HAZARD EVALUATIONS

HAZARD EVALUATIONS, INC. · 3636 N. BUFFALO ROAD · ORCHARD PARK, NEW YORK 14127
PHONE (716) 667-3130 · FAX (716) 667-3156 · www.hazardevaluations.com

May 31, 2019

Jaspal Walia, 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 2019; DEC Site #C915312**
Pierce Arrow Business Center, 155-157 Chandler Street, Buffalo, New York

Dear Mr. Walia:

In accordance with the Site Management Plan (NYSDEC Site Number: C915312), Section 7.2 Periodic Review Report, and NYSDEC's March 13, 2019 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 2018-2019 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
e1601\ CY2018-2019\ NYSDEC 155-157 Chandler St. 2018 PRR 0519

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

HAZARD EVALUATIONS

May 31, 2019

TABLE OF CONTENTS

Appendices

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. Site 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 & Service, and Light Industrial uses. The neighborhood surrounding the Site primarily include 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/mid 1950s, and 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, identified as Site No. 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 RI activities, as well as IRM activities, in accordance with an RI/IRM Work Plan, which was approved by NYSDEC on April 20, 2017. RI and IRM work was done concurrently, with additional investigation or IRM work completed, as needed. A series of interim remedial measures (IRM) were performed at the site in order to remediate the on-site concerns.

<u>Courtyard Area:</u>

- Asbestos containing materials (ACM) were identified within the courtyard area, which resulted in the need to remove the top 2-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.
- ACM soils, which were identified by Owner's representative AMD Environmental, were excavated and disposed off-site as PCBs-containing soil. The soils were disposed at Waste Management facility in Emelle, Alabama.
- After the courtyard was deemed as ACM 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:
    - The brick was generated from the pavers that were present within the courtyard. The concrete was generated from former pad areas as well as foundations within the courtyard area. The concrete and brick materials were disposed at Waste Management facility in Chaffee, New York.

    - Further soil excavation was completed, generally to depths of 2 to 3 feet below original grade, into the native underlying clay soils. Soil 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 Waste Management facility in Chaffee, New York.
- One 2,000-gallon gasoline tank was located within the courtyard area. The tank was uncovered and approximately 150-gallons of gasoline/water mixture were pumped from the tank. Upon removal, the steel tank was cleaned and crushed for recycling at the Niagara Metals scrap yard. A limited amount of impacted soil was present on the bottom and northern sidewall. The impacted soil was excavated soil was disposed at Waste Management facility in Chaffee, New York.
- Three drainage structures or "pits" were identified within the courtyard area. Each structure was excavated and any impacted soil removed was disposed at the Waste Management facility in Chaffee, New York.
- Historical records identified the potential for a 10,000-gallon AST vault to be present near the former boiler room. During concrete pad removal, the vault area was discovered under the 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, indicating a concentration over 50 ppm. The sand and brick material were removed from the vault and materials disposed off-site at Waste Management facility in Emelle, Alabama.
    - The concrete footer for the vault is approximately 18-inches wide and extended over four feet below grade. The vault had a concrete floor/base that was approximately 6-inches thick. Due to the vault's proximity to the chimney, the vault footer is 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/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.

<u>Parking Lot Area</u>

- Due to the presence of metals and SVOCs within the fill material, the 3 to 4 feet of fill within the parking lot area was planned for removal during the IRM work. Initial waste characterization samples identified portions of the parking lot at concentrations deemed as hazardous, due to leaching of lead. Additional delineation work was completed to evaluate areas with lead impacts.
- The lead soils were stabilized on-site by using the MAECTITE® stabilization process, a proprietary process completed by Sevenson 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 3 to 4 feet below grade to the underlying native clay soils. Approximately 2,200 tons of soil was excavated and disposed off-site at Waste Management facility in Chaffee, New York.
- Confirmatory sidewall and bottom samples were collected from the parking lot area. Analytical test results did not identify compounds above RRUSCO.

Under Building Area

- The subject 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, subslab 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, areas of impact were identified. For each area, the soil surrounding the area was excavated and sidewall and bottom samples collected, which did not exhibit further exceedances. Soil from under the building was excavated and disposed at Chaffee, New York.
- PCBs were identified within the concrete floor at various locations, specifically in the southwestern corner of the structure. The concrete was removed and disposed at Waste Management facility in Chaffee, New York. Confirmatory samples were collected from adjoining concrete floor, in which any PCBs levels identified were below RRUSCO.

A Certificate of Completion was issued 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.

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 2, 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 of below levels of 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, so as to prevent vapors from entering the indoor air of the building, while also releasing the trapped vapor beneath the slab;
    - Demonstrate system effectiveness while maintaining for 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. A figure identifying the SSD systems locations within the building is included in Figure 2. 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 (herein referred to as the "Department") 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 each monitoring event. SSD system components to be monitored include 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 SSDS locations are shown on Figure 2 (Appendix A).

- Semi-Annual sampling and analysis of groundwater at one existing monitoring wells (MW-3) for VOCs, using USEPA Method 8260B, TCL. The monitoring well is identified on Figure 3 (Appendix A).

2.0 SITE INSPECTION AND MONITORING RESULTS

2.1 Site Inspections

HEI completed the initial site inspection on December 12, 2018. The site was under development in December 2017, at the time of Certificate of Completion issuance. A completed Institutional and Engineering Controls Certification Form is included in Appendix B. The following inspection observations were noted:

- The site building was under interior development. The concrete floor was completed, which included new #1 stone, vapor barrier, and six-inches of new concrete flooring throughout the entire building. The concrete floor was finished with a sealer. Interior development was completed in some tenant spaces, but still under way in others. Exterior development work and windows were still being installed.

- The building was developed into various tenant spaces, including four apartments and six office areas. Site occupants which will utilize the 155 Chandler space as office space and manufacturing area include Utilant, EnrG,Inc., Donovan Orchards, LLC, Barrel & Brine Café and Taproom, Andersen Tax, and Great Lakes Processing Services.

- New construction features, such as new electrical service, natural gas, heating and air conditioning service, new walls, floors, ceilings, painting, office furniture, tenant specific equipment, ect. were being installed throughout the site building. EnrG, Inc. will utilize the building for manufacturing purposes, and a clean room was being constructed within their space.

- One monitoring well remained on-site, within the parking lot area, identified as MW3. The remaining former monitoring well locations had been filled and new concrete floor completed.

- At the time of the initial inspection, SSDS-1, SSDS-2, and SSDS-3 were not operating. New construction included enclosure of each these points, along with an access doorway. However, for SSDS-2 and SSDS-3, the access doors were not installed at the proper height, therefore manometers and warning devices could not be accessed. Additionally, alarms were not functioning.

- The property manager indicated that during interior construction activities, the three SSDS locations were turned off. The manager was not aware they had been turned off, until brought to their attention during the inspection. The property manager indicated the systems would again be turned on.

- SSDS-4 was operating at the time of the inspection. The manometer read 0.5 inches H_20, and was easily accessible. However, the alarm was not functioning.

HEI completed a follow up site inspection on February 13, 2019, to assure the systems were fully operational. HEI was informed by property manager that the systems were operational in early February 2019.

- SSDS-1 was operational and manometer access door had been relocated. Manometer reading was 1.0 inch of H20. The alarm was still located above the access door and could not be observed.

- SSDS-2 was operational and the manometer and alarm/warning device were repositioned to be observed from the access door. Manometer reading was noted to be 1 inch of H_20.

- The fan for SSDS-3 was moved to above the roofline, due to a noise complaint by the tenant. Additionally, the manometer and warning device were repositioned and accessible through access door. Manometer reading was noted to be 1.5 inch of H_20. However, the property manager indicated the fan would work intermittently.

- SSDS-4 remained operational with manometer reading noted at 0.5 inch of H_20. However, the alarm appeared to be non-operational due to a dead battery.

- The deficiencies, which included access to and operation of alarms, were brought to the attention of the property manager.

HEI completed a third inspection on April, 26, 2019, to assure all four systems were operating properly.

- SSDS-1 was operational with appropriate access. The warning alarm was repositioned to provide easy access. Additionally, the alarm battery was replaced.

- SSDS-2 was operational, with appropriate access. The property manager indicated the alarm battery was recently replaced.

- SSDS-3 was operational with appropriate access. The property manager indicated the fan was replaced due to intermittent malfunction. Additionally, the alarm was replaced and hardwired into the building's electrical service.

- SSDS-4 was operational with appropriate access. The property manager indicated the fan was replaced due to occasional malfunction as reported by the site tenant. Additionally, the alarm battery was replaced.

- 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 06/28/2018 with an expiration date of 06/27/2028. A copy of the registration certificate is included in Appendix C.

2.2 Indoor Air Sampling Results

Annual Indoor air sampling is required to assess the effectiveness of the four (4) SSDS systems. The SSDS locations, along with indoor air sampling locations, are included on Figure 2 (Appendix A).

Indoor air samples were collected on December 18, 2018 at six (6) locations as shown on Figure 2. As noted above, SSDS-1, SSDS-2 and SSDS-3 were not operational at the time of sampling. Indoor air samples were collected over an 8-hour period.

Analytical results are summarized on Table 1 located in Appendix D and the laboratory report is included in Appendix E. As shown on the table, up to 20 VOCs were detected within the six indoor air samples and one outdoor air sample. Most compounds were detected at concentrations below their respective commercial indoor air background levels as noted in New York State Department of Health (NYSDOH) guidance[1]. However, the following results were noted:

- Indoor air sample IA-5 was noted to include carbon tetrachloride, ethanol and ethyl acetate at concentrations above the identified commercial background level.

- Trichloroethene (TCE) was detected in each of the six indoor air samples collected. However, the concentrations in sample locations IA-1 to IA-4 and IA-6 ranged from 0.489 ug/m^3 to 1.37 ug/m^3, which is below the NYSDOH ambient air guidance of 2 ug/m^3. Additionally, tetrachloroethene was also detected at each indoor air sample, ranging in concentration from 0.319 ug/m^3 to 1.3 ug/m^3, which is below NYSDOH guideline of 30 ug/m^3 .

- TCE was detected at a concentration of 9.46 ug/m^3 in the indoor air sample identified as IA-5. This concentration exceeds the NYSDEC ambient air guideline of 2 ug/m^3. As noted above, the SSDSs were not all operational at time of sample collection.

Corrective actions were completed at the site due to the SSDSs not being operated full-time at the site, as summarized above in Section 2.1. HEI was informed that the systems were operational in early February 2019. Due to the detection of TCE at IA-5, a second indoor air sample was collected at the original IA-5 sample location on February 13, 2019, identified as IA-5(2019), to assess if indoor air concentrations have been reduced with operation of SSDS.

Analytical testing results identified TCE at a concentration of 4.54 ug/m^3 at the IA-5(2019) location. This TCE concentration appears to have been reduced as a result of proper operation of the site SSDSs; however, the concentration was above the NYSDOH guideline of 2 ug/m^3.

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

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 required. A groundwater sample was collected on January 14, 2019 for VOs analysis using USEPA Method 8260B (total compound list). The monitoring well is identified on Figure 3 l(Appendix A).

Prior to sample collection, static groundwater level and total well depth was measured. The monitoring well depth was measured at 17.97 feet below ground surface and groundwater level was recorded at 4.67 feet below ground surface. During well purging activities field measurements of pH, specific conductivity, temperature, and turbidity were recorded. Once the parameters stabilized HEI collected the groundwater was sampled using low flow sampling techniques.

Analytical test results are included on Table 2. VOCs were not detected at concentrations exceeding their respective Class GA criteria. Laboratory Analytical Report is presented in Appendix E.

3.0 CORRECTIVE ACTION WORK PLAN

Due to detection of TCE in the one indoor air sample location IA-5 at a concentration exceeding NYSDEC guideline, an additional indoor air sample will be collected from the IA-5 location in June 2019. The SSDSs were not fully operational and corrective measures were taken between December 2018 and April 2019. The systems are currently functioning as designed.

It is planned that the SSDS inspection frequency be increased to a quarterly basis for one year to assure all systems are operating appropriately. Therefore, SSDS inspections will be completed in June 2019, September 2019, December 20109 and March 2020. Concurrently, indoor air sampling will be completed every six months, first in June 2019 and again in December 20219. The June 2019 indoor air testing results will be provided to NYSDEC upon receipt with a summary letter that addresses applicable findings. Based on testing results, a determination will be made if SSDS upgrades are needed in order to maintain indoor air levels below NYSDOH guidelines.

Groundwater monitoring well sampling will be completed in June 2019.

The O&M Plan is fully implemented, with no deficiencies in compliance. No changes to the plan are recommended at this time, with the exceptions noted above.

4.0 OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

The initial site inspection identified that the SSDSs were not operational; therefore, the SMP requirements were not being met. However, corrective actions were implemented between December 2018 and April 2019 to the SSDSs, which included relocation of alarms and manometers and the replacement of fans, batteries, with full

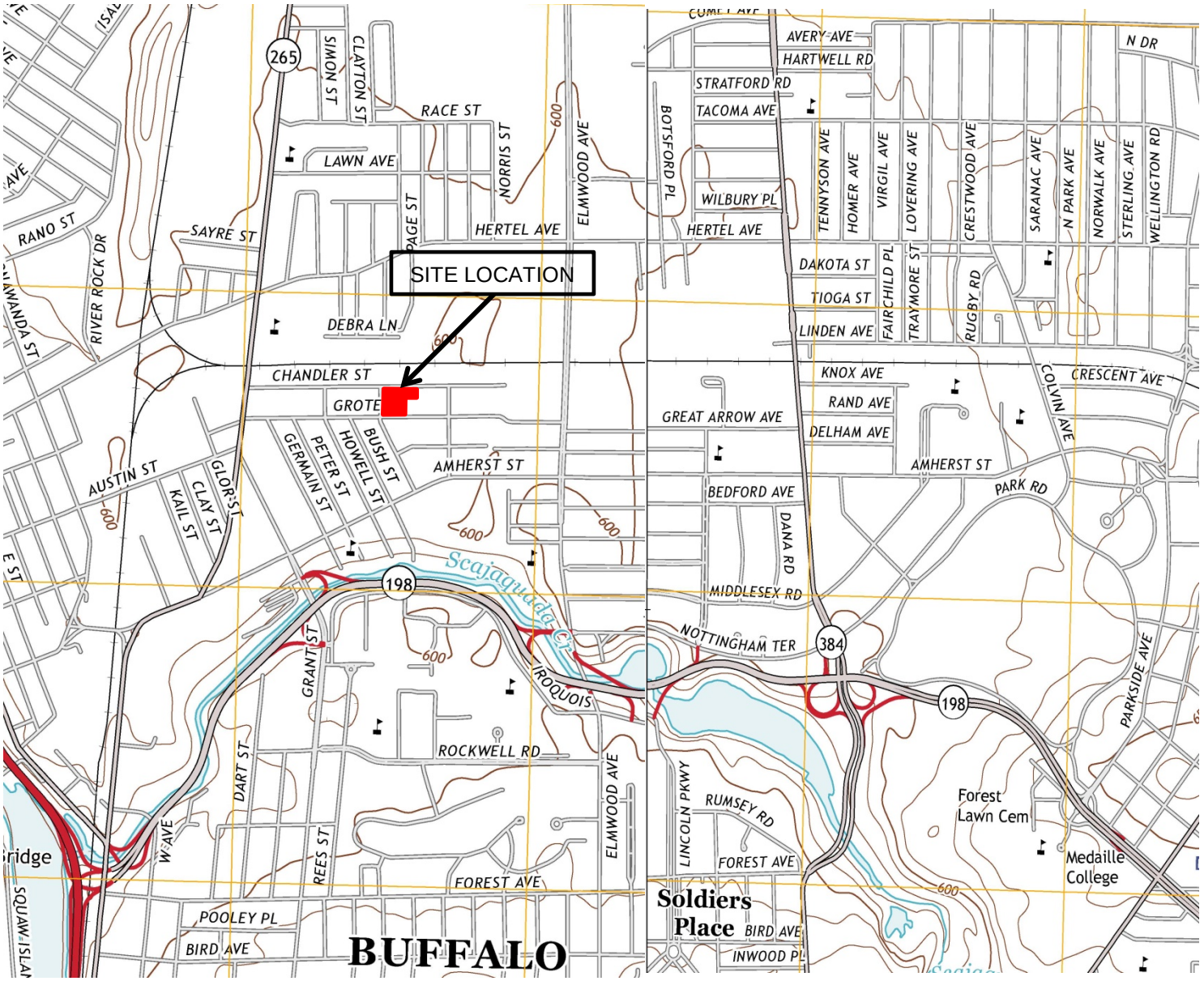
operation of the SSDSs currently. Further, the property manager is aware of site requirement to operate the SSDSs on a full-time basis. The site is currently in compliance with IC/EC, monitoring and O&M requirements.

Due to detection of TCE at one indoor air location, identified as IA-5, additional indoor air sampling has been recommended. The indoor air sampling was completed at a time that all SSDS were not fully functioning. Therefore, an additional indoor air sample will be collected from the IA-5 location in June 2019 and December 2019. Testing results will be provided in a summary letter report upon receipt and review.

SSDS inspection will be completed on a quarterly basis for a period of one year to assure the systems are operating appropriately. Quarterly inspections will start in June 2019.

APPENDIX A

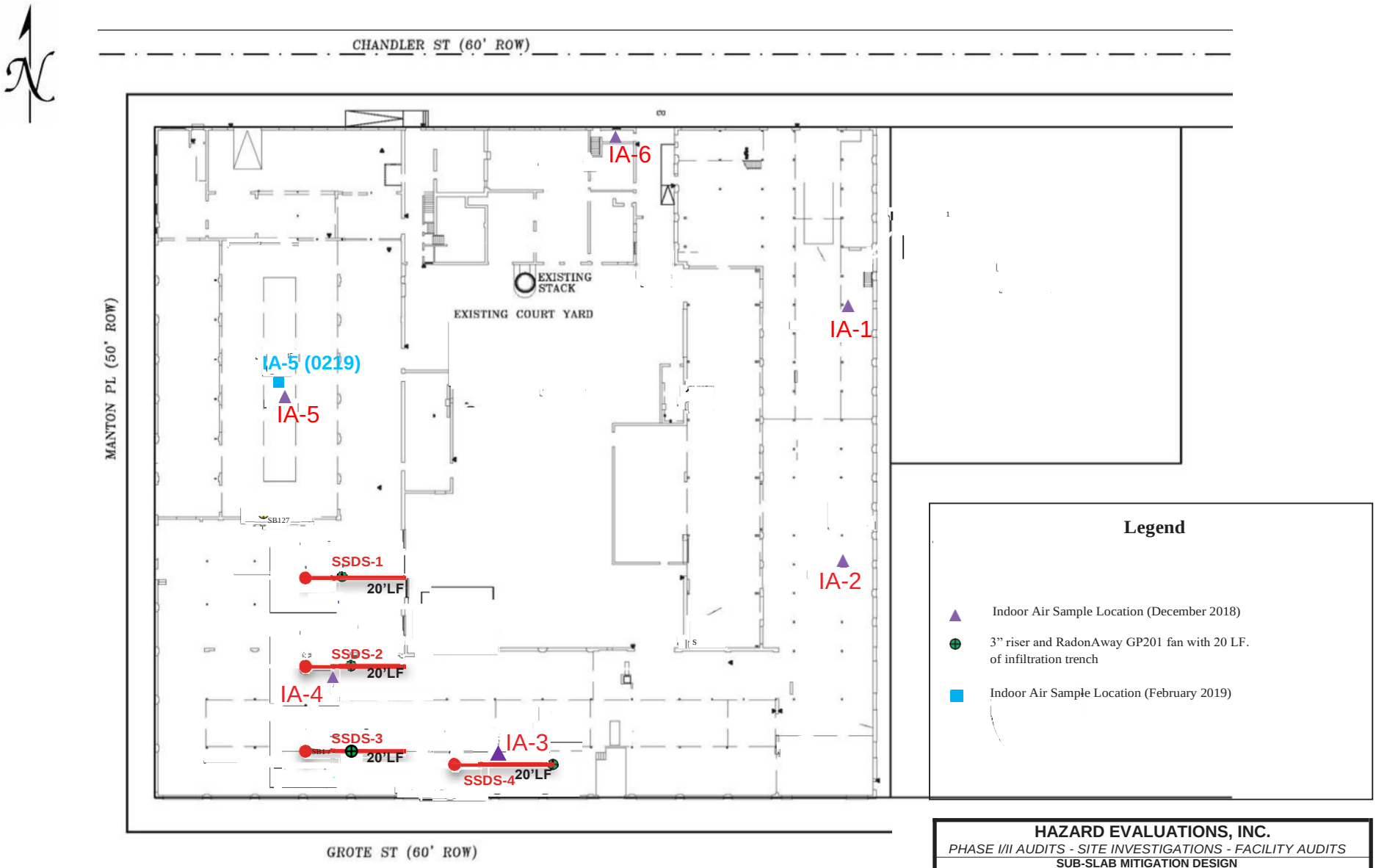
FIGURES



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

N

HAZARD EVALUATIONS, INC. *Phase I/II Audits – Site Investigations – Facility Inspections*		
SITE LOCATION MAP 155 and 157 CHANDLER STREET BUFFALO, NEW YORK		
R & M LEASING LLC BUFFALO, NEW YORK		
DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: e1601
CHECKED BY: EB	DATE: 11/17	FIGURE NO: 1

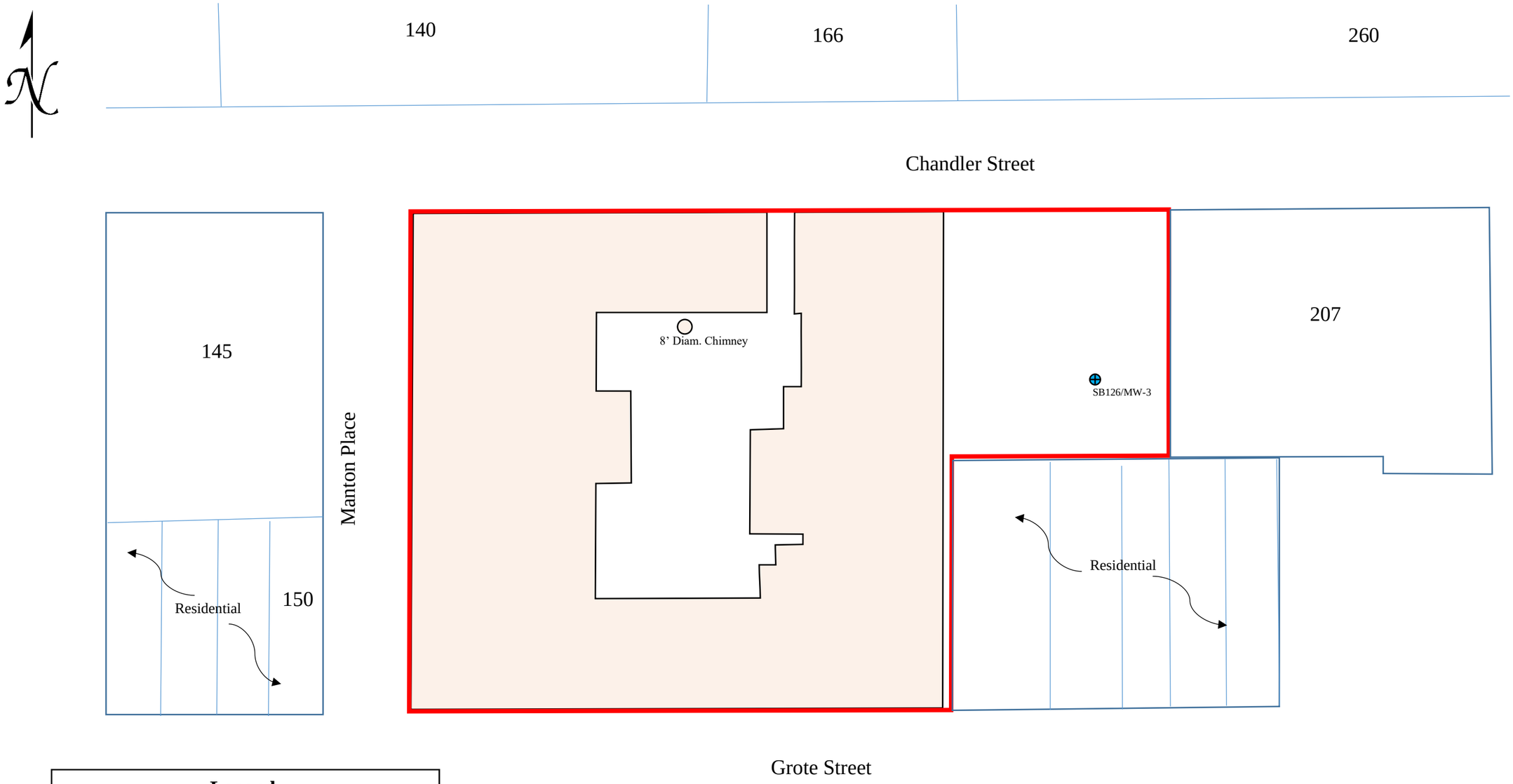


SUB-SLAB MIGRATION SYSTEM

N.T.S.

AS-BUILT

HAZARD EVALUATIONS, INC.		
PHASE I/II AUDITS - SITE INVESTIGATIONS - FACILITY AUDITS		
SUB-SLAB MITIGATION DESIGN **INDOOR AIR SAMPLING LOCATIONS** 155 and 157 CHANDLER STREET BUFFALO, NEW YORK		
R & M LEASING LLC BUFFALO, NEW YORK		
DRAWN BY: LSH CHECKED BY: EB	SCALE: NOT TO SCALE DATE: 05/19	FIGURE 2



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: EB	SCALE: 1" = 60'	PROJECT: e1601
CHECKED BY: MMW	DATE: 05/19	FIGURE NO: 3

APPENDIX B

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: December 27, 2017 to April 27, 2019

	YES	NO
1. Is the information above correct?	X	☐
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?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	X	☐
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?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	X	☐
7. Are all ICs/ECs in place and functioning as designed?	X	☐

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

5/31/19
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?	☐	X

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

	YES	NO
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	X	☐

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

Parcel	Owner	Institutional 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	~~Ontario Equipment Co. Inc.~~ 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

Parcel	Engineering Control
77.84-1-4	Vapor Mitigation

. Monitoring of the Sub-slab Depressurization System.

Box 5

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 compete.

YES	NO
X	☐

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
X	☐

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.

Mark Sanna — 5/31/19

Signature of Owner, Remedial Party or Designated Representative — 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 RD, 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.

C. Mark Hanna 5/31/19
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification — 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. MACK HANNA (print name) at 3636 N. BUFFALO RD, ORCHARD PARK, NY (print business address)

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

C. Mack Hanna — Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

5/31/19 — Date

APPENDIX C

ISSUED PERMITS

New York State Department of Environmental Conservation

Registration ID: 9-1402-01142/00001 **Facility DEC ID:** 9-1402-01142

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.

New York State Department of Environmental Conservation

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

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 D

TABLES

Table 2
SMP Groundwater Analytical Testing Results
155 Chandler Street, Buffalo, NY

Parameter	GA	SB126 / MW-3	SB126 / MW-3	MW-3	MW-3 (Duplicate)
Alpha Job Number		L1726029	L1738023	L1901687	L1901687
Sampling Date		07/27/17	10/19/17	01/14/19	01/14/19
Volatiles 8260C Analysis (ug/L)					
Acetone	**50**	24 J	88 J	2.5 J	3.2 J
2-butanone	**50**	7.5	130 J	ND	ND
Benzene	**1**	2.2	1.2	0.29 J	0.35 J
Carbon disulfide	**NV**	1.4 J	ND	ND	ND
Cyclohexane	**NV**	0.64 J	0.47 J	ND	ND
cis-1,2-dichloroethene	**5**	ND	3.0	ND	ND
Methyl cyclohexane	**NV**	0.82 J	0.67 J	ND	ND
Trichloroethene	**5**	ND	11 J	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.
3. ND = not detected.
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 dectection limit (MDL).
6. Shading indicates: exceeds New York Groundwater Standards.

Table 1
Indoor Air Analytical Testing Results
155 Chandler Street, Buffalo, NY
December 2018 and February 2019

	Guidance Values- Indoor Air												
Parameter	Table C2 Commercial Indoor Air Background (90%)	NYSDOH Air Guideline Value	IA-1 Indoor Air	IA-2 Indoor Air	IA-3 Indoor Air	IA-4 Indoor Air	IA-4 Duplicate Indoor Air	IA-5 Indoor Air	IA-5 (0219) Indoor Air	IA-5 (0219) Duplicate Indoor Air	IA-6 Indoor Air	OA-1 Outdoor Air	Table C2 Outdoor Air Guidance Values
1,2-Dichloroethane	<0.9		ND	ND	ND	ND	ND	0.163	0.127	0.139	0.103	ND	<0.8
Acetone	98.9		14.4	14.6	21.1	24.7	24	46.3	33.5	36.3	5.3	4.39	43.7
Carbon disulfide	4.2		ND	ND	2.24	ND	ND	ND	ND	ND	ND	ND	3.7
Carbon tetrachloride	<1.3		0.591	0.566	0.541	0.711	0.723	2.31	1.09	1.05	0.598	0.459	0.7
Chloromethane	3.7		1.25	1.14	2.24	2.95	1.13	1.13	0.96	1.01	1.06	1.13	3.7
cis-1,2-Dichloroethene	<1.9		ND	ND	ND	ND	ND	0.163	0.127	0.139	0.103	ND	<1.8
Dichlorodifluoromethane	16.5		1.63	1.68	2.4	1.78	1.66	1.61	2.44	2.49	2.49	1.39	8.1
Ethanol	210		155	207	307	148	144	910	298	315	40.1	ND	57
Ethyl acetate	5.4		ND	ND	26.5	3.29	3.33	15.9	3.2	3.28	ND	ND	1.5
Ethylbenzene	5.7		2.49	2.32	2.76	2.79	2.82	4.73	2	2.03	ND	ND	3.5
Hexane	NV		ND	ND	0.811	1.26	1.32	6.87	2.55	2.81	ND	ND	6.4
Isopropanol	NV		11.9	11.3	32.4	99.6	97.8	873	215	228	ND	ND	NV
m&p-Xylene	22.2		9.56	9.38	10.6	10.6	10.3	19	8.17	8.17	ND	ND	12.8
Methyl Ethyl Ketone	12		ND	ND	ND	ND	ND	4.63	5.66	6.16	ND	ND	11.3
Methyl Isobutyl Ketone	NV		ND	ND	ND	ND	ND	19.8	4.51	4.39	ND	ND	NV
o-Xylene	7.9		3.12	3.09	2.86	3.14	3.24	5.56	2.4	2.44	ND	ND	4.6
Styrene	1.9		ND	ND	ND	ND	ND	0.932	ND	ND	ND	ND	1.3
Tetrachloroethene	15.9	30	0.753	0.685	0.332	0.922	0.882	1.3	0.353	0.319	0.529	ND	6.5
Toluene	43		4.07	1.21	1.16	4.26	5.8	7.65	5.35	5.39	ND	ND	33.7
trans-1,2-Dichloroethene	NV		ND	ND	ND	ND	ND	1.44	2.36	2.5	ND	ND	NV
Trichloroethene	4.2	2	0.849	0.736	0.489	1.34	1.37	9.46	4.54	4.58	0.924	ND	1.3
Trichlorofluoromethane	18.1		1.33	1.3	1.12	1.28	1.25	1.25	ND	ND	1.26	1.16	4.3

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/m^3 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

APPENDIX E

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

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	**Lab Number:**	L1852191
Project Number:	E1601	**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	**Lab Number:**	L1852191
Project Number:	E1601	**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
Anaytical Method: 48,TO-15
Analytical Date: 12/21/18 19:03
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	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
1,1,2,2-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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/21/18 19:03
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	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
Anaytical Method: 48,TO-15
Analytical Date: 12/22/18 09:01
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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
Anaytical Method: 48,TO-15
Analytical Date: 12/21/18 19:35
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.230	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
1,1,2,2-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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/21/18 19:35
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.086	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
Anaytical Method: 48,TO-15
Analytical Date: 12/21/18 20:40
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.357	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
1,1,2,2-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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/21/18 20:40
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.113	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
Anaytical Method: 48,TO-15
Analytical Date: 12/21/18 21:12
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.375	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
1,1,2,2-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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/21/18 21:12
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.115	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
Anaytical Method: 48,TO-15
Analytical Date: 12/21/18 21:45
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	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
1,1,2,2-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:

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

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/21/18 21:45
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	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
Anaytical Method: 48,TO-15
Analytical Date: 12/21/18 22:17
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	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
1,1,2,2-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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/21/18 22:17
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.094	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
Anaytical Method: 48,TO-15
Analytical Date: 12/21/18 22:49
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.340	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:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/21/18 22:49
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	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
Anaytical Method: 48,TO-15
Analytical Date: 12/21/18 18:31
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	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
1,1,2,2-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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/21/18 18:31
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.073	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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-08 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-08 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-08 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-08 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
Project Number: E1601
Lab Number: L1852191
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-08 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

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 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: 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 Controler 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

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 Controler 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
Anaytical Method: 48,TO-15
Analytical Date: 12/08/18 00:19
Analyst: RY

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
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
1,1,2,2-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: 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
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
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/08/18 00:19
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
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: 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
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
Anaytical Method: 48,TO-15
Analytical Date: 12/11/18 19:33
Analyst: MB

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
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
1,1,2,2-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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
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
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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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	99		60-140
chlorobenzene-d5	97		60-140

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
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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/11/18 19:33
Analyst: MB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
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 **Lab Number:** L1850771

Project Number: CANISTER QC BAT **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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
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: 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
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
Project Number: E1601

Lab Number: L1852191
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)

*Values in parentheses indicate holding time in days

Project Name:	DECEMBER 2018 INDOOR AIR MONIT	**Lab Number:**	L1852191
Project Number:	E1601	**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	**Lab Number:**	L1852191
Project Number:	E1601	**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.

Report Format: Data Usability Report

REFERENCES

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

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

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

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
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, SM4500Cl-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

ALPHA ANALYTICAL — CHAIN OF CUSTODY

PAGE 1 OF 1

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

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

ALPHA Job #: L1652191

Client Information

Client: Hazard Evaluations Inc.
Address: 3636 N. Buffalo Rd
Orchard Park, NY 14127
Phone: 716-667-3130
Fax: 716-667-3156
Email: mwittman@hazardevaluations.com

☐ These samples have been previously analyzed by Alpha

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:

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)

Billing Information

☑ Same as Client info PO #: e1601

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH (Subtract Non-petroleum HCs ☐)	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
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: 6S

Relinquished By:	Date/Time	Received By:	Date/Time:
AAC	12/18/18 1620	AAC	12/18/18 16:20
AAC	12/18/18 16:50		12/18/18 1650
	12/19/18 0605		12/19/18 0605

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.

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

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

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	**Lab Number:**	L1905849
Project Number:	E1601	**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	**Lab Number:**	L1905849
Project Number:	E1601	**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
Anaytical Method: 48,TO-15
Analytical Date: 02/18/19 19:54
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.724	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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/18/19 19:54
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	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
Anaytical Method: 48,TO-15
Analytical Date: 02/18/19 20:34
Analyst: EW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.798	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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Xylene	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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/18/19 20:34
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 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
Project Number: E1601
Lab Number: L1905849
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 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
Project Number: E1601
Lab Number: L1905849
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 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

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								
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
1,1,2,2-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

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 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

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 Controler 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
Anaytical Method: 48,TO-15
Analytical Date: 01/29/19 18:30
Analyst: EW

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

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

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

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140

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
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
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/29/19 18:30
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
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: 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 Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
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
Project Number: E1601

Lab Number: L1905849
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)

*Values in parentheses indicate holding time in days

Project Name:	FEB2019 INDOOR AIR MONITORING	**Lab Number:**	L1905849
Project Number:	E1601	**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'

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.

REFERENCES

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

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

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

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
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, SM4500Cl-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

PAGE 1 OF 1

CHAIN OF CUSTODY

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

Date Rec'd in Lab: 2/14/19

ALPHA Job #: L1905849

Client Information

Client: Hazard Evaluations Inc.
Address: 3636 N. Buffalo Rd
Orchard Park NY 14127
Phone: 716-667-3130
Fax: 716-667-3156
Email: mhanna@hazardevluations.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Feb. 2019 Indoor Air Monitoring
Project Location: 155 Chandler st. Buffalo NY
Project #: e1601
Project Manager: Mark Hanna
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
5 day Firm
Date Due: Time:

Report Information - Data Deliverables

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

Billing Information

☒ Same as Client info PO #: e1601

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH (Subtract Non-petroleum HCs ☐)	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
5849-01	IA-5(0219)	2/13/19	7:50am	3:50pm	-28.93	-5.48	AA	EB	2.7L	423	0256	X					
-02	IA-5(0219) Duplicate	2/13/19	7:50am	3:50pm	-28.95	-6.37	AA	EB	2.7L	476	0811	X					

ANALYSIS

*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:
	2/13/19 1610		13Feb2019 1610
	13Feb2019 1800		2/14/19 0210
	02/14/19 0610		2/14/19 0611 0

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.

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

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

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 **Lab Number:** L1901687
Project Number: E1601 **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	**Lab Number:**	L1901687
Project Number:	E1601	**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 Date Collected: 01/14/19 11:10

Client ID: EQUIPMENT RINSATE 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	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 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:
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 Date Collected: 01/14/19 11:15

Client ID: MW-3 (DUPLICATE) 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	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 % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
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

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)

*Values in parentheses indicate holding time in days

Project Name:	CY18 SMP GW SAMPLING	**Lab Number:**	L1901687
Project Number:	E1601	**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	**Lab Number:**	L1901687
Project Number:	E1601	**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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	CY18 SMP GW SAMPLING	**Lab Number:**	L1901687
Project Number:	E1601	**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.

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, SM4500Cl-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.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 1/15/19

ALPHA Job #: L1901687

Client Information
Client: Hazard Evaluations Inc
Address: 3636 N. Buffalo Rd
Orchard Park NY 14127
Phone: 716-667-3130
Fax: 716-667-3156
Email: mw.tynan@hazardevaluations.com

Project Information
Project Name: CY18 SMP GW Sampling
Project Location: 155 Chandler St. Buffalo, NY
Project #: e1601
(Use Project name as Project #) ☐
Project Manager: Candy Fox
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☒ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Open new Sample delivery group. Close Sample delivery group.

Please specify Metals or TAL.

ANALYSIS
VOC 8260 TCL

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC 8260 TCL	Sample Specific Comments	Total Bottle
01687-01	Trip Blank 011419	1/14/19	11:00 am	WA	EB	X		3
-02	Equipment Rinsate 011419		11:10 am	WA	EB	X		3
-03	MW-3		11:15 am	GW	EB	X		3
-04	MW-3 (Duplicate)		11:15 am	GW	EB	X		3
-03	MW-3 (MS)		11:45 am	GW	EB	X		3
-03	MW-3 (MSD)		11:55 am	GW	EB	X		3
-03								

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	V									
Preservative	B									

Relinquished By:	Date/Time	Received By:	Date/Time
AAL	1/14/19 1420	AAL	1/14/19 1420
AAL	1/14/19 15:23		1/15/19 0035

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)