

# Vapor Intrusion Investigation Summary Report

Former Champion Products, Inc.  
200 North Main Street  
Perry, New York

## **PREPARED FOR:**

Megan Kuczka  
NYSDEC  
Division of Environmental Remediation  
700 Delaware Avenue  
Buffalo, NY 14209

April 21, 2023

NYSDEC Site No. V00189

# Contents

Introduction .....	1
1.0    Site Characterization.....	1
1.1    Site Description .....	1
2.0    Geology and Hydrogeology.....	1
2.1    Site Geology.....	1
2.2    Site Hydrology .....	1
3.0    Site History.....	2
3.1    Site Background.....	2
3.2    Voluntary Cleanup Agreement.....	2
4.0    Soil Vapor Intrusion Investigation.....	3
4.1    Pre-Sampling Building Inspection.....	3
4.2    Sub-Slab Soil Vapor Sampling .....	3
4.3    Indoor/Outdoor Ambient Air Sampling.....	4
5.0    Laboratory Analytical Results .....	4
5.1    Soil Vapor and Ambient Air Samples – Evaluation Criteria .....	4
5.2    Laboratory Analytical Results: Sub-Slab Vapor.....	5
5.3    Laboratory Analytical Results: Indoor/Outdoor Ambient Air .....	5
5.4    Laboratory Analytical Results: Data Analysis.....	5
6.0    Conclusion.....	6
Remarks .....	6
References .....	7

## Figures

Figure 1 – Site Location Map

Figure 2 – Site Map

## Tables

Table 1 – Sub-Slab Vapor and Ambient Air Analytical Results

## Appendices

Appendix A – Indoor Air Quality Questionnaire and Building Inventory

Appendix B – Laboratory Analytical Reports

Appendix C – Data Usability Summary Report

# Soil Vapor Intrusion Investigation Summary Report

*Former Champion Products, Inc. – Perry, New York*

## Introduction

This Vapor Intrusion Investigation Summary Report (VII Report) was prepared by AG Geology & Engineering, D.P.C. (AG Geology), on behalf of Hanesbrands, Inc. (Hanesbrands) to summarize the results of the soil vapor intrusion investigation conducted at the former Champion Products (Champion) facility located at 200 North Main Street, Perry, New York between December 12 and 13, 2022. All work summarized in this VII Report were conducted in association with New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Agreement (VCA) V00189.

The work summarized in this VII Report was performed in accordance with New York State Department of Health (NYSDOH) – Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (SVI Guidance), NYSDEC DER-13 – Strategy for Evaluating Soil Vapor Intrusion at Remedial Sites in New York (NYSDEC DER-13), and NYSDEC Division of Environmental Remediation (DER-10) Technical Guidance for Site Investigation and Remediation.

## 1.0 Site Characterization

### 1.1 SITE DESCRIPTION

The former Champion Products facility is located at 200 North Main Street, Perry, New York (the Site) and is a 26-acre irregularly shaped parcel of land (**Figure 1**). The Site is bound by North Main Street to the north, single family residential properties to the south and west, and farmland to the east. The main on-site building is approximately 150,000 square feet ( $\text{ft}^2$ ) in size with a section that is approximately 75,000  $\text{ft}^2$ , which is not part of the Site. In 2014, a 9,600  $\text{ft}^2$ , three bay, steel frame construction, bus garage was constructed in the northeast corner of the Site and is now utilized for parking of buses. 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**.

## 2.0 Geology and Hydrogeology

### 2.1 SITE GEOLOGY

There are no predominant geological surface features such as rock outcroppings present at the Site. Based on previous subsurface investigations conducted at the Site to date, the Site is underlain by approximately 14 to 16 feet of unconsolidated deposits ranging from sandy silts and clays to fine to medium sands and gravels. The unconsolidated deposits are underlain by a shale bedrock unit.

### 2.2 SITE HYDROLOGY

A shallow water table groundwater system is present at depths ranging from 4 feet to 12 feet below ground surface (ft bgs) in the mixed unconsolidated deposits located beneath the Site. Groundwater is present in the bedrock at approximately 24 to 34 ft bgs. 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.

## **3.0 Site History**

### **3.1 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 Development, LLC. (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, American Classic Outfitters (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.

### **3.2 VOLUNTARY CLEANUP AGREEMENT**

In March 2000, Champion entered into a Voluntary Cleanup Agreement (VCA) with the 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 the 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 the implementation of sub-slab depressurization systems (SSDSs). 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 six feet of soil backfill (**Figure 2**). In the interior of the building, the cover system is comprised of the building's existing four-inch to six-inch-thick concrete floor slabs (**Figure 2**). The cover systems are permanent controls, and the quality and integrity of these systems is verified during 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 NYSDOH decision matrix recommended action levels for monitoring and/or mitigation (**Figure 2**). The SSDS at each area consists of a series of two to three sub-slab suction points (installed in high permeability material), which are connected by three-inch polyvinyl chloride (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-inch 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 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. Compliance with the ICs is evaluated during annual inspections. 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.

## 4.0 Soil Vapor Intrusion Investigation

On December 13, 2022, Antea Group, a subcontractor of 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 and subsequent January 2022 sample locations. 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 in accordance with NYSDOH SVI Guidance. The methodology implemented during the event is described in the paragraphs below.

### 4.1 PRE-SAMPLING BUILDING INSPECTION

On December 13, 2022, AG Geology was on-site to perform a site walk and complete an Indoor Air Quality Questionnaire and Building Inventory at the Site. The inspection aimed to identify and minimize conditions that could interfere with the proposed testing methodology, identify sampling locations, visually inspect the physical condition of the building, floor layout, site use, and to screen the ambient air for the presence of VOCs utilizing a photo-ionization detector (PID). The SSDS was shut-off and capped during the previous January 2022 vapor intrusion investigation to allow the site to return to its equilibrium status prior to the vapor intrusion sampling activities. It was confirmed the SSDS was still shut-off and capped during monitoring well decommissioning activities conducted between November 28 and 30, 2022 prior to vapor intrusion sampling activities conducted on December 13, 2022. Additionally, a crack near SS-3 noticed during the January 2022 sampling was repaired during the November decommissioning activities to maintain the cover system prior to the December vapor 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, maintenance room, break room, and office area. The facility is heated by natural gas with various ceiling mounted ducts 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 (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. The highest PID reading identified during the building inventory was 89.6 parts per million (ppm) in the maintenance room near the kerosene/gasoline containers. PID readings did not exceed 0.1 ppm in any area where sub-slab soil vapor or ambient air samples were collected. Sub-slab vapor and ambient air sampling locations are illustrated in **Figure 2**. A copy of the Indoor Air Quality Questionnaire and Building Inventory is provided in **Appendix A**.

### 4.2 SUB-SLAB SOIL VAPOR SAMPLING

In accordance with NYSDOH SVI Guidance, five temporary vapor probes were installed by Antea Group, 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, at least 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 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. The 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 collected over a continuous eight-hour period to be representative of an eight-hour work shift and subsequently submitted to Alpha Analytical, Inc. (Alpha) of Mansfield, MA for analysis of VOCs via United States Environmental Protection Agency (USEPA) Method TO-15. Alpha is a NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified laboratory (Certification Number 11627). Following receipt, analytical data was checked by Antea Group for completeness and accuracy; and was validated by a NYSDEC-approved data validation chemist and a Data Usability Summary Report (DUSR) was prepared. Sub-slab vapor sample locations are illustrated in **Figure 2**.

#### **4.3 INDOOR/OUTDOOR AMBIENT AIR SAMPLING**

Five indoor ambient air samples (IA-1, IA-2, IA-3, IA-4, and IA-5) were collected via summa canister inside the facility at locations adjacent to sub-slab vapor sample locations of the same designation over the same sampling period. The 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 Selective Ion Monitoring (SIM). Indoor ambient air sampling locations are illustrated in **Figure 2**. A copy of the Indoor Air Quality Questionnaire and Building Inventory is presented in **Appendix A**.

One outdoor ambient air sample (OA-1) was collected via summa canister to characterize site-specific background outdoor air conditions. Sample OA-1 was collected northwest of the building concurrently with sub-slab vapor and indoor ambient air samples and submitted to Alpha for analysis of VOCs via USEPA Method TO-15. Following receipt, analytical data was checked by Antea Group for completeness and accuracy; and was validated by a NYSDEC-approved data validation chemist and a DUSR was prepared. The outdoor ambient air sampling location is illustrated in **Figure 2**.

## **5.0 Laboratory Analytical Results**

### **5.1 SOIL VAPOR AND AMBIENT 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 NYSDOH Guidance document. More specifically, the NYSDOH 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 NYSDOH 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 USEPA 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, 90<sup>th</sup>, 95<sup>th</sup>, and 99<sup>th</sup> percentile values for the distribution of each compound. The NYSDOH recommends the use of the 90<sup>th</sup> 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 the 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 95<sup>th</sup> percentile value was used as the secondary reference for indoor air concentrations in this investigation per a request from the NYSDEC.

## **5.2 LABORATORY ANALYTICAL RESULTS: SUB-SLAB VAPOR**

Upon review of laboratory analytical data obtained from the five sub-slab vapor samples (SS-1, SS-2, SS-3, SS-4, SS-5) collected on December 13, 2022, a total of 25 compounds were identified above laboratory reporting limits. The laboratory analytical results from the sub-slab vapor samples collected on December 13, 2022, are summarized in **Table 1**. The laboratory analytical report is provided in **Appendix B**. A DUSR is included in **Appendix C**.

## **5.3 LABORATORY ANALYTICAL RESULTS: INDOOR/OUTDOOR AMBIENT AIR**

Upon review of laboratory analytical data obtained from the five indoor ambient air samples (IA-1, IA-2, IA-3, IA-4, IA-5) collected on December 13, 2022, a total of 18 compounds were identified above laboratory reporting limits; however, no compounds were detected at concentrations above their respective reference values.

A total of seven compounds were identified above laboratory reporting limits in the outdoor ambient air sample (OA-1) collected northwest of the main on-site building; however, no compounds were detected at concentrations above their respective reference values. The laboratory analytical results from the indoor/outdoor ambient air samples collected on December 13, 2022, are summarized in **Table 1**. The laboratory analytical report is provided in **Appendix B**. A DUSR is included in **Appendix C**.

## **5.4 LABORATORY ANALYTICAL RESULTS: DATA ANALYSIS**

The 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 December 13, 2022, sampling event, these decision matrices indicated “no further action” was required with regard to these eight chemicals.

A review of laboratory analytical results identified three compounds chloroform, n-hexane, and trichlorofluoromethane detected above the respective air reference values in at least one sub-slab vapor sample however none of these compounds were detected in any of the indoor or outdoor ambient air samples exceeding their reference values.

Based on a review of the laboratory analytical results obtained from the December 13, 2022, sampling event, no compounds were identified in any indoor air sample at concentrations above their respective reference values (90th percentile BASE database or 95th percentile Volatile Organic Chemicals in Air of Fuel Oil Heated Homes), which are considered representative of background levels found in office settings. All identified compounds were found at concentrations falling within the range commonly found in commercial buildings across New York State.

## 6.0 Conclusion

Based on analytical results obtained during the December 2022 vapor sampling event, residual impacts exist within the sub-slab. Chloroform, n-hexane, and trichlorofluoromethane were detected in sub-slab vapor samples at concentrations above the lowest reference value; however, concentrations of these three compounds were either not detected or were below their respective reference values in all indoor and outdoor ambient air samples. There were no exceedances identified in any of the indoor air or outdoor ambient air samples. Additionally, these reference concentrations are indicative of background concentration only, not something that would be considered a health hazard. Given that concentrations of these compounds do not pose a threat to human health, AG Geology is requesting that the use and annual inspections of the SSDSs be discontinued.

## Remarks

The recommendations contained in this report represent AG Geology'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 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's client and anyone else specifically identified in writing by AG Geology as a user of this report. AG Geology will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, AG Geology makes no express or implied warranty as to the contents of this report.

Prepared by:



Date: April 21, 2023

Moira Buck  
Project Professional

Reviewed by:



Date: April 21, 2023

Katharine Angel, PE  
Project Manager

## References

Cadwell, Donald H., *et al.*, 1991, Surficial Geologic Map of New York, Niagara Sheet: New York State Geologic Survey.

New York State Department of Environmental Conservation, Division of Environmental Remediation, DER-10 Technical Guidance for Site Investigation and Remediation, dated May 3, 2010.

New York State Department of Environmental Conservation, Division of Water, Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values, dated October 22, 1993, revised June 1998.

New York State Department of Environmental Conservation, Division of Environmental Remediation, Final Commissioner's Policy CP-51: Soil Cleanup Guidance, dated October 21, 2010.

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**

Figure 1 – Site Location Map

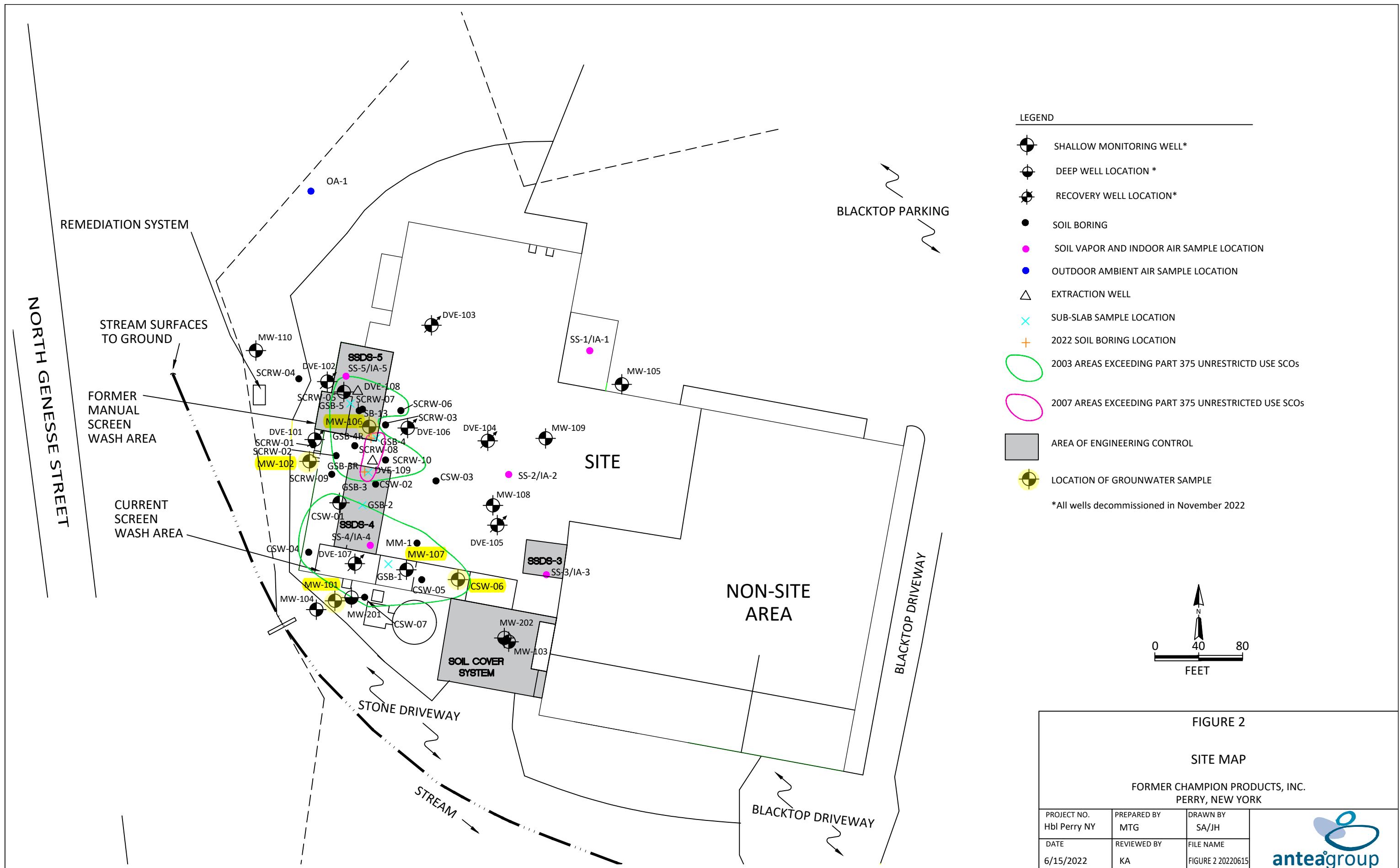
Figure 2 – Site Map



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



## **Table**

Table 1 – Sub-Slab Vapor and Ambient Air Analytical Results

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

Compound	Temporary Sub-Slab Vapor Samples														
	SS-1			SS-2			SS-3			SS-4			SS-5		
Date	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022
PID screening results (ppm)	--	2.4	0.0	--	6.7	0.1	--	2.1	0.0	--	3.0	0.0	--	9.2	0.1
1,1,1-Trichloroethane	98	<1.09	1.58	22	4.92	7.26	220	<1.09	16.9	7,600	2.91	9.6	1,200	1.13	13.6
1,1,2,2-Tetrachloroethane	<2.1	<1.37	<1.37	<5.5	<1.37	<1.37	<4.1	<1.37	<1.37	<89	<1.37	<1.37	<8.2	<1.37	<1.37
1,1,2-Trichloroethane	<1.6	<1.09	<1.09	<4.4	<1.09	<1.09	<3.3	<1.09	<1.09	<71	<1.09	<1.09	<6.5	<1.09	<1.09
1,1-Dichloroethane	<1.2	<0.809	<0.809	<3.2	<0.809	<0.809	<2.4	<0.809	<0.809	1300	<0.809	<0.809	180	1.65	<0.809
1,1-Dichloroethene	<1.2	<0.793	<0.793	<3.2	<0.793	<0.793	<2.4	<0.793	<0.793	59	<0.793	<0.793	<4.8	<0.793	<0.793
1,2,4-Trichlorobenzene	<5.6	<1.48	<1.48	<15	<1.48	<1.48	11	<1.48	<1.48	240	<1.48	<1.48	22	<1.48	<1.48
1,2,4-Trimethylbenzene	3.1	<0.983	1.16	<3.9	2.36	3.56	<2.9	4.37	3.07	<64	1.83	2.91	<5.9	1.46	4.11
1,2-Dibromoethane	<2.3	<1.54	<1.54	<6.1	<1.54	<1.54	<4.6	<1.54	<1.54	<100	<1.54	<1.54	<9.2	<1.54	<1.54
1,2-Dichlorobenzene	<1.8	<1.2	<1.2	<4.8	<1.2	<1.2	<3.6	<1.2	<1.2	<78	<1.2	<1.2	<7.2	<1.2	<1.2
1,2-Dichloroethane	<1.2	<0.809	<0.809	<3.2	<0.809	<0.809	<2.4	<0.809	<0.809	<53	<0.809	<0.809	<4.9	<0.809	<0.809
1,2-Dichloropropane	<1.4	<0.924	<0.924	<3.7	<0.924	<0.924	<2.8	<0.924	<0.924	<60	<0.924	<0.924	<5.5	<0.924	<0.924
1,3,5-Trimethylbenzene	<1.5	<0.983	<0.983	<3.9	<0.983	1.0	<2.9	0.983	<0.983	<64	<0.983	<0.983	<5.9	<0.983	1.18
1,3-Butadiene	<1.7	<0.442	<0.442	<4.4	1.57	<0.442	<3.3	<0.442	<0.442	<73	0.557	<0.442	<6.6	0.661	<0.442
1,3-Dichlorobenzene	<1.8	<1.2	<1.2	<4.8	<1.2	<1.2	<3.6	<1.2	<1.2	<78	<1.2	<1.2	<7.2	<1.2	<1.2
1,4-Dichlorobenzene	3.9	<1.2	<1.2	5.1	<1.2	<1.2	<3.6	<1.2	<1.2	<78	<1.2	<1.2	<7.2	<1.2	<1.2
1,4-Dioxane	<27	<0.721	<0.721	<72	<0.721	<0.721	<54	<0.721	<0.721	<1,200	<0.721	<0.721	<110	<0.721	<0.721
2,2,4-Trimethylpentane	<1.4	<0.934	<0.934	<3.7	<0.934	<0.934	<2.8	3.12	0.972	<61	<0.934	<0.934	<5.6	1.25	<0.934
2-Butanone (Methyl Ethyl Ketone)	11	<1.47	2.34	10	6.93	2.32	7.7	9.44	2.32	<97	4.87	3.21	14	2.06	2.05
2-Hexanone	210	<0.82	18.1	410	<0.82	<0.82	94	<0.82	<0.82	<140	<0.82	<0.82	940	<0.82	<0.82
3-Chloropropene	<2.3	<0.626	<0.626	<6.3	<0.626	<0.626	<4.7	<0.626	<0.626	<100	<0.626	<0.626	<9.4	<0.626	<0.626
4-Ethyltoluene	2.1	<0.983	<0.983	<3.9	<0.983	<0.983	<2.9	<0.983	<0.983	<64	<0.983	<0.983	<5.9	<0.983	<0.983
4-Methyl-2-pentanone	86	<2.05	<2.05	82	<2.05	<2.05	45	<2.05	<2.05	<140	<2.05	<2.05	140	<2.05	<2.05
Acetone	55	31.4	19.7	62	90.7	48.2	81	89.3	49.9	<780	109	46.8	120	78.9	10.2
Benzene	2.6	1.73	2.33	<2.6	21.1	1.1	2.8	1.66	1.4	<42	7.83	1.94	<3.8	1.63	0.735
Benzyl chloride	--	<1.04	<1.04	--	<1.04	<1.04	--	<1.04	<1.04	--	<1.04	<1.04	--	<1.04	<1.04
Bromodichloromethane	5.1	<1.34	<1.34	<5.4	<1.34	<1.34	<4	<1.34	<1.34	<87	<1.34	<1.34	<8	<1.34	<1.34
Bromoform	<3.1	<2.07	<2.07	<8.3	<2.07	<2.07	<6.2	<2.07	<2.07	<130	<2.07	<2.07	<12	<2.07	<2.07
Bromomethane	<1.2	<0.777	<0.777	<3.1	<0.777	<0.777	<2.3	<0.777	<0.777	<50	<0.777	<0.777	<4.7	<0.777	<0.777
Carbon disulfide	3.7	<0.623	<0.623	<6.2	2.48	<0.623	<4.7	<0.623	<0.623	<100	2.72	<0.623	<9.3	<0.623	<0.623
Carbon tetrachloride	<1.9	<1.26	<1.26	<5	<1.26	<1.26	<3.8	<1.26	<1.26	<82	<1.26	<1.26	<7.5	<1.26	<1.26
Chlorobenzene	<1.4	<0.921	<0.921	<3.7	<0.921	<0.921	<2.8	<0.921	<0.921	<60	<0.921	<0.921	<5.5	<0.921	<0.921
Chloroethane	<2.0	<0.528	<0.528	<5.3	<0.528	<0.528	<4	<0.528	<0.528	<87	0.668	<0.528	<7.9	<0.528	<0.528
Chloroform	88	<0.977	11.3	27	<0.977	<0.977	28	<0.977	<0.977	<63	<0.977	<0.977	41	<0.977	<0.977
Chloromethane	<1.5	0.989	1.17	<4.1	0.845	<0.413	<3.1	0.809	0.533	<68	1.37	<0.413	<6.2	1.45	<0.413
cis-1,2-Dichloroethene	<1.2	<0.793	<0.793	<3.2	<0.793	<0.793	<2.4	<0.793	<0.793	<52	<0.793	<0.793	<4.8	<0.793	<0.793
cis-1,3-Dichloropropene	<1.4	<0.908	<0.908	<3.6	<0.908	<0.908	<2.7	<0.908	<0.908	<59	<0.908	<0.908	<5.4	<0.908	<0.908
Cyclohexane	4.1	4.23	2.41	<2.8	57.5	<0.688	7.6	2.37	<0.688	210	23.8	0.874	38	1.9	<0.688
Dibromochloromethane	<2.6	<1.7	<1.7	<6.8	<1.7	<1.7	<5.1	<1.7	<1.7	<110	<				

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

Compound	Temporary Sub-Slab Vapor Samples														
	SS-1			SS-2			SS-3			SS-4			SS-5		
Date	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022
trans-1,3-Dichloropropene	<1.4	<0.908	<0.908	<3.6	<0.908	<0.908	<2.7	<0.908	<0.908	<59	<0.908	<0.908	<5.4	<0.908	<0.908
Trichloroethene (TCE)	16	2.94	3.21	<4.3	2.72	<1.07	<3.2	3.98	<1.07	<70	1.81	3.23	24	3.96	<1.07
Trichlorofluoromethane	6.2	6.97	20.5	16	5.62	4.18	18	14.4	30	<73	3.64	3.25	15	3.47	1.55
Vinyl bromide	--	<0.874	<0.874	--	<0.874	<0.874	--	<0.874	<0.874	--	<0.874	<0.874	--	<0.874	<0.874
Vinyl chloride	<0.77	<0.511	<0.511	<2.0	<0.511	<0.511	<1.5	<0.511	<0.511	<33	<0.511	<0.511	<3.1	<0.511	<0.511
Xylenes, Total	6.3	2.19	3.45	ND	8.46	7.11	7.8	11.26	5.45	ND	6.65	9.42	ND	5.68	9.51
Total VOCs	750.7	329.089	172.75	1,363.6	981.79	181	1,444.5	964.61	204.11	10,699	764.83	223.93	4,366.1	1,006.06	65.91

Notes:

1. DOH SVI 2006, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th Percentile 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 ( $\mu\text{g}/\text{m}^3$ )

**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 <sup>1</sup>	Indoor, EPA 2001 BASE Database 90th Percentile Value <sup>2</sup>	Indoor Ambient Air Samples													Outdoor, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th Percentile Value <sup>1</sup>	Outdoor, EPA 2001 BASE Database 90th Percentile Value <sup>2</sup>	Outdoor Ambient Air Sample					
			IA-1			IA-2			IA-3			IA-4			IA-5					UW-1	OA-1	OA-1	
	Date	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	
PID screening results (ppm)	--	--	--	--	0.0	--	--	0.1	--	--	0.0	--	--	0.0	--	--	0.1	--	--	--	--	--	0.0
1,1,1-Trichloroethane	6.9	20.6	<0.87	0.207	0.36	<65	0.235	0.344	<87	0.147	0.322	<93	0.295	0.349	<44	0.278	0.387	0.7	2.6	<0.87	<0.109	<0.109	
1,1,2,2-Tetrachloroethane	<0.25	NGV	<1.1	<1.37	<1.37	<82	<1.37	<1.37	<110	<1.37	<1.37	<120	<1.37	<1.37	<55	<1.37	<1.37	<0.25	NGV	<1.1	<1.37	<1.37	
1,1,2-Trichloroethane	<0.25	<1.5	<0.87	<1.09	<1.09	<65	<1.09	<1.09	<87	<1.09	<1.09	<93	<1.09	<1.09	<44	<1.09	<1.09	<0.25	<1.6	<0.87	<1.09	<1.09	
1,1-Dichloroethane	<0.25	<0.70	<0.65	<0.809	<0.809	<49	<0.809	<0.809	<65	<0.809	<0.809	<69	<0.809	<0.809	<32	<0.809	<0.809	<0.25	<0.6	<0.65	<0.809	<0.809	
1,1-Dichloroethene	0.7	<1.4	<0.63	<0.079	<0.079	<48	<0.079	<0.079	<63	<0.079	<0.079	<67	<0.079	<0.079	<32	<0.079	<0.079	<0.25	<1.4	<0.63	<0.079	<0.079	
1,2,4-Trichlorobenzene	6.3	<6.8	<3.0	<1.48	220	<1.48	<1.48	300	<1.48	<1.48	<310	<1.48	<1.48	<150	<1.48	<1.48	4.8	<6.4	3.0	<1.48	<1.48		
1,2,4-Trimethylbenzene	18	9.5	<0.79	<0.983	<0.983	<59	1.58	1.18	<79	1.12	1.03	<84	1.55	1.2	<39	1.34	<0.983	2.5	5.8	<0.79	<0.983	<0.983	
1,2-Dibromoethane	<0.25	<1.5	<1.2	<1.54	<1.54	<92	<1.54	<1.54	<120	<1.54	<1.54	<130	<1.54	<1.54	<61	<1.54	<1.54	<0.25	<1.6	<1.2	<1.54	<1.54	
1,2-Dichlorobenzene	1.0	<1.2	<0.96	<1.2	<1.2	<72	<1.2	<1.2	<96	<1.2	<1.2	<100	<1.2	<1.2	<48	<1.2	<1.2	0.9	<1.2	<0.96	<1.2	<1.2	
1,2-Dichloroethane	<0.25	<0.90	<0.65	<0.809	<0.809	<49	<0.809	<0.809	<65	<0.809	<0.809	<69	<0.809	<0.809	<32	<0.809	<0.809	<0.25	<0.8	<0.65	<0.809	<0.809	
1,2-Dichloropropane	<0.25	<1.6	<0.74	<0.924	<0.924	<55	<0.924	<0.924	<74	<0.924	<0.924	<79	<0.924	<0.924	<37	<0.924	<0.924	<0.25	<1.6	<0.74	<0.924	<0.924	
1,3,5-Trimethylbenzene	6.5	3.7	<0.79	<0.983	<0.983	<59	<0.983	<0.983	<79	<0.983	<0.983	<84	<0.983	<0.983	<39	<0.983	<0.983	1.0	2.7	<0.79	<0.983	<0.983	
1,3-Butadiene	NGV	<3.0	<0.88	<0.442	<0.442	<66	<0.442	<0.442	<88	<0.442	<0.442	<93	<0.442	<0.442	<44	<0.442	<0.442	NGV	<3.4	<0.88	<0.442	<0.442	
1,3-Dichlorobenzene	0.9	<2.4	<0.96	<1.2	<1.2	<72	<1.2	<1.2	<96	<1.2	<1.2	<100	<1.2	<1.2	<48	<1.2	<1.2	0.7	<2.2	<0.96	<1.2	<1.2	
1,4-Dichlorobenzene	2.6	5.5	<0.96	<1.2	<1.2	<72	<1.2	<1.2	<96	<1.2	<1.2	<100	<1.2	<1.2	<48	<1.2	<1.2	0.8	1.2	<0.96	<1.2	<1.2	
1,4-Dioxane	NGV	NGV	<14	<0.721	<0.721	<1,100	<0.721	<0.721	<1,400	<0.721	<0.721	<1,500	<0.721	<0.721	<720	<0.721	<0.721	NGV	NGV	<14	<0.721	<0.721	
2,2,4-Trimethylpentane	NGV	NGV	<0.75	<0.934	<0.934	<56	<0.934	<0.934	<75	<0.934	<0.934	<79	<0.934	<0.934	<37	<0.934	<0.934	NGV	NGV	<0.75	<0.934	<0.934	
2-Butanone (Methyl Ethyl Ketone)	39	12	3.8	<1.47	1.85	<88	<1.47	1.73	<120	<1.47	<1.47	<120	<1.47	<1.47	<59	1.52	<1.47	17	11.3	<1.2	<1.47	2.18	
2-Hexanone	NGV	NGV	<1.6	<0.82	<0.82	<120	<0.82	<0.82	<160	<0.82	<0.82	<170	<0.82	<0.82	<82	<0.82	<0.82	NGV	NGV	<1.6	<0.82	<0.82	
3-Chloropropene	NGV	NGV	<1.3	<0.626	<0.626	<94	<0.626	<0.626	<130	<0.626	<0.626	<130	<0.626	<0.626	<63	<0.626	<0.626	NGV	NGV	<1.3	<0.626	<0.626	
4-Ethyltoluene	NGV	3.6	<0.79	<0.983	<0.983	<59	<0.983	<0.983	<79	<0.983	<0.983	<84	<0.983	<0.983	<39	<0.983	<0.983	NGV	3	<0.79	<0.983	<0.983	
4-Methyl-2-pentanone	NGV	6	<1.6	<2.05	<2.05	<120	<2.05	<2.05	<160	<2.05	<2.05	<170	<2.05	<2.05	<82	<2.05	<2.05	NGV	1.9	<1.6	<2.05	<2.05	
Acetone	140	98.9	22	38.5	21.3	<710	257	29.9	<950	192	25.9	<1000	283	28.7	<480	231	2.49	58	43.7	<9.5	5.94	5.25	
Benzene	29	9.4	<0.51	0.805	0.869	<38	0.933	1.05	<51	0.827	1.01	<54	0.923	1.1	<26	0.856	0.965	5.8	6.				

**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 <sup>1</sup>	Indoor, EPA 2001 BASE Database 90th Percentile Value <sup>2</sup>	Indoor Ambient Air Samples												Outdoor, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 95th Percentile Value <sup>1</sup>	Outdoor, EPA 2001 BASE Database 90th Percentile Value <sup>2</sup>	Outdoor Ambient Air Sample					
			IA-1			IA-2			IA-3			IA-4			IA-5			UW-1	OA-1	OA-1		
Date	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	3/29/2007	1/4/2022	12/13/2022	
trans-1,3-Dichloropropene	<0.25	<1.3	<0.73	<0.908	<0.908	<54	<0.908	<0.908	<73	<0.908	<0.908	<77	<0.908	<0.908	<36	<0.908	<0.908	<0.25	<1.4	<0.73	<0.908	<0.908
Trichloroethene (TCE)	0.8	4.2	<0.86	0.118	<0.107	<64	0.177	0.113	<86	0.172	0.118	<91	0.124	0.21	<43	<0.107	<0.107	0.5	1.3	<0.86	<0.107	<0.107
Trichlorofluoromethane	30	18.1	14	10.5	10.8	<67	5.3	3.37	<90	5.73	3.34	<96	3.94	3.36	<b>45</b>	3.17	2.85	6.1	4.3	1.3	1.57	1.28
Vinyl bromide	NGV	NGV	--	<0.874	<0.874	--	<0.874	<0.874	--	<0.874	<0.874	--	<0.874	<0.874	--	<0.874	<0.874	NGV	NGV	--	<0.874	<0.874
Vinyl chloride	<0.25	<1.9	<0.41	<0.051	<0.051	<31	<0.051	<0.051	<41	<0.051	<0.051	<43	<0.051	<0.051	<20	<0.051	<0.051	<0.25	<1.8	<0.41	<0.051	<0.051
Xylenes, Total	NGV	NGV	ND	ND	1.99	ND	4.52	1.94	ND	3.137	1.74	ND	3.93	1.97	ND	3.023	ND	NGV	NGV	ND	ND	ND
Total VOCs	NGV	NGV	82.39	142.21	129.34	5530	609.47	171.3	9460	461.56	163.69	6060.00	626.80	163.52	5565	505.93	18.27	NGV	NGV	10.4	38.0	14.9

Notes:

1. DOH SVI 2006, NYSDOH 2003: Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes

2. DOH SVI 2006, EPA 2001: Building Assessment and Survey Evaluation (BASE) Database

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 ( $\mu\text{g}/\text{m}^3$ )

**BOLD** - Exceeds EPA 2001 BASE Values

## **Appendix A – Indoor Air Quality Questionnaire and Building Inventory**

**NEW YORK STATE DEPARTMENT OF HEALTH  
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY  
CENTER FOR ENVIRONMENTAL HEALTH**

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

Preparer's Name Victor Allen Date/Time Prepared 12/13/22 - 1215

Preparer's Affiliation Antea Group Phone No. 412.418.0924

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: Gunn First Name: Alden

Address: \_\_\_\_\_

County: \_\_\_\_\_

Home Phone: 585.739.5236 Office Phone: \_\_\_\_\_

**3. BUILDING CHARACTERISTICS**

Type of Building: (Circle appropriate response)

Residential  
Industrial

School  
Church

Commercial/Multi-use  
Other: Tekla | Furniture Warehouse | Food

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: <u>N/A</u>

If multiple units, how many? 11

If the property is commercial, type?

Business Type(s) Textiles / Furniture warehouse (Former Champion plant) & Food

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?  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

Some airflow between floors; vents in basement. No ventilation on 1st floor.

Airflow near source

Not much airflow near vapor points.

Outdoor air infiltration

Through cracks/buckles in the windows.

Infiltration into air ducts

Not sure of infiltration into air ducts

## 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 \_\_\_\_\_
- g. Foundation walls: unsealed sealed sealed with \_\_\_\_\_
- h. The basement is: wet damp  dry moldy
- 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)

- |   |                  |                     |
|---|------------------|---------------------|
| <input checked="" type="checkbox"/> 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:

- |   |          |          |
|---|----------|----------|
| <input checked="" type="checkbox"/> Natural Gas | Fuel Oil | Kerosene |
| Electric  | Propane  | Solar    |
| Wood  | Coal     |          |

Domestic hot water tank fueled by: ElectricityBoiler/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 run across ceiling of basement. Appear in good condition.*

---



---



---

## 7. OCCUPANCY

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

<u>Level</u>	<u>General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)</u>
Basement	<i>Sewing workshop area</i>
1 <sup>st</sup> Floor	<i>N/A</i>
2 <sup>nd</sup> Floor	<i> </i>
3 <sup>rd</sup> Floor	<i> </i>
4 <sup>th</sup> Floor	<i> </i>

## 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 - Textiles / Sewing*
- g. Is there smoking in the building?  Y /  N How frequently? \_\_\_\_\_
- h. Have cleaning products been used recently?  Y / N When & Type? *Weekly - disinfectants*
- 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? below room
- n. Is there a bathroom exhaust fan? Y / N If yes, where vented? to the 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

- |                         |  |              |             |          |              |
|-------------------------|--|--------------|-------------|----------|--------------|
| <b>Water Supply:</b>    | <input checked="" type="checkbox"/> Public Water | Drilled Well | Driven Well | Dug Well | Other: _____ |
| <b>Sewage Disposal:</b> | <input checked="" type="checkbox"/> Public Sewer | Septic Tank  | Leach Field | Dry Well | Other: _____ |

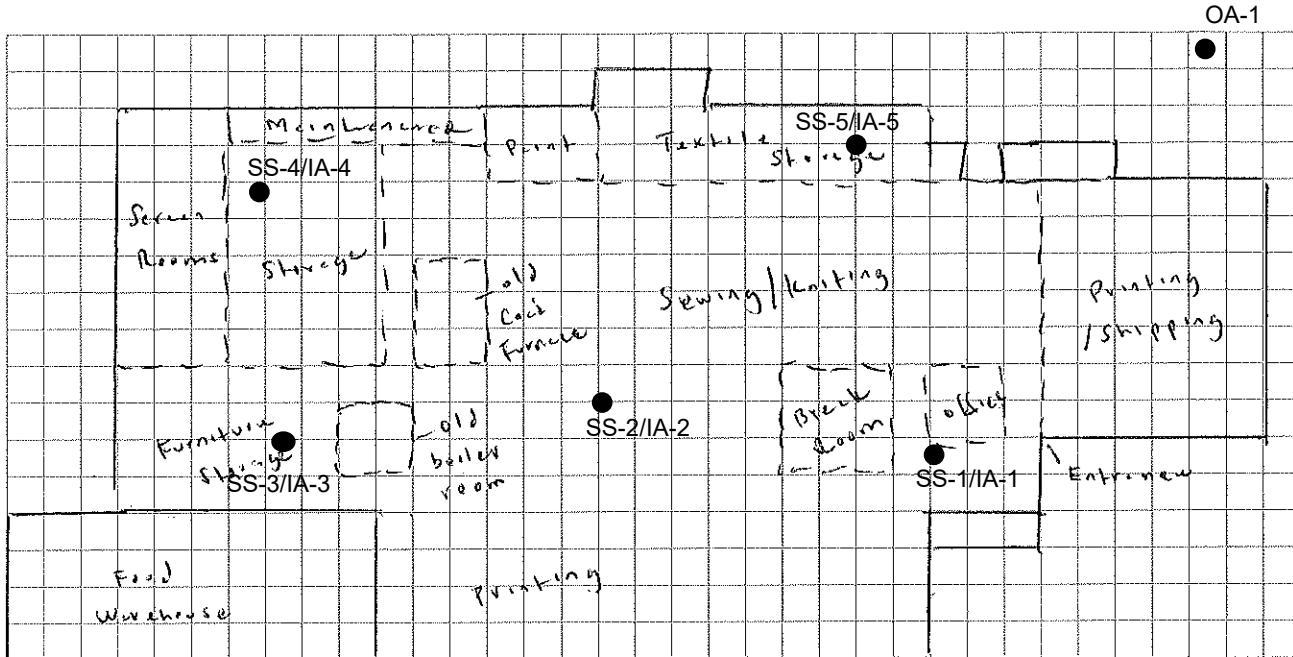
#### 10. RELOCATION INFORMATION (for oil spill residential emergency)

- 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

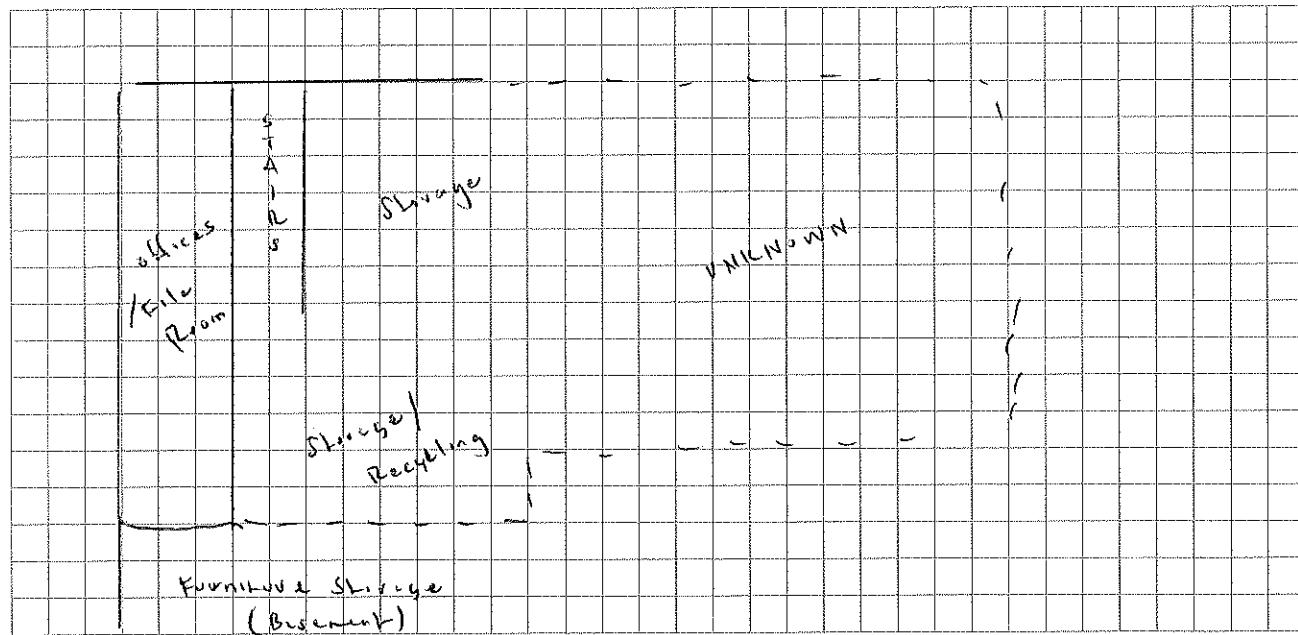
## 11. FLOOR PLANS

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:

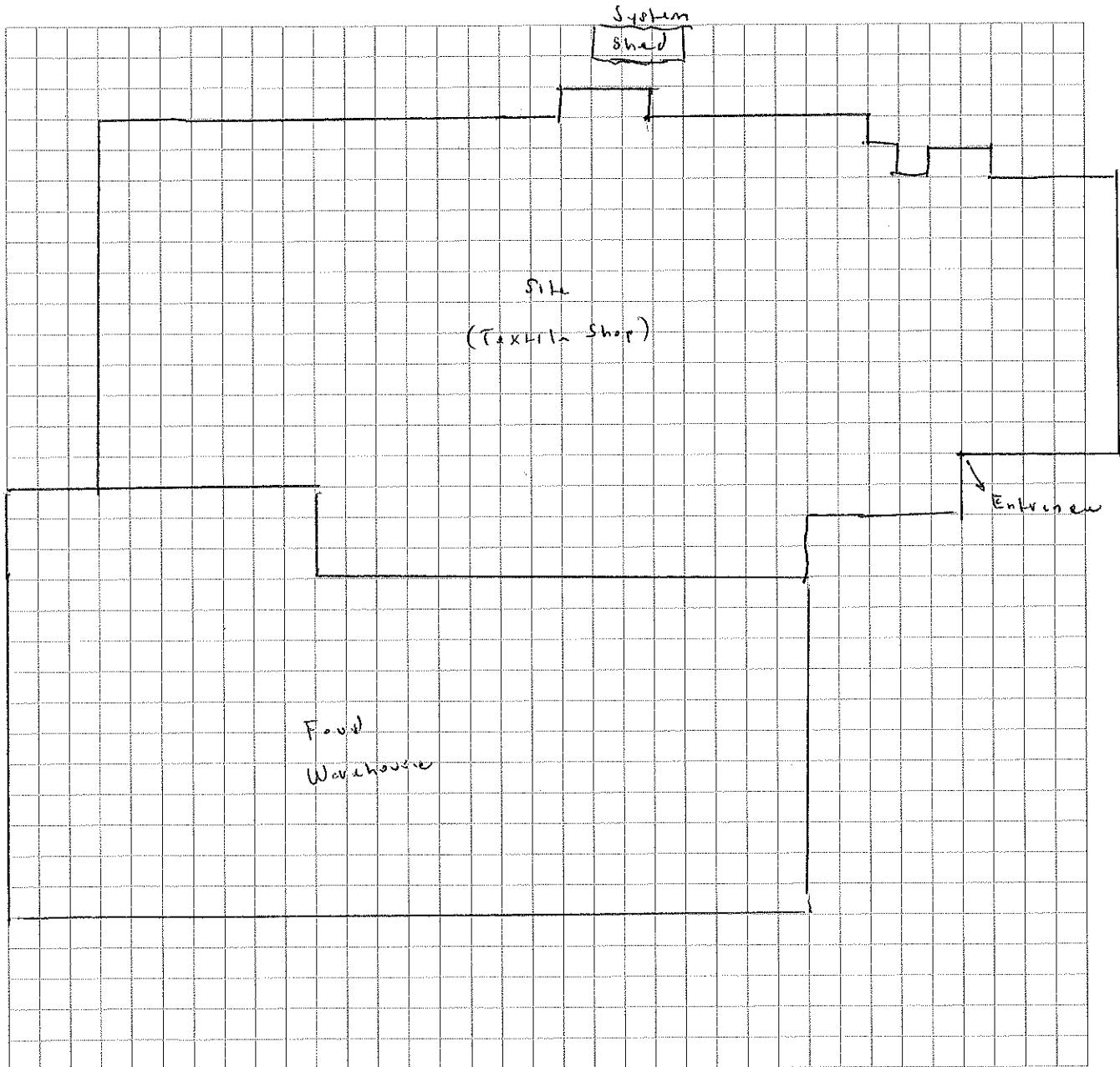


\* FIRST FLOOR NOT STABLE

## 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.



### **13. PRODUCT INVENTORY FORM**

**Make & Model of field instrument used:** Minirite 3000

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

\* 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.

**Quarterly System Inspection**  
Hanesbrands, Inc.  
200 North Main Street, Perry, New York

Quarter/Date: 4/22 - 11/24/22  
Weather: 37 °F, C1, ~1y  
Personnel: V1, L1, A1, L1

Location:	Area SS-5 / Former Remedial Area			Area SS-4 / Storage Southwest Building		Area SS-3 / Storage Southeast Building	
	Western Building			D	E	F	G
Pipe Branch:	A	B	C				
Suction Pressure (" WC)	2.75	2.45	2.45	3.50	3.55	0	0
PVC Piping Intact (Y/N)	Y	Y	Y	Y	Y	Y	Y
Floor and PVC seals ok (Y/N)	Y	Y	Y	Y	Y	Y	Y
System Operating (Y/N)	Y			Y		N	
Overall Piping Run ok (Y/N)	Y			Y		Y	
Blower Functioning Correctly (Y/N)	Y			Y		Y	
Exterior casings intact (Y/N)	Y			Y		Y	

**Comments/Notes:**

- \* Inspection 1545-1630

  - Closed pipe valves after completing well abandonment
  - No suction pressure in Area SS-3.

## **Appendix B – Laboratory Analytical Reports**



## ANALYTICAL REPORT

Lab Number:	L2270538
Client:	Antea USA, Inc. 565 Allegheny Avenue Oakmont, PA 15139
ATTN:	Ken Click
Phone:	(845) 729-8270
Project Name:	HBL PERRY NY SITE 2023 PROJECT
Project Number:	Not Specified
Report Date:	12/29/22

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](http://www.alphalab.com)

**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2270538-01	IA-1	AIR	PERRY, NY	12/13/22 17:18	12/15/22
L2270538-02	IA-2	AIR	PERRY, NY	12/13/22 17:04	12/15/22
L2270538-03	IA-3	AIR	PERRY, NY	12/13/22 17:25	12/15/22
L2270538-04	IA-4	AIR	PERRY, NY	12/13/22 16:34	12/15/22
L2270538-05	IA-5	AIR	PERRY, NY	12/13/22 13:22	12/15/22
L2270538-06	OA-1	AIR	PERRY, NY	12/13/22 17:10	12/15/22
L2270538-07	SS-1	SOIL_VAPOR	PERRY, NY	12/13/22 16:21	12/15/22
L2270538-08	SS-2	SOIL_VAPOR	PERRY, NY	12/13/22 17:39	12/15/22
L2270538-09	SS-3	SOIL_VAPOR	PERRY, NY	12/13/22 17:25	12/15/22
L2270538-10	SS-4	SOIL_VAPOR	PERRY, NY	12/13/22 17:57	12/15/22
L2270538-11	SS-5	SOIL_VAPOR	PERRY, NY	12/13/22 17:37	12/15/22

**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

### 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 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

**Case Narrative (continued)**

Volatile Organics in Air

Canisters were released from the laboratory on December 5, 2022. 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* Christopher J. Anderson

Title: Technical Director/Representative

Date: 12/29/22

**AIR**



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-01  
 Client ID: IA-1  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:18  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Anaytical Method: 48,TO-15  
 Analytical Date: 12/27/22 18:55  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.730	0.200	--	3.61	0.989	--		1
Chloromethane	0.682	0.200	--	1.41	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	39.3	5.00	--	74.1	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.97	1.00	--	21.3	2.38	--		1
Trichlorofluoromethane	1.93	0.200	--	10.8	1.12	--		1
Isopropanol	2.72	0.500	--	6.69	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	0.626	0.500	--	1.85	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID:	L2270538-01	Date Collected:	12/13/22 17:18
Client ID:	IA-1	Date Received:	12/15/22
Sample Location:	PERRY, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.284	0.200	--	1.00	0.705	--	1
Benzene	0.272	0.200	--	0.869	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	1.08	0.200	--	4.07	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	0.459	0.400	--	1.99	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-01  
 Client ID: IA-1  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:18  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
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	94		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-01  
 Client ID: IA-1  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:18  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Anaytical Method: 48,TO-15-SIM  
 Analytical Date: 12/27/22 18:55  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
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	0.066	0.020	--	0.360	0.109	--		1
Carbon tetrachloride	0.085	0.020	--	0.535	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.111	0.020	--	0.753	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	93		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-02  
 Client ID: IA-2  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:04  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Anaytical Method: 48,TO-15  
 Analytical Date: 12/27/22 19:36  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.646	0.200	--	3.19	0.989	--		1
Chloromethane	0.682	0.200	--	1.41	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	60.6	5.00	--	114	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.6	1.00	--	29.9	2.38	--		1
Trichlorofluoromethane	0.599	0.200	--	3.37	1.12	--		1
Isopropanol	2.80	0.500	--	6.88	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	0.588	0.500	--	1.73	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-02  
 Client ID: IA-2  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:04  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.314	0.200	--	1.11	0.705	--		1
Benzene	0.330	0.200	--	1.05	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	0.938	0.200	--	3.53	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	0.446	0.400	--	1.94	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-02  
 Client ID: IA-2  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:04  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
1,2,4-Trimethylbenzene	0.241	0.200	--	1.18	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	96		60-140
chlorobenzene-d5	95		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-02  
 Client ID: IA-2  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:04  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Anaytical Method: 48,TO-15-SIM  
 Analytical Date: 12/27/22 19:36  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
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	0.063	0.020	--	0.344	0.109	--		1
Carbon tetrachloride	0.079	0.020	--	0.497	0.126	--		1
Trichloroethene	0.021	0.020	--	0.113	0.107	--		1
Tetrachloroethene	0.157	0.020	--	1.06	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	98		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	95		60-140



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-03  
 Client ID: IA-3  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:25  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Anaytical Method: 48,TO-15  
 Analytical Date: 12/27/22 20:17  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.652	0.200	--	3.22	0.989	--		1
Chloromethane	0.687	0.200	--	1.42	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	58.5	5.00	--	110	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.9	1.00	--	25.9	2.38	--		1
Trichlorofluoromethane	0.595	0.200	--	3.34	1.12	--		1
Isopropanol	2.88	0.500	--	7.08	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-03  
 Client ID: IA-3  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:25  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.278	0.200	--	0.980	0.705	--	1
Benzene	0.317	0.200	--	1.01	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	0.832	0.200	--	3.14	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	0.400	0.400	--	1.74	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-03  
 Client ID: IA-3  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:25  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
1,2,4-Trimethylbenzene	0.210	0.200	--	1.03	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	96		60-140
chlorobenzene-d5	95		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-03  
 Client ID: IA-3  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:25  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Anaytical Method: 48,TO-15-SIM  
 Analytical Date: 12/27/22 20:17  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
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	0.059	0.020	--	0.322	0.109	--		1
Carbon tetrachloride	0.079	0.020	--	0.497	0.126	--		1
Trichloroethene	0.022	0.020	--	0.118	0.107	--		1
Tetrachloroethene	0.573	0.020	--	3.89	0.136	--		1

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



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-04  
 Client ID: IA-4  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 16:34  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Anaytical Method: 48,TO-15  
 Analytical Date: 12/27/22 20:59  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.646	0.200	--	3.19	0.989	--		1
Chloromethane	0.717	0.200	--	1.48	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	54.7	5.00	--	103	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.1	1.00	--	28.7	2.38	--		1
Trichlorofluoromethane	0.598	0.200	--	3.36	1.12	--		1
Isopropanol	2.78	0.500	--	6.83	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	1.33	0.500	--	4.79	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-04  
 Client ID: IA-4  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 16:34  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.329	0.200	--	1.16	0.705	--	1
Benzene	0.343	0.200	--	1.10	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	0.212	0.200	--	0.990	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	0.969	0.200	--	3.65	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	0.453	0.400	--	1.97	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-04  
 Client ID: IA-4  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 16:34  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
1,2,4-Trimethylbenzene	0.245	0.200	--	1.20	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	96		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-04  
 Client ID: IA-4  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 16:34  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Anaytical Method: 48,TO-15-SIM  
 Analytical Date: 12/27/22 20:59  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
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	0.064	0.020	--	0.349	0.109	--		1
Carbon tetrachloride	0.079	0.020	--	0.497	0.126	--		1
Trichloroethene	0.039	0.020	--	0.210	0.107	--		1
Tetrachloroethene	0.153	0.020	--	1.04	0.136	--		1

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

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-05  
 Client ID: IA-5  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 13:22  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 12/27/22 22:24  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.658	0.200	--	3.25	0.989	--		1
Chloromethane	1.75	0.200	--	3.61	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	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.05	1.00	--	2.49	2.38	--		1
Trichlorofluoromethane	0.508	0.200	--	2.85	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-05  
 Client ID: IA-5  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 13:22  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.326	0.200	--	1.15	0.705	--	1
Benzene	0.302	0.200	--	0.965	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	0.614	0.200	--	2.31	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-05  
 Client ID: IA-5  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 13:22  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
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	93		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-05  
 Client ID: IA-5  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 13:22  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 12/27/22 22:24  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
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	0.071	0.020	--	0.387	0.109	--		1
Carbon tetrachloride	0.082	0.020	--	0.516	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.110	0.020	--	0.746	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-06  
 Client ID: OA-1  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:10  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Anaytical Method: 48,TO-15  
 Analytical Date: 12/27/22 18:15  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.616	0.200	--	3.05	0.989	--		1
Chloromethane	0.686	0.200	--	1.42	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	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.21	1.00	--	5.25	2.38	--		1
Trichlorofluoromethane	0.228	0.200	--	1.28	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	0.740	0.500	--	2.18	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-06  
 Client ID: OA-1  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:10  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	ND	0.200	--	ND	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	0.325	0.200	--	1.22	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-06  
 Client ID: OA-1  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:10  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
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	94		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	96		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-06  
 Client ID: OA-1  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:10  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Anaytical Method: 48,TO-15-SIM  
 Analytical Date: 12/27/22 18:15  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
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	0.080	0.020	--	0.503	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

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

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-07  
 Client ID: SS-1  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 16:21  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
 Anaytical Method: 48,TO-15  
 Analytical Date: 12/27/22 23:05  
 Analyst: TJS

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Dichlorodifluoromethane	0.717	0.200	--	3.55	0.989	--	1
Chloromethane	0.565	0.200	--	1.17	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	16.9	5.00	--	31.8	9.42	--	1
Vinyl bromide	ND	0.200	--	ND	0.874	--	1
Acetone	8.30	1.00	--	19.7	2.38	--	1
Trichlorofluoromethane	3.65	0.200	--	20.5	1.12	--	1
Isopropanol	0.998	0.500	--	2.45	1.23	--	1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	1
Tertiary butyl Alcohol	0.913	0.500	--	2.77	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	0.793	0.500	--	2.34	1.47	--	1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-07  
 Client ID: SS-1  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 16:21  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Ethyl Acetate	ND	0.500	--	ND	1.80	--	1
Chloroform	2.31	0.200	--	11.3	0.977	--	1
Tetrahydrofuran	0.527	0.500	--	1.55	1.47	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	5.14	0.200	--	18.1	0.705	--	1
1,1,1-Trichloroethane	0.289	0.200	--	1.58	1.09	--	1
Benzene	0.729	0.200	--	2.33	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	0.700	0.200	--	2.41	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	0.598	0.200	--	3.21	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Heptane	1.70	0.200	--	6.97	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	4.42	0.200	--	18.1	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethene	2.01	0.200	--	13.6	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 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-07  
 Client ID: SS-1  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 16:21  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	0.550	0.400	--	2.39	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	0.243	0.200	--	1.06	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	0.235	0.200	--	1.16	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	95		60-140
chlorobenzene-d5	101		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-08  
 Client ID: SS-2  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:39  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
 Anaytical Method: 48,TO-15  
 Analytical Date: 12/27/22 23:46  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.557	0.200	--	2.75	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	30.2	5.00	--	56.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	20.3	1.00	--	48.2	2.38	--		1
Trichlorofluoromethane	0.744	0.200	--	4.18	1.12	--		1
Isopropanol	2.61	0.500	--	6.42	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.39	0.500	--	7.25	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	0.787	0.500	--	2.32	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-08  
 Client ID: SS-2  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:39  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Ethyl Acetate	ND	0.500	--	ND	1.80	--	1
Chloroform	ND	0.200	--	ND	0.977	--	1
Tetrahydrofuran	1.42	0.500	--	4.19	1.47	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	1.99	0.200	--	7.01	0.705	--	1
1,1,1-Trichloroethane	1.33	0.200	--	7.26	1.09	--	1
Benzene	0.344	0.200	--	1.10	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	0.428	0.200	--	1.75	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	1.30	0.200	--	4.90	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	2.02	0.200	--	13.7	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	0.322	0.200	--	1.40	0.869	--	1



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-08  
 Client ID: SS-2  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:39  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	1.15	0.400	--	5.00	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	0.486	0.200	--	2.11	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.204	0.200	--	1.00	0.983	--		1
1,2,4-Trimethylbenzene	0.724	0.200	--	3.56	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	95		60-140
chlorobenzene-d5	96		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-09  
 Client ID: SS-3  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:25  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
 Anaytical Method: 48,TO-15  
 Analytical Date: 12/28/22 00:25  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	2.10	0.200	--	10.4	0.989	--		1
Chloromethane	0.258	0.200	--	0.533	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	27.7	5.00	--	52.2	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	21.0	1.00	--	49.9	2.38	--		1
Trichlorofluoromethane	5.34	0.200	--	30.0	1.12	--		1
Isopropanol	2.30	0.500	--	5.65	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	0.504	0.500	--	1.75	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	0.786	0.500	--	2.32	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-09  
 Client ID: SS-3  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:25  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Ethyl Acetate	ND	0.500	--	ND	1.80	--	1
Chloroform	ND	0.200	--	ND	0.977	--	1
Tetrahydrofuran	0.987	0.500	--	2.91	1.47	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.886	0.200	--	3.12	0.705	--	1
1,1,1-Trichloroethane	3.10	0.200	--	16.9	1.09	--	1
Benzene	0.437	0.200	--	1.40	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	0.208	0.200	--	0.972	0.934	--	1
Heptane	0.438	0.200	--	1.79	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	1.04	0.200	--	3.92	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	1.59	0.200	--	10.8	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	0.235	0.200	--	1.02	0.869	--	1



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-09  
 Client ID: SS-3  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:25  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	0.881	0.400	--	3.83	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	0.372	0.200	--	1.62	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	0.624	0.200	--	3.07	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	96		60-140
chlorobenzene-d5	97		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-10  
 Client ID: SS-4  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:57  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
 Anaytical Method: 48,TO-15  
 Analytical Date: 12/28/22 01:07  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.595	0.200	--	2.94	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	57.6	5.00	--	109	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	19.7	1.00	--	46.8	2.38	--		1
Trichlorofluoromethane	0.579	0.200	--	3.25	1.12	--		1
Isopropanol	3.40	0.500	--	8.36	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	1.09	0.500	--	3.21	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-10  
 Client ID: SS-4  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:57  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Ethyl Acetate	ND	0.500	--	ND	1.80	--	1
Chloroform	ND	0.200	--	ND	0.977	--	1
Tetrahydrofuran	1.46	0.500	--	4.31	1.47	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	1.87	0.200	--	6.59	0.705	--	1
1,1,1-Trichloroethane	1.76	0.200	--	9.60	1.09	--	1
Benzene	0.608	0.200	--	1.94	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	0.254	0.200	--	0.874	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	0.601	0.200	--	3.23	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Heptane	0.884	0.200	--	3.62	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	1.66	0.200	--	6.26	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	0.373	0.200	--	1.62	0.869	--	1



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-10  
 Client ID: SS-4  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:57  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	1.59	0.400	--	6.91	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	0.577	0.200	--	2.51	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	0.591	0.200	--	2.91	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	94		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	99		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-11  
 Client ID: SS-5  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:37  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
 Anaytical Method: 48,TO-15  
 Analytical Date: 12/28/22 01:47  
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.628	0.200	--	3.11	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	4.28	1.00	--	10.2	2.38	--		1
Trichlorofluoromethane	0.275	0.200	--	1.55	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	0.734	0.500	--	2.23	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	0.695	0.500	--	2.05	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-11  
 Client ID: SS-5  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:37  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Ethyl Acetate	ND	0.500	--	ND	1.80	--	1
Chloroform	ND	0.200	--	ND	0.977	--	1
Tetrahydrofuran	0.754	0.500	--	2.22	1.47	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.869	0.200	--	3.06	0.705	--	1
1,1,1-Trichloroethane	2.50	0.200	--	13.6	1.09	--	1
Benzene	0.230	0.200	--	0.735	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	0.350	0.200	--	1.43	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	1.19	0.200	--	4.48	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	0.725	0.200	--	4.92	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	0.349	0.200	--	1.52	0.869	--	1



**Project Name:** HBL PERRY NY SITE 2023 PROJECT**Lab Number:** L2270538**Project Number:** Not Specified**Report Date:** 12/29/22**SAMPLE RESULTS**

Lab ID: L2270538-11  
 Client ID: SS-5  
 Sample Location: PERRY, NY

Date Collected: 12/13/22 17:37  
 Date Received: 12/15/22  
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	1.65	0.400	--	7.17	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	0.538	0.200	--	2.34	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.240	0.200	--	1.18	0.983	--		1
1,2,4-Trimethylbenzene	0.837	0.200	--	4.11	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	91		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	94		60-140

Project Name: HBL PERRY NY SITE 2023 PROJECT

Lab Number: L2270538

Project Number: Not Specified

Report Date: 12/29/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/27/22 16:35

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-06 Batch: WG1727802-4</b>							
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 2023 PROJECT

Lab Number: L2270538

Project Number: Not Specified

Report Date: 12/29/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 48,TO-15  
 Analytical Date: 12/27/22 15:55

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab for sample(s): 01-11 Batch: WG1727803-4</b>							
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 2023 PROJECT

Lab Number: L2270538

Project Number: Not Specified

Report Date: 12/29/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 48,TO-15  
 Analytical Date: 12/27/22 15:55

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab for sample(s): 01-11 Batch: WG1727803-4</b>							
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 2023 PROJECT

Lab Number: L2270538

Project Number: Not Specified

Report Date: 12/29/22

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 48,TO-15

Analytical Date: 12/27/22 15:55

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab for sample(s): 01-11 Batch: WG1727803-4</b>							
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 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

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: WG1727802-3								
Vinyl chloride	111		-		70-130	-		25
1,1-Dichloroethene	96		-		70-130	-		25
cis-1,2-Dichloroethene	93		-		70-130	-		25
1,1,1-Trichloroethane	109		-		70-130	-		25
Carbon tetrachloride	105		-		70-130	-		25
Trichloroethene	95		-		70-130	-		25
Tetrachloroethene	99		-		70-130	-		25

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG1727803-3								
Dichlorodifluoromethane	122		-		70-130	-		
Chloromethane	123		-		70-130	-		
Freon-114	126		-		70-130	-		
Vinyl chloride	112		-		70-130	-		
1,3-Butadiene	130		-		70-130	-		
Bromomethane	118		-		70-130	-		
Chloroethane	106		-		70-130	-		
Ethanol	109		-		40-160	-		
Vinyl bromide	99		-		70-130	-		
Acetone	120		-		40-160	-		
Trichlorofluoromethane	109		-		70-130	-		
Isopropanol	108		-		40-160	-		
1,1-Dichloroethene	95		-		70-130	-		
Tertiary butyl Alcohol	84		-		70-130	-		
Methylene chloride	105		-		70-130	-		
3-Chloropropene	108		-		70-130	-		
Carbon disulfide	101		-		70-130	-		
Freon-113	101		-		70-130	-		
trans-1,2-Dichloroethene	89		-		70-130	-		
1,1-Dichloroethane	90		-		70-130	-		
Methyl tert butyl ether	105		-		70-130	-		
2-Butanone	106		-		70-130	-		
cis-1,2-Dichloroethene	92		-		70-130	-		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG1727803-3								
Ethyl Acetate	93		-		70-130	-		
Chloroform	107		-		70-130	-		
Tetrahydrofuran	99		-		70-130	-		
1,2-Dichloroethane	103		-		70-130	-		
n-Hexane	100		-		70-130	-		
1,1,1-Trichloroethane	110		-		70-130	-		
Benzene	97		-		70-130	-		
Carbon tetrachloride	117		-		70-130	-		
Cyclohexane	96		-		70-130	-		
1,2-Dichloropropane	96		-		70-130	-		
Bromodichloromethane	113		-		70-130	-		
1,4-Dioxane	101		-		70-130	-		
Trichloroethene	98		-		70-130	-		
2,2,4-Trimethylpentane	98		-		70-130	-		
Heptane	116		-		70-130	-		
cis-1,3-Dichloropropene	117		-		70-130	-		
4-Methyl-2-pentanone	121		-		70-130	-		
trans-1,3-Dichloropropene	102		-		70-130	-		
1,1,2-Trichloroethane	100		-		70-130	-		
Toluene	90		-		70-130	-		
2-Hexanone	119		-		70-130	-		
Dibromochloromethane	108		-		70-130	-		
1,2-Dibromoethane	110		-		70-130	-		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 Batch: WG1727803-3								
Tetrachloroethene	102		-		70-130	-		
Chlorobenzene	105		-		70-130	-		
Ethylbenzene	98		-		70-130	-		
p/m-Xylene	101		-		70-130	-		
Bromoform	108		-		70-130	-		
Styrene	106		-		70-130	-		
1,1,2,2-Tetrachloroethane	110		-		70-130	-		
o-Xylene	105		-		70-130	-		
4-Ethyltoluene	110		-		70-130	-		
1,3,5-Trimethylbenzene	109		-		70-130	-		
1,2,4-Trimethylbenzene	116		-		70-130	-		
Benzyl chloride	107		-		70-130	-		
1,3-Dichlorobenzene	109		-		70-130	-		
1,4-Dichlorobenzene	107		-		70-130	-		
1,2-Dichlorobenzene	106		-		70-130	-		
1,2,4-Trichlorobenzene	109		-		70-130	-		
Hexachlorobutadiene	113		-		70-130	-		

**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

**Lab Duplicate Analysis**  
**Batch Quality Control**

**Lab Number:** L2270538  
**Report Date:** 12/29/22

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: WG1727802-5 QC Sample: L2270538-04 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	0.064	0.065	ppbV	2		25
Carbon tetrachloride	0.079	0.081	ppbV	3		25
Trichloroethene	0.039	0.041	ppbV	5		25
Tetrachloroethene	0.153	0.160	ppbV	4		25

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1727803-5 QC Sample: L2270538-04 Client ID: IA-4						
Dichlorodifluoromethane	0.646	0.651	ppbV	1		25
Chloromethane	0.717	0.719	ppbV	0		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	54.7	56.5	ppbV	3		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	12.1	12.2	ppbV	1		25
Trichlorofluoromethane	0.598	0.595	ppbV	1		25
Isopropanol	2.78	2.82	ppbV	1		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	1.33	1.30	ppbV	2		25

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1727803-5 QC Sample: L2270538-04 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	0.329	0.330	ppbV	0		25
Benzene	0.343	0.353	ppbV	3		25
Cyclohexane	ND	ND	ppbV	NC		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	0.212	0.216	ppbV	2		25
Heptane	ND	ND	ppbV	NC		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	0.969	1.00	ppbV	3		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 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-11 QC Batch ID: WG1727803-5 QC Sample: L2270538-04 Client ID: IA-4						
p/m-Xylene	0.453	0.480	ppbV	6		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	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.245	0.263	ppbV	7		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 2023 PROJECT

Serial\_No:12292216:08

Project Number:

Lab Number: L2270538

Report Date: 12/29/22

**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 Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2270538-01	IA-1	0482	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	4.5	0
L2270538-01	IA-1	3715	2.7L Can	12/05/22	407508	L2265786-06	Pass	-30.3	-5.4	-	-	-	-
L2270538-02	IA-2	02193	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	4.2	7
L2270538-02	IA-2	3750	2.7L Can	12/05/22	407508	L2265786-06	Pass	-30.3	-6.5	-	-	-	-
L2270538-03	IA-3	01895	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	4.6	2
L2270538-03	IA-3	2823	2.7L Can	12/05/22	407508	L2265786-06	Pass	-30.3	-5.7	-	-	-	-
L2270538-04	IA-4	0091	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	5.0	11
L2270538-04	IA-4	2876	2.7L Can	12/05/22	407508	L2265786-06	Pass	-30.3	-5.9	-	-	-	-
L2270538-05	IA-5	02210	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	4.6	2
L2270538-05	IA-5	2734	2.7L Can	12/05/22	407508	L2265786-06	Pass	-30.2	-6.3	-	-	-	-
L2270538-06	OA-1	0420	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	4.8	6
L2270538-06	OA-1	3245	2.7L Can	12/05/22	407508	L2265786-06	Pass	-30.2	-3.9	-	-	-	-
L2270538-07	SS-1	01498	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	5.0	11
L2270538-07	SS-1	502	2.7L Can	12/05/22	407508	L2266383-03	Pass	-30.2	-6.5	-	-	-	-
L2270538-08	SS-2	01817	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	5.1	13

**Project Name:** HBL PERRY NY SITE 2023 PROJECT

Serial\_No:12292216:08

**Lab Number:** L2270538

**Project Number:**

**Report Date:** 12/29/22

### 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 Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2270538-08	SS-2	2991	2.7L Can	12/05/22	407508	L2265786-06	Pass	-30.2	-6.7	-	-	-	-
L2270538-09	SS-3	0832	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	5.2	14
L2270538-09	SS-3	2250	2.7L Can	12/05/22	407508	L2266383-03	Pass	-30.3	-6.4	-	-	-	-
L2270538-10	SS-4	0283	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	5.0	11
L2270538-10	SS-4	416	2.7L Can	12/05/22	407508	L2266383-03	Pass	-30.2	-6.8	-	-	-	-
L2270538-11	SS-5	0555	Flow 5	12/05/22	407508		-	-	-	Pass	4.5	5.3	16
L2270538-11	SS-5	3419	2.7L Can	12/05/22	407508	L2265786-06	Pass	-30.3	-6.9	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2265786

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2265786-06 Date Collected: 11/22/22 10:00  
 Client ID: CAN 3884 SHELF 16 Date Received: 11/22/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 11/23/22 18:42  
 Analyst: NFL

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

Lab Number: L2265786

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2265786-06 Date Collected: 11/22/22 10:00  
 Client ID: CAN 3884 SHELF 16 Date Received: 11/22/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

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

Lab Number: L2265786

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2265786-06 Date Collected: 11/22/22 10:00  
 Client ID: CAN 3884 SHELF 16 Date Received: 11/22/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

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

Lab Number: L2265786

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2265786-06 Date Collected: 11/22/22 10:00  
 Client ID: CAN 3884 SHELF 16 Date Received: 11/22/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

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

Lab Number: L2265786

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2265786-06 Date Collected: 11/22/22 10:00  
 Client ID: CAN 3884 SHELF 16 Date Received: 11/22/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

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

### Tentatively Identified Compounds

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Units	RDL	Dilution Factor
1,4-Difluorobenzene	77			60-140	
Bromochloromethane	83			60-140	
chlorobenzene-d5	85			60-140	

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2265786

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID:	L2265786-06	Date Collected:	11/22/22 10:00
Client ID:	CAN 3884 SHELF 16	Date Received:	11/22/22
Sample Location:		Field Prep:	Not Specified

Sample Depth:

Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 11/23/22 18:42  
 Analyst: NFL

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



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2265786

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2265786-06 Date Collected: 11/22/22 10:00  
 Client ID: CAN 3884 SHELF 16 Date Received: 11/22/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	Results	RL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
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	0.022	0.020	--	0.118	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-Trimethylbenzene	ND	0.020	--	ND	0.098	--	1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--	1
Benzyl chloride	ND	0.100	--	ND	0.518	--	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: L2265786

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2265786-06 Date Collected: 11/22/22 10:00  
 Client ID: CAN 3884 SHELF 16 Date Received: 11/22/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
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	79		60-140
bromochloromethane	84		60-140
chlorobenzene-d5	86		60-140

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2266383

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID:	L2266383-03	Date Collected:	11/24/22 18:00
Client ID:	CAN 3423 SHELF 15	Date Received:	11/28/22
Sample Location:		Field Prep:	Not Specified

Sample Depth:

Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 11/29/22 06:44  
 Analyst: TJS

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



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2266383

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2266383-03 Date Collected: 11/24/22 18:00  
 Client ID: CAN 3423 SHELF 15 Date Received: 11/28/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

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

Lab Number: L2266383

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2266383-03 Date Collected: 11/24/22 18:00  
 Client ID: CAN 3423 SHELF 15 Date Received: 11/28/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

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

Lab Number: L2266383

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2266383-03 Date Collected: 11/24/22 18:00  
 Client ID: CAN 3423 SHELF 15 Date Received: 11/28/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

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

Lab Number: L2266383

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2266383-03 Date Collected: 11/24/22 18:00  
 Client ID: CAN 3423 SHELF 15 Date Received: 11/28/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

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

### Tentatively Identified Compounds

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Units	RDL	Dilution Factor
1,4-Difluorobenzene	75			60-140	
Bromochloromethane	78			60-140	
chlorobenzene-d5	91			60-140	

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2266383

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID:	L2266383-03	Date Collected:	11/24/22 18:00
Client ID:	CAN 3423 SHELF 15	Date Received:	11/28/22
Sample Location:		Field Prep:	Not Specified

Sample Depth:

Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 11/29/22 06:44  
 Analyst: TJS

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



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2266383

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2266383-03 Date Collected: 11/24/22 18:00  
 Client ID: CAN 3423 SHELF 15 Date Received: 11/28/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
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-Trimethylbenzene	ND	0.020	--	ND	0.098	--	1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--	1
Benzyl chloride	ND	0.100	--	ND	0.518	--	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: L2266383

Project Number: CANISTER QC BAT

Report Date: 12/29/22

## Air Canister Certification Results

Lab ID: L2266383-03 Date Collected: 11/24/22 18:00  
 Client ID: CAN 3423 SHELF 15 Date Received: 11/28/22  
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
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	71		60-140
bromochloromethane	75		60-140
chlorobenzene-d5	85		60-140

**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

Serial\_No:12292216:08  
**Lab Number:** L2270538  
**Report Date:** 12/29/22

**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
NA	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2270538-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2270538-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2270538-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2270538-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2270538-05A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2270538-06A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2270538-07A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2270538-08A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2270538-09A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2270538-10A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2270538-11A	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 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

## 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 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

#### 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.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**Report Format:** Data Usability Report



**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

**Data Qualifiers**

- 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 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*



**Project Name:** HBL PERRY NY SITE 2023 PROJECT  
**Project Number:** Not Specified

**Lab Number:** L2270538  
**Report Date:** 12/29/22

## 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 its 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, NO<sub>2</sub>, NO<sub>3</sub>.

**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**, **SM4500CI-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, 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 CHAIN OF CUSTODY										PAGE 1 OF 2		Date Rec'd in Lab: <b>12/16/22</b>				ALPHA Job #: <b>L2270538</b>					
Project Information										Report/Data Deliverables Information				Billing Information							
Project Name: Hbl Perry NY Site Testing - 2023-Project										<input type="checkbox"/> FAX		<input checked="" type="checkbox"/> EMAIL		<input type="checkbox"/> Same as Client Info		PO #:					
Project Location: Perry, NY										<input type="checkbox"/> ADEX		<input type="checkbox"/> Add'l Deliverables									
Client Information										Regulatory Requirements/Report Limits											
Client: Hanesbrands / Antea Group					Project Manager: Ken Click					State/Fed		Program		Residential/Commercial							
Address: 445 Hamilton Ave., Suite 504					ALPHA Quote #:																
White Plains, NY 10601					Turn-Around-Time																
Phone: 845 729 8270					<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (only confirmed if pre-approved)																
Fax:					Date Due: Time:																
Email: ken.click@anteagroup.us																					
<input type="checkbox"/> These samples have been Previously analyzed by Alpha																					
Other Project Specific Requirements/Comments:																					
<input type="checkbox"/> Project-Specific Target Compound List																					
*Requesting the Level IV data package with raw data.																					
All Columns Below Must Be Filled Out										Analysis											
Alpha Lab Use Only	Sample ID	Collection					Sample Matrix*	Sampler Initials	Can Size	ID Can	ID Flow Controller	TO-15	TO-15 SIM	APH	<input type="checkbox"/> Subtract non-petroleum HCs	Sulfides & Mercaptans by TO-15	Sample Specific Comments (i.e. PID)				
		End Date	Start Time	End Time	Initial Vac	Final Vac											FIXED GASES				
70538-01	IA-1	12/13/22	0959	1718	-29.78	-5.28	AA	VA	2.7 L	3715	0482	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
02	IA-2	12/13/22	0825	1704	-29.97	-5.87	AA	VA	2.7 L	3750	02193	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
03	IA-3	12/13/22	0806	1725	-29.77	-5.44	AA	VA	2.7 L	2823	01895	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
04	IA-4	12/13/22	0934	1634	-29.73	-5.88	AA	VA	2.7 L	2876	0091	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
05	IA-5	12/13/22	0909	1322	-28.85	-5.83	AA	VA	2.7 L	2734	02210	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
06	OA-1	12/13/22	0832	1710	-30.75	-5.98	AA	VA	2.7 L	3245	0420	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
*SAMPLE MATRIX CODES: AA = Ambient Air (Indoor/Outdoor) SV = Soil Vapor/Landfill Gas/SVE Other = Please Specify										Container Type				-	-	-	-	-	-	-	
										Relinquished By				Date/Time	Received By:				Date/Time	Please print clearly & legibly and completely. Samples cannot be logged in and turn around time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms	
										<i>D. Alter AAL</i>				12/14/22	<i>E. Muller</i>				12/15/22		
										<i>E. Muller</i>				12/15/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		
										<i>R. McQua</i>				12/16/22	<i>D. Alter</i>				12/16/22		
										<i>D. Alter</i>				12/16/22	<i>R. McQua</i>				12/16/22		

AIR ANALYSIS									PAGE 2 OF 2																							
CHAIN OF CUSTODY				Project Information																												
				Project Name: Hbl Perry NY Site Testing - 2023-Project																												
320 Forbes Blvd, Mansfield, MA 02048 TEL: 508-822-9300 FAX: 508-822-3288				Project Location: Perry, NY																												
Client Information				Project #: 2022-08-490484																												
Client: Hanesbrands / Antea Group				Project Manager: Ken Click																												
Address: 445 Hamilton Ave., Suite 504				ALPHA Quote #:																												
White Plains, NY 10601				Turn-Around-Time																												
Phone: 845 729 8270				<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (only confirmed if pre-approved)																												
Fax:				Date Due: Time:																												
Email: ken.click@anteagroup.us																																
<input type="checkbox"/> These samples have been Previously analyzed by Alpha																																
Other Project Specific Requirements/Comments: <input type="checkbox"/> Project-Specific Target Compound List *Requesting the Level IV data package with raw data.																																
All Columns Below Must Be Filled Out																																
Alpha Lab Use Only	Sample ID	Collection					Sample Matrix*	Sampler Initials	Can Size	ID Can	ID Flow Controller	TO-15	TO-15 SIM	APH	Subtract non-petroleum HCs	<input type="checkbox"/>	FIXED GASES	Sulfides & Mercaptans by TO-15								Sample Specific Comments (i.e. PID)						
		End Date	Start Time	End Time	Initial Vac	Final Vac																										
07	SS-1	12/13/22	0959	1621	-29.55	-5.69	SV	VA	2.7 L	502	01498	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
03	SS-2	12/13/22	0825	1739	-29.81	-5.53	SV	VA	2.7 L	2991	01817	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
09	SS-3	12/13/22	0806	1725	-29.24	-5.62	SV	VA	2.7 L	2250	0832	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
10	SS-4	12/13/22	0934	1757	-29.72	-5.93	SV	VA	2.7 L	416	0283	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
11	SS-5	12/13/22	0909	1737	-30.12	-5.58	SV	VA	2.7 L	3419	0555	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>														
*SAMPLE MATRIX CODES:										Container Type																						
AA = Ambient Air (Indoor/Outdoor) SV = Soil Vapor/Landfill Gas/SVE Other = Please Specify										Relinquished By					Date/Time	Received By:					Date/Time											
										<i>Ken Click AAL</i>					12/14/22 17:00	<i>D. R. Bar AAL</i>					12/15/24 14:00											
										<i>E. Muller</i>					12/15/24 14:00	<i>E. Muller</i>					12/16/22 01:55											

**\*SAMPLE MATRIX CODES:**

AA = Ambient Air (Indoor/Outdoor)

SV = Soil Vapor/Landfill Gas/SVE

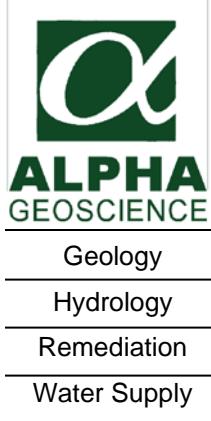
**Other = Please Specify**

Form 101-07 JJ Rev 25-Sept-15

Please print clearly & legibly and completely. Samples cannot be logged in and turn around time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

Page 82 of 82

## **Appendix C – Data Usability Summary Report**



March 21, 2023

Ms. Katherine Angel, PE  
Project Manager  
Antea Group  
117 Terrace Dr.  
Syracuse, NY 13219

Re: Data Usability Summary Report  
Perry Hansebrand Project  
December 2022 Air/Vapor Sampling Event

Dear Ms. Angel:

The data usability summary report and data validation summary are attached to this letter for the Perry Hansebrand December 2022 soil vapor/air sampling event. The data for Alpha Analytical, SDG number: L2270538 are acceptable with no issues identified in the validation summary. There are no data that were qualified as either rejected (R) or estimated (J) in the data pack.

A list of common data validation acronyms and data validation qualifiers are attached to this letter to assist you interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995.

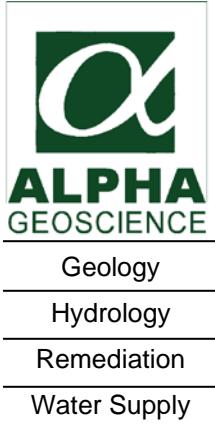
Thank you for the opportunity to assist Antea Group.

Sincerely,  
Alpha Geoscience

A handwritten signature in black ink that reads "Donald Anné".

Donald Anné  
Senior Chemist

DCA/bms  
Via email



**Data Usability Summary Report for  
Alpha Analytical, SDG: No: L2270538**

**11 Soil Vapor/Air Samples  
Collected December 13, 2022**

Prepared by: Donald Anné  
March 21, 2023

The data package contains the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained 11 soil vapor/air samples analyzed for TO-15 volatiles.

The overall performances of the analyses are acceptable. Alpha Analytical did fulfill the requirements of the analytical method.

The data are acceptable with no issues that are identified in the accompanying data validation review. There were no data qualified as either estimated or rejected (R); therefore, all data are considered usable. Detailed information on data quality is included in the data validation review.

# Qualified Data Section

## (No Data Qualified)

**Results Summary**  
**Form 1**  
**Volatile Organics in Air by SIM**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-01	Date Collected	: 12/13/22 17:18
Client ID	: IA-1	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 18:55
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TJS
Lab File ID	: R323095_EV2	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	0.066	0.020	--	0.360	0.109	--	
56-23-5	Carbon tetrachloride	0.085	0.020	--	0.535	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.111	0.020	--	0.753	0.136	--	

**Results Summary**  
**Form 1**  
**Volatile Organics in Air by SIM**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-02	Date Collected	: 12/13/22 17:04
Client ID	: IA-2	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 19:36
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TJS
Lab File ID	: R323096_EV2	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	0.063	0.020	--	0.344	0.109	--	
56-23-5	Carbon tetrachloride	0.079	0.020	--	0.497	0.126	--	
79-01-6	Trichloroethene	0.021	0.020	--	0.113	0.107	--	
127-18-4	Tetrachloroethene	0.157	0.020	--	1.06	0.136	--	

**Results Summary**  
**Form 1**  
**Volatile Organics in Air by SIM**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-03	Date Collected	: 12/13/22 17:25
Client ID	: IA-3	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 20:17
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TJS
Lab File ID	: R323097_EV2	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	0.059	0.020	--	0.322	0.109	--	
56-23-5	Carbon tetrachloride	0.079	0.020	--	0.497	0.126	--	
79-01-6	Trichloroethene	0.022	0.020	--	0.118	0.107	--	
127-18-4	Tetrachloroethene	0.573	0.020	--	3.89	0.136	--	

**Results Summary**  
**Form 1**  
**Volatile Organics in Air by SIM**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-04	Date Collected	: 12/13/22 16:34
Client ID	: IA-4	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 20:59
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TJS
Lab File ID	: R323098_EV2	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	0.064	0.020	--	0.349	0.109	--	
56-23-5	Carbon tetrachloride	0.079	0.020	--	0.497	0.126	--	
79-01-6	Trichloroethene	0.039	0.020	--	0.210	0.107	--	
127-18-4	Tetrachloroethene	0.153	0.020	--	1.04	0.136	--	

**Results Summary**  
**Form 1**  
**Volatile Organics in Air by SIM**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-05	Date Collected	: 12/13/22 13:22
Client ID	: IA-5	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 22:24
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TJS
Lab File ID	: R323100_EV2	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	0.071	0.020	--	0.387	0.109	--	
56-23-5	Carbon tetrachloride	0.082	0.020	--	0.516	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	0.110	0.020	--	0.746	0.136	--	

**Results Summary**  
**Form 1**  
**Volatile Organics in Air by SIM**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-06	Date Collected	: 12/13/22 17:10
Client ID	: OA-1	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 18:15
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15-SIM	Analyst	: TJS
Lab File ID	: R323094_EV2	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.080	0.020	--	0.503	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-01	Date Collected	: 12/13/22 17:18
Client ID	: IA-1	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 18:55
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323095	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.730	0.200	--	3.61	0.989	--	
74-87-3	Chloromethane	0.682	0.200	--	1.41	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	39.3	5.00	--	74.1	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	8.97	1.00	--	21.3	2.38	--	
75-69-4	Trichlorofluoromethane	1.93	0.200	--	10.8	1.12	--	
67-63-0	Isopropanol	2.72	0.500	--	6.69	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.626	0.500	--	1.85	1.47	--	
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.284	0.200	--	1.00	0.705	--	
71-43-2	Benzene	0.272	0.200	--	0.869	0.639	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-01	Date Collected	: 12/13/22 17:18
Client ID	: IA-1	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 18:55
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323095	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.08	0.200	--	4.07	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	0.459	0.400	--	1.99	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : Antea USA, Inc.	Lab Number : L2270538
Project Name : HBL PERRY NY SITE 2023 PROJECT	Project Number :
Lab ID : L2270538-01	Date Collected : 12/13/22 17:18
Client ID : IA-1	Date Received : 12/15/22
Sample Location : PERRY, NY	Date Analyzed : 12/27/22 18:55
Sample Matrix : AIR	Dilution Factor : 1
Analytical Method : 48,TO-15	Analyst : TJS
Lab File ID : R323095	Instrument ID : AIRPIANO3
Sample Amount : 250 ml	GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-02	Date Collected	: 12/13/22 17:04
Client ID	: IA-2	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 19:36
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323096	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.646	0.200	--	3.19	0.989	--	
74-87-3	Chloromethane	0.682	0.200	--	1.41	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	60.6	5.00	--	114	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	12.6	1.00	--	29.9	2.38	--	
75-69-4	Trichlorofluoromethane	0.599	0.200	--	3.37	1.12	--	
67-63-0	Isopropanol	2.80	0.500	--	6.88	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.588	0.500	--	1.73	1.47	--	
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.314	0.200	--	1.11	0.705	--	
71-43-2	Benzene	0.330	0.200	--	1.05	0.639	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-02	Date Collected	: 12/13/22 17:04
Client ID	: IA-2	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 19:36
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323096	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.938	0.200	--	3.53	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	0.446	0.400	--	1.94	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.241	0.200	--	1.18	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : Antea USA, Inc.	Lab Number : L2270538
Project Name : HBL PERRY NY SITE 2023 PROJECT	Project Number :
Lab ID : L2270538-02	Date Collected : 12/13/22 17:04
Client ID : IA-2	Date Received : 12/15/22
Sample Location : PERRY, NY	Date Analyzed : 12/27/22 19:36
Sample Matrix : AIR	Dilution Factor : 1
Analytical Method : 48,TO-15	Analyst : TJS
Lab File ID : R323096	Instrument ID : AIRPIANO3
Sample Amount : 250 ml	GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-03	Date Collected	: 12/13/22 17:25
Client ID	: IA-3	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 20:17
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323097	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.652	0.200	--	3.22	0.989	--	
74-87-3	Chloromethane	0.687	0.200	--	1.42	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	58.5	5.00	--	110	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	10.9	1.00	--	25.9	2.38	--	
75-69-4	Trichlorofluoromethane	0.595	0.200	--	3.34	1.12	--	
67-63-0	Isopropanol	2.88	0.500	--	7.08	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.278	0.200	--	0.980	0.705	--	
71-43-2	Benzene	0.317	0.200	--	1.01	0.639	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-03	Date Collected	: 12/13/22 17:25
Client ID	: IA-3	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 20:17
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323097	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.832	0.200	--	3.14	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	0.400	0.400	--	1.74	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.210	0.200	--	1.03	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : Antea USA, Inc.	Lab Number : L2270538
Project Name : HBL PERRY NY SITE 2023 PROJECT	Project Number :
Lab ID : L2270538-03	Date Collected : 12/13/22 17:25
Client ID : IA-3	Date Received : 12/15/22
Sample Location : PERRY, NY	Date Analyzed : 12/27/22 20:17
Sample Matrix : AIR	Dilution Factor : 1
Analytical Method : 48,TO-15	Analyst : TJS
Lab File ID : R323097	Instrument ID : AIRPIANO3
Sample Amount : 250 ml	GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-04	Date Collected	: 12/13/22 16:34
Client ID	: IA-4	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 20:59
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323098	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.646	0.200	--	3.19	0.989	--	
74-87-3	Chloromethane	0.717	0.200	--	1.48	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	54.7	5.00	--	103	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	12.1	1.00	--	28.7	2.38	--	
75-69-4	Trichlorofluoromethane	0.598	0.200	--	3.36	1.12	--	
67-63-0	Isopropanol	2.78	0.500	--	6.83	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	1.33	0.500	--	4.79	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.329	0.200	--	1.16	0.705	--	
71-43-2	Benzene	0.343	0.200	--	1.10	0.639	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-04	Date Collected	: 12/13/22 16:34
Client ID	: IA-4	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 20:59
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323098	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	0.212	0.200	--	0.990	0.934	--	
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.969	0.200	--	3.65	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	0.453	0.400	--	1.97	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.245	0.200	--	1.20	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : Antea USA, Inc.	Lab Number : L2270538
Project Name : HBL PERRY NY SITE 2023 PROJECT	Project Number :
Lab ID : L2270538-04	Date Collected : 12/13/22 16:34
Client ID : IA-4	Date Received : 12/15/22
Sample Location : PERRY, NY	Date Analyzed : 12/27/22 20:59
Sample Matrix : AIR	Dilution Factor : 1
Analytical Method : 48,TO-15	Analyst : TJS
Lab File ID : R323098	Instrument ID : AIRPIANO3
Sample Amount : 250 ml	GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-05	Date Collected	: 12/13/22 13:22
Client ID	: IA-5	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 22:24
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323100	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.658	0.200	--	3.25	0.989	--	
74-87-3	Chloromethane	1.75	0.200	--	3.61	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	1.05	1.00	--	2.49	2.38	--	
75-69-4	Trichlorofluoromethane	0.508	0.200	--	2.85	1.12	--	
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.326	0.200	--	1.15	0.705	--	
71-43-2	Benzene	0.302	0.200	--	0.965	0.639	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-05	Date Collected	: 12/13/22 13:22
Client ID	: IA-5	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 22:24
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323100	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.614	0.200	--	2.31	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : Antea USA, Inc.	Lab Number : L2270538
Project Name : HBL PERRY NY SITE 2023 PROJECT	Project Number :
Lab ID : L2270538-05	Date Collected : 12/13/22 13:22
Client ID : IA-5	Date Received : 12/15/22
Sample Location : PERRY, NY	Date Analyzed : 12/27/22 22:24
Sample Matrix : AIR	Dilution Factor : 1
Analytical Method : 48,TO-15	Analyst : TJS
Lab File ID : R323100	Instrument ID : AIRPIANO3
Sample Amount : 250 ml	GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-06	Date Collected	: 12/13/22 17:10
Client ID	: OA-1	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 18:15
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323094	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.616	0.200	--	3.05	0.989	--	
74-87-3	Chloromethane	0.686	0.200	--	1.42	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	2.21	1.00	--	5.25	2.38	--	
75-69-4	Trichlorofluoromethane	0.228	0.200	--	1.28	1.12	--	
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.740	0.500	--	2.18	1.47	--	
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-06	Date Collected	: 12/13/22 17:10
Client ID	: OA-1	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 18:15
Sample Matrix	: AIR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323094	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	0.325	0.200	--	1.22	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client : Antea USA, Inc.	Lab Number : L2270538
Project Name : HBL PERRY NY SITE 2023 PROJECT	Project Number :
Lab ID : L2270538-06	Date Collected : 12/13/22 17:10
Client ID : OA-1	Date Received : 12/15/22
Sample Location : PERRY, NY	Date Analyzed : 12/27/22 18:15
Sample Matrix : AIR	Dilution Factor : 1
Analytical Method : 48,TO-15	Analyst : TJS
Lab File ID : R323094	Instrument ID : AIRPIANO3
Sample Amount : 250 ml	GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-07	Date Collected	: 12/13/22 16:21
Client ID	: SS-1	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 23:05
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323101	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.717	0.200	--	3.55	0.989	--	
74-87-3	Chloromethane	0.565	0.200	--	1.17	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	16.9	5.00	--	31.8	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	8.30	1.00	--	19.7	2.38	--	
75-69-4	Trichlorofluoromethane	3.65	0.200	--	20.5	1.12	--	
67-63-0	Isopropanol	0.998	0.500	--	2.45	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	0.913	0.500	--	2.77	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.793	0.500	--	2.34	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	2.31	0.200	--	11.3	0.977	--	
109-99-9	Tetrahydrofuran	0.527	0.500	--	1.55	1.47	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-07	Date Collected	: 12/13/22 16:21
Client ID	: SS-1	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 23:05
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323101	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	5.14	0.200	--	18.1	0.705	--	
71-55-6	1,1,1-Trichloroethane	0.289	0.200	--	1.58	1.09	--	
71-43-2	Benzene	0.729	0.200	--	2.33	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.700	0.200	--	2.41	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	0.598	0.200	--	3.21	1.07	--	
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	1.70	0.200	--	6.97	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.25	0.200	--	4.71	0.754	--	
591-78-6	2-Hexanone	4.42	0.200	--	18.1	0.820	--	
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	2.01	0.200	--	13.6	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	0.550	0.400	--	2.39	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-07	Date Collected	: 12/13/22 16:21
Client ID	: SS-1	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 23:05
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323101	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.243	0.200	--	1.06	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.235	0.200	--	1.16	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-08	Date Collected	: 12/13/22 17:39
Client ID	: SS-2	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 23:46
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323102	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.557	0.200	--	2.75	0.989	--	
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	30.2	5.00	--	56.9	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	20.3	1.00	--	48.2	2.38	--	
75-69-4	Trichlorofluoromethane	0.744	0.200	--	4.18	1.12	--	
67-63-0	Isopropanol	2.61	0.500	--	6.42	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	2.39	0.500	--	7.25	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.787	0.500	--	2.32	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	1.42	0.500	--	4.19	1.47	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-08	Date Collected	: 12/13/22 17:39
Client ID	: SS-2	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 23:46
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323102	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	1.99	0.200	--	7.01	0.705	--	
71-55-6	1,1,1-Trichloroethane	1.33	0.200	--	7.26	1.09	--	
71-43-2	Benzene	0.344	0.200	--	1.10	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.428	0.200	--	1.75	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.30	0.200	--	4.90	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	2.02	0.200	--	13.7	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.322	0.200	--	1.40	0.869	--	
179601-23-1	p/m-Xylene	1.15	0.400	--	5.00	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-08	Date Collected	: 12/13/22 17:39
Client ID	: SS-2	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/27/22 23:46
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323102	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.486	0.200	--	2.11	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	0.204	0.200	--	1.00	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	0.724	0.200	--	3.56	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-09	Date Collected	: 12/13/22 17:25
Client ID	: SS-3	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/28/22 00:25
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323103	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	2.10	0.200	--	10.4	0.989	--	
74-87-3	Chloromethane	0.258	0.200	--	0.533	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	27.7	5.00	--	52.2	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	21.0	1.00	--	49.9	2.38	--	
75-69-4	Trichlorofluoromethane	5.34	0.200	--	30.0	1.12	--	
67-63-0	Isopropanol	2.30	0.500	--	5.65	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.504	0.500	--	1.75	1.74	--	
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.786	0.500	--	2.32	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	0.987	0.500	--	2.91	1.47	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-09	Date Collected	: 12/13/22 17:25
Client ID	: SS-3	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/28/22 00:25
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323103	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.886	0.200	--	3.12	0.705	--	
71-55-6	1,1,1-Trichloroethane	3.10	0.200	--	16.9	1.09	--	
71-43-2	Benzene	0.437	0.200	--	1.40	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	0.208	0.200	--	0.972	0.934	--	
142-82-5	Heptane	0.438	0.200	--	1.79	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.04	0.200	--	3.92	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	1.59	0.200	--	10.8	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.235	0.200	--	1.02	0.869	--	
179601-23-1	p/m-Xylene	0.881	0.400	--	3.83	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-09	Date Collected	: 12/13/22 17:25
Client ID	: SS-3	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/28/22 00:25
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323103	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.372	0.200	--	1.62	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.624	0.200	--	3.07	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-10	Date Collected	: 12/13/22 17:57
Client ID	: SS-4	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/28/22 01:07
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323104	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.595	0.200	--	2.94	0.989	--	
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	57.6	5.00	--	109	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	19.7	1.00	--	46.8	2.38	--	
75-69-4	Trichlorofluoromethane	0.579	0.200	--	3.25	1.12	--	
67-63-0	Isopropanol	3.40	0.500	--	8.36	1.23	--	
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.09	0.500	--	3.21	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	1.46	0.500	--	4.31	1.47	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-10	Date Collected	: 12/13/22 17:57
Client ID	: SS-4	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/28/22 01:07
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323104	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	1.87	0.200	--	6.59	0.705	--	
71-55-6	1,1,1-Trichloroethane	1.76	0.200	--	9.60	1.09	--	
71-43-2	Benzene	0.608	0.200	--	1.94	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	0.254	0.200	--	0.874	0.688	--	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethylene	0.601	0.200	--	3.23	1.07	--	
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.884	0.200	--	3.62	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.66	0.200	--	6.26	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	ND	0.200	--	ND	1.36	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.373	0.200	--	1.62	0.869	--	
179601-23-1	p/m-Xylene	1.59	0.400	--	6.91	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-10	Date Collected	: 12/13/22 17:57
Client ID	: SS-4	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/28/22 01:07
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323104	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.577	0.200	--	2.51	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	0.591	0.200	--	2.91	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-11	Date Collected	: 12/13/22 17:37
Client ID	: SS-5	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/28/22 01:47
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323105	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.628	0.200	--	3.11	0.989	--	
74-87-3	Chloromethane	ND	0.200	--	ND	0.413	--	U
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
75-01-4	Vinyl chloride	ND	0.200	--	ND	0.511	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	4.28	1.00	--	10.2	2.38	--	
75-69-4	Trichlorofluoromethane	0.275	0.200	--	1.55	1.12	--	
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-35-4	1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-65-0	Tertiary butyl Alcohol	0.734	0.500	--	2.23	1.52	--	
75-09-2	Methylene chloride	ND	0.500	--	ND	1.74	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	0.695	0.500	--	2.05	1.47	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	0.754	0.500	--	2.22	1.47	--	



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-11	Date Collected	: 12/13/22 17:37
Client ID	: SS-5	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/28/22 01:47
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323105	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.869	0.200	--	3.06	0.705	--	
71-55-6	1,1,1-Trichloroethane	2.50	0.200	--	13.6	1.09	--	
71-43-2	Benzene	0.230	0.200	--	0.735	0.639	--	
56-23-5	Carbon tetrachloride	ND	0.200	--	ND	1.26	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
79-01-6	Trichloroethene	ND	0.200	--	ND	1.07	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.350	0.200	--	1.43	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.19	0.200	--	4.48	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
127-18-4	Tetrachloroethene	0.725	0.200	--	4.92	1.36	--	
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	0.349	0.200	--	1.52	0.869	--	
179601-23-1	p/m-Xylene	1.65	0.400	--	7.17	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U



**Results Summary**  
**Form 1**  
**Volatile Organics in Air**

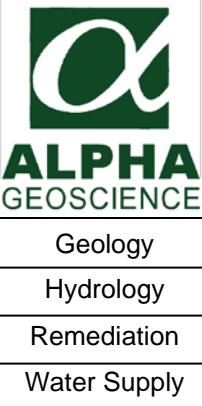
Client	: Antea USA, Inc.	Lab Number	: L2270538
Project Name	: HBL PERRY NY SITE 2023 PROJECT	Project Number	:
Lab ID	: L2270538-11	Date Collected	: 12/13/22 17:37
Client ID	: SS-5	Date Received	: 12/15/22
Sample Location	: PERRY, NY	Date Analyzed	: 12/28/22 01:47
Sample Matrix	: SOIL_VAPOR	Dilution Factor	: 1
Analytical Method	: 48,TO-15	Analyst	: TJS
Lab File ID	: R323105	Instrument ID	: AIRPIANO3
Sample Amount	: 250 ml	GC Column	: RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.538	0.200	--	2.34	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	0.240	0.200	--	1.18	0.983	--	
95-63-6	1,2,4-Trimethylbenzene	0.837	0.200	--	4.11	0.983	--	
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U



TO-15

# Data Section



**QA/QC Review of Method TO15 Volatiles Data  
for Alpha Analytical, SDG: No: L2270538**

**11 Soil Vapor/Air Samples  
Collected December 13, 2022**

Prepared by: Donald Anné  
March 21, 2023

**Holding Times:** The sample was analyzed within the EPA recommended holding times.

**Cannister Pressure:** The laboratory reported residual vacuum (negative pressure) in the sample canisters as required by the method.

**GC/MS Tuning and Mass Calibration:** The BFB tuning criteria were within control limits.

**Initial Calibration:** The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

**Continuing Calibration:** The RRFs for target compounds were above the allowable minimum (0.010) and the %Ds were below the allowable maximum (30%), as required.

**Blanks:** The analyses of the method blanks reported target compounds as not detected.

**Internal Standard Area Summary:** The internal standard areas and retention times were within control limits.

**Laboratory Duplicate:** The relative percent differences for applicable compounds were below the allowable maximum (25%) for air duplicate sample IA-4, as required.

**Laboratory Control Sample:** The percent recoveries for target compounds were within QC limits for vapor/air samples WG1727802-3 and WG1727803-3

**Compound ID:** Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

# **Alpha Geoscience:**

## **Acronyms and**

## **Definitions**

## Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

## **Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II**

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- J- = Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
- J+ = Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.