

SVE PERFORMANCE ASSESSMENT WORK PLAN

**107-35 Merrick Boulevard
Jamaica, Queens, New York**

Site # 241227

Prepared for:

Calmark Equities Group
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January 25, 2023

Table of Contents

1.0 INTRODUCTION	1
1.1 Site Location and Description	1
2.0 BACKGROUND	2
3.0 SVE SYSTEM AND REMEDIAL PROGRESS SAMPLING.....	4
3.1 Objectives.....	4
3.2 SVE System Shutdown and Sampling	4
3.3 Proposed Sub-Slab Soil Vapor Sampling Locations	4
3.4 Proposed Soil Vapor Sampling Locations	5
3.5 Proposed Groundwater Sampling Locations	5
3.6 Site Inspection and Inventory	5
3.7 Sampling Procedures and Analyses	5
3.8 Sample Custody Documentation	7
3.9 Quality Assurance/Quality Control	8
4.0 DATA EVALUATION AND REPORTING.....	10
5.0 SCHEDULE.....	11

TABLES

Table 1	Summary of Sampling Program Rationale and Analysis
Table 2	Sample Collection and Analysis Protocols

FIGURES

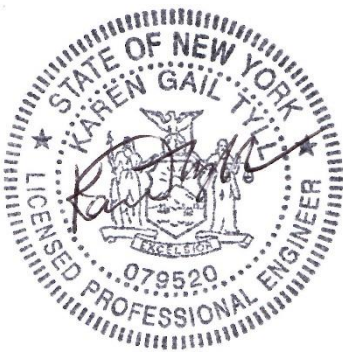
Figure 1	Site Location Map
Figure 2	Site Sampling Plan

APPENDICES

Appendix A	Influent/Effluent checks
Appendix B	Recent Pressure Checks

Engineering Certification

I, Karen Tyll, P.E., certify that I am a New York State registered Professional Engineer and that this SVE Performance Assessment Work Plan was prepared in accordance with applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).



Karen Tyll, P.E.

NYS PE License No. 079520

1/25/23

Date

1.0 INTRODUCTION

Tyll Engineering and Consulting, P.C. (TEC) and Seacliff Environmental Geology, PC (Seacliff) have prepared this SVE Performance Assessment Work Plan (the “Work Plan”) on behalf of 107-35 Merrick Corp. (Calmark) for the property located at 107-35 Merrick Boulevard, Jamaica, NY (NYSDEC Site No. 241227).

This Work Plan calls for the shut-down and sampling of the soil vapor extraction (SVE) to evaluate the remedial performance of the SVE system.

1.1 Site Location and Description

The site is located at 107-35 Merrick Boulevard in the Jamaica section of Queens and is identified as Block 10244 and Lot 224 on the New York City Tax Map. Figure 1 is a site location map. The Site is 21,282-square feet and is bounded by I.K. Auto Express to the north, a mixed-use building and church to the south, a residential home to the east, and a 7-story mixed use building and senior home to the west.

There are no sensitive receptors such as schools, hospitals, and day care facilities within a 250 to 500- foot radius of the Site.

Currently, the site contains one building and yard occupied by a refuse trucking tenant. The proposed future use of the site will be commercial which will consist of the expansion of the existing 3,800 square foot commercial building by an additional 8,150 square feet for a total square footage of 11,950. The building will be divided into two retail units, approximately 6,705 and 5,245 square feet. No basements or subgrade structures are planned, and no existing subgrade levels are present. The open area at the front of the lot after the building is expanded, will be utilized as a paved parking lot.

2.0 BACKGROUND

The Site was previously occupied by a knitting mill, a gasoline station, a home heating oil delivery operation, and a bus repair shop. These past uses are considered an environmental concern. Prior reports reviewed as part of the April 2014 Phase I ESA indicated that eleven 550-gallon underground gasoline storage tanks (USTs) and one 550-gallon heating oil UST were removed from the Site in 2007. Although post-removal soil samples were reportedly collected for laboratory analysis at the time, the locations of the samples were not identified and the number of collected samples was deemed insufficient. A 4,000-gallon heating oil AST was removed in 2011. Surface staining was observed during the 2014 Phase I with a large amount of discarded vehicle parts and related items. The staining and vehicle parts were not observed during the conduct of the OER-required Remedial Investigation (RI) in May and June 2018.

In May 2018 a Remedial Investigation was completed by Seacliff Environmental That included the installation of 10 soil borings with 22 soil samples collected, installation of 7 groundwater monitoring wells, and the installation and sampling of 5 soil vapor implants. The results of the soil sampling indicated no exceedances of Restricted commercial (Track 2) Soil Cleanup Objectives (SCOs). Groundwater samples indicated dissolved sodium and manganese in all 7 groundwater samples and tetrachlorethylene (PERC) was found in one sample, B-2, at 6.3 ug/L. Soil vapor samples collected during the RI showed elevated concentrations of tetrachloroethene (PERC) ranging from 1,080 ug/m³ to 552,000 ug/m³ (VP-3). At this point OER sent the case to the NYSDEC to take over due to the high soil vapor levels.

In March 2019, the NYSDEC approved a Site Characterization Workplan (SCWP) for Seacliff Environmental Inc. to complete additional investigation tasks to supplement the Remedial Investigation in 2018. The scope of the supplemental investigation was to further assess groundwater conditions at the site, further assess soil conditions in specific areas of the Site affected by historic operations and further assess vapor conditions to potentially identify a source. Twelve soil samples were obtained during the Supplemental Characterization event. The soil results yielded only one chemical, Acetone, in boring B-14 at a concentration of 0.61 mg/kg (Unrestricted SCO = 0.05 mg/kg). PERC and petroleum constituents were detected but

were at concentrations significantly lower than their respective Unrestricted SCOs. Nine groundwater samples were obtained during the supplemental Characterization event. PERC was detected above the 5 ppb standard in four groundwater samples; B-1, B-2, MW-3, and MW-9. Five (5) soil vapor samples were collected from previous soil vapor sampled points. Concentrations of PERC were found in VP-3 at 91,500 ug/m³, VP-1 at 3,610 ug/m³, VP-2 at 577 ug/m³, VP-4 at 5,050 ug/m³, and VP-5 at 3,700 ug/m³. All of these exceedances were substantially less than the results from 2018. Of the three (3) new vapor points that were installed and sampled, PERC was found in VP-6 at 40.3 ug/m³, VP-7 at 1,080 ug/m³, and upgradient point, VP-8, was 1,840 ug/m³.

As a result of the above results, the NYSDEC required that an SVE system be installed.

An Interim Remedial Measure and Pilot Test Work Plan Document prepared by Tyll Engineering and Consulting, P.C. (TEC), was (conditionally) approved by the NYSDEC on August 25, 2020. The corresponding SVE remedial system was installed and began operation in November 2020. The system has been operating continuously since November 2020 and periodic checks have been made. Tables and laboratory reports from the checks in 2022 can be found in Appendix A. It does not appear that a GAC change is required at this time but possibly after the next periodic check in the Spring 2023.

Calmark intends to redevelop the property, which includes the renovation and expansion of the current structure on site and interim termination of the utility access to the property. The existing building slab and sub-grade remediation infrastructure will remain on-site through the 60-day notice period for change of use, pursuant to the DER-10 Section 1.4(b), through the system shutdown sampling, as described in Section 3.0 below, and during the building demolition activities

3.0 SVE SYSTEM SHUTDOWN AND REMEDIAL PROGRESS SAMPLING

3.1 Objectives

The objectives of the Work Plan are to:

- Shutdown the SVE system to evaluate the need for continued operation.
- Collect groundwater samples to assess current groundwater quality at the site.
- Complete soil vapor intrusion (SVI) sampling to assess the remedial progress of the SVE system with respect to the potential soil vapor intrusion pathway.
- Collect soil vapor samples to assess the remedial progress of the SVE system.
- Develop and submit a report detailing the sampling results, analysis of data, conclusions, and recommendations for future remedial activities, if any, at the Site.

3.2 SVE System Shutdown and Sampling

Upon approval of this work plan, the SVE system will be shut down by turning the operation switches for the SVE blower to OFF and/or shutting the circuit breakers. The SVE system will be visually confirmed to be shut down via inspections of the pressures at the respective risers and direct observation of the compressor and blower within the system enclosure. The system will be locked out/tagged out to prevent accidental restart. If the system is unable to be locked out/tagged out, the hour meter will be photographed at the time of system shutdown.

Following a one-month (30 day) rebound period, groundwater and soil vapor samples will be collected at the Site. These samples will be collected to monitor the remedial progress of the SVE system with respect to the reduction of soil gas concentrations of PCE and its daughter products. If sample results from this one month rebound sample set are acceptable to the NYSDEC, the SVE system will remain off for an additional two month rebound period at which time a three-month (60 day) soil vapor sample set will be collected for laboratory testing.

Data collected from these events will be used to evaluate the potential for SVI, assess groundwater quality at the Site and determine the need for continued operation of the SVE system. Following the three-month rebound sampling event, the SVE system will be turned back on.

Sampling will also be performed to assess any potential SVI impacts to the on-site structure and will be done concurrently with both the one-month, and three-month, soil vapor sampling events. The sampling will be completed in accordance with the procedures in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006,

updated 2017), and is further discussed below.

3.3 Proposed Soil Vapor Intrusion Sampling Locations

The objective of this sampling is to determine if there are pathways for SVI that could allow the migration of vapors from the subsurface into the building. The proposed sampling locations include the two vapor implants at VP-4 and VP-5. Both are within the building with sub-slab vapor and indoor air samples, IA-4 and IA-5, collected. In addition to the locations indicated on **Figure 2**, an ambient air sample (OA-1) positioned upwind at the exterior of the building will also be selected on the day of sampling to assist in documentation of background, ambient conditions.

3.4 Proposed Soil Vapor Sampling Locations

The proposed sampling locations include the vapor implants at VP-1, VP-2, VP-3, VP-9, VP-10 and the two off-site points, VP-8 & VP-7. Please refer to **Figure 2** which illustrates the locations of the points.

3.5 Proposed Groundwater Sampling Locations

Groundwater samples are to be collected from the remaining on-site groundwater wells MW-2, B-2, B-7 and MW-9, along with the two off-site wells: MW-10, and MW-11.

3.6 Site Inspection and Inventory

The initial task will be completion of site reconnaissance to understand current site operations and to document any activities or chemical usage that may bias the results of the soil vapor and indoor air quality sampling program. At a minimum, work under this task will include the following:

- A site inspection to determine the logistics of taking samples in the shop and out in the yard.
- Review of site operations and current hazardous materials usage. To the degree possible, historic chemical usage will also be considered.
- Review of the heating ventilation and air conditioning system to determine air flow patterns, sources of makeup air, and possible preferential exposure pathways; and,
- Documentation of a facility chemical inventory.

3.7 Sampling Procedures and Analyses

3.7.1 Groundwater

Prior to sampling, depth to water will be measured at each well using an electronic water level meter with an accuracy of +/- 0.01 feet. All wells will then be purged and sampled using a submersible pump or low-flow method, or an alternative method, depending on the observed depth to groundwater and logistical issues. Purging and sampling will be performed consistent with USEPA low-flow sampling requirements. Sampling will be completed utilizing low-flow sampling with dedicated Teflon™-lined tubing for each well. Samples will be collected in laboratory supplied clean glassware. Upon collection, the samples will be placed in a sample cooler containing ice, and proper Chain-of-Custody (CoC) protocols will be followed for all samples collected. For quality assurance/quality control (QA/QC) purposes, a field blank, trip blank, and blind duplicate will be collected. All samples, including QA/QC, will be analyzed for VOCs using EPA Method 8260C by a New York State-accredited laboratory and results will be issued as Category B deliverables.

3.7.2 Soil Gas

Prior to sample collection, the Teflon®-lined tubing will be purged of approximately two volumes of the tubing using a vacuum pump set at a rate of 0.2 liters per minute. A tracer gas (i.e. helium) will be used to test the borehole seal and verify that ambient air is not being drawn into the sample as per NYSDOH Guidance. Following purging and verification with the tracer gas, the tubing will be connected to the laboratory supplied six-liter Summa canister. All soil vapor samples will be collected using pre-cleaned (batch-certified) six-liter Summa canisters with regulators calibrated to collect samples over an 8-hour period. A sampling log form will be used to document the initial and final vacuum readings of the Summa canisters along with the sampling times and canister and regulator identification numbers.

3.7.3 Soil Vapor Intrusion

Samples will be collected during the heating season between November 15, 2022, and March 31, 2023. Indoor air and co-located sub-slab vapor samples will be collected in six-liter Summa Canisters over an eight-hour period to simulate the exposure scenario for a workplace during a single shift. Samples will be collected from the indoor air within the structure and from beneath the slab below the building. Sampling procedures are described below:

- Prior to sampling the sampling point will be purged and the seal integrity will be tested with an inert gas (helium) in accordance with NYSDOH guidance.
- Sub-slab soil vapor and indoor air samples will be collected using laboratory-evacuated six-liter Summa® canisters, which are certified clean, with eight-hour flow regulators calibrated by the laboratory to ensure an 8-hour sampling duration. The flow rate will be less than the maximum flow rate of 0.2 liters per minute (LPM) (NYSDOH. 2006) and provided by a NYSDEC-certified analytical laboratory.
- A sampling log form will be used to document the initial and final vacuum readings of the Summa canisters along with the sampling times and canister and regulator identification numbers.
- At the two locations where co-located indoor air quality (IAQ) samples are also to be collected, sampling times will be coordinated so that sub-slab vapor and IAQ samples at the same location are collected at the same time. IAQ samples shall be located in the breathing zone (3 to 5 feet above the finished floor) within 2 to 3 feet of the soil vapor probe locations.
- A complete Product Inventory and Building Questionnaire will be completed at the time of sampling. Specific business practices would also be noted in the questionnaire such as truck maintenance and the frequency of the garage doors being open/closed.
- The HVAC system will be set for its normal heating season operation as if the building were occupied during the SVI sampling events.
- All samples will be delivered to New York State-accredited laboratory (TBD). EPA Method TO-15 will be used to analyze the air samples and the results will be issued as a Category B deliverable. The results will be available within 15 business days and data will be compared to the appropriate NYSDOH guidelines.

3.8 Sample Custody Documentation

The purpose of documenting sample custody is to ensure the integrity and handling of the samples is not subject to question. Sample custody will be maintained from the point of sampling through the analysis (and return of unused sample portions, if applicable). Each individual collecting samples is personally responsible for the care and custody of the samples. All sample labels should be pre-printed or filled out using waterproof ink. The technical staff will review all field activities with the Field Team Leader to determine whether proper custody procedures were followed during the fieldwork and to decide if additional samples are required. All samples being shipped offsite for analysis must be accompanied by a properly

completed chain of custody form. The sample numbers will be listed on the chain of custody form. When transferring the possession of samples, individuals relinquishing and receiving will sign, date, and note the time on the record. This record documents transfer of custody of samples from the sampler to another person, to/from a secure storage area, and to the laboratory. Samples will be packaged for shipment and dispatched to the appropriate laboratory for analysis with a separate signed custody record enclosed in each sample box or cooler. Shipping containers will be locked and/or secured with strapping tape in at least two locations for shipment to the laboratory.

3.9 Quality Assurance/Quality Control

The primary intended use for the data is to determine the effectiveness of the remedial SVE system and whether conversion to an SSDS, or shutdown of the SVE is appropriate. The primary data quality objective of the groundwater and soil vapor programs, therefore, is that data be accurate and precise, thus, representative of the actual Site conditions. Accuracy refers to the ability of the laboratory to obtain a true value (i.e. compared to a standard) and is assessed through the use of laboratory quality control (QC) samples, including laboratory control samples and matrix spike samples, as well as through the use of surrogates, which are compounds not typically found in the environment that are injected into the samples prior to analysis. Precision refers to the ability to replicate a value and is assessed through both field and laboratory duplicate samples.

Sensitivity is also a critical issue in generating representative data. Laboratory equipment must be of sufficient sensitivity to detect target compounds and analytes at levels below NYSDEC standards and guidelines whenever possible. Equipment sensitivity can be decreased by field or laboratory contamination of samples, and by sample matrix effects. Assessment of instrument sensitivity is performed through the analysis of reagent blanks, near-detection-limit standards, and response factors. Potential field and/or laboratory contamination is assessed through use of trip blanks, method blanks, and equipment rinse blanks (also called “field blanks”).

Table 1 lists the number/type of field and QA/QC samples that will be collected during the implementation of this Work Plan. Table 1 lists the requirements for field and laboratory QC samples that will be analyzed to assess data accuracy and precision, as well as to determine if equipment sensitivity has been compromised. Table 2 lists the preservation, holding times and sample container information.

The laboratory selected to analyze the field samples collected shall maintain a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) Contract Laboratory Protocol (CLP) certification for each of the “assessment” analyses utilized.

All laboratory data are to be reported in NYSDEC ASP Category B deliverables and will be delivered to NYSDEC in electronic data deliverable (EDD) format. A Data Usability Report will be prepared meeting the requirements in Section 2.2(a)1.ii and Appendix 2B of DER-10 for all data packages generated.

4.0 DATA EVALUATION AND REPORTING

4.1 Daily Reports

Daily reports during field/sampling activities will be prepared and submitted to the NYSDEC project manager by the end of each day and will include:

- An update of progress made during the reporting day
- Photographic documentation of the activities completed during the reporting day
- Identification of samples collected during the reporting day
- An explanation of notable site conditions or issues
- A list of anticipated work for the following reporting day

4.2 SVE Remedial Performance Report

Upon completion of field activities, analytical data will be evaluated and the work performed will be documented in a summary report. At a minimum, the data evaluation and summary report will include the following:

- Documentation of field activities performed including SVE system shutdown and groundwater, soil vapor, and SVI sampling.
- A summary of analytical data including groundwater, soil vapor, and SVI sample results. Data will be discussed in comparison to applicable regulatory standards and guidelines and will be presented in tabular and figure formats.
- Conclusions with respect to the remedial effectiveness of the SVE system and recommendations for any further assessment, mitigation, etc.
- Groundwater, soil vapor, and SVI data will be independently validated by a third-party data validator in accordance with the DER-10 guidance and the subsequent DUSR included as part of the summary report.
- EDDs will be submitted to NYSDEC via the EQulS™ database.
- Appendices will be provided as appropriate with backup data and full analytical laboratory deliverable packages (ASP Category B).

5.0 SCHEDULE

When this workplan is approved, we will immediately shutdown the SVE System and schedule the Soil and groundwater sampling for at least 30 days after the system is shut down (within the heating season November 15, 2022 to March 31, 2023).

Anticipated Schedule

Initial Round System Shut down: January 30, 2023

Initial System Sampling: not before March 1, 2023

System is put back in operation day of sampling.

Laboratory results: 15 days from sampling.

Results report: 45 days from sampling.

Second Round System Shut down: November 10th, 2023

Initial System Sampling: not before December 10th, 2023

System is put back in operation day of sampling.

Laboratory results: 15 days from sampling.

Final Results report: 45 days from sampling.

TABLES

**TABLE 1
SUMMARY OF SAMPLING PROGRAM RATIONALE AND ANALYSIS**

Matrix	Location	Approximate Number of Samples	Rationale for Sampling	Laboratory Analysis
Groundwater (water table)	4 monitoring wells throughout the Site (MW-2, B-2, B-7, MW-9)	4	To assess groundwater quality at the Site.	VOCs EPA Method 8260C, SVOCs EPA Method 8270, Pesticides EPA Method 8081, PCBs EPA Method 8082, TAL/TCL Metals EPA 6010, 21
Groundwater (water table)	2 monitoring wells in the sidewalk along Merrick Blvd and 107 th Avenue (MW-10 and MW-11)	2	To assess groundwater quality off Site.	VOCs EPA Method 8260C, SVOCs EPA Method 8270, Pesticides EPA Method 8081, PCBs EPA Method 8082, TAL/TCL Metals EPA 6010, 21
Total (Groundwater)		6		
Sub-Slab Soil Vapor	2 existing soil vapor probes within the building (VP-4 & VP-5)	2	Evaluate soil vapor under the building slab	VOCs EPA Method TO-15.
Soil Vapor	5 existing soil vapor probes across the Site.	5	Evaluate Vapor throughout the Site.	VOCs EPA Method TO-15.
Soil Vapor	2 existing soil vapor probes off- Site.	2	Evaluate soil Vapor off-Site.	VOCs EPA Method TO-15.
Total (Soil Vapor)		9		
Groundwater Duplicate	One duplicate groundwater sample per 20 samples	1	To meet requirements of QA / QC program	VOCs EPA Method 8260C, SVOCs EPA Method 8270, Pesticides EPA Method 8081, PCBs EPA Method 8082, TAL/TCL Metals EPA 6010, 21
Groundwater MS/MSD	Matrix spike and Matrix spike duplicates at the rate 5%	1	To meet requirements of QA / QC program	VOCs EPA Method 8260C, SVOCs EPA Method 8270, Pesticides EPA Method 8081, PCBs EPA Method 8082, TAL/TCL Metals EPA 6010, 21
Trip Blanks	One laboratory prepared trip blank to accompany samples each time they are delivered to the laboratory.	5	To meet requirements of QA / QC program	VOCs EPA Method 8260C
Total (QA/QC Samples)		7		

**TABLE 2
SAMPLE COLLECTION AND ANALYSIS PROTOCOLS**

Sample Type	Matrix	Sampling Device	Parameter	Sample Container	Sample Preservation	Analytical Method#	CRQL / MDLH	HoldingTime
Grab	Water	Pump Tubing	VOCs	(2) 40 mL vials	Cool to 4° C 1:1 HCL	EPA Method 8260C	Compound Specific (1-5 ug/kg)	14 days
Grab	Water	Pump Tubing	SVOCs	(1) 1 Liter Amber Bottle	Cool to 4° C	EPA Method 8270D	Compound Specific (1-5 ug/kg)	7 days 40 days after extraction
Grab	Water	Pump Tubing	Pest/PCBs	(2) 1 Liter Amber Bottles	Cool to 4° C	EPA Method 8081B/8082A	Compound Specific (1-5 ug/kg)	7 days 40 days after extraction
Grab	Water	Pump Tubing	Total Metals	(1) 100 ml	HNO ₃	TAL Metals 6010	Compound Specific (1-5 ug/kg)	6 months
Grab	Water	Pump Tubing	Dissolved Metals	(1) 100 ml	Cool to 4° C	TAL Metals 6010	Compound Specific (1-5 ug/kg)	6 months
8 hr Avg	Soil Vapor	6-Liter Summa Canister	VOCs	6-Liter Summa Canister	None	EPA Method TO-15	< 0.5 ppbv	30 days if pressure Difference between sampling and analysis if <5psi
8 hr Avg	Ambient Air	6-Liter Summa Canister	VOCs	6-Liter Summa Canister	None	EPA Method TO-15	< 0.5 ppbv	30 days if pressure Difference between sampling and analysis if <5psi

Notes:

All holding times listed are from Verified Time of Sample Receipt (VTSR) unless noted otherwise. * Holding time listed is from time of sample collection.

The number in parentheses in the "Sample Container" column denotes the number of containers needed.

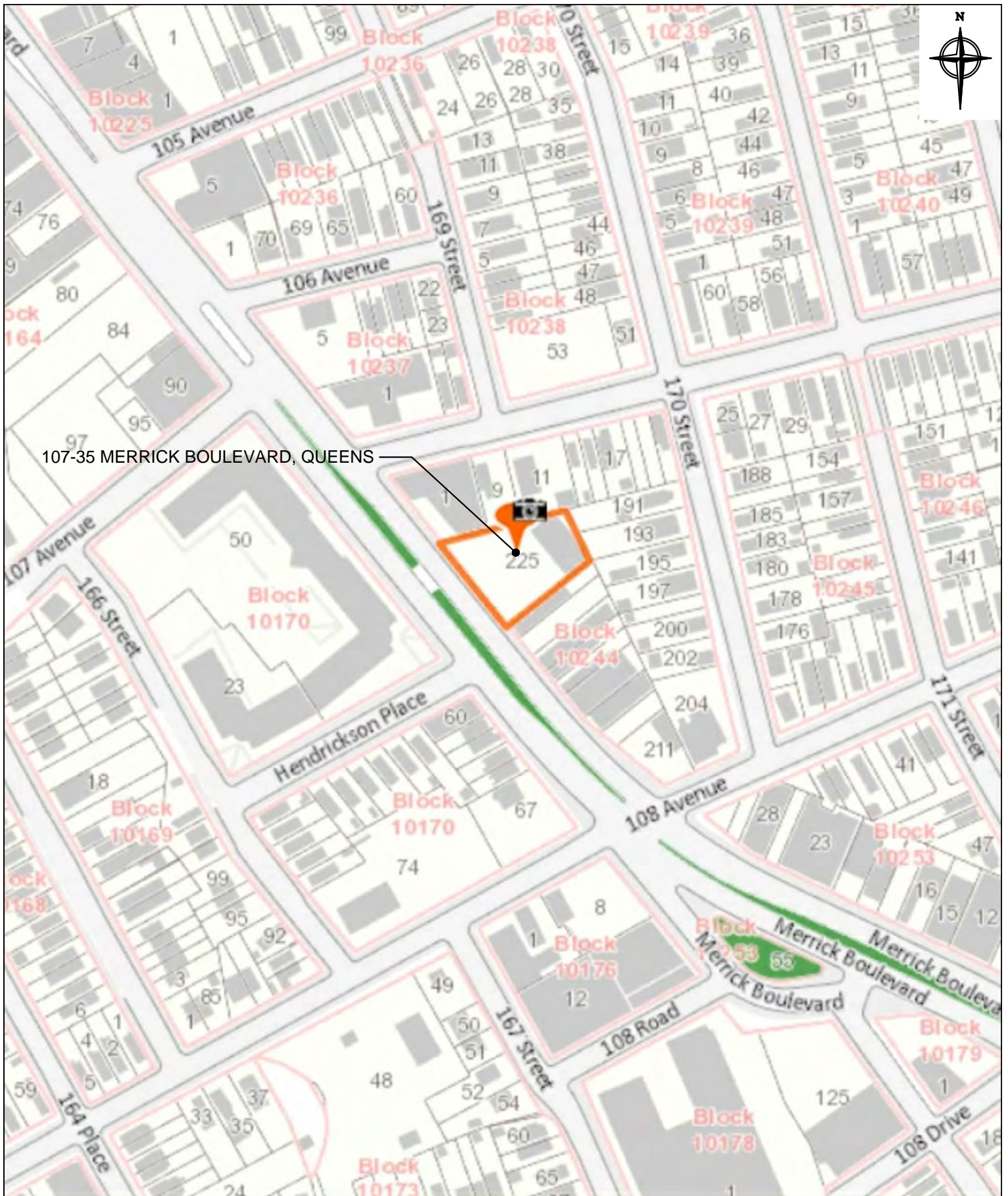
Triple volume required when collected MS/MSD samples

The number of trip blanks are estimated.

CRQL / MDL = Contract Required Quantitation Limit / Method Detection Limit

NA = Not available or not applicable.

FIGURES



107-35 MERRICK BOULEVARD, QUEENS

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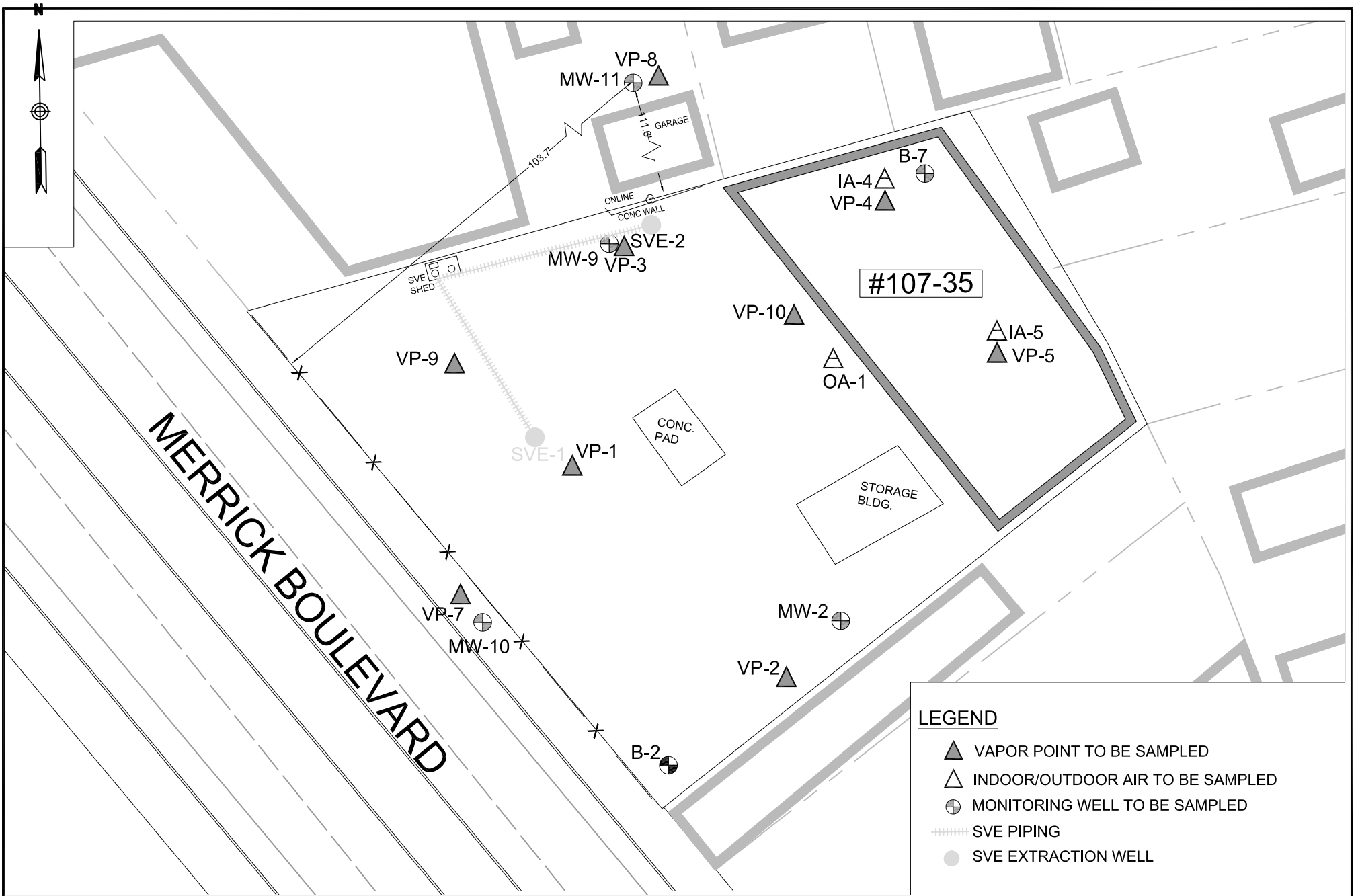
TITLE:

PROJECT LOCATION MAP

107-35 Merrick Boulevard
Queens, NY

DWN: LR	SCALE: N.T.S	DATE: 06-06-18	PROJECT NO.: 107-35
CHKD: JDM	APPD: JDM	REV.: -	NOTES: -

FIGURE NO.:



LEGEND

- ▲ VAPOR POINT TO BE SAMPLED
- △ INDOOR/OUTDOOR AIR TO BE SAMPLED
- ⊕ MONITORING WELL TO BE SAMPLED
- SVE PIPING
- SVE EXTRACTION WELL

PREPARED BY:



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TITLE:

SITE SAMPLING PLAN

107-35 MERRICK BLVD.
 JAMAICA, NY

DRAWN: -	SCALE: NTS	DATE: 12/1/22	PROJECT NO.: CAL1801
CHECKED: KT	APPROVED: KT	REVISION: -	NOTES: -

FIGURE NO.: **2**

APPENDIX A

Pre/Post GAC Sampling Events



Table 3
Pre/Post GAC Sampling
107-35 Merrick Blvd, Queens, NY
Volatile Organic Compounds in Air
by EPA Method TO-15

Analytes	Location: Sampling Date: Unit:	Before GAC	After GAC	Before GAC	After GAC
		2/10/2022	2/10/2022	11/9/2022	11/9/2022
1,1,1-Trichloroethane	ug/m3	ND	ND	<1.09	<1.09
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND	<1.37	<1.37
1,1,2-Trichloroethane	ug/m3	ND	ND	<1.09	<1.09
1,1-Dichloroethane	ug/m3	ND	ND	<0.809	<0.809
1,1-Dichloroethene	ug/m3	ND	ND	<0.793	<0.793
1,2,4-Trichlorobenzene	ug/m3	ND	ND	<1.48	<1.48
1,2,4-Trimethylbenzene	ug/m3	ND	ND	<0.983	<0.983
1,2-Dibromoethane	ug/m3	ND	ND	<1.54	<1.54
1,2-Dichlorobenzene	ug/m3	ND	ND	<1.20	<1.20
1,2-Dichloroethane	ug/m3	ND	ND	<0.809	<0.809
1,2-Dichloropropane	ug/m3	ND	ND	<0.924	<0.924
1,3,5-Trimethylbenzene	ug/m3	ND	ND	<0.983	<0.983
1,3-Butadiene	ug/m3	ND	ND	<0.442	<0.442
1,3-Dichlorobenzene	ug/m3	ND	ND	<1.20	<1.20
1,4-Dichlorobenzene	ug/m3	ND	ND	<1.20	<1.20
1,4-Dioxane	ug/m3	ND	ND	<0.721	<0.721
2,2,4-Trimethylpentane	ug/m3	2.21	3.8	<0.934	<0.934
2-Butanone	ug/m3	ND	ND	<1.47	<1.47
2-Hexanone	ug/m3	ND	ND	<0.820	<0.820
3-Chloropropene	ug/m3	ND	ND	<0.626	<0.626
4-Ethyltoluene	ug/m3	ND	ND	<0.983	<0.983
4-Methyl-2-pentanone	ug/m3	ND	ND	<2.05	<2.05
Acetone	ug/m3	5.84	ND	3.47	<2.38
Benzene	ug/m3	0.642	0.716	<0.639	<0.639
Benzyl chloride	ug/m3	ND	ND	<1.04	<1.04
Bromodichloromethane	ug/m3	ND	ND	<1.34	<1.34
Bromoform	ug/m3	ND	ND	<2.07	<2.07
Bromomethane	ug/m3	ND	ND	<0.777	<0.777
Carbon disulfide	ug/m3	ND	ND	<0.623	0.751
Carbon tetrachloride	ug/m3	ND	ND	<1.26	<1.26
Chlorobenzene	ug/m3	ND	ND	<0.921	<0.921
Chloroethane	ug/m3	ND	ND	<0.528	<0.528
Chloroform	ug/m3	ND	2.9	3.45	5.37
Chloromethane	ug/m3	1.08	ND	0.434	<0.413
cis-1,2-Dichloroethene	ug/m3	ND	ND	0.991	2.14
cis-1,3-Dichloropropene	ug/m3	ND	ND	<0.908	<0.908
Cyclohexane	ug/m3	0.781	12.3	<0.688	3.99
Dibromochloromethane	ug/m3	ND	ND	<1.70	<1.70



Table 3
Pre/Post GAC Sampling
107-35 Merrick Blvd, Queens, NY
Volatile Organic Compounds in Air
by EPA Method TO-15

Analytes	Location: Sampling Date: Unit:	Before GAC	After GAC	Before GAC	After GAC
		2/10/2022	2/10/2022	11/9/2022	11/9/2022
Dichlorodifluoromethane	ug/m3	2.98	2.86	2.19	2.28
Ethanol	ug/m3	ND	ND	<9.42	<9.42
Ethyl Acetate	ug/m3	ND	ND	<1.80	<1.80
Ethylbenzene	ug/m3	ND	ND	<0.869	<0.869
Freon-113	ug/m3	ND	ND	<1.53	<1.53
Freon-114	ug/m3	ND	ND	<1.40	<1.40
Heptane	ug/m3	ND	4.84	<0.820	<0.820
Hexachlorobutadiene	ug/m3	ND	ND	<2.13	<2.13
Isopropanol	ug/m3	ND	ND	<1.23	<1.23
Methyl tert butyl ether	ug/m3	ND	ND	<0.721	<0.721
Methylene chloride	ug/m3	ND	ND	<1.74	<1.74
n-Hexane	ug/m3	1.2	8.18	<0.705	5.6
o-Xylene	ug/m3	ND	ND	<0.869	<0.869
p/m-Xylene	ug/m3	ND	ND	<1.74	<1.74
Styrene	ug/m3	ND	ND	<0.852	<0.852
Tertiary butyl Alcohol	ug/m3	ND	ND	<1.52	<1.52
Tetrachloroethene	ug/m3	26.6	ND	136	9.56
Tetrahydrofuran	ug/m3	2.91	ND	<1.47	<1.47
Toluene	ug/m3	1.13	19.7	<0.754	<0.754
trans-1,2-Dichloroethene	ug/m3	ND	ND	<0.793	<0.793
trans-1,3-Dichloropropene	ug/m3	ND	ND	<0.908	<0.908
Trichloroethene	ug/m3	ND	ND	1.45	4.07
Trichlorofluoromethane	ug/m3	1.57	1.61	1.23	1.26
Vinyl bromide	ug/m3	ND	ND	<0.874	<0.874
Vinyl chloride	ug/m3	ND	ND	<0.511	<0.511



ANALYTICAL REPORT

Lab Number:	L2207235
Client:	Tyll Engineering and Consulting PC 169 Commack Road Suite H173 Commack, NY 11725
ATTN:	Karen Tyll
Phone:	(631) 664-6477
Project Name:	Not Specified
Project Number:	Not Specified
Report Date:	02/25/22

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

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



Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2207235-01	BEFORE GAC	SOIL_VAPOR	107-35 MERRICK BLVD, QUEENS	02/10/22 11:02	02/10/22
L2207235-02	AFTER GAC	SOIL_VAPOR	107-35 MERRICK BLVD, QUEENS	02/10/22 11:07	02/10/22

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

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: Not Specified
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on February 9, 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:

 Susan O'Neil

Title: Technical Director/Representative

Date: 02/25/22

AIR

Project Name:
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

SAMPLE RESULTS

Lab ID: L2207235-01
 Client ID: BEFORE GAC
 Sample Location: 107-35 MERRICK BLVD, QUEENS

Date Collected: 02/10/22 11:02
 Date Received: 02/10/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 02/25/22 02:33
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.603	0.200	--	2.98	0.989	--		1
Chloromethane	0.521	0.200	--	1.08	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	2.46	1.00	--	5.84	2.38	--		1
Trichlorofluoromethane	0.279	0.200	--	1.57	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



Project Name:
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

SAMPLE RESULTS

Lab ID: L2207235-01
 Client ID: BEFORE GAC
 Sample Location: 107-35 MERRICK BLVD, QUEENS

Date Collected: 02/10/22 11:02
 Date Received: 02/10/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.986	0.500	--	2.91	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.340	0.200	--	1.20	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.201	0.200	--	0.642	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.227	0.200	--	0.781	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	0.473	0.200	--	2.21	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	0.299	0.200	--	1.13	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	3.92	0.200	--	26.6	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



Project Name:
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

SAMPLE RESULTS

Lab ID: L2207235-01
 Client ID: BEFORE GAC
 Sample Location: 107-35 MERRICK BLVD, QUEENS

Date Collected: 02/10/22 11:02
 Date Received: 02/10/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
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	77		60-140
Bromochloromethane	82		60-140
chlorobenzene-d5	93		60-140



Project Name:
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

SAMPLE RESULTS

Lab ID: L2207235-02
 Client ID: AFTER GAC
 Sample Location: 107-35 MERRICK BLVD, QUEENS

Date Collected: 02/10/22 11:07
 Date Received: 02/10/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 02/25/22 01:53
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.578	0.200	--	2.86	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	0.287	0.200	--	1.61	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



Project Name:
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

SAMPLE RESULTS

Lab ID: L2207235-02
 Client ID: AFTER GAC
 Sample Location: 107-35 MERRICK BLVD, QUEENS

Date Collected: 02/10/22 11:07
 Date Received: 02/10/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.594	0.200	--	2.90	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	2.32	0.200	--	8.18	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.224	0.200	--	0.716	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	3.57	0.200	--	12.3	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	0.814	0.200	--	3.80	0.934	--		1
Heptane	1.18	0.200	--	4.84	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	5.23	0.200	--	19.7	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



Project Name:
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

SAMPLE RESULTS

Lab ID: L2207235-02
 Client ID: AFTER GAC
 Sample Location: 107-35 MERRICK BLVD, QUEENS

Date Collected: 02/10/22 11:07
 Date Received: 02/10/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
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	83		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	97		60-140



Project Name: Not Specified

Lab Number: L2207235

Project Number: Not Specified

Report Date: 02/25/22

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/24/22 17:36

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1608966-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: Not Specified

Lab Number: L2207235

Project Number: Not Specified

Report Date: 02/25/22

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/24/22 17:36

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1608966-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1



Project Name: Not Specified

Lab Number: L2207235

Project Number: Not Specified

Report Date: 02/25/22

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/24/22 17:36

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1608966-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Lab Number: L2207235

Project Number: Not Specified

Report Date: 02/25/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1608966-3								
Dichlorodifluoromethane	88		-		70-130	-		
Chloromethane	93		-		70-130	-		
Freon-114	92		-		70-130	-		
Vinyl chloride	88		-		70-130	-		
1,3-Butadiene	96		-		70-130	-		
Bromomethane	88		-		70-130	-		
Chloroethane	86		-		70-130	-		
Ethanol	98		-		40-160	-		
Vinyl bromide	87		-		70-130	-		
Acetone	100		-		40-160	-		
Trichlorofluoromethane	87		-		70-130	-		
Isopropanol	102		-		40-160	-		
1,1-Dichloroethene	91		-		70-130	-		
Tertiary butyl Alcohol	89		-		70-130	-		
Methylene chloride	99		-		70-130	-		
3-Chloropropene	103		-		70-130	-		
Carbon disulfide	91		-		70-130	-		
Freon-113	94		-		70-130	-		
trans-1,2-Dichloroethene	88		-		70-130	-		
1,1-Dichloroethane	90		-		70-130	-		
Methyl tert butyl ether	96		-		70-130	-		
2-Butanone	98		-		70-130	-		
cis-1,2-Dichloroethene	93		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Lab Number: L2207235

Project Number: Not Specified

Report Date: 02/25/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1608966-3								
Ethyl Acetate	99		-		70-130	-		
Chloroform	91		-		70-130	-		
Tetrahydrofuran	95		-		70-130	-		
1,2-Dichloroethane	86		-		70-130	-		
n-Hexane	95		-		70-130	-		
1,1,1-Trichloroethane	91		-		70-130	-		
Benzene	88		-		70-130	-		
Carbon tetrachloride	93		-		70-130	-		
Cyclohexane	96		-		70-130	-		
1,2-Dichloropropane	96		-		70-130	-		
Bromodichloromethane	92		-		70-130	-		
1,4-Dioxane	94		-		70-130	-		
Trichloroethene	94		-		70-130	-		
2,2,4-Trimethylpentane	97		-		70-130	-		
Heptane	102		-		70-130	-		
cis-1,3-Dichloropropene	104		-		70-130	-		
4-Methyl-2-pentanone	104		-		70-130	-		
trans-1,3-Dichloropropene	89		-		70-130	-		
1,1,2-Trichloroethane	99		-		70-130	-		
Toluene	93		-		70-130	-		
2-Hexanone	110		-		70-130	-		
Dibromochloromethane	104		-		70-130	-		
1,2-Dibromoethane	104		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Lab Number: L2207235

Project Number: Not Specified

Report Date: 02/25/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1608966-3								
Tetrachloroethene	100		-		70-130	-		
Chlorobenzene	104		-		70-130	-		
Ethylbenzene	102		-		70-130	-		
p/m-Xylene	102		-		70-130	-		
Bromoform	106		-		70-130	-		
Styrene	108		-		70-130	-		
1,1,2,2-Tetrachloroethane	106		-		70-130	-		
o-Xylene	104		-		70-130	-		
4-Ethyltoluene	106		-		70-130	-		
1,3,5-Trimethylbenzene	106		-		70-130	-		
1,2,4-Trimethylbenzene	109		-		70-130	-		
Benzyl chloride	111		-		70-130	-		
1,3-Dichlorobenzene	109		-		70-130	-		
1,4-Dichlorobenzene	113		-		70-130	-		
1,2-Dichlorobenzene	110		-		70-130	-		
1,2,4-Trichlorobenzene	116		-		70-130	-		
Hexachlorobutadiene	107		-		70-130	-		

Project Name:

Project Number:

Serial_No:02252215:23
Lab Number: L2207235

Report Date: 02/25/22

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
L2207235-01	BEFORE GAC	2672	6.0L Can	02/09/22	378258	L2205332-03	Pass	-29.5	-2.4	-	-	-	-
L2207235-02	AFTER GAC	2715	6.0L Can	02/09/22	378258	L2205637-02	Pass	-29.5	0.0	-	-	-	-

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

Lab Number: L2205332
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205332-03
 Client ID: CAN 3634 SHELF 61
 Sample Location:

Date Collected: 02/01/22 17:00
 Date Received: 02/02/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 02/02/22 22:41
 Analyst: TS

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



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

Lab Number: L2205332
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205332-03
 Client ID: CAN 3634 SHELF 61
 Sample Location:

Date Collected: 02/01/22 17:00
 Date Received: 02/02/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2205332
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205332-03
 Client ID: CAN 3634 SHELF 61
 Sample Location:

Date Collected: 02/01/22 17:00
 Date Received: 02/02/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2205332
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205332-03
 Client ID: CAN 3634 SHELF 61
 Sample Location:

Date Collected: 02/01/22 17:00
 Date Received: 02/02/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2205332
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205332-03
 Client ID: CAN 3634 SHELF 61
 Sample Location:

Date Collected: 02/01/22 17:00
 Date Received: 02/02/22
 Field Prep: Not Specified

Sample Depth:

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

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	94		60-140



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

Lab Number: L2205332
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205332-03
 Client ID: CAN 3634 SHELF 61
 Sample Location:

Date Collected: 02/01/22 17:00
 Date Received: 02/02/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 02/02/22 22:41
 Analyst: TS

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



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

Lab Number: L2205332
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205332-03
 Client ID: CAN 3634 SHELF 61
 Sample Location:

Date Collected: 02/01/22 17:00
 Date Received: 02/02/22
 Field Prep: Not Specified

Sample Depth:

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

Lab Number: L2205332
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205332-03
 Client ID: CAN 3634 SHELF 61
 Sample Location:

Date Collected: 02/01/22 17:00
 Date Received: 02/02/22
 Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	97		60-140



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

Lab Number: L2205637
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205637-02
 Client ID: CAN 1814 SHELF 57
 Sample Location:

Date Collected: 02/02/22 17:00
 Date Received: 02/03/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 02/03/22 19:55
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	0.095	0.500	--	0.164	0.861	--	J	1
Propane	0.190	0.500	--	0.343	0.902	--	J	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	0.081	0.200	--	0.193	0.475	--	J	1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	1.54	5.00	--	2.90	9.42	--	J	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	0.100	0.200	--	0.295	0.590	--	J	1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



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

Lab Number: L2205637
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205637-02
 Client ID: CAN 1814 SHELF 57
 Sample Location:

Date Collected: 02/02/22 17:00
 Date Received: 02/03/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2205637
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205637-02
 Client ID: CAN 1814 SHELF 57
 Sample Location:

Date Collected: 02/02/22 17:00
 Date Received: 02/03/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2205637
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205637-02
 Client ID: CAN 1814 SHELF 57
 Sample Location:

Date Collected: 02/02/22 17:00
 Date Received: 02/03/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2205637
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205637-02
 Client ID: CAN 1814 SHELF 57
 Sample Location:

Date Collected: 02/02/22 17:00
 Date Received: 02/03/22
 Field Prep: Not Specified

Sample Depth:

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

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	88		60-140
chlorobenzene-d5	91		60-140



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

Lab Number: L2205637
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205637-02
 Client ID: CAN 1814 SHELF 57
 Sample Location:

Date Collected: 02/02/22 17:00
 Date Received: 02/03/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 02/03/22 19:55
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.023	0.200	--	0.114	0.989	--	J	1
Chloromethane	0.036	0.200	--	0.074	0.413	--	J	1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	0.457	1.00	--	1.09	2.38	--	J	1
Trichlorofluoromethane	0.016	0.050	--	0.090	0.281	--	J	1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	0.059	0.500	--	0.205	1.74	--	J	1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	0.021	0.100	--	0.067	0.319	--	J	1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



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

Lab Number: L2205637
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205637-02
 Client ID: CAN 1814 SHELF 57
 Sample Location:

Date Collected: 02/02/22 17:00
 Date Received: 02/03/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	0.014	0.100	--	0.053	0.377	--	J	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
Project Number: CANISTER QC BAT

Lab Number: L2205637
Report Date: 02/25/22

Air Canister Certification Results

Lab ID: L2205637-02
 Client ID: CAN 1814 SHELF 57
 Sample Location:

Date Collected: 02/02/22 17:00
 Date Received: 02/03/22
 Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	96		60-140



Project Name: Not Specified

Project Number: Not Specified

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Absent

Container Information**Container ID** **Container Type**

L2207235-01A Canister - 6 Liter

L2207235-02A Canister - 6 Liter

Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
NA	NA			Y	Absent		TO15-LL(30)
NA	NA			Y	Absent		TO15-LL(30)

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

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: Not Specified
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

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

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

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

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

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

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

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report



Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

Data Qualifiers

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: Not Specified
Project Number: Not Specified

Lab Number: L2207235
Report Date: 02/25/22

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 it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpeneol

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-Terpeneol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, 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, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522, EPA 537.1.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



AIR ANALYSIS

CHAIN OF CUSTODY

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

PAGE _____ OF _____

Date Rec'd in Lab: 2/11/22

ALPHA Job #: L2207235

Client Information

Client: Tyll Engineering
 Address: 169 Gammack Rd
 Suite H173
 Phone: 631 629-5373
 Fax:
 Email: karu@tyllengineering.com

Project Information

Project Name:
 Project Location: 107-35 Merrick Blvd, Queens
 Project #:
 Project Manager:
 ALPHA Quote #:

Turn-Around Time

Standard RUSH (only confirmed if pre-approved!)

Date Due: _____ Time: _____

Report Information - Data Deliverables

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

Billing Information

Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List:

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION					Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15 TO-15 SIM APH Fixed Gases Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum							
07235-01	BEFORE GAC	2/10/22	11 AM	11:02	27.8	1.05	Air	CR	6L	2672	6RB005	X	
	02 AFTER GAC	2/10/22	11:05A	11:07AM	29.1	0.22	Air	CR	6L	2715	6RB005	X	

*SAMPLE MATRIX CODES

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

Container Type

Relinquished By: *Carla Perry* Date/Time: 2/10/22/3:04
 Received By: *Wynne Deane* Date/Time: 2/10/22/15:35
Yathany Hussein Date/Time: 2/10/22
Carla Perry Date/Time: 2/11/22 08:00

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



ANALYTICAL REPORT

Lab Number:	L2262899
Client:	Tyll Engineering and Consulting PC 169 Commack Road Suite H173 Commack, NY 11725
ATTN:	Karen Tyll
Phone:	(631) 664-6477
Project Name:	107-35 MB
Project Number:	Not Specified
Report Date:	11/28/22

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

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

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



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2262899-01	BEFORE GAC	SOIL_VAPOR	107-35 MERRICK BLVD, JAMAICA	11/09/22 10:46	11/09/22
L2262899-02	AFTER GAC	SOIL_VAPOR	107-35 MERRICK BLVD, JAMAICA	11/09/22 10:21	11/09/22

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

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: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22


Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on November 8, 2022. The canister certification results are provided as an addendum.

The WG1716010-3 LCS recovery for bromoform (133%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

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

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 11/28/22

AIR

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-01
 Client ID: BEFORE GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:46
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 11/24/22 04:40
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.443	0.200	--	2.19	0.989	--		1
Chloromethane	0.210	0.200	--	0.434	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	1.46	1.00	--	3.47	2.38	--		1
Trichlorofluoromethane	0.219	0.200	--	1.23	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	0.250	0.200	--	0.991	0.793	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-01
 Client ID: BEFORE GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:46
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.706	0.200	--	3.45	0.977	--		1
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	0.269	0.200	--	1.45	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	20.1	0.200	--	136	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-01
 Client ID: BEFORE GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:46
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:

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

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



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-02
 Client ID: AFTER GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:21
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 11/24/22 05:19
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.461	0.200	--	2.28	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	0.224	0.200	--	1.26	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	0.241	0.200	--	0.751	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	0.541	0.200	--	2.14	0.793	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-02
 Client ID: AFTER GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:21
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	1.10	0.200	--	5.37	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.59	0.200	--	5.60	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	1.16	0.200	--	3.99	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	0.758	0.200	--	4.07	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	1.41	0.200	--	9.56	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-02
 Client ID: AFTER GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:21
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 11/23/22 15:42

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1716010-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 11/23/22 15:42

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1716010-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 11/23/22 15:42

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1716010-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1716010-3								
Dichlorodifluoromethane	89		-		70-130	-		
Chloromethane	96		-		70-130	-		
Freon-114	92		-		70-130	-		
Vinyl chloride	87		-		70-130	-		
1,3-Butadiene	96		-		70-130	-		
Bromomethane	87		-		70-130	-		
Chloroethane	90		-		70-130	-		
Ethanol	76		-		40-160	-		
Vinyl bromide	98		-		70-130	-		
Acetone	113		-		40-160	-		
Trichlorofluoromethane	94		-		70-130	-		
Isopropanol	107		-		40-160	-		
1,1-Dichloroethene	95		-		70-130	-		
Tertiary butyl Alcohol	87		-		70-130	-		
Methylene chloride	100		-		70-130	-		
3-Chloropropene	110		-		70-130	-		
Carbon disulfide	100		-		70-130	-		
Freon-113	101		-		70-130	-		
trans-1,2-Dichloroethene	94		-		70-130	-		
1,1-Dichloroethane	97		-		70-130	-		
Methyl tert butyl ether	95		-		70-130	-		
2-Butanone	99		-		70-130	-		
cis-1,2-Dichloroethene	99		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1716010-3								
Ethyl Acetate	96		-		70-130	-		
Chloroform	99		-		70-130	-		
Tetrahydrofuran	98		-		70-130	-		
1,2-Dichloroethane	92		-		70-130	-		
n-Hexane	95		-		70-130	-		
1,1,1-Trichloroethane	100		-		70-130	-		
Benzene	94		-		70-130	-		
Carbon tetrachloride	107		-		70-130	-		
Cyclohexane	96		-		70-130	-		
1,2-Dichloropropane	99		-		70-130	-		
Bromodichloromethane	102		-		70-130	-		
1,4-Dioxane	98		-		70-130	-		
Trichloroethene	100		-		70-130	-		
2,2,4-Trimethylpentane	98		-		70-130	-		
Heptane	110		-		70-130	-		
cis-1,3-Dichloropropene	113		-		70-130	-		
4-Methyl-2-pentanone	110		-		70-130	-		
trans-1,3-Dichloropropene	98		-		70-130	-		
1,1,2-Trichloroethane	105		-		70-130	-		
Toluene	100		-		70-130	-		
2-Hexanone	120		-		70-130	-		
Dibromochloromethane	123		-		70-130	-		
1,2-Dibromoethane	116		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1716010-3								
Tetrachloroethene	110		-		70-130	-		
Chlorobenzene	110		-		70-130	-		
Ethylbenzene	116		-		70-130	-		
p/m-Xylene	118		-		70-130	-		
Bromoform	133	Q	-		70-130	-		
Styrene	127		-		70-130	-		
1,1,2,2-Tetrachloroethane	113		-		70-130	-		
o-Xylene	119		-		70-130	-		
4-Ethyltoluene	123		-		70-130	-		
1,3,5-Trimethylbenzene	117		-		70-130	-		
1,2,4-Trimethylbenzene	109		-		70-130	-		
Benzyl chloride	125		-		70-130	-		
1,3-Dichlorobenzene	130		-		70-130	-		
1,4-Dichlorobenzene	130		-		70-130	-		
1,2-Dichlorobenzene	120		-		70-130	-		
1,2,4-Trichlorobenzene	106		-		70-130	-		
Hexachlorobutadiene	108		-		70-130	-		

Project Name: 107-35 MB

Project Number:

Serial_No:11282216:10
Lab Number: L2262899

Report Date: 11/28/22

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
L2262899-01	BEFORE GAC	2003	6.0L Can	11/08/22	405396	L2261234-04	Pass	-29.5	-1.5	-	-	-	-
L2262899-02	AFTER GAC	2785	6.0L Can	11/08/22	405396	L2261234-04	Pass	-29.6	0.0	-	-	-	-

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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 11/04/22 00:10
 Analyst: RAY

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



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

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

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	113		60-140
Bromochloromethane	123		60-140
chlorobenzene-d5	128		60-140



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 11/04/22 00:10
 Analyst: RAY

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



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-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
Project Number: CANISTER QC BAT

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	112		60-140
bromochloromethane	121		60-140
chlorobenzene-d5	125		60-140



Project Name: 107-35 MB

Project Number: Not Specified

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Present/Intact

Container Information**Container ID** **Container Type**

L2262899-01A Canister - 6 Liter

L2262899-02A Canister - 6 Liter

Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
NA	NA			Y	Absent		TO15-LL(30)
NA	NA			Y	Absent		TO15-LL(30)

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

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: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

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: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

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.)

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

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 it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpeneol

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-Terpeneol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, 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, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522, EPA 537.1.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS		PAGE OF																																											
 CHAIN OF CUSTODY		Project Information																																											
320 Forbes Blvd, Mansfield, MA 02048 TEL: 508-822-9300 FAX: 508-822-3268		Project Name: 107-35 MB Project Location: 107-35 Merrick Blvd, Jamaica																																											
Client Information		Project #: Project Manager: Karen Tyll ALPHA Quote #: 20480																																											
Client: Tyll Engineering and Consulting, PC Address: 169 Commack Road, H173 Commack, NY 11725 Phone: 6316295373 Fax: Email: Karen@tyllengineering.com		Turn-Around-Time <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (only confirmed if pre-approved) Date Due: Time:																																											
<input type="checkbox"/> These samples have been Previously analyzed by Alpha Other Project Specific Requirements/Comments: <input type="checkbox"/> Project-Specific Target Compound List		Regulatory Requirements/Report Limits																																											
		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>State/Fed</th> <th>Program</th> <th>Residential/Commercial</th> </tr> </thead> <tbody> <tr> <td>NYSDEC</td> <td>REM</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>		State/Fed	Program	Residential/Commercial	NYSDEC	REM																																					
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Alpha Lab Use Only	Sample ID	Collection					Sample Matrix*	Sampler Initials	Can Size	ID Can	ID Flow Controller	TO-15	TO-15 SIM	APH	FIXED GASES	Sulfides & Mercaptans by TO-15	Sample Specific Comments (i.e. PID)																												
		End Date	Start Time	End Time	Initial Vac	Final Vac																																							
62899-01	BEFORE GAC	11/9/22	1045	1046	-30.47	-237	SV	KT	6L	2003	GRB0123	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																												
-02	AFTER GAC	11/9/22	1031	1031	-24.3	29	SV	KT	6L	2785	GRB0047	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																												
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*SAMPLE MATRIX CODES: AA = Ambient Air (Indoor/Outdoor) SV = Soil Vapor/Landfill Gas/SVE Other = Please Specify		Container Type: - - - - -		Relinquished By: <i>Karen Tyll</i> Date/Time: 11/9/22 14:00 Signature: <i>[Handwritten]</i>		Received By: <i>[Handwritten]</i> Date/Time: 11/9/22 17:27 Signature: <i>[Handwritten]</i>		Date/Time: 11/10/22 03:15 Signature: <i>[Handwritten]</i>		Date/Time: 11/10/22 03:15 Signature: <i>[Handwritten]</i>		Date/Time: 11/10/22 03:15 Signature: <i>[Handwritten]</i>		Date/Time: 11/10/22 03:15 Signature: <i>[Handwritten]</i>		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.																													



ANALYTICAL REPORT

Lab Number:	L2262899
Client:	Tyll Engineering and Consulting PC 169 Commack Road Suite H173 Commack, NY 11725
ATTN:	Karen Tyll
Phone:	(631) 664-6477
Project Name:	107-35 MB
Project Number:	Not Specified
Report Date:	11/28/22

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

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

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



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2262899-01	BEFORE GAC	SOIL_VAPOR	107-35 MERRICK BLVD, JAMAICA	11/09/22 10:46	11/09/22
L2262899-02	AFTER GAC	SOIL_VAPOR	107-35 MERRICK BLVD, JAMAICA	11/09/22 10:21	11/09/22

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

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: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22


Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on November 8, 2022. The canister certification results are provided as an addendum.

The WG1716010-3 LCS recovery for bromoform (133%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

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

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 11/28/22

AIR

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-01
 Client ID: BEFORE GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:46
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 11/24/22 04:40
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.443	0.200	--	2.19	0.989	--		1
Chloromethane	0.210	0.200	--	0.434	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	1.46	1.00	--	3.47	2.38	--		1
Trichlorofluoromethane	0.219	0.200	--	1.23	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	0.250	0.200	--	0.991	0.793	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-01
 Client ID: BEFORE GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:46
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	0.706	0.200	--	3.45	0.977	--		1
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	0.269	0.200	--	1.45	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	20.1	0.200	--	136	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-01
 Client ID: BEFORE GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:46
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:

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

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



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-02
 Client ID: AFTER GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:21
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Soil_Vapor
 Analytical Method: 48,TO-15
 Analytical Date: 11/24/22 05:19
 Analyst: TJS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.461	0.200	--	2.28	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	0.224	0.200	--	1.26	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	0.241	0.200	--	0.751	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	0.541	0.200	--	2.14	0.793	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-02
 Client ID: AFTER GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:21
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	1.10	0.200	--	5.37	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.59	0.200	--	5.60	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	1.16	0.200	--	3.99	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	0.758	0.200	--	4.07	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	1.41	0.200	--	9.56	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

SAMPLE RESULTS

Lab ID: L2262899-02
 Client ID: AFTER GAC
 Sample Location: 107-35 MERRICK BLVD, JAMAICA

Date Collected: 11/09/22 10:21
 Date Received: 11/09/22
 Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 11/23/22 15:42

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1716010-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 11/23/22 15:42

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1716010-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1



Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 11/23/22 15:42

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1716010-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1716010-3								
Dichlorodifluoromethane	89		-		70-130	-		
Chloromethane	96		-		70-130	-		
Freon-114	92		-		70-130	-		
Vinyl chloride	87		-		70-130	-		
1,3-Butadiene	96		-		70-130	-		
Bromomethane	87		-		70-130	-		
Chloroethane	90		-		70-130	-		
Ethanol	76		-		40-160	-		
Vinyl bromide	98		-		70-130	-		
Acetone	113		-		40-160	-		
Trichlorofluoromethane	94		-		70-130	-		
Isopropanol	107		-		40-160	-		
1,1-Dichloroethene	95		-		70-130	-		
Tertiary butyl Alcohol	87		-		70-130	-		
Methylene chloride	100		-		70-130	-		
3-Chloropropene	110		-		70-130	-		
Carbon disulfide	100		-		70-130	-		
Freon-113	101		-		70-130	-		
trans-1,2-Dichloroethene	94		-		70-130	-		
1,1-Dichloroethane	97		-		70-130	-		
Methyl tert butyl ether	95		-		70-130	-		
2-Butanone	99		-		70-130	-		
cis-1,2-Dichloroethene	99		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1716010-3								
Ethyl Acetate	96		-		70-130	-		
Chloroform	99		-		70-130	-		
Tetrahydrofuran	98		-		70-130	-		
1,2-Dichloroethane	92		-		70-130	-		
n-Hexane	95		-		70-130	-		
1,1,1-Trichloroethane	100		-		70-130	-		
Benzene	94		-		70-130	-		
Carbon tetrachloride	107		-		70-130	-		
Cyclohexane	96		-		70-130	-		
1,2-Dichloropropane	99		-		70-130	-		
Bromodichloromethane	102		-		70-130	-		
1,4-Dioxane	98		-		70-130	-		
Trichloroethene	100		-		70-130	-		
2,2,4-Trimethylpentane	98		-		70-130	-		
Heptane	110		-		70-130	-		
cis-1,3-Dichloropropene	113		-		70-130	-		
4-Methyl-2-pentanone	110		-		70-130	-		
trans-1,3-Dichloropropene	98		-		70-130	-		
1,1,2-Trichloroethane	105		-		70-130	-		
Toluene	100		-		70-130	-		
2-Hexanone	120		-		70-130	-		
Dibromochloromethane	123		-		70-130	-		
1,2-Dibromoethane	116		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1716010-3								
Tetrachloroethene	110		-		70-130	-		
Chlorobenzene	110		-		70-130	-		
Ethylbenzene	116		-		70-130	-		
p/m-Xylene	118		-		70-130	-		
Bromoform	133	Q	-		70-130	-		
Styrene	127		-		70-130	-		
1,1,2,2-Tetrachloroethane	113		-		70-130	-		
o-Xylene	119		-		70-130	-		
4-Ethyltoluene	123		-		70-130	-		
1,3,5-Trimethylbenzene	117		-		70-130	-		
1,2,4-Trimethylbenzene	109		-		70-130	-		
Benzyl chloride	125		-		70-130	-		
1,3-Dichlorobenzene	130		-		70-130	-		
1,4-Dichlorobenzene	130		-		70-130	-		
1,2-Dichlorobenzene	120		-		70-130	-		
1,2,4-Trichlorobenzene	106		-		70-130	-		
Hexachlorobutadiene	108		-		70-130	-		

Project Name: 107-35 MB

Project Number:

Serial_No:11282216:10
Lab Number: L2262899

Report Date: 11/28/22

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
L2262899-01	BEFORE GAC	2003	6.0L Can	11/08/22	405396	L2261234-04	Pass	-29.5	-1.5	-	-	-	-
L2262899-02	AFTER GAC	2785	6.0L Can	11/08/22	405396	L2261234-04	Pass	-29.6	0.0	-	-	-	-

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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 11/04/22 00:10
 Analyst: RAY

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



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

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



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

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

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	113		60-140
Bromochloromethane	123		60-140
chlorobenzene-d5	128		60-140



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 11/04/22 00:10
 Analyst: RAY

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



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

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2-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
Project Number: CANISTER QC BAT

Lab Number: L2261234
Report Date: 11/28/22

Air Canister Certification Results

Lab ID: L2261234-04
 Client ID: CAN 2067 SHELF 47
 Sample Location:

Date Collected: 11/01/22 18:00
 Date Received: 11/02/22
 Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	112		60-140
bromochloromethane	121		60-140
chlorobenzene-d5	125		60-140



Project Name: 107-35 MB

Project Number: Not Specified

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

NA Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2262899-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2262899-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

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: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

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: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

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.)

Project Name: 107-35 MB
Project Number: Not Specified

Lab Number: L2262899
Report Date: 11/28/22

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 it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpeneol

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-Terpeneol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,**

EPA 180.1, SM2130B, 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, **LCHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.**

EPA 522, EPA 537.1.

Non-Potable Water


EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

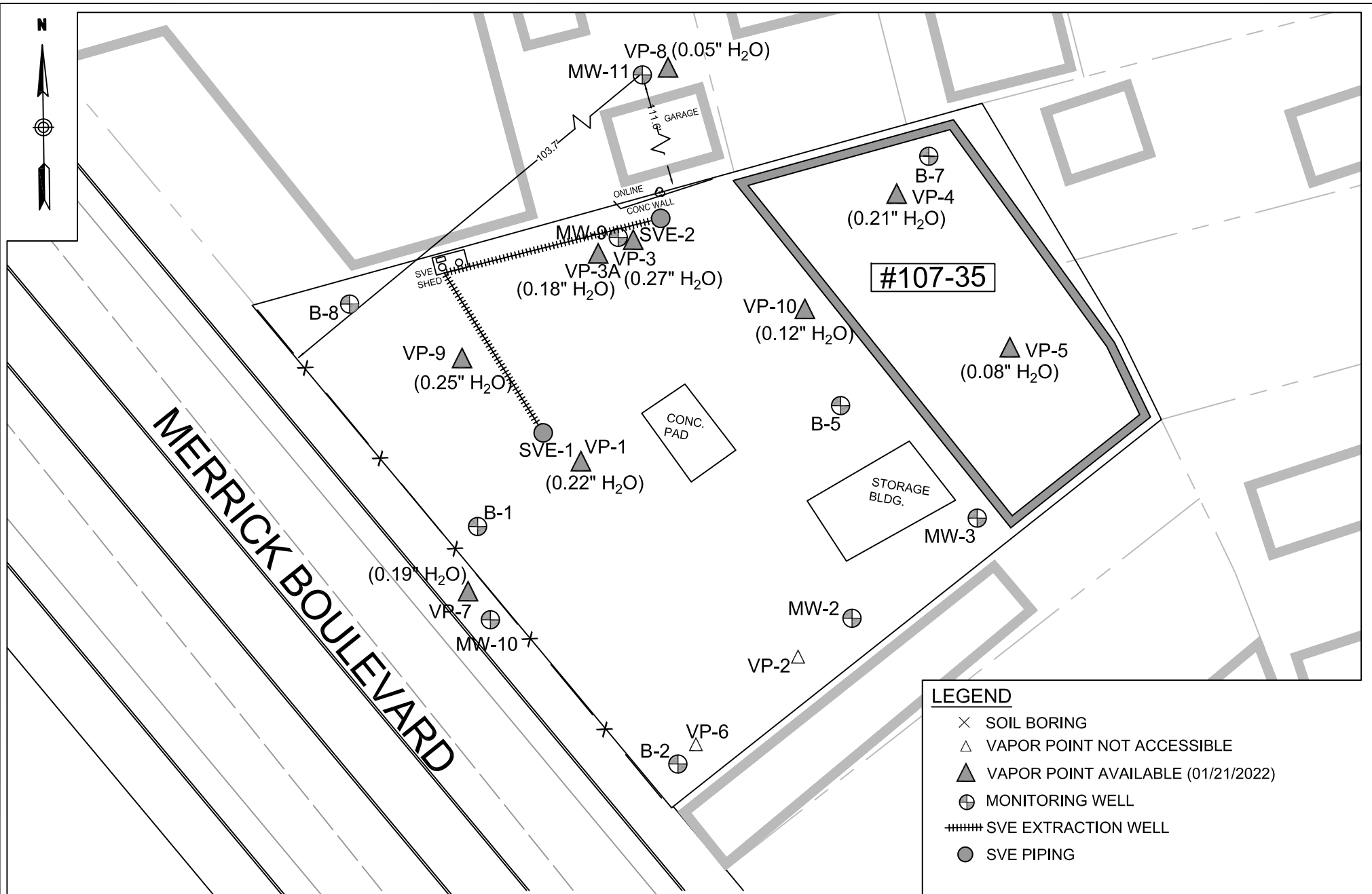
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS		PAGE OF																
 CHAIN OF CUSTODY		Project Information																
320 Forbes Blvd, Mansfield, MA 02048 TEL: 508-822-9300 FAX: 508-822-3268		Project Name: 107-35 MB																
Client Information Client: Tyll Engineering and Consulting, PC Address: 169 Commack Road, H173 Commack, NY 11725 Phone: 6316295373 Fax: Email: Karen@tyllengineering.com		Project Location: 107-35 Merrick Blvd, Jamaica Project #: Project Manager: Karen Tyll ALPHA Quote #: 20480																
<input type="checkbox"/> These samples have been Previously analyzed by Alpha		Turn-Around-Time																
Other Project Specific Requirements/Comments: <input type="checkbox"/> Project-Specific Target Compound List		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (only confirmed if pre-approved)																
		Date Due: _____ Time: _____																
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	FIXED GASES	Sulfides & Mercaptans by TO-15	Sample Specific Comments (i.e. PID)	
		End Date	Start Time	End Time	Initial Vac	Final Vac												
62899-01	BEFORE GAC	11/9/22	1045	1046	-30.47	-237	SV	KT	6L	2003	GRB0123	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
-02	AFTER GAC	11/9/22	1031	1031	-24.3	2.9	SV	KT	6L	2785	GRB0047	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>		
												<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
												<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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										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.	
							Relinquished By		Date/Time		Received By		Date/Time					
							Karen Tyll [Signature]		11/9/22 14:14 [Signature]		[Signature] 11/9/22 21:00							
							[Signature] 11-10-22		11-10-22 03:15 [Signature]		[Signature] 11/10/22 00:15							

APPENDIX B

Recent Pressure Checks



PREPARED BY:



Seacliff Environmental Geology PC
P.O. Box 2085
Miller Place, NY 11764

Office # (631)828-5994
Cell#(631)742-6948

PRESSURE MONITORING

107-35 Merrick Blvd, Queens
New York

DWN: -	SCALE: 1:30	DATE: 07-05-2021	PROJECT NO: -
CHKD: JMD	APPD: JMD	REV: -	NOTES: -
FIGURE NO:			1

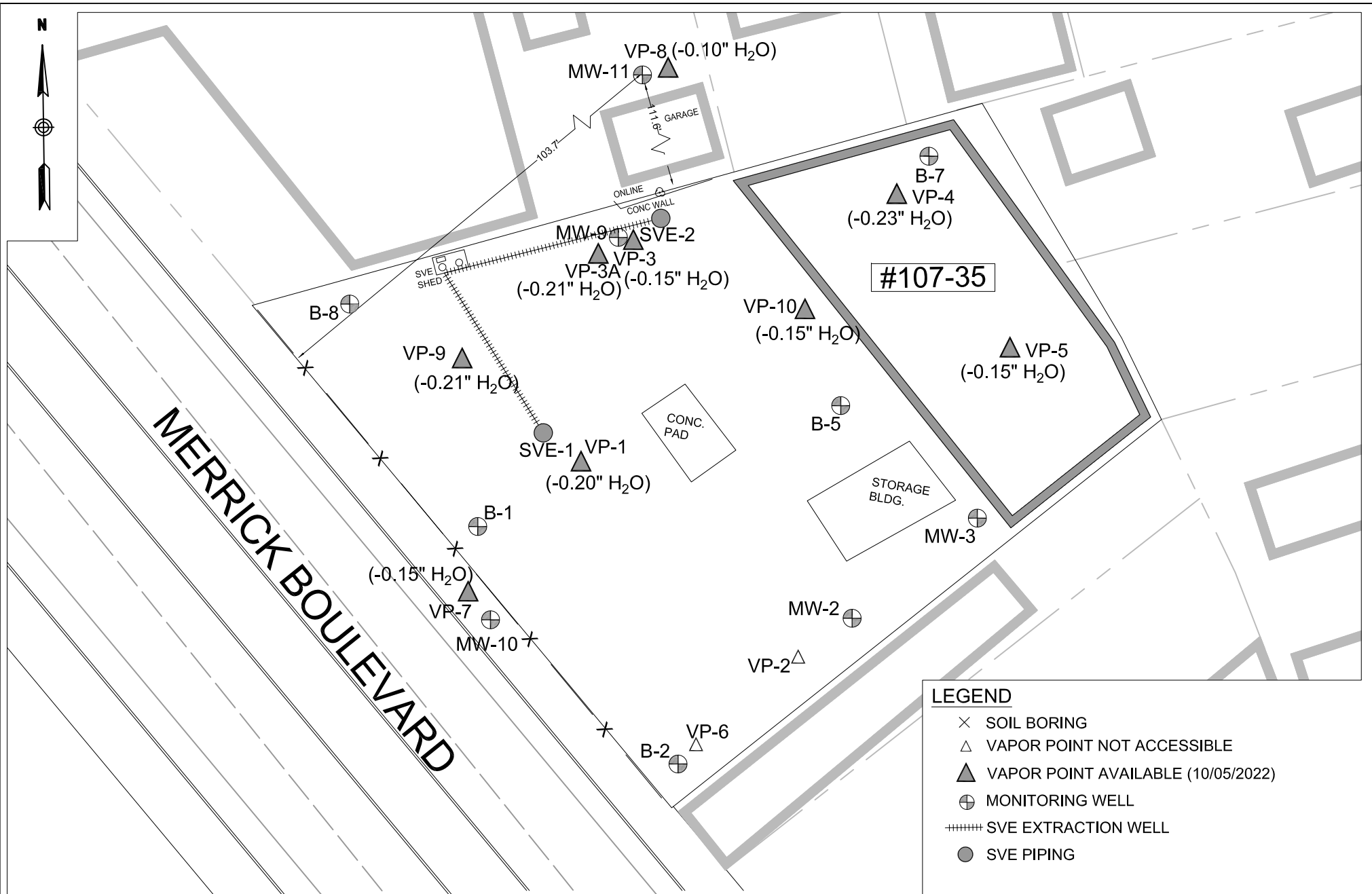
SSD SYSTEM MONITORING DATA LOG SHEET

PGES Project # _____ Date 1/21/2022
 Client Hill Engineering Instrument Dwyer Manometer
 Site Location 107-35 Merrick Blvd, Queens Spill No. _____
 Weather Condition Sunny, Cold Outdoor Air Temperature 21° F

SSDS Location	Vacuum ("W.C.)	Effluent PID (ppm)	Observation Notes
<u>VP-4</u>	<u>0.21</u>		
<u>VP-5</u>	<u>0.08</u>		
<u>VP-10</u>	<u>0.12</u>		
<u>VP-1</u>	<u>0.22</u>		
<u>VP-7</u>	<u>0.19</u>		
<u>VP-9</u>	<u>0.25</u>		
<u>VP-3</u>	<u>0.27</u>		
<u>VP-3A</u>	<u>0.18</u>		
<u>VP-8</u>	<u>0.05</u>		
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Notes
 "W.C... inch of water column
 ppm...part per million
 PID...photoionization detector

Reported By: Carlos Quinones



PREPARED BY:



Seacliff Environmental Geology PC
P.O. Box 2085
Miller Place, NY 11764

Office # (631)828-5994
Cell#(631)742-6948

PRESSURE MONITORING

107-35 Merrick Blvd, Queens
New York

DWN: -	SCALE: 1:30	DATE: 10-05-2022	PROJECT NO: -
CHKD: JMD	APPD: JMD	REV: -	NOTES: -
FIGURE NO:			1

SSD SYSTEM MONITORING DATA LOG SHEET

PGES Project # _____ Date 10/05/2022

Client Tyll Engineering Instrument Dwyer Manometer

Site Location 107-35 merrick blvd, queens ny Spill No. _____

Weather Condition sunny Outdoor Air Temperature 67

<u>SSDS Location</u>	<u>Vacuum ("W.C.)</u>	<u>Effluent PID (ppm)</u>	<u>Observation Notes</u>
<u>VP-4</u>	<u>0.23</u>	<u></u>	<u></u>
<u>VP-5</u>	<u>0.15</u>	<u></u>	<u></u>
<u>VP-10</u>	<u>0.15</u>	<u></u>	<u></u>
<u>VP-1</u>	<u>0.20</u>	<u></u>	<u></u>
<u>VP-7</u>	<u>0.15</u>	<u></u>	<u></u>
<u>VP-9</u>	<u>0.21</u>	<u></u>	<u></u>
<u>VP-3</u>	<u>0.15</u>	<u></u>	<u></u>
<u>VP-3A</u>	<u>0.21</u>	<u></u>	<u></u>
<u>VP-8</u>	<u>0.10</u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>
<u></u>	<u></u>	<u></u>	<u></u>

Notes

"W.C... inch of water column
 ppm...part per million
 PID...photoionization detector

Reported By: CARLOS QUINONEZ