

April 30, 2020

Megan Kuczka, DER Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203

Re: **Periodic Review Report – April 2020; DEC Site #C915312**
Pierce Arrow Business Center, 155-157 Chandler Street, Buffalo, New York

Dear Ms. Kuczka:

In accordance with the Site Management Plan (NYSDEC Site Number: C915312), Section 7.2 Periodic Review Report, and NYSDEC's March 20, 2020 letter to Mr. Rocco Termini regarding the preparation and submittal of a Site Management Periodic Review Report and IC/EC Certification, please find attached a Periodic Review Report that includes the appropriate certifications and the 2019-2020 Routine Progress Report.

If you have comments or questions regarding the contents of these documents, please contact me directly.

Very truly yours,
HAZARD EVALUATIONS, INC.



C. Mark Hanna, CHMM
President

Attachments

cc: R. Termini

e1842\ CY2019-2020\Pierce Arrow Business Center – BCP # C915312 – PRR 2019-20 – 043020 Final

Periodic Review Report

Pierce Arrow Business Center

155-157 Chandler Street
Buffalo, New York 14203

NYSDEC Site Number: C915312

Prepared by:

Hazard Evaluations, Inc.
3636 North Buffalo Road
Orchard Park, New York 14127
(716) 667-3130

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1.0 SITE OVERVIEW

1.1 Site Summary

The Pierce Arrow Business Center Property ("Site") is an approximately 2.37 acre property located at 155-157 Chandler Street in the City of Buffalo, Erie County, New York. The Site location and boundaries are provided in Figure 1, located in Appendix A. The Site consists of an approximate 65,000-square foot building, 22,000-square foot courtyard within the central area of the building and an approximate 0.39 acre parking lot area. The Site is zoned D-C Flex Commercial, which permits Residential, Retail and Service, and Light Industrial uses. The neighborhood surrounding the Site primarily includes light industrial, commercial, and residential properties.

1.2 Site Remedial History

The Site building was originally constructed in 1907 and utilized as a factory occupied by Linde Air Products until the early-1950s. Bell Aircraft Corp. occupied the Site in the early-to-mid 1950s, which was then purchased by Donald Rosen in 1958, who utilized the property for G & R Machinery (machine shop). The Site was purchased by Ontario Equipment Co. in 2005, and by R&M Leasing, LLC in February 2017.

Brownfield Cleanup Agreement (BCA Index No. C915312-02-17) was executed on April 24, 2017 for the Site, which identified the property as Site # C915312 with the New York State Department of Environmental Conservation (NYSDEC) under the Brownfield Cleanup Program (BCP). Hazard Evaluations Inc. (HEI), in association with Schenne & Associates (S&A), completed remedial investigation (RI) activities, as well as interim remedial measure (IRM) activities, in accordance with an RI/IRM Work Plan, which was approved by NYSDEC on April 20, 2017. The RI and IRM work was done concurrently, with additional investigation or IRM work completed, as needed. A series of IRM work tasks were performed at the Site in order to remediate the on-Site concerns, which included the following:

Courtyard Area:

- Asbestos containing materials (ACMs) were identified within the courtyard area which resulted in the need to remove the top two inches of soil. A composite characterization sample was collected for landfill disposal. Test results identified PCBs at a concentration of 53 parts per million (ppm), which prompted further IRM work within the courtyard area.
- ACMs soils, which were identified by AMD Environmental, the Owner's representative, were excavated and disposed off-Site as PCBs-containing soil. The soils were disposed at a Waste Management facility in Emelle, Alabama.
- After the courtyard was deemed as ACMs free, additional soil excavations were completed under the guidance of HEI. Soil containing over 50 ppm of PCBs was excavated from the courtyard area and disposed off-Site.
- Additional materials removal was completed from the courtyard area, which included the following:

- Brick was generated from pavers that were present within the courtyard. Concrete was generated from a former pad areas, as well as from foundations within the courtyard area. The brick and concrete materials were disposed off-Site at a Waste Management facility in Chaffee, New York.
- Further soil excavations were completed, generally to depths of 2 to 3 feet below original grade, into the native underlying clay soils. Soils that contained PCBs below 50 ppm, but over the Restricted Residential Use Soil Cleanup Objective (RRUSCO) standard of 1 ppm, were excavated and disposed at a Waste Management facility in Chaffee, New York.
- One 2,000-gallon gasoline underground storage tank (UST) was located within the courtyard area. The tank was uncovered and approximately 150 gallons of a gasoline/water mixture were pumped from the tank. Upon removal, the steel tank was cleaned and crushed for recycling at the Niagara Metals LLC scrap yard. A limited amount of impacted soil was present on the bottom and northern sidewall. The impacted soil was excavated and disposed off-Site at a Waste Management facility in Chaffee, New York.
- Three drainage structures or “pits” were also identified within the courtyard area. Each drainage structure was excavated and any associated impacted soil was removed and disposed off-Site at a Waste Management facility in Chaffee, New York.
- Historical records identified the potential for a 10,000-gallon above ground storage tank (AST) vault to be present near the former boiler room. During the removal of a concrete pad, the vault area was discovered under the concrete pad. Once the concrete was removed, the vault was found to be filled with brick and sand.
 - A sample of the sand material was analyzed for PCBs, which indicated a PCBs-concentration over 50 ppm. The sand and brick materials were subsequently removed from the vault and the materials were disposed off-Site at a Waste Management facility in Emelle, Alabama.
 - A concrete footer was located within the vault, measuring approximately 18-inches wide and extending over four feet. The vault had a concrete floor/base that was approximately six inches thick. Due to the vault’s proximity to the chimney, the vault footer was required to remain in place, as removal would risk compromising the structural stability of the chimney foundation.
- Sidewall and bottom samples were collected from the UST excavation area, former vault area, and the drainage structure or “pit” areas. Additionally, confirmatory soil samples were selected from the bottom of the excavation which occurred in the courtyard area. Soil sample results did not identify impacts above the RRUSCO.

Parking Lot Area:

- Due to the presence of metals and SVOCs within the fill material, the three to four feet of fill material within the parking lot area was scheduled for removal during the IRM work. Initial waste characterization samples identified portions of the parking lot at concentrations deemed as hazardous due to characteristic of lead toxicity. Additional delineation work was completed to evaluate areas with lead impacts.

- The lead soils were stabilized on-Site using the MAECTITE® stabilization process, a proprietary process completed by Severson Environmental. The stabilization process bound the lead, preventing further leaching. As such, the soil was able to be disposed as non-hazardous soil.
- The parking lot area was then excavated to a depth of three to four feet below grade to the underlying native clay soils. Approximately 2,200 tons of soil were excavated and disposed off-Site at a Waste Management facility in Chaffee, New York.
- Confirmatory soil samples were collected from the sidewall and bottom of the excavation within the parking lot area. Analytical test results did not identify compounds above RRUSCO.

Under Building Area:

- The Site was on a fast track for Site development. As such, HEI worked with the Site Owner to investigate and evaluate specific areas under the building proposed for future water and/or sewer lines. Additionally, sub-slab soil samples were collected and if impacts were identified, the soil was excavated. Concrete samples were also collected to determine if PCBs were present.
- During RI work, specific areas of impact were identified. For each area, the soil surrounding the area was excavated and sidewall and bottom samples were collected, which did not exhibit further exceedances. Soil from under the building was excavated and disposed off-Site at a Waste Management facility in Chaffee, New York.
- PCBs were identified within the concrete floor at various locations, specifically in the southwestern corner of the structure. The concrete was subsequently removed and disposed off-Site at a Waste Management facility in Chaffee, New York. Confirmatory samples were collected from the adjoining concrete floor, which did not identify any PCBs concentrations above RRUSCO.

A Certificate of Completion was issued for the Site on December 27, 2017.

1.3 Institutional and Engineering Controls

Since remaining contamination exists at the Site, Institutional Controls (ICs) and Engineering Controls (ECs) were required to protect human health and the environment, which include the following:

Institutional Controls:

- The property may be used for restricted residential, commercial, and/or industrial uses;
- All ECs must be operated and maintained as specified in the SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Erie County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

- Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in the SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP;
- Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries noted on Figure 1, and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the Site are prohibited.

Engineering Controls:

- Four (4) Sub-Slab Depressurization (SSD) systems were installed in the southwestern portion of the Site, in proximity to SS-3/IA-3 and SS-4/IA-4 sample locations. The system objectives and performance goals include the following elements:
 - Reduce and maintain indoor air concentrations to levels below the NYSDOH Soil Vapor Guidance Document Matrix A;
 - Maintain a minimum of 0.25 inches of water column in the four SSD systems, measured in the exhaust piping manometer located 5-feet above the finished floor, to prevent vapors from entering the indoor air of the building while also releasing the trapped vapor beneath the slab; and
 - Demonstrate system effectiveness while maintaining continuous operation of the SSDS, with no significant non-operating time.

The SSD systems were installed in November 2017, with a system start date of November 8, 2017. SSD system locations within the building are identified in Figure 2, provided in Appendix A. The four (4) mitigation fans are individually monitored with a dedicated (air-flow) alarm system, which is mounted to the system pipe to alert users of a low or no flow condition. Each fan also includes an interior mounted manometer installed at eye level to provide a visual indication to the tenants that the system is operating. In the event that a fan loses power or vacuum an audible alarm with a blinking LED light will notify the tenant of the no air flow condition. The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until the NYSDEC determines that continued operation is technically impracticable or not feasible.

1.4 Monitoring and Sampling Requirements

The Monitoring and Sampling Plan described the measures for evaluating the overall performance and effectiveness of the remedy. The Monitoring Plan includes the following:

- Site-wide inspection performed a minimum of once per year, as noted in SMP.
- Evaluate the potential for soil vapor intrusion for any buildings developed on the Site, including provisions for mitigation of any impacts identified.
- Monitoring of the four (4) SSD systems including the following:
 - Annual visual inspection of the complete system conducted during each monitoring event. SSD system components are to be monitored including, but not limited to, vacuum blower and general system piping.
 - Annual indoor air sampling to assess the effectiveness of the four (4) SSD systems. The SSD system locations are shown in Figure 2 (Appendix A).
- Semi-annual sampling and analysis of groundwater at one existing monitoring well (MW-3) for VOCs, using USEPA Method 8260B TCL. The monitoring well location is identified in Figure 3.

2.0 SITE INSPECTION AND MONITORING RESULTS

2.1 Site Inspections

On June 21, 2019, HEI completed a Site-wide inspection to assure the SSD systems were operating properly as designed and collected additional indoor air samples at location IA-5 as a follow-up to previously detected concentrations of trichloroethene (TCE) in February 2019. Copies of the Site-wide inspections are included in Appendix B. Additionally, semi-annual sampling and analysis of groundwater was performed at MW-3, as required in the SMP, which is described in Section 2.3 below. The following was noted during the SSD system inspection:

- The four SSD systems appeared to be functioning properly at the time of the inspection, as positive pressure differential readings were recorded as follows:
 - SSDS-1 operated at 0.7 inches of water;
 - SSDS-2 operated at one-inch of water;
 - SSDS-3 operated at 1.5 inches of water; and
 - SSDS-4 operated at one-inch of water.
- HEI collected two air samples at the original IA-5 and IA-5 (0219) sample locations and submitted the air canisters to Alpha Analytical for VOCs analysis via USEPA method TO-15. Air testing results are described in Section 2.2 below.
- A Site-wide inspection was scheduled for September 2019 and a Site-wide indoor air monitoring event for IA-1 through IA-6 sample locations was scheduled for December 2019.

HEI completed a follow-up Site-wide inspection on September 13, 2019, to assure the SSD systems were operating properly as designed. The following was noted during the inspection:

- The four SSD systems appeared to be functioning properly at the time of the inspection, as positive pressure differential readings were recorded as follows:
 - SSDS-1 operated at one-inch of water;
 - SSDS-2 operated at one-inch of water;
 - SSDS-3 operated at 1.5 inches of water; and
 - SSDS-4 operated at one-inch of water.
- It was noted that the four SSD systems Engineering Controls (ECs) continue to be protective of human health and the environment and were in compliance with the requirements of the SMP and the Environmental Easement.

Based on the results of this September inspection, a Site-wide inspection and Site-wide indoor air monitoring event for IA-1 through IA-6 sample locations was scheduled for December 2019. HEI completed a Site-wide inspection and collected annual indoor air samples at locations IA-1 through IA-6 on December 12, 2019 to assure the SSD systems were operating properly as designed. Additionally, semi-annual sampling and analysis of groundwater was performed at MW-3 on December 10, 2019, as required in the SMP, and is described in Section 2.3 below. The following was noted during the SSD system inspection:

- The four SSD systems appeared to be functioning properly at the time of the inspection, as positive pressure differential readings were recorded as follows:
 - SSDS-1 operated at one-inch of water;
 - SSDS-2 operated at one-inch of water;
 - SSDS-3 operated at 1.5 inches of water; and
 - SSDS-4 operated at one-inch of water.
- HEI collected air sample canisters at six indoor locations and one outdoor location and submitted the air canisters to Alpha Analytical for VOCs analysis via USEPA method TO-15. Air testing results are described in Section 2.2 below.

On February 19 and 20, 2020, HEI completed a SSD system inspection and collected additional indoor air samples at location IA-6 as a follow-up to previously detected concentrations of TCE in December 2019. The following was noted during the inspection:

- The four SSD systems appeared to be functioning properly at the time of the inspection, as positive pressure differential readings were recorded as follows:
 - SSDS-1 operated at one-inch of water;
 - SSDS-2 operated at one-inch of water;
 - SSDS-3 operated at 1.5 inches of water; and
 - SSDS-4 operated at one-inch of water.

- HEI collected two air samples at the original IA-6 (121219) sample location, due to previous detections of TCE and submitted the air canisters to Alpha Analytical for VOCs analysis via USEPA method TO-15. Air testing results are described in Section 2.2 below.

A completed Institutional and Engineering Controls Certification Form is included in Appendix C. One occupant, EnrG, Inc., located in the western portion of the Site building, was identified to hold a NYSDEC Air Facility Registration Certificate, identified as registration ID: 9-1402-01142/00001 and Facility DEC ID: 1402-01142. The registration's effective date was June 28, 2018 with an expiration date of June 27, 2028. A copy of the registration certificate is included in Appendix D.

2.2 Indoor Air Sampling Results

Annual indoor air sampling is required to assess the effectiveness of the four (4) SSD systems. The SSD system locations, along with indoor air sampling locations, are included on Figure 2 (Appendix A). Indoor air and outdoor air samples were collected on June 21, 2019, December 12, 2019, and February 20, 2020 at locations as shown on Figure 2. The samples were collected over an 8-hour period and were submitted for VOCs analysis via USEPA method TO-15.

Due to the detection of TCE at IA-5 in February 2019, HEI collected additional indoor air samples at location IA-5 on June 21, 2019, identified as IA-5 (0619). Indoor air analytical results are summarized on Tables 1 through 4 located in Appendix E and the laboratory reports are included in Appendix F. The following results were noted:

- The June 2019 indoor air testing results identified that the concentration of TCE was reduced from 4.58 ug/m³ (February 2019) to 0.903 ug/m³, which is below the NYSDOH guideline¹ value of 2 ug/m³.
- The June 2019 indoor air testing results support the Site's operational conditions that the four SSD systems were performing and functioning as designed, as TCE levels were reduced below NYSDOH guideline value. However, it was noted that five additional VOCs were detected above their respective NYSDOH commercial indoor air values. HEI suspects that at least some of these air contaminants may have been related to the operations of the affected area of this facility based on data submitted in ENrG's NYSDEC air permit application. HEI concluded that since these compounds were not previously detected in the prior sampling events, a determination will be made after the December 2019 sampling event if upgrades to the SSD systems are necessary.

On December 12, 2019, HEI collected annual indoor air samples at locations IA-1 through IA-6 to assure the SSD systems were operating properly as designed. Indoor air analytical results are summarized on Tables 1 through 4 located in Appendix E and the laboratory reports are included in Appendix F. As shown on Table 2, up to 21 VOCs were detected within the six indoor air samples and one outdoor air sample. Most compounds

¹ "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006", prepared by New York State Department of Health

were detected at concentrations below their respective NYSDOH commercial indoor air background levels. However, the following results were noted:

- Ethanol and ethyl acetate were each detected in five of the six indoor air samples collected from locations IA-1 (121219) through IA-4 (121219), exhibiting concentrations above their respective commercial indoor air background levels.
- Carbon tetrachloride was detected in all six indoor air samples at relatively constant concentrations, with the exception of location IA-6 (121219), where the level detected was above its respective commercial indoor air background level.
- Tetrachloroethene (PCE) was detected in five of the six indoor air samples, ranging in concentration from 0.271 ug/m³ to 0.651 ug/m³, all which are well below its respective commercial indoor air background level and NYSDOH guideline value of 30 ug/m³.
- TCE was detected in four of the six indoor air samples collected. The concentrations of samples identified as IA-1 (121219), IA-2 (121219), and IA-5 (121219) ranged from 0.688 ug/m³ to 0.833 ug/m³, all of which are below their respective commercial background level and NYSDOH guideline value of 2 ug/m³. However, TCE was detected at a concentration of 12.0 ug/m³ in the indoor air sample identified as IA-6 (121219). This concentration exceeds the NYSDOH guideline value of 2 ug/m³.

Due to the elevated detection of TCE at IA-6 in December 2019, HEI collected additional indoor air samples at location IA-6 on February 20, 2020, identified as IA-6 (022020). Indoor air analytical results are summarized on Tables 1 through 4 located in Appendix E and the laboratory reports are included in Appendix F. The following results were noted:

- The February 2020 indoor air testing results identified that concentration of TCE was reduced from 12.0 ug/m³ (December 2019) to 1.34 ug/m³, which is below the NYSDOH guideline of 2 ug/m³. The analytical results support the Site's operational conditions that the four SSDS are performing and functioning as designed.

2.3 Ground Water Monitoring and Sampling

Semi-Annual sampling and analysis of groundwater at the one existing monitoring well, identified as MW-3, was performed as required by the SMP. Groundwater samples were collected on June 21, 2019 and December 10, 2019 for VOCs analysis via USEPA Method 8260B TCL (total compound list). The monitoring well is identified in Figure 3.

Prior to sample collection, the static groundwater level and total well depth were measured. The monitoring well depth was measured at 18.05 feet below ground surface and groundwater levels were recorded at 1.55 feet below ground surface and 0.95 feet below ground surface for June and December, respectively. During well purging activities, field measurements of pH, specific conductivity, temperature, and turbidity were recorded. Once the parameters stabilized, HEI collected the groundwater using low flow sampling techniques.

Groundwater analytical test results are summarized on Tables 5 through 7, provided in Appendix E. VOCs were not detected at concentrations exceeding their respective Class GA criteria for both semi-annual sampling events. The laboratory analytical reports are included in Appendix F.

2.4 Data Usability Summary

The analytical data from the indoor air and groundwater samples collected from December 2018 through February 2020 were submitted for independent review, as required by NYSDEC. Vali-Data of WNY, LLC, located in West Falls, New York, completed the data usability summary reports (DUSRs). The DUSRs are provided in Appendix G and were prepared using guidance from the USEPA Region 2 Validation Standard Operating Procedures, USEPA National Functional Guidelines for Data Review, and professional judgement. Indoor air and groundwater samples were collected as described above and were evaluated as described below:

Indoor Air Samples – Alpha Lab Samples L1852191, L1905849, L1927357, L1959915, L2007739:

The results for 15 indoor air samples, five blind duplicates, and two outdoor air samples were processed for VOCs. In general, the samples were noted to be either usable or with minor qualifications. However, the following items were noted:

- VOCs data are acceptable for use except, where qualified in MS/MSD/Duplicate, compound continuation, and continuing calibration;
- All results were recorded to the reporting limits; and
- Samples IA-5, IA-5 (0619), and IA-5 (0619) Duplicate were diluted due to high target analyte concentrations.

Groundwater Samples – Alpha Lab Samples L1901687, L1927225, L1959098:

The results for three groundwater samples and three blind duplicate were processed for VOCs. In general, the samples were noted to be either usable or with minor qualifications. However, the following items were noted:

- VOCs data are acceptable for use except where qualified in MS/MSD, compound quantitation, initial calibration, and continuing calibration.

2.5 Electronic Data Deliverables

As per NYSDEC, all aforementioned data were submitted electronically to the NYSDEC EQulS system. Confirmation emails of successful data submission are provided in Appendix H.

3.0 CORRECTIVE ACTION WORK PLAN

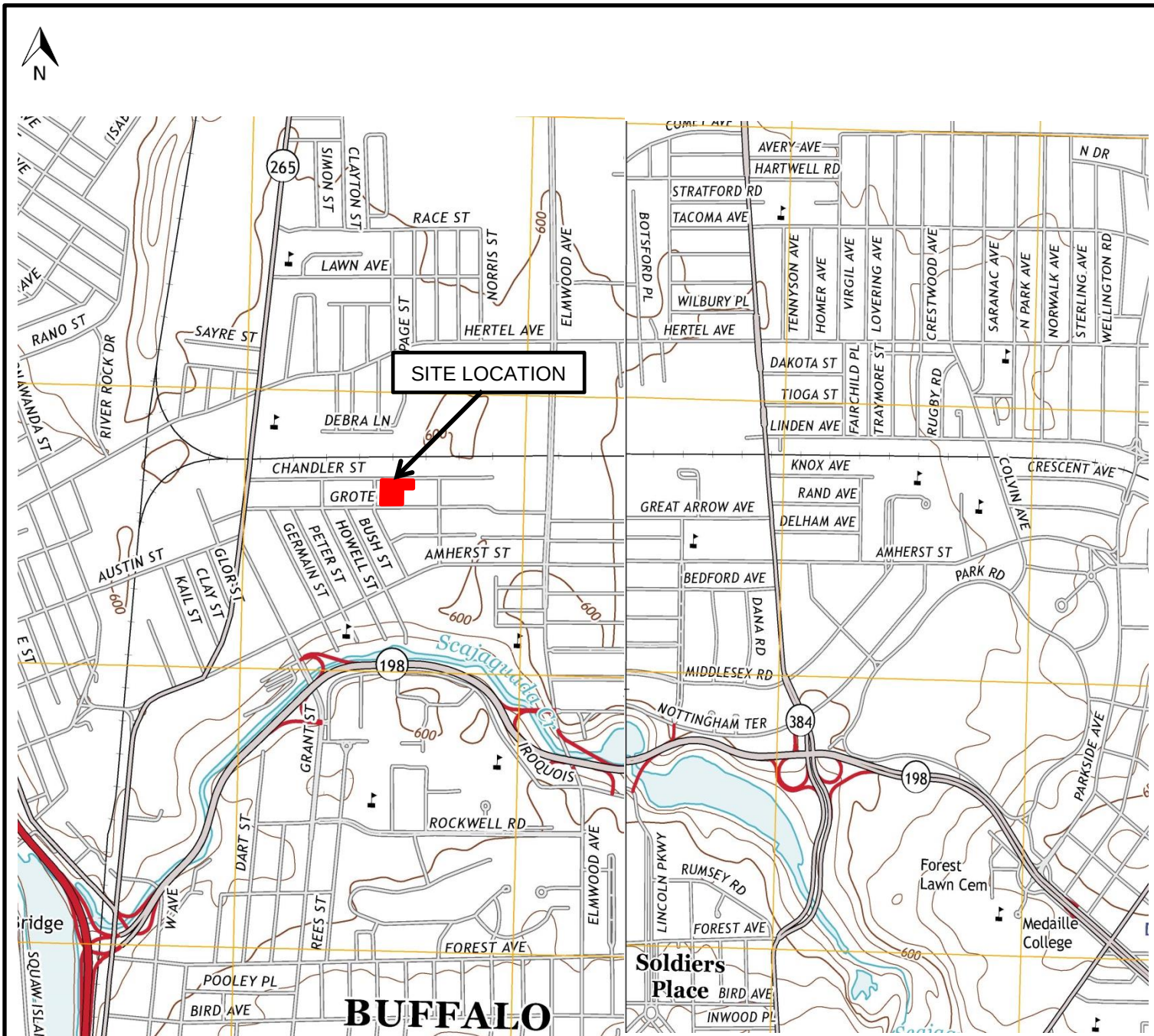
The SSD systems continue to function properly. These SSD systems will be tested if, in the course of the system lifetime, significant changes are made to the system, and the system must be restarted. The SSD systems will be inspected and maintained at least annually. Additional inspections and/or sampling may occur when a suspected failure of the SSD system has been reported or an emergency occurs. The Operation & Maintenance Plan (O&M Plan) describes the measures necessary to operate, monitor and maintain the existing SSD systems and includes procedures for routine operation, shutdown, general maintenance and monitoring requirements, and record keeping. The O&M Plan is fully in place, with no deficiencies in compliance. No changes to the plan are recommended at this time. Annual groundwater monitoring well sampling will be completed by December 2020.

4.0 OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

All components of the Site Management Plan have been met during the reporting period, including Engineering Controls, Institutional Controls, the Monitoring Plan, and the Operation & Maintenance Plan. Based on activities conducted at the Site during the reporting period, the Site remedy continues to be protective of public health and the environment. The requirements for Site closure have not yet been met, and no changes to the frequency of PRR submittals are recommended at this time.

APPENDIX A

FIGURES



THIS DRAWING IS FOR ILLUSTRATIVE AND INFORMATIONAL PURPOSES ONLY
AND WAS ADAPTED FROM USGS, BUFFALO NE & NW, NEW YORK 2013 QUADRANGLE

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

SITE LOCATION MAP

155 & 157 CHANDLER STREET
BUFFALO, NEW YORK

R & M LEASING LLC
BUFFALO, NEW YORK

DRAWN BY: MB

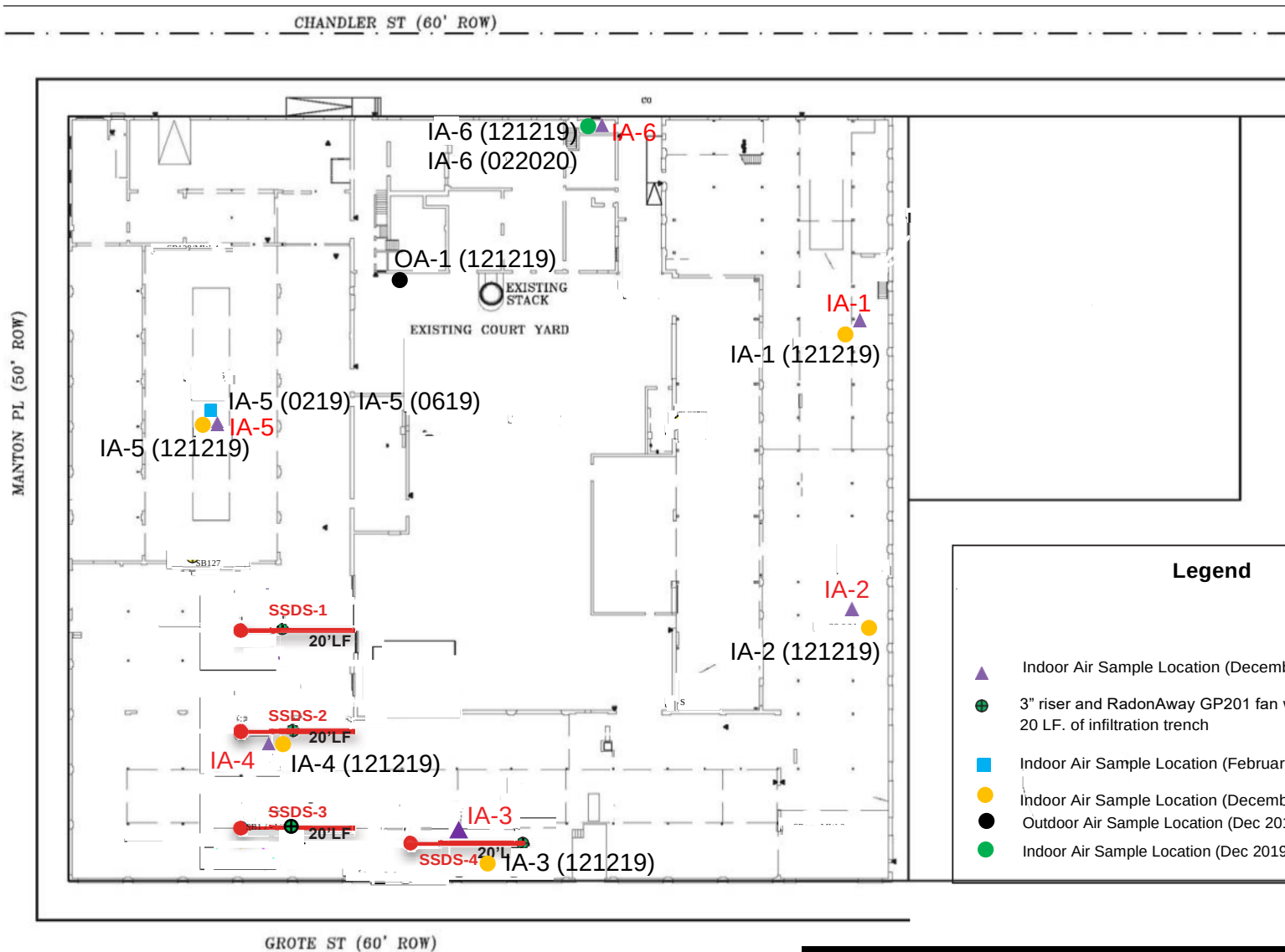
SCALE: NOT TO SCALE

PROJECT: e1842

CHECKED BY: CMH

DATE: 04/2020

FIGURE NO: 1



Legend

- Indoor Air Sample Location (December 2018)
- 3" riser and RadonAway GP201 fan with 20 LF. of infiltration trench
- Indoor Air Sample Location (February and June 2019)
- Indoor Air Sample Location (December 2019)
- Outdoor Air Sample Location (Dec 2018 and 2019)
- Indoor Air Sample Location (Dec 2019 and Feb 2020)

SUB-SLAB MIGRATION SYSTEM

N.T.S.

AS-BUILT

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

SUB-SLAB MITIGATION DESIGN & INDOOR AIR SAMPLING LOCATIONS

155 & 157 CHANDLER STREET
BUFFALO, NEW YORK

R & M LEASING LLC
KENMORE, NEW YORK

DRAWN BY: MB

SCALE: NOT TO SCALE

PROJECT: e1842

CHECKED BY: CMH

DATE: 04/2020

FIGURE NO: 2

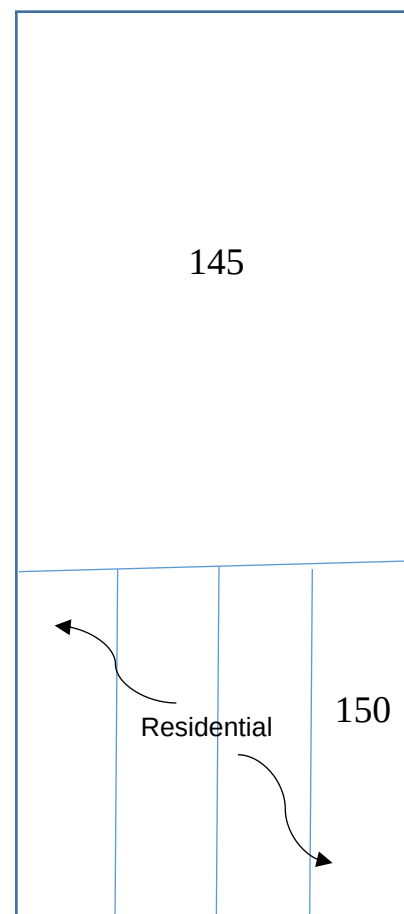


140

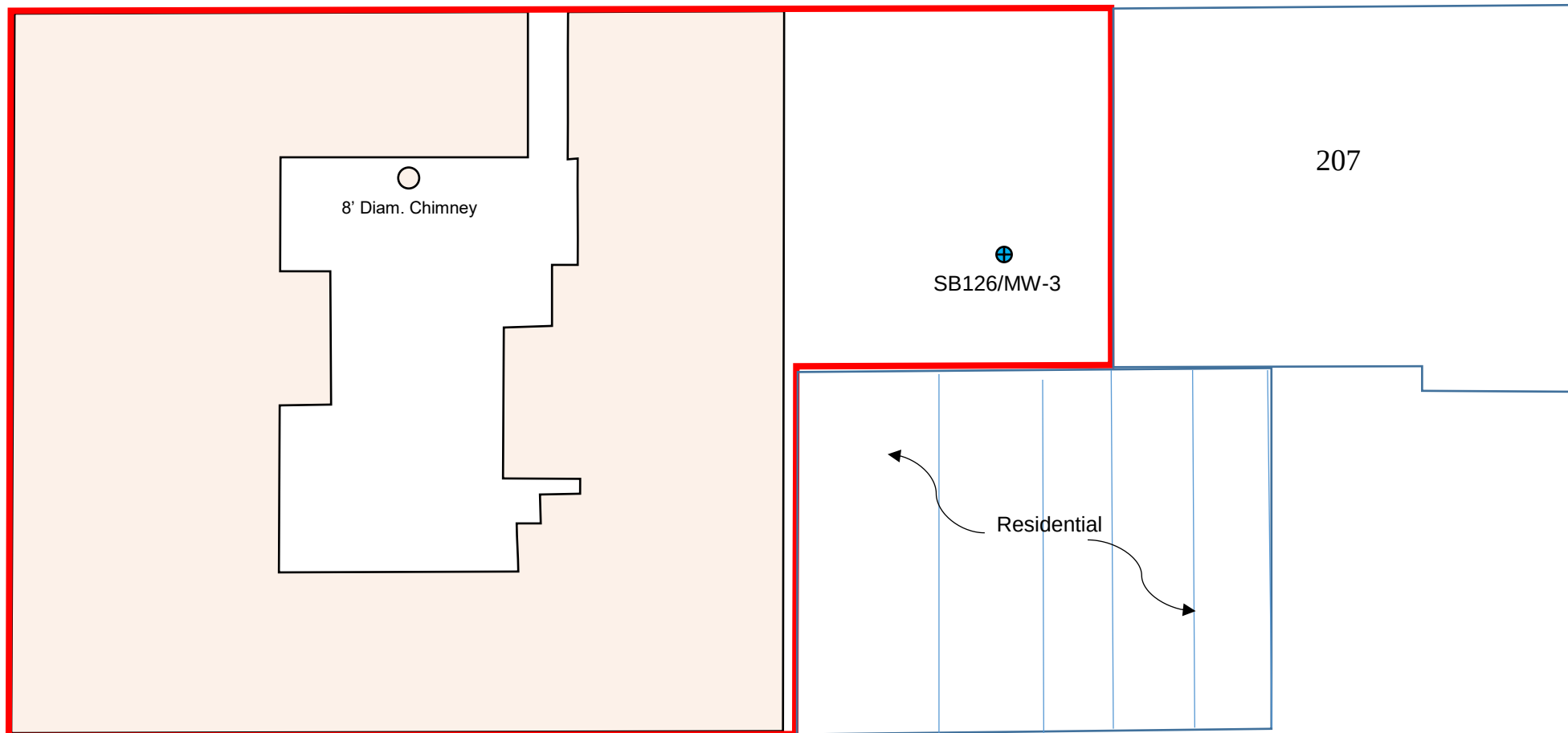
166

260

Chandler



Manton Place



8' Diam. Chimney

SB126/MW-3

Residential

Grote Street

Legend

⊕ = Monitoring well location

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

MONITORING WELL LOCATION MAP

155 and 157 CHANDLER STREET
BUFFALO, NEW YORK

R & M LEASING LLC
BUFFALO, NEW YORK

DRAWN BY: MB

SCALE: 1" = 60'

PROJECT: e1842

CHECKED BY: CMH

DATE: 04/2020

FIGURE NO: 3

APPENDIX B

SITE-WIDE INSPECTIONS AND FIELD NOTES

Site-Wide Inspection Form

Site: 155 Chandler Street Buffalo, NY

Date/Time: 6/21/2019 7:30am

Inspector: Eric Betzold *Eric J Betzold*

Weather: 70°F Sunny

General site conditions at the time of the inspection: The site appeared to be in overall good condition.

Are site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection? Yes.

Do the implemented institutional controls continue to be protective of human health and the environment? Yes.

Is the site currently in compliance with requirements of the SMP and the Environmental Easement? Yes.

Are site records complete and up-to-date? Yes.

Are the implemented Engineering Controls (SSDS) operating in compliance with the requirements of the SMP? Yes.

SSDS Pressure Differential Readings:

SSDS-1: 0.7" of H2O

SSDS-2: 1" of H2O

SSDS-3: 1.5" of H2O

SSDS-4: 1" of H2O

Deficiencies Observed / Corrective Actions Required: No.

Notes: Following the inspection of the four SSDS, HEI set up two air samplers at the original IA-5 and IA-5 (0219) sample locations, due to previous detections of Trichloroethene (TCE). HEI returned on-site at 3:40pm to pick up the two canisters. HEI submitted the canisters to Alpha Analytical for TO-15 air analysis.

Implemented Institutional Controls:

1. The property may only be used for restricted residential, commercial, and/or industrial use;
2. The use of groundwater is prohibited;
3. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP;
4. All activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
5. Access to the site must be provided to agents, employees, or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement; and
6. Vegetable gardens and farming are prohibited at the property;

Implemented Engineering Controls

1. Sub-Slab Depressurization System

Site-Wide Inspection Form

Site: 155 Chandler Street Buffalo, NY

Date/Time: 9/13/2019 9:00am

Inspector: Eric Betzold *Eric J Betzold*

Weather: 73°F Cloudy

General site conditions at the time of the inspection: The site appeared to be in overall good condition.

Are site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection? Yes.

Do the implemented institutional controls continue to be protective of human health and the environment? Yes.

Is the site currently in compliance with requirements of the SMP and the Environmental Easement? Yes.

Are site records complete and up-to-date? Yes.

Are the implemented Engineering Controls (SSDS) operating in compliance with the requirements of the SMP? Yes.

SSDS Pressure Differential Readings:

SSDS-1: 1" of H2O

SSDS-2: 1" of H2O

SSDS-3: 1.5" of H2O

SSDS-4: 1" of H2O

Deficiencies Observed / Corrective Actions Required: No.

Notes: None.

Implemented Institutional Controls:

1. The property may only be used for restricted residential, commercial, and/or industrial use;
2. The use of groundwater is prohibited;
3. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP;
4. All activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
5. Access to the site must be provided to agents, employees, or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement; and
6. Vegetable gardens and farming are prohibited at the property;

Implemented Engineering Controls

1. Sub-Slab Depressurization System

Site-Wide Inspection Form

Site: 155 Chandler Street Buffalo, NY

Date/Time: 12/12/2019 8:15am

Inspector: Eric Betzold *Eric J Betzold*

Weather: 15°F Mostly Sunny

General site conditions at the time of the inspection: The site appeared to be in overall good condition.

Are site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection? Yes.

Do the implemented institutional controls continue to be protective of human health and the environment? Yes.

Is the site currently in compliance with requirements of the SMP and the Environmental Easement? Yes.

Are site records complete and up-to-date? Yes.

Are the implemented Engineering Controls (SSDS) operating in compliance with the requirements of the SMP? Yes.

SSDS Pressure Differential Readings:

SSDS-1: 1" of H2O

SSDS-2: 1" of H2O

SSDS-3: 1.5" of H2O

SSDS-4: 1" of H2O

Deficiencies Observed / Corrective Actions Required: No.

Notes: Following the inspection of the four SSDS, HEI set up indoor air samplers at the six (6) indoor locations and one outdoor location for an 8 hour collection period. HEI returned on-site at 4:30pm to pick up the canisters. HEI submitted the canisters to Alpha Analytical for TO-15 air analysis. HEI left the site at 5:45pm.

Implemented Institutional Controls:

1. The property may only be used for restricted residential, commercial, and/or industrial use;
2. The use of groundwater is prohibited;
3. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP;
4. All activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
5. Access to the site must be provided to agents, employees, or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement; and
6. Vegetable gardens and farming are prohibited at the property;

Implemented Engineering Controls

1. Sub-Slab Depressurization System

Site-Wide Inspection Form

Site: 155 Chandler Street Buffalo, NY

Date/Time: 2/19/2020 2:30pm

Inspector: Eric Betzold *Eric J Betzold*

Weather: 30°F Mostly Cloudy

General site conditions at the time of the inspection: The site appeared to be in overall good condition.

Are site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection? Yes.

Do the implemented institutional controls continue to be protective of human health and the environment? Yes.

Is the site currently in compliance with requirements of the SMP and the Environmental Easement? Yes.

Are site records complete and up-to-date? Yes.

Are the implemented Engineering Controls (SSDS) operating in compliance with the requirements of the SMP? Yes.

SSDS Pressure Differential Readings:

SSDS-1: 1" of H2O

SSDS-2: 1" of H2O

SSDS-3: 1.5" of H2O

SSDS-4: 1" of H2O

Deficiencies Observed / Corrective Actions Required: No.

Notes: On February 20, 2020 HEI re-visited the site at 7:50am set up two air samplers at the original IA-6 (121219) sample locations, due to previous detections of Trichloroethene (TCE). HEI returned on-site at 3:50 pm to pick up the two canisters. HEI submitted the canisters to Alpha Analytical for TO-15 air analysis.

Implemented Institutional Controls:

1. The property may only be used for restricted residential, commercial, and/or industrial use;
2. The use of groundwater is prohibited;
3. Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP;
4. All activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
5. Access to the site must be provided to agents, employees, or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement; and
6. Vegetable gardens and farming are prohibited at the property;

Implemented Engineering Controls

1. Sub-Slab Depressurization System

~~HAZARD~~
EVALUATIONS

AIR/VAPOR SAMPLING FIELD DATA SHEET

Client: R & M Leasing Project No.: e1601

Site Name & Address: 155 chandler st. Buffalo, NY

Person(s) Performing Sampling: Eric Betzold

Sample Identification: IA-S (0619)

Sample Type: ☒ Indoor Air (ambient) ☐ Outdoor Air ☐ Soil Vapor ☐ Sub-slab Vapor

Date of Collection: 6/21/19 Setup Time: 7:40am Stop Time: 3:40pm

Sample Depth: —

Sample Height: 4'

Sampling Method(s) & Device(s): 2.7 L Summa canister & Regulator

Purge Volume: —

Sample Volume: 2.7 L

Sampling Canister Type & Size (if applicable): 2.7 L Summa

Canister # 195 Regulator # 0159

Vacuum Pressure of Canister Prior to Sampling: -29.15"

Vacuum Pressure of Canister After Sampling: -6.52"

Temperature in Sampling Zone: 70°F

Apparent Moisture Content of Sampling Zone: low

Soil Type in Sampling Zone: —

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☒ Yes ☐ No. If no, provide reason(s) why? —

Laboratory Name: Alpha Analytical

Analysis: TO-15

Comments:

Sampler's Signature Eric Betzold

Date: 6/21/19

HAZARD
EVALUATIONS

AIR/VAPOR SAMPLING FIELD DATA SHEET

Client: R & M Leasing Project No.: e1601

Site Name & Address: 15 Schandler St. Buffalo, NY

Person(s) Performing Sampling: Eric Betzold

Sample Identification: IA-5(0619) Duplicate

Sample Type: ☒ Indoor Air (ambient) ☐ Outdoor Air ☐ Soil Vapor ☐ Sub-slab Vapor

Date of Collection: 6/21/19 Setup Time: 7:40am Stop Time: 3:40pm

Sample Depth: —

Sample Height: 4'

Sampling Method(s) & Device(s): 2.7 L Summa canister & Regulator

Purge Volume: —

Sample Volume: 2.7 L

Sampling Canister Type & Size (if applicable): 2.7 L Summa

Canister # 510 Regulator # 0905

Vacuum Pressure of Canister Prior to Sampling: -28.90"

Vacuum Pressure of Canister After Sampling: -12.58"

Temperature in Sampling Zone: 70°F

Apparent Moisture Content of Sampling Zone: low

Soil Type in Sampling Zone: —

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☒ Yes ☐ No. If no, provide reason(s) why? —

Laboratory Name: Alpha Analytical

Analysis: TD-15

Comments:

Sampler's Signature Eric Betzold Date: 6/21/19

HAZARD
EVALUATIONS

Well Data Sheet

Date: 6/21/19

Job #: C1601

Well ID: MW-3

Crew: Eric Betzold

Well Depth (TOR): 17.6'

Well Depth (GS): 18.05'

Initial Water Level (TOR): 1.1'

Initial Water Level (GS): 1.55'

Volume Calculation: $16.5 \times .163 = 2.69 \times 3 = 8 \text{ gal}$

DTB-DTW*0.163=1-well vol

Purge Record

Time	Volume	pH	Cond.	Temp. °C	Turbidity
8:37am	1 gal	6.80	7.472	13.8	191.81
8:39am	3 gal	6.80	7.485	13.8°C	192.23
8:43am	5 gal	7.17	6.834	13.8°C	183.22
8:51am	7 gal	7.25	6.704	14.7°C	185.25
8:54am	8 gal	7.30	6.596	14.3°C	155.45

Purge Method: Bailer/Submersible Pump

Initial Water Quality Fair

Final Water Quality Fair

SAMPLE RECORD

Date: 6/21/19

Time: 9:20am

Crew: Eric Betzold

Method: low flow pump

Sample ID: MW-3

Water Quality: fair

pH: 7.19

Conductivity: 6.358

Temperature: 15.3°C

Turbidity: 18.93

Volume: 3x40ml VOAs

Analysis: VOC 8260 TCL

Chain of Custody #: -

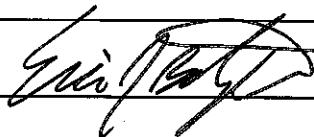
Sample Type: Continuous

Diameter	Multiply by
1"	0.041
2"	0.163
3"	0.367
4"	0.653
6"	1.468
8"	2.61

Comments: 0.0 ppm - OVM headspace

TOR= Top of Riser

GS= Ground Surface

Signature: 

HAZARD
EVALUATIONS

AIR/VAPOR SAMPLING FIELD DATA SHEET

Client: R&M Leasing Project No.: E1842Site Name & Address: 155 Chandler st. Buffalo, NYPerson(s) Performing Sampling: Eric BetzoldSample Identification: 0A-1 (12/12/19)Sample Type: ☐ Indoor Air (ambient) ☒ Outdoor Air ☐ Soil Vapor ☐ Sub-slab VaporDate of Collection: 12/12/19 Setup Time: 8:30am Stop Time: 4:30pmSample Depth: —Sample Height: 4'Sampling Method(s) & Device(s): 2.7 Liter Summa Canister & RegulatorPurge Volume: —Sample Volume: 2.7 LSampling Canister Type & Size (if applicable): 2.7 L SummaCanister # 194 Regulator # 01608Vacuum Pressure of Canister Prior to Sampling: -28.52"Vacuum Pressure of Canister After Sampling: -2.91"Temperature in Sampling Zone: 20°FApparent Moisture Content of Sampling Zone: LowSoil Type in Sampling Zone: —

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☒ Yes ☐ No. If no, provide reason(s) why? —Laboratory Name: Alpha AnalyticalAnalysis: TO-15Comments: Southeast Wind.PID reading - 0.0ppmSampler's Signature Eric BetzoldDate: 12/12/19

HAZARD
EVALUATIONS

AIR/VAPOR SAMPLING FIELD DATA SHEET

Client: R&M Leasing Project No.: e1842

Site Name & Address: 155 Schendler St. Buffalo, NY

Person(s) Performing Sampling: Eric Betzold

Sample Identification: IA-1(121219)

Sample Type: ☒ Indoor Air (ambient) ☐ Outdoor Air ☐ Soil Vapor ☐ Sub-slab Vapor

Date of Collection: 12/12/19 Setup Time: 9:35 am Stop Time: 5:35 pm

Sample Depth: —

Sample Height: 4'

Sampling Method(s) & Device(s): 2.7 Liter Summa canister & Regulator

Purge Volume: —

Sample Volume: 2.7 L

Sampling Canister Type & Size (if applicable): —

Canister # 2429 Regulator # 01617

Vacuum Pressure of Canister Prior to Sampling: -30.25"

Vacuum Pressure of Canister After Sampling: -0.75"

Temperature in Sampling Zone: 70°F

Apparent Moisture Content of Sampling Zone: low

Soil Type in Sampling Zone: —

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☒ Yes ☐ No. If no, provide reason(s) why? —

Laboratory Name: Alpha Analytical

Analysis: TO-15

Comments: PID reading - 0.0 ppm

Sampler's Signature Eric Betzold

Date: 12/12/19

Client: R&M Leasing Project No.: e1842Site Name & Address: 155 chandler st. Buffalo, NYPerson(s) Performing Sampling: Eric BetzoldSample Identification: IA-1(12/21/19) DuplicateSample Type: ☒ Indoor Air (ambient) ☐ Outdoor Air ☐ Soil Vapor ☐ Sub-slab VaporDate of Collection: 12/12/19 Setup Time: 9:35am Stop Time: 5:35pmSample Depth: —Sample Height: 4'Sampling Method(s) & Device(s): 2.7 Liter Summa Canister & RegulatorPurge Volume: —Sample Volume: 2.7 LSampling Canister Type & Size (if applicable): 2.7 Liter SummaCanister # 2423 Regulator # 01614Vacuum Pressure of Canister Prior to Sampling: -30.15"Vacuum Pressure of Canister After Sampling: -0.25"Temperature in Sampling Zone: 70°FApparent Moisture Content of Sampling Zone: lowSoil Type in Sampling Zone: —

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☒ Yes ☐ No. If no, provide reason(s) why? —Laboratory Name: Alpha AnalyticalAnalysis: TO-15Comments: PID reading - 0.0ppmSampler's Signature Eric Betzold Date: 12/12/19

HAZARD EVALUATIONS

AIR/VAPOR SAMPLING FIELD DATA SHEET

Client: R&M Leasing Project No.: E1842

Site Name & Address: 155 Chandler St. Buffalo, NY

Person(s) Performing Sampling: Eric Betzold

Sample Identification: IA-2(121219)

Sample Type: ☒ Indoor Air (ambient) ☐ Outdoor Air ☐ Soil Vapor ☐ Sub-slab Vapor

Date of Collection: 12/12/19 Setup Time: 9:45am Stop Time: 5:45pm

Sample Depth: —

Sample Height: 4'

Sampling Method(s) & Device(s): 2.7 Liter Summa Canister & Regulator

Purge Volume: —

Sample Volume: 2.7 L

Sampling Canister Type & Size (if applicable): 2.7 L Summa

Canister # 3034 Regulator # 0144

Vacuum Pressure of Canister Prior to Sampling: -30.25

Vacuum Pressure of Canister After Sampling: -9.60"

Temperature in Sampling Zone: 70°F

Apparent Moisture Content of Sampling Zone: low

Soil Type in Sampling Zone: —

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☒ Yes ☐ No. If no, provide reason(s) why? —

Laboratory Name: Alpha Analytical

Analysis: TO-15

Comments: PID reading: 0.0 ppm

—

—

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Sampler's Signature Eric Betzold Date: 12/12/19

HAZARD EVALUATIONS

AIR/VAPOR SAMPLING FIELD DATA SHEET

Client: R&M Leasing Project No.: e1842

Site Name & Address: 155 Chandler St. Buffalo, NY

Person(s) Performing Sampling: Eric Betzold

Sample Identification: IA-3 (12/12/19)

Sample Type: ☒ Indoor Air (ambient) ☐ Outdoor Air ☐ Soil Vapor ☐ Sub-slab Vapor

Date of Collection: 12/12/19 Setup Time: 9:00am Stop Time: 5:00pm

Sample Depth: —

Sample Height: 5'

Sampling Method(s) & Device(s): 2.7 Liter Summa Canister & Regulator

Purge Volume: —

Sample Volume: 2.7L

Sampling Canister Type & Size (if applicable): —

Canister # 148 Regulator # 01613

Vacuum Pressure of Canister Prior to Sampling: -30.00"

Vacuum Pressure of Canister After Sampling: -5.45"

Temperature in Sampling Zone: 65°F

Apparent Moisture Content of Sampling Zone: low

Soil Type in Sampling Zone: —

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☒ Yes ☐ No. If no, provide reason(s) why? —

Laboratory Name: Alpha Analytical

Analysis: TO-15

Comments: PID reading - 0.0ppm

Sampler's Signature Eric Betzold Date: 12/12/19

HAZARD
EVALUATIONS

AIR/VAPOR SAMPLING FIELD DATA SHEET

Client: R&M Leasing Project No.: e1842

Site Name & Address: 155 Chandler St. Buffalo, NY

Person(s) Performing Sampling: Eric Betzold

Sample Identification: IA-4 (121219)

Sample Type: ☒ Indoor Air (ambient) ☐ Outdoor Air ☐ Soil Vapor ☐ Sub-slab Vapor

Date of Collection: 12/12/19 Setup Time: 8:50am Stop Time: 4:50pm

Sample Depth: —

Sample Height: 4'

Sampling Method(s) & Device(s): 2.7 Liter Summa Canister & Regulator

Purge Volume: —

Sample Volume: 2.7L

Sampling Canister Type & Size (if applicable): 2.7 L Summa

Canister # 2236 Regulator # 01602

Vacuum Pressure of Canister Prior to Sampling: -28.10"

Vacuum Pressure of Canister After Sampling: -5.74"

Temperature in Sampling Zone: 60°F

Apparent Moisture Content of Sampling Zone: low

Soil Type in Sampling Zone: —

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☐ Yes ☐ No. If no, provide reason(s) why? —

Laboratory Name: Alpha Analytical

Analysis: TO-15

Comments: PID reading - 0.0ppm

Sampler's Signature Eric Betzold Date: 12/12/19

HAZARD EVALUATIONS

AIR/VAPOR SAMPLING FIELD DATA SHEET

Client: R&M Leasing Project No.: e1842

Site Name & Address: 155 Chandler St. Buffalo, NY

Person(s) Performing Sampling: Eric Betzold

Sample Identification: IA-5(121219)

Sample Type: ☒ Indoor Air (ambient) ☐ Outdoor Air ☐ Soil Vapor ☐ Sub-slab Vapor

Date of Collection: 12/12/19 Setup Time: 8:45am Stop Time: 4:45pm

Sample Depth: -

Sample Height: 4'

Sampling Method(s) & Device(s): 2.7 Liter Summa Canister & Regulator

Purge Volume: -

Sample Volume: 2.7L

Sampling Canister Type & Size (if applicable): 2.7L Summa

Canister # 151B Regulator # 01575

Vacuum Pressure of Canister Prior to Sampling: -30.18"

Vacuum Pressure of Canister After Sampling: -7.59"

Temperature in Sampling Zone: 60°F

Apparent Moisture Content of Sampling Zone: low

Soil Type in Sampling Zone: -

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☒ Yes ☐ No. If no, provide reason(s) why? _____

Laboratory Name: Alpha Analytical

Analysis: TO-15

Comments: PID reading - 0.0ppm

Sampler's Signature Eric Betzold Date: 12/12/19

HAZARD
EVALUATIONS

AIR/VAPOR SAMPLING FIELD DATA SHEET

Client: R&M Leasing Project No.: e1842Site Name & Address: 155 Chandler St. Buffalo, NYPerson(s) Performing Sampling: Eric BetzoldSample Identification: IA-6 (121219)Sample Type: ☒ Indoor Air (ambient) ☐ Outdoor Air ☐ Soil Vapor ☐ Sub-slab VaporDate of Collection: 12/12/19 Setup Time: 9:30am Stop Time: 5:30pmSample Depth: -Sample Height: 5'Sampling Method(s) & Device(s): 2.7 Liter Summa Canister & RegulatorPurge Volume: -Sample Volume: 2.7 LSampling Canister Type & Size (if applicable): 2.7 L SummaCanister # 2358 Regulator # 01607Vacuum Pressure of Canister Prior to Sampling: -29.99"Vacuum Pressure of Canister After Sampling: -8.93"Temperature in Sampling Zone: 55°FApparent Moisture Content of Sampling Zone: Med.Soil Type in Sampling Zone: -

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☒ Yes ☐ No. If no, provide reason(s) why? _____Laboratory Name: Alpha AnalyticalAnalysis: TO-15Comments: PID reading - 0.0ppmSampler's Signature Eric BetzoldDate: 12/12/19

HAZARD
EVALUATIONS

Well Data Sheet

Date: 12/10/19

Job #: C1842

Well ID: MW-3

Crew: Eric Betzold

Well Depth (TOR): 17.6'

Well Depth (GS): 18.05'

Initial Water Level (TOR): 0.5'

Initial Water Level (GS): 0.95'

Volume Calculation: $17.1' \times 0.163 = 2.78 \text{ gal} \times 5 = 13.9 \text{ gal.}$

DTB-DTW*0.163=1-well vol

Purge Record

Time	Volume	pH	Cond. ms/cm	Temp. $^{\circ}\text{C}$	Turbidity NTU
11:00am	.5 gal	6.38	4.92	11.34	55.8
11:05am	3 gal	6.44	5.12	11.20	81.1
11:10am	6 gal	6.56	4.99	12.66	55.4
11:14am	9 gal	6.61	7.41	13.82	101
11:21am	14 gal	6.76	6.09	13.62	174

Purge Method: Bailer Submersible Pump

Initial Water Quality Fair

Final Water Quality Fair

SAMPLE RECORD

Date: 12/10/19

Volume: 3x 40ml VOAs

Time: 11:38am

Analysis: VOC8260 TCL

Crew: Eric Betzold

Chain of Custody #: -

Method: Low Flow Pump

Sample Type: Grab

Sample ID: MW-3 (12/10/19)

Water Quality: Good

pH: 6.84

Conductivity: 9.42 ms/cm Temperature: 12.70 $^{\circ}\text{C}$

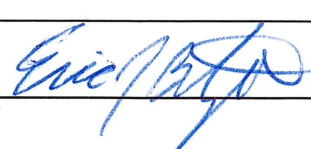
Turbidity: 49.2 NTU

Diameter	Multiply by
1"	0.041
2"	0.163
3"	0.367
4"	0.653
6"	1.468
8"	2.61

Comments: PID Headspace - 0.0PPm

TOR= Top of Riser

GS= Ground Surface

Signature: 

APPENDIX C

INSTITUTIONAL CONTROLS/ENGINEERING CONTROLS CERTIFICATION



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details

Box 1

Site No. **C915312**

Site Name **Pierce Arrow Business Center**

Site Address: 155-157 Chandler Street Zip Code: 14207

City/Town: Buffalo

County: Erie

Site Acreage: 2.350

Reporting Period: April 27, 2019 to April 27, 2020

YES NO

1. Is the information above correct?



If NO, include handwritten above or on a separate sheet.

2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?



3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?



4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?



If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.

5. Is the site currently undergoing development?



Box 2

YES NO

6. Is the current site use consistent with the use(s) listed below?



Restricted-Residential, Commercial, and Industrial

7. Are all ICs/ECs in place and functioning as designed?



IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Box 2A

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?



If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid?
(The Qualitative Exposure Assessment must be certified every five years)



If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C915312**Box 3****Description of Institutional Controls**ParcelOwnerInstitutional Control**77.84-1-4**~~Ontario Equipment Co. Inc.~~

R & M Leasing, LLC

IC/EC Plan
Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Site Management Plan

Monitoring Plan

- . Prohibition of use of groundwater.
- . Restricted Residential Use.
- . Soil Vapor Intrusion Evaluation for any existing or future structures.
- . Soil Management or Excavation Work Plan for any future intrusive work.

77.84-1-5

R&M Leasing, LLC

Ground Water Use Restriction
Landuse Restriction
Monitoring Plan
Site Management Plan
IC/EC Plan
Soil Management Plan

- . Prohibition of use of groundwater.
- . Restricted Residential Use.
- . Soil Vapor Intrusion Evaluation for any future structures.
- . Soil Management or Excavation Work Plan for any future intrusive work.
- . Groundwater Monitoring Plan

Box 4**Description of Engineering Controls**ParcelEngineering Control**77.84-1-4**

Vapor Mitigation

- . Monitoring of the Sub-slab Depressurization System.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.



Signature of Owner, Remedial Party or Designated Representative

4/30/2020

Date

**IC CERTIFICATIONS
SITE NO. C915312**

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I C. Mark Hanna at 3636 N. Buffalo Road, Orchard Park NY,
print name print business address

am certifying as designated representative (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.



Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

4/30/2020
Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I C. Mark Hanna at 3636 N. Buffalo Road, Orchard Park NY,
print name print business address

am certifying as a Qualified Environmental Professional for the R&M Leasing, LLC (Owner)
(Owner or Remedial Party)

 4/30/2020
Signature of Qualified Environmental Professional, for Stamp Date
the Owner or Remedial Party, Rendering Certification (Required for PE)

APPENDIX D
ISSUED PERMITS

**AIR FACILITY REGISTRATION CERTIFICATE
in accordance with 6 NYCRR Subpart 201-4**

Registration Issued to: ENrG Inc
175 Rano St Ste 101
Buffalo, NY 14207-2132

Contact: Thomas E Silverblatt
175 Rano St Ste 101
Buffalo, NY 14207-2176
(716) 465-2481

Facility: ENrG Inc.
155 Chandler St
Buffalo, NY 14207

Description:

ENrG makes and sells a product called Thin E-Strate®. This is a thin flexible ceramic tape made out of yttria stabilized zirconia powder. This registration is for two emission points at the facility. The first emission point is for the casting apparatus, slip operation and punch area. The second emission point is for the drying ovens and high temperature furnaces.

Ceramic powder is mixed with binders, solvents and other ingredients to make a liquid with a paint like consistency. This liquid is slip casted in a casting table into thin sheets and allowed to dry. When the solvents evaporate the film dries and becomes a solid. Emissions from the zirconia slip making operation are exhaust out emission point 1. The facility also makes Alumina liners for internal use in a secondary casting table. The second table is only capable of air drying. The Alumina liner is used as a plate to support the zirconia green tape while it is sintered in the electric furnaces. The alumina liner is produced similarly to the zirconia product. A powder is mixed with binders, solvents and other ingredients to make a liquid with a paint like consistency. The liquid is also cast, dried, cut to size and sintered before it can be used as a liner. There is a small amount of VOCs generated when constructing the alumina liners. Once the liners are made they are used several times before they are replaced. Emissions from the alumina slip making operation are also exhaust out emission point 1, while all emissions from the sintering operation exhaust from emission point 2.

The solidified zirconia based green tapes are fired to the sintering temperatures of ceramics in electric ovens. During this process, the binders burn out and the ceramic sinters to form a dense ceramic part. The alumina liners are also sintered in the electric ovens. There are five electric furnaces. Three of the furnaces are used for the initial sintering which volatilize binders and other components that didn't volatilize during the slip casting. The other two furnaces are used for re-firing and as backup in case one of the main furnaces needs maintenance. The furnaces are electric, so there are no emissions of NOx. All of the furnaces exhaust through emission point 2.

ENrG has exempt emission sources which exhausts out of both Emission points 1 and 2. The first source is a cleaning operation where tools and equipment are cleaned by hand wiping with solvents and alcohols, such as Isopropyl Alcohol. Intricate parts are cleaned in a small solvent bath. The hand cleaning operations are considered a trivial source under 201-3.3(c)(96), and the cleaning bath is exempt from permitting under 201-3.2(c)(39) since the bath size is less than 93 gallons and has a surface area of less than 11 square feet. These activities are done in the Slip Room and exhaust out of emission point 1. The second source is an electric belt dryer and is currently used to assist with the infrequent research involving ink labeling on the ceramic tape. The ink labeling process is exempt from permitting because it meets the 201-3.2(c)(13) exemption for Graphic Arts. This source exhausts to emission point 2.

The production of E-Strate is subject to 6NYCRR Part 212; Process Operations. Air dispersion modeling was conducted on the facility and determined that potential emissions from the facility to be in compliance with table 4 in Part 212. The facility is also subject to Part 212 particulate and opacity limits. No facility owner or operator shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point. In addition, no owner or operator shall cause or allow emissions of particulate that exceed 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis.



Registration ID: 9-1402-01142/00001

Facility DEC ID: 9-1402-01142

AIR FACILITY REGISTRATION CERTIFICATE
in accordance with 6 NYCRR Subpart 201-4

The facility must provide the Department with an updated registration application at least 30 days in advance of undertaking modifications to the facility that will make the facility subject to additional State or Federal regulatory requirements.

This Air Facility Registration (AFR) will expire ten (10) years after the date of issuance. As such, the facility is required to submit an AFR renewal application 60 days prior to the expiration date.

Total Number of Emission Points: 2

Cap By Rule: No

Authorized Activity By Standard Industrial Classification Code:

3264 - PORCELAIN ELECTRICAL SUPPLIES

Registration Effective Date: 06/28/2018

Registration Expiration Date: 06/27/2028

List of Regulations in Application:

6 NYCRR Part 200	General Provisions
6 NYCRR Part 201	Permits and Registrations
6 NYCRR Part 211	General Prohibitions
6 NYCRR Part 212	Process Operations

MICHAEL EMERY

REGION 9 AIR POLLUTION CONTROL ENGINEER
NYSDEC - REGION 9
270 MICHIGAN AVE
BUFFALO, NY 14203-2915

This registrant is required to operate this facility in accordance with all air pollution control applicable Federal and State laws and regulations. Failure to comply with these laws and regulations is a violation of the ECL and the registrant is subject to fines and/or penalties as provided by the ECL. If ownership of this facility changes, the registrant is required to notify the Department at the address shown above using the appropriate forms and procedures within 30 days after the transfer takes place. The present registrant will continue to be responsible for all fees and penalties until the Department has been notified of any change in ownership.

APPENDIX E

TABLES

Table 1
Indoor Air Analytical Testing Results
155 & 157 Chandler Street, Buffalo, NY
June 2019

	Guidance Values - Indoor Air			
LOCATION	Table C2 Commercial Indoor Air Background (90%)	NYSDOH Air Guideline Value	IA-5 (0619) Indoor Air	IA-5 (0619) Duplicate Indoor Air
SAMPLING DATE			6/21/2019	6/21/2019
LAB SAMPLE ID			L1927357-01	L1927357-02
1,2,4-Trimethylbenzene	9.5		ND	ND
1,2-Dichloroethane	<0.9		ND	ND
Acetone	98.9		38 J	40.4 J
Benzene	9.4		ND	0.866
Carbon disulfide	4.2		0.673	0.704
Carbon tetrachloride	<1.3		0.591	0.598
Chloromethane	3.7		1.43	1.40
cis-1,2-Dichloroethene	<1.9		ND	ND
Cyclohexane	NV		ND	1.03
Dichlorodifluoromethane	16.5		2.69	2.53
Ethanol	210		675	667
Ethyl acetate	5.4		5.19	6.45
Ethylbenzene	5.7		8.38	8.69
Heptane	NV		0.906	1.22
Hexane	NV		2.49	4.79
Isopropanol	NV		1230	1170
m&p-Xylene	22.2		36.7	36.2
Methyl Ethyl Ketone	12		2.56	2.70
Methyl Isobutyl Ketone	NV		5.12	5.16
Methylene chloride	10	60	ND	2.01
o-Xylene	7.9		12.2	12.2
Styrene	1.9		2.18	2.76
Tetrachloroethene	15.9	30	0.203	0.292
Toluene	43		5.39	8.63
trans-1,2-Dichloroethene	NV		6.15	5.95
Trichloroethene	4.2	2	0.903	0.833
Trichlorofluoromethane	18.1		1.41	1.49

Notes:

- Compounds detected in one or more samples included in this table. For a list of all compounds, refer to analytical report.
- Analytical testing for VOCs via TO-15 completed by Alpha Laboratories.
- Results present in ug/m³ or microgram per cubic meter.
- Samples were collected during a 8-hour sample duration.
- 90th percentile values as presented in C2 (EPA 2001: Building assessment and survey evaluation (BASE) database) Appendix C, in the NYSDOH Guidance Manual, as indicated for Indoor and Outdoor air only.
- Air Guidance Values from "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, prepared by New York State Department of Health.
- Grey shaded values represent exceedance of table C2 guidance values; yellow shaded values represent exceedance of NYSDOH Air Guidance Values.
- Qualifiers: J = result is less than the reporting limit but greater or equal to the method detection limit and the concentration is an approximate value.
- ND = Non Detect; NV = No Value
- Red values represent updated values based on recent data validation (April 2020).

Table 2
Indoor Air Analytical Testing Results
155 & 157 Chandler Street, Buffalo, NY
December 2019

	Guidance Values - Indoor Air											
LOCATION	Table C2 Commercial Indoor Air Background (90%)	NYSDOH Air Guideline Value	IA-1 (121219) Indoor Air	IA-1 (121219) Duplicate Indoor Air	IA-2 (121219) Indoor Air	IA-3 (121219) Indoor Air	IA-4 (121219) Indoor Air	IA-5 (121219) Indoor Air	IA-6 (121219) Indoor Air	OA-1 (121219) Outdoor Air	Table C2 Outdoor Air Guidance Values	
SAMPLING DATE			12/12/2019	12/12/2019	12/12/2019	12/12/2019	12/12/2019	12/12/2019	12/12/2019	12/12/2019		12/12/2019
LAB SAMPLE ID			L1959919-06	L1959919-07	L1959919-08	L1959919-04	L1959919-03	L1959919-02	L1959919-05	L1959919-01		
Acetone	98.9		11.9	11.8 J	12.4	13.3	8.20	9.45	8.69	3.44	43.7	
Benzene	9.4		0.744	0.824 J	0.764	0.652	0.684	0.741	0.655	ND	6.6	
Carbon disulfide	4.2		ND	ND	ND	1.35	ND	ND	ND	ND	3.7	
Carbon tetrachloride	<1.3		0.579	0.572 J	0.598	0.491	0.516	0.547	2.26	0.484	0.7	
Chloromethane	3.7		1.19	1.16 J	1.22	1.18	1.11	1.23	1.09	1.11	3.7	
cis-1,2-Dichloroethene	<1.9		ND	ND	ND	ND	ND	ND	0.270	ND	<1.8	
Dichlorodifluoromethane	16.5		2.59	2.59 J	2.70	2.58	2.57	2.63	2.66	2.55	8.1	
Ethanol	210		298	352 J	224	931	392	63.3	194	ND	57	
Ethyl acetate	5.4		6.85	7.03 J	9.30	231	60.5	ND	2.01	ND	1.5	
Ethylbenzene	5.7		0.869	0.873 J	0.877	ND	ND	0.986	ND	ND	3.5	
Hexane	NV		0.888	0.962 J	1.01	ND	ND	0.807	ND	ND	6.4	
Isopropanol	NV		3.52	3.39 J	3.17	2.65	2.48	4.77	9.24	ND	NV	
m&p-Xylene	22.2		3.36	3.33 J	3.32	1.74	ND	3.82	ND	ND	12.8	
Methyl Ethyl Ketone	12		ND	ND	ND	4.28	1.64	ND	1.62	ND	11.3	
Methylene chloride	10	60	ND	ND	ND	ND	ND	ND	ND	ND	6.1	
o-Xylene	7.9		1.22	1.29 J	1.22	ND	ND	1.20	ND	ND	4.6	
Tetrachloroethene	15.9	30	0.651	0.387 J	0.346	0.488	ND	0.271	0.448	ND	6.5	
Toluene	43		1.53	1.76 J	1.57	1.38	1.30	2.58	1.82	0.855	33.7	
trans-1,2-Dichloroethene	NV		ND	ND	ND	ND	ND	1.10	ND	ND	NV	
Trichloroethene	4.2	2	0.833	0.844 J	0.742	ND	ND	0.688	12.0	ND	1.3	
Trichlorofluoromethane	18.1		1.25	1.29 J	1.29	1.27	1.25	1.32	1.31	1.24	4.3	

Notes:

- Compounds detected in one or more samples included in this table. For a list of all compounds, refer to analytical report.
- Analytical testing for VOCs via TO-15 completed by Alpha Laboratories.
- Results present in ug/m³ or microgram per cubic meter.
- Samples were collected during a 8-hour sample duration.
- 90th percentile values as presented in C2 (EPA 2001: Building assessment and survey evaluation (BASE) database) Appendix C, in the NYSDOH Guidance Manual, as indicated for Indoor and Outdoor air only.
- Air Guidance Values from "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, prepared by New York State Department of Health.
- Grey shaded values represent exceedance of table C2 guidance values; yellow shaded values represent exceedance of NYSDOH Air Guidance Values
- Qualifiers: J = result is less than the reporting limit but greater or equal to the method detection limit and the concentration is an approximate value.
- ND = Non Detect; NV = No Value
- Red values represent updated values based on recent data validation (April 2020).

Table 3
Indoor Air Analytical Testing Results
155 & 157 Chandler Street, Buffalo, NY
February 2020

Guidance Values - Indoor Air				
LOCATION	Table C2 Commercial Indoor Air Background (90%)	NYSDOH Air Guideline Value	IA-6 (022020) Indoor Air	IA-6 (022020) Duplicate Indoor Air
SAMPLING DATE			2/20/2020	2/20/2020
LAB SAMPLE ID			L2007739-01	L2007739-02
1,2,4-Trimethylbenzene	9.5		1.09	1.24
1,2-Dichloroethane	<0.9		ND	ND
Acetone	98.9		165	187
Benzene	9.4		ND	ND
Carbon disulfide	4.2		ND	ND
Carbon tetrachloride	<1.3		0.434	0.453
Chloromethane	3.7		0.956	0.921
cis-1,2-Dichloroethene	<1.9		0.095	0.119
Cyclohexane	NV		ND	ND
Dichlorodifluoromethane	16.5		1.86	1.93
Ethanol	210		111	129
Ethyl acetate	5.4		ND	ND
Ethylbenzene	5.7		5.52	5.86
Heptane	NV		ND	ND
Hexane	NV		ND	ND
Isopropanol	NV		5.21	5.19
m&p-Xylene	22.2		18.0	19.3
Methyl Ethyl Ketone	12		ND	ND
Methyl Isobutyl Ketone	NV		ND	ND
Methylene chloride	10	60	ND	ND
o-Xylene	7.9		5.21	5.60
Styrene	1.9		ND	ND
Tetrachloroethene	15.9	30	0.305	0.292
Toluene	43		1.17	1.06
trans-1,2-Dichloroethene	NV		ND	ND
Trichloroethene	4.2	2	1.34	1.43
Trichlorofluoromethane	18.1		ND	ND

Notes:

1. Compounds detected in one or more samples included in this table. For a list of all compounds, refer to analytical report.
2. Analytical testing for VOCs via TO-15 completed by Alpha Laboratories.
3. Results present in ug/m³ or microgram per cubic meter.
4. Samples were collected during a 8-hour sample duration.
5. 90th percentile values as presented in C2 (EPA 2001: Building assessment and survey evaluation (BASE) database) Appendix C, in the NYSDOH Guidance Manual, as indicated for Indoor and Outdoor air only.
6. Air Guidance Values from "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, prepared by New York State Department of Health.
7. Grey shaded values represent exceedance of table C2 guidance values; yellow shaded values represent exceedance of NYSDOH Air Guidance Values.
8. Qualifiers: J = result is less than the reporting limit but greater or equal to the method detection limit and the concentration is an approximate value.
9. ND = Non Detect; NV = No Value

Table 4
Indoor Air Analytical Testing Results Comparison
155 & 157 Chandler Street, Buffalo, NY
December 2018, February 2019, June 2019, December 2019, and February 2020

LOCATION	Guidance Values - Indoor Air			IA-1			IA-2			IA-3			IA-4			IA-5			IA-6			OA-1			Table C2 Outdoor Air Guidance Values
	Table C2 Commercial Indoor Air Background (90%)	NYSDOH Air Guideline Value	IA-1 Indoor Air	IA-1 (12/12/19) Indoor Air	IA-1 (12/12/19) Duplicate Indoor Air	IA-2 Indoor Air	IA-2 (12/12/19) Indoor Air	IA-3 Indoor Air	IA-3 (12/12/19) Indoor Air	IA-4 Indoor Air	IA-4 Duplicate Indoor Air	IA-4 (12/12/19) Indoor Air	IA-5 Indoor Air	IA-5 (02/19) Indoor Air	IA-5 (02/19) Duplicate Indoor Air	IA-5 (06/19) Indoor Air	IA-5 (06/19) Duplicate Indoor Air	IA-5 (12/12/19) Indoor Air	IA-6 Indoor Air	IA-6 (12/12/19) Indoor Air	IA-6 (02/2020) Indoor Air	IA-6 (02/2020) Duplicate Indoor Air	OA-1 Outdoor Air	OA-1 (12/12/19) Outdoor Air	
SAMPLING DATE			12/19/2018	12/12/2019	12/12/2019	12/18/2018	12/12/2019	12/18/2018	12/12/2019	12/18/2018	12/12/2019	12/18/2018	12/18/2018	2/13/2019	2/13/2019	6/21/2019	6/21/2019	12/12/2019	12/18/2018	12/12/2019	2/20/2020	2/20/2020	12/18/2018	12/12/2019	
LAB SAMPLE ID			L1852191-06	L1959919-06	L1959919-07	L1852191-07	L1959919-08	L1852191-02	L1959919-04	L1852191-03	L1852191-04	L1959919-03	L1852191-01	L1905849-01	L1905849-02	L1927357-01	L1927357-02	L1959919-02	L1852191-05	L1959919-05	L2007739-01	L2007739-02	L1852191-08	L1959919-01	
1,2,4-Trimethylbenzene	9.5		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09	1.24	ND	ND	5.8
1,2-Dichloroethane	<0.9		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.163	0.127	0.139	ND	ND	ND	0.103	ND	ND	ND	ND	ND	<0.8
Acetone	98.9		14.4	11.9	11.8 J	14.6	12.4	21.1	13.3	24.7	24	8.20	46.3	33.5 J	36.3 J	38 J	40.4 J	9.45	5.3	8.69	165	187	4.39	3.44	43.7
Benzene	9.4		ND	0.744	0.824 J	ND	0.764	ND	0.652	ND	ND	0.684	ND	ND	ND	ND	0.866	0.741	ND	0.655	ND	ND	ND	ND	6.6
Carbon disulfide	4.2		ND	ND	ND	ND	ND	2.24	1.35	ND	ND	ND	ND	ND	ND	0.673	0.704	ND	ND	ND	ND	ND	ND	ND	3.7
Carbon tetrachloride	<1.3		0.591	0.579	0.572 J	0.566	0.598	0.541	0.491	0.711	0.723	0.516	2.31	1.09	1.05	0.591	0.598	0.547	0.598	2.26	0.434	0.453	0.459	0.484	0.7
Chloromethane	3.7		1.25	1.19	1.16 J	1.14	1.22	2.24	1.18	2.95	1.13	1.11	1.13	0.96	1.01	1.43	1.40	1.23	1.06	1.09	0.956	0.921	1.13	1.11	3.7
cis-1,2-Dichloroethene	<1.9		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.163	0.127	0.139	ND	ND	ND	0.103	0.270	0.095	0.119	ND	ND	<1.8
Cyclohexane	NV		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	NV
Dichlorodifluoromethane	16.5		1.63	2.59	2.59 J	1.68	2.70	2.4	2.58	1.78	1.66	2.57	1.61	2.44	2.49	2.69	2.53	2.63	2.49	2.66	1.86	1.93	1.39	2.55	8.1
Ethanol	210		155	298	352 J	207	224	307	931	148	144	392	910	298	315	675	667	63.3	40.1	194	111	129	ND	ND	57
Ethyl acetate	5.4		ND	6.85	7.03 J	ND	9.30	26.5	231	3.29	3.33	60.5	15.9	3.2	3.28	5.19	6.45	ND	ND	2.01	ND	ND	ND	ND	1.5
Ethylbenzene	5.7		2.49	0.869	0.873 J	2.32	0.877	2.76	ND	2.79	2.82	ND	4.73	2	2.03	8.38	8.69	0.986	ND	ND	5.52	5.86	ND	ND	3.5
Heptane	NV		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.906	1.22	ND	ND	ND	ND	ND	ND	ND	NV
Hexane	NV		ND	0.888	0.962 J	ND	1.01	0.811	ND	1.26	1.32	ND	6.87	2.55	2.81	2.49	4.79	0.807	ND	ND	ND	ND	ND	ND	6.4
Isopropanol	NV		11.9	3.52	3.39 J	11.3	3.17	32.4	2.65	99.6	97.8	2.48	873	215	228	1230	1170	4.77	ND	ND	9.24	5.21	5.19	ND	NV
m,p-Xylene	22.2		9.56	3.36	3.33 J	9.38	3.32	10.6	1.74	10.6	10.3	ND	19	8.17	8.17	36.7	36.2	3.82	ND	ND	18.0	19.3	ND	ND	12.8
Methyl Ethyl Ketone	12		ND	ND	ND	ND	ND	ND	4.28	ND	ND	1.64	4.63	5.66	6.16	2.56	2.70	ND	ND	1.62	ND	ND	ND	ND	11.3
Methyl Isobutyl Ketone	NV		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.8	4.51	4.39	5.12	5.16	ND	ND	ND	ND	ND	ND	ND	NV
Methylene chloride	10	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	6.1
o-Xylene	7.9		3.12	1.22	1.29 J	3.09	1.22	2.86	ND	3.14	3.24	ND	5.58	2.4	2.44	12.2	12.2	1.20	ND	ND	5.21	5.60	ND	ND	4.6
Styrene	1.9		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.932	ND	ND	2.18	2.76	ND	ND	ND	ND	ND	ND	ND	1.3
Tetrachloroethene	15.9	30	0.753	0.651	0.387 J	0.685	0.346	0.332	0.488	0.922	0.882	ND	1.3	0.353	0.319	0.203	0.292	0.271	0.529	0.448	0.305	0.292	ND	ND	6.5
Toluene	43		4.07	1.53	1.76 J	1.21	1.57	1.16	1.38	4.26	5.8	1.30	7.65	5.35	5.39	5.39	8.63	2.58	ND	1.82	1.17	1.06	ND	0.855	33.7
trans-1,2-Dichloroethene	NV		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.44	2.36	2.5	6.15	5.95	1.10	ND	ND	ND	ND	ND	ND	NV
Trichloroethene	4.2	2	0.849	0.833	0.844 J	0.736	0.742	0.489	ND	1.34	1.37	ND	9.46	4.54	4.58	0.903	0.833	0.688	0.924	12.0	1.34	1.43	ND	ND	1.3
Trichlorofluoromethane	18.1		1.33	1.25	1.29 J	1.3	1.29	1.12	1.27	1.28	1.25	1.25	1.25	ND	ND	1.41	1.49	1.32	1.26	1.31	ND	ND	1.16	1.24	4.3

- Notes:
- Compounds detected in one or more samples included in this table. For a list of all compounds, refer to analytical report.
 - Analytical testing for VOCs via TO-15 completed by Alpha Laboratories.
 - Results present in ug/m³ or microgram per cubic meter.
 - Samples were collected during a 8-hour sample duration.
 - 90th percentile values as presented in C2 (EPA 2001: Building assessment and survey evaluation (BASE) database) Appendix C, in the NYSDOH Guidance Manual, as indicated for Indoor and Outdoor air only.
 - Air Guidance Values from "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2008, prepared by New York State Department of Health.
 - Blue shading represents the samples previously collected during the 2018-2019 PRR Reporting Period (December 2018 & February 2019).
 - No shading represents the samples most recently collected during the 2019-2020 PRR Reporting Period (June 2019, December 2019, and February 2020).
 - Grey shaded values represent exceedance of table C2 guidance values; yellow shaded values represent exceedance of NYSDOH Air Guidance Values.
 - Qualifiers: J = result is less than the reporting limit but greater or equal to the method detection limit and the concentration is an approximate value.
 - ND = Non Detect; NV = No Value
 - Red values represent updated values based on recent data validation (April 2020).

Table 5
Groundwater Analytical Testing Results
155-157 Chandler Street, Buffalo, NY
June 2019

LOCATION	GA	MW-3 (062119)	MW-3 (062119) (Duplicate)
SAMPLE DATE		L1927255	L1927255
LAB SAMPLE ID		06/21/19	06/21/19
Volatiles 8260C Analysis (ug/L)			
Acetone	50	ND	ND
2-butanone	50	ND	ND
Benzene	1	ND	ND
Carbon disulfide	NV	ND	ND
Cyclohexane	NV	ND	ND
cis-1,2-dichloroethene	5	ND	ND
Methyl cyclohexane	NV	ND	ND
Trichloroethene	5	ND	ND

Notes:

1. Analytical testing performed by Alpha Analytical. Compounds detected in one or more samples are presented in this table. Refer to Appendix for the full analytical report.
2. ug/L = parts per billion (ppb).
3. ND = not detected; NV = no value
4. Analytical results compared to NYSDEC Class GA criteria obtained from the Division of Water Technical and Operational Guidance Series (TOGS 1.1.1)
5. J = Estimated value. The target analyte is below the reporting limit (RL), but above the method detection limit (MDL).
6. Grey shaded values represent exceedance of NYSDEC Class GA criteria.

Table 6
Groundwater Analytical Testing Results
155-157 Chandler Street, Buffalo, NY
December 2019

LOCATION	GA	MW-3 (121019)	MW-3 (121019) (Duplicate)
SAMPLE DATE		L1959098	L1959098
LAB SAMPLE ID		12/10/19	12/10/19
Volatiles 8260C Analysis (ug/L)			
Acetone	50	ND	ND
2-butanone	50	ND	ND
Benzene	1	0.26 J	0.28 J
Carbon disulfide	NV	ND	ND
Cyclohexane	NV	ND	ND
cis-1,2-dichloroethene	5	ND	ND
Methyl cyclohexane	NV	ND	ND
Trichloroethene	5	ND	ND

Notes:

1. Analytical testing performed by Alpha Analytical. Compounds detected in one or more samples are presented in this table. Refer to Appendix for the full analytical report.
2. ug/L = parts per billion (ppb).
3. ND = not detected; NV = no value
4. Analytical results compared to NYSDEC Class GA criteria obtained from the Division of Water Technical and Operational Guidance Series (TOGS 1.1.1)
5. J = Estimated value. The target analyte is below the reporting limit (RL), but above the method detection limit (MDL).
6. Grey shaded values represent exceedance of NYSDEC Class GA criteria.

Table 7
Groundwater Analytical Testing Results
155-157 Chandler Street, Buffalo, NY
July 2017, October 2017, January 2019, June 2019, and December 2019

		Remedial Investigation		Site Management Plan					
LOCATION	GA	SB126 / MW-3	SB126 / MW-3	MW-3	MW-3 (Duplicate)	MW-3 (062119)	MW-3 (062119) (Duplicate)	MW-3 (121019)	MW-3 (121019) (Duplicate)
SAMPLE DATE		7/27/2017	10/19/2017	1/14/2019	1/14/2019	06/21/19	06/21/19	12/10/19	12/10/19
LAB SAMPLE ID		L1726029	L1738023	L1901687-03	L1901687-04	L1927255-03	L1927255-04	L1959098-03	L1959098-04
Volatiles 8260C Analysis (ug/L)									
Acetone	50	24 J	88 J	ND	ND	ND	ND	ND	ND
2-butanone	50	7.5	130 J	ND	ND	ND	ND	ND	ND
Benzene	1	2.2	1.2	0.29 J	0.35 J	ND	ND	0.26 J	0.28 J
Carbon disulfide	NV	1.4 J	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NV	0.64 J	0.47 J	ND	ND	ND	ND	ND	ND
cis-1,2-dichloroethene	5	ND	3.0	ND	ND	ND	ND	ND	ND
Methyl cyclohexane	NV	0.82 J	0.67 J	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	11 J	ND	ND	ND	ND	ND	ND

Notes:

1. Analytical testing performed by Alpha Analytical. Compounds detected in one or more samples are presented in this table. Refer to Appendix for the full analytical report.
2. ug/L = parts per billion (ppb).
3. ND = not detected; NV = no value
4. Analytical results compared to NYSDEC Class GA criteria obtained from the Division of Water Technical and Operational Guidance Series (TOGS 1.1.1)
5. J = Estimated value. The target analyte is below the reporting limit (RL), but above the method detection limit (MDL).
6. Grey shaded values represent exceedance of NYSDEC Class GA criteria.
7. Red "ND" values represent updated values based on recent data validation (April 2020).

APPENDIX F

LABORATORY ANALYTICAL RESULTS



ANALYTICAL REPORT

Lab Number:	L1852191
Client:	Hazard Evaluations, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Michele Wittman
Phone:	(716) 667-3130
Project Name:	DECEMBER 2018 INDOOR AIR MONIT
Project Number:	E1601
Report Date:	12/27/18

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: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1852191-01	IA-5	AIR	155 CHANDLER ST., BUFFALO, NY	12/18/18 15:40	12/18/18
L1852191-02	IA-3	AIR	155 CHANDLER ST., BUFFALO, NY	12/18/18 15:45	12/18/18
L1852191-03	IA-4	AIR	155 CHANDLER ST., BUFFALO, NY	12/18/18 15:55	12/18/18
L1852191-04	IA-4 DUPLICATE	AIR	155 CHANDLER ST., BUFFALO, NY	12/18/18 15:55	12/18/18
L1852191-05	IA-6	AIR	155 CHANDLER ST., BUFFALO, NY	12/18/18 16:05	12/18/18
L1852191-06	IA-1	AIR	155 CHANDLER ST., BUFFALO, NY	12/18/18 16:10	12/18/18
L1852191-07	IA-2	AIR	155 CHANDLER ST., BUFFALO, NY	12/18/18 16:15	12/18/18
L1852191-08	OA-1	AIR	155 CHANDLER ST., BUFFALO, NY	12/18/18 16:20	12/18/18

Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 17, 2018. The canister certification results are provided as an addendum.

L1852191-01: The sample was re-analyzed on dilution in order to quantify the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

The WG1192251-3 LCS recoveries for 1,2,4-trichlorobenzene (135%) and 1,2,3-trichlorobenzene (133%) are above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of these analytes.

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: 12/27/18

AIR

Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-01
 Client ID: IA-5
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:40
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/21/18 19:03
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.325	0.200	--	1.61	0.989	--		1
Chloromethane	0.549	0.200	--	1.13	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	483	5.00	--	910	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	19.5	1.00	--	46.3	2.38	--		1
Trichlorofluoromethane	0.223	0.200	--	1.25	1.12	--		1
Isopropanol	354	0.500	--	870	1.23	--	E	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	0.364	0.200	--	1.44	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.57	0.500	--	4.63	1.47	--		1
Ethyl Acetate	4.41	0.500	--	15.9	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-01
 Client ID: IA-5
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:40
 Date Received: 12/18/18
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.95	0.200	--	6.87	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	4.82	0.500	--	19.8	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.03	0.200	--	7.65	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.09	0.200	--	4.73	0.869	--		1
p/m-Xylene	4.37	0.400	--	19.0	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.219	0.200	--	0.932	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.28	0.200	--	5.56	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-01
 Client ID: IA-5
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:40
 Date Received: 12/18/18
 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								
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	88		60-140
chlorobenzene-d5	88		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-01
 Client ID: IA-5
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:40
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/21/18 19:03
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.041	0.020	--	0.163	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.367	0.020	--	2.31	0.126	--		1
Trichloroethene	1.76	0.020	--	9.46	0.107	--		1
Tetrachloroethene	0.191	0.020	--	1.30	0.136	--		1
1,2-Dichloroethene (total)	0.041	0.020	--	0.163	0.079	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	82		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	89		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-01 D
 Client ID: IA-5
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:40
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/22/18 09:01
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Isopropanol	355	2.50	--	873	6.15	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	85		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	86		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-02
 Client ID: IA-3
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:45
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/21/18 19:35
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.486	0.200	--	2.40	0.989	--		1
Chloromethane	0.568	0.200	--	1.17	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	163	5.00	--	307	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.87	1.00	--	21.1	2.38	--		1
Trichlorofluoromethane	0.200	0.200	--	1.12	1.12	--		1
Isopropanol	13.2	0.500	--	32.4	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.720	0.200	--	2.24	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	7.34	0.500	--	26.5	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-02
 Client ID: IA-3
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:45
 Date Received: 12/18/18
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.230	0.200	--	0.811	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.308	0.200	--	1.16	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.636	0.200	--	2.76	0.869	--		1
p/m-Xylene	2.45	0.400	--	10.6	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.659	0.200	--	2.86	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-02
 Client ID: IA-3
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:45
 Date Received: 12/18/18
 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								
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	87		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	91		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-02
 Client ID: IA-3
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:45
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/21/18 19:35
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.086	0.020	--	0.541	0.126	--		1
Trichloroethene	0.091	0.020	--	0.489	0.107	--		1
Tetrachloroethene	0.049	0.020	--	0.332	0.136	--		1
1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	91		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-03
 Client ID: IA-4
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:55
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/21/18 20:40
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.359	0.200	--	1.78	0.989	--		1
Chloromethane	1.43	0.200	--	2.95	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	78.4	5.00	--	148	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.4	1.00	--	24.7	2.38	--		1
Trichlorofluoromethane	0.228	0.200	--	1.28	1.12	--		1
Isopropanol	40.5	0.500	--	99.6	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	0.912	0.500	--	3.29	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-03
 Client ID: IA-4
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:55
 Date Received: 12/18/18
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.357	0.200	--	1.26	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.13	0.200	--	4.26	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.642	0.200	--	2.79	0.869	--		1
p/m-Xylene	2.43	0.400	--	10.6	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.724	0.200	--	3.14	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-03
 Client ID: IA-4
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:55
 Date Received: 12/18/18
 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								
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	84		60-140
chlorobenzene-d5	83		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-03
 Client ID: IA-4
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:55
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/21/18 20:40
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.113	0.020	--	0.711	0.126	--		1
Trichloroethene	0.249	0.020	--	1.34	0.107	--		1
Tetrachloroethene	0.136	0.020	--	0.922	0.136	--		1
1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	82		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	84		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-04
 Client ID: IA-4 DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:55
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/21/18 21:12
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.335	0.200	--	1.66	0.989	--		1
Chloromethane	0.548	0.200	--	1.13	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	76.3	5.00	--	144	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.1	1.00	--	24.0	2.38	--		1
Trichlorofluoromethane	0.223	0.200	--	1.25	1.12	--		1
Isopropanol	39.8	0.500	--	97.8	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	0.925	0.500	--	3.33	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-04
 Client ID: IA-4 DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:55
 Date Received: 12/18/18
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.375	0.200	--	1.32	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.54	0.200	--	5.80	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.650	0.200	--	2.82	0.869	--		1
p/m-Xylene	2.38	0.400	--	10.3	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.745	0.200	--	3.24	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-04
 Client ID: IA-4 DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:55
 Date Received: 12/18/18
 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								
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	81		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	89		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-04
 Client ID: IA-4 DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 15:55
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/21/18 21:12
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.115	0.020	--	0.723	0.126	--		1
Trichloroethene	0.255	0.020	--	1.37	0.107	--		1
Tetrachloroethene	0.130	0.020	--	0.882	0.136	--		1
1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	87		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-05
 Client ID: IA-6
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:05
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/21/18 21:45
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.504	0.200	--	2.49	0.989	--		1
Chloromethane	0.513	0.200	--	1.06	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	21.3	5.00	--	40.1	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.23	1.00	--	5.30	2.38	--		1
Trichlorofluoromethane	0.225	0.200	--	1.26	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-05
 Client ID: IA-6
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:05
 Date Received: 12/18/18
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-05
 Client ID: IA-6
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:05
 Date Received: 12/18/18
 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								
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	85		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	90		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-05
 Client ID: IA-6
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:05
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/21/18 21:45
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.026	0.020	--	0.103	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.095	0.020	--	0.598	0.126	--		1
Trichloroethene	0.172	0.020	--	0.924	0.107	--		1
Tetrachloroethene	0.078	0.020	--	0.529	0.136	--		1
1,2-Dichloroethene (total)	0.026	0.020	--	0.103	0.079	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	90		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-06
 Client ID: IA-1
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:10
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/21/18 22:17
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.330	0.200	--	1.63	0.989	--		1
Chloromethane	0.603	0.200	--	1.25	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	82.4	5.00	--	155	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.07	1.00	--	14.4	2.38	--		1
Trichlorofluoromethane	0.236	0.200	--	1.33	1.12	--		1
Isopropanol	4.86	0.500	--	11.9	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-06
 Client ID: IA-1
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:10
 Date Received: 12/18/18
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.08	0.200	--	4.07	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.574	0.200	--	2.49	0.869	--		1
p/m-Xylene	2.20	0.400	--	9.56	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.718	0.200	--	3.12	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-06
 Client ID: IA-1
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:10
 Date Received: 12/18/18
 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								
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	87		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-06
 Client ID: IA-1
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:10
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/21/18 22:17
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.094	0.020	--	0.591	0.126	--		1
Trichloroethene	0.158	0.020	--	0.849	0.107	--		1
Tetrachloroethene	0.111	0.020	--	0.753	0.136	--		1
1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	88		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-07
 Client ID: IA-2
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:15
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/21/18 22:49
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.340	0.200	--	1.68	0.989	--		1
Chloromethane	0.554	0.200	--	1.14	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	110	5.00	--	207	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.15	1.00	--	14.6	2.38	--		1
Trichlorofluoromethane	0.231	0.200	--	1.30	1.12	--		1
Isopropanol	4.60	0.500	--	11.3	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-07
 Client ID: IA-2
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:15
 Date Received: 12/18/18
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.320	0.200	--	1.21	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.535	0.200	--	2.32	0.869	--		1
p/m-Xylene	2.16	0.400	--	9.38	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.712	0.200	--	3.09	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-07
 Client ID: IA-2
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:15
 Date Received: 12/18/18
 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								
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	82		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	85		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-07
 Client ID: IA-2
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:15
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/21/18 22:49
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.090	0.020	--	0.566	0.126	--		1
Trichloroethene	0.137	0.020	--	0.736	0.107	--		1
Tetrachloroethene	0.101	0.020	--	0.685	0.136	--		1
1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	81		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	86		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-08
 Client ID: OA-1
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:20
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/21/18 18:31
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.282	0.200	--	1.39	0.989	--		1
Chloromethane	0.546	0.200	--	1.13	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.85	1.00	--	4.39	2.38	--		1
Trichlorofluoromethane	0.207	0.200	--	1.16	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-08
 Client ID: OA-1
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:20
 Date Received: 12/18/18
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-08
 Client ID: OA-1
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:20
 Date Received: 12/18/18
 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								
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	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

SAMPLE RESULTS

Lab ID: L1852191-08
 Client ID: OA-1
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 12/18/18 16:20
 Date Received: 12/18/18
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/21/18 18:31
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.073	0.020	--	0.459	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	93		60-140



Project Name: DECEMBER 2018 INDOOR AIR MONIT**Lab Number:** L1852191**Project Number:** E1601**Report Date:** 12/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/21/18 15:06

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1192250-4								
Propylene	ND	0.500	--	ND	0.861	--		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
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
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT**Lab Number:** L1852191**Project Number:** E1601**Report Date:** 12/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/21/18 15:06

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1192250-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	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



Project Name: DECEMBER 2018 INDOOR AIR MONIT**Lab Number:** L1852191**Project Number:** E1601**Report Date:** 12/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/21/18 15:06

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1192250-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
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

Project Name: DECEMBER 2018 INDOOR AIR MONIT**Lab Number:** L1852191**Project Number:** E1601**Report Date:** 12/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/21/18 15:39

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-08 Batch: WG1192251-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	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
Ethyl Alcohol	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	0.050	--	ND	0.281	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
1,3-Dichloropropene, Total	ND	0.020	--	ND	0.091	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	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



Project Name: DECEMBER 2018 INDOOR AIR MONIT**Lab Number:** L1852191**Project Number:** E1601**Report Date:** 12/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/21/18 15:39

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-08 Batch: WG1192251-4								
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Xylene (Total)	ND	0.020	--	ND	0.087	--		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
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
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
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.020	--	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	0.050	--	ND	0.188	--		1



Project Name: DECEMBER 2018 INDOOR AIR MONIT**Lab Number:** L1852191**Project Number:** E1601**Report Date:** 12/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/21/18 15:39

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-08 Batch: WG1192251-4								
2-Hexanone	ND	0.200	--	ND	0.820	--		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
1,2,3-Trichloropropane	ND	0.020	--	ND	0.121	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		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	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
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



Project Name: DECEMBER 2018 INDOOR AIR MONIT**Lab Number:** L1852191**Project Number:** E1601**Report Date:** 12/27/18

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/21/18 15:39

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-08 Batch: WG1192251-4								
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

Lab Control Sample Analysis

Batch Quality Control

Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1192250-3								
Chlorodifluoromethane	85		-		70-130	-		
Propylene	94		-		70-130	-		
Propane	88		-		70-130	-		
Dichlorodifluoromethane	91		-		70-130	-		
Chloromethane	97		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	101		-		70-130	-		
Methanol	81		-		70-130	-		
Vinyl chloride	101		-		70-130	-		
1,3-Butadiene	101		-		70-130	-		
Butane	85		-		70-130	-		
Bromomethane	94		-		70-130	-		
Chloroethane	101		-		70-130	-		
Ethyl Alcohol	87		-		70-130	-		
Dichlorofluoromethane	92		-		70-130	-		
Vinyl bromide	99		-		70-130	-		
Acrolein	89		-		70-130	-		
Acetone	105		-		70-130	-		
Acetonitrile	85		-		70-130	-		
Trichlorofluoromethane	100		-		70-130	-		
iso-Propyl Alcohol	108		-		70-130	-		
Acrylonitrile	88		-		70-130	-		
Pentane	89		-		70-130	-		
Ethyl ether	83		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: DECEMBER 2018 INDOOR AIR MONIT

Project Number: E1601

Lab Number: L1852191

Report Date: 12/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1192250-3								
1,1-Dichloroethene	92		-		70-130	-		
tert-Butyl Alcohol	88		-		70-130	-		
Methylene chloride	97		-		70-130	-		
3-Chloropropene	99		-		70-130	-		
Carbon disulfide	90		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	94		-		70-130	-		
trans-1,2-Dichloroethene	91		-		70-130	-		
1,1-Dichloroethane	92		-		70-130	-		
Methyl tert butyl ether	91		-		70-130	-		
Vinyl acetate	96		-		70-130	-		
2-Butanone	93		-		70-130	-		
cis-1,2-Dichloroethene	95		-		70-130	-		
Ethyl Acetate	100		-		70-130	-		
Chloroform	96		-		70-130	-		
Tetrahydrofuran	92		-		70-130	-		
2,2-Dichloropropane	86		-		70-130	-		
1,2-Dichloroethane	90		-		70-130	-		
n-Hexane	100		-		70-130	-		
Isopropyl Ether	91		-		70-130	-		
Ethyl-Tert-Butyl-Ether	89		-		70-130	-		
1,2-Dichloroethene (total)	92		-			-		
1,2-Dichloroethene (total)	92		-			-		
1,1,1-Trichloroethane	96		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: DECEMBER 2018 INDOOR AIR MONIT

Project Number: E1601

Lab Number: L1852191

Report Date: 12/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1192250-3								
1,1-Dichloropropene	95		-		70-130	-		
Benzene	93		-		70-130	-		
Carbon tetrachloride	100		-		70-130	-		
Cyclohexane	99		-		70-130	-		
Tertiary-Amyl Methyl Ether	88		-		70-130	-		
Dibromomethane	94		-		70-130	-		
1,2-Dichloropropane	100		-		70-130	-		
Bromodichloromethane	104		-		70-130	-		
1,4-Dioxane	102		-		70-130	-		
Trichloroethene	98		-		70-130	-		
2,2,4-Trimethylpentane	103		-		70-130	-		
Methyl Methacrylate	101		-		70-130	-		
Heptane	100		-		70-130	-		
cis-1,3-Dichloropropene	103		-		70-130	-		
4-Methyl-2-pentanone	101		-		70-130	-		
trans-1,3-Dichloropropene	89		-		70-130	-		
1,1,2-Trichloroethane	101		-		70-130	-		
Toluene	96		-		70-130	-		
1,3-Dichloropropane	94		-		70-130	-		
2-Hexanone	103		-		70-130	-		
Dibromochloromethane	112		-		70-130	-		
1,2-Dibromoethane	100		-		70-130	-		
Butyl Acetate	94		-		70-130	-		

Lab Control Sample Analysis **Batch Quality Control**

Project Name: DECEMBER 2018 INDOOR AIR MONIT

Project Number: E1601

Lab Number: L1852191

Report Date: 12/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1192250-3								
Octane	92		-		70-130	-		
Tetrachloroethene	99		-		70-130	-		
1,1,1,2-Tetrachloroethane	99		-		70-130	-		
Chlorobenzene	101		-		70-130	-		
Ethylbenzene	99		-		70-130	-		
p/m-Xylene	100		-		70-130	-		
Bromoform	114		-		70-130	-		
Styrene	98		-		70-130	-		
1,1,2,2-Tetrachloroethane	111		-		70-130	-		
o-Xylene	104		-		70-130	-		
1,2,3-Trichloropropane	98		-		70-130	-		
Nonane (C9)	100		-		70-130	-		
Isopropylbenzene	98		-		70-130	-		
Bromobenzene	96		-		70-130	-		
o-Chlorotoluene	97		-		70-130	-		
n-Propylbenzene	97		-		70-130	-		
p-Chlorotoluene	97		-		70-130	-		
4-Ethyltoluene	103		-		70-130	-		
1,3,5-Trimethylbenzene	101		-		70-130	-		
tert-Butylbenzene	103		-		70-130	-		
1,2,4-Trimethylbenzene	111		-		70-130	-		
Decane (C10)	105		-		70-130	-		
Benzyl chloride	113		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1192250-3								
1,3-Dichlorobenzene	108		-		70-130	-		
1,4-Dichlorobenzene	108		-		70-130	-		
sec-Butylbenzene	103		-		70-130	-		
p-Isopropyltoluene	97		-		70-130	-		
1,2-Dichlorobenzene	107		-		70-130	-		
n-Butylbenzene	108		-		70-130	-		
1,2-Dibromo-3-chloropropane	104		-		70-130	-		
Undecane	119		-		70-130	-		
Dodecane (C12)	144	Q	-		70-130	-		
1,2,4-Trichlorobenzene	127		-		70-130	-		
Naphthalene	104		-		70-130	-		
1,2,3-Trichlorobenzene	121		-		70-130	-		
Hexachlorobutadiene	124		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: DECEMBER 2018 INDOOR AIR MONIT

Project Number: E1601

Lab Number: L1852191

Report Date: 12/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-08 Batch: WG1192251-3								
Propylene	102		-		70-130	-		25
Dichlorodifluoromethane	96		-		70-130	-		25
Chloromethane	97		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	99		-		70-130	-		25
Vinyl chloride	99		-		70-130	-		25
1,3-Butadiene	103		-		70-130	-		25
Bromomethane	100		-		70-130	-		25
Chloroethane	93		-		70-130	-		25
Ethyl Alcohol	88		-		70-130	-		25
Vinyl bromide	99		-		70-130	-		25
Acetone	108		-		70-130	-		25
Trichlorofluoromethane	99		-		70-130	-		25
iso-Propyl Alcohol	112		-		70-130	-		25
Acrylonitrile	86		-		70-130	-		25
1,1-Dichloroethene	92		-		70-130	-		25
tert-Butyl Alcohol ¹	88		-		70-130	-		25
Methylene chloride	96		-		70-130	-		25
3-Chloropropene	101		-		70-130	-		25
Carbon disulfide	89		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	93		-		70-130	-		25
trans-1,2-Dichloroethene	91		-		70-130	-		25
1,1-Dichloroethane	92		-		70-130	-		25
Methyl tert butyl ether	92		-		70-130	-		25

Lab Control Sample Analysis **Batch Quality Control**

Project Name: DECEMBER 2018 INDOOR AIR MONIT

Project Number: E1601

Lab Number: L1852191

Report Date: 12/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-08 Batch: WG1192251-3								
Vinyl acetate	94		-		70-130	-		25
2-Butanone	94		-		70-130	-		25
cis-1,2-Dichloroethene	93		-		70-130	-		25
Ethyl Acetate	99		-		70-130	-		25
Chloroform	95		-		70-130	-		25
Tetrahydrofuran	87		-		70-130	-		25
1,2-Dichloroethane	90		-		70-130	-		25
n-Hexane	94		-		70-130	-		25
1,1,1-Trichloroethane	95		-		70-130	-		25
Benzene	93		-		70-130	-		25
Carbon tetrachloride	99		-		70-130	-		25
Cyclohexane	96		-		70-130	-		25
Dibromomethane ¹	82		-		70-130	-		25
1,2-Dichloropropane	95		-		70-130	-		25
Bromodichloromethane	100		-		70-130	-		25
1,4-Dioxane	100		-		70-130	-		25
Trichloroethene	93		-		70-130	-		25
2,2,4-Trimethylpentane	97		-		70-130	-		25
cis-1,3-Dichloropropene	100		-		70-130	-		25
4-Methyl-2-pentanone	98		-		70-130	-		25
trans-1,3-Dichloropropene	85		-		70-130	-		25
1,1,2-Trichloroethane	98		-		70-130	-		25
Toluene	98		-		70-130	-		25

Lab Control Sample Analysis **Batch Quality Control**

Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-08 Batch: WG1192251-3								
2-Hexanone	102		-		70-130	-		25
Dibromochloromethane	111		-		70-130	-		25
1,2-Dibromoethane	100		-		70-130	-		25
Tetrachloroethene	97		-		70-130	-		25
1,1,1,2-Tetrachloroethane	96		-		70-130	-		25
Chlorobenzene	99		-		70-130	-		25
Ethylbenzene	98		-		70-130	-		25
p/m-Xylene	97		-		70-130	-		25
Bromoform	111		-		70-130	-		25
Styrene	99		-		70-130	-		25
1,1,2,2-Tetrachloroethane	105		-		70-130	-		25
o-Xylene	98		-		70-130	-		25
1,2,3-Trichloropropane ¹	96		-		70-130	-		25
Isopropylbenzene	97		-		70-130	-		25
Bromobenzene ¹	94		-		70-130	-		25
4-Ethyltoluene	104		-		70-130	-		25
1,3,5-Trimethylbenzene	101		-		70-130	-		25
1,2,4-Trimethylbenzene	106		-		70-130	-		25
Benzyl chloride	109		-		70-130	-		25
1,3-Dichlorobenzene	109		-		70-130	-		25
1,4-Dichlorobenzene	107		-		70-130	-		25
sec-Butylbenzene	101		-		70-130	-		25
p-Isopropyltoluene	96		-		70-130	-		25

Lab Control Sample Analysis Batch Quality Control

Project Name: DECEMBER 2018 INDOOR AIR MONIT

Project Number: E1601

Lab Number: L1852191

Report Date: 12/27/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-08 Batch: WG1192251-3								
1,2-Dichlorobenzene	108		-		70-130	-		25
n-Butylbenzene	114		-		70-130	-		25
1,2,4-Trichlorobenzene	135	Q	-		70-130	-		25
Naphthalene	109		-		70-130	-		25
1,2,3-Trichlorobenzene	133	Q	-		70-130	-		25
Hexachlorobutadiene	128		-		70-130	-		25

Lab Duplicate Analysis Batch Quality Control

Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1192250-5 QC Sample: L1852191-02 Client ID: IA-3						
Dichlorodifluoromethane	0.486	0.482	ppbV	1		25
Chloromethane	0.568	0.564	ppbV	1		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	163	172	ppbV	5		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	8.87	9.04	ppbV	2		25
Trichlorofluoromethane	0.200	0.228	ppbV	13		25
Isopropanol	13.2	13.8	ppbV	4		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	0.720	0.745	ppbV	3		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	7.34	7.81	ppbV	6		25

Lab Duplicate Analysis Batch Quality Control

Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1192250-5 QC Sample: L1852191-02 Client ID: IA-3						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.230	0.271	ppbV	16		25
Benzene	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.308	0.315	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.636	0.651	ppbV	2		25

Lab Duplicate Analysis Batch Quality Control

Project Name: DECEMBER 2018 INDOOR AIR MONIT

Project Number: E1601

Lab Number: L1852191

Report Date: 12/27/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1192250-5 QC Sample: L1852191-02 Client ID: IA-3						
p/m-Xylene	2.45	2.52	ppbV	3		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	0.659	0.687	ppbV	4		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: DECEMBER 2018 INDOOR AIR MONIT

Project Number: E1601

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1852191

Report Date: 12/27/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1192251-5 QC Sample: L1852191-02 Client ID: IA-3						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.086	0.094	ppbV	9		25
Trichloroethene	0.091	0.105	ppbV	14		25
Tetrachloroethene	0.049	0.051	ppbV	4		25
1,2-Dichloroethene (total)	ND	ND	ppbV	NC		25

Project Name: DECEMBER 2018 INDOOR AIR MONIT

Lab Number: Serial_No:12271814:14
L1852191

Project Number: E1601

Report Date: 12/27/18

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
L1852191-01	IA-5	0334	Flow 5	12/17/18	281364		-	-	-	Pass	4.5	4.1	9
L1852191-01	IA-5	414	2.7L Can	12/17/18	281364	L1850424-01	Pass	-29.7	-6.7	-	-	-	-
L1852191-02	IA-3	01025	Flow 5	12/17/18	281364		-	-	-	Pass	4.5	4.3	5
L1852191-02	IA-3	148	2.7L Can	12/17/18	281364	L1850771-01	Pass	-29.8	-4.0	-	-	-	-
L1852191-03	IA-4	0643	Flow 5	12/17/18	281364		-	-	-	Pass	4.5	4.4	2
L1852191-03	IA-4	377	2.7L Can	12/17/18	281364	L1850424-01	Pass	-29.7	-7.3	-	-	-	-
L1852191-04	IA-4 DUPLICATE	0716	Flow 3	12/17/18	281364		-	-	-	Pass	4.5	4.4	2
L1852191-04	IA-4 DUPLICATE	370	2.7L Can	12/17/18	281364	L1850424-01	Pass	-29.8	-6.8	-	-	-	-
L1852191-05	IA-6	01131	Flow 5	12/17/18	281364		-	-	-	Pass	4.5	4.2	7
L1852191-05	IA-6	362	2.7L Can	12/17/18	281364	L1850771-01	Pass	-29.8	-4.4	-	-	-	-
L1852191-06	IA-1	0726	Flow 5	12/17/18	281364		-	-	-	Pass	4.5	4.0	12
L1852191-06	IA-1	1719	2.7L Can	12/17/18	281364	L1850771-01	Pass	-29.8	-7.2	-	-	-	-
L1852191-07	IA-2	0873	Flow 5	12/17/18	281364		-	-	-	Pass	4.5	4.3	5
L1852191-07	IA-2	163	2.7L Can	12/17/18	281364	L1850424-01	Pass	-29.8	-7.8	-	-	-	-
L1852191-08	OA-1	0484	Flow 5	12/17/18	281364		-	-	-	Pass	4.5	4.3	5

Project Name: DECEMBER 2018 INDOOR AIR MONIT

Serial_No:12271814:14
Lab Number: L1852191

Project Number: E1601

Report Date: 12/27/18

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
L1852191-08	OA-1	369	2.7L Can	12/17/18	281364	L1850424-01	Pass	-29.8	-4.7	-	-	-	-

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

Lab Number: L1850424
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850424-01
Client ID: CAN 1741 SHELF 5
Sample Location:

Date Collected: 12/07/18 09:00
Date Received: 12/07/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 12/08/18 00:19
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	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: L1850424
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850424-01
Client ID: CAN 1741 SHELF 5
Sample Location:

Date Collected: 12/07/18 09:00
Date Received: 12/07/18
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
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
1,1,1-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
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



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

Lab Number: L1850424
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850424-01
Client ID: CAN 1741 SHELF 5
Sample Location:

Date Collected: 12/07/18 09:00
Date Received: 12/07/18
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								
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
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1850424**Project Number:** CANISTER QC BAT**Report Date:** 12/27/18**Air Canister Certification Results**

Lab ID: L1850424-01

Date Collected: 12/07/18 09:00

Client ID: CAN 1741 SHELF 5

Date Received: 12/07/18

Sample Location:

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								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1850424**Project Number:** CANISTER QC BAT**Report Date:** 12/27/18**Air Canister Certification Results**

Lab ID: L1850424-01

Date Collected: 12/07/18 09:00

Client ID: CAN 1741 SHELF 5

Date Received: 12/07/18

Sample Location:

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					
Silanol, Trimethyl-	1.8	NJ	ppbV		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	82		60-140
Bromochloromethane	80		60-140
chlorobenzene-d5	81		60-140

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

Lab Number: L1850424
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850424-01
Client ID: CAN 1741 SHELF 5
Sample Location:

Date Collected: 12/07/18 09:00
Date Received: 12/07/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 12/08/18 00:19
Analyst: RY

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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

Lab Number: L1850424
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850424-01
Client ID: CAN 1741 SHELF 5
Sample Location:

Date Collected: 12/07/18 09:00
Date Received: 12/07/18
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								
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1850424**Project Number:** CANISTER QC BAT**Report Date:** 12/27/18**Air Canister Certification Results**

Lab ID: L1850424-01

Date Collected: 12/07/18 09:00

Client ID: CAN 1741 SHELF 5

Date Received: 12/07/18

Sample Location:

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								
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	78		60-140
bromochloromethane	75		60-140
chlorobenzene-d5	77		60-140



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

Lab Number: L1850771
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850771-01
Client ID: CAN 2685 SHELF 4
Sample Location:

Date Collected: 12/11/18 08:00
Date Received: 12/11/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 12/11/18 19:33
Analyst: MB

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: L1850771
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850771-01
Client ID: CAN 2685 SHELF 4
Sample Location:

Date Collected: 12/11/18 08:00
Date Received: 12/11/18
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
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
1,1,1-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
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1



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

Lab Number: L1850771
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850771-01
Client ID: CAN 2685 SHELF 4
Sample Location:

Date Collected: 12/11/18 08:00
Date Received: 12/11/18
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								
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
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1



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

Lab Number: L1850771
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850771-01
Client ID: CAN 2685 SHELF 4
Sample Location:

Date Collected: 12/11/18 08:00
Date Received: 12/11/18
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								
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1850771**Project Number:** CANISTER QC BAT**Report Date:** 12/27/18**Air Canister Certification Results**

Lab ID: L1850771-01

Date Collected: 12/11/18 08:00

Client ID: CAN 2685 SHELF 4

Date Received: 12/11/18

Sample Location:

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	96		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	97		60-140

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

Lab Number: L1850771
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850771-01
Client ID: CAN 2685 SHELF 4
Sample Location:

Date Collected: 12/11/18 08:00
Date Received: 12/11/18
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 12/11/18 19:33
Analyst: MB

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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

Lab Number: L1850771
Report Date: 12/27/18

Air Canister Certification Results

Lab ID: L1850771-01
Client ID: CAN 2685 SHELF 4
Sample Location:

Date Collected: 12/11/18 08:00
Date Received: 12/11/18
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								
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1850771**Project Number:** CANISTER QC BAT**Report Date:** 12/27/18**Air Canister Certification Results**

Lab ID: L1850771-01

Date Collected: 12/11/18 08:00

Client ID: CAN 2685 SHELF 4

Date Received: 12/11/18

Sample Location:

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								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

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

Project Name: DECEMBER 2018 INDOOR AIR MONIT**Lab Number:** L1852191**Project Number:** E1601**Report Date:** 12/27/18**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

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

N/A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1852191-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1852191-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1852191-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1852191-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1852191-05A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1852191-06A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1852191-07A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1852191-08A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

GLOSSARY

Acronyms

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.
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.
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.
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.

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.

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.

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.

Report Format: Data Usability Report



Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- 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.
- 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.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- 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.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: DECEMBER 2018 INDOOR AIR MONIT
Project Number: E1601

Lab Number: L1852191
Report Date: 12/27/18

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.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**Revision **12**

Published Date: 10/9/2018 4:58:19 PM

Page 1 of 1

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**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**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****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****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.****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

PAGE 1 OF 1

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

Client Information

Client: Hazard Evaluations Inc.

Address: 3636 N. Buffalo Rd
Orchard Park, NY 14127

Phone: 716-667-3130

Fax: 716-667-3156

Email: mwhittman@hazardevaluations.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

Project Information

Project Name: December 2018 Indoor Air Monitoring

Project Location: 155 Chandler St. Buffalo, NY

Project #: e1601

Project Manager: Candy Fox

ALPHA Quote #:

Turn-Around Time

☒ Standard

☐ RUSH (only confirmed if pre-approved)

5 day firm

Date Due:

Time:

Date Rec'd in Lab: 12/19/18

Report Information - Data Deliverables

☐ FAX

☒ ADEX

Criteria Checker: ASP-B
(Default based on Regulatory Criteria Indicated)

Other Formats:

☐ EMAIL (standard pdf report)

☐ Additional Deliverables:

Report to: (if different than Project Manager)

ALPHA Job #: 4852191

Billing Information

☒ Same as Client info PO #: e1601

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

ANALYSIS

☐

TO-15
TO-15 SIM
APH
Fixed Gases
Sulfides & Mercaptans by TO-15

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	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum												
52191.01	IA-5	12/18/18	740am	340pm	-29.7"	-6.96"	AA	EB	2.7L	414	0334	X						
.02	IA-3	12/18/18	745am	345pm	-29.81"	-4.52"	AA	EB	2.7L	148	01025	X						
.03	IA-4	12/18/18	755am	3:55pm	-29.32"	-8.22"	AA	EB	2.7L	377	0643	X						
.04	IA-4 Duplicate	12/18/18	755am	3:55pm	-29.68"	-7.62"	AA	EB	2.7L	370	0716	X						
.05	IA-6	12/18/18	805am	4:05pm	-29.30"	-5.88"	AA	EB	2.7L	362	01131	X						
.06	IA-1	12/18/18	810am	410pm	-29.84"	-7.63"	AA	EB	2.7L	1719	0726	X						
.07	IA-2	12/18/18	8:15am	4:15pm	-29.91"	-8.13"	AA	EB	2.7L	163	0873	X						
.08	OA-1	12/18/18	8:20am	4:20pm	-29.65"	-6.59"	AA	EB	2.7L	369	0484	X						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)

SV = Soil Vapor/Landfill Gas/SVE

Other = Please Specify

Container Type

CS

Relinquished By:

Date/Time

Received By:

Date/Time:

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:	L1901687
Client:	Hazard Evaluations, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Mark Hanna
Phone:	(716) 667-3130
Project Name:	CY18 SMP GW SAMPLING
Project Number:	E1601
Report Date:	01/17/19

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: CY18 SMP GW SAMPLING
Project Number: E1601

Lab Number: L1901687
Report Date: 01/17/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1901687-01	TRIP BLANK 011419	WATER	155 CHANDLER ST., BUFFALO, NY	01/14/19 11:00	01/14/19
L1901687-02	EQUIPMENT RINSATE 011419	WATER	155 CHANDLER ST., BUFFALO, NY	01/14/19 11:10	01/14/19
L1901687-03	MW-3	WATER	155 CHANDLER ST., BUFFALO, NY	01/14/19 11:15	01/14/19
L1901687-04	MW-3 (DUPLICATE)	WATER	155 CHANDLER ST., BUFFALO, NY	01/14/19 11:15	01/14/19

Project Name: CY18 SMP GW SAMPLING
Project Number: E1601

Lab Number: L1901687
Report Date: 01/17/19

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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

Project Name: CY18 SMP GW SAMPLING
Project Number: E1601

Lab Number: L1901687
Report Date: 01/17/19

Case Narrative (continued)

Report Submission

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

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:



Kelly Stenstrom

Title: Technical Director/Representative

Date: 01/17/19

ORGANICS

VOLATILES

Project Name: CY18 SMP GW SAMPLING**Lab Number:** L1901687**Project Number:** E1601**Report Date:** 01/17/19**SAMPLE RESULTS**

Lab ID: L1901687-01
 Client ID: TRIP BLANK 011419
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 01/14/19 11:00
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/16/19 16:53
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY18 SMP GW SAMPLING**Lab Number:** L1901687**Project Number:** E1601**Report Date:** 01/17/19**SAMPLE RESULTS****Lab ID:** L1901687-01**Date Collected:** 01/14/19 11:00**Client ID:** TRIP BLANK 011419**Date Received:** 01/14/19**Sample Location:** 155 CHANDLER ST., BUFFALO, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	97		70-130

Project Name: CY18 SMP GW SAMPLING**Lab Number:** L1901687**Project Number:** E1601**Report Date:** 01/17/19**SAMPLE RESULTS**

Lab ID: L1901687-02
 Client ID: EQUIPMENT RINSATE 011419
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 01/14/19 11:10
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/16/19 17:19
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY18 SMP GW SAMPLING**Lab Number:** L1901687**Project Number:** E1601**Report Date:** 01/17/19**SAMPLE RESULTS**

Lab ID: L1901687-02
 Client ID: EQUIPMENT RINSATE 011419
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 01/14/19 11:10
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.7	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

Project Name: CY18 SMP GW SAMPLING**Lab Number:** L1901687**Project Number:** E1601**Report Date:** 01/17/19**SAMPLE RESULTS**

Lab ID: L1901687-03
 Client ID: MW-3
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 01/14/19 11:15
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/16/19 17:44
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.29	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY18 SMP GW SAMPLING**Lab Number:** L1901687**Project Number:** E1601**Report Date:** 01/17/19**SAMPLE RESULTS****Lab ID:** L1901687-03**Date Collected:** 01/14/19 11:15**Client ID:** MW-3**Date Received:** 01/14/19**Sample Location:** 155 CHANDLER ST., BUFFALO, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	98		70-130

Project Name: CY18 SMP GW SAMPLING**Lab Number:** L1901687**Project Number:** E1601**Report Date:** 01/17/19**SAMPLE RESULTS**

Lab ID: L1901687-04
 Client ID: MW-3 (DUPLICATE)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 01/14/19 11:15
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 01/16/19 18:09
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.35	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY18 SMP GW SAMPLING**Lab Number:** L1901687**Project Number:** E1601**Report Date:** 01/17/19**SAMPLE RESULTS**

Lab ID: L1901687-04
 Client ID: MW-3 (DUPLICATE)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 01/14/19 11:15
 Date Received: 01/14/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.2	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	100		70-130

Project Name: CY18 SMP GW SAMPLING

Lab Number: L1901687

Project Number: E1601

Report Date: 01/17/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/16/19 16:28
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198334-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CY18 SMP GW SAMPLING

Lab Number: L1901687

Project Number: E1601

Report Date: 01/17/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/16/19 16:28
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198334-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: CY18 SMP GW SAMPLING

Lab Number: L1901687

Project Number: E1601

Report Date: 01/17/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 01/16/19 16:28
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1198334-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	96		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY18 SMP GW SAMPLING

Project Number: E1601

Lab Number: L1901687

Report Date: 01/17/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198334-3 WG1198334-4								
Methylene chloride	96		96		70-130	0		20
1,1-Dichloroethane	95		95		70-130	0		20
Chloroform	92		87		70-130	6		20
Carbon tetrachloride	88		82		63-132	7		20
1,2-Dichloropropane	94		90		70-130	4		20
Dibromochloromethane	91		91		63-130	0		20
1,1,2-Trichloroethane	97		96		70-130	1		20
Tetrachloroethene	96		90		70-130	6		20
Chlorobenzene	93		90		75-130	3		20
Trichlorofluoromethane	100		96		62-150	4		20
1,2-Dichloroethane	89		87		70-130	2		20
1,1,1-Trichloroethane	93		86		67-130	8		20
Bromodichloromethane	92		88		67-130	4		20
trans-1,3-Dichloropropene	95		93		70-130	2		20
cis-1,3-Dichloropropene	91		90		70-130	1		20
Bromoform	94		95		54-136	1		20
1,1,2,2-Tetrachloroethane	98		99		67-130	1		20
Benzene	91		87		70-130	4		20
Toluene	97		91		70-130	6		20
Ethylbenzene	93		87		70-130	7		20
Chloromethane	96		90		64-130	6		20
Bromomethane	80		82		39-139	2		20
Vinyl chloride	100		94		55-140	6		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CY18 SMP GW SAMPLING

Project Number: E1601

Lab Number: L1901687

Report Date: 01/17/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198334-3 WG1198334-4								
Chloroethane	110		100		55-138	10		20
1,1-Dichloroethene	100		96		61-145	4		20
trans-1,2-Dichloroethene	97		91		70-130	6		20
Trichloroethene	98		92		70-130	6		20
1,2-Dichlorobenzene	94		93		70-130	1		20
1,3-Dichlorobenzene	96		92		70-130	4		20
1,4-Dichlorobenzene	96		92		70-130	4		20
Methyl tert butyl ether	98		100		63-130	2		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	95		90		70-130	5		20
cis-1,2-Dichloroethene	90		90		70-130	0		20
Styrene	95		90		70-130	5		20
Dichlorodifluoromethane	110		100		36-147	10		20
Acetone	120		120		58-148	0		20
Carbon disulfide	120		110		51-130	9		20
2-Butanone	95		95		63-138	0		20
4-Methyl-2-pentanone	95		98		59-130	3		20
2-Hexanone	84		89		57-130	6		20
1,2-Dibromoethane	95		94		70-130	1		20
n-Butylbenzene	94		88		53-136	7		20
sec-Butylbenzene	97		93		70-130	4		20
tert-Butylbenzene	84		79		70-130	6		20
1,2-Dibromo-3-chloropropane	95		100		41-144	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY18 SMP GW SAMPLING

Project Number: E1601

Lab Number: L1901687

Report Date: 01/17/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1198334-3 WG1198334-4								
Isopropylbenzene	99		93		70-130	6		20
p-Isopropyltoluene	96		90		70-130	6		20
Naphthalene	92		94		70-130	2		20
n-Propylbenzene	98		92		69-130	6		20
1,2,4-Trichlorobenzene	88		86		70-130	2		20
1,3,5-Trimethylbenzene	98		92		64-130	6		20
1,2,4-Trimethylbenzene	96		92		70-130	4		20
Methyl Acetate	96		98		70-130	2		20
Cyclohexane	95		91		70-130	4		20
Freon-113	100		94		70-130	6		20
Methyl cyclohexane	95		90		70-130	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		97		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	96		96		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: CY18 SMP GW SAMPLING

Project Number: E1601

Lab Number: L1901687

Report Date: 01/17/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198334-6 WG1198334-7 QC Sample: L1901687-03 Client ID: MW-3												
Methylene chloride	ND	10	10	100		11	110		70-130	10		20
1,1-Dichloroethane	ND	10	10	100		11	110		70-130	10		20
Chloroform	ND	10	10	100		11	110		70-130	10		20
Carbon tetrachloride	ND	10	10	100		11	110		63-132	10		20
1,2-Dichloropropane	ND	10	11	110		11	110		70-130	0		20
Dibromochloromethane	ND	10	10	100		11	110		63-130	10		20
1,1,2-Trichloroethane	ND	10	11	110		12	120		70-130	9		20
Tetrachloroethene	ND	10	9.9	99		11	110		70-130	11		20
Chlorobenzene	ND	10	10	100		10	100		75-130	0		20
Trichlorofluoromethane	ND	10	12	120		13	130		62-150	8		20
1,2-Dichloroethane	ND	10	10	100		11	110		70-130	10		20
1,1,1-Trichloroethane	ND	10	11	110		11	110		67-130	0		20
Bromodichloromethane	ND	10	10	100		11	110		67-130	10		20
trans-1,3-Dichloropropene	ND	10	10	100		11	110		70-130	10		20
cis-1,3-Dichloropropene	ND	10	9.6	96		10	100		70-130	4		20
Bromoform	ND	10	10	100		11	110		54-136	10		20
1,1,2,2-Tetrachloroethane	ND	10	11	110		12	120		67-130	9		20
Benzene	0.29J	10	10	100		11	110		70-130	10		20
Toluene	ND	10	10	100		11	110		70-130	10		20
Ethylbenzene	ND	10	9.9	99		10	100		70-130	1		20
Chloromethane	ND	10	10	100		11	110		64-130	10		20
Bromomethane	ND	10	4.5	45		5.4	54		39-139	18		20
Vinyl chloride	ND	10	11	110		12	120		55-140	9		20

Matrix Spike Analysis

Batch Quality Control

Project Name: CY18 SMP GW SAMPLING

Project Number: E1601

Lab Number: L1901687

Report Date: 01/17/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198334-6 WG1198334-7 QC Sample: L1901687-03 Client ID: MW-3												
Chloroethane	ND	10	12	120		13	130		55-138	8		20
1,1-Dichloroethene	ND	10	11	110		12	120		61-145	9		20
trans-1,2-Dichloroethene	ND	10	10	100		11	110		70-130	10		20
Trichloroethene	ND	10	10	100		12	120		70-130	18		20
1,2-Dichlorobenzene	ND	10	10	100		11	110		70-130	10		20
1,3-Dichlorobenzene	ND	10	9.8	98		11	110		70-130	12		20
1,4-Dichlorobenzene	ND	10	9.9	99		11	110		70-130	11		20
Methyl tert butyl ether	ND	10	11	110		12	120		63-130	9		20
p/m-Xylene	ND	20	21	105		22	110		70-130	5		20
o-Xylene	ND	20	21	105		22	110		70-130	5		20
cis-1,2-Dichloroethene	ND	10	10	100		11	110		70-130	10		20
Styrene	ND	20	20	100		22	110		70-130	10		20
Dichlorodifluoromethane	ND	10	12	120		13	130		36-147	8		20
Acetone	2.5J	10	15	150	Q	16	160	Q	58-148	6		20
Carbon disulfide	ND	10	14	140	Q	14	140	Q	51-130	0		20
2-Butanone	ND	10	12	120		14	140	Q	63-138	15		20
4-Methyl-2-pentanone	ND	10	13	130		14	140	Q	59-130	7		20
2-Hexanone	ND	10	12	120		14	140	Q	57-130	15		20
1,2-Dibromoethane	ND	10	11	110		12	120		70-130	9		20
n-Butylbenzene	ND	10	9.4	94		10	100		53-136	6		20
sec-Butylbenzene	ND	10	10	100		11	110		70-130	10		20
tert-Butylbenzene	ND	10	8.7	87		9.5	95		70-130	9		20
1,2-Dibromo-3-chloropropane	ND	10	12	120		13	130		41-144	8		20

Matrix Spike Analysis

Batch Quality Control

Project Name: CY18 SMP GW SAMPLING

Project Number: E1601

Lab Number: L1901687

Report Date: 01/17/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1198334-6 WG1198334-7 QC Sample: L1901687-03 Client ID: MW-3												
Isopropylbenzene	ND	10	10	100		11	110		70-130	10		20
p-Isopropyltoluene	ND	10	9.8	98		11	110		70-130	12		20
Naphthalene	ND	10	11	110		13	130		70-130	17		20
n-Propylbenzene	ND	10	10	100		11	110		69-130	10		20
1,2,4-Trichlorobenzene	ND	10	9.3	93		10	100		70-130	7		20
1,3,5-Trimethylbenzene	ND	10	10	100		11	110		64-130	10		20
1,2,4-Trimethylbenzene	ND	10	10	100		11	110		70-130	10		20
Methyl Acetate	ND	10	10	100		11	110		70-130	10		20
Cyclohexane	ND	10	11	110		11	110		70-130	0		20
Freon-113	ND	10	11	110		11	110		70-130	0		20
Methyl cyclohexane	ND	10	10	100		11	110		70-130	10		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	107		105		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	100		100		70-130
Toluene-d8	98		97		70-130

Project Name: CY18 SMP GW SAMPLING
Project Number: E1601

Serial_No:01171918:46
Lab Number: L1901687
Report Date: 01/17/19

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1901687-01A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-01B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-01C	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-02A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-02B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-02C	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-03A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-03A1	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-03A2	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-03B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-03B1	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-03B2	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-03C	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-03C1	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-03C2	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-04A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-04B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)
L1901687-04C	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260-R2(14)

Project Name: CY18 SMP GW SAMPLING
Project Number: E1601

Lab Number: L1901687
Report Date: 01/17/19

GLOSSARY

Acronyms

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.
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.
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.
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.

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.

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.

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.

Report Format: DU Report with 'J' Qualifiers



Project Name: CY18 SMP GW SAMPLING
Project Number: E1601

Lab Number: L1901687
Report Date: 01/17/19

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- 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.
- 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.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- 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.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Project Name: CY18 SMP GW SAMPLING
Project Number: E1601

Lab Number: L1901687
Report Date: 01/17/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 12

Published Date: 10/9/2018 4:58:19 PM

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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**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**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****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****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.****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.

[illegible]



ANALYTICAL REPORT

Lab Number:	L1905849
Client:	Hazard Evaluations, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Mark Hanna
Phone:	(716) 667-3130
Project Name:	FEB2019 INDOOR AIR MONITORING
Project Number:	E1601
Report Date:	02/20/19

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: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1905849-01	IA-5(0219)	AIR	155 CHANDLER ST., BUFFALO, NY	02/13/19 15:50	02/13/19
L1905849-02	IA-5(0219) DUPLICATE	AIR	155 CHANDLER ST., BUFFALO, NY	02/13/19 15:50	02/13/19

Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

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: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on February 1, 2019. The canister certification results are provided as an addendum.

L1905849-01 & -02: results for Acetone should be considered estimated due to co-elution with a non-target peak.

WG1207888-5 results for Acetone should be considered estimated due to co-elution with a non-target peak.

The WG1207888-5 Laboratory Duplicate RPD for ethyl acetate (28%), performed on L1905849-02, is above the acceptance criteria; however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid

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: 02/20/19

AIR

Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

SAMPLE RESULTS

Lab ID: L1905849-01
 Client ID: IA-5(0219)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 02/13/19 15:50
 Date Received: 02/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 02/18/19 19:54
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.493	0.200	--	2.44	0.989	--		1
Chloromethane	0.465	0.200	--	0.960	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	158	5.00	--	298	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	14.1	1.00	--	33.5	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	87.6	0.500	--	215	1.23	--		1
tert-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
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	0.595	0.200	--	2.36	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.92	0.500	--	5.66	1.47	--		1
Ethyl Acetate	0.888	0.500	--	3.20	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: FEB2019 INDOOR AIR MONITORING**Lab Number:** L1905849**Project Number:** E1601**Report Date:** 02/20/19**SAMPLE RESULTS**

Lab ID: L1905849-01

Client ID: IA-5(0219)

Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 02/13/19 15:50

Date Received: 02/13/19

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.724	0.200	--	2.55	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.10	0.500	--	4.51	2.05	--		1
Xylene (Total)	2.43	0.200	--	10.6	0.869	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.42	0.200	--	5.35	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.460	0.200	--	2.00	0.869	--		1
p/m-Xylene	1.88	0.400	--	8.17	1.74	--		1
1,2-Dichloroethene (total)	0.595	0.200	--	2.36	0.793	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

SAMPLE RESULTS

Lab ID: L1905849-01
 Client ID: IA-5(0219)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 02/13/19 15:50
 Date Received: 02/13/19
 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	0.553	0.200	--	2.40	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	89		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	90		60-140



Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

SAMPLE RESULTS

Lab ID: L1905849-01
 Client ID: IA-5(0219)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 02/13/19 15:50
 Date Received: 02/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 02/18/19 19:54
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.032	0.020	--	0.127	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.174	0.020	--	1.09	0.126	--		1
Trichloroethene	0.845	0.020	--	4.54	0.107	--		1
Tetrachloroethene	0.052	0.020	--	0.353	0.136	--		1
1,2-Dichloroethene (total)	0.032	0.020	--	0.127	0.079	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	88		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	88		60-140



Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

SAMPLE RESULTS

Lab ID: L1905849-02
 Client ID: IA-5(0219) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 02/13/19 15:50
 Date Received: 02/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 02/18/19 20:34
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.503	0.200	--	2.49	0.989	--		1
Chloromethane	0.487	0.200	--	1.01	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	167	5.00	--	315	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	15.3	1.00	--	36.3	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	92.9	0.500	--	228	1.23	--		1
tert-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
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	0.631	0.200	--	2.50	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.09	0.500	--	6.16	1.47	--		1
Ethyl Acetate	0.909	0.500	--	3.28	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

SAMPLE RESULTS

Lab ID: L1905849-02
 Client ID: IA-5(0219) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 02/13/19 15:50
 Date Received: 02/13/19
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.798	0.200	--	2.81	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.07	0.500	--	4.39	2.05	--		1
Xylene (Total)	2.45	0.200	--	10.6	0.869	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.43	0.200	--	5.39	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.467	0.200	--	2.03	0.869	--		1
p/m-Xylene	1.88	0.400	--	8.17	1.74	--		1
1,2-Dichloroethene (total)	0.631	0.200	--	2.50	0.793	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

SAMPLE RESULTS

Lab ID: L1905849-02
 Client ID: IA-5(0219) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 02/13/19 15:50
 Date Received: 02/13/19
 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	0.562	0.200	--	2.44	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	90		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	89		60-140



Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

SAMPLE RESULTS

Lab ID: L1905849-02
 Client ID: IA-5(0219) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 02/13/19 15:50
 Date Received: 02/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 02/18/19 20:34
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.035	0.020	--	0.139	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.167	0.020	--	1.05	0.126	--		1
Trichloroethene	0.853	0.020	--	4.58	0.107	--		1
Tetrachloroethene	0.047	0.020	--	0.319	0.136	--		1
1,2-Dichloroethene (total)	0.035	0.020	--	0.139	0.079	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	87		60-140



Project Name: FEB2019 INDOOR AIR MONITORING**Lab Number:** L1905849**Project Number:** E1601**Report Date:** 02/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/18/19 14:58

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: WG1207888-4								
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
1,2-Dichloro-1,1,2,2-tetrafluoroethane	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
Ethyl Alcohol	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
iso-Propyl Alcohol	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
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: FEB2019 INDOOR AIR MONITORING**Lab Number:** L1905849**Project Number:** E1601**Report Date:** 02/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/18/19 14:58

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: WG1207888-4								
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
1,1,2-Trichloro-1,2,2-Trifluoroethane	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
Xylene (Total)	ND	0.200	--	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
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	0.200	--	ND	0.793	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,3-Dichloropropene, Total	ND	0.200	--	ND	0.908	--		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



Project Name: FEB2019 INDOOR AIR MONITORING**Lab Number:** L1905849**Project Number:** E1601**Report Date:** 02/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/18/19 14:58

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: WG1207888-4								
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
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



Project Name: FEB2019 INDOOR AIR MONITORING**Lab Number:** L1905849**Project Number:** E1601**Report Date:** 02/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/18/19 14:58

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: WG1207888-4								
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
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-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 (C10)	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



Project Name: FEB2019 INDOOR AIR MONITORING**Lab Number:** L1905849**Project Number:** E1601**Report Date:** 02/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/18/19 14:58

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: WG1207888-4								
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	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: FEB2019 INDOOR AIR MONITORING**Lab Number:** L1905849**Project Number:** E1601**Report Date:** 02/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 02/18/19 15:37

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1208168-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	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
Ethyl Alcohol	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	0.050	--	ND	0.281	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,2-Dichloroethene (total)	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
1,3-Dichloropropene, Total	ND	0.020	--	ND	0.091	--		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
1,1,2-Trichloro-1,2,2-Trifluoroethane	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



Project Name: FEB2019 INDOOR AIR MONITORING**Lab Number:** L1905849**Project Number:** E1601**Report Date:** 02/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 02/18/19 15:37

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1208168-4								
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		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
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
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
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.020	--	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	0.050	--	ND	0.188	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1



Project Name: FEB2019 INDOOR AIR MONITORING

Lab Number: L1905849

Project Number: E1601

Report Date: 02/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 02/18/19 15:37

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1208168-4								
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
Xylene (Total)	ND	0.020	--	ND	0.087	--		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
1,2,3-Trichloropropane	ND	0.020	--	ND	0.121	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		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	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
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



Project Name: FEB2019 INDOOR AIR MONITORING

Lab Number: L1905849

Project Number: E1601

Report Date: 02/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 02/18/19 15:37

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1208168-4								
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

Lab Control Sample Analysis

Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

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: WG1207888-3								
Chlorodifluoromethane	102		-		70-130	-		
Propylene	99		-		70-130	-		
Propane	95		-		70-130	-		
Dichlorodifluoromethane	101		-		70-130	-		
Chloromethane	90		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	109		-		70-130	-		
Methanol	95		-		70-130	-		
Vinyl chloride	116		-		70-130	-		
1,3-Butadiene	110		-		70-130	-		
Butane	90		-		70-130	-		
Bromomethane	106		-		70-130	-		
Chloroethane	119		-		70-130	-		
Ethyl Alcohol	98		-		40-160	-		
Dichlorofluoromethane	97		-		70-130	-		
Vinyl bromide	93		-		70-130	-		
Acrolein	104		-		70-130	-		
Acetone	75		-		40-160	-		
Acetonitrile	102		-		70-130	-		
Trichlorofluoromethane	92		-		70-130	-		
iso-Propyl Alcohol	74		-		40-160	-		
Acrylonitrile	102		-		70-130	-		
Pentane	90		-		70-130	-		
Ethyl ether	92		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

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: WG1207888-3								
1,1-Dichloroethene	116		-		70-130	-		
tert-Butyl Alcohol	118		-		70-130	-		
Methylene chloride	98		-		70-130	-		
3-Chloropropene	107		-		70-130	-		
Carbon disulfide	98		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	99		-		70-130	-		
trans-1,2-Dichloroethene	112		-		70-130	-		
1,1-Dichloroethane	114		-		70-130	-		
Methyl tert butyl ether	98		-		70-130	-		
Vinyl acetate	93		-		70-130	-		
2-Butanone	97		-		70-130	-		
cis-1,2-Dichloroethene	116		-		70-130	-		
Ethyl Acetate	105		-		70-130	-		
Chloroform	113		-		70-130	-		
Tetrahydrofuran	92		-		70-130	-		
2,2-Dichloropropane	99		-		70-130	-		
1,2-Dichloroethane	104		-		70-130	-		
n-Hexane	114		-		70-130	-		
Isopropyl Ether	95		-		70-130	-		
Ethyl-Tert-Butyl-Ether	101		-		70-130	-		
1,2-Dichloroethene (total)	114		-			-		
1,2-Dichloroethene (total)	114		-			-		
1,1,1-Trichloroethane	96		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

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: WG1207888-3								
1,1-Dichloropropene	105		-		70-130	-		
Benzene	105		-		70-130	-		
Carbon tetrachloride	101		-		70-130	-		
Cyclohexane	114		-		70-130	-		
Tertiary-Amyl Methyl Ether	98		-		70-130	-		
Dibromomethane	92		-		70-130	-		
1,2-Dichloropropane	98		-		70-130	-		
Bromodichloromethane	102		-		70-130	-		
1,4-Dioxane	102		-		70-130	-		
Trichloroethene	103		-		70-130	-		
2,2,4-Trimethylpentane	116		-		70-130	-		
Methyl Methacrylate	63		-		40-160	-		
Heptane	96		-		70-130	-		
cis-1,3-Dichloropropene	111		-		70-130	-		
4-Methyl-2-pentanone	97		-		70-130	-		
trans-1,3-Dichloropropene	95		-		70-130	-		
1,1,2-Trichloroethane	103		-		70-130	-		
Toluene	90		-		70-130	-		
1,3-Dichloropropane	95		-		70-130	-		
2-Hexanone	95		-		70-130	-		
Dibromochloromethane	97		-		70-130	-		
1,2-Dibromoethane	100		-		70-130	-		
Butyl Acetate	86		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

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: WG1207888-3								
Octane	91		-		70-130	-		
Tetrachloroethene	96		-		70-130	-		
1,1,1,2-Tetrachloroethane	94		-		70-130	-		
Chlorobenzene	101		-		70-130	-		
Ethylbenzene	94		-		70-130	-		
p/m-Xylene	98		-		70-130	-		
Bromoform	100		-		70-130	-		
Styrene	103		-		70-130	-		
1,1,2,2-Tetrachloroethane	107		-		70-130	-		
o-Xylene	102		-		70-130	-		
1,2,3-Trichloropropane	98		-		70-130	-		
Nonane (C9)	90		-		70-130	-		
Isopropylbenzene	104		-		70-130	-		
Bromobenzene	99		-		70-130	-		
o-Chlorotoluene	93		-		70-130	-		
n-Propylbenzene	95		-		70-130	-		
p-Chlorotoluene	93		-		70-130	-		
4-Ethyltoluene	108		-		70-130	-		
1,3,5-Trimethylbenzene	108		-		70-130	-		
tert-Butylbenzene	105		-		70-130	-		
1,2,4-Trimethylbenzene	115		-		70-130	-		
Decane (C10)	108		-		70-130	-		
Benzyl chloride	94		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

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: WG1207888-3								
1,3-Dichlorobenzene	106		-		70-130	-		
1,4-Dichlorobenzene	106		-		70-130	-		
sec-Butylbenzene	106		-		70-130	-		
p-Isopropyltoluene	94		-		70-130	-		
1,2-Dichlorobenzene	104		-		70-130	-		
n-Butylbenzene	102		-		70-130	-		
1,2-Dibromo-3-chloropropane	104		-		70-130	-		
Undecane	118		-		70-130	-		
Dodecane (C12)	128		-		70-130	-		
1,2,4-Trichlorobenzene	122		-		70-130	-		
Naphthalene	102		-		70-130	-		
1,2,3-Trichlorobenzene	114		-		70-130	-		
Hexachlorobutadiene	123		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1208168-3								
Propylene	82		-		70-130	-		25
Dichlorodifluoromethane	88		-		70-130	-		25
Chloromethane	79		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	93		-		70-130	-		25
Vinyl chloride	95		-		70-130	-		25
1,3-Butadiene	97		-		70-130	-		25
Bromomethane	86		-		70-130	-		25
Chloroethane	98		-		70-130	-		25
Ethyl Alcohol	87		-		40-160	-		25
Vinyl bromide	84		-		70-130	-		25
Acetone	60		-		40-160	-		25
Trichlorofluoromethane	77		-		70-130	-		25
iso-Propyl Alcohol	62		-		40-160	-		25
Acrylonitrile	94		-		70-130	-		25
1,1-Dichloroethene	96		-		70-130	-		25
tert-Butyl Alcohol ¹	97		-		70-130	-		25
Methylene chloride	86		-		70-130	-		25
3-Chloropropene	91		-		70-130	-		25
Carbon disulfide	82		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	81		-		70-130	-		25
trans-1,2-Dichloroethene	94		-		70-130	-		25
1,1-Dichloroethane	95		-		70-130	-		25
Methyl tert butyl ether	82		-		70-130	-		25

Lab Control Sample Analysis **Batch Quality Control**

Project Name: FEB2019 INDOOR AIR MONITORING

Lab Number: L1905849

Project Number: E1601

Report Date: 02/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1208168-3								
Vinyl acetate	76		-		70-130	-		25
2-Butanone	80		-		70-130	-		25
cis-1,2-Dichloroethene	98		-		70-130	-		25
Ethyl Acetate	84		-		70-130	-		25
Chloroform	92		-		70-130	-		25
Tetrahydrofuran	79		-		70-130	-		25
1,2-Dichloroethane	83		-		70-130	-		25
n-Hexane	105		-		70-130	-		25
1,1,1-Trichloroethane	91		-		70-130	-		25
Benzene	97		-		70-130	-		25
Carbon tetrachloride	87		-		70-130	-		25
Cyclohexane	106		-		70-130	-		25
Dibromomethane ¹	80		-		70-130	-		25
1,2-Dichloropropane	89		-		70-130	-		25
Bromodichloromethane	96		-		70-130	-		25
1,4-Dioxane	95		-		70-130	-		25
Trichloroethene	90		-		70-130	-		25
2,2,4-Trimethylpentane	106		-		70-130	-		25
cis-1,3-Dichloropropene	91		-		70-130	-		25
4-Methyl-2-pentanone	94		-		70-130	-		25
trans-1,3-Dichloropropene	104		-		70-130	-		25
1,1,2-Trichloroethane	100		-		70-130	-		25
Toluene	82		-		70-130	-		25

Lab Control Sample Analysis Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1208168-3								
2-Hexanone	85		-		70-130	-		25
Dibromochloromethane	88		-		70-130	-		25
1,2-Dibromoethane	97		-		70-130	-		25
Tetrachloroethene	94		-		70-130	-		25
1,1,1,2-Tetrachloroethane	83		-		70-130	-		25
Chlorobenzene	97		-		70-130	-		25
Ethylbenzene	92		-		70-130	-		25
p/m-Xylene	92		-		70-130	-		25
Bromoform	92		-		70-130	-		25
Styrene	104		-		70-130	-		25
1,1,2,2-Tetrachloroethane	98		-		70-130	-		25
o-Xylene	96		-		70-130	-		25
1,2,3-Trichloropropane ¹	95		-		70-130	-		25
Isopropylbenzene	103		-		70-130	-		25
Bromobenzene ¹	96		-		70-130	-		25
4-Ethyltoluene	107		-		70-130	-		25
1,3,5-Trimethylbenzene	109		-		70-130	-		25
1,2,4-Trimethylbenzene	116		-		70-130	-		25
Benzyl chloride	79		-		70-130	-		25
1,3-Dichlorobenzene	102		-		70-130	-		25
1,4-Dichlorobenzene	105		-		70-130	-		25
sec-Butylbenzene	108		-		70-130	-		25
p-Isopropyltoluene	92		-		70-130	-		25

Lab Control Sample Analysis Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1208168-3								
1,2-Dichlorobenzene	108		-		70-130	-		25
n-Butylbenzene	107		-		70-130	-		25
1,2,4-Trichlorobenzene	122		-		70-130	-		25
Naphthalene	87		-		70-130	-		25
1,2,3-Trichlorobenzene	113		-		70-130	-		25
Hexachlorobutadiene	118		-		70-130	-		25

Lab Duplicate Analysis Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1207888-5 QC Sample: L1905849-02 Client ID: IA-5(0219) DUPLICATE						
Dichlorodifluoromethane	0.503	0.512	ppbV	2		25
Chloromethane	0.487	0.486	ppbV	0		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	167	166	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	15.3	15.2	ppbV	1		25
Trichlorofluoromethane	ND	0.203	ppbV	NC		25
iso-Propyl Alcohol	92.9	93.1	ppbV	0		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	0.631	0.632	ppbV	0		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	2.09	2.07	ppbV	1		25
Ethyl Acetate	0.909	1.20	ppbV	28	Q	25

Lab Duplicate Analysis

Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1207888-5 QC Sample: L1905849-02 Client ID: IA-5(0219)						
DUPLICATE						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.798	0.847	ppbV	6		25
Benzene	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
Xylene (Total)	2.45	2.41	ppbV	2		25
4-Methyl-2-pentanone	1.07	1.12	ppbV	5		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	1.43	1.41	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis Batch Quality Control

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Number: L1905849

Report Date: 02/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1207888-5 QC Sample: L1905849-02 Client ID: IA-5(0219) DUPLICATE						
Ethylbenzene	0.467	0.464	ppbV	1		25
p/m-Xylene	1.88	1.85	ppbV	2		25
1,2-Dichloroethene (total)	0.631	0.632	ppbV	0		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,3-Dichloropropene, Total	ND	ND	ppbV	NC		25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	0.562	0.555	ppbV	1		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: FEB2019 INDOOR AIR MONITORING

Project Number: E1601

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1905849

Report Date: 02/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1208168-5 QC Sample: L1905849-02 Client ID: IA-5(0219) DUPLICATE						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	0.035	0.035	ppbV	0		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.167	0.167	ppbV	0		25
Trichloroethene	0.853	0.856	ppbV	0		25
Tetrachloroethene	0.047	0.052	ppbV	10		25
1,2-Dichloroethene (total)	0.035	0.035	ppbV	0		25

Project Name: FEB2019 INDOOR AIR MONITORING

Serial_No:02201916:08
Lab Number: L1905849

Project Number: E1601

Report Date: 02/20/19

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
L1905849-01	IA-5(0219)	0256	Flow 5	02/01/19	284261		-	-	-	Pass	4.5	4.4	2
L1905849-01	IA-5(0219)	423	2.7L Can	02/01/19	284261	L1903592-01	Pass	-30.0	-6.0	-	-	-	-
L1905849-02	IA-5(0219) DUPLICATE	0811	Flow 3	02/01/19	284261		-	-	-	Pass	4.5	4.4	2
L1905849-02	IA-5(0219) DUPLICATE	476	2.7L Can	02/01/19	284261	L1903592-01	Pass	-30.0	-7.1	-	-	-	-

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

Lab Number: L1903592
Report Date: 02/20/19

Air Canister Certification Results

Lab ID: L1903592-01
Client ID: CAN 163 SHELF 5
Sample Location:

Date Collected: 01/28/19 16:00
Date Received: 01/29/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/29/19 18:30
Analyst: EW

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: L1903592
Report Date: 02/20/19

Air Canister Certification Results

Lab ID: L1903592-01
Client ID: CAN 163 SHELF 5
Sample Location:

Date Collected: 01/28/19 16:00
Date Received: 01/29/19
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: L1903592
Report Date: 02/20/19

Air Canister Certification Results

Lab ID: L1903592-01
Client ID: CAN 163 SHELF 5
Sample Location:

Date Collected: 01/28/19 16:00
Date Received: 01/29/19
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: L1903592
Report Date: 02/20/19

Air Canister Certification Results

Lab ID: L1903592-01
Client ID: CAN 163 SHELF 5
Sample Location:

Date Collected: 01/28/19 16:00
Date Received: 01/29/19
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**Lab Number:** L1903592**Project Number:** CANISTER QC BAT**Report Date:** 02/20/19**Air Canister Certification Results**

Lab ID: L1903592-01

Date Collected: 01/28/19 16:00

Client ID: CAN 163 SHELF 5

Date Received: 01/29/19

Sample Location:

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	96		60-140
chlorobenzene-d5	92		60-140

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

Lab Number: L1903592
Report Date: 02/20/19

Air Canister Certification Results

Lab ID: L1903592-01
Client ID: CAN 163 SHELF 5
Sample Location:

Date Collected: 01/28/19 16:00
Date Received: 01/29/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 01/29/19 18:30
Analyst: RY

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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

Lab Number: L1903592
Report Date: 02/20/19

Air Canister Certification Results

Lab ID: L1903592-01
Client ID: CAN 163 SHELF 5
Sample Location:

Date Collected: 01/28/19 16:00
Date Received: 01/29/19
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								
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1903592**Project Number:** CANISTER QC BAT**Report Date:** 02/20/19**Air Canister Certification Results**

Lab ID: L1903592-01

Date Collected: 01/28/19 16:00

Client ID: CAN 163 SHELF 5

Date Received: 01/29/19

Sample Location:

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								
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	97		60-140
bromochloromethane	105		60-140
chlorobenzene-d5	101		60-140



Project Name: FEB2019 INDOOR AIR MONITORING**Lab Number:** L1905849**Project Number:** E1601**Report Date:** 02/20/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

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

N/A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1905849-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1905849-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L1905849-02S	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-SIM(30)

Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

GLOSSARY

Acronyms

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.
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.
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.
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.

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.

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.

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. 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'

Report Format: Data Usability Report



Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

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 Condensation Product".
- 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.
- 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 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.

Project Name: FEB2019 INDOOR AIR MONITORING
Project Number: E1601

Lab Number: L1905849
Report Date: 02/20/19

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.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 12

Department: **Quality Assurance**

Published Date: 10/9/2018 4:58:19 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

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**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**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****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****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.****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.

CHAIN OF CUSTODY

Client Information

Email: mhanna@hazardevaluations.com

Project-Specific Target Compound List: ☐

ALPHA Job #: L1905849

Turn-Around Time

Time:

Report to: (if different than Project Manager)

☒ Same as Client Info	PO #: e1601
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State/Fed	Program	Res / Comm
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TO-15
TO-15 SIM
APH
Fixed Gases
Subtract Non-petroleum HCs

Sample Comments (i.e. PID)

-02	FA-S(0219) Duplicate	2/13/19	7.50am	350pm	-28.95	-6.37	AA	EB	274	476	0811	X
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CS

Date/Time:

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ANALYTICAL REPORT

Lab Number:	L1927357
Client:	Hazard Evaluations, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Mark Hanna
Phone:	(716) 667-3130
Project Name:	JUNE 2019 INDOOR AIR SAMPLING
Project Number:	E1601
Report Date:	07/01/19

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: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1927357-01	IA-5(0619)	AIR	155 CHANDLER ST., BUFFALO, NY	06/21/19 15:40	06/21/19
L1927357-02	IA-5(0619) DUPLICATE	AIR	155 CHANDLER ST., BUFFALO, NY	06/21/19 15:40	06/21/19

Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

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: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on June 18, 2019. The canister certification results are provided as an addendum.

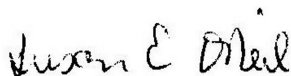
L1927357-01 and -02: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L1927357-01, -02 and WG1254638-5: The Acetone result should be considered estimated due to co-elution with a non-target peak.

The WG1254903-3 LCS recoveries for propylene (145%), dichlorodifluoromethane (134%), Freon-114 (131%), 1,3-butadiene (141%), 1,1-dichloroethene (134%), tert-butyl alcohol (133%), methylene chloride (131%), 3-chloropropene (131%), tetrahydrofuran (136%) and benzyl chloride (137%) are above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of these analytes.

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: 07/01/19

AIR

Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

SAMPLE RESULTS

Lab ID: L1927357-01
 Client ID: IA-5(0619)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 15:40
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 06/29/19 00:46
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.545	0.200	--	2.69	0.989	--		1
Chloromethane	0.693	0.200	--	1.43	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	358	5.00	--	675	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	16.0	1.00	--	38.0	2.38	--		1
Trichlorofluoromethane	0.251	0.200	--	1.41	1.12	--		1
Isopropanol	433	0.500	--	1060	1.23	--	E	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	0.216	0.200	--	0.673	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	1.55	0.200	--	6.15	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.867	0.500	--	2.56	1.47	--		1
Ethyl Acetate	1.44	0.500	--	5.19	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: JUNE 2019 INDOOR AIR SAMPLING**Lab Number:** L1927357**Project Number:** E1601**Report Date:** 07/01/19**SAMPLE RESULTS**

Lab ID: L1927357-01

Client ID: IA-5(0619)

Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 15:40

Date Received: 06/21/19

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.706	0.200	--	2.49	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.221	0.200	--	0.906	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.25	0.500	--	5.12	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.43	0.200	--	5.39	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.93	0.200	--	8.38	0.869	--		1
p/m-Xylene	8.44	0.400	--	36.7	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.512	0.200	--	2.18	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	2.82	0.200	--	12.2	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: JUNE 2019 INDOOR AIR SAMPLING**Lab Number:** L1927357**Project Number:** E1601**Report Date:** 07/01/19**SAMPLE RESULTS**

Lab ID: L1927357-01

Date Collected: 06/21/19 15:40

Client ID: IA-5(0619)

Date Received: 06/21/19

Sample Location: 155 CHANDLER ST., BUFFALO, NY

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								
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	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	93		60-140



Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

SAMPLE RESULTS

Lab ID: L1927357-01
 Client ID: IA-5(0619)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 15:40
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 06/29/19 00:46
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.094	0.020	--	0.591	0.126	--		1
Trichloroethene	0.168	0.020	--	0.903	0.107	--		1
Tetrachloroethene	0.030	0.020	--	0.203	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	93		60-140



Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

SAMPLE RESULTS

Lab ID: L1927357-01 D
 Client ID: IA-5(0619)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 15:40
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 06/30/19 00:16
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Isopropanol	501	1.67	--	1230	4.10	--		3.333

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	94		60-140



Project Name: JUNE 2019 INDOOR AIR SAMPLING**Lab Number:** L1927357**Project Number:** E1601**Report Date:** 07/01/19**SAMPLE RESULTS**

Lab ID: L1927357-02
 Client ID: IA-5(0619) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 15:40
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 06/29/19 02:10
 Analyst: EW

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.512	0.200	--	2.53	0.989	--		1
Chloromethane	0.678	0.200	--	1.40	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	354	5.00	--	667	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	17.0	1.00	--	40.4	2.38	--		1
Trichlorofluoromethane	0.265	0.200	--	1.49	1.12	--		1
Isopropanol	424	0.500	--	1040	1.23	--	E	1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.579	0.500	--	2.01	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.226	0.200	--	0.704	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	1.50	0.200	--	5.95	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.914	0.500	--	2.70	1.47	--		1
Ethyl Acetate	1.79	0.500	--	6.45	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

SAMPLE RESULTS

Lab ID: L1927357-02
 Client ID: IA-5(0619) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 15:40
 Date Received: 06/21/19
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.36	0.200	--	4.79	0.705	--		1
Benzene	0.271	0.200	--	0.866	0.639	--		1
Cyclohexane	0.299	0.200	--	1.03	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.298	0.200	--	1.22	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	1.26	0.500	--	5.16	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.29	0.200	--	8.63	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	2.00	0.200	--	8.69	0.869	--		1
p/m-Xylene	8.33	0.400	--	36.2	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.648	0.200	--	2.76	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	2.80	0.200	--	12.2	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

SAMPLE RESULTS

Lab ID: L1927357-02
 Client ID: IA-5(0619) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 15:40
 Date Received: 06/21/19
 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								
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	89		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	90		60-140



Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

SAMPLE RESULTS

Lab ID: L1927357-02
 Client ID: IA-5(0619) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 15:40
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 06/29/19 02:10
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.095	0.020	--	0.598	0.126	--		1
Trichloroethene	0.155	0.020	--	0.833	0.107	--		1
Tetrachloroethene	0.043	0.020	--	0.292	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	91		60-140



Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

SAMPLE RESULTS

Lab ID: L1927357-02 D
 Client ID: IA-5(0619) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 15:40
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 06/30/19 00:54
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Isopropanol	478	1.67	--	1170	4.10	--		3.333

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	107		60-140
chlorobenzene-d5	92		60-140



Project Name: JUNE 2019 INDOOR AIR SAMPLING**Lab Number:** L1927357**Project Number:** E1601**Report Date:** 07/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 06/28/19 15:00

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: WG1254638-4								
Propylene	ND	0.500	--	ND	0.861	--		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
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
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: JUNE 2019 INDOOR AIR SAMPLING

Lab Number: L1927357

Project Number: E1601

Report Date: 07/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 06/28/19 15:00

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: WG1254638-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	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



Project Name: JUNE 2019 INDOOR AIR SAMPLING

Lab Number: L1927357

Project Number: E1601

Report Date: 07/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 06/28/19 15:00

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: WG1254638-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
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

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Lab Number: L1927357

Project Number: E1601

Report Date: 07/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 06/28/19 15:40

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1254639-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Project Name: JUNE 2019 INDOOR AIR SAMPLING**Lab Number:** L1927357**Project Number:** E1601**Report Date:** 07/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 06/29/19 17:15

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: WG1254903-4								
Propylene	ND	0.500	--	ND	0.861	--		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
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
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: JUNE 2019 INDOOR AIR SAMPLING

Lab Number: L1927357

Project Number: E1601

Report Date: 07/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 06/29/19 17:15

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: WG1254903-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	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



Project Name: JUNE 2019 INDOOR AIR SAMPLING

Lab Number: L1927357

Project Number: E1601

Report Date: 07/01/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 06/29/19 17:15

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: WG1254903-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
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: JUNE 2019 INDOOR AIR SAMPLING

Project Number: E1601

Lab Number: L1927357

Report Date: 07/01/19

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: WG1254638-3								
Propylene	111		-		70-130	-		
Dichlorodifluoromethane	110		-		70-130	-		
Chloromethane	112		-		70-130	-		
Freon-114	112		-		70-130	-		
Vinyl chloride	110		-		70-130	-		
1,3-Butadiene	125		-		70-130	-		
Bromomethane	110		-		70-130	-		
Chloroethane	108		-		70-130	-		
Ethanol	120		-		40-160	-		
Vinyl bromide	108		-		70-130	-		
Acetone	83		-		40-160	-		
Trichlorofluoromethane	109		-		70-130	-		
Isopropanol	90		-		40-160	-		
1,1-Dichloroethene	117		-		70-130	-		
Tertiary butyl Alcohol	116		-		70-130	-		
Methylene chloride	124		-		70-130	-		
3-Chloropropene	110		-		70-130	-		
Carbon disulfide	116		-		70-130	-		
Freon-113	118		-		70-130	-		
trans-1,2-Dichloroethene	112		-		70-130	-		
1,1-Dichloroethane	108		-		70-130	-		
Methyl tert butyl ether	104		-		70-130	-		
Vinyl acetate	103		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Project Number: E1601

Lab Number: L1927357

Report Date: 07/01/19

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: WG1254638-3								
2-Butanone	92		-		70-130	-		
cis-1,2-Dichloroethene	102		-		70-130	-		
Ethyl Acetate	113		-		70-130	-		
Chloroform	104		-		70-130	-		
Tetrahydrofuran	112		-		70-130	-		
1,2-Dichloroethane	117		-		70-130	-		
n-Hexane	90		-		70-130	-		
1,1,1-Trichloroethane	109		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	117		-		70-130	-		
Cyclohexane	104		-		70-130	-		
1,2-Dichloropropane	107		-		70-130	-		
Bromodichloromethane	104		-		70-130	-		
1,4-Dioxane	100		-		70-130	-		
Trichloroethene	102		-		70-130	-		
2,2,4-Trimethylpentane	106		-		70-130	-		
Heptane	106		-		70-130	-		
cis-1,3-Dichloropropene	109		-		70-130	-		
4-Methyl-2-pentanone	109		-		70-130	-		
trans-1,3-Dichloropropene	97		-		70-130	-		
1,1,2-Trichloroethane	108		-		70-130	-		
Toluene	102		-		70-130	-		
2-Hexanone	114		-		70-130	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Project Number: E1601

Lab Number: L1927357

Report Date: 07/01/19

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: WG1254638-3								
Dibromochloromethane	111		-		70-130	-		
1,2-Dibromoethane	104		-		70-130	-		
Tetrachloroethene	102		-		70-130	-		
Chlorobenzene	104		-		70-130	-		
Ethylbenzene	104		-		70-130	-		
p/m-Xylene	106		-		70-130	-		
Bromoform	123		-		70-130	-		
Styrene	100		-		70-130	-		
1,1,2,2-Tetrachloroethane	105		-		70-130	-		
o-Xylene	107		-		70-130	-		
4-Ethyltoluene	102		-		70-130	-		
1,3,5-Trimethylbenzene	103		-		70-130	-		
1,2,4-Trimethylbenzene	104		-		70-130	-		
Benzyl chloride	114		-		70-130	-		
1,3-Dichlorobenzene	111		-		70-130	-		
1,4-Dichlorobenzene	116		-		70-130	-		
1,2-Dichlorobenzene	99		-		70-130	-		
1,2,4-Trichlorobenzene	107		-		70-130	-		
Hexachlorobutadiene	98		-		70-130	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Project Number: E1601

Lab Number: L1927357

Report Date: 07/01/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1254639-3								
Vinyl chloride	98		-		70-130	-		25
1,1-Dichloroethene	107		-		70-130	-		25
cis-1,2-Dichloroethene	89		-		70-130	-		25
1,1,1-Trichloroethane	100		-		70-130	-		25
Carbon tetrachloride	102		-		70-130	-		25
Trichloroethene	92		-		70-130	-		25
Tetrachloroethene	98		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Project Number: E1601

Lab Number: L1927357

Report Date: 07/01/19

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: WG1254903-3								
Propylene	145	Q	-		70-130	-		
Dichlorodifluoromethane	134	Q	-		70-130	-		
Chloromethane	130		-		70-130	-		
Freon-114	131	Q	-		70-130	-		
Vinyl chloride	128		-		70-130	-		
1,3-Butadiene	141	Q	-		70-130	-		
Bromomethane	118		-		70-130	-		
Chloroethane	121		-		70-130	-		
Ethanol	120		-		40-160	-		
Vinyl bromide	118		-		70-130	-		
Acetone	106		-		40-160	-		
Trichlorofluoromethane	124		-		70-130	-		
Isopropanol	107		-		40-160	-		
1,1-Dichloroethene	134	Q	-		70-130	-		
Tertiary butyl Alcohol	133	Q	-		70-130	-		
Methylene chloride	131	Q	-		70-130	-		
3-Chloropropene	131	Q	-		70-130	-		
Carbon disulfide	120		-		70-130	-		
Freon-113	122		-		70-130	-		
trans-1,2-Dichloroethene	120		-		70-130	-		
1,1-Dichloroethane	115		-		70-130	-		
Methyl tert butyl ether	105		-		70-130	-		
Vinyl acetate	120		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Project Number: E1601

Lab Number: L1927357

Report Date: 07/01/19

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: WG1254903-3								
2-Butanone	109		-		70-130	-		
cis-1,2-Dichloroethene	113		-		70-130	-		
Ethyl Acetate	120		-		70-130	-		
Chloroform	113		-		70-130	-		
Tetrahydrofuran	136	Q	-		70-130	-		
1,2-Dichloroethane	114		-		70-130	-		
n-Hexane	89		-		70-130	-		
1,1,1-Trichloroethane	97		-		70-130	-		
Benzene	118		-		70-130	-		
Carbon tetrachloride	106		-		70-130	-		
Cyclohexane	119		-		70-130	-		
1,2-Dichloropropane	118		-		70-130	-		
Bromodichloromethane	109		-		70-130	-		
1,4-Dioxane	115		-		70-130	-		
Trichloroethene	114		-		70-130	-		
2,2,4-Trimethylpentane	125		-		70-130	-		
Heptane	116		-		70-130	-		
cis-1,3-Dichloropropene	127		-		70-130	-		
4-Methyl-2-pentanone	118		-		70-130	-		
trans-1,3-Dichloropropene	108		-		70-130	-		
1,1,2-Trichloroethane	121		-		70-130	-		
Toluene	111		-		70-130	-		
2-Hexanone	123		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Project Number: E1601

Lab Number: L1927357

Report Date: 07/01/19

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: WG1254903-3								
Dibromochloromethane	116		-		70-130	-		
1,2-Dibromoethane	113		-		70-130	-		
Tetrachloroethene	108		-		70-130	-		
Chlorobenzene	113		-		70-130	-		
Ethylbenzene	112		-		70-130	-		
p/m-Xylene	112		-		70-130	-		
Bromoform	126		-		70-130	-		
Styrene	116		-		70-130	-		
1,1,2,2-Tetrachloroethane	118		-		70-130	-		
o-Xylene	112		-		70-130	-		
4-Ethyltoluene	112		-		70-130	-		
1,3,5-Trimethylbenzene	113		-		70-130	-		
1,2,4-Trimethylbenzene	112		-		70-130	-		
Benzyl chloride	137	Q	-		70-130	-		
1,3-Dichlorobenzene	129		-		70-130	-		
1,4-Dichlorobenzene	124		-		70-130	-		
1,2-Dichlorobenzene	112		-		70-130	-		
1,2,4-Trichlorobenzene	125		-		70-130	-		
Hexachlorobutadiene	105		-		70-130	-		

Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1927357
Report Date: 07/01/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1254638-5 QC Sample: L1927357-01 Client ID: IA-5(0619)						
Dichlorodifluoromethane	0.545	0.531	ppbV	3		25
Chloromethane	0.693	0.706	ppbV	2		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	358	346	ppbV	3		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	16.0	16.1	ppbV	1		25
Trichlorofluoromethane	0.251	0.250	ppbV	0		25
iso-Propyl Alcohol	433E	425E	ppbV	2		25
tert-Butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	0.216	0.213	ppbV	1		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	1.55	1.52	ppbV	2		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	0.867	0.877	ppbV	1		25
Ethyl Acetate	1.44	1.38	ppbV	4		25

Lab Duplicate Analysis Batch Quality Control

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Project Number: E1601

Lab Number: L1927357

Report Date: 07/01/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1254638-5 QC Sample: L1927357-01 Client ID: IA-5(0619)						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.706	0.704	ppbV	0		25
Benzene	ND	ND	ppbV	NC		25
Cyclohexane	ND	0.216	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	0.221	0.218	ppbV	1		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
Xylene (Total)	11.2	11.4	ppbV	2		25
4-Methyl-2-pentanone	1.25	1.22	ppbV	2		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	1.43	1.47	ppbV	3		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis Batch Quality Control

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Project Number: E1601

Lab Number: L1927357

Report Date: 07/01/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1254638-5 QC Sample: L1927357-01 Client ID: IA-5(0619)						
Ethylbenzene	1.93	1.95	ppbV	1		25
p/m-Xylene	8.44	8.56	ppbV	1		25
1,2-Dichloroethene (total)	1.55	1.52	ppbV	2		25
Bromoform	ND	ND	ppbV	NC		25
1,3-Dichloropropene, Total	ND	ND	ppbV	NC		25
Styrene	0.512	0.513	ppbV	0		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	2.82	2.80	ppbV	1		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Project Number: E1601

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1927357

Report Date: 07/01/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1254639-5 QC Sample: L1927357-01 Client ID: IA-5(0619)						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.094	0.094	ppbV	0		25
Trichloroethene	0.168	0.172	ppbV	2		25
Tetrachloroethene	0.030	0.028	ppbV	7		25

Project Name: JUNE 2019 INDOOR AIR SAMPLING

Serial_No:07011914:20
Lab Number: L1927357

Project Number: E1601

Report Date: 07/01/19

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
L1927357-01	IA-5(0619)	0159	Flow 3	06/18/19	294918		-	-	-	Pass	4.5	4.7	4
L1927357-01	IA-5(0619)	195	2.7L Can	06/18/19	294918	L1925583-02	Pass	-29.4	-6.8	-	-	-	-
L1927357-02	IA-5(0619) DUPLICATE	0905	Flow 4	06/18/19	294918		-	-	-	Pass	4.5	5.4	18
L1927357-02	IA-5(0619) DUPLICATE	510	2.7L Can	06/18/19	294918	L1925583-02	Pass	-29.2	-12.7	-	-	-	-

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

Lab Number: L1925583
Report Date: 07/01/19

Air Canister Certification Results

Lab ID: L1925583-02
Client ID: CAN 2424 SHELF 16
Sample Location:

Date Collected: 06/13/19 08:00
Date Received: 06/13/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 06/13/19 19:38
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
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
Butane	ND	0.200	--	ND	0.475	--		1
Acetaldehyde	ND	2.50	--	ND	4.50	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		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
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	1.00	--	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

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

Lab Number: L1925583
Report Date: 07/01/19

Air Canister Certification Results

Lab ID: L1925583-02
Client ID: CAN 2424 SHELF 16
Sample Location:

Date Collected: 06/13/19 08:00
Date Received: 06/13/19
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								
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
Chloroform	ND	0.200	--	ND	0.977	--		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
Thiophene	ND	0.200	--	ND	0.688	--		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-Methylthiophene	ND	0.200	--	ND	0.803	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
3-Methylthiophene	ND	0.200	--	ND	0.803	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1



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

Lab Number: L1925583
Report Date: 07/01/19

Air Canister Certification Results

Lab ID: L1925583-02
Client ID: CAN 2424 SHELF 16
Sample Location:

Date Collected: 06/13/19 08:00
Date Received: 06/13/19
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								
Octane	ND	0.200	--	ND	0.934	--		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
2-Ethylthiophene	ND	0.200	--	ND	0.918	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
2-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
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,3-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
Indane	ND	0.200	--	ND	0.967	--		1
Indene	ND	0.200	--	ND	0.951	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
1,2,4,5-Tetramethylbenzene	ND	0.200	--	ND	1.10	--		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



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1925583**Project Number:** CANISTER QC BAT**Report Date:** 07/01/19**Air Canister Certification Results**

Lab ID: L1925583-02

Date Collected: 06/13/19 08:00

Client ID: CAN 2424 SHELF 16

Date Received: 06/13/19

Sample Location:

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								
Benzothiophene	ND	0.500	--	ND	2.74	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1
2-Methylnaphthalene	ND	1.00	--	ND	5.82	--		1
1-Methylnaphthalene	ND	1.00	--	ND	5.82	--		1

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	91		60-140

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

Lab Number: L1925583
Report Date: 07/01/19

Air Canister Certification Results

Lab ID: L1925583-02
Client ID: CAN 2424 SHELF 16
Sample Location:

Date Collected: 06/13/19 08:00
Date Received: 06/13/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 06/14/19 19:45
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
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

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

Lab Number: L1925583
Report Date: 07/01/19

Air Canister Certification Results

Lab ID: L1925583-02
Client ID: CAN 2424 SHELF 16
Sample Location:

Date Collected: 06/13/19 08:00
Date Received: 06/13/19
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								
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
Dibromomethane	ND	0.200	--	ND	1.42	--		1



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

Lab Number: L1925583
Report Date: 07/01/19

Air Canister Certification Results

Lab ID: L1925583-02
Client ID: CAN 2424 SHELF 16
Sample Location:

Date Collected: 06/13/19 08:00
Date Received: 06/13/19
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								
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
o-Xylene	ND	0.200	--	ND	0.869	--		1



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

Lab Number: L1925583
Report Date: 07/01/19

Air Canister Certification Results

Lab ID: L1925583-02
Client ID: CAN 2424 SHELF 16
Sample Location:

Date Collected: 06/13/19 08:00
Date Received: 06/13/19
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								
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1925583**Project Number:** CANISTER QC BAT**Report Date:** 07/01/19**Air Canister Certification Results**

Lab ID: L1925583-02

Date Collected: 06/13/19 08:00

Client ID: CAN 2424 SHELF 16

Date Received: 06/13/19

Sample Location:

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	101		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	95		60-140

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

Lab Number: L1925583
Report Date: 07/01/19

Air Canister Certification Results

Lab ID: L1925583-02
Client ID: CAN 2424 SHELF 16
Sample Location:

Date Collected: 06/13/19 08:00
Date Received: 06/13/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 06/14/19 19:45
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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

Lab Number: L1925583
Report Date: 07/01/19

Air Canister Certification Results

Lab ID: L1925583-02
Client ID: CAN 2424 SHELF 16
Sample Location:

Date Collected: 06/13/19 08:00
Date Received: 06/13/19
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								
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1925583**Project Number:** CANISTER QC BAT**Report Date:** 07/01/19**Air Canister Certification Results**

Lab ID: L1925583-02

Date Collected: 06/13/19 08:00

Client ID: CAN 2424 SHELF 16

Date Received: 06/13/19

Sample Location:

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								
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	94		60-140

Project Name: JUNE 2019 INDOOR AIR SAMPLING**Lab Number:** L1927357**Project Number:** E1601**Report Date:** 07/01/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

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

N/A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1927357-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1927357-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

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.
LCS D	- 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.
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.

Footnotes

Report Format: Data Usability Report



Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

- 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.

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. 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 Condensation Product".
- 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.
- 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 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.

Report Format: Data Usability Report



Project Name: JUNE 2019 INDOOR AIR SAMPLING
Project Number: E1601

Lab Number: L1927357
Report Date: 07/01/19

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.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 12

Department: **Quality Assurance**

Published Date: 10/9/2018 4:58:19 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

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**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**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****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****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.****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.



ANALYTICAL REPORT

Lab Number:	L1927255
Client:	Hazard Evaluations, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Mark Hanna
Phone:	(716) 667-3130
Project Name:	CY19 JUNE GW SAMPLING
Project Number:	E1601
Report Date:	06/28/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: CY19 JUNE GW SAMPLING
Project Number: E1601

Lab Number: L1927255
Report Date: 06/28/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1927255-01	TRIP BLANK (062119)	WATER	155 CHANDLER ST., BUFFALO, NY	06/21/19 00:00	06/21/19
L1927255-02	EQUIPMENT RINSATE (062119)	WATER	155 CHANDLER ST., BUFFALO, NY	06/21/19 09:15	06/21/19
L1927255-03	MW-3 (062119)	WATER	155 CHANDLER ST., BUFFALO, NY	06/21/19 09:20	06/21/19
L1927255-04	MW-3 (062119) DUPLICATE	WATER	155 CHANDLER ST., BUFFALO, NY	06/21/19 09:20	06/21/19

Project Name: CY19 JUNE GW SAMPLING
Project Number: E1601

Lab Number: L1927255
Report Date: 06/28/19

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: CY19 JUNE GW SAMPLING
Project Number: E1601

Lab Number: L1927255
Report Date: 06/28/19

Case Narrative (continued)

Report Submission

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

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:

 Amita Naik

Title: Technical Director/Representative

Date: 06/28/19

ORGANICS

VOLATILES

Project Name: CY19 JUNE GW SAMPLING**Lab Number:** L1927255**Project Number:** E1601**Report Date:** 06/28/19**SAMPLE RESULTS**

Lab ID: L1927255-01
 Client ID: TRIP BLANK (062119)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 00:00
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 06/26/19 16:44
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY19 JUNE GW SAMPLING**Lab Number:** L1927255**Project Number:** E1601**Report Date:** 06/28/19**SAMPLE RESULTS****Lab ID:** L1927255-01**Date Collected:** 06/21/19 00:00**Client ID:** TRIP BLANK (062119)**Date Received:** 06/21/19**Sample Location:** 155 CHANDLER ST., BUFFALO, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	99		70-130

Project Name: CY19 JUNE GW SAMPLING**Lab Number:** L1927255**Project Number:** E1601**Report Date:** 06/28/19**SAMPLE RESULTS**

Lab ID: L1927255-02
 Client ID: EQUIPMENT RINSATE (062119)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 09:15
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 06/26/19 17:20
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY19 JUNE GW SAMPLING**Lab Number:** L1927255**Project Number:** E1601**Report Date:** 06/28/19**SAMPLE RESULTS**

Lab ID: L1927255-02
 Client ID: EQUIPMENT RINSATE (062119)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 09:15
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.3	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	97		70-130

Project Name: CY19 JUNE GW SAMPLING**Lab Number:** L1927255**Project Number:** E1601**Report Date:** 06/28/19**SAMPLE RESULTS**

Lab ID: L1927255-03
 Client ID: MW-3 (062119)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 09:20
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 06/27/19 16:11
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY19 JUNE GW SAMPLING**Lab Number:** L1927255**Project Number:** E1601**Report Date:** 06/28/19**SAMPLE RESULTS**

Lab ID: L1927255-03
 Client ID: MW-3 (062119)
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 09:20
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	104		70-130

Project Name: CY19 JUNE GW SAMPLING**Lab Number:** L1927255**Project Number:** E1601**Report Date:** 06/28/19**SAMPLE RESULTS**

Lab ID: L1927255-04
 Client ID: MW-3 (062119) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 09:20
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 06/26/19 16:08
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY19 JUNE GW SAMPLING**Lab Number:** L1927255**Project Number:** E1601**Report Date:** 06/28/19**SAMPLE RESULTS**

Lab ID: L1927255-04
 Client ID: MW-3 (062119) DUPLICATE
 Sample Location: 155 CHANDLER ST., BUFFALO, NY

Date Collected: 06/21/19 09:20
 Date Received: 06/21/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	97		70-130

Project Name: CY19 JUNE GW SAMPLING

Lab Number: L1927255

Project Number: E1601

Report Date: 06/28/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/26/19 08:55
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04 Batch: WG1253251-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CY19 JUNE GW SAMPLING

Lab Number: L1927255

Project Number: E1601

Report Date: 06/28/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/26/19 08:55
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04 Batch: WG1253251-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: CY19 JUNE GW SAMPLING
Project Number: E1601

Lab Number: L1927255
Report Date: 06/28/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/26/19 08:55
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02,04 Batch: WG1253251-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	98		70-130

Project Name: CY19 JUNE GW SAMPLING

Lab Number: L1927255

Project Number: E1601

Report Date: 06/28/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/27/19 08:45
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1254148-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CY19 JUNE GW SAMPLING

Lab Number: L1927255

Project Number: E1601

Report Date: 06/28/19

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 06/27/19 08:45
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1254148-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: CY19 JUNE GW SAMPLING
Project Number: E1601

Lab Number: L1927255
Report Date: 06/28/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 06/27/19 08:45
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1254148-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	105		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY19 JUNE GW SAMPLING

Project Number: E1601

Lab Number: L1927255

Report Date: 06/28/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1253251-3 WG1253251-4								
Methylene chloride	100		110		70-130	10		20
1,1-Dichloroethane	97		97		70-130	0		20
Chloroform	94		95		70-130	1		20
Carbon tetrachloride	96		94		63-132	2		20
1,2-Dichloropropane	98		99		70-130	1		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	110		110		75-130	0		20
Trichlorofluoromethane	77		77		62-150	0		20
1,2-Dichloroethane	90		92		70-130	2		20
1,1,1-Trichloroethane	93		92		67-130	1		20
Bromodichloromethane	93		94		67-130	1		20
trans-1,3-Dichloropropene	110		100		70-130	10		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	94		94		54-136	0		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
Benzene	95		97		70-130	2		20
Toluene	100		100		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	62	Q	67		64-130	8		20
Bromomethane	45		40		39-139	12		20
Vinyl chloride	90		91		55-140	1		20

Lab Control Sample Analysis Batch Quality Control

Project Name: CY19 JUNE GW SAMPLING

Project Number: E1601

Lab Number: L1927255

Report Date: 06/28/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1253251-3 WG1253251-4								
Chloroethane	98		99		55-138	1		20
1,1-Dichloroethene	90		91		61-145	1		20
trans-1,2-Dichloroethene	94		94		70-130	0		20
Trichloroethene	94		95		70-130	1		20
1,2-Dichlorobenzene	110		110		70-130	0		20
1,3-Dichlorobenzene	110		110		70-130	0		20
1,4-Dichlorobenzene	110		110		70-130	0		20
Methyl tert butyl ether	99		100		63-130	1		20
p/m-Xylene	115		110		70-130	4		20
o-Xylene	115		115		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	115		115		70-130	0		20
Dichlorodifluoromethane	81		79		36-147	3		20
Acetone	91		93		58-148	2		20
Carbon disulfide	94		95		51-130	1		20
2-Butanone	110		100		63-138	10		20
4-Methyl-2-pentanone	110		110		59-130	0		20
2-Hexanone	110		110		57-130	0		20
Bromochloromethane	100		110		70-130	10		20
1,2-Dibromoethane	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	110		110		41-144	0		20
Isopropylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	120		120		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY19 JUNE GW SAMPLING

Project Number: E1601

Lab Number: L1927255

Report Date: 06/28/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02,04 Batch: WG1253251-3 WG1253251-4								
1,2,4-Trichlorobenzene	120		120		70-130	0		20
Methyl Acetate	98		96		70-130	2		20
Cyclohexane	89		86		70-130	3		20
1,4-Dioxane	110		116		56-162	5		20
Freon-113	89		86		70-130	3		20
Methyl cyclohexane	91		88		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		94		70-130
Toluene-d8	105		104		70-130
4-Bromofluorobenzene	92		95		70-130
Dibromofluoromethane	98		98		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CY19 JUNE GW SAMPLING

Project Number: E1601

Lab Number: L1927255

Report Date: 06/28/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1254148-3 WG1254148-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		110		70-130	10		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	110		100		63-130	10		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	110		100		75-130	10		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	110		100		67-130	10		20
trans-1,3-Dichloropropene	110		99		70-130	11		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	100		98		54-136	2		20
1,1,2,2-Tetrachloroethane	100		98		67-130	2		20
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	110		100		70-130	10		20
Chloromethane	94		95		64-130	1		20
Bromomethane	120		120		39-139	0		20
Vinyl chloride	100		98		55-140	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY19 JUNE GW SAMPLING

Project Number: E1601

Lab Number: L1927255

Report Date: 06/28/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1254148-3 WG1254148-4								
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	100		110		70-130	10		20
1,3-Dichlorobenzene	110		110		70-130	0		20
1,4-Dichlorobenzene	110		110		70-130	0		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	110		100		70-130	10		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Styrene	105		100		70-130	5		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	110		120		58-148	9		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	110		100		63-138	10		20
4-Methyl-2-pentanone	100		96		59-130	4		20
2-Hexanone	110		100		57-130	10		20
Bromochloromethane	120		110		70-130	9		20
1,2-Dibromoethane	110		100		70-130	10		20
1,2-Dibromo-3-chloropropane	98		96		41-144	2		20
Isopropylbenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY19 JUNE GW SAMPLING

Project Number: E1601

Lab Number: L1927255

Report Date: 06/28/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1254148-3 WG1254148-4								
1,2,4-Trichlorobenzene	100		100		70-130	0		20
Methyl Acetate	100		110		70-130	10		20
Cyclohexane	100		110		70-130	10		20
1,4-Dioxane	138		156		56-162	12		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	100		97		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		105		70-130
Toluene-d8	103		100		70-130
4-Bromofluorobenzene	101		102		70-130
Dibromofluoromethane	104		102		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: CY19 JUNE GW SAMPLING

Project Number: E1601

Lab Number: L1927255

Report Date: 06/28/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 QC Batch ID: WG1254148-6 WG1254148-7 QC Sample: L1927255-03 Client ID: MW-3 (062119)												
Methylene chloride	ND	10	11	110		12	120		70-130	9		20
1,1-Dichloroethane	ND	10	12	120		13	130		70-130	8		20
Chloroform	ND	10	12	120		13	130		70-130	8		20
Carbon tetrachloride	ND	10	13	130		14	140	Q	63-132	7		20
1,2-Dichloropropane	ND	10	11	110		12	120		70-130	9		20
Dibromochloromethane	ND	10	11	110		12	120		63-130	9		20
1,1,2-Trichloroethane	ND	10	11	110		12	120		70-130	9		20
Tetrachloroethene	ND	10	12	120		13	130		70-130	8		20
Chlorobenzene	ND	10	11	110		12	120		75-130	9		20
Trichlorofluoromethane	ND	10	13	130		13	130		62-150	0		20
1,2-Dichloroethane	ND	10	12	120		12	120		70-130	0		20
1,1,1-Trichloroethane	ND	10	13	130		13	130		67-130	0		20
Bromodichloromethane	ND	10	12	120		12	120		67-130	0		20
trans-1,3-Dichloropropene	ND	10	10	100		12	120		70-130	18		20
cis-1,3-Dichloropropene	ND	10	10	100		11	110		70-130	10		20
Bromoform	ND	10	11	110		12	120		54-136	9		20
1,1,1,2-Tetrachloroethane	ND	10	11	110		12	120		67-130	9		20
Benzene	ND	10	12	120		12	120		70-130	0		20
Toluene	ND	10	11	110		12	120		70-130	9		20
Ethylbenzene	ND	10	11	110		12	120		70-130	9		20
Chloromethane	ND	10	11	110		11	110		64-130	0		20
Bromomethane	ND	10	8.6	86		10	100		39-139	15		20
Vinyl chloride	ND	10	12	120		12	120		55-140	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: CY19 JUNE GW SAMPLING

Project Number: E1601

Lab Number: L1927255

Report Date: 06/28/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 QC Batch ID: WG1254148-6 WG1254148-7 QC Sample: L1927255-03 Client ID: MW-3 (062119)												
Chloroethane	ND	10	12	120		12	120		55-138	0		20
1,1-Dichloroethene	ND	10	12	120		13	130		61-145	8		20
trans-1,2-Dichloroethene	ND	10	12	120		12	120		70-130	0		20
Trichloroethene	ND	10	12	120		13	130		70-130	8		20
1,2-Dichlorobenzene	ND	10	11	110		11	110		70-130	0		20
1,3-Dichlorobenzene	ND	10	11	110		12	120		70-130	9		20
1,4-Dichlorobenzene	ND	10	11	110		12	120		70-130	9		20
Methyl tert butyl ether	ND	10	12	120		13	130		63-130	8		20
p/m-Xylene	ND	20	23	115		24	120		70-130	4		20
o-Xylene	ND	20	23	115		24	120		70-130	4		20
cis-1,2-Dichloroethene	ND	10	12	120		12	120		70-130	0		20
Styrene	ND	20	22	110		23	115		70-130	4		20
Dichlorodifluoromethane	ND	10	12	120		13	130		36-147	8		20
Acetone	ND	10	16	160	Q	14	140		58-148	13		20
Carbon disulfide	ND	10	12	120		13	130		51-130	8		20
2-Butanone	ND	10	12	120		13	130		63-138	8		20
4-Methyl-2-pentanone	ND	10	12	120		12	120		59-130	0		20
2-Hexanone	ND	10	11	110		12	120		57-130	9		20
Bromochloromethane	ND	10	12	120		13	130		70-130	8		20
1,2-Dibromoethane	ND	10	11	110		12	120		70-130	9		20
1,2-Dibromo-3-chloropropane	ND	10	10	100		11	110		41-144	10		20
Isopropylbenzene	ND	10	12	120		12	120		70-130	0		20
1,2,3-Trichlorobenzene	ND	10	11	110		11	110		70-130	0		20

Matrix Spike Analysis**Batch Quality Control****Project Name:** CY19 JUNE GW SAMPLING**Project Number:** E1601**Lab Number:** L1927255**Report Date:** 06/28/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 QC Batch ID: WG1254148-6 WG1254148-7 QC Sample: L1927255-03 Client ID: MW-3 (062119)												
1,2,4-Trichlorobenzene	ND	10	11	110		11	110		70-130	0		20
Methyl Acetate	ND	10	12	120		12	120		70-130	0		20
Cyclohexane	ND	10	12	120		13	130		70-130	8		20
1,4-Dioxane	ND	500	850	170	Q	780	156		56-162	9		20
Freon-113	ND	10	12	120		13	130		70-130	8		20
Methyl cyclohexane	ND	10	11	110		11	110		70-130	0		20

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		113		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	107		106		70-130
Toluene-d8	101		102		70-130

Project Name: CY19 JUNE GW SAMPLING**Lab Number:** L1927255**Project Number:** E1601**Report Date:** 06/28/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

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

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1927255-01A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-01B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-02A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-02B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-02C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-03A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-03A1	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-03A2	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-03B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-03B1	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-03B2	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-03C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-03C1	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-03C2	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-04A	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-04B	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)
L1927255-04C	Vial HCl preserved	A	NA		3.0	Y	Absent		NYTCL-8260-R2(14)

Project Name: CY19 JUNE GW SAMPLING
Project Number: E1601

Lab Number: L1927255
Report Date: 06/28/19

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.
LCS D	- 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.
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.

Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Name: CY19 JUNE GW SAMPLING
Project Number: E1601

Lab Number: L1927255
Report Date: 06/28/19

- 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.

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. 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 Condensation Product".
- 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.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name: CY19 JUNE GW SAMPLING
Project Number: E1601

Lab Number: L1927255
Report Date: 06/28/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 12

Department: **Quality Assurance**

Published Date: 10/9/2018 4:58:19 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

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**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**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****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****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.****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.

[illegible]



ANALYTICAL REPORT

Lab Number:	L1959919
Client:	Hazard Evaluations, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Mark Hanna
Phone:	(716) 667-3130
Project Name:	CY19 SMP INDOOR AIR SAMPLING
Project Number:	E1842
Report Date:	12/20/19

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Six Park Row, Mansfield, MA 02048
508-261-7467 (Fax) -- -- - emccarter@mansfieldma.com



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1959919-01	OA-1(121219)	AIR	155 CHANDLER ST, BUFFALO, NY	12/12/19 16:30	12/13/19
L1959919-02	IA-5(121219)	AIR	155 CHANDLER ST, BUFFALO, NY	12/12/19 16:45	12/13/19
L1959919-03	IA-4(121219)	AIR	155 CHANDLER ST, BUFFALO, NY	12/12/19 16:50	12/13/19
L1959919-04	IA-3(121219)	AIR	155 CHANDLER ST, BUFFALO, NY	12/12/19 17:00	12/13/19
L1959919-05	IA-6(121219)	AIR	155 CHANDLER ST, BUFFALO, NY	12/12/19 17:30	12/13/19
L1959919-06	IA-1(121219)	AIR	155 CHANDLER ST, BUFFALO, NY	12/12/19 17:35	12/13/19
L1959919-07	IA-1(121219)DUPLICATE	AIR	155 CHANDLER ST, BUFFALO, NY	12/12/19 17:35	12/13/19
L1959919-08	IA-2(121219)	AIR	155 CHANDLER ST, BUFFALO, NY	12/12/19 17:45	12/13/19

Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

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: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

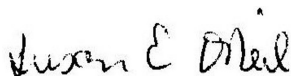
Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on December 10, 2019. 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: 12/20/19

AIR

Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-01
 Client ID: OA-1(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 16:30
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/19/19 17:23
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.515	0.200	--	2.55	0.989	--		1
Chloromethane	0.536	0.200	--	1.11	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.45	1.00	--	3.44	2.38	--		1
Trichlorofluoromethane	0.220	0.200	--	1.24	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-01

Date Collected: 12/12/19 16:30

Client ID: OA-1(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.227	0.200	--	0.855	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-01

Date Collected: 12/12/19 16:30

Client ID: OA-1(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
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	92		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	89		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

SAMPLE RESULTS

Lab ID: L1959919-01
 Client ID: OA-1(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 16:30
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/19/19 17:23
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.077	0.020	--	0.484	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	90		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-02
 Client ID: IA-5(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 16:45
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/19/19 18:02
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.531	0.200	--	2.63	0.989	--		1
Chloromethane	0.597	0.200	--	1.23	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	33.6	5.00	--	63.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.98	1.00	--	9.45	2.38	--		1
Trichlorofluoromethane	0.235	0.200	--	1.32	1.12	--		1
Isopropanol	1.94	0.500	--	4.77	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	0.277	0.200	--	1.10	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-02

Date Collected: 12/12/19 16:45

Client ID: IA-5(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.229	0.200	--	0.807	0.705	--		1
Benzene	0.232	0.200	--	0.741	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.684	0.200	--	2.58	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.227	0.200	--	0.986	0.869	--		1
p/m-Xylene	0.880	0.400	--	3.82	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.277	0.200	--	1.20	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-02

Date Collected: 12/12/19 16:45

Client ID: IA-5(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
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	90		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	89		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

SAMPLE RESULTS

Lab ID: L1959919-02
 Client ID: IA-5(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 16:45
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/19/19 18:02
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.087	0.020	--	0.547	0.126	--		1
Trichloroethene	0.128	0.020	--	0.688	0.107	--		1
Tetrachloroethene	0.040	0.020	--	0.271	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	90		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-03
 Client ID: IA-4(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 16:50
 Date Received: 12/13/19
 Field Prep: Not Specified

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

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.519	0.200	--	2.57	0.989	--		1
Chloromethane	0.536	0.200	--	1.11	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	208	5.00	--	392	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.45	1.00	--	8.20	2.38	--		1
Trichlorofluoromethane	0.223	0.200	--	1.25	1.12	--		1
Isopropanol	1.01	0.500	--	2.48	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.557	0.500	--	1.64	1.47	--		1
Ethyl Acetate	16.8	0.500	--	60.5	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-03

Date Collected: 12/12/19 16:50

Client ID: IA-4(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.214	0.200	--	0.684	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.346	0.200	--	1.30	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-03

Date Collected: 12/12/19 16:50

Client ID: IA-4(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
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	92		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	90		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

SAMPLE RESULTS

Lab ID: L1959919-03
 Client ID: IA-4(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 16:50
 Date Received: 12/13/19
 Field Prep: Not Specified

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

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.082	0.020	--	0.516	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-04
 Client ID: IA-3(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:00
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/19/19 19:57
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.521	0.200	--	2.58	0.989	--		1
Chloromethane	0.573	0.200	--	1.18	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	494	5.00	--	931	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.58	1.00	--	13.3	2.38	--		1
Trichlorofluoromethane	0.226	0.200	--	1.27	1.12	--		1
Isopropanol	1.08	0.500	--	2.65	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.433	0.200	--	1.35	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.45	0.500	--	4.28	1.47	--		1
Ethyl Acetate	64.0	0.500	--	231	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-04

Date Collected: 12/12/19 17:00

Client ID: IA-3(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.204	0.200	--	0.652	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.365	0.200	--	1.38	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.400	0.400	--	1.74	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-04

Date Collected: 12/12/19 17:00

Client ID: IA-3(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
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	92		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	91		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

SAMPLE RESULTS

Lab ID: L1959919-04
 Client ID: IA-3(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:00
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/19/19 19:57
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.078	0.020	--	0.491	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.072	0.020	--	0.488	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-05
 Client ID: IA-6(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:30
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/19/19 20:36
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.537	0.200	--	2.66	0.989	--		1
Chloromethane	0.529	0.200	--	1.09	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	103	5.00	--	194	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.66	1.00	--	8.69	2.38	--		1
Trichlorofluoromethane	0.233	0.200	--	1.31	1.12	--		1
Isopropanol	3.76	0.500	--	9.24	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.550	0.500	--	1.62	1.47	--		1
Ethyl Acetate	0.557	0.500	--	2.01	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-05

Date Collected: 12/12/19 17:30

Client ID: IA-6(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.205	0.200	--	0.655	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.484	0.200	--	1.82	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-05

Date Collected: 12/12/19 17:30

Client ID: IA-6(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
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	90		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	89		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

SAMPLE RESULTS

Lab ID: L1959919-05
 Client ID: IA-6(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:30
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/19/19 20:36
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.068	0.020	--	0.270	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.360	0.020	--	2.26	0.126	--		1
Trichloroethene	2.24	0.020	--	12.0	0.107	--		1
Tetrachloroethene	0.066	0.020	--	0.448	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	90		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-06
 Client ID: IA-1(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:35
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/19/19 21:14
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.524	0.200	--	2.59	0.989	--		1
Chloromethane	0.577	0.200	--	1.19	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	158	5.00	--	298	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.99	1.00	--	11.9	2.38	--		1
Trichlorofluoromethane	0.223	0.200	--	1.25	1.12	--		1
Isopropanol	1.43	0.500	--	3.52	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	1.90	0.500	--	6.85	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-06

Client ID: IA-1(121219)

Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:35

Date Received: 12/13/19

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.252	0.200	--	0.888	0.705	--		1
Benzene	0.233	0.200	--	0.744	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.406	0.200	--	1.53	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.200	0.200	--	0.869	0.869	--		1
p/m-Xylene	0.773	0.400	--	3.36	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.282	0.200	--	1.22	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-06

Date Collected: 12/12/19 17:35

Client ID: IA-1(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
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	92		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	90		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

SAMPLE RESULTS

Lab ID: L1959919-06
 Client ID: IA-1(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:35
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/19/19 21:14
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.092	0.020	--	0.579	0.126	--		1
Trichloroethene	0.155	0.020	--	0.833	0.107	--		1
Tetrachloroethene	0.096	0.020	--	0.651	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-07
 Client ID: IA-1(121219)DUPLICATE
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:35
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/19/19 21:52
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.523	0.200	--	2.59	0.989	--		1
Chloromethane	0.564	0.200	--	1.16	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	187	5.00	--	352	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.95	1.00	--	11.8	2.38	--		1
Trichlorofluoromethane	0.229	0.200	--	1.29	1.12	--		1
Isopropanol	1.38	0.500	--	3.39	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	1.95	0.500	--	7.03	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-07

Date Collected: 12/12/19 17:35

Client ID: IA-1(121219)DUPLICATE

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.273	0.200	--	0.962	0.705	--		1
Benzene	0.258	0.200	--	0.824	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.467	0.200	--	1.76	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.201	0.200	--	0.873	0.869	--		1
p/m-Xylene	0.766	0.400	--	3.33	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.297	0.200	--	1.29	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-07

Date Collected: 12/12/19 17:35

Client ID: IA-1(121219)DUPLICATE

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
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	91		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	90		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

SAMPLE RESULTS

Lab ID: L1959919-07
 Client ID: IA-1(121219)DUPLICATE
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:35
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/19/19 21:52
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.091	0.020	--	0.572	0.126	--		1
Trichloroethene	0.157	0.020	--	0.844	0.107	--		1
Tetrachloroethene	0.057	0.020	--	0.387	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-08
 Client ID: IA-2(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:45
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/19/19 22:31
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.546	0.200	--	2.70	0.989	--		1
Chloromethane	0.591	0.200	--	1.22	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	119	5.00	--	224	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.21	1.00	--	12.4	2.38	--		1
Trichlorofluoromethane	0.229	0.200	--	1.29	1.12	--		1
Isopropanol	1.29	0.500	--	3.17	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	2.58	0.500	--	9.30	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-08

Date Collected: 12/12/19 17:45

Client ID: IA-2(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.287	0.200	--	1.01	0.705	--		1
Benzene	0.239	0.200	--	0.764	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.416	0.200	--	1.57	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.202	0.200	--	0.877	0.869	--		1
p/m-Xylene	0.765	0.400	--	3.32	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.281	0.200	--	1.22	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**SAMPLE RESULTS**

Lab ID: L1959919-08

Date Collected: 12/12/19 17:45

Client ID: IA-2(121219)

Date Received: 12/13/19

Sample Location: 155 CHANDLER ST, BUFFALO, NY

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								
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	88		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	87		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

SAMPLE RESULTS

Lab ID: L1959919-08
 Client ID: IA-2(121219)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/12/19 17:45
 Date Received: 12/13/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/19/19 22:31
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.095	0.020	--	0.598	0.126	--		1
Trichloroethene	0.138	0.020	--	0.742	0.107	--		1
Tetrachloroethene	0.051	0.020	--	0.346	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	87		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	87		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/19/19 14:47

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1322896-4								
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: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/19/19 14:47

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1322896-4								
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: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/19/19 14:47

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 Batch: WG1322896-4								
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

Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/19/19 15:25

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-08 Batch: WG1322897-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY19 SMP INDOOR AIR SAMPLING

Project Number: E1842

Lab Number: L1959919

Report Date: 12/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1322896-3								
Dichlorodifluoromethane	105		-		70-130	-		
Chloromethane	103		-		70-130	-		
Freon-114	114		-		70-130	-		
Vinyl chloride	120		-		70-130	-		
1,3-Butadiene	111		-		70-130	-		
Bromomethane	120		-		70-130	-		
Chloroethane	123		-		70-130	-		
Ethanol	97		-		40-160	-		
Vinyl bromide	104		-		70-130	-		
Acetone	99		-		40-160	-		
Trichlorofluoromethane	104		-		70-130	-		
Isopropanol	98		-		40-160	-		
1,1-Dichloroethene	115		-		70-130	-		
Tertiary butyl Alcohol	104		-		70-130	-		
Methylene chloride	101		-		70-130	-		
3-Chloropropene	127		-		70-130	-		
Carbon disulfide	87		-		70-130	-		
Freon-113	94		-		70-130	-		
trans-1,2-Dichloroethene	109		-		70-130	-		
1,1-Dichloroethane	115		-		70-130	-		
Methyl tert butyl ether	102		-		70-130	-		
2-Butanone	113		-		70-130	-		
cis-1,2-Dichloroethene	115		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY19 SMP INDOOR AIR SAMPLING

Project Number: E1842

Lab Number: L1959919

Report Date: 12/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1322896-3								
Ethyl Acetate	117		-		70-130	-		
Chloroform	108		-		70-130	-		
Tetrahydrofuran	109		-		70-130	-		
1,2-Dichloroethane	118		-		70-130	-		
n-Hexane	120		-		70-130	-		
1,1,1-Trichloroethane	125		-		70-130	-		
Benzene	104		-		70-130	-		
Carbon tetrachloride	118		-		70-130	-		
Cyclohexane	115		-		70-130	-		
1,2-Dichloropropane	125		-		70-130	-		
Bromodichloromethane	114		-		70-130	-		
1,4-Dioxane	113		-		70-130	-		
Trichloroethene	120		-		70-130	-		
2,2,4-Trimethylpentane	121		-		70-130	-		
Heptane	122		-		70-130	-		
cis-1,3-Dichloropropene	115		-		70-130	-		
4-Methyl-2-pentanone	126		-		70-130	-		
trans-1,3-Dichloropropene	100		-		70-130	-		
1,1,2-Trichloroethane	121		-		70-130	-		
Toluene	103		-		70-130	-		
2-Hexanone	117		-		70-130	-		
Dibromochloromethane	117		-		70-130	-		
1,2-Dibromoethane	101		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY19 SMP INDOOR AIR SAMPLING

Project Number: E1842

Lab Number: L1959919

Report Date: 12/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 Batch: WG1322896-3								
Tetrachloroethene	101		-		70-130	-		
Chlorobenzene	103		-		70-130	-		
Ethylbenzene	109		-		70-130	-		
p/m-Xylene	112		-		70-130	-		
Bromoform	115		-		70-130	-		
Styrene	105		-		70-130	-		
1,1,2,2-Tetrachloroethane	116		-		70-130	-		
o-Xylene	118		-		70-130	-		
4-Ethyltoluene	104		-		70-130	-		
1,3,5-Trimethylbenzene	111		-		70-130	-		
1,2,4-Trimethylbenzene	117		-		70-130	-		
Benzyl chloride	108		-		70-130	-		
1,3-Dichlorobenzene	120		-		70-130	-		
1,4-Dichlorobenzene	112		-		70-130	-		
1,2-Dichlorobenzene	114		-		70-130	-		
1,2,4-Trichlorobenzene	119		-		70-130	-		
Hexachlorobutadiene	113		-		70-130	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: CY19 SMP INDOOR AIR SAMPLING

Project Number: E1842

Lab Number: L1959919

Report Date: 12/20/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-08 Batch: WG1322897-3								
Vinyl chloride	114		-		70-130	-		25
1,1-Dichloroethene	111		-		70-130	-		25
cis-1,2-Dichloroethene	110		-		70-130	-		25
1,1,1-Trichloroethane	119		-		70-130	-		25
Carbon tetrachloride	111		-		70-130	-		25
Trichloroethene	115		-		70-130	-		25
Tetrachloroethene	99		-		70-130	-		25

Lab Duplicate Analysis Batch Quality Control

Project Name: CY19 SMP INDOOR AIR SAMPLING

Project Number: E1842

Lab Number: L1959919

Report Date: 12/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1322896-5 QC Sample: L1959919-02 Client ID: IA-5(121219)						
Dichlorodifluoromethane	0.531	0.539	ppbV	1		25
Chloromethane	0.597	0.611	ppbV	2		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	33.6	32.6	ppbV	3		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	3.98	4.04	ppbV	1		25
Trichlorofluoromethane	0.235	0.234	ppbV	0		25
Isopropanol	1.94	1.99	ppbV	3		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	0.277	0.284	ppbV	2		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1959919
Report Date: 12/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1322896-5 QC Sample: L1959919-02 Client ID: IA-5(121219)						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.229	0.234	ppbV	2		25
Benzene	0.232	0.238	ppbV	3		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.684	0.692	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.227	0.227	ppbV	0		25

Lab Duplicate Analysis Batch Quality Control

Project Name: CY19 SMP INDOOR AIR SAMPLING

Project Number: E1842

Lab Number: L1959919

Report Date: 12/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1322896-5 QC Sample: L1959919-02 Client ID: IA-5(121219)						
p/m-Xylene	0.880	0.889	ppbV	1		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	0.277	0.280	ppbV	1		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L1959919
Report Date: 12/20/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1322897-5 QC Sample: L1959919-02 Client ID: IA-5(121219)						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.087	0.089	ppbV	2		25
Trichloroethene	0.128	0.115	ppbV	11		25
Tetrachloroethene	0.040	0.038	ppbV	5		25

Project Name: CY19 SMP INDOOR AIR SAMPLING

Serial_No:12201915:57
Lab Number: L1959919

Project Number: E1842

Report Date: 12/20/19

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
L1959919-01	OA-1(121219)	01608	Flow 4	12/10/19	309419		-	-	-	Pass	4.5	4.5	0
L1959919-01	OA-1(121219)	194	2.7L Can	12/10/19	309419	L1958012-01	Pass	-29.2	-1.5	-	-	-	-
L1959919-02	IA-5(121219)	01575	Flow 4	12/10/19	309419		-	-	-	Pass	4.5	4.8	6
L1959919-02	IA-5(121219)	151B	2.7L Can	12/10/19	309419	L1958012-06	Pass	-29.5	-6.2	-	-	-	-
L1959919-03	IA-4(121219)	01602	Flow 4	12/10/19	309419		-	-	-	Pass	4.5	4.7	4
L1959919-03	IA-4(121219)	2236	2.7L Can	12/10/19	309419	L1957745-07	Pass	-29.3	-5.3	-	-	-	-
L1959919-04	IA-3(121219)	01613	Flow 4	12/10/19	309419		-	-	-	Pass	4.5	4.6	2
L1959919-04	IA-3(121219)	148	2.7L Can	12/10/19	309419	L1957745-04	Pass	-29.0	-5.8	-	-	-	-
L1959919-05	IA-6(121219)	01607	Flow 4	12/10/19	309419		-	-	-	Pass	4.5	4.7	4
L1959919-05	IA-6(121219)	2358	2.7L Can	12/10/19	309419	L1957745-04	Pass	-29.4	-8.0	-	-	-	-
L1959919-06	IA-1(121219)	01617	Flow 4	12/10/19	309419		-	-	-	Pass	4.5	7.3	47
L1959919-06	IA-1(121219)	2429	2.7L Can	12/10/19	309419	L1957745-04	Pass	-29.4	-1.3	-	-	-	-
L1959919-07	IA-1(121219)DUPLICATE	01614	Flow 4	12/10/19	309419		-	-	-	Pass	4.5	9.6	72
L1959919-07	IA-1(121219)DUPLICATE	2423	2.7L Can	12/10/19	309419	L1957745-04	Pass	-29.0	0.0	-	-	-	-
L1959919-08	IA-2(121219)	0144	Flow 4	12/10/19	309419		-	-	-	Pass	4.5	3.9	14

Project Name: CY19 SMP INDOOR AIR SAMPLING

Project Number: E1842

Serial_No:12201915:57

Lab Number: L1959919

Report Date: 12/20/19

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1959919-08	IA-2(121219)	3034	2.7L Can	12/10/19	309419	L1957745-04	Pass	-29.1	-10.2	-	-	-	-



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

Lab Number: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-04
Client ID: CAN 481 SHELF 9
Sample Location:

Date Collected: 12/03/19 16:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 12/04/19 21:22
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: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-04
Client ID: CAN 481 SHELF 9
Sample Location:

Date Collected: 12/03/19 16:00
Date Received: 12/04/19
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: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-04
Client ID: CAN 481 SHELF 9
Sample Location:

Date Collected: 12/03/19 16:00
Date Received: 12/04/19
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: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-04
Client ID: CAN 481 SHELF 9
Sample Location:

Date Collected: 12/03/19 16:00
Date Received: 12/04/19
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**Lab Number:** L1957745**Project Number:** CANISTER QC BAT**Report Date:** 12/20/19**Air Canister Certification Results**

Lab ID: L1957745-04

Date Collected: 12/03/19 16:00

Client ID: CAN 481 SHELF 9

Date Received: 12/04/19

Sample Location:

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	114		60-140
Bromochloromethane	110		60-140
chlorobenzene-d5	125		60-140

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

Lab Number: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-04
Client ID: CAN 481 SHELF 9
Sample Location:

Date Collected: 12/03/19 16:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 12/04/19 21:22
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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

Lab Number: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-04
Client ID: CAN 481 SHELF 9
Sample Location:

Date Collected: 12/03/19 16:00
Date Received: 12/04/19
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								
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1957745**Project Number:** CANISTER QC BAT**Report Date:** 12/20/19**Air Canister Certification Results**

Lab ID: L1957745-04

Date Collected: 12/03/19 16:00

Client ID: CAN 481 SHELF 9

Date Received: 12/04/19

Sample Location:

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								
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	116		60-140
bromochloromethane	111		60-140
chlorobenzene-d5	126		60-140



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

Lab Number: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-07
Client ID: CAN 2073 SHELF 3
Sample Location:

Date Collected: 12/04/19 09:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 12/04/19 23:19
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: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-07
Client ID: CAN 2073 SHELF 3
Sample Location:

Date Collected: 12/04/19 09:00
Date Received: 12/04/19
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: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-07
Client ID: CAN 2073 SHELF 3
Sample Location:

Date Collected: 12/04/19 09:00
Date Received: 12/04/19
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**Lab Number:** L1957745**Project Number:** CANISTER QC BAT**Report Date:** 12/20/19**Air Canister Certification Results****Lab ID:** L1957745-07**Date Collected:** 12/04/19 09:00**Client ID:** CAN 2073 SHELF 3**Date Received:** 12/04/19**Sample Location:****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**Lab Number:** L1957745**Project Number:** CANISTER QC BAT**Report Date:** 12/20/19**Air Canister Certification Results**

Lab ID: L1957745-07

Date Collected: 12/04/19 09:00

Client ID: CAN 2073 SHELF 3

Date Received: 12/04/19

Sample Location:

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	111		60-140
Bromochloromethane	106		60-140
chlorobenzene-d5	122		60-140

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

Lab Number: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-07
Client ID: CAN 2073 SHELF 3
Sample Location:

Date Collected: 12/04/19 09:00
Date Received: 12/04/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 12/04/19 23:19
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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

Lab Number: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-07
Client ID: CAN 2073 SHELF 3
Sample Location:

Date Collected: 12/04/19 09:00
Date Received: 12/04/19
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								
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



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

Lab Number: L1957745
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1957745-07
Client ID: CAN 2073 SHELF 3
Sample Location:

Date Collected: 12/04/19 09:00
Date Received: 12/04/19
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								
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	113		60-140
bromochloromethane	107		60-140
chlorobenzene-d5	124		60-140



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

Lab Number: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-01
Client ID: CAN 354 SHELF 10
Sample Location:

Date Collected: 12/04/19 16:00
Date Received: 12/05/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 12/05/19 17:28
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: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-01
Client ID: CAN 354 SHELF 10
Sample Location:

Date Collected: 12/04/19 16:00
Date Received: 12/05/19
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: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-01
Client ID: CAN 354 SHELF 10
Sample Location:

Date Collected: 12/04/19 16:00
Date Received: 12/05/19
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: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-01
Client ID: CAN 354 SHELF 10
Sample Location:

Date Collected: 12/04/19 16:00
Date Received: 12/05/19
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**Lab Number:** L1958012**Project Number:** CANISTER QC BAT**Report Date:** 12/20/19**Air Canister Certification Results**

Lab ID: L1958012-01

Date Collected: 12/04/19 16:00

Client ID: CAN 354 SHELF 10

Date Received: 12/05/19

Sample Location:

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	99		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	99		60-140

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

Lab Number: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-01
Client ID: CAN 354 SHELF 10
Sample Location:

Date Collected: 12/04/19 16:00
Date Received: 12/05/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 12/05/19 17:28
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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

Lab Number: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-01
Client ID: CAN 354 SHELF 10
Sample Location:

Date Collected: 12/04/19 16:00
Date Received: 12/05/19
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								
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	0.050	--	ND	0.188	--		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-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L1958012**Project Number:** CANISTER QC BAT**Report Date:** 12/20/19**Air Canister Certification Results**

Lab ID: L1958012-01

Date Collected: 12/04/19 16:00

Client ID: CAN 354 SHELF 10

Date Received: 12/05/19

Sample Location:

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								
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	99		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	98		60-140



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

Lab Number: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-06
Client ID: CAN 171 SHELF 7
Sample Location:

Date Collected: 12/05/19 09:00
Date Received: 12/05/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 12/05/19 20:47
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: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-06
Client ID: CAN 171 SHELF 7
Sample Location:

Date Collected: 12/05/19 09:00
Date Received: 12/05/19
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: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-06
Client ID: CAN 171 SHELF 7
Sample Location:

Date Collected: 12/05/19 09:00
Date Received: 12/05/19
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: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-06
Client ID: CAN 171 SHELF 7
Sample Location:

Date Collected: 12/05/19 09:00
Date Received: 12/05/19
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**Lab Number:** L1958012**Project Number:** CANISTER QC BAT**Report Date:** 12/20/19**Air Canister Certification Results**

Lab ID: L1958012-06

Date Collected: 12/05/19 09:00

Client ID: CAN 171 SHELF 7

Date Received: 12/05/19

Sample Location:

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	97		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	98		60-140

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

Lab Number: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-06
Client ID: CAN 171 SHELF 7
Sample Location:

Date Collected: 12/05/19 09:00
Date Received: 12/05/19
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 12/05/19 20:47
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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

Lab Number: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-06
Client ID: CAN 171 SHELF 7
Sample Location:

Date Collected: 12/05/19 09:00
Date Received: 12/05/19
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								
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



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

Lab Number: L1958012
Report Date: 12/20/19

Air Canister Certification Results

Lab ID: L1958012-06
Client ID: CAN 171 SHELF 7
Sample Location:

Date Collected: 12/05/19 09:00
Date Received: 12/05/19
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								
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	98		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	98		60-140



Project Name: CY19 SMP INDOOR AIR SAMPLING**Lab Number:** L1959919**Project Number:** E1842**Report Date:** 12/20/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1959919-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1959919-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1959919-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L1959919-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1959919-05A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L1959919-06A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1959919-07A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L1959919-08A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

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.
LCS D	- 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.
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.

Footnotes

Report Format: Data Usability Report



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

- 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. 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.
- 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 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.

Report Format: Data Usability Report



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

Data Qualifiers

RE - Analytical results are from sample re-extraction.
S - Analytical results are from modified screening analysis.

Report Format: Data Usability Report



Project Name: CY19 SMP INDOOR AIR SAMPLING
Project Number: E1842

Lab Number: L1959919
Report Date: 12/20/19

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.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 15

Department: **Quality Assurance**

Published Date: 8/15/2019 9:53:42 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

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**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

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

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****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.****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

PAGE 1 OF 1

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

Client Information

Client: Hazard Evaluations Inc.
Address: 3636 N. Buffalo Rd.
Orchard Park, NY 14127
Phone: 716-667-3130
Fax: 716-667-3156
Email: mhan@hazardevaluations.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

Project Information

Project Name: CY19 SMP Indoor Air Sampling
Project Location: 155 Chandler St. Buffalo, NY
Project #: e1842
Project Manager: Mark Hanna
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due:

Time:

Date Rec'd in Lab:

12/13/19

Report Information - Data Deliverables

☐ FAX

☒ ADEX

Criteria Checker: ASP-B
(Default based on Regulatory Criteria Indicated)

Other Formats:

☐ EMAIL (standard pdf report)

☐ Additional Deliverables:

Report to: (if different than Project Manager)

ALPHA Job #:

L1959919

Billing Information

☒ Same as Client Info

PO #: e1842

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

ANALYSIS

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 S/N	APH Sub	Fixed Gases	Sulfides & Mercaptans		Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum													
89919-01	OA-1(121219)	12/12/19	8:30am	4:30pm	-28.52"	-2.91"	AA	EB	2.7L	194	01602	X							0.0ppm
02	IA-5(121219)	12/12/19	8:45am	4:45pm	-30.18"	-7.59"	AA	EB	2.7L	1513	01575	X							0.0ppm
03	IA-4(121219)	12/12/19	8:50am	4:50pm	-28.10"	-5.74"	AA	EB	2.7L	2236	01602	X							0.0ppm
04	IA-3(121219)	12/12/19	9:00am	5:00pm	-30.00"	-5.45"	AA	EB	2.7L	148	01613	X							0.0ppm
05	IA-6(121219)	12/14/19	9:30am	5:30pm	-27.99"	-8.93"	AA	EB	2.7L	2358	01607	X							0.0ppm
06	IA-1(121219)	12/12/19	9:35am	5:35pm	-30.25"	-0.75"	AA	EB	2.7L	2429	01617	X							0.0ppm
07	IA-1(121219) Duplicate	12/12/19	9:35am	5:35pm	-30.15"	-0.25"	AA	EB	2.7L	2423	01614	X							0.0ppm
08	IA-2(121219)	12/12/19	9:45am	5:45pm	-30.25"	-9.60"	AA	EB	2.7L	3034	0144	X							0.0ppm

*SAMPLE MATRIX CODES

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

Container Type

CS

Relinquished By:

Date/Time

Received By:

Date/Time:

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:	L1959098
Client:	Hazard Evaluations, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Mark Hanna
Phone:	(716) 667-3130
Project Name:	CY19 DECEMBER GW SAMPLING
Project Number:	E1842
Report Date:	12/17/19

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

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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



Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1959098-01	TRIP BLANK (121019)	WATER	155 CHANDLER ST, BUFFALO, NY	12/10/19 00:00	12/10/19
L1959098-02	EQUIPMENT RINSATE (121019)	WATER	155 CHANDLER ST, BUFFALO, NY	12/10/19 11:35	12/10/19
L1959098-03	MW-3 (121019)	WATER	155 CHANDLER ST, BUFFALO, NY	12/10/19 11:38	12/10/19
L1959098-04	MW-3 (121019) DUPLICATE	WATER	155 CHANDLER ST, BUFFALO, NY	12/10/19 11:38	12/10/19

Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

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: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

Case Narrative (continued)

Report Submission

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

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:

Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative

Date: 12/17/19

ORGANICS

VOLATILES

Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

SAMPLE RESULTS

Lab ID: L1959098-01
Client ID: TRIP BLANK (121019)
Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/10/19 00:00
Date Received: 12/10/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/16/19 14:07
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY19 DECEMBER GW SAMPLING**Lab Number:** L1959098**Project Number:** E1842**Report Date:** 12/17/19**SAMPLE RESULTS****Lab ID:** L1959098-01**Date Collected:** 12/10/19 00:00**Client ID:** TRIP BLANK (121019)**Date Received:** 12/10/19**Sample Location:** 155 CHANDLER ST, BUFFALO, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	96		70-130

Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

SAMPLE RESULTS

Lab ID: L1959098-02
Client ID: EQUIPMENT RINSATE (121019)
Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/10/19 11:35
Date Received: 12/10/19
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/16/19 13:44
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY19 DECEMBER GW SAMPLING**Lab Number:** L1959098**Project Number:** E1842**Report Date:** 12/17/19**SAMPLE RESULTS**

Lab ID: L1959098-02
 Client ID: EQUIPMENT RINSATE (121019)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/10/19 11:35
 Date Received: 12/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Project Name: CY19 DECEMBER GW SAMPLING**Lab Number:** L1959098**Project Number:** E1842**Report Date:** 12/17/19**SAMPLE RESULTS**

Lab ID: L1959098-03
 Client ID: MW-3 (121019)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/10/19 11:38
 Date Received: 12/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 12/16/19 14:30
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.26	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY19 DECEMBER GW SAMPLING**Lab Number:** L1959098**Project Number:** E1842**Report Date:** 12/17/19**SAMPLE RESULTS**

Lab ID: L1959098-03
 Client ID: MW-3 (121019)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/10/19 11:38
 Date Received: 12/10/19
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	95		70-130

Project Name: CY19 DECEMBER GW SAMPLING**Lab Number:** L1959098**Project Number:** E1842**Report Date:** 12/17/19**SAMPLE RESULTS**

Lab ID: L1959098-04
 Client ID: MW-3 (121019) DUPLICATE
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/10/19 11:38
 Date Received: 12/10/19
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 12/16/19 13:21
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.28	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: CY19 DECEMBER GW SAMPLING**Lab Number:** L1959098**Project Number:** E1842**Report Date:** 12/17/19**SAMPLE RESULTS**

Lab ID: L1959098-04
Client ID: MW-3 (121019) DUPLICATE
Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 12/10/19 11:38
Date Received: 12/10/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	95		70-130

Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/16/19 08:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1321405-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 12/16/19 08:21
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1321405-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 12/16/19 08:21
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1321405-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: CY19 DECEMBER GW SAMPLING

Lab Number: L1959098

Project Number: E1842

Report Date: 12/17/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1321405-3 WG1321405-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	95		94		63-132	1		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	89		89		63-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	110		100		75-130	10		20
Trichlorofluoromethane	120		110		62-150	9		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	85		85		70-130	0		20
cis-1,3-Dichloropropene	98		98		70-130	0		20
Bromoform	84		86		54-136	2		20
1,1,2,2-Tetrachloroethane	100		110		67-130	10		20
Benzene	110		110		70-130	0		20
Toluene	110		100		70-130	10		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	100		98		64-130	2		20
Bromomethane	100		100		39-139	0		20
Vinyl chloride	120		110		55-140	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY19 DECEMBER GW SAMPLING

Project Number: E1842

Lab Number: L1959098

Report Date: 12/17/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1321405-3 WG1321405-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	110		100		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	110		110		70-130	0		20
o-Xylene	110		105		70-130	5		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Styrene	110		105		70-130	5		20
Dichlorodifluoromethane	110		110		36-147	0		20
Acetone	140		160	Q	58-148	13		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	130		140	Q	63-138	7		20
4-Methyl-2-pentanone	100		110		59-130	10		20
2-Hexanone	99		110		57-130	11		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	82		87		41-144	6		20
Isopropylbenzene	110		110		70-130	0		20
1,2,3-Trichlorobenzene	99		100		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: CY19 DECEMBER GW SAMPLING

Project Number: E1842

Lab Number: L1959098

Report Date: 12/17/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1321405-3 WG1321405-4								
1,2,4-Trichlorobenzene	99		100		70-130	1		20
Methyl Acetate	99		100		70-130	1		20
Cyclohexane	110		110		70-130	0		20
1,4-Dioxane	114		128		56-162	12		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	110		110		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		106		70-130
Toluene-d8	102		101		70-130
4-Bromofluorobenzene	101		102		70-130
Dibromofluoromethane	100		101		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: CY19 DECEMBER GW SAMPLING

Project Number: E1842

Lab Number: L1959098

Report Date: 12/17/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1321405-6 WG1321405-7 QC Sample: L1959098-03 Client ID: MW-3 (121019)												
Methylene chloride	ND	10	10	100		10	100		70-130	0		20
1,1-Dichloroethane	ND	10	10	100		11	110		70-130	10		20
Chloroform	ND	10	10	100		10	100		70-130	0		20
Carbon tetrachloride	ND	10	8.6	86		9.0	90		63-132	5		20
1,2-Dichloropropane	ND	10	10	100		10	100		70-130	0		20
Dibromochloromethane	ND	10	7.8	78		7.8	78		63-130	0		20
1,1,2-Trichloroethane	ND	10	10	100		10	100		70-130	0		20
Tetrachloroethene	ND	10	10	100		10	100		70-130	0		20
Chlorobenzene	ND	10	9.7	97		9.9	99		75-130	2		20
Trichlorofluoromethane	ND	10	11	110		11	110		62-150	0		20
1,2-Dichloroethane	ND	10	11	110		11	110		70-130	0		20
1,1,1-Trichloroethane	ND	10	10	100		11	110		67-130	10		20
Bromodichloromethane	ND	10	9.4	94		9.7	97		67-130	3		20
trans-1,3-Dichloropropene	ND	10	7.1	71		7.5	75		70-130	5		20
cis-1,3-Dichloropropene	ND	10	8.3	83		8.7	87		70-130	5		20
Bromoform	ND	10	6.9	69		7.2	72		54-136	4		20
1,1,2,2-Tetrachloroethane	ND	10	9.7	97		10	100		67-130	3		20
Benzene	0.26J	10	11	110		11	110		70-130	0		20
Toluene	ND	10	10	100		10	100		70-130	0		20
Ethylbenzene	ND	10	10	100		10	100		70-130	0		20
Chloromethane	ND	10	11	110		10	100		64-130	10		20
Bromomethane	ND	10	11	110		13	130		39-139	17		20
Vinyl chloride	ND	10	11	110		11	110		55-140	0		20

Matrix Spike Analysis

Batch Quality Control

Project Name: CY19 DECEMBER GW SAMPLING

Project Number: E1842

Lab Number: L1959098

Report Date: 12/17/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1321405-6 WG1321405-7 QC Sample: L1959098-03 Client ID: MW-3 (121019)												
Chloroethane	ND	10	10	100		11	110		55-138	10		20
1,1-Dichloroethene	ND	10	11	110		11	110		61-145	0		20
trans-1,2-Dichloroethene	ND	10	10	100		10	100		70-130	0		20
Trichloroethene	ND	10	10	100		10	100		70-130	0		20
1,2-Dichlorobenzene	ND	10	9.3	93		9.7	97		70-130	4		20
1,3-Dichlorobenzene	ND	10	9.3	93		9.7	97		70-130	4		20
1,4-Dichlorobenzene	ND	10	9.3	93		9.6	96		70-130	3		20
Methyl tert butyl ether	ND	10	9.8	98		10	100		63-130	2		20
p/m-Xylene	ND	20	20	100		20	100		70-130	0		20
o-Xylene	ND	20	20	100		20	100		70-130	0		20
cis-1,2-Dichloroethene	ND	10	10	100		10	100		70-130	0		20
Styrene	ND	20	20	100		20	100		70-130	0		20
Dichlorodifluoromethane	ND	10	10	100		10	100		36-147	0		20
Acetone	ND	10	14	140		13	130		58-148	7		20
Carbon disulfide	ND	10	9.7	97		10	100		51-130	3		20
2-Butanone	ND	10	12	120		12	120		63-138	0		20
4-Methyl-2-pentanone	ND	10	10	100		11	110		59-130	10		20
2-Hexanone	ND	10	10	100		11	110		57-130	10		20
Bromochloromethane	ND	10	9.9	99		10	100		70-130	1		20
1,2-Dibromoethane	ND	10	9.6	96		9.8	98		70-130	2		20
1,2-Dibromo-3-chloropropane	ND	10	7.0	70		7.7	77		41-144	10		20
Isopropylbenzene	ND	10	10	100		10	100		70-130	0		20
1,2,3-Trichlorobenzene	ND	10	8.7	87		9.6	96		70-130	10		20

Matrix Spike Analysis**Batch Quality Control****Project Name:** CY19 DECEMBER GW SAMPLING**Project Number:** E1842**Lab Number:** L1959098**Report Date:** 12/17/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1321405-6 WG1321405-7 QC Sample: L1959098-03 Client ID: MW-3 (121019)												
1,2,4-Trichlorobenzene	ND	10	8.7	87		9.2	92		70-130	6		20
Methyl Acetate	ND	10	9.2	92		9.6	96		70-130	4		20
Cyclohexane	ND	10	11	110		11	110		70-130	0		20
1,4-Dioxane	ND	500	990	198	Q	820	164	Q	56-162	19		20
Freon-113	ND	10	11	110		11	110		70-130	0		20
Methyl cyclohexane	ND	10	10	100		10	100		70-130	0		20

Surrogate	MS % Recovery	Qualifier	MSD % Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		109		70-130
4-Bromofluorobenzene	101		102		70-130
Dibromofluoromethane	101		101		70-130
Toluene-d8	100		100		70-130

Project Name: CY19 DECEMBER GW SAMPLING**Lab Number:** L1959098**Project Number:** E1842**Report Date:** 12/17/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

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

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1959098-01A	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-01B	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-02A	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-02B	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-02C	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-03A	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-03A1	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-03A2	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-03B	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-03B1	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-03B2	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-03C	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-03C1	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-03C2	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-04A	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-04B	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1959098-04C	Vial HCl preserved	A	NA		3.6	Y	Absent		NYTCL-8260-R2(14)

Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

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.
LCS D	- 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.
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.

Footnotes

Report Format: DU Report with 'J' Qualifiers



Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

- 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. 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.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

Report Format: DU Report with 'J' Qualifiers



Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

Data Qualifiers

- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name: CY19 DECEMBER GW SAMPLING
Project Number: E1842

Lab Number: L1959098
Report Date: 12/17/19

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 15

Department: **Quality Assurance**

Published Date: 8/15/2019 9:53:42 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

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**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

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

Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****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.****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.



ANALYTICAL REPORT

Lab Number:	L2007739
Client:	Hazard Evaluations, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Mark Hanna
Phone:	(716) 667-3130
Project Name:	INDOOR AIR RE-SAMPLE FEB 2020
Project Number:	E1842
Report Date:	02/26/20

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: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2007739-01	IA-6(022020)	AIR	155 CHANDLER ST, BUFFALO, NY	02/20/20 15:50	02/20/20
L2007739-02	IA-6(022020)DUPLICATE	AIR	155 CHANDLER ST, BUFFALO, NY	02/20/20 15:50	02/20/20

Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

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: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on February 13, 2020. The canister certification results are provided as an addendum.

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

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 02/26/20

AIR

Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

SAMPLE RESULTS

Lab ID: L2007739-01
 Client ID: IA-6(022020)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 02/20/20 15:50
 Date Received: 02/20/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 02/25/20 21:47
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.377	0.200	--	1.86	0.989	--		1
Chloromethane	0.463	0.200	--	0.956	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	58.8	5.00	--	111	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	69.6	1.00	--	165	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	2.12	0.500	--	5.21	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

SAMPLE RESULTS

Lab ID: L2007739-01
 Client ID: IA-6(022020)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 02/20/20 15:50
 Date Received: 02/20/20
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.310	0.200	--	1.17	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.27	0.200	--	5.52	0.869	--		1
p/m-Xylene	4.14	0.400	--	18.0	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.20	0.200	--	5.21	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

SAMPLE RESULTS

Lab ID: L2007739-01
 Client ID: IA-6(022020)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 02/20/20 15:50
 Date Received: 02/20/20
 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								
1,2,4-Trimethylbenzene	0.222	0.200	--	1.09	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	89		60-140



Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

SAMPLE RESULTS

Lab ID: L2007739-01
 Client ID: IA-6(022020)
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 02/20/20 15:50
 Date Received: 02/20/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 02/25/20 21:47
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.024	0.020	--	0.095	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.069	0.020	--	0.434	0.126	--		1
Trichloroethene	0.250	0.020	--	1.34	0.107	--		1
Tetrachloroethene	0.045	0.020	--	0.305	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	91		60-140



Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

SAMPLE RESULTS

Lab ID: L2007739-02
Client ID: IA-6(022020)DUPLICATE
Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 02/20/20 15:50
Date Received: 02/20/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/25/20 22:26
Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.391	0.200	--	1.93	0.989	--		1
Chloromethane	0.446	0.200	--	0.921	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	68.5	5.00	--	129	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	78.7	1.00	--	187	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	2.11	0.500	--	5.19	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

SAMPLE RESULTS

Lab ID: L2007739-02
 Client ID: IA-6(022020)DUPLICATE
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 02/20/20 15:50
 Date Received: 02/20/20
 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								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.282	0.200	--	1.06	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.35	0.200	--	5.86	0.869	--		1
p/m-Xylene	4.44	0.400	--	19.3	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.29	0.200	--	5.60	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

SAMPLE RESULTS

Lab ID: L2007739-02
 Client ID: IA-6(022020)DUPLICATE
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 02/20/20 15:50
 Date Received: 02/20/20
 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								
1,2,4-Trimethylbenzene	0.253	0.200	--	1.24	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	94		60-140



Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

SAMPLE RESULTS

Lab ID: L2007739-02
 Client ID: IA-6(022020)DUPLICATE
 Sample Location: 155 CHANDLER ST, BUFFALO, NY

Date Collected: 02/20/20 15:50
 Date Received: 02/20/20
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 02/25/20 22:26
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.030	0.020	--	0.119	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--		1
Trichloroethene	0.266	0.020	--	1.43	0.107	--		1
Tetrachloroethene	0.043	0.020	--	0.292	0.136	--		1

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



Project Name: INDOOR AIR RE-SAMPLE FEB 2020**Lab Number:** L2007739**Project Number:** E1842**Report Date:** 02/26/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/25/20 14:52

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: WG1344262-4								
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: INDOOR AIR RE-SAMPLE FEB 2020**Lab Number:** L2007739**Project Number:** E1842**Report Date:** 02/26/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/25/20 14:52

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: WG1344262-4								
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: INDOOR AIR RE-SAMPLE FEB 2020**Lab Number:** L2007739**Project Number:** E1842**Report Date:** 02/26/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 02/25/20 14:52

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: WG1344262-4								
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

Project Name: INDOOR AIR RE-SAMPLE FEB 2020**Lab Number:** L2007739**Project Number:** E1842**Report Date:** 02/26/20

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 02/25/20 15:31

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1344264-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: INDOOR AIR RE-SAMPLE FEB 2020

Project Number: E1842

Lab Number: L2007739

Report Date: 02/26/20

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: WG1344262-3								
Dichlorodifluoromethane	83		-		70-130	-		
Chloromethane	88		-		70-130	-		
Freon-114	93		-		70-130	-		
Vinyl chloride	108		-		70-130	-		
1,3-Butadiene	94		-		70-130	-		
Bromomethane	105		-		70-130	-		
Chloroethane	110		-		70-130	-		
Ethanol	83		-		40-160	-		
Vinyl bromide	89		-		70-130	-		
Acetone	88		-		40-160	-		
Trichlorofluoromethane	81		-		70-130	-		
Isopropanol	89		-		40-160	-		
1,1-Dichloroethene	102		-		70-130	-		
Tertiary butyl Alcohol	90		-		70-130	-		
Methylene chloride	92		-		70-130	-		
3-Chloropropene	115		-		70-130	-		
Carbon disulfide	86		-		70-130	-		
Freon-113	99		-		70-130	-		
trans-1,2-Dichloroethene	110		-		70-130	-		
1,1-Dichloroethane	111		-		70-130	-		
Methyl tert butyl ether	84		-		70-130	-		
2-Butanone	102		-		70-130	-		
cis-1,2-Dichloroethene	116		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: INDOOR AIR RE-SAMPLE FEB 2020

Project Number: E1842

Lab Number: L2007739

Report Date: 02/26/20

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: WG1344262-3								
Ethyl Acetate	126		-		70-130	-		
Chloroform	105		-		70-130	-		
Tetrahydrofuran	106		-		70-130	-		
1,2-Dichloroethane	95		-		70-130	-		
n-Hexane	106		-		70-130	-		
1,1,1-Trichloroethane	81		-		70-130	-		
Benzene	92		-		70-130	-		
Carbon tetrachloride	83		-		70-130	-		
Cyclohexane	104		-		70-130	-		
1,2-Dichloropropane	106		-		70-130	-		
Bromodichloromethane	94		-		70-130	-		
1,4-Dioxane	102		-		70-130	-		
Trichloroethene	94		-		70-130	-		
2,2,4-Trimethylpentane	106		-		70-130	-		
Heptane	93		-		70-130	-		
cis-1,3-Dichloropropene	93		-		70-130	-		
4-Methyl-2-pentanone	95		-		70-130	-		
trans-1,3-Dichloropropene	77		-		70-130	-		
1,1,2-Trichloroethane	97		-		70-130	-		
Toluene	104		-		70-130	-		
2-Hexanone	105		-		70-130	-		
Dibromochloromethane	101		-		70-130	-		
1,2-Dibromoethane	104		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: INDOOR AIR RE-SAMPLE FEB 2020

Project Number: E1842

Lab Number: L2007739

Report Date: 02/26/20

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: WG1344262-3								
Tetrachloroethene	97		-		70-130	-		
Chlorobenzene	106		-		70-130	-		
Ethylbenzene	104		-		70-130	-		
p/m-Xylene	104		-		70-130	-		
Bromoform	104		-		70-130	-		
Styrene	103		-		70-130	-		
1,1,2,2-Tetrachloroethane	117		-		70-130	-		
o-Xylene	102		-		70-130	-		
4-Ethyltoluene	98		-		70-130	-		
1,3,5-Trimethylbenzene	95		-		70-130	-		
1,2,4-Trimethylbenzene	102		-		70-130	-		
Benzyl chloride	98		-		70-130	-		
1,3-Dichlorobenzene	109		-		70-130	-		
1,4-Dichlorobenzene	109		-		70-130	-		
1,2-Dichlorobenzene	112		-		70-130	-		
1,2,4-Trichlorobenzene	114		-		70-130	-		
Hexachlorobutadiene	105		-		70-130	-		

Lab Control Sample Analysis **Batch Quality Control**

Project Name: INDOOR AIR RE-SAMPLE FEB 2020

Project Number: E1842

Lab Number: L2007739

Report Date: 02/26/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1344264-3								
Vinyl chloride	106		-		70-130	-		25
1,1-Dichloroethene	100		-		70-130	-		25
cis-1,2-Dichloroethene	114		-		70-130	-		25
1,1,1-Trichloroethane	79		-		70-130	-		25
Carbon tetrachloride	81		-		70-130	-		25
Trichloroethene	91		-		70-130	-		25
Tetrachloroethene	93		-		70-130	-		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: INDOOR AIR RE-SAMPLE FEB 2020

Project Number: E1842

Lab Number: L2007739

Report Date: 02/26/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1344262-5 QC Sample: L2007739-02 Client ID: IA-6(022020)DUPLICATE						
Dichlorodifluoromethane	0.391	0.379	ppbV	3		25
Chloromethane	0.446	0.456	ppbV	2		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	68.5	66.2	ppbV	3		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	78.7	79.9	ppbV	2		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	2.11	2.15	ppbV	2		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis Batch Quality Control

Project Name: INDOOR AIR RE-SAMPLE FEB 2020

Project Number: E1842

Lab Number: L2007739

Report Date: 02/26/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1344262-5 QC Sample: L2007739-02 Client ID: IA-6(022020)DUPLICATE						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.282	0.284	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	1.35	1.40	ppbV	4		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: INDOOR AIR RE-SAMPLE FEB 2020

Project Number: E1842

Lab Number: L2007739

Report Date: 02/26/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1344262-5 QC Sample: L2007739-02 Client ID: IA-6(022020)DUPLICATE						
p/m-Xylene	4.44	4.58	ppbV	3		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	1.29	1.34	ppbV	4		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.253	0.266	ppbV	5		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: INDOOR AIR RE-SAMPLE FEB 2020

Project Number: E1842

Lab Duplicate Analysis

Batch Quality Control

Lab Number: L2007739

Report Date: 02/26/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1344264-5 QC Sample: L2007739-02 Client ID: IA-6(022020)DUPLICATE						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	0.030	0.035	ppbV	15		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.072	0.064	ppbV	12		25
Trichloroethene	0.266	0.270	ppbV	1		25
Tetrachloroethene	0.043	0.042	ppbV	2		25

Project Name: INDOOR AIR RE-SAMPLE FEB 2020

Serial_No:02262016:06
Lab Number: L2007739

Project Number: E1842

Report Date: 02/26/20

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
L2007739-01	IA-6(022020)	01201	Flow 5	02/13/20	314243		-	-	-	Pass	4.5	4.7	4
L2007739-01	IA-6(022020)	2873	2.7L Can	02/13/20	314243	L2006062-06	Pass	-29.0	-14.3	-	-	-	-
L2007739-02	IA-6(022020)DUPLICATE	01485	Flow 5	02/13/20	314243		-	-	-	Pass	4.5	4.4	2
L2007739-02	IA-6(022020)DUPLICATE	2434	2.7L Can	02/13/20	314243	L2006062-07	Pass	-29.0	-3.1	-	-	-	-

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

Lab Number: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-06
Client ID: CAN 490 SHELF 7
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/11/20 20:33
Analyst: EW

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: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-06
Client ID: CAN 490 SHELF 7
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
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: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-06
Client ID: CAN 490 SHELF 7
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
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: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-06
Client ID: CAN 490 SHELF 7
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
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**Lab Number:** L2006062**Project Number:** CANISTER QC BAT**Report Date:** 02/26/20**Air Canister Certification Results**

Lab ID: L2006062-06

Date Collected: 02/11/20 12:00

Client ID: CAN 490 SHELF 7

Date Received: 02/11/20

Sample Location:

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	85		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	81		60-140

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

Lab Number: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-06
Client ID: CAN 490 SHELF 7
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/11/20 20:33
Analyst: EW

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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

Lab Number: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-06
Client ID: CAN 490 SHELF 7
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
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								
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2006062**Project Number:** CANISTER QC BAT**Report Date:** 02/26/20**Air Canister Certification Results**

Lab ID: L2006062-06

Date Collected: 02/11/20 12:00

Client ID: CAN 490 SHELF 7

Date Received: 02/11/20

Sample Location:

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								
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	83		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	82		60-140

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

Lab Number: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-07
Client ID: CAN 418 SHELF 8
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 02/11/20 21:12
Analyst: EW

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: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-07
Client ID: CAN 418 SHELF 8
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
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: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-07
Client ID: CAN 418 SHELF 8
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
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: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-07
Client ID: CAN 418 SHELF 8
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
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**Lab Number:** L2006062**Project Number:** CANISTER QC BAT**Report Date:** 02/26/20**Air Canister Certification Results**

Lab ID: L2006062-07

Date Collected: 02/11/20 12:00

Client ID: CAN 418 SHELF 8

Date Received: 02/11/20

Sample Location:

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	85		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	82		60-140

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

Lab Number: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-07
Client ID: CAN 418 SHELF 8
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 02/11/20 21:12
Analyst: EW

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
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
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1



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

Lab Number: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-07
Client ID: CAN 418 SHELF 8
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
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								
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1



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

Lab Number: L2006062
Report Date: 02/26/20

Air Canister Certification Results

Lab ID: L2006062-07
Client ID: CAN 418 SHELF 8
Sample Location:

Date Collected: 02/11/20 12:00
Date Received: 02/11/20
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								
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	83		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	82		60-140

Project Name: INDOOR AIR RE-SAMPLE FEB 2020**Lab Number:** L2007739**Project Number:** E1842**Report Date:** 02/26/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

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

NA Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2007739-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2007739-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

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.
LCS D	- 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.
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.

Footnotes

Report Format: Data Usability Report



Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

- 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. 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.
- 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 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

Report Format: Data Usability Report



Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

Data Qualifiers

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.

Project Name: INDOOR AIR RE-SAMPLE FEB 2020
Project Number: E1842

Lab Number: L2007739
Report Date: 02/26/20

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.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 16

Published Date: 2/17/2020 10:46:05 AM

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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**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; 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.

EPA TO-12 Non-methane organics**EPA 3C** Fixed gases**Biological Tissue Matrix:** EPA 3050B

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

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

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

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****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.****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.

APPENDIX G

DATA USABILITY SUMMARY REPORTS

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

155 Chandler St.
Alpha Analytical SDG#L1852191, L1905849, L1927357, L1959919, L2007739
March 25, 2020
Sampling dates: 12/18/2018-2/20/2020

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

155 Chandler St.
SDG# L1852191, L1905849, L1927357, L1959919, L2007739

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for Hazard Evaluations, Inc., project located at 155 Chandler St., Alpha Analytical #L1852191, L1905849, L1927357, L1959919, L2007739 submitted to Vali-Data of WNY, LLC on March 20, 2020. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocols and USEPA National Functional Guidelines (SOP NO. HW-31, revision 6). The laboratory performed the analysis using Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15 and TO-15SIM, January 1999.

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Method Blank
- Field Duplicate Sample Precision
- Laboratory Control Samples
- MS/MSD/Duplicate
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
- GC/MS Performance Check
- Canister Certification Blanks

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use except where qualified below in MS/MSD/Duplicate, Compound Quantitation and Continuing Calibration.

All results were recorded to the reporting limits.

Samples: IA-5, IA-5(0619) and IA-5(0619)DUPLICATE were diluted due to high target analyte concentrations.

155 Chandler St.

SDG# L1852191, L1905849, L1927357, L1959919, L2007739

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met except the raw data page for standard level 0.05 was mislabeled off instrument Airpiano4 on 5/14/19. All pertinent data was evaluated using the correct value of 0.05, so no further action is required.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met.

HOLDING TIMES

All holding times were met.

INTERNAL STANDARD (IS)

All criteria were met.

METHOD BLANK

All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met.

LABORATORY CONTROL SAMPLES

All criteria were met.

MS/MSD/DUPLICATE

All criteria were met for the laboratory duplicate except the RPD of Ethyl Acetate was outside QC limits between IA-5(0219)DUPLICATE and IA-5(0219)DUPLICATEDUP. This target analyte should be qualified as estimated in the associated samples and duplicate. Trichlorofluoromethane was detected in IA-5(0219)DUPLICATEDUP but was not detected in IA-5(0219)DUPLICATE. Cyclohexane was detected in IA-5(0619)DUP but was not detected in IA-5(0619). No MS/MSD was acquired.

COMPOUND QUANTITATION

All criteria were met except Acetone should be qualified as estimated in IA-5(0219), IA-5(0219)DUPLICATE, IA-5(0619), IA-5(0619)DUPLICATE and WG1254638-5DUP due to coelution of peaks. Methylene Chloride, Benzene and Cyclohexane were detected in IA-5(0619)DUPLICATE but were not detected in IA-5(0619). The final pressure of sample IA-1(121219)DUPLICATE was 0. All target analytes in this sample should be qualified as estimated.

INITIAL CALIBRATION

All criteria were met.

CONTINUING CALIBRATION

All criteria were met except the %D of several target analytes was outside QC limits in WG1254903-2 and should be qualified as estimated in the associated blank and spike. The samples were not monitored for these target analytes.

GC/MS PERFORMANCE CHECK

All criteria were met.

CANISTER CERTIFICATION BLANKS

All criteria were met.

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

155 Chandler St.
Alpha Analytical SDG#L1901687, L1927255, L1959098
March 27, 2020
Sampling date: 1/14/2019, 6/21/2019, 12/10/2019

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

155 Chandler St.
SDG# L1901687, L1927255, L1959098

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for Hazard Evaluations, Inc., project located at 155 Chandler St., Alpha Analytical #L1901687, L1927255, L1959098 submitted to Vali-Data of WNY, LLC on March 20, 2020. This DUSR has been prepared in general compliance with USEPA National Functional Guidelines (NFG) and NYSDEC Analytical Services Protocols (ASP). The laboratory performed the analysis using USEPA method Volatile Organics (8260C).

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Surrogate Spike Recoveries
- Method Blank
- Field Duplicate Sample Precision
- Laboratory Control Samples
- MS/MSD
- Compound Quantitation
- Initial Calibration
- Continuing Calibration
- GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use except where qualified below in MS/MSD, Compound Quantitation, Initial Calibration and Continuing Calibration.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met.

Data was not reported to 3 significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met.

HOLDING TIMES

All holding times were met.

INTERNAL STANDARD (IS)

All criteria were met.

SURROGATE SPIKE RECOVERIES

All criteria were met.

METHOD BLANK

All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met.

LABORATORY CONTROL SAMPLES

All criteria were met.

Several target analytes were outside QC limits in the laboratory control sample or the laboratory control sample duplicate but not both, so no further action is required.

MS/MSD

All criteria were met except the %Rec of Acetone and Carbon disulfide was outside QC limits, high in MW-3MS/MSD and should be qualified as estimated. The RPD of Trichloroethene was outside QC limits between MW-3MS and MW-3MSD and should be qualified as estimated. The %Rec of 1,4-Dioxane was outside QC limits, high in MW-3(121019)MS/MSD. These target analytes should be qualified as estimated in the associated samples, if detected.

Several target analytes were outside QC limits in the matrix spike of the matrix spike duplicate but not both, so no further action is required.

COMPOUND QUANTITATION

All criteria were met except Acetone was detected above the MDL, below the reporting limit and is qualified as estimated in Equipment Rinsate 011419, Equipment Rinsate 062119. This target analyte should be qualified as undetected at the reporting limit in associated samples in which it was detected below the reporting limit. This target analyte should be qualified as estimated high in associated samples in which it was detected above the reporting limit.

INITIAL CALIBRATION

All criteria were met except the RRF of 1,4-Dioxane was outside outer QC limits in the initial calibrations. The RRF of 1,2-Dichloropropane, 1,1,2-Trichloroethane, 1,2-Dibromomethane and Bromodichloromethane was outside QC limits in the initial calibration performed on instrument

155 Chandler St.

SDG# L1901687, L1927255, L1959098

VOA105 run on 11/9/2018. The RRF of 1,1,2-Trichloroethane, 1,2-Dibromomethane and Bromodichloromethane was outside QC limits in the initial calibration performed on instrument Elaine run on 5/1/2019. The RRF of 1,1,2-Trichloroethane was outside QC limits in the initial calibration performed on instrument VOA122 run on 6/11/2019. The RRF of 1,1,2-Trichloroethane, 1,2-Dibromomethane and Bromodichloromethane was outside QC limits in the initial calibration performed on instrument VOA105 run on 12/13/2019. These target analytes should be qualified as estimated in the associated sample, blank and spikes. Alternate forms of regression were performed on all target analytes whose %RSD >20%, with acceptable results.

CONTINUING CALIBRATION

All criteria were met except the RRF of 1,4-Dioxane was outside outer QC limits in the continuing calibrations. The RRF of 1,2-Dichloropropane, 1,1,2-Trichloroethane, 1,2-Dibromomethane and Bromodichloromethane was outside QC limits in WG1198334-2. The RRF of 1,1,2-Trichloroethane and Bromodichloromethane was outside QC limits in WG1253251-2. The %D of Bromomethane was outside outer QC limits in WG1253251-2. The RRF of 1,1,2-Trichloroethane was outside QC limits in WG1254148-2. The RRF of 1,1,2-Trichloroethane was outside QC limits in WG1321405-2. The %D of Acetone was outside outer QC limits in WG1321405-2. These target analytes should be qualified as estimated in the associated sample, blank and spikes.

GC/MS PERFORMANCE CHECK

All criteria were met.

APPENDIX H

EQUIS DATA SUBMITTAL CONFIRMATIONS

Mallory Behlmaier

From: Mallory Behlmaier <mbehlmaier@hazardevaluations.com>
Sent: Thursday, April 23, 2020 12:53 PM
To: nyenvdata@dec.ny.gov
Subject: Electronic Data Deliverable - C915312
Attachments: 20200423 1211.C915312.NYSDEC_MERGE.zip; 20200423
1216.C915312.NYSDEC_MERGE.zip; 20200423 1223.C915312.NYSDEC_MERGE.zip;
20200423 1226.C915312.NYSDEC_MERGE.zip; 20200423
1244.C915312.NYSDEC_MERGE.zip

Please find attached five zip files containing the following data sets for BCP Site C915312 – Pierce Arrow Business Center

L1852191
L1905849
L1927357
L1959919
L2007739

Thank you,
Mallory

Mallory Behlmaier, Environmental Scientist
Hazard Evaluations, Inc.
3636 N. Buffalo Road
Orchard Park, NY 14127
Phone (716) 667-3130 ext. 116
Fax (716) 667-3156

mbehlmaier@hazardevaluations.com
www.hazardevaluations.com

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Mallory Behlmaier

From: Mallory Behlmaier <mbehlmaier@hazardevaluations.com>
Sent: Thursday, April 9, 2020 3:44 PM
To: nyenvdata@dec.ny.gov
Subject: Electronic Data Deliverable Submission - C915312
Attachments: 20200409 1437.C915312.NYSDEC_MERGE.zip; 20200409 1531.C915312.NYSDEC_MERGE.zip; 20200409 1534.C915312.NYSDEC_MERGE.zip

Please find attached three zip files containing the following data sets for BCP Site C915213 – Pierce Arrow Business Center

L1901687
L1927255
L1959098

Thank you,
Mallory

Mallory Behlmaier, Environmental Scientist
Hazard Evaluations, Inc.
3636 N. Buffalo Road
Orchard Park, NY 14127
Phone (716) 667-3130 ext. 116
Fax (716) 667-3156

mbehlmaier@hazardevaluations.com
www.hazardevaluations.com

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