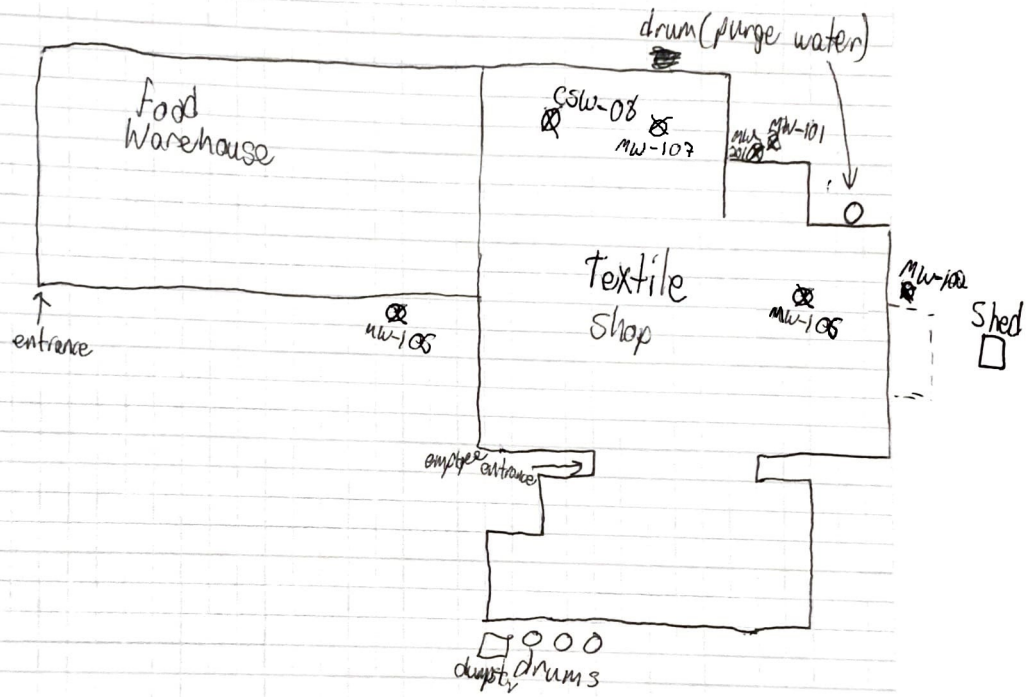
First Floor: First floor abandoned, unsure if safe to enter to map out

● Approximate locations of soil vapor and air samples - map not to scale

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



⊗ = MW found and not abandoned

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: Mini Rae 3000 PGM7320

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y / N
Printing	Ink, black	10	Good UO		0.0	Y
Painting	Paint, many colors	200	Good/fair U		0.0	Y
Maintenance	Kerosene	4	Good U		96.5	Y
Maintenance	Silicon lubricant	3	Good UO		0.2	Y
Maintenance	Machine oil	2	Good U		6.4	Y
Screen	Ink Degradient	4	Good U		0.1	Y
Screen	Detergent	1	U		0.0	Y
Screen	Unknown	2	U		0.0	Y
Screen	Unindex	1	U		0.0	Y
Sewing	Unmarked cleaning	5	U		0.0	N
Maintenance	Joint compound	2	U		0.1	Y
Maintenance	Oil Lubricant	6	UO		0.6	Y
Maintenance	Reflective coating	4	UO		0.8	Y
Maintenance	Steel Polish/clean	1	UO		0.2	Y
Machinery	Open Bucket	1	D		0.9	Y

Make gasoline

Closet w/ Kerosene

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Appendix B – Laboratory Analytical Reports

ANALYTICAL REPORT

Lab Number:	L2200747
Client:	Antea USA, Inc. 5788 Widewaters Parkway, 1st Floor Syracuse, NY 13214
ATTN:	Katharine Angel
Phone:	(315) 949-7036
Project Name:	HBL PERRY NY SITE CLOSURE
Project Number:	Not Specified
Report Date:	01/21/22

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-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2200747-01	IA-1	AIR	PERRY, NY	01/04/22 17:44	01/06/22
L2200747-02	IA-2	AIR	PERRY, NY	01/04/22 18:39	01/06/22
L2200747-03	IA-3	AIR	PERRY, NY	01/04/22 18:27	01/06/22
L2200747-04	IA-4	AIR	PERRY, NY	01/04/22 19:51	01/06/22
L2200747-05	IA-5	AIR	PERRY, NY	01/04/22 19:55	01/06/22
L2200747-06	OA-1	AIR	PERRY, NY	01/04/22 17:08	01/06/22

Project Name:	HBL PERRY NY SITE CLOSURE	**Lab Number:**	L2200747
Project Number:	Not Specified	**Report Date:**	01/21/22

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:	HBL PERRY NY SITE CLOSURE	**Lab Number:**	L2200747
Project Number:	Not Specified	**Report Date:**	01/21/22

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 30, 2021. The canister certification results are provided as an addendum.

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: Christopher J. Anderson

Title: Technical Director/Representative Date: 01/21/22

AIR

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-01
Client ID: IA-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:44
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/20/22 20:53
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.614	0.200	--	3.04	0.989	--		1
Chloromethane	0.472	0.200	--	0.975	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	16.0	5.00	--	30.1	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	16.2	1.00	--	38.5	2.38	--		1
Trichlorofluoromethane	1.86	0.200	--	10.5	1.12	--		1
Isopropanol	4.14	0.500	--	10.2	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-01
Client ID: IA-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:44
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	12.3	0.200	--	43.3	0.705	--		1
Benzene	0.252	0.200	--	0.805	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.203	0.200	--	0.832	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.732	0.200	--	2.76	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-01
Client ID: IA-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:44
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	99		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-01
Client ID: IA-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:44
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/20/22 20:53
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.038	0.020	--	0.207	0.109	--		1
Carbon tetrachloride	0.069	0.020	--	0.434	0.126	--		1
Trichloroethene	0.022	0.020	--	0.118	0.107	--		1
Tetrachloroethene	0.065	0.020	--	0.441	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	97		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	98		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-02
Client ID: IA-2
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:39
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/20/22 21:32
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.653	0.200	--	3.23	0.989	--		1
Chloromethane	0.502	0.200	--	1.04	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	41.2	5.00	--	77.6	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	108	1.00	--	257	2.38	--		1
Trichlorofluoromethane	0.944	0.200	--	5.30	1.12	--		1
Isopropanol	5.18	0.500	--	12.7	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-02
Client ID: IA-2
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:39
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	66.6	0.200	--	235	0.705	--		1
Benzene	0.292	0.200	--	0.933	0.639	--		1
Cyclohexane	0.389	0.200	--	1.34	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.333	0.200	--	1.36	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.25	0.200	--	4.71	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.248	0.200	--	1.08	0.869	--		1
p/m-Xylene	0.750	0.400	--	3.26	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.289	0.200	--	1.26	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-02
Client ID: IA-2
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:39
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.322	0.200	--	1.58	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	96		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-02
Client ID: IA-2
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:39
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/20/22 21:32
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.043	0.020	--	0.235	0.109	--		1
Carbon tetrachloride	0.066	0.020	--	0.415	0.126	--		1
Trichloroethene	0.033	0.020	--	0.177	0.107	--		1
Tetrachloroethene	0.185	0.020	--	1.25	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	95		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	96		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-03
Client ID: IA-3
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:27
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/20/22 22:10
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.688	0.200	--	3.40	0.989	--		1
Chloromethane	0.526	0.200	--	1.09	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	32.4	5.00	--	61.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	81.0	1.00	--	192	2.38	--		1
Trichlorofluoromethane	1.02	0.200	--	5.73	1.12	--		1
Isopropanol	6.05	0.500	--	14.9	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-03
Client ID: IA-3
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:27
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	48.5	0.200	--	171	0.705	--		1
Benzene	0.259	0.200	--	0.827	0.639	--		1
Cyclohexane	0.289	0.200	--	0.995	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.239	0.200	--	0.979	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.00	0.200	--	3.77	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.505	0.400	--	2.19	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.218	0.200	--	0.947	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-03
Client ID: IA-3
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:27
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.227	0.200	--	1.12	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	98		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-03
Client ID: IA-3
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:27
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/20/22 22:10
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.027	0.020	--	0.147	0.109	--		1
Carbon tetrachloride	0.066	0.020	--	0.415	0.126	--		1
Trichloroethene	0.032	0.020	--	0.172	0.107	--		1
Tetrachloroethene	0.130	0.020	--	0.882	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	96		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	97		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-04
Client ID: IA-4
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:51
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/20/22 22:49
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.604	0.200	--	2.99	0.989	--		1
Chloromethane	0.508	0.200	--	1.05	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	39.0	5.00	--	73.5	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	119	1.00	--	283	2.38	--		1
Trichlorofluoromethane	0.701	0.200	--	3.94	1.12	--		1
Isopropanol	3.42	0.500	--	8.41	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-04
Client ID: IA-4
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:51
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	67.4	0.200	--	238	0.705	--		1
Benzene	0.289	0.200	--	0.923	0.639	--		1
Cyclohexane	0.404	0.200	--	1.39	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.345	0.200	--	1.41	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.23	0.200	--	4.64	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.648	0.400	--	2.81	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.259	0.200	--	1.12	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-04
Client ID: IA-4
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:51
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.316	0.200	--	1.55	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	95		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-04
Client ID: IA-4
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:51
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/20/22 22:49
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.054	0.020	--	0.295	0.109	--		1
Carbon tetrachloride	0.070	0.020	--	0.440	0.126	--		1
Trichloroethene	0.023	0.020	--	0.124	0.107	--		1
Tetrachloroethene	0.178	0.020	--	1.21	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	94		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-05
Client ID: IA-5
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:55
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/21/22 00:08
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.576	0.200	--	2.85	0.989	--		1
Chloromethane	0.511	0.200	--	1.06	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	29.4	5.00	--	55.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	97.3	1.00	--	231	2.38	--		1
Trichlorofluoromethane	0.564	0.200	--	3.17	1.12	--		1
Isopropanol	2.69	0.500	--	6.61	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.514	0.500	--	1.52	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-05
Client ID: IA-5
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:55
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	54.2	0.200	--	191	0.705	--		1
Benzene	0.268	0.200	--	0.856	0.639	--		1
Cyclohexane	0.327	0.200	--	1.13	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.297	0.200	--	1.22	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.02	0.200	--	3.84	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.495	0.400	--	2.15	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.201	0.200	--	0.873	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-05
Client ID: IA-5
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:55
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.272	0.200	--	1.34	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	94		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-05
Client ID: IA-5
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:55
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/21/22 00:08
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	0.051	0.020	--	0.278	0.109	--		1
Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.176	0.020	--	1.19	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	93		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	94		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-06
Client ID: OA-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:08
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/20/22 19:36
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.470	0.200	--	2.32	0.989	--		1
Chloromethane	0.534	0.200	--	1.10	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	12.4	5.00	--	23.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.50	1.00	--	5.94	2.38	--		1
Trichlorofluoromethane	0.280	0.200	--	1.57	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-06
Client ID: OA-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:08
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.856	0.200	--	3.02	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-06
Client ID: OA-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:08
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	101		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200747-06
Client ID: OA-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:08
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/20/22 19:36
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.074	0.020	--	0.465	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.027	0.020	--	0.183	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	96		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	100		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 01/20/22 16:07

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-06 Batch: WG1596450-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/20/22 15:28

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1596452-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/20/22 15:28

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1596452-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200747
Report Date: 01/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/20/22 15:28

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1596452-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-06 Batch: WG1596450-3								
Vinyl chloride	83		-		70-130	-		25
1,1-Dichloroethene	103		-		70-130	-		25
cis-1,2-Dichloroethene	97		-		70-130	-		25
1,1,1-Trichloroethane	98		-		70-130	-		25
Carbon tetrachloride	92		-		70-130	-		25
Trichloroethene	94		-		70-130	-		25
Tetrachloroethene	93		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1596452-3								
Dichlorodifluoromethane	94		-		70-130	-		
Chloromethane	90		-		70-130	-		
Freon-114	94		-		70-130	-		
Vinyl chloride	87		-		70-130	-		
1,3-Butadiene	92		-		70-130	-		
Bromomethane	88		-		70-130	-		
Chloroethane	90		-		70-130	-		
Ethanol	100		-		40-160	-		
Vinyl bromide	94		-		70-130	-		
Acetone	102		-		40-160	-		
Trichlorofluoromethane	96		-		70-130	-		
Isopropanol	97		-		40-160	-		
1,1-Dichloroethene	90		-		70-130	-		
Tertiary butyl Alcohol	87		-		70-130	-		
Methylene chloride	91		-		70-130	-		
3-Chloropropene	101		-		70-130	-		
Carbon disulfide	110		-		70-130	-		
Freon-113	110		-		70-130	-		
trans-1,2-Dichloroethene	96		-		70-130	-		
1,1-Dichloroethane	101		-		70-130	-		
Methyl tert butyl ether	100		-		70-130	-		
2-Butanone	98		-		70-130	-		
cis-1,2-Dichloroethene	100		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1596452-3								
Ethyl Acetate	100		-		70-130	-		
Chloroform	96		-		70-130	-		
Tetrahydrofuran	94		-		70-130	-		
1,2-Dichloroethane	100		-		70-130	-		
n-Hexane	92		-		70-130	-		
1,1,1-Trichloroethane	104		-		70-130	-		
Benzene	86		-		70-130	-		
Carbon tetrachloride	101		-		70-130	-		
Cyclohexane	92		-		70-130	-		
1,2-Dichloropropane	97		-		70-130	-		
Bromodichloromethane	99		-		70-130	-		
1,4-Dioxane	96		-		70-130	-		
Trichloroethene	98		-		70-130	-		
2,2,4-Trimethylpentane	95		-		70-130	-		
Heptane	97		-		70-130	-		
cis-1,3-Dichloropropene	102		-		70-130	-		
4-Methyl-2-pentanone	100		-		70-130	-		
trans-1,3-Dichloropropene	90		-		70-130	-		
1,1,2-Trichloroethane	102		-		70-130	-		
Toluene	92		-		70-130	-		
2-Hexanone	100		-		70-130	-		
Dibromochloromethane	111		-		70-130	-		
1,2-Dibromoethane	102		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1596452-3								
Tetrachloroethene	98		-		70-130	-		
Chlorobenzene	101		-		70-130	-		
Ethylbenzene	104		-		70-130	-		
p/m-Xylene	104		-		70-130	-		
Bromoform	116		-		70-130	-		
Styrene	105		-		70-130	-		
1,1,2,2-Tetrachloroethane	100		-		70-130	-		
o-Xylene	106		-		70-130	-		
4-Ethyltoluene	105		-		70-130	-		
1,3,5-Trimethylbenzene	106		-		70-130	-		
1,2,4-Trimethylbenzene	108		-		70-130	-		
Benzyl chloride	102		-		70-130	-		
1,3-Dichlorobenzene	105		-		70-130	-		
1,4-Dichlorobenzene	106		-		70-130	-		
1,2-Dichlorobenzene	104		-		70-130	-		
1,2,4-Trichlorobenzene	111		-		70-130	-		
Hexachlorobutadiene	104		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1596450-5 QC Sample: L2200747-04 Client ID: IA-4						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	0.054	0.049	ppbV	10		25
Carbon tetrachloride	0.070	0.069	ppbV	1		25
Trichloroethene	0.023	0.023	ppbV	0		25
Tetrachloroethene	0.178	0.174	ppbV	2		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1596452-5 QC Sample: L2200747-04 Client ID: IA-4						
Dichlorodifluoromethane	0.604	0.604	ppbV	0		25
Chloromethane	0.508	0.499	ppbV	2		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	39.0	38.4	ppbV	2		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	119	119	ppbV	0		25
Trichlorofluoromethane	0.701	0.692	ppbV	1		25
Isopropanol	3.42	3.41	ppbV	0		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1596452-5 QC Sample: L2200747-04 Client ID: IA-4						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	67.4	68.6	ppbV	2		25
Benzene	0.289	0.292	ppbV	1		25
Cyclohexane	0.404	0.398	ppbV	1		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	0.345	0.348	ppbV	1		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	1.23	1.23	ppbV	0		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1596452-5 QC Sample: L2200747-04 Client ID: IA-4						
p/m-Xylene	0.648	0.656	ppbV	1		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	0.259	0.256	ppbV	1		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.316	0.316	ppbV	0		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: HBL PERRY NY SITE CLOSURE

Lab Number: L2200747

Project Number:

Report Date: 01/21/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2200747-01	IA-1	0616	Flow 5	12/30/21	375000		-	-	-	Pass	4.5	4.7	4
L2200747-01	IA-1	2235	2.7L Can	12/30/21	375000	L2170457-01	Pass	-29.3	-5.5	-	-	-	-
L2200747-02	IA-2	0044	Flow 5	12/30/21	375000		-	-	-	Pass	4.5	4.8	6
L2200747-02	IA-2	3197	2.7L Can	12/30/21	375000	L2169934-02	Pass	-29.2	-5.9	-	-	-	-
L2200747-03	IA-3	0847	Flow 5	12/30/21	375000		-	-	-	Pass	4.5	5.0	11
L2200747-03	IA-3	2202	2.7L Can	12/30/21	375000	L2170457-01	Pass	-28.9	-5.9	-	-	-	-
L2200747-04	IA-4	0950	Flow 4	12/30/21	375000		-	-	-	Pass	4.5	4.8	6
L2200747-04	IA-4	2553	2.7L Can	12/30/21	375000	L2169934-02	Pass	-29.4	-5.5	-	-	-	-
L2200747-05	IA-5	01300	Flow 5	12/30/21	375000		-	-	-	Pass	4.5	4.7	4
L2200747-05	IA-5	2249	2.7L Can	12/30/21	375000	L2170457-01	Pass	-29.3	-6.3	-	-	-	-
L2200747-06	OA-1	0241	Flow 5	12/30/21	375000		-	-	-	Pass	4.5	4.5	0
L2200747-06	OA-1	114	2.7L Can	12/30/21	375000	L2169934-02	Pass	-29.4	-5.9	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 12/20/21 18:19
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/20/21 18:19
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2169934

Project Number: CANISTER QC BAT **Report Date:** 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	97		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2170457
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2170457-01
Client ID: CAN 481 SHELF 1
Sample Location:

Date Collected: 12/21/21 14:00
Date Received: 12/22/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 12/23/21 23:01
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2170457
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2170457-01
Client ID: CAN 481 SHELF 1
Sample Location:

Date Collected: 12/21/21 14:00
Date Received: 12/22/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2170457
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2170457-01
Client ID: CAN 481 SHELF 1
Sample Location:

Date Collected: 12/21/21 14:00
Date Received: 12/22/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2170457
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2170457-01
Client ID: CAN 481 SHELF 1
Sample Location:

Date Collected: 12/21/21 14:00
Date Received: 12/22/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2170457
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2170457-01
Client ID: CAN 481 SHELF 1
Sample Location:

Date Collected: 12/21/21 14:00
Date Received: 12/22/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	97		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2170457
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2170457-01
Client ID: CAN 481 SHELF 1
Sample Location:

Date Collected: 12/21/21 14:00
Date Received: 12/22/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/23/21 23:01
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2170457
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2170457-01
Client ID: CAN 481 SHELF 1
Sample Location:

Date Collected: 12/21/21 14:00
Date Received: 12/22/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2170457
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2170457-01
Client ID: CAN 481 SHELF 1
Sample Location:

Date Collected: 12/21/21 14:00
Date Received: 12/22/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	97		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200747
Report Date: 01/21/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2200747-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2200747-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2200747-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2200747-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2200747-05A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2200747-06A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name:	HBL PERRY NY SITE CLOSURE	**Lab Number:**	L2200747
Project Number:	Not Specified	**Report Date:**	01/21/22

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: Data Usability Report

Project Name:	HBL PERRY NY SITE CLOSURE	**Lab Number:**	L2200747
Project Number:	Not Specified	**Report Date:**	01/21/22

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.

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'.

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.

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.)

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. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Project Name:	HBL PERRY NY SITE CLOSURE	**Lab Number:**	L2200747
Project Number:	Not Specified	**Report Date:**	01/21/22

Data Qualifiers

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.)

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

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 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/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 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
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 332: Perchlorate; **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), **EPA 600/4-81-045**: PCB-Oil.
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.

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/6/22

ALPHA Job #: L2200747

Client Information

Client: HANSEBRANDS | ANTEA GROUP
Address: 445 Hamilton Ave. Suite 1102, White Plains, NY 10601
Phone: 518.859.4626
Fax:
Email: katie.angel@anteagroup.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: HBL Perry NY Site Closure
Project Location: Perry, NY
Project #:
Project Manager: Katie Angel
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	ANALYSIS TO-15	TO-15 SIM	APH Subset Non-petroleum HCs ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
00747-01	IA-1	1/4/22	1016	1744	-29.95	-5.52	AA	VA	2.7L	2235	0616		X				
-02	IA-2		1119	1839	-29.28	-5.57				3197	0044		X				
-03	IA-3		1130	1827	-28.86	-5.75				2202	0847		X				
-04	IA-4		1158	1951	-29.50	-5.40				2553	0950		X				
-05	IA-5		1213	1955	-29.17	-5.08				2249	01300		X				
-06	OA-1		0930	1708	-29.90	-5.86				114	0241	X					

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
Fedex	1/5/22 - 1500	Fedex ML	1/6/22 1205

Form No: 101-02 Rev: (25-Sep-15)

ANALYTICAL REPORT

Lab Number:	L2200764
Client:	Antea USA, Inc. 445 Hamilton Ave, Suite 1102 White Plains, NY 10601
ATTN:	Katharine Angel
Phone:	(315) 949-7036
Project Name:	HBL PERRY NY SITE CLOSURE
Project Number:	Not Specified
Report Date:	01/21/22

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-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2200764-01	SS-1	SOIL_VAPOR	PERRY, NY	01/04/22 17:45	01/06/22
L2200764-02	SS-2	SOIL_VAPOR	PERRY, NY	01/04/22 18:29	01/06/22
L2200764-03	SS-3	SOIL_VAPOR	PERRY, NY	01/04/22 18:56	01/06/22
L2200764-04	SS-4	SOIL_VAPOR	PERRY, NY	01/04/22 19:52	01/06/22
L2200764-05	SS-5	SOIL_VAPOR	PERRY, NY	01/04/22 20:48	01/06/22

Project Name:	HBL PERRY NY SITE CLOSURE	**Lab Number:**	L2200764
Project Number:	Not Specified	**Report Date:**	01/21/22

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:	HBL PERRY NY SITE CLOSURE	**Lab Number:**	L2200764
Project Number:	Not Specified	**Report Date:**	01/21/22

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 30, 2021. The canister certification results are provided as an addendum.

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: Christopher J. Anderson

Title: Technical Director/Representative Date: 01/21/22

AIR

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-01
Client ID: SS-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:45
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 01/21/22 00:25
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.559	0.200	--	2.76	0.989	--		1
Chloromethane	0.479	0.200	--	0.989	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	36.6	5.00	--	69.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	13.2	1.00	--	31.4	2.38	--		1
Trichlorofluoromethane	1.24	0.200	--	6.97	1.12	--		1
Isopropanol	67.6	0.500	--	166	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-01
Client ID: SS-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:45
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	10.0	0.200	--	35.2	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.540	0.200	--	1.73	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	1.23	0.200	--	4.23	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	0.547	0.200	--	2.94	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.503	0.200	--	2.06	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.961	0.200	--	3.62	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-01
Client ID: SS-1
Sample Location: PERRY, NY

Date Collected: 01/04/22 17:45
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.505	0.400	--	2.19	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	91		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-02
Client ID: SS-2
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:29
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 01/21/22 01:04
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.638	0.200	--	3.15	0.989	--		1
Chloromethane	0.409	0.200	--	0.845	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	0.709	0.200	--	1.57	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	55.9	5.00	--	105	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	38.2	1.00	--	90.7	2.38	--		1
Trichlorofluoromethane	1.00	0.200	--	5.62	1.12	--		1
Isopropanol	97.5	0.500	--	240	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	0.678	0.500	--	2.06	1.52	--		1
Methylene chloride	0.539	0.500	--	1.87	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.797	0.200	--	2.48	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.35	0.500	--	6.93	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-02
Client ID: SS-2
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:29
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	5.51	0.500	--	19.9	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	1.85	0.500	--	5.46	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	90.2	0.200	--	318	0.705	--		1
1,1,1-Trichloroethane	0.901	0.200	--	4.92	1.09	--		1
Benzene	6.59	0.200	--	21.1	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	16.7	0.200	--	57.5	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	0.507	0.200	--	2.72	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	14.5	0.200	--	59.4	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	4.66	0.200	--	17.6	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	0.347	0.200	--	2.35	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.413	0.200	--	1.79	0.869	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-02
Client ID: SS-2
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:29
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.40	0.400	--	6.08	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.547	0.200	--	2.38	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.480	0.200	--	2.36	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	87		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-03
Client ID: SS-3
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:56
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 01/21/22 01:43
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	1.35	0.200	--	6.68	0.989	--		1
Chloromethane	0.392	0.200	--	0.809	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	192	5.00	--	362	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	37.6	1.00	--	89.3	2.38	--		1
Trichlorofluoromethane	2.57	0.200	--	14.4	1.12	--		1
Isopropanol	116	0.500	--	285	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	3.20	0.500	--	9.44	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-03
Client ID: SS-3
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:56
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	5.26	0.500	--	15.5	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	39.7	0.200	--	140	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.519	0.200	--	1.66	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.689	0.200	--	2.37	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	0.741	0.200	--	3.98	1.07	--		1
2,2,4-Trimethylpentane	0.668	0.200	--	3.12	0.934	--		1
Heptane	0.818	0.200	--	3.35	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.22	0.200	--	8.37	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.465	0.200	--	2.02	0.869	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-03
Client ID: SS-3
Sample Location: PERRY, NY

Date Collected: 01/04/22 18:56
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.89	0.400	--	8.21	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.703	0.200	--	3.05	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.200	0.200	--	0.983	0.983	--		1
1,2,4-Trimethylbenzene	0.889	0.200	--	4.37	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	86		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-04
Client ID: SS-4
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:52
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 01/21/22 02:22
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.569	0.200	--	2.81	0.989	--		1
Chloromethane	0.664	0.200	--	1.37	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	0.252	0.200	--	0.557	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	0.253	0.200	--	0.668	0.528	--		1
Ethanol	43.1	5.00	--	81.2	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	46.0	1.00	--	109	2.38	--		1
Trichlorofluoromethane	0.648	0.200	--	3.64	1.12	--		1
Isopropanol	82.3	0.500	--	202	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.526	0.500	--	1.83	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.873	0.200	--	2.72	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.65	0.500	--	4.87	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-04
Client ID: SS-4
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:52
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	4.64	0.500	--	16.7	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	1.02	0.500	--	3.01	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	71.9	0.200	--	253	0.705	--		1
1,1,1-Trichloroethane	0.533	0.200	--	2.91	1.09	--		1
Benzene	2.45	0.200	--	7.83	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	6.92	0.200	--	23.8	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	0.336	0.200	--	1.81	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	6.12	0.200	--	25.1	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.70	0.200	--	10.2	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.305	0.200	--	1.32	0.869	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-04
Client ID: SS-4
Sample Location: PERRY, NY

Date Collected: 01/04/22 19:52
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	1.10	0.400	--	4.78	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.430	0.200	--	1.87	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.373	0.200	--	1.83	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	87		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-05
Client ID: SS-5
Sample Location: PERRY, NY

Date Collected: 01/04/22 20:48
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 01/21/22 03:01
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.599	0.200	--	2.96	0.989	--		1
Chloromethane	0.702	0.200	--	1.45	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	0.299	0.200	--	0.661	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	255	5.00	--	480	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	33.2	1.00	--	78.9	2.38	--		1
Trichlorofluoromethane	0.617	0.200	--	3.47	1.12	--		1
Isopropanol	74.9	0.500	--	184	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.36	0.500	--	7.15	1.52	--		1
Methylene chloride	12.1	0.500	--	42.0	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	0.408	0.200	--	1.65	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.699	0.500	--	2.06	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-05
Client ID: SS-5
Sample Location: PERRY, NY

Date Collected: 01/04/22 20:48
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	0.858	0.500	--	3.09	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	48.5	0.200	--	171	0.705	--		1
1,1,1-Trichloroethane	0.207	0.200	--	1.13	1.09	--		1
Benzene	0.510	0.200	--	1.63	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.553	0.200	--	1.90	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	0.736	0.200	--	3.96	1.07	--		1
2,2,4-Trimethylpentane	0.268	0.200	--	1.25	0.934	--		1
Heptane	0.558	0.200	--	2.29	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.92	0.200	--	7.24	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.261	0.200	--	1.13	0.869	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

SAMPLE RESULTS

Lab ID: L2200764-05
Client ID: SS-5
Sample Location: PERRY, NY

Date Collected: 01/04/22 20:48
Date Received: 01/06/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	0.957	0.400	--	4.16	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.351	0.200	--	1.52	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.297	0.200	--	1.46	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	90		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/20/22 15:56

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1596439-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/20/22 15:56

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1596439-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified
Lab Number: L2200764
Report Date: 01/21/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 01/20/22 15:56

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1596439-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1596439-3								
Dichlorodifluoromethane	102		-		70-130	-		
Chloromethane	115		-		70-130	-		
Freon-114	108		-		70-130	-		
Vinyl chloride	103		-		70-130	-		
1,3-Butadiene	119		-		70-130	-		
Bromomethane	107		-		70-130	-		
Chloroethane	97		-		70-130	-		
Ethanol	93		-		40-160	-		
Vinyl bromide	107		-		70-130	-		
Acetone	117		-		40-160	-		
Trichlorofluoromethane	104		-		70-130	-		
Isopropanol	114		-		40-160	-		
1,1-Dichloroethene	102		-		70-130	-		
Tertiary butyl Alcohol	106		-		70-130	-		
Methylene chloride	125		-		70-130	-		
3-Chloropropene	128		-		70-130	-		
Carbon disulfide	103		-		70-130	-		
Freon-113	119		-		70-130	-		
trans-1,2-Dichloroethene	96		-		70-130	-		
1,1-Dichloroethane	99		-		70-130	-		
Methyl tert butyl ether	106		-		70-130	-		
2-Butanone	107		-		70-130	-		
cis-1,2-Dichloroethene	103		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1596439-3								
Ethyl Acetate	105		-		70-130	-		
Chloroform	105		-		70-130	-		
Tetrahydrofuran	106		-		70-130	-		
1,2-Dichloroethane	100		-		70-130	-		
n-Hexane	103		-		70-130	-		
1,1,1-Trichloroethane	108		-		70-130	-		
Benzene	100		-		70-130	-		
Carbon tetrachloride	109		-		70-130	-		
Cyclohexane	104		-		70-130	-		
1,2-Dichloropropane	107		-		70-130	-		
Bromodichloromethane	111		-		70-130	-		
1,4-Dioxane	104		-		70-130	-		
Trichloroethene	111		-		70-130	-		
2,2,4-Trimethylpentane	108		-		70-130	-		
Heptane	118		-		70-130	-		
cis-1,3-Dichloropropene	115		-		70-130	-		
4-Methyl-2-pentanone	119		-		70-130	-		
trans-1,3-Dichloropropene	98		-		70-130	-		
1,1,2-Trichloroethane	114		-		70-130	-		
Toluene	108		-		70-130	-		
2-Hexanone	102		-		70-130	-		
Dibromochloromethane	121		-		70-130	-		
1,2-Dibromoethane	116		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1596439-3								
Tetrachloroethene	118		-		70-130	-		
Chlorobenzene	113		-		70-130	-		
Ethylbenzene	116		-		70-130	-		
p/m-Xylene	116		-		70-130	-		
Bromoform	119		-		70-130	-		
Styrene	110		-		70-130	-		
1,1,2,2-Tetrachloroethane	118		-		70-130	-		
o-Xylene	116		-		70-130	-		
4-Ethyltoluene	112		-		70-130	-		
1,3,5-Trimethylbenzene	119		-		70-130	-		
1,2,4-Trimethylbenzene	121		-		70-130	-		
Benzyl chloride	110		-		70-130	-		
1,3-Dichlorobenzene	109		-		70-130	-		
1,4-Dichlorobenzene	102		-		70-130	-		
1,2-Dichlorobenzene	114		-		70-130	-		
1,2,4-Trichlorobenzene	113		-		70-130	-		
Hexachlorobutadiene	122		-		70-130	-		

Project Name: HBL PERRY NY SITE CLOSURE

Lab Number: L2200764

Project Number:

Report Date: 01/21/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2200764-01	SS-1	01213	Flow 5	12/30/21	375000		-	-	-	Pass	4.5	4.7	4
L2200764-01	SS-1	2427	2.7L Can	12/30/21	375000	L2169934-02	Pass	-29.4	-5.9	-	-	-	-
L2200764-02	SS-2	01473	Flow 5	12/30/21	375000		-	-	-	Pass	4.5	2.6	54
L2200764-02	SS-2	3095	2.7L Can	12/30/21	375000	L2169934-02	Pass	-29.4	-6.6	-	-	-	-
L2200764-03	SS-3	01827	Flow 5	12/30/21	375000		-	-	-	Pass	4.5	4.8	6
L2200764-03	SS-3	2036	2.7L Can	12/30/21	375000	L2169934-02	Pass	-29.4	-6.2	-	-	-	-
L2200764-04	SS-4	01271	Flow 5	12/30/21	375000		-	-	-	Pass	4.5	4.7	4
L2200764-04	SS-4	2212	2.7L Can	12/30/21	375000	L2169934-02	Pass	-29.4	-5.8	-	-	-	-
L2200764-05	SS-5	02156	FLOW 5	12/30/21	375000		-	-	-	Pass	4.5	3.8	17
L2200764-05	SS-5	503	2.7L Can	12/30/21	375000	L2169934-02	Pass	-29.3	-6.3	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 12/20/21 18:19
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/20/21 18:19
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2169934
Report Date: 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2169934

Project Number: CANISTER QC BAT **Report Date:** 01/21/22

Air Canister Certification Results

Lab ID: L2169934-02
Client ID: CAN 2591 SHELF 4
Sample Location:

Date Collected: 12/17/21 14:00
Date Received: 12/20/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	97		60-140

Project Name: HBL PERRY NY SITE CLOSURE
Project Number: Not Specified

Lab Number: L2200764
Report Date: 01/21/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2200764-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2200764-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2200764-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2200764-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2200764-05A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	HBL PERRY NY SITE CLOSURE	**Lab Number:**	L2200764
Project Number:	Not Specified	**Report Date:**	01/21/22

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: Data Usability Report

Project Name:	HBL PERRY NY SITE CLOSURE	**Lab Number:**	L2200764
Project Number:	Not Specified	**Report Date:**	01/21/22

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.

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'.

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.

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.)

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. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report

Project Name:	HBL PERRY NY SITE CLOSURE	**Lab Number:**	L2200764
Project Number:	Not Specified	**Report Date:**	01/21/22

Data Qualifiers

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.)

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

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 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/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 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
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 332: Perchlorate; **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), **EPA 600/4-81-045**: PCB-Oil.
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.

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/6/22

ALPHA Job #: L2200764

Client Information

Client: HANSEBRANDS | ANTEA GROUP
Address: 445 Hamilton Ave, Suite 1102, White Plains, NY 10601
Phone: 518.859.4626
Fax:
Email: Katie.angel@anteagroup.us
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: HBL Perry NY Site Closure
Project Location: Perry, NY
Project #:
Project Manager: Katie Angel
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH Subset Non-petroleum HCs ☐	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
00764-01	SS-1	1/4/22	1015	1745	-30.00	-5.76	SV	VA	2.7L	2427	01213	X					
-02	SS-2		1120	1829	-29.43	-5.77				3095	01473	X					
-03	SS-3		1132	1856	-30.18	-5.93				2036	01627	X					
-04	SS-4		1200	1952	-29.35	-5.78				2212	01271	X					
-05	SS-5		1215	2048	-29.14	-6.00				503	02156	X					

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
Fedex	1/5/22 1500	Fedex	1/6/22 1205

Form No: 101-02 Rev: (25-Sep-15)

ORIGIN ID:LBEA (412) 418-0924
ANTEA GROUP
565 ALLEGHENY AVE STE 100

OAKMONT, PA 15139
UNITED STATES US

SHIP DATE: 05JAN
ACTWGT: 31.00 LB
CAD: 6994408/SSFE2
DIMS: 22x15x16 IN

BILL THIRD PARTY

TO ALPHA ANALYTICAL LABS INC
ALPHA ANALYTICAL LABS INC
320 FORBES BLVD

MANSFIELD MA 02048
(508) 822-9300 REF:
INV:
PO: DEPT:

FedEx Express

E

REL# 3785346

1 of 2
TRK# 0201 2884 1332 6676
MASTER

THU - 06 JAN 4:30P
STANDARD OVERNIGHT
AHS
02048
MA-US BOS

U7 PYMA

ORIGIN ID:LBEA (412) 418-0924
ANTEA GROUP
565 ALLEGHENY AVE STE 100

OAKMONT, PA 15139
UNITED STATES US

SHIP DATE: 05JAN22
ACTWGT: 36.60 LB
CAD: 6994408/SSFE2220
DIMS: 22x15x16 IN

BILL THIRD PARTY

TO ALPHA ANALYTICAL LABS INC
ALPHA ANALYTICAL LABS INC
320 FORBES BLVD

MANSFIELD MA 02048
(508) 822-9300 REF:
INV:
PO: DEPT:

FedEx Express

E

REL# 3785346

2 of 2
MPS# 0263 2884 1332 6687
Mstr# 2884 1332 6676 0201

THU - 06 JAN 4:30P
STANDARD OVERNIGHT
AHS
02048
MA-US BOS

U7 PYMA

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-69921-1
Client Project/Site: Perry, NY - Soil

For:
Antea Group
535 Route 38
Suite 203
Cherry Hill, New Jersey 08002

Attn: Katie Angel

Marrissa Williams

Authorized for release by:
1/27/2022 4:27:42 PM

Marrissa Williams, Project Manager
(717)556-7246
Marrissa.Williams@eurofinset.com

LINKS

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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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.

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Marrissa Williams
Project Manager
1/27/2022 4:27:42 PM

Table of Contents

Definitions/Glossary

Client: Antea Group
Job ID: 410-69921-1
Project/Site: Perry, NY - Soil

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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: Antea Group
Project/Site: Perry, NY - Soil

Job ID: 410-69921-1

Job ID: 410-69921-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-69921-1

Receipt
The samples were received on 1/15/2022 10:19 AM. 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 1.8°C

GC/MS VOA
Method 8260D: The following samples were diluted due to the abundance of non-target analytes: SB-1(10-12') (410-69921-2) and SB-2(10-12') (410-69921-5). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 410-217892 recovered above the upper control limit for Chloroethane. Non-detections of the affected analytes are reported. Any detections are considered estimated.

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: Antea Group
Project/Site: Perry, NY - Soil

Job ID: 410-69921-1

Client Sample ID: SB-1(8-10') — Lab Sample ID: 410-69921-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	9.3		2.8	0.34	ug/Kg	1	☼	8260D	Total/NA
1,1-Dichloroethane	2.1	J	2.8	0.28	ug/Kg	1	☼	8260D	Total/NA
1,2,4-Trimethylbenzene	0.56	J	2.8	0.28	ug/Kg	1	☼	8260D	Total/NA
Acetone	4.0	J	11	3.4	ug/Kg	1	☼	8260D	Total/NA
Benzene	1.3	J	2.8	0.28	ug/Kg	1	☼	8260D	Total/NA
Carbon disulfide	1.2	J	2.8	0.34	ug/Kg	1	☼	8260D	Total/NA
Ethylbenzene	0.26	J	2.8	0.23	ug/Kg	1	☼	8260D	Total/NA
m&p-Xylene	1.6	J	2.8	0.56	ug/Kg	1	☼	8260D	Total/NA
o-Xylene	0.40	J	2.8	0.23	ug/Kg	1	☼	8260D	Total/NA
Tetrachloroethene	0.44	J	2.8	0.28	ug/Kg	1	☼	8260D	Total/NA
Toluene	2.6	J	2.8	0.34	ug/Kg	1	☼	8260D	Total/NA
Xylene (total)	2.0	J	5.6	0.79	ug/Kg	1	☼	8260D	Total/NA

Client Sample ID: SB-1(10-12') — Lab Sample ID: 410-69921-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	53	J cn	280	33	ug/Kg	50	☼	8260D	Total/NA

Client Sample ID: SB-1(Endpoint) — Lab Sample ID: 410-69921-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	5.1		4.2	0.50	ug/Kg	1	☼	8260D	Total/NA
1,2,3-Trimethylbenzene	0.73	J	4.2	0.42	ug/Kg	1	☼	8260D	Total/NA
1,2,4-Trimethylbenzene	3.3	J	4.2	0.42	ug/Kg	1	☼	8260D	Total/NA
Acetone	8.2	J	17	5.0	ug/Kg	1	☼	8260D	Total/NA
Benzene	5.4		4.2	0.42	ug/Kg	1	☼	8260D	Total/NA
Ethylbenzene	1.3	J	4.2	0.34	ug/Kg	1	☼	8260D	Total/NA
m&p-Xylene	7.6		4.2	0.84	ug/Kg	1	☼	8260D	Total/NA
o-Xylene	1.9	J	4.2	0.34	ug/Kg	1	☼	8260D	Total/NA
Toluene	11		4.2	0.50	ug/Kg	1	☼	8260D	Total/NA
Xylene (total)	9.5		8.4	1.2	ug/Kg	1	☼	8260D	Total/NA

Client Sample ID: SB-2(8-10') — Lab Sample ID: 410-69921-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	31		4.2	0.50	ug/Kg	1	☼	8260D	Total/NA
1,1-Dichloroethane	7.6		4.2	0.42	ug/Kg	1	☼	8260D	Total/NA
1,2,4-Trimethylbenzene	1.2	J	4.2	0.42	ug/Kg	1	☼	8260D	Total/NA
Acetone	5.1	J	17	5.0	ug/Kg	1	☼	8260D	Total/NA
Benzene	2.8	J	4.2	0.42	ug/Kg	1	☼	8260D	Total/NA
Ethylbenzene	0.57	J	4.2	0.33	ug/Kg	1	☼	8260D	Total/NA
m&p-Xylene	3.5	J	4.2	0.83	ug/Kg	1	☼	8260D	Total/NA
o-Xylene	0.90	J	4.2	0.33	ug/Kg	1	☼	8260D	Total/NA
Toluene	5.3		4.2	0.50	ug/Kg	1	☼	8260D	Total/NA
Xylene (total)	4.4	J	8.3	1.2	ug/Kg	1	☼	8260D	Total/NA

Client Sample ID: SB-2(10-12') — Lab Sample ID: 410-69921-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	87	J cn	230	27	ug/Kg	50	☼	8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Antea Group
Project/Site: Perry, NY - Soil

Job ID: 410-69921-1

Client Sample ID: SB-2(Endpoint) — Lab Sample ID: 410-69921-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	74		3.9	0.47	ug/Kg	1	☼	8260D	Total/NA
1,1-Dichloroethane	35		3.9	0.39	ug/Kg	1	☼	8260D	Total/NA
1,2,4-Trimethylbenzene	1.2	J	3.9	0.39	ug/Kg	1	☼	8260D	Total/NA
Acetone	6.6	J	16	4.7	ug/Kg	1	☼	8260D	Total/NA
Benzene	4.2		3.9	0.39	ug/Kg	1	☼	8260D	Total/NA
cis-1,2-Dichloroethene	0.64	J	3.9	0.39	ug/Kg	1	☼	8260D	Total/NA
Ethylbenzene	0.70	J	3.9	0.31	ug/Kg	1	☼	8260D	Total/NA
m&p-Xylene	4.2		3.9	0.78	ug/Kg	1	☼	8260D	Total/NA
o-Xylene	0.98	J	3.9	0.31	ug/Kg	1	☼	8260D	Total/NA
Toluene	7.4		3.9	0.47	ug/Kg	1	☼	8260D	Total/NA
Xylene (total)	5.2	J	7.8	1.1	ug/Kg	1	☼	8260D	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 410-69921-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client: Antea Group
Project/Site: Perry, NY - Soil

Job ID: 410-69921-1

Client Sample ID: SB-1(8-10')

Lab Sample ID: 410-69921-1

Date Collected: 01/13/22 11:35
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 88.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**9.3**		2.8	0.34	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
1,1-Dichloroethane	**2.1**	**J**	2.8	0.28	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
1,2,3-Trimethylbenzene	ND		2.8	0.28	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
1,2,4-Trimethylbenzene	**0.56**	**J**	2.8	0.28	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Acetone	**4.0**	**J**	11	3.4	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Benzene	**1.3**	**J**	2.8	0.28	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Carbon disulfide	**1.2**	**J**	2.8	0.34	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Chloroethane	ND		2.8	0.56	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Chloroform	ND		2.8	0.34	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
cis-1,2-Dichloroethene	ND		2.8	0.28	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Ethylbenzene	**0.26**	**J**	2.8	0.23	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
m&p-Xylene	**1.6**	**J**	2.8	0.56	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Methylene Chloride	ND		2.8	1.1	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
n-Butylbenzene	ND		4.5	1.7	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
o-Xylene	**0.40**	**J**	2.8	0.23	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Styrene	ND		2.8	0.23	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Tetrachloroethene	**0.44**	**J**	2.8	0.28	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Toluene	**2.6**	**J**	2.8	0.34	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Vinyl chloride	ND		2.8	0.34	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1
Xylene (total)	**2.0**	**J**	5.6	0.79	ug/Kg	☼	01/19/22 11:53	01/25/22 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*54 - 135*	*01/19/22 11:53*	*01/25/22 19:35*	*1*
4-Bromofluorobenzene (Surr)	*96*		*50 - 131*	*01/19/22 11:53*	*01/25/22 19:35*	*1*
Dibromofluoromethane (Surr)	*103*		*50 - 141*	*01/19/22 11:53*	*01/25/22 19:35*	*1*
Toluene-d8 (Surr)	*93*		*52 - 141*	*01/19/22 11:53*	*01/25/22 19:35*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11.5**		1.0	1.0	%			01/17/22 13:27	1

Client Sample ID: SB-1(10-12')

Lab Sample ID: 410-69921-2

Date Collected: 01/13/22 11:50
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 86.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**53**	**J cn**	280	33	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
1,1-Dichloroethane	ND	cn	280	28	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
1,2,3-Trimethylbenzene	ND	cn	280	28	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
1,2,4-Trimethylbenzene	ND	cn	280	28	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Acetone	ND	cn	1100	330	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Benzene	ND	cn	280	28	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Carbon disulfide	ND	cn	280	33	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Chloroethane	ND	cn	280	56	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Chloroform	ND	cn	280	33	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
cis-1,2-Dichloroethene	ND	cn	280	28	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Ethylbenzene	ND	cn	280	22	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
m&p-Xylene	ND	cn	280	56	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Methylene Chloride	ND	cn	280	110	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50

Client Sample ID: SB-1(10-12')

Lab Sample ID: 410-69921-2

Date Collected: 01/13/22 11:50
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 86.5

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND	cn	450	170	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
o-Xylene	ND	cn	280	22	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Styrene	ND	cn	280	22	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Tetrachloroethene	ND	cn	280	28	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Toluene	ND	cn	280	33	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Vinyl chloride	ND	cn	280	33	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50
Xylene (total)	ND	cn	560	78	ug/Kg	☼	01/19/22 17:58	01/26/22 14:53	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*	*cn*	*54 - 135*	*01/19/22 17:58*	*01/26/22 14:53*	*50*
4-Bromofluorobenzene (Surr)	*82*	*cn*	*50 - 131*	*01/19/22 17:58*	*01/26/22 14:53*	*50*
Dibromofluoromethane (Surr)	*86*	*cn*	*50 - 141*	*01/19/22 17:58*	*01/26/22 14:53*	*50*
Toluene-d8 (Surr)	*75*	*cn*	*52 - 141*	*01/19/22 17:58*	*01/26/22 14:53*	*50*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13.5**		1.0	1.0	%			01/17/22 13:27	1

Client Sample ID: SB-1(Endpoint)

Lab Sample ID: 410-69921-3

Date Collected: 01/13/22 12:00
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 87.8

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**5.1**		4.2	0.50	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
1,1-Dichloroethane	ND		4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
1,2,3-Trimethylbenzene	**0.73**	**J**	4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
1,2,4-Trimethylbenzene	**3.3**	**J**	4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Acetone	**8.2**	**J**	17	5.0	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Benzene	**5.4**		4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Carbon disulfide	ND		4.2	0.50	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Chloroethane	ND		4.2	0.84	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Chloroform	ND		4.2	0.50	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
cis-1,2-Dichloroethene	ND		4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Ethylbenzene	**1.3**	**J**	4.2	0.34	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
m&p-Xylene	**7.6**		4.2	0.84	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Methylene Chloride	ND		4.2	1.7	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
n-Butylbenzene	ND		6.7	2.5	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
o-Xylene	**1.9**	**J**	4.2	0.34	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Styrene	ND		4.2	0.34	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Tetrachloroethene	ND		4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Toluene	**11**		4.2	0.50	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Vinyl chloride	ND		4.2	0.50	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1
Xylene (total)	**9.5**		8.4	1.2	ug/Kg	☼	01/19/22 11:53	01/25/22 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*54 - 135*	*01/19/22 11:53*	*01/25/22 18:05*	*1*
4-Bromofluorobenzene (Surr)	*91*		*50 - 131*	*01/19/22 11:53*	*01/25/22 18:05*	*1*
Dibromofluoromethane (Surr)	*95*		*50 - 141*	*01/19/22 11:53*	*01/25/22 18:05*	*1*
Toluene-d8 (Surr)	*97*		*52 - 141*	*01/19/22 11:53*	*01/25/22 18:05*	*1*

Client Sample ID: SB-1(Endpoint)

Lab Sample ID: 410-69921-3

Date Collected: 01/13/22 12:00
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 87.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**12.2**		1.0	1.0	%			01/17/22 13:27	1

Client Sample ID: SB-2(8-10')

Lab Sample ID: 410-69921-4

Date Collected: 01/13/22 12:35
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 88.8

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**31**		4.2	0.50	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
1,1-Dichloroethane	**7.6**		4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
1,2,3-Trimethylbenzene	ND		4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
1,2,4-Trimethylbenzene	**1.2**	**J**	4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Acetone	**5.1**	**J**	17	5.0	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Benzene	**2.8**	**J**	4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Carbon disulfide	ND		4.2	0.50	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Chloroethane	ND		4.2	0.83	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Chloroform	ND		4.2	0.50	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
cis-1,2-Dichloroethene	ND		4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Ethylbenzene	**0.57**	**J**	4.2	0.33	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
m&p-Xylene	**3.5**	**J**	4.2	0.83	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Methylene Chloride	ND		4.2	1.7	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
n-Butylbenzene	ND		6.6	2.5	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
o-Xylene	**0.90**	**J**	4.2	0.33	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Styrene	ND		4.2	0.33	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Tetrachloroethene	ND		4.2	0.42	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Toluene	**5.3**		4.2	0.50	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Vinyl chloride	ND		4.2	0.50	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1
Xylene (total)	**4.4**	**J**	8.3	1.2	ug/Kg	☼	01/19/22 11:53	01/25/22 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*54 - 135*	*01/19/22 11:53*	*01/25/22 18:27*	*1*
4-Bromofluorobenzene (Surr)	*98*		*50 - 131*	*01/19/22 11:53*	*01/25/22 18:27*	*1*
Dibromofluoromethane (Surr)	*102*		*50 - 141*	*01/19/22 11:53*	*01/25/22 18:27*	*1*
Toluene-d8 (Surr)	*94*		*52 - 141*	*01/19/22 11:53*	*01/25/22 18:27*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11.2**		1.0	1.0	%			01/17/22 13:27	1

Client Sample ID: SB-2(10-12')

Lab Sample ID: 410-69921-5

Date Collected: 01/13/22 12:45
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 89.5

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**87**	**J cn**	230	27	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
1,1-Dichloroethane	ND	cn	230	23	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
1,2,3-Trimethylbenzene	ND	cn	230	23	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
1,2,4-Trimethylbenzene	ND	cn	230	23	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Acetone	ND	cn	920	270	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Benzene	ND	cn	230	23	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50

Client Sample ID: SB-2(10-12')

Lab Sample ID: 410-69921-5

Date Collected: 01/13/22 12:45
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 89.5

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND	cn	230	27	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Chloroethane	ND	cn	230	46	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Chloroform	ND	cn	230	27	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
cis-1,2-Dichloroethene	ND	cn	230	23	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Ethylbenzene	ND	cn	230	18	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
m&p-Xylene	ND	cn	230	46	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Methylene Chloride	ND	cn	230	92	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
n-Butylbenzene	ND	cn	370	140	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
o-Xylene	ND	cn	230	18	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Styrene	ND	cn	230	18	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Tetrachloroethene	ND	cn	230	23	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Toluene	ND	cn	230	27	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Vinyl chloride	ND	cn	230	27	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50
Xylene (total)	ND	cn	460	64	ug/Kg	☼	01/19/22 17:58	01/26/22 15:15	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*	*cn*	*54 - 135*	*01/19/22 17:58*	*01/26/22 15:15*	*50*
4-Bromofluorobenzene (Surr)	*85*	*cn*	*50 - 131*	*01/19/22 17:58*	*01/26/22 15:15*	*50*
Dibromofluoromethane (Surr)	*85*	*cn*	*50 - 141*	*01/19/22 17:58*	*01/26/22 15:15*	*50*
Toluene-d8 (Surr)	*75*	*cn*	*52 - 141*	*01/19/22 17:58*	*01/26/22 15:15*	*50*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**10.5**		1.0	1.0	%			01/17/22 13:27	1

Client Sample ID: SB-2(Endpoint)

Lab Sample ID: 410-69921-6

Date Collected: 01/13/22 12:55
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 87.3

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**74**		3.9	0.47	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
1,1-Dichloroethane	**35**		3.9	0.39	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
1,2,3-Trimethylbenzene	ND		3.9	0.39	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
1,2,4-Trimethylbenzene	**1.2**	**J**	3.9	0.39	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Acetone	**6.6**	**J**	16	4.7	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Benzene	**4.2**		3.9	0.39	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Carbon disulfide	ND		3.9	0.47	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Chloroethane	ND		3.9	0.78	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Chloroform	ND		3.9	0.47	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
cis-1,2-Dichloroethene	**0.64**	**J**	3.9	0.39	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Ethylbenzene	**0.70**	**J**	3.9	0.31	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
m&p-Xylene	**4.2**		3.9	0.78	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Methylene Chloride	ND		3.9	1.6	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
n-Butylbenzene	ND		6.2	2.3	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
o-Xylene	**0.98**	**J**	3.9	0.31	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Styrene	ND		3.9	0.31	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Tetrachloroethene	ND		3.9	0.39	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Toluene	**7.4**		3.9	0.47	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1
Vinyl chloride	ND		3.9	0.47	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1

Client Sample ID: SB-2(Endpoint)

Lab Sample ID: 410-69921-6

Date Collected: 01/13/22 12:55
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 87.3

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (total)	5.2	J	7.8	1.1	ug/Kg	☼	01/19/22 11:53	01/25/22 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*54 - 135*	*01/19/22 11:53*	*01/25/22 18:50*	*1*
4-Bromofluorobenzene (Surr)	*99*		*50 - 131*	*01/19/22 11:53*	*01/25/22 18:50*	*1*
Dibromofluoromethane (Surr)	*97*		*50 - 141*	*01/19/22 11:53*	*01/25/22 18:50*	*1*
Toluene-d8 (Surr)	*94*		*52 - 141*	*01/19/22 11:53*	*01/25/22 18:50*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.7		1.0	1.0	%			01/17/22 13:27	1

Client Sample ID: Trip Blank

Lab Sample ID: 410-69921-7

Date Collected: 01/06/22 00:00
Matrix: Water
Date Received: 01/15/22 10:19

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			01/20/22 11:24	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			01/20/22 11:24	1
1,2,3-Trimethylbenzene	ND		5.0	0.30	ug/L			01/20/22 11:24	1
1,2,4-Trimethylbenzene	ND		5.0	1.0	ug/L			01/20/22 11:24	1
Chloroethane	ND		1.0	0.20	ug/L			01/20/22 11:24	1
Chloroform	ND		1.0	0.30	ug/L			01/20/22 11:24	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			01/20/22 11:24	1
Methylene Chloride	ND		1.0	0.30	ug/L			01/20/22 11:24	1
n-Butylbenzene	ND		5.0	0.30	ug/L			01/20/22 11:24	1
Tetrachloroethene	ND		1.0	0.30	ug/L			01/20/22 11:24	1
Vinyl chloride	ND		1.0	0.20	ug/L			01/20/22 11:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*01/20/22 11:24*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/20/22 11:24*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*01/20/22 11:24*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*01/20/22 11:24*	*1*

Surrogate Summary

Client: Antea Group
Project/Site: Perry, NY - Soil

Job ID: 410-69921-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(54-135)	(50-131)	(50-141)	(52-141)
410-69921-1	SB-1(8-10')	111	96	103	93
410-69921-2	SB-1(10-12')	88 cn	82 cn	86 cn	75 cn
410-69921-3	SB-1(Endpoint)	101	91	95	97
410-69921-4	SB-2(8-10')	106	98	102	94
410-69921-5	SB-2(10-12')	83 cn	85 cn	85 cn	75 cn
410-69921-6	SB-2(Endpoint)	105	99	97	94
LCS 410-217477/4	Lab Control Sample	99	101	104	98
LCS 410-217892/6	Lab Control Sample	105	96	107	94
LCSD 410-217477/5	Lab Control Sample Dup	99	99	104	97
LCSD 410-217892/7	Lab Control Sample Dup	103	94	105	91
MB 410-217477/7	Method Blank	104	95	106	94
MB 410-217892/12	Method Blank	109	93	104	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-69921-7	Trip Blank	102	99	97	111
LCS 410-216237/4	Lab Control Sample	104	101	102	112
MB 410-216237/6	Method Blank	100	99	98	111

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-216237/6
Matrix: Water
Analysis Batch: 216237

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			01/20/22 09:28	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			01/20/22 09:28	1
1,2,3-Trimethylbenzene	ND		5.0	0.30	ug/L			01/20/22 09:28	1
1,2,4-Trimethylbenzene	ND		5.0	1.0	ug/L			01/20/22 09:28	1
Chloroethane	ND		1.0	0.20	ug/L			01/20/22 09:28	1
Chloroform	ND		1.0	0.30	ug/L			01/20/22 09:28	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			01/20/22 09:28	1
Methylene Chloride	ND		1.0	0.30	ug/L			01/20/22 09:28	1
n-Butylbenzene	ND		5.0	0.30	ug/L			01/20/22 09:28	1
Tetrachloroethene	ND		1.0	0.30	ug/L			01/20/22 09:28	1
Vinyl chloride	ND		1.0	0.20	ug/L			01/20/22 09:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*01/20/22 09:28*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/20/22 09:28*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*01/20/22 09:28*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*01/20/22 09:28*	*1*

Lab Sample ID: LCS 410-216237/4
Matrix: Water
Analysis Batch: 216237

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	19.9		ug/L		100	67 - 126
1,1-Dichloroethane	20.0	20.1		ug/L		101	80 - 120
1,2,3-Trimethylbenzene	20.0	21.0		ug/L		105	80 - 120
1,2,4-Trimethylbenzene	20.0	21.3		ug/L		106	75 - 120
Chloroethane	20.0	18.4		ug/L		92	55 - 123
Chloroform	20.0	20.8		ug/L		104	80 - 120
cis-1,2-Dichloroethene	20.0	20.5		ug/L		102	80 - 125
Methylene Chloride	20.0	21.2		ug/L		106	80 - 120
n-Butylbenzene	20.0	22.3		ug/L		111	76 - 120
Tetrachloroethene	20.0	20.6		ug/L		103	80 - 120
Vinyl chloride	20.0	15.1		ug/L		76	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*112*		*80 - 120*

Lab Sample ID: MB 410-217477/7
Matrix: Solid
Analysis Batch: 217477

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.60	ug/Kg			01/25/22 12:52	1
1,1-Dichloroethane	ND		5.0	0.50	ug/Kg			01/25/22 12:52	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-217477/7
Matrix: Solid
Analysis Batch: 217477

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trimethylbenzene	ND		5.0	0.50	ug/Kg			01/25/22 12:52	1
1,2,4-Trimethylbenzene	ND		5.0	0.50	ug/Kg			01/25/22 12:52	1
Acetone	ND		20	6.0	ug/Kg			01/25/22 12:52	1
Benzene	ND		5.0	0.50	ug/Kg			01/25/22 12:52	1
Carbon disulfide	ND		5.0	0.60	ug/Kg			01/25/22 12:52	1
Chloroethane	ND		5.0	1.0	ug/Kg			01/25/22 12:52	1
Chloroform	ND		5.0	0.60	ug/Kg			01/25/22 12:52	1
cis-1,2-Dichloroethene	ND		5.0	0.50	ug/Kg			01/25/22 12:52	1
Ethylbenzene	ND		5.0	0.40	ug/Kg			01/25/22 12:52	1
m&p-Xylene	ND		5.0	1.0	ug/Kg			01/25/22 12:52	1
Methylene Chloride	ND		5.0	2.0	ug/Kg			01/25/22 12:52	1
n-Butylbenzene	ND		8.0	3.0	ug/Kg			01/25/22 12:52	1
o-Xylene	ND		5.0	0.40	ug/Kg			01/25/22 12:52	1
Styrene	ND		5.0	0.40	ug/Kg			01/25/22 12:52	1
Tetrachloroethene	ND		5.0	0.50	ug/Kg			01/25/22 12:52	1
Toluene	ND		5.0	0.60	ug/Kg			01/25/22 12:52	1
Vinyl chloride	ND		5.0	0.60	ug/Kg			01/25/22 12:52	1
Xylene (total)	ND		10	1.4	ug/Kg			01/25/22 12:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*54 - 135*		*01/25/22 12:52*	*1*
4-Bromofluorobenzene (Surr)	*95*		*50 - 131*		*01/25/22 12:52*	*1*
Dibromofluoromethane (Surr)	*106*		*50 - 141*		*01/25/22 12:52*	*1*
Toluene-d8 (Surr)	*94*		*52 - 141*		*01/25/22 12:52*	*1*

Lab Sample ID: LCS 410-217477/4
Matrix: Solid
Analysis Batch: 217477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.7		ug/Kg		103	69 - 123
1,1-Dichloroethane	20.0	17.8		ug/Kg		89	79 - 120
1,2,3-Trimethylbenzene	20.0	18.6		ug/Kg		93	77 - 120
1,2,4-Trimethylbenzene	20.0	18.8		ug/Kg		94	73 - 120
Acetone	250	215		ug/Kg		86	41 - 150
Benzene	20.0	18.4		ug/Kg		92	80 - 120
Carbon disulfide	20.0	18.8		ug/Kg		94	64 - 133
Chloroethane	20.0	16.7		ug/Kg		83	43 - 135
Chloroform	20.0	19.5		ug/Kg		98	80 - 120
cis-1,2-Dichloroethene	20.0	19.2		ug/Kg		96	80 - 125
Ethylbenzene	20.0	18.8		ug/Kg		94	78 - 120
m&p-Xylene	40.0	37.7		ug/Kg		94	80 - 120
Methylene Chloride	20.0	18.4		ug/Kg		92	76 - 122
n-Butylbenzene	20.0	19.6		ug/Kg		98	71 - 121
o-Xylene	20.0	17.8		ug/Kg		89	75 - 120
Styrene	20.0	17.7		ug/Kg		88	76 - 120
Tetrachloroethene	20.0	19.3		ug/Kg		97	73 - 120
Toluene	20.0	17.9		ug/Kg		89	80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-217477/4
Matrix: Solid
Analysis Batch: 217477

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	20.0	16.5		ug/Kg		82	52 - 120
Xylene (total)	60.0	55.5		ug/Kg		93	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*54 - 135*
4-Bromofluorobenzene (Surr)	*101*		*50 - 131*
Dibromofluoromethane (Surr)	*104*		*50 - 141*
Toluene-d8 (Surr)	*98*		*52 - 141*

Lab Sample ID: LCSD 410-217477/5
Matrix: Solid
Analysis Batch: 217477

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	21.0		ug/Kg		105	69 - 123	2	30
1,1-Dichloroethane	20.0	18.2		ug/Kg		91	79 - 120	2	30
1,2,3-Trimethylbenzene	20.0	18.8		ug/Kg		94	77 - 120	1	30
1,2,4-Trimethylbenzene	20.0	19.1		ug/Kg		96	73 - 120	1	30
Acetone	250	218		ug/Kg		87	41 - 150	2	30
Benzene	20.0	18.8		ug/Kg		94	80 - 120	2	30
Carbon disulfide	20.0	18.9		ug/Kg		95	64 - 133	1	30
Chloroethane	20.0	16.8		ug/Kg		84	43 - 135	1	30
Chloroform	20.0	20.0		ug/Kg		100	80 - 120	2	30
cis-1,2-Dichloroethene	20.0	19.7		ug/Kg		98	80 - 125	2	30
Ethylbenzene	20.0	18.8		ug/Kg		94	78 - 120	0	30
m&p-Xylene	40.0	38.1		ug/Kg		95	80 - 120	1	30
Methylene Chloride	20.0	19.0		ug/Kg		95	76 - 122	3	30
n-Butylbenzene	20.0	19.7		ug/Kg		98	71 - 121	0	30
o-Xylene	20.0	18.0		ug/Kg		90	75 - 120	1	30
Styrene	20.0	17.7		ug/Kg		89	76 - 120	0	30
Tetrachloroethene	20.0	18.9		ug/Kg		94	73 - 120	2	30
Toluene	20.0	17.9		ug/Kg		90	80 - 120	0	30
Vinyl chloride	20.0	17.3		ug/Kg		86	52 - 120	5	30
Xylene (total)	60.0	56.1		ug/Kg		94	75 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*54 - 135*
4-Bromofluorobenzene (Surr)	*99*		*50 - 131*
Dibromofluoromethane (Surr)	*104*		*50 - 141*
Toluene-d8 (Surr)	*97*		*52 - 141*

Lab Sample ID: MB 410-217892/12
Matrix: Solid
Analysis Batch: 217892

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250	30	ug/Kg			01/26/22 13:04	50
1,1-Dichloroethane	ND		250	25	ug/Kg			01/26/22 13:04	50

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-217892/12
Matrix: Solid
Analysis Batch: 217892

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trimethylbenzene	ND		250	25	ug/Kg			01/26/22 13:04	50
1,2,4-Trimethylbenzene	ND		250	25	ug/Kg			01/26/22 13:04	50
Acetone	ND		1000	300	ug/Kg			01/26/22 13:04	50
Benzene	ND		250	25	ug/Kg			01/26/22 13:04	50
Carbon disulfide	ND		250	30	ug/Kg			01/26/22 13:04	50
Chloroethane	ND		250	50	ug/Kg			01/26/22 13:04	50
Chloroform	ND		250	30	ug/Kg			01/26/22 13:04	50
cis-1,2-Dichloroethene	ND		250	25	ug/Kg			01/26/22 13:04	50
Ethylbenzene	ND		250	20	ug/Kg			01/26/22 13:04	50
m&p-Xylene	ND		250	50	ug/Kg			01/26/22 13:04	50
Methylene Chloride	ND		250	100	ug/Kg			01/26/22 13:04	50
n-Butylbenzene	ND		400	150	ug/Kg			01/26/22 13:04	50
o-Xylene	ND		250	20	ug/Kg			01/26/22 13:04	50
Styrene	ND		250	20	ug/Kg			01/26/22 13:04	50
Tetrachloroethene	ND		250	25	ug/Kg			01/26/22 13:04	50
Toluene	ND		250	30	ug/Kg			01/26/22 13:04	50
Vinyl chloride	ND		250	30	ug/Kg			01/26/22 13:04	50
Xylene (total)	ND		500	70	ug/Kg			01/26/22 13:04	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*54 - 135*		*01/26/22 13:04*	*50*
4-Bromofluorobenzene (Surr)	*93*		*50 - 131*		*01/26/22 13:04*	*50*
Dibromofluoromethane (Surr)	*104*		*50 - 141*		*01/26/22 13:04*	*50*
Toluene-d8 (Surr)	*93*		*52 - 141*		*01/26/22 13:04*	*50*

Lab Sample ID: LCS 410-217892/6
Matrix: Solid
Analysis Batch: 217892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1000	1110		ug/Kg		111	69 - 123
1,1-Dichloroethane	1000	997		ug/Kg		100	79 - 120
1,2,3-Trimethylbenzene	1000	908		ug/Kg		91	77 - 120
1,2,4-Trimethylbenzene	1000	940		ug/Kg		94	73 - 120
Acetone	12500	9920		ug/Kg		79	41 - 150
Benzene	1000	1050		ug/Kg		105	80 - 120
Carbon disulfide	1000	1020		ug/Kg		102	64 - 133
Chloroethane	1000	1210		ug/Kg		121	43 - 135
Chloroform	1000	1090		ug/Kg		109	80 - 120
cis-1,2-Dichloroethene	1000	1100		ug/Kg		110	80 - 125
Ethylbenzene	1000	967		ug/Kg		97	78 - 120
m&p-Xylene	2000	1990		ug/Kg		99	80 - 120
Methylene Chloride	1000	1050		ug/Kg		105	76 - 122
n-Butylbenzene	1000	914		ug/Kg		91	71 - 121
o-Xylene	1000	962		ug/Kg		96	75 - 120
Styrene	1000	978		ug/Kg		98	76 - 120
Tetrachloroethene	1000	1050		ug/Kg		105	73 - 120
Toluene	1000	974		ug/Kg		97	80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-217892/6
Matrix: Solid
Analysis Batch: 217892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			1000	819		ug/Kg		82	52 - 120		
Xylene (total)			3000	2950		ug/Kg		98	75 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*54 - 135*
4-Bromofluorobenzene (Surr)	*96*		*50 - 131*
Dibromofluoromethane (Surr)	*107*		*50 - 141*
Toluene-d8 (Surr)	*94*		*52 - 141*

Lab Sample ID: LCSD 410-217892/7
Matrix: Solid
Analysis Batch: 217892

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			1000	1090		ug/Kg		109	69 - 123	2	30
1,1-Dichloroethane			1000	999		ug/Kg		100	79 - 120	0	30
1,2,3-Trimethylbenzene			1000	896		ug/Kg		90	77 - 120	1	30
1,2,4-Trimethylbenzene			1000	921		ug/Kg		92	73 - 120	2	30
Acetone			12500	9380		ug/Kg		75	41 - 150	6	30
Benzene			1000	1020		ug/Kg		102	80 - 120	3	30
Carbon disulfide			1000	982		ug/Kg		98	64 - 133	4	30
Chloroethane			1000	1190		ug/Kg		119	43 - 135	2	30
Chloroform			1000	1070		ug/Kg		107	80 - 120	2	30
cis-1,2-Dichloroethene			1000	1080		ug/Kg		108	80 - 125	1	30
Ethylbenzene			1000	935		ug/Kg		94	78 - 120	3	30
m&p-Xylene			2000	1910		ug/Kg		96	80 - 120	4	30
Methylene Chloride			1000	1030		ug/Kg		103	76 - 122	2	30
n-Butylbenzene			1000	886		ug/Kg		89	71 - 121	3	30
o-Xylene			1000	939		ug/Kg		94	75 - 120	2	30
Styrene			1000	945		ug/Kg		95	76 - 120	3	30
Tetrachloroethene			1000	1010		ug/Kg		101	73 - 120	4	30
Toluene			1000	940		ug/Kg		94	80 - 120	4	30
Vinyl chloride			1000	822		ug/Kg		82	52 - 120	0	30
Xylene (total)			3000	2850		ug/Kg		95	75 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*54 - 135*
4-Bromofluorobenzene (Surr)	*94*		*50 - 131*
Dibromofluoromethane (Surr)	*105*		*50 - 141*
Toluene-d8 (Surr)	*91*		*52 - 141*

QC Association Summary

Client: Antea Group
Project/Site: Perry, NY - Soil

Job ID: 410-69921-1

GC/MS VOA

Prep Batch: 215941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-69921-1	SB-1(8-10')	Total/NA	Solid	5035	
410-69921-3	SB-1(Endpoint)	Total/NA	Solid	5035	
410-69921-4	SB-2(8-10')	Total/NA	Solid	5035	
410-69921-6	SB-2(Endpoint)	Total/NA	Solid	5035	

Prep Batch: 216114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-69921-2	SB-1(10-12')	Total/NA	Solid	5035	
410-69921-5	SB-2(10-12')	Total/NA	Solid	5035	

Analysis Batch: 216237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-69921-7	Trip Blank	Total/NA	Water	8260D	
MB 410-216237/6	Method Blank	Total/NA	Water	8260D	
LCS 410-216237/4	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 217477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-69921-1	SB-1(8-10')	Total/NA	Solid	8260D	215941
410-69921-3	SB-1(Endpoint)	Total/NA	Solid	8260D	215941
410-69921-4	SB-2(8-10')	Total/NA	Solid	8260D	215941
410-69921-6	SB-2(Endpoint)	Total/NA	Solid	8260D	215941
MB 410-217477/7	Method Blank	Total/NA	Solid	8260D	
LCS 410-217477/4	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-217477/5	Lab Control Sample Dup	Total/NA	Solid	8260D	

Analysis Batch: 217892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-69921-2	SB-1(10-12')	Total/NA	Solid	8260D	216114
410-69921-5	SB-2(10-12')	Total/NA	Solid	8260D	216114
MB 410-217892/12	Method Blank	Total/NA	Solid	8260D	
LCS 410-217892/6	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-217892/7	Lab Control Sample Dup	Total/NA	Solid	8260D	

General Chemistry

Analysis Batch: 215173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-69921-1	SB-1(8-10')	Total/NA	Solid	Moisture	
410-69921-2	SB-1(10-12')	Total/NA	Solid	Moisture	
410-69921-3	SB-1(Endpoint)	Total/NA	Solid	Moisture	
410-69921-4	SB-2(8-10')	Total/NA	Solid	Moisture	
410-69921-5	SB-2(10-12')	Total/NA	Solid	Moisture	
410-69921-6	SB-2(Endpoint)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Antea Group
Project/Site: Perry, NY - Soil

Job ID: 410-69921-1

Client Sample ID: SB-1(8-10') — **Lab Sample ID: 410-69921-1**
Date Collected: 01/13/22 11:35 — **Matrix: Solid**
Date Received: 01/15/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	215173	01/17/22 13:27	X4C8	ELLE

Client Sample ID: SB-1(8-10') — **Lab Sample ID: 410-69921-1**
Date Collected: 01/13/22 11:35 — **Matrix: Solid**
Date Received: 01/15/22 10:19 — **Percent Solids: 88.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			215941	01/19/22 11:53	MXX6	ELLE
Total/NA	Analysis	8260D		1	217477	01/25/22 19:35	USEJ	ELLE

Client Sample ID: SB-1(10-12') — **Lab Sample ID: 410-69921-2**
Date Collected: 01/13/22 11:50 — **Matrix: Solid**
Date Received: 01/15/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	215173	01/17/22 13:27	X4C8	ELLE

Client Sample ID: SB-1(10-12') — **Lab Sample ID: 410-69921-2**
Date Collected: 01/13/22 11:50 — **Matrix: Solid**
Date Received: 01/15/22 10:19 — **Percent Solids: 86.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			216114	01/19/22 17:58	UK3O	ELLE
Total/NA	Analysis	8260D		50	217892	01/26/22 14:53	USEJ	ELLE

Client Sample ID: SB-1(Endpoint) — **Lab Sample ID: 410-69921-3**
Date Collected: 01/13/22 12:00 — **Matrix: Solid**
Date Received: 01/15/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	215173	01/17/22 13:27	X4C8	ELLE

Client Sample ID: SB-1(Endpoint) — **Lab Sample ID: 410-69921-3**
Date Collected: 01/13/22 12:00 — **Matrix: Solid**
Date Received: 01/15/22 10:19 — **Percent Solids: 87.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			215941	01/19/22 11:53	MXX6	ELLE
Total/NA	Analysis	8260D		1	217477	01/25/22 18:05	USEJ	ELLE

Client Sample ID: SB-2(8-10') — **Lab Sample ID: 410-69921-4**
Date Collected: 01/13/22 12:35 — **Matrix: Solid**
Date Received: 01/15/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	215173	01/17/22 13:27	X4C8	ELLE

Lab Chronicle

Client: Antea Group
Project/Site: Perry, NY - Soil

Job ID: 410-69921-1

Client Sample ID: SB-2(8-10')

Lab Sample ID: 410-69921-4
Date Collected: 01/13/22 12:35
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			215941	01/19/22 11:53	MXX6	ELLE
Total/NA	Analysis	8260D		1	217477	01/25/22 18:27	USEJ	ELLE

Client Sample ID: SB-2(10-12')

Lab Sample ID: 410-69921-5
Date Collected: 01/13/22 12:45
Matrix: Solid
Date Received: 01/15/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	215173	01/17/22 13:27	X4C8	ELLE

Client Sample ID: SB-2(10-12')

Lab Sample ID: 410-69921-5
Date Collected: 01/13/22 12:45
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			216114	01/19/22 17:58	UK3O	ELLE
Total/NA	Analysis	8260D		50	217892	01/26/22 15:15	USEJ	ELLE

Client Sample ID: SB-2(Endpoint)

Lab Sample ID: 410-69921-6
Date Collected: 01/13/22 12:55
Matrix: Solid
Date Received: 01/15/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	215173	01/17/22 13:27	X4C8	ELLE

Client Sample ID: SB-2(Endpoint)

Lab Sample ID: 410-69921-6
Date Collected: 01/13/22 12:55
Matrix: Solid
Date Received: 01/15/22 10:19
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			215941	01/19/22 11:53	MXX6	ELLE
Total/NA	Analysis	8260D		1	217477	01/25/22 18:50	USEJ	ELLE

Client Sample ID: Trip Blank

Lab Sample ID: 410-69921-7
Date Collected: 01/06/22 00:00
Matrix: Water
Date Received: 01/15/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	216237	01/20/22 11:24	ULCP	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Antea Group
Job ID: 410-69921-1
Project/Site: Perry, NY - Soil

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	04-01-22

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
8260D		Water	1,2,3-Trimethylbenzene
8260D	5035	Solid	1,2,3-Trimethylbenzene
Moisture		Solid	Percent Moisture

Method Summary

Client: Antea Group
Job ID: 410-69921-1
Project/Site: Perry, NY - Soil

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
Moisture	Percent Moisture	EPA	ELLE
5030C	Purge and Trap	SW846	ELLE
5035	Closed System Purge and Trap	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 Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Antea Group
Project/Site: Perry, NY - Soil

Job ID: 410-69921-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-69921-1	SB-1(8-10')	Solid	01/13/22 11:35	01/15/22 10:19
410-69921-2	SB-1(10-12')	Solid	01/13/22 11:50	01/15/22 10:19
410-69921-3	SB-1(Endpoint)	Solid	01/13/22 12:00	01/15/22 10:19
410-69921-4	SB-2(8-10')	Solid	01/13/22 12:35	01/15/22 10:19
410-69921-5	SB-2(10-12')	Solid	01/13/22 12:45	01/15/22 10:19
410-69921-6	SB-2(Endpoint)	Solid	01/13/22 12:55	01/15/22 10:19
410-69921-7	Trip Blank	Water	01/06/22 00:00	01/15/22 10:19

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record

410-69921 Chain of Custody

Eurofins Environment Testing America

Client Information	Sampler: J. Stanek	Lab PM: Williams, Marrissa C	Job No.: 47265-13196.1
Client Contact: Katie Angel	Phone: 612-772-1142	E-Mail: Marrissa.Williams@eurofinset.com	Page: Page 1 of 1
Company: Antea Group	PWSID:	Analysis Requested	Job #:
Address: 535 Route 38 Suite 203	Due Date Requested:		Preservation Codes:
City: Cherry Hill	TAT Requested (days):		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 - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: NJ, 08002	Compliance Project: Δ Yes Δ No		
Phone: 518-859-4626(Tel)	PO #: Purchase Order Requested		
Email: Katie.Angel@anteagroup.us	WO #:		Other:
Project Name: Perry, NY - Soil	Project #: 41009019		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)		8260D - Perry Site Specific List	8260D - Perry Site Specific List	Total Number of containers	Special Instructions/Note:
SB-1 (8-10')	1/13/22	1135	G	Solid	N	N	4			
SB-1 (10-12')	1/13/22	1150	G	Solid	N	N	4			
SB-1 (Endpoint)	1/13/22	1200	G	Solid	N	N	4			
SB-2 (8-10')	1/13/22	1235	G	Solid	N	N	4			
SB-2 (10-12')	1/13/22	1245	G	Solid	N	N	4			
SB-2 (Endpoint	1/13/22	1255	G	Solid	N	N	4			
				Solid	N	N				
Trip Blank	1/13/22		G	Water	N	N	2		2	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	1-6-22 1100	ELLE			
2	[signature]	1/13/22 1630	Antea Group			
3				[signature]	1/15/22	7019

Custody Seals Intact: ☑ Yes Δ No
Custody Seal No.: 128910
Cooler Temperature(s) °C and Other Remarks: 1.8

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Antea Group

Job Number: 410-69921-1

Login Number: 69921

List Source: Eurofins Lancaster Laboratories Env, LLC

List Number: 1

Creator: Cyms, Carolyn M

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=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.	True	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-67898-1
Client Project/Site: RMSC (BP) Perry

For:
Antea Group
535 Route 38
Suite 203
Cherry Hill, New Jersey 08002

Attn: Katie Angel

Marrissa Williams

Authorized for release by:
12/30/2021 9:42:41 AM

Marrissa Williams, Project Manager
(717)556-7246
Marrissa.Williams@eurofinset.com

LINKS

Review your project results through TotalAccess

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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.

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Marrissa Williams
Project Manager
12/30/2021 9:42:41 AM

Table of Contents

Definitions/Glossary

Client: Antea Group
Job ID: 410-67898-1
Project/Site: RMSC (BP) Perry

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
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

Job ID: 410-67898-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-67898-1

Receipt

The samples were received on 12/22/2021 11:56 AM. 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 1.0°C

GC/MS VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Antea Group
Project/Site: RMSC (BP) Perry

Job ID: 410-67898-1

Client Sample ID: MW-107 — Lab Sample ID: 410-67898-1

No Detections.

Client Sample ID: MW-101 — Lab Sample ID: 410-67898-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.30	J	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-102 — Lab Sample ID: 410-67898-3

No Detections.

Client Sample ID: CSW-08 — Lab Sample ID: 410-67898-4

No Detections.

Client Sample ID: MW-106 — Lab Sample ID: 410-67898-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.60	J	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: TB-1 — Lab Sample ID: 410-67898-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-107

Lab Sample ID: 410-67898-1

Date Collected: 12/16/21 16:20

Matrix: Water

Date Received: 12/22/21 11:56

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			12/29/21 18:27	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			12/29/21 18:27	1
1,2,3-Trimethylbenzene	ND		5.0	0.30	ug/L			12/29/21 18:27	1
1,2,4-Trimethylbenzene	ND		5.0	1.0	ug/L			12/29/21 18:27	1
Chloroethane	ND		1.0	0.20	ug/L			12/29/21 18:27	1
Chloroform	ND		1.0	0.30	ug/L			12/29/21 18:27	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			12/29/21 18:27	1
Methylene Chloride	ND		1.0	0.30	ug/L			12/29/21 18:27	1
n-Butylbenzene	ND		5.0	0.30	ug/L			12/29/21 18:27	1
Tetrachloroethene	ND		1.0	0.30	ug/L			12/29/21 18:27	1
Vinyl chloride	ND		1.0	0.20	ug/L			12/29/21 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*12/29/21 18:27*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*12/29/21 18:27*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*12/29/21 18:27*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*12/29/21 18:27*	*1*

Client Sample ID: MW-101

Lab Sample ID: 410-67898-2

Date Collected: 12/16/21 16:50

Matrix: Water

Date Received: 12/22/21 11:56

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			12/29/21 18:47	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			12/29/21 18:47	1
1,2,3-Trimethylbenzene	ND		5.0	0.30	ug/L			12/29/21 18:47	1
1,2,4-Trimethylbenzene	ND		5.0	1.0	ug/L			12/29/21 18:47	1
Chloroethane	ND		1.0	0.20	ug/L			12/29/21 18:47	1
Chloroform	**0.30**	**J**	1.0	0.30	ug/L			12/29/21 18:47	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			12/29/21 18:47	1
Methylene Chloride	ND		1.0	0.30	ug/L			12/29/21 18:47	1
n-Butylbenzene	ND		5.0	0.30	ug/L			12/29/21 18:47	1
Tetrachloroethene	ND		1.0	0.30	ug/L			12/29/21 18:47	1
Vinyl chloride	ND		1.0	0.20	ug/L			12/29/21 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*12/29/21 18:47*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/29/21 18:47*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*12/29/21 18:47*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*12/29/21 18:47*	*1*

Client Sample ID: MW-102

Lab Sample ID: 410-67898-3

Date Collected: 12/16/21 17:20

Matrix: Water

Date Received: 12/22/21 11:56

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			12/29/21 19:07	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			12/29/21 19:07	1
1,2,3-Trimethylbenzene	ND		5.0	0.30	ug/L			12/29/21 19:07	1

Client Sample ID: MW-102

Lab Sample ID: 410-67898-3

Date Collected: 12/16/21 17:20

Matrix: Water

Date Received: 12/22/21 11:56

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		5.0	1.0	ug/L			12/29/21 19:07	1
Chloroethane	ND		1.0	0.20	ug/L			12/29/21 19:07	1
Chloroform	ND		1.0	0.30	ug/L			12/29/21 19:07	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			12/29/21 19:07	1
Methylene Chloride	ND		1.0	0.30	ug/L			12/29/21 19:07	1
n-Butylbenzene	ND		5.0	0.30	ug/L			12/29/21 19:07	1
Tetrachloroethene	ND		1.0	0.30	ug/L			12/29/21 19:07	1
Vinyl chloride	ND		1.0	0.20	ug/L			12/29/21 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*12/29/21 19:07*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*12/29/21 19:07*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*12/29/21 19:07*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*12/29/21 19:07*	*1*

Client Sample ID: CSW-08

Lab Sample ID: 410-67898-4

Date Collected: 12/17/21 09:15

Matrix: Water

Date Received: 12/22/21 11:56

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			12/29/21 23:21	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			12/29/21 23:21	1
1,2,3-Trimethylbenzene	ND		5.0	0.30	ug/L			12/29/21 23:21	1
1,2,4-Trimethylbenzene	ND		5.0	1.0	ug/L			12/29/21 23:21	1
Chloroethane	ND		1.0	0.20	ug/L			12/29/21 23:21	1
Chloroform	ND		1.0	0.30	ug/L			12/29/21 23:21	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			12/29/21 23:21	1
Methylene Chloride	ND		1.0	0.30	ug/L			12/29/21 23:21	1
n-Butylbenzene	ND		5.0	0.30	ug/L			12/29/21 23:21	1
Tetrachloroethene	ND		1.0	0.30	ug/L			12/29/21 23:21	1
Vinyl chloride	ND		1.0	0.20	ug/L			12/29/21 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*12/29/21 23:21*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*12/29/21 23:21*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*12/29/21 23:21*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*12/29/21 23:21*	*1*

Client Sample ID: MW-106

Lab Sample ID: 410-67898-5

Date Collected: 12/17/21 10:10

Matrix: Water

Date Received: 12/22/21 11:56

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			12/29/21 23:01	1
1,1-Dichloroethane	**0.60**	**J**	1.0	0.30	ug/L			12/29/21 23:01	1
1,2,3-Trimethylbenzene	ND		5.0	0.30	ug/L			12/29/21 23:01	1
1,2,4-Trimethylbenzene	ND		5.0	1.0	ug/L			12/29/21 23:01	1
Chloroethane	ND		1.0	0.20	ug/L			12/29/21 23:01	1
Chloroform	ND		1.0	0.30	ug/L			12/29/21 23:01	1

Client Sample ID: MW-106

Lab Sample ID: 410-67898-5

Date Collected: 12/17/21 10:10

Matrix: Water

Date Received: 12/22/21 11:56

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			12/29/21 23:01	1
Methylene Chloride	ND		1.0	0.30	ug/L			12/29/21 23:01	1
n-Butylbenzene	ND		5.0	0.30	ug/L			12/29/21 23:01	1
Tetrachloroethene	ND		1.0	0.30	ug/L			12/29/21 23:01	1
Vinyl chloride	ND		1.0	0.20	ug/L			12/29/21 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*12/29/21 23:01*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/29/21 23:01*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*12/29/21 23:01*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*12/29/21 23:01*	*1*

Client Sample ID: TB-1

Lab Sample ID: 410-67898-6

Date Collected: 12/17/21 00:00

Matrix: Water

Date Received: 12/22/21 11:56

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			12/29/21 22:41	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			12/29/21 22:41	1
1,2,3-Trimethylbenzene	ND		5.0	0.30	ug/L			12/29/21 22:41	1
1,2,4-Trimethylbenzene	ND		5.0	1.0	ug/L			12/29/21 22:41	1
Chloroethane	ND		1.0	0.20	ug/L			12/29/21 22:41	1
Chloroform	ND		1.0	0.30	ug/L			12/29/21 22:41	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			12/29/21 22:41	1
Methylene Chloride	ND		1.0	0.30	ug/L			12/29/21 22:41	1
n-Butylbenzene	ND		5.0	0.30	ug/L			12/29/21 22:41	1
Tetrachloroethene	ND		1.0	0.30	ug/L			12/29/21 22:41	1
Vinyl chloride	ND		1.0	0.20	ug/L			12/29/21 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*12/29/21 22:41*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*12/29/21 22:41*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*12/29/21 22:41*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*12/29/21 22:41*	*1*

Surrogate Summary

Client: Antea Group
Project/Site: RMSC (BP) Perry

Job ID: 410-67898-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-67898-1	MW-107	104	100	108	102
410-67898-2	MW-101	104	99	109	103
410-67898-3	MW-102	106	101	109	103
410-67898-4	CSW-08	105	100	110	101
410-67898-5	MW-106	106	99	109	102
410-67898-6	TB-1	105	100	108	102
LCS 410-209941/4	Lab Control Sample	105	104	108	104
LCS 410-210303/4	Lab Control Sample	103	102	108	104
MB 410-209941/6	Method Blank	106	100	107	103
MB 410-210303/6	Method Blank	103	98	110	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-209941/6
Matrix: Water
Analysis Batch: 209941

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			12/29/21 10:04	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			12/29/21 10:04	1
1,2,3-Trimethylbenzene	ND		5.0	0.30	ug/L			12/29/21 10:04	1
1,2,4-Trimethylbenzene	ND		5.0	1.0	ug/L			12/29/21 10:04	1
Chloroethane	ND		1.0	0.20	ug/L			12/29/21 10:04	1
Chloroform	ND		1.0	0.30	ug/L			12/29/21 10:04	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			12/29/21 10:04	1
Methylene Chloride	ND		1.0	0.30	ug/L			12/29/21 10:04	1
n-Butylbenzene	ND		5.0	0.30	ug/L			12/29/21 10:04	1
Tetrachloroethene	ND		1.0	0.30	ug/L			12/29/21 10:04	1
Vinyl chloride	ND		1.0	0.20	ug/L			12/29/21 10:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*12/29/21 10:04*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*12/29/21 10:04*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*12/29/21 10:04*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*12/29/21 10:04*	*1*

Lab Sample ID: LCS 410-209941/4
Matrix: Water
Analysis Batch: 209941

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	20.5		ug/L		102	67 - 126
1,1-Dichloroethane	20.0	19.6		ug/L		98	80 - 120
1,2,3-Trimethylbenzene	20.0	18.6		ug/L		93	80 - 120
1,2,4-Trimethylbenzene	20.0	18.7		ug/L		94	75 - 120
Chloroethane	20.0	19.3		ug/L		96	55 - 123
Chloroform	20.0	20.8		ug/L		104	80 - 120
cis-1,2-Dichloroethene	20.0	20.5		ug/L		103	80 - 125
Methylene Chloride	20.0	19.7		ug/L		98	80 - 120
n-Butylbenzene	20.0	18.3		ug/L		92	76 - 120
Tetrachloroethene	20.0	19.7		ug/L		98	80 - 120
Vinyl chloride	20.0	18.6		ug/L		93	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 410-210303/6
Matrix: Water
Analysis Batch: 210303

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			12/29/21 21:20	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			12/29/21 21:20	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-210303/6
Matrix: Water
Analysis Batch: 210303

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trimethylbenzene	ND		5.0	0.30	ug/L			12/29/21 21:20	1
1,2,4-Trimethylbenzene	ND		5.0	1.0	ug/L			12/29/21 21:20	1
Chloroethane	ND		1.0	0.20	ug/L			12/29/21 21:20	1
Chloroform	ND		1.0	0.30	ug/L			12/29/21 21:20	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			12/29/21 21:20	1
Methylene Chloride	ND		1.0	0.30	ug/L			12/29/21 21:20	1
n-Butylbenzene	ND		5.0	0.30	ug/L			12/29/21 21:20	1
Tetrachloroethene	ND		1.0	0.30	ug/L			12/29/21 21:20	1
Vinyl chloride	ND		1.0	0.20	ug/L			12/29/21 21:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*12/29/21 21:20*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/29/21 21:20*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*12/29/21 21:20*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*12/29/21 21:20*	*1*

Lab Sample ID: LCS 410-210303/4
Matrix: Water
Analysis Batch: 210303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane			20.0	21.0		ug/L		105	67 - 126		
1,1-Dichloroethane			20.0	19.3		ug/L		96	80 - 120		
1,2,3-Trimethylbenzene			20.0	18.3		ug/L		91	80 - 120		
1,2,4-Trimethylbenzene			20.0	18.5		ug/L		92	75 - 120		
Chloroethane			20.0	18.5		ug/L		92	55 - 123		
Chloroform			20.0	20.8		ug/L		104	80 - 120		
cis-1,2-Dichloroethene			20.0	20.1		ug/L		101	80 - 125		
Methylene Chloride			20.0	19.6		ug/L		98	80 - 120		
n-Butylbenzene			20.0	18.1		ug/L		91	76 - 120		
Tetrachloroethene			20.0	20.2		ug/L		101	80 - 120		
Vinyl chloride			20.0	17.5		ug/L		87	56 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

QC Association Summary

Client: Antea Group
Project/Site: RMSC (BP) Perry

Job ID: 410-67898-1

GC/MS VOA

Analysis Batch: 209941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-67898-1	MW-107	Total/NA	Water	8260D	
410-67898-2	MW-101	Total/NA	Water	8260D	
410-67898-3	MW-102	Total/NA	Water	8260D	
MB 410-209941/6	Method Blank	Total/NA	Water	8260D	
LCS 410-209941/4	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 210303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-67898-4	CSW-08	Total/NA	Water	8260D	
410-67898-5	MW-106	Total/NA	Water	8260D	
410-67898-6	TB-1	Total/NA	Water	8260D	
MB 410-210303/6	Method Blank	Total/NA	Water	8260D	
LCS 410-210303/4	Lab Control Sample	Total/NA	Water	8260D	

Lab Chronicle

Client: Antea Group
Project/Site: RMSC (BP) Perry

Job ID: 410-67898-1

Client Sample ID: MW-107
Date Collected: 12/16/21 16:20
Date Received: 12/22/21 11:56

Lab Sample ID: 410-67898-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	209941	12/29/21 18:27	TQ4J	ELLE

Client Sample ID: MW-101
Date Collected: 12/16/21 16:50
Date Received: 12/22/21 11:56

Lab Sample ID: 410-67898-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	209941	12/29/21 18:47	TQ4J	ELLE

Client Sample ID: MW-102
Date Collected: 12/16/21 17:20
Date Received: 12/22/21 11:56

Lab Sample ID: 410-67898-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	209941	12/29/21 19:07	TQ4J	ELLE

Client Sample ID: CSW-08
Date Collected: 12/17/21 09:15
Date Received: 12/22/21 11:56

Lab Sample ID: 410-67898-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	210303	12/29/21 23:21	LCW8	ELLE

Client Sample ID: MW-106
Date Collected: 12/17/21 10:10
Date Received: 12/22/21 11:56

Lab Sample ID: 410-67898-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	210303	12/29/21 23:01	LCW8	ELLE

Client Sample ID: TB-1
Date Collected: 12/17/21 00:00
Date Received: 12/22/21 11:56

Lab Sample ID: 410-67898-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	210303	12/29/21 22:41	LCW8	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Antea Group
Project/Site: RMSC (BP) Perry

Job ID: 410-67898-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10670	04-01-22

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
8260D		Water	1,2,3-Trimethylbenzene

Method Summary

Client: Antea Group
Job ID: 410-67898-1
Project/Site: RMSC (BP) Perry

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Antea Group
Project/Site: RMSC (BP) Perry

Job ID: 410-67898-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-67898-1	MW-107	Water	12/16/21 16:20	12/22/21 11:56
410-67898-2	MW-101	Water	12/16/21 16:50	12/22/21 11:56
410-67898-3	MW-102	Water	12/16/21 17:20	12/22/21 11:56
410-67898-4	CSW-08	Water	12/17/21 09:15	12/22/21 11:56
410-67898-5	MW-106	Water	12/17/21 10:10	12/22/21 11:56
410-67898-6	TB-1	Water	12/17/21 00:00	12/22/21 11:56

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone (717) 656-2300

Chain of Custody Record

410-67898 Chain of Custody

eurofins

Client Information	Sampler: Ross Tamarelli	Lab PM: Marissa Williams	COC No: 410-41518-12774.1
Client Contact: Katie Angel	Phone:	E-Mail: katie.angel@antea group.com	State of Origin: NY	Page: Page 1 of 1
Company: Antea Group	PWSID:		Job #:
Address: 71 Raymond Road	Due Date Requested:		
City: West Hartford	TAT Requested (days): 5 day		
State, Zip: CT, 06107	Compliance Project: Δ Yes Δ No		
Phone:	PO #:		
Email:	WO #:		
Project Name: RMSC (GP) Perry	Project #:		
Site:	SSOW#:		

Analysis Requested

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 - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	83600 - Perry Site Specific List	Total Number of containers	Special Instructions/Note:
			Preservation Code:			A		
MW-107	12/16/21	1620		GW		X		
MW-101	12/16/21	1650		GW		X		
MW-102	12/16/21	1720		GW		X		
CSW-02	12/17/21	915		GW		X		
MW-105	12/17/21	1010		GW		X		
TB-1	12/17/21	0000		W		X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by	Date	Time	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Ross Tamarelli	12-13-21 12:19	EHLE			
2	Ross Tamarelli	12/17/21 11:00	Antea Group			
3					12/17/21 1156	

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.0

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Antea Group

Job Number: 410-67898-1

Login Number: 67898

List Source: Eurofins Lancaster Laboratories Env, LLC

List Number: 1

Creator: Lugardo, Tamara

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=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.	True	

Appendix C – Soil Boring Logs

Project Name	Soil Boring Log	Soil Boring Number
Hanesbrands, Inc.		**SB-1**

Address	Drilling Contractor/License	Headspace Monitoring Device	Boring Depth
200 North Main Street	**Cascade Drilling**	**N/A**	**12.5 ft.**
Perry **New York**	Drilling Method **Hand Auger / Direct Push**	Sampling Method **Grab Sample**	Boring Diameter **2 in.**
Logged By / Approved By **J. Stangel** / **M. Buck**	Drilling Equipment **Geoprobe**	Sampling Equipment **Grab Sample**	Backfill Material / Surface Finish **Bentonite / Concrete**
Antea Group Project Number **Hbl Perry NY Site Closure**	Driller Name	Date Drilling Started **1/13/2022**	Date Drilling Completed **1/13/2022**

LITHOLOGY **SAMPLING DATA**

Elevation	Depth	Water Level	Graphic Log	Visual Description	Headspace (ppm)	Sample Interval (ft)	Sample Type	Sample Collected	Recovery (%)	Depth
0	0			Hand auger to 5 ft. bgs. No lithology logged.	N/A					0
-5	5									5
				Silt; light brown with pebbles throughout, some plasticity, slight moisture, spots of dry, dark brown flaky soil (ML)		8 - 10	G		100	
-10	10			Silt; light brown with some pebbles, plastic, moist (ML)		10 - 12	G		100	10
				Auger refusal; boring terminated at 12.5 ft. bgs.						
-15	15									15
-20	20									20

G = Grab Sample
N/A = Not Applicable

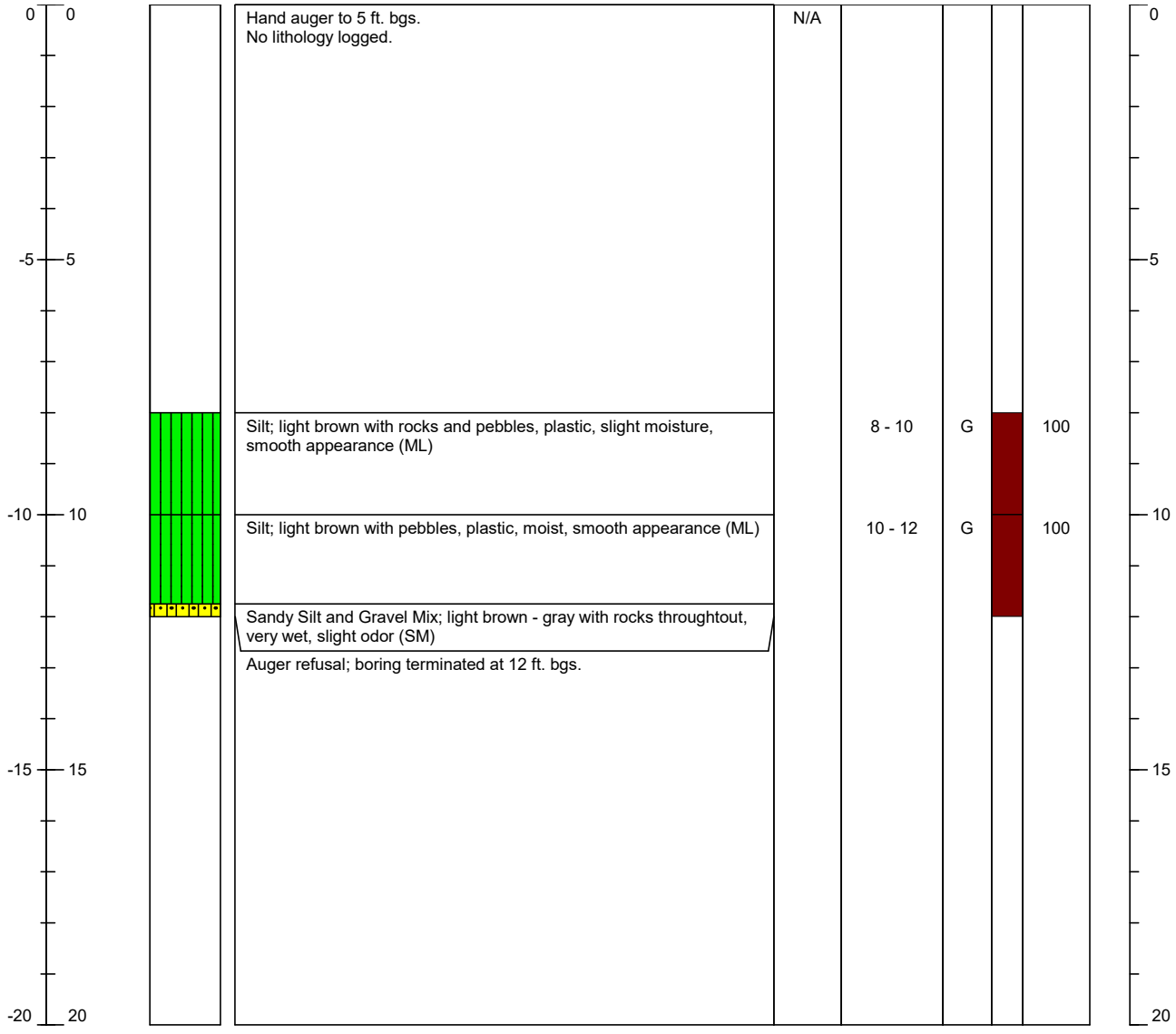
AG Geology, D.P.C.

▽ Water Level During Drilling

Project Name	Soil Boring Log	Soil Boring Number
Hanesbrands, Inc.		**SB-2**

Address	Drilling Contractor/License	Headspace Monitoring Device	Boring Depth
200 North Main Street	**Cascade Drilling**	**N/A**	**12 ft.**
Perry **New York**	Drilling Method **Hand Auger / Direct Push**	Sampling Method **Grab Sample**	Boring Diameter **2 in.**
Logged By / Approved By **J. Stangel** / **M. Buck**	Drilling Equipment **Geoprobe**	Sampling Equipment **Grab Sample**	Backfill Material / Surface Finish **Bentonite / Concrete**
Antea Group Project Number **Hbl Perry NY Site Closure**	Driller Name	Date Drilling Started **1/13/2022**	Date Drilling Completed **1/13/2022**

LITHOLOGY **SAMPLING DATA**



G = Grab Sample
N/A = Not Applicable

AG Geology, D.P.C.

▽ Water Level During Drilling

Appendix D – Groundwater Gauging and Purge Logs

WELL GAUGING/SAMPLING DATA SHEET

Antea Group

Site ID	Perry, NY
Project Location	200 N. Main St.
Antea Group Project#	
Date of Field Event	12/16/21
Weather Conditions	45, sunny

Antea Group PM:	Katie Angel
Personnel On-site	Ross Tomanelli
Equipment Used	~~whale pump~~ / bailers
Materials Used	

Casing Diameter	Gallons per ft
1"	0.041
1.5"	0.092
2"	0.163
4"	0.653
6"	1.469

(5x vol)

WELL ID	TIME	DTP (ft.)	DTW (ft.)	Total Depth (ft.)	Well Diameter (in.)	Well/Case Volume (g.)	To Be Purged Volume (g.)	Actual Purged Volume (g.)	Well Condition	Comments
MW-106		-	7.04	12.02	2	0.81	4.06	4.25	fair	
MW-101		-	5.72	14.50	2	1.43	7.16	7.25	good	
MW-102		-	7.01	18.00	2	1.79	8.96	9.0	good	
CSW-08		-	9.90	11.61	1	0.07	0.35	0.25	good	slow recharge - ran dry 3x
MW-107		-	9.93	11.50	2	0.26	1.28	1.50	bad	no cap on well

Appendix E – Waste Manifest

LORCO PETROLEUM SERVICES

450 SOUTH FRONT STREET, ELIZABETH, NJ 07202

Please print or type
(Form designed for use on elite (12-pitch)(typewriter.)

NON-HAZARDOUS WASTE MANIFEST

R002.3

1. Generator's US EPA ID No.	
Manifest Document No.	10X4146
2. Page 1 of 1	
NHZ1084176	

GENERATOR

3. Generator's Name and Mailing Address: BP PRODUCTS NORTH AMERICA, INC. c/o BP West Coast Products, LLC., P.O.Box 80249 Rancho Santa Margarita CA 92688

HB Perry 200 N Main St Perry, NY

4. Generator's Phone ( )

5. Transporter 1 Company Name: LORCO PETROLEUM SERVICES

6. US EPA ID Number: NJR000023036

A. Transporter's Phone: 908-820-8800

7. Transporter 2 Company Name: Lorco Petroleum Services

8. US EPA ID Number: NJR000023036

B. Transporter's Phone: 908-820-8800

9. Designated Facility Name and Site Address: CLEAN EARTH OF NORTH JERSEY 105 JACOBUS AVE. SOUTH KEARNY, NJ 07032 973-344-4004

10. US EPA ID Number: NJD991291105

C. Facility's Phone: 973-344-4004

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. OIL CONTAMINATED SOLIDS NON DOT REGULATED MATERIAL	01	DM	500	P
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

EMERGENCY RESPONSE #1-800-255-3924 CONTRACT# MS1482273

DECAL # 014535

MANIFEST USED FOR TRACKING PURPOSES ONLY

TRUCK # 164

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
		5	1	22

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Stefan Godley	Stefan Godley	5	1	22

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Abigail Weaver	Abigail Weaver	05	01	22

FACILITY

19. Discrepancy Indication Space

Generator printed & signed in box #18 instead box #16

Received Pending Manifest Review/Quality Control Date

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Mahamadu Dasane	M Dasane	5	10	22

TRANSPORTER #1

C0022

LORCO PETROLEUM SERVICES

www.lorcopetroleum.com

PENDING QUALITY CONTROL

INCHES IN TANK _____

STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

Shipper No. C139178

Carrier No. _____

LORCO PETROLEUM SERVICES, INC.

EPA ID Number NJR000023036

(Name of Carrier)

Date 5/10/22

TO: Consignee	LORCO PETROLEUM SERVICES	FROM: Shipper	PERRY HB
Street	450 SOUTH FRONT STREET	Street	200 N MAIN St
Destination	ELIZABETH, NEW JERSEY 07202	Origin	PERRY NY
Route	FEDERAL TERMINAL	Emergency Response Phone No.	1-800-255-3924 Contract # MIS1482273
		Vehicle Number	164

No.	Type	HM*	Kind of Packaging, Description of Articles, Special Marks and Exceptions	Total Quantity	Unit Wt / Vol
1	DM		PETROLEUM CONTACT WATER DOT NON-REGULATED RCRA NON-HAZARDOUS	50	G

*When transporting hazardous materials include the technical or chemical name for n.o.s. (not otherwise specified) or generic description of material with appropriate UN or NA number as defined in US DOT Emergency Communication Standard (HM-126C). Provide emergency response phone number in case of incident or accident in box above.

GENERATOR'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in the proper condition for transportation according to the applicable regulations of the Department of Transportation.

Printed/Typed Name	Signature	Month	Day	Year

Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Stello Clark	Clark	05	10	22

Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

Discrepancy Indication Space

Facility Owner or Operator:

Printed/Typed Name	Signature	Month	Day	Year
Tom Wilhoit	Tom Wilhoit	05	10	22

1

LPS -11C