LAPP INSULATOR SITE

INDOOR AIR MONITORING REPORT
SEPTEMBER 2019

WORK ASSIGNMENT D007622-11.1

LAPP INSULATOR
LEROY (T)

SITE NO. 819017
GENESEE COUNTY, NY

Prepared for:
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
625 Broadway, Albany, New York

Basil Seggos, Commissioner

DIVISION OF ENVIRONMENTAL REMEDIATION
Remedial Bureau E

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November 2019

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130 GILBERT STREET
LEROY, GENESEE COUNTY, NEW YORK
SITE ID No. 819017

Prepared For:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
REMEDIAL BUREAU E
WORK ASSIGNMENT NO. D007622-11.2

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257 WEST GENESEE STREET, SUITE 400
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LIST OF ACRONYMS AND ABBREVIATIONS

%	percent
1,1-DCA	1,1-dichloroethane
1,1-DCE	1,1-dichloroethene
cis-1,2-DCE	cis-1,2-dichloroethene
1,1,1-TCA	1,1,1-trichloroethane
ASP	Analytical Services Protocol
COC	contaminants of concern
CVOC	chlorinated volatile organic compounds
cy	cubic yards
DUSR	Data Usability Summary Report
ELAP	Environmental Laboratory Approval Program
ENSR	ENSR Consulting and Engineering
FS	Feasibility Study
FHW	former hazardous waste storage building
Inc.	Incorporated
Lapp Insulator	Lapp Insulator Group
Malcolm Pirnie	Malcolm Pirnie, Inc.
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	perchloroethene, aka tetrachloroethene or tetrachloroethylene or perchloroethylene
PCore	PCore Electric Co. Inc.
PDF	portable document format
PID	photoionization detector
ppb	parts per billion
QC	quality control
RI	Remedial Investigation
ROD	Record of Decision
SC	Site Characterization
SDS	Safety Data Sheets
SSD	sub-slab depressurization
SVI	soil vapor intrusion
TCE	trichloroethene, aka trichloroethylene
TestAmerica	TestAmerica Laboratories, Inc.
$\mu g/m^3$	micrograms per cubic meter
UHP	ultra high purity
URS	URS Corporation – New York
VOCs	volatile organic compounds
WA	Work Assignment

1.0 INTRODUCTION

This Indoor Air Monitoring Report has been prepared to summarize the field activities and analytical results for the September 2019 indoor air monitoring performed by URS Corporation – New York (URS) at the Lapp Insulator site (Site ID No. 819017) located in LeRoy, New York (Figure 1), hereinafter referred to as the Site. The New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) requested that URS conduct indoor air monitoring in Buildings B-31, B-35, B-37, and the PCore Building over the course of eight quarterly events starting with December 2017. The data collected during these monitoring events will be used to evaluate the effectiveness of the mitigation measures and gain a better understanding of the nature and extent of indoor air contamination at the Site. The September 2019 indoor air sampling event was the fifth quarterly sampling event performed by URS.

URS performed soil vapor intrusion (SVI) sampling on May 10-12, 2017 and August 30-31, 2017; and indoor air sampling on December 18-19, 2017 in five buildings at the Site. After each sampling event, a *Soil Vapor Intrusion Data Summary Report* documenting the results and recommendations was prepared and submitted to NYSDEC. The third *Soil Vapor Intrusion Data Summary Report* (URS, January 2018), completed after the December 2017 sampling and data review was finished, was a comprehensive report that included a discussion of all three sampling events.

One of the five buildings sampled is currently occupied by PCore Electric Co. Inc. (PCore) herein identified as the "PCore Building". The other buildings, occupied by Lapp Insulator Group (Lapp Insulator) are a former hazardous waste storage building (FHW), a storage and shipment building (B-31), and two active manufacturing buildings (B-35 and B-37). Building locations are shown on Figure 2.

Based on the results of the SVI sampling events, the NYSDOH, NYSDEC and URS concluded that mitigation was necessary to address the SVI in three buildings at the Site: Buildings B-31, B-35, and the PCore Building. The mitigation involved the installation sub-slab depressurization (SSD) systems to prevent the flow of soil vapors from beneath the building sub-slabs into the buildings.

In July 2018, a Pilot Study was conducted in order to gather information necessary to design the SSD systems. Also during this time, Four SSD systems were installed in Building B-31: two just outside an office located in the northeastern corner of the building, and two in a workshop area in the southwestern end of the building. Each system consists of a 4-inch diameter polyvinyl chloride (PVC) riser installed approximately 1 foot beneath the concrete floor slab. The PVC riser is connected to a fan, which then

discharges via 4-inch PVC piping to the outside of the building. The intent of the systems is to create a pressure differential that limits the potential for sub-slab vapors to enter the breathing space within the building. In September 2018, URS submitted a *Soil Vapor Mitigation Design Report* to NYSDEC, documenting the installation of the SSD fans in Building B-31; the findings of the Pilot Study; and providing an overview of the proposed SVI mitigation design for Building B-35 and the PCore Building. The SSD system construction for Building B-35 and the PCore Building began in March 2019 and was completed in May 2019.

An indoor air monitoring event was originally scheduled to take place in March 2019. Since the SSD systems are expected to impact indoor air quality, NYSDEC requested that the March 2019 sampling event be removed from the indoor air sampling program. The June 2019 sampling event included the first indoor air samples that have been collected since the SSD systems in Building B-35 and the PCore Building began operation in May 2019. This September 2019 sampling event represents the second round of indoor air sampling to take place since the SSD systems were installed in Building B-35 and the PCore Building and the fourth round of indoor air sampling to take place since the SSD systems were installed in Building B-31.

This report presents the findings of the fifth quarterly indoor air monitoring event conducted on September 26 and 27, 2019.

1.1 Site Description

The Site is located in the County of Genesee, New York and is identified as Block 1 and Lot 90 on the Town of LeRoy Tax Map # 29. The Site is situated on an approximately 66-acre area bounded by Munson Street to the north, Oatka Creek to the south and east, and B&O Railroad tracks to the west. The general layout of the Site and key features are illustrated on Figure 2.

The Site is located within the flat-lying Erie-Ontario Lowlands. The Site topography is nearly flat, dipping slightly from west to east toward Oatka Creek. The maximum relief of the Site is a drop in elevation of approximately 30 feet at the steep rock bank at the adjacent Oatka Creek.

Overburden soil thickness at the Site ranges from approximately 10 to 30 feet. Fill material was used to level topographically low areas and provide support to the steep bank of Oatka Creek along the eastern edge of the property. Where present, fill is the uppermost overburden unit and was encountered up to 30 feet thick in the South fill area. The fill material consists primarily of anthropogenic materials including brick, coal, cinders, and fragments of porcelain from insulators mixed with disturbed natural soil material of clay, silt, sand, and gravel. The native overburden material at the Site is glacial till which is

composed of unsorted silt with clay, sand, and gravel. This till is deposited directly on the underlying bedrock and, where not covered by fill, is present at the ground surface.

Bedrock was measured at the Site at depths ranging from 10 to 30 feet below grade. A total of four distinct bedrock units were encountered during rock well drilling at the Site. These are, in descending order: Levanna Shale, Stafford Limestone, Oatka Creek Shale, and Onondaga Limestone. Levanna Shale is present directly beneath overburden deposits at the Site. Levanna Shale is a light olive gray shale near the top and weathered fissile dark gray or black shale near the base. Levanna Shale was observed along the eastern border of the Site at the western bank of Oatka Creek where it is exposed along a steep cliff approximately 30 feet high. This rock unit also underlies the creek by an estimated additional 50 feet. The thickness of this unit beneath the Site ranges from 50 to 70 feet.

Groundwater at the Site flows generally to the east toward Oatka Creek on the eastern side of the Site, and towards the west on the western side of the Site. The creek is a discharge for the overburden, shallow rock, and intermediate zones. Groundwater in the deepest rock zone flows downward.

1.2 Site History

Since 1917 Lapp Insulator has been actively engaged in the manufacture and production of ceramic insulators and electrical transformer bushings. Lapp Insulator discontinued manufacture of bushings in 2004. The bushings portion of the business is leased to PCore electronics, which continues to operate in the buildings on-site on the east side of Gilbert Street. Historical records indicate that oils, petroleum based products, and chlorinated solvents including: 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE), and tetrachloroethene (PCE), were stored and utilized for production at the Site, primarily on the east side of Gilbert Street. Further, two areas of the Site, referred to as the Northeast and South fill areas have been used for the disposal of crushed ceramic insulators.

In 1996, the Department first listed the Site as a Class 2a site in the Registry of Inactive Hazardous Waste Disposal Sites in New York (the Registry). Class 2a was a temporary classification assigned to a site that had inadequate and/or insufficient data for inclusion in any of the other classifications. In 1998, the Department listed the Site as a Class 2 site in the Registry. A Class 2 site is a site where hazardous waste presents a significant threat to the public health or the environment and action is required.

Investigations conducted by ENSR Consulting and Engineering (ENSR) to assess environmental conditions at the Site included: Phase I Environmental Due Diligence Examination in 1991, Phase II Environmental Due Diligence Examination in 1992, Phase I Site Characterization (SC) in 1994, and Supplemental Site Soil Characterization in 1995.

Results indicated that the groundwater and soil were impacted with Site-related volatile organic compounds (VOCs).

A remedial measure was attempted by Lapp Insulator without Department concurrence or involvement in December 1995. The remedial measure consisted of a soil vapor extraction system with a single extraction well placed in each of three areas of concern. The system was deemed ineffective at adequately addressing the contamination at the Site and was ultimately shut down in September 1999.

An Order on Consent between Lapp Insulator and the Department was signed in 2001. Remedial Investigation (RI) work activities required under the 2001 Order on Consent are presented in the November 2000 RI/Feasibility Study (FS) Work Plan. RI work was performed by Malcolm Pirnie, Inc. of Orchard Park, NY (Malcolm Pirnie).

The RI work activities began in October 2001 with site characterization tasks, installation of an upgradient deep bedrock monitoring well, and sampling of several media including soil, groundwater, soil vapor, and surface water and sediments. Results of the Phase I RI were submitted to the Department in the form of a Technical Memorandum in November 2002.

A second phase of the RI was performed to confirm and expand upon the information obtained from the initial phase of investigation. The Phase II field program was performed in July and August 2003 and included installation of bedrock monitoring wells, and sampling of several media including sediment, surface water, water seep, and groundwater. The 2005 RI Report (Malcolm Pirnie, 2005) provided the results from both phases of RI at the Site. The March 2007 FS Report (Malcolm Pirnie, 2007) evaluated remedial alternatives. The selected remedy was subsequently presented in the 2009 Record of Decision (ROD). In March 2014, an amended ROD was issued by the NYSDEC.

Soil Vapor Investigation

As part of the 2001 RI, Gore-Sorber passive soil gas modules were installed in sixty-nine locations approximately 2 to 3 feet below grade throughout the Site. The soil vapor samples collected were analyzed for VOCs. A key finding of the passive soil vapor sampling was that there were areas of high concentrations of TCE and 1,1,1-TCA in soil vapor along the south and southeastern portions of the Site.

Summer 2014 Remediation

During the summer of 2014, a remedial action was conducted at the Site to address chlorinated VOC (CVOC) contamination. The contaminants of concern (COC) for this Site are 1,1,1-TCA, TCE, PCE, and their breakdown products. The remedial action included the excavation, mechanical screening and backfill of approximately 15,000 cubic yards (cy) of soil from two areas of the Site: approximately 1,500 cy to a maximum depth of 12 feet from an area immediately to the south of the PCore Building; and about

13,500 cy to a maximum depth of 14 feet from an open field in an area near the southern end of the property just southwest of the FHW Building. Additionally, two groundwater injection wells with laterals were installed just to the southeast of the PCore Building. The Final Engineering Report, which discusses the Site activities and results was prepared by URS and submitted as a draft to NYSDEC in March 2017.

May, August and December 2017 SVI Investigations

URS performed the first of three SVI investigations on May 10-12, 2017. Sample locations were identified based on the findings of the passive soil vapor sampling conducted as part of the RI. The results of the RI concluded that the highest levels of total targeted CVOCs: 1,1,1-TCA and TCE, were found in the southern/southeastern portion of the Site along the southeastern sides of the FHW Building, Building B-31, Building B-35 and the western portion of the PCore Building.

In an August 1, 2017 email the NYSDOH recommended collecting SVI samples in Building B-37. URS, in consultation with the NYSDEC Project Manager also recommended sampling of the eastern half of the PCore Building to evaluate if the soil vapor plume beneath the PCore Building extended to the eastern portion of the building.

After the NYSDOH reviewed the results of the August 2017 SVI sampling event, the NYSDEC instructed URS to recollect indoor air samples in the PCore Building laboratory (location P-B-IA-05) and Building B-37 at location IA-03. An indoor air sample was also requested in the office located at the southeast corner of Building B-31. Refer to Figure 3 for locations of the office and laboratory.

The third SVI investigation was conducted by URS in December 2017. Indoor air samples were collected in Buildings B-31, B-37, and the PCore Building.

All of the sampling was conducted following procedures outlined in *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, Final, (NYSDOH, October 2006). Detailed sketches of the individual buildings, key building features, and sampling locations are included with the Questionnaires and Inventory forms which were presented in the *Lapp Insulator Site SVI Data Summary Report* (URS, January 2018).

Based on the results of these investigations, mitigation was recommended in Buildings B-31, B-35, and the PCore Building.

June, September and December 2018 Indoor Air Monitoring

The first three quarterly indoor air monitoring events were conducted on June 17-18, 2018, September 18-19, 2018 and December 13-14, 2018. These monitoring events consisted of indoor air and outdoor air sampling; no sub-slab samples were collected. The buildings sampled during these events included Buildings B-31, B-35, B-37, and the PCore Building. The activities conducted during these

indoor air monitoring events, along with discussions of the results, are presented in the *Indoor Air Monitoring Report June 2018* (URS February 2019), *Indoor Air Monitoring Report September 2018* (URS February 2019), *Indoor Air Monitoring Report December 2018* (URS February 2019).

July 2018 SSD Installation

Four SSD systems were installed in Building B-31: two just outside an office located in the northeastern corner of the building, and two in a workshop area in the southwestern end of the building. Each system consists of a 3-inch diameter polyvinyl chloride (PVC) riser installed approximately 1 foot beneath the concrete floor slab. The PVC riser is connected to a fan, which then discharges via 3-inch PVC piping to the outside of the building. In September 2018, URS submitted a *Soil Vapor Mitigation Design Report* to NYSDEC, documenting the installation of the SSD fans and the activities associated with the Pilot Test.

February 2019 Interim Indoor Air Sampling

The polymer laboratory in the northeastern portion of the PCore Building, one of the target remediation area for the project, was not available for sampling during the December 2018 monitoring event. NYSDEC requested that URS collect an additional sample from the laboratory to determine whether the installation of the proposed SSD System in the laboratory should be completed prior to mobilization for the construction of the other SSD systems proposed for the site. The data for this sampling event was discussed in the Indoor Air Monitoring Report for the June 2019 sampling event. It was determined based on the data that the construction of the polymer laboratory SSD system was not urgent and could be installed concurrently with the other SSD systems.

2019 SSD Installation

During the spring of 2019, URS installed four SSD systems: two systems are installed in the PCore Building; one system is installed in Building B-35; and one radon fan-style system is installed in the polymer laboratory of the PCore Building. Each system consists of a 4-inch diameter PVC riser installed approximately 1 foot beneath the concrete floor slab. The PVC risers are connected to a regenerative blower inside a shed constructed on the outside of their respective building. From there, the blower discharges vapors to the air via a stack with an outlet at least one foot above the roofline. The PVC riser for the PCore laboratory system is connected to a radon-style fan, which then discharges via 4-inch PVC piping to the outside of the building. URS is documenting the construction of these remediation systems in a *Construction Completion Report* which will supplement the Final Engineering Report associated with the site.

June 2019 Indoor Air Sampling

In June 2019, URS resumed the quarterly indoor air sampling program. Indoor air and outdoor air samples were collected on June 20-21, 2019; no sub-slab samples were collected. The buildings sampled during the June 2019 event included Buildings B-31, B-35, B-37, and the PCore Building. The activities conducted during this indoor air monitoring event, along with discussions of the results, are discussed in the *Indoor Air Monitoring Report June 2019* (URS August 2019),

2.0 FIELD INVESTIGATION ACTIVITIES

The fifth quarterly indoor air monitoring event was conducted on September 26 and 27, 2019. This monitoring event consisted of indoor air and outdoor air sampling; no sub-slab samples were collected. The buildings sampled during this event included Buildings B-31, B-35, B-37, and the PCore Building. Sampling consisted of the following work tasks:

- On September 26, 2019 URS initiated the indoor air sampling in the four buildings. Procedures for the collection of the indoor air and outdoor air samples are discussed in Section 2.2.
- URS returned to the Site on September 27, 2019 to retrieve the samples for submittal to the NYSDEC call-out laboratory for analysis.

2.1 Questionnaire and Inventory

An inventory of containers was performed prior to sampling in each area. A RAE Systems miniRAE-3000 PID was used to screen indoor air and identify potential sources of VOCs from chemicals prior to collecting the air samples. The questionnaires and inventory forms from previous sampling events were updated as necessary. The updated Questionnaire and Inventory forms are in Appendix A.

2.2 Indoor Air Investigation

A total of eleven indoor air samples (plus one field duplicate) and one outdoor air sample were collected during the September 2019 indoor air monitoring event. The indoor air sampling locations were generally in the same locations as previous sampling events. The indoor air locations were placed in the breathing zone (approximately 3 to 5 feet above the floor), central to the building and away from the outside walls, appliances, machinery, and apparent penetrations. Sampling locations are presented on Figure 3, and photographs of the in-place Summa Canisters are included in Appendix B.

Sampling was performed in accordance with the procedures outlined in the *Generic Field Activity Plan* (URS, 2010b). The samples were collected using laboratory evacuated 6-liter Summa® canisters with 24-hour laboratory calibrated flow regulators. Upon opening the canister valve, the initial vacuum pressure was read from the built-in gauge on the flow controller and recorded onto the Indoor Air Quality Survey and Questionnaire form. Approximately 24 hours after sampling commenced, each canister vacuum was recorded on the Indoor Air Quality Survey and Questionnaire form and the valve was then closed. One indoor air duplicate sample (FD092719) was collected in Building B-35, at location B35-IA-01. One outdoor ambient air sample (OA 2) was collected. The outdoor air sample was collected from an unoccupied area to the east of the Site (southeast of the PCore Building).

2.2.1 Sample Analysis

The samples were delivered under chain of custody to NYSDEC's call-out laboratory, TestAmerica Laboratories, Inc. (TestAmerica) located in Amherst, NY and then shipped by TestAmerica to their facility located in Knoxville, Tennessee. TestAmerica Knoxville is a NYSDOH ELAP certified laboratory for the analysis of VOCs by USEPA Method TO-15 (Table 1). All indoor and outdoor air samples were analyzed for the VOCs shown on Table 1 to a minimum detection limit of 1.0 microgram per cubic meter ($\mu g/m^3$) with the exception of alcohols and ketones. VOCs trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), carbon tetrachloride, and vinyl chloride in all indoor and outdoor air samples were analyzed with a minimum target detection limit of 0.2 $\mu g/m^3$.

3.0 RESULTS OF THE INVESTIGATION

3.1 Data Validation and Data Usability Summary Report

The data package submitted by the laboratory was equivalent to the NYSDEC's Analytical Services Protocol (ASP) Category B Deliverable requirements. A Data Usability Summary Report (DUSR) was prepared for the sampling event following the guidelines provided in NYSDEC's Department of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 2B, Guidance for Data Deliverables and the Development of Data Usability Summary Reports*, May 2010. The complete validated analytical results and Form 1s are provided in the DUSR which is included in Appendix C.

It should be noted that the results for sample B35-IA-01 were rejected in its entirety because the laboratory determined that the Summa canister contained residue from a previous use, rendering the data unusable. A field duplicate (FD 092719) was collected at location B35-IA-01, therefore only the field duplicate results are used for this location.

3.2 Soil Vapor Intrusion Investigation Sampling Results

To determine whether mitigation or monitoring are necessary, or whether no further action is required, soil vapor analytical data are compared to NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006. In May 2017, NYSDOH issued updated decision matrixes within this guidance. The SVI results for the samples collected from May through August 2017 from the Lapp Insulator site are presented in Table 2 with color-coded decision matrix recommendations.

The current indoor air monitoring program is intended to monitor VOC concentrations in indoor air and to evaluate SSD system effectiveness. Therefore the decision matrix was not used for evaluation of the data collected since the December 2017 sampling event. The December 2017 through September 2019 results were compared to Air Guideline Values Derived by the NYSDOH (NYSDOH, October 2006, Updated September 2013 and August 2015).

A summary of detected VOCs in the indoor air and outdoor air samples collected from December 2017 through September 2019 is presented in Table 3. Figure 4 shows all of the indoor and outdoor air sampling results since the May 2017 SVI sampling event. The results of the most recent (September 2019) monitoring event are discussed below with a focus on the eight NYSDOH decision matrix compounds. Charts showing the total VOC concentrations at each sampling location accompany the discussions below.

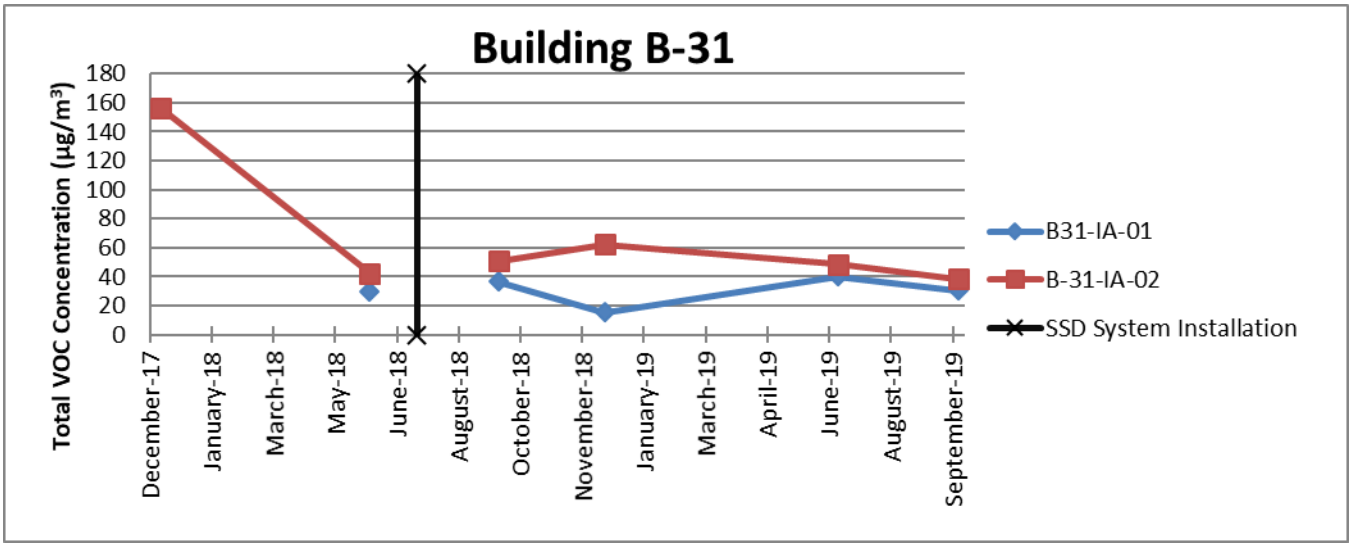
Carbon tetrachloride was detected in the indoor air and outdoor air at similar concentrations; therefore, results for carbon tetrachloride are not discussed below.

BUILDING B-31

The indoor air results show the following for the two samples collected from Building B-31:

- TCE was detected at 0.47 µg/m^3 in the sample collected from the workshop area at the northwestern end of the building (sample B31-IA-01) and was detected at 0.29 µg/m^3 in the front office (B31-IA-02). These indoor air concentrations are lower than previous measurements of 0.50 µg/m^3 and 0.45 µg/m^3, respectively. The September 2019 outdoor air concentration of TCE was higher than the indoor air concentration, at 0.53 µg/m^3. All September 2019 TCE detections were below the Air Guideline value of 2 µg/m^3.
- Methylene chloride, 1,1,1-TCA; 1,1-DCE; cis-1,2-DCE; and PCE were not detected in Building B-31 indoor air during the September 2019 indoor air monitoring event.
- Various non-decision matrix compounds were detected in the two samples collected from Building B-31 during the September 2019 indoor air monitoring event, ranging from 0.3 µg/m^3 (benzene) to 10 µg/m^3 (ethanol). Since the SSD system has been installed, the non-decision matrix compounds have ranged in concentration from 0.3 µg/m^3 (benzene) to 42 µg/m^3 (ethanol).

The chart below presents total VOC concentrations detected in the samples collected in Building B-31 over the course of the monitoring program.

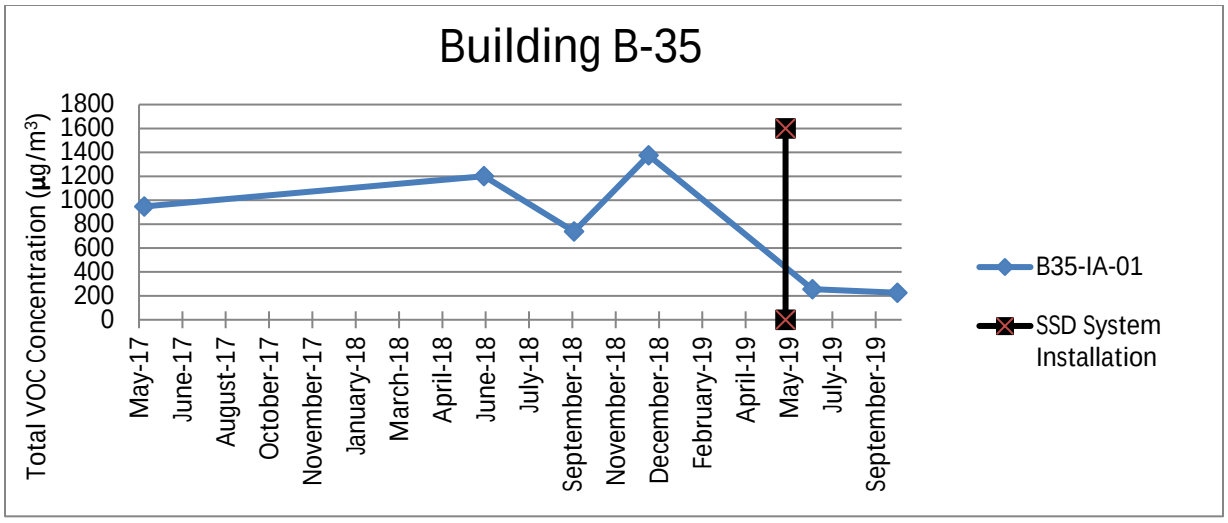


As shown in the above chart, the total VOC concentrations in B31-IA-01 and B31-IA-02 have exhibited some minor fluctuations but have remained relatively consistent since June 2018. Variations in total VOC concentrations are expected and can be attributed to several factors including changes in weather, opening and closing of doors and windows, changes in heating and air conditioning usage, and changes in levels of activity within the facility. This is the fourth round of indoor air samples that have been collected following the installation of the SSD systems at Building B-31.

BUILDING B-35

The indoor air results show the following for one sample collected from Building B-35. The data discussed here is from the field duplicate (sample FD 092719) collected at location B-35-I-01; parent sample B-35-IA-01 results were rejected.

- The concentration of TCE was 0.36 $\mu g/m^3$ during the September 2019 monitoring event. TCE was not detected during the June 2019 monitoring event. Previous concentrations of TCE ranged from 1.3 $\mu g/m^3$ to 2.9 $\mu g/m^3$. The September 2019 outdoor air concentration of TCE was higher than the indoor air concentration, at 0.53 $\mu g/m^3$. The September 2019 TCE detection was below the Air Guideline value of 2 $\mu g/m^3$.
- 1,1,1-TCA, 1,1-DCE, cis-1,2-DCE, methylene chloride, PCE and vinyl chloride were not detected in the sample collected from Building B-35 during the September 2019 monitoring event.
- Various non-decision matrix compounds were detected in the indoor air sample collected from Building B-35 during the September 2019 indoor air monitoring event, ranging from 0.52 $\mu g/m^3$ (benzene) to 91 $\mu g/m^3$ (1,3-dichlorobenzene). 1,3-Dichlorobenzene, ethanol and tert-butyl alcohol have been typically detected at higher concentrations than other compounds; concentrations of these compounds during the September 2019 monitoring event were similar to previous monitoring events. Historically, the non-decision matrix compounds have ranged in concentration from 0.37 $\mu g/m^3$ (benzene) to 950 $\mu g/m^3$ (1,3-dichlorobenzene).



As shown in the above chart, the total VOC concentration in B-35-IA-01 increased slightly from May 2017 to December 2018, and then decreased sharply from December 2018 to June 2019 mostly due to lower concentrations of 1,3-dichlorobenzene and ethanol. The concentrations of 1,3-dichlorobenzene peaked in December 2018 and have ranged from 38 mg/m^3 (September 2018) to 950 mg/m^3 (December 2018). The total VOC concentrations detected in B-35-IA-01 in June and September 2019 were similar. Variations in total VOC concentrations are expected and can be attributed to several factors including changes in weather, opening and closing of doors and windows, changes in heating and air conditioning usage, and changes in levels of activity within the facility.

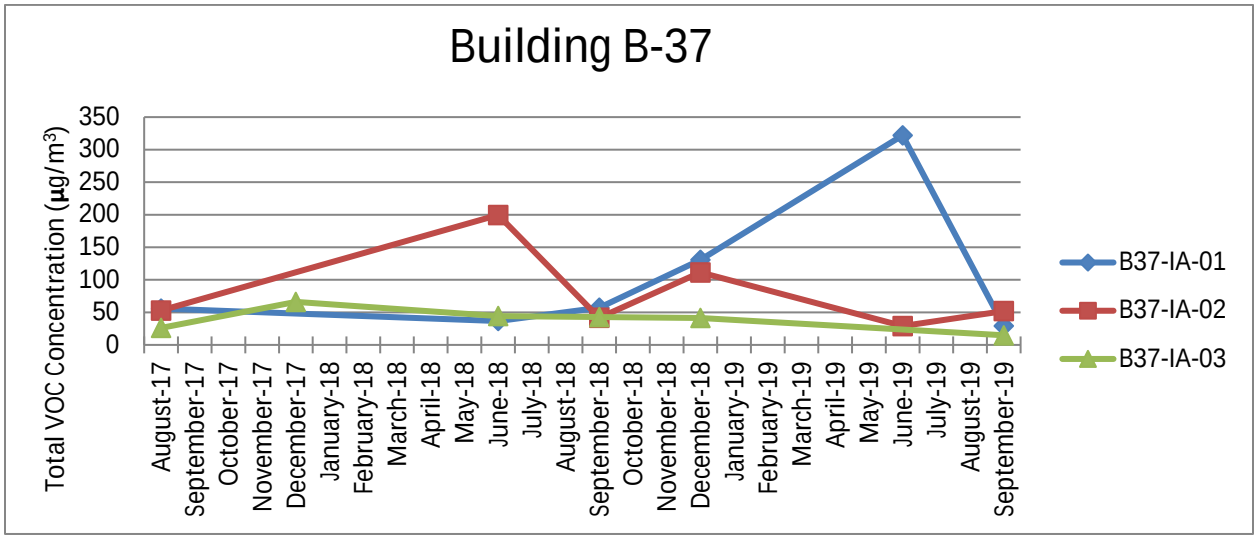
Building B-37

The indoor air results show the following for the three samples collected from Building B-37:

- TCE was detected in all three samples collected in Building B-37 at concentrations of 0.62 µg/m^3, 0.97 µg/m^3 and 0.20 µg/m^3. TCE was previously detected at concentrations ranging from 0.23 µg/m^3 to 2.7 µg/m^3 in Building B-37 indoor air samples. The September 2019 outdoor air concentration of TCE was higher than the indoor air concentration, at 0.53 µg/m^3. None of the three September 2019 TCE detections were above the Air Guideline value of 2 µg/m^3.
- Methylene chloride was detected in one of the three samples collected during the September 2019 monitoring event at 3.9 µg/m^3. Prior to September 2019, methylene chloride had been detected in every indoor air sample collected from Building B-37 from August 2017 through June 2019, with concentrations ranging from 0.86 µg/m^3 to 95 µg/m^3. The outdoor air sample concentration of methylene chloride was 1.1 µg/m^3 in September

2019. None of the September 2019 methylene chloride detections exceeded the Air Guideline value of 60 µg/m^3.

- 1,1,1-TCA, 1,1-DCE, cis-1,2-DCE, PCE and vinyl chloride were not detected in any of the three samples collected in Building B-37 during the September 2019 monitoring event.
- Various non-decision matrix compounds were detected in the samples collected during the September 2019 indoor air monitoring event at concentrations ranging from 0.40 µg/m^3 (benzene) to 34 µg/m^3 (ethanol). Historically, the non-decision matrix compounds have ranged in concentration from 0.26 µg/m^3 (benzene) to 79 µg/m^3 (ethanol).



As shown in the above chart, the total VOC concentrations in B-37-IA-03 have been relatively consistent. The total VOC concentrations in B-37-IA-01 increased from September 2018 through June 2019 primarily due to an increase in ethanol concentration during December 2018, and then a methylene chloride concentration spike during June 2019. The concentrations of these two compounds decreased during the September 2019 monitoring event, resulting in a decrease in the total VOC concentration. The total VOC concentration at B-37-IA-02 has fluctuated since August 2017, mostly due to varying concentrations of ethanol. Although variability is not unusual, the location of the summa canister for sample B37-IA-02 has had to be adjusted during each event due to operations within the facility. Variations in total VOC concentrations are expected and can be attributed to several factors including changes in weather, opening and closing of doors and windows, changes in heating and air conditioning usage, and changes in levels of activity within the facility.

PCore Building

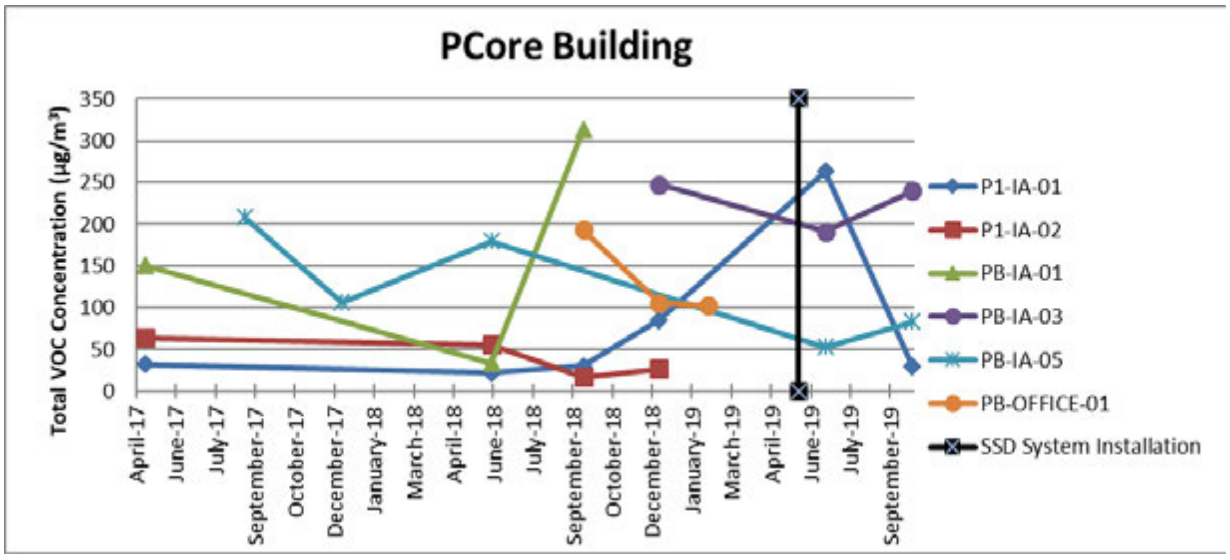
In September 2019, two samples (P1-IA-01 and P1-IA-02) were collected from the portion of the building that is above ground, identified herein as the first floor. The remaining samples (PB-IA-01, PB-IA-03 and PB-IA-05) were collected from the lower level, referred to herein as the basement. During the September 2019 monitoring event, a sample was not collected from location PB-IA-02 due to its proximity to sampling location PB-IA-01. A sample was most recently collected from location PB-Office in February 2019.

The indoor air results show the following for the five samples collected from the PCore Building in September 2019:

- 1,1,1-TCA was detected in four out of the five samples in the PCore Building during the September 2019 sampling event, at concentrations between 0.69 $\mu g/m^3$ (PB-IA-05) and 1.6 $\mu g/m^3$ (PB-IA-01 and PB-IA-03). With the exception of P1-IA-02 during the September 2018 monitoring event and four samples during the June 2019 monitoring event, 1,1,1-TCA has been detected consistently at every location in the PCore Building with concentrations between 1.6 $\mu g/m^3$ (P1-IA-01) and 69 $\mu g/m^3$ (PB-IA-05).
- TCE was detected in four out of the five samples in the PCore Building during the September 2019 monitoring event at concentrations ranging from 0.53 $\mu g/m^3$ (P1-IA-02) to 0.83 $\mu g/m^3$ (PB-IA-05). The September 2019 outdoor air concentration of TCE was 0.53 $\mu g/m^3$. Previously, TCE concentrations ranged from 0.2 $\mu g/m^3$ (P1-IA-02) to 25 $\mu g/m^3$ (PB-IA-05). Until the September 2019 monitoring event, TCE has been detected in every indoor air sample collected from the PCore Building. None of the September 2019 samples exceeded the Air Guideline value of 2 $\mu g/m^3$.
- PCE was detected in four out of the five samples collected from the PCore building during the September 2019 monitoring event at concentrations ranging from 0.57 $\mu g/m^3$ (P1-IA-02) to 1.5 $\mu g/m^3$ (PB-IA-05). The September 2019 outdoor air concentration of PCE was 1.0 $\mu g/m^3$. Except for one unexpectedly high concentration of 210 $\mu g/m^3$ at PB-IA-01 during the September 2018 event, previous samples have exhibited PCE concentrations ranging from 0.73 $\mu g/m^3$ (P1-IA-02 and P1-IA-02) to 9.7 $\mu g/m^3$ (PB-IA-03). None of the September 2019 samples exceeded the Air Guideline value of 30 $\mu g/m^3$.
- Methylene chloride was detected in two out of the five samples collected from the PCore Building during the September 2019 monitoring event at concentrations ranging from 5.3

µg/m^3 (PB-IA-01) to 68 µg/m^3 (PB-IA-03). The September 2019 outdoor air concentration of methylene chloride was 1.1 µg/m^3. Except for B37-IA-02 in June 2018 (95 µg/m^3), PB-IA-03 in December 2018 (30 µg/m^3), and PB-IA-01 in June 2019 (64 µg/m^3), the concentration of methylene chloride had generally been consistent, ranging from 1.0 µg/m^3 to 10 µg/m^3. The methylene chloride concentration in sample PB-IA-03 (68 µg/m^3) exceeded the Air Guideline value of 60 µg/m^3.

- Cis-1,2-DCE was detected in two out of the five samples collected from the PCore Building during the September 2019 monitoring event at concentrations of 0.26 µg/m^3 (PB-IA-03) and 0.17 µg/m^3 (PB-IA-05). Historically, detected concentrations of cis-1,2-DCE have ranged from 0.16 µg/m^3 (P1-IA-02) to 15 µg/m^3 (PB-IA-05).
- 1,1-DCE and vinyl chloride were not detected in any of the PCore Building samples collected during the September 2019 monitoring event.
- Various non-decision matrix compounds were detected in the samples collected during the September 2019 indoor air monitoring event at concentrations ranging from 0.35 µg/m^3 (o-xylene) to 170 µg/m^3 (toluene). The historical non-decision matrix compounds concentrations for indoor air samples collected from the PCore Building have ranged from 0.27 µg/m^3 (benzene) to 680 µg/m^3 (ethanol).



As shown in the above chart, the total VOC concentrations at P1-IA-01 and P1-IA-02 had been generally consistent since June 2018, then increased during the June 2019 monitoring event before decreasing again during the September 2019 monitoring event. The increases observed in June 2019 are

mostly attributed to sharp increases in concentrations of toluene and methyl ethyl ketone. The total VOC concentration at PB-IA-01 has fluctuated over the course of the monitoring program, primarily due to: a sharp decrease in the 1,1,1-TCA concentration in June 2018, a sharp increase in the PCE concentration in September 2018; and a sharp increase in the methylene chloride concentration in June 2019. The total VOC concentrations at PB-IA-03 and PB-OFFICE have been consistent. The total VOC concentration at PB-IA-05 has exhibited an overall downward trend over the course of the monitoring program, with the lowest total VOC concentration being observed most recently in September 2019. The variations in total VOC concentrations are expected and can be attributed to several factors including changes in weather, opening and closing of doors and windows, changes in heating and air conditioning usage, and changes in levels of activity within the facility.

3.3 Results of the Inventory

The analytical results were compared against the product inventories (Appendix A). The product inventories were initially completed during the SVI investigation work in 2017; the inventories are updated as needed during each monitoring event.

In the office in Building B-31 (where sample B-31-IA-02 is collected), only air fresheners were present. The background PID measurement in the office was 0 ppm, and the PID measured 0 ppm when held next to the air fresheners.

During the September 2019 monitoring event, the inventory for the workshop area of Building B-31 (where sample B-31-IA-01 is collected) was updated. The background PID reading was 0 ppm. In addition to the chemicals observed during the June 2019 monitoring event (spray paints, lubricants and paint stripper with PID readings of 3 ppm or less), paint stripper, PlioBond, and enamel were observed. The maximum PID reading observed was the PlioBond at 4 ppm. PlioBond does not contain chlorinated VOCs according to the Safety Data Sheet (included in Appendix A).

In Building B-35 during the September 2019 monitoring event, the peak VOC background reading collected using the PID was approximately 2 ppm. There were no notable changes to the product inventory for Building B-35. The building regularly contains various drums containing oil, naphthalene and acetone in the manufacturing area, away from where the samples were collected.

The Building B-37 product inventory was updated during the September 2019 monitoring event. During the June 2019 monitoring event, three waste oil drums were observed near the location of sample

B-37-IA-01; these drums were not present during the September 2019 monitoring event. Because of an elevated methylene chloride concentration observed in sampling B-37-IA-01 during the June 2019 monitoring event, NYSDEC requested that URS enlarge the search area for the product inventory. URS examined a nearby painting room, where methylene chloride may be commonly used. There were several cabinets containing various paints and mineral spirits in this room, but there were no PID readings observed. The background PID reading was also 0 ppm in this area. No other potential sources of methylene chloride, or any other VOCs, were identified near this sample location.

The product inventories for the other two sample locations in Building B-37 (B-37-IA-02 and B-37-IA-03) were revisited, but there were no changes necessary. Background readings in both locations were 0 ppm.

Products found throughout the PCore Building during previous site visits have included various cleaning products, one oxygen tank and one acetylene tank, and drums containing various resins and waste oil. During the September 2019 monitoring event, the product inventories were updated as follows:

- Sample location P1-IA-01: URS updated the product inventory in the vicinity of sample P1-IA-01 during the September 2019 monitoring event. The background PID reading was 0 ppm. There were no notable changes to the product inventory. During the June 2019 site visit, a drum storage room door was open; the room contains approximately 25 waste oil drums, 25 drums containing various epoxy resins, and eight pails of butyl alcohol. The drum storage room door was closed during the September 2019 monitoring event.
- Sample location P1-IA-02: URS updated the product inventory in the vicinity of sample P1-IA-02 during the September 2019 monitoring event. The background PID reading was 0 ppm. There were two 260-gallon (approximately) totes containing hydraulic oil being stored next to the sample location; there were no PID readings observed around these totes. This sample location is near a loading dock with frequent truck and forklift traffic.
- Sample location PB-IA-01: Background PID reading was 3 ppm. There were no products observed near this sampling location. This area sees occasional forklift traffic.
- Sample location PB-IA-03: During the September 2019 monitoring event, the sample location was moved to a nearby area to facilitate PCore operations. This location is in an active manufacturing area. During the September 2019 monitoring event, the inventory was updated to reflect the new sampling area. The background PID reading was 0 ppm.

A chemical cabinet containing various spray paints, oil cleaners, and brake cleaners was found. The PID readings within this cabinet ranged from 0 ppm to 10 ppm.

- Sample location PB-IA-05: During the September 2019 monitoring event, the background PID reading was 0 ppm in the polymer laboratory of the PCore Building (Sample location PB-IA-05). There are certain products stored inside a flammables cabinet in the laboratory that are known to exhibit high PID readings; PCore personnel typically remove these products prior to the sampling. However, for the September 2019 monitoring event, these products were not removed. There were no PID readings observed in or around the flammable's cabinet during the September 2019 monitoring event. The product inventory was revisited in the laboratory, and there were no notable changes to the product inventory (the contents of the flammables cabinet have not changed since the cabinet was last inventoried in February 2019). It should be noted that a sump pit in the floor of the laboratory, which was exposed to bare subsoil, was sealed during the construction of the SSD system in this location in May 2019.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The sub-slab vapor concentrations of 1,1,1-TCA and/or TCE detected beneath Buildings B-31, B-35, B-37 and the PCore Building in 2017 prompted the 'mitigate' determination. One exception to this is in the PCore Laboratory (PB-IA-05), where the indoor air concentration of TCE rather than the subslab concentration prompted the 'mitigate' determination. Mitigation of Building B-31 was completed in July 2018, and mitigation of Building B-35 and the PCore Building were completed in May 2019.

In September 2019 there was only one Air Guideline value exceedance. The exceedance was for methylene chloride in sample PB-IA-03 in the manufacturing area of the PCore Building. There were no compounds found at concentrations exceeding the Recommended Immediate Action Level during the September 2019 monitoring event.

Overall, concentrations of compounds found in the sub-slab soil vapor samples continue to decrease in the indoor air samples being collected. This decrease may be an early indicator that the SSD systems are effectively limiting vapor intrusion. However, several factors can impact indoor air concentrations (i.e. time of year, weather, use of doors/windows, use of various chemicals, etc.). This is the second indoor air monitoring event that has been conducted since the construction of the SSD systems in Building B-35 and the PCore Building.

In Building B-31, the indoor air concentrations of compounds found in the sub-slab soil vapor samples have continued to decrease since the SSD systems were installed in July 2018. This trend indicates that the SSD systems in Building B-31 are effectively limiting vapor intrusion.

URS will continue to perform quarterly indoor air sampling in accordance with the current scope of work. The ongoing indoor air monitoring program will collect the data necessary to evaluate the effectiveness of the SSD systems. The sixth indoor air monitoring event is expected to take place in December 2019.

5.0 REFERENCES

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TABLES

TABLE 1
SUMMARY OF PARAMETERS ANALYZED
IN
INDOOR AND OUTDOOR AIR SAMPLES
BY USEPA METHODS TO-15

1,1,1-Trichloroethane (1,1,1-TCA)	Bromoform
1,1,2,2-Tetrachloroethane	Bromomethane
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	Carbon tetrachloride #
1,1,2-Trichloroethane	Chlorobenzene
*1,1-Dichloroethane (1,1-DCA)	*Chloroethane
*1,1-Dichloroethene (1,1-DCE)	Chloroform
1,2,4-Trichlorobenzene	Chloromethane
1,2,4-Trimethylbenzene	Cyclohexane
1,2-Dibromoethane (Ethylene dibromide)	Dibromochloromethane
1,2-Dichlorobenzene	Dichlorodifluoromethane (Freon 12)
*1,2-Dichloroethane (1,2-DCA)	Ethanol
*cis-1,2-Dichloroethene (cis-1,2-DCE)	Ethylbenzene
*trans-1,2-Dichloroethene (trans-1,2-DCE)	Hexachlorobutadiene
1,2-Dichloropropane	Hexane
1,2-Dichlorotetrafluoroethane	Methyl ethyl ketone (2-Butanone)
1,3,5-Trimethylbenzene (Mesitylene)	Methyl tert-butyl ether
1,3-Dichlorobenzene	Methylene chloride
cis-1,3-Dichloropropene	Styrene
trans-1,3-Dichloropropene	tert-Butyl alcohol
1,4-Dichlorobenzene	*Tetrachloroethene (PCE)
1,4-Dioxane	Toluene
2,2,4-Trimethylpentane	*Trichloroethene (TCE) #
4-Methyl-2-pentanone	Trichlorofluoromethane (Freon 11)
Benzene	*Vinyl chloride (VC) #
Benzyl chloride	m&p Xylene
Bromodichloromethane	o Xylene

USEPA Method TO-15, VOCs in Air Collected in SUMMA® Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS): USEPA Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, January 1999.

* - Tetrachloroethene, trichloroethene and breakdown products.

\# - The minimum reporting limit in all indoor and outdoor air samples for trichloroethene, cis-1,2-dichlroethene, 1,1-dichloroethene, carbon tetrachloride and vinyl chloride is 0.2 microgram per cubic meter ($\mu g/m^3$); the reporting limits for all other compounds are at least 1 $\mu g/m^3$ (except for ketones).

TABLE 2
SOIL VAPOR INTRUSION ANALYTICAL RESULTS
LAPP INSULATOR SITE

Location		OUTDOOR UPWIND		BUILDING B31	BUILDING B35			BUILDING B37						PCORE BUILDING									
Location ID		OUTDOOR AIR[1]		B31-SS-01	B35-IA/SS-01			B37-IA/SS-01		B37-IA/SS-02		B37-IA/SS-03		P1-IA/SS-01		P1-IA/SS-02		PB-IA/SS-01		PB-IA/SS-02		PB-IA/SS-05		
Field Sample ID		OA-01	OA-02	B31-SS-01	B35-IA-01	051017-FD-001	B35-SS-01	IA-01	B37-SS-01	IA-02	B37-SS-02	B37-IA-03	B37-SS-03	P-1-IA-01	P-1-SS-01	P-1-IA-02	P-1-SS-02	P-B-IA-01	P-B-SS-01	P-B-IA-02	P-B-SS-02	P-B-IA-05	083017-FD-002	PB-SS-05
Matrix		Outdoor Air	Outdoor Air	Sub-slab Vapor	Indoor Air	Indoor Air	Sub-slab Vapor	Indoor Air	Sub-slab Vapor	Indoor Air	Sub-slab Vapor	Indoor Air	Sub-slab Vapor	Indoor Air	Sub-slab Vapor	Indoor Air	Sub-slab Vapor	Indoor Air	Sub-slab Vapor	Indoor Air	Sub-slab Vapor	Indoor Air	Indoor Air	Sub-slab Vapor
Date Sampled		05/12/17	08/31/17	05/11/17	05/11/17	05/11/17	05/11/17	08/31/17	08/31/17	08/31/17	08/31/17	08/31/17	08/31/17	05/11/17	05/11/17	05/11/17	05/11/17	05/11/17	05/11/17	05/11/17	05/11/17	08/31/17	08/31/17	08/31/17
Parameter	**Units**					Field Duplicate																	Field Duplicate	
1,1,1-Trichloroethane	UG/M3			8400	< 0.33	16	660	< 0.065	180	< 0.065	< 0.065	< 0.065	< 0.65	2.9	170	10	590,000 D	24	520	36	14,000	42	46	51
1,1-Dichloroethene	UG/M3															< 0.056	6,600	0.34	< 11	0.52	180	1.2	1.3	< 0.056
1,2-Dichloroethene (cis)	UG/M3															< 0.095	3,100	2.1	< 18	2.4	280	5.1	5.6	1.6
Carbon tetrachloride	UG/M3	0.39	0.42	< 17	< 0.47	< 1.0	< 79	0.47	< 11	0.46	0.41	0.42	< 0.94	0.39	2.5	0.39	< 230	0.38	< 18	0.35	< 17	0.39	0.47	0.57
Methylene chloride	UG/M3	0.95	1.2	< 82	< 2.3	< 4.8	< 380	1.3	< 52	1.9	1.3	2.1	< 4.5	1.0	< 4.5	1.2	< 1100	1.8	< 87	1.6	< 79	2.5	3.3	3.1
Tetrachloroethene	UG/M3			< 20	< 0.54	< 1.2	<90			4.5	2.1	8.9	< 1.1	< 0.11	42	1.1	< 270	4.0	< 21	3.1	< 19	3.9	4.1	18
Trichloroethene	UG/M3			2300	2.1	5.3	28000	< 0.075	3500	0.23	9.0	< 0.075	190	0.69	410	1.9	92,000	18	5,100	20	4,600	11	12	30
1,1-Dichloroethane	UG/M3															0.39		0.75		0.98		4.0	4.3	4.3
1,2,4-Trimethylbenzene	UG/M3							0.78		1.1	1.7	0.67	9.7									4.4	4.0	7.4
1,2-Dichloroethane	UG/M3															0.32						0.73	0.78	
1,2-Dichloroethene (trans)	UG/M3										2.4													
1,2-Dichloropropane	UG/M3																							
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3										0.74		4.4									1.9	1.7	4.0
1,3-Dichlorobenzene	UG/M3				200	160																		
1,4-Dichlorobenzene	UG/M3																							0.52
1,4-Dioxane	UG/M3	0.94																						3.7
2,2,4-Trimethylpentane	UG/M3									1.0														
4-Methyl-2-pentanone	UG/M3	6.8	1.1					1.2		2.3	7.8		15	1.1		1.1		1.2		2.3		1.5	0.96	22
Benzene	UG/M3							0.30		0.28	8.1		15					0.28				0.31	0.32	42
Chloroethane	UG/M3																							0.27
Chloroform	UG/M3																							0.60
Chloromethane	UG/M3	1.1	0.96					1.2		1.1		1.0		1.2		1.1		1.2		1.1		1.3	1.3	0.86
Cyclohexane	UG/M3			150							44		270											57
Dichlorodifluoromethane	UG/M3	2.5	2.3		2.4			2.6		2.5	2.4	2.3		2.3		2.3		2.4		2.3		2.3	2.5	2.7
Ethanol	UG/M3	6.4			550	450		28		27	7.6	5.5		15		29		84		130		83	86	150
Ethylbenzene	UG/M3										5.1		12			0.75		0.57		0.47		1.4	1.4	24
Hexane	UG/M3			230						0.72	52		300					1.7		1.5		14	14	160
Methyl ethyl ketone (2-Butanone)	UG/M3		2.7					6.9		4.8	16	1.7	15	2.2		2.0		1.2		1.4		4.7	2.8	33
Styrene	UG/M3										1.1													1.7
tert-Butyl alcohol	UG/M3				190	140																		8.9
Toluene	UG/M3		0.54		3.5			0.69		0.89	39	0.72	59	2.5		6.5		2.2		1.9		6.3	6.4	100
Trichlorofluoromethane	UG/M3	1.5	1.3					11		3.0	2.3	2.2		1.3		1.4		1.6		1.4		3.0	3.2	3.4
m&p-Xylene	UG/M3							0.99		0.66	22	0.60	48	1.4		3.3		2.4		2.0		4.8	4.8	100
o-Xylene	UG/M3							0.37		0.35	7		16	0.44		1.0		0.75		0.62		1.2	1.2	31
Total VOCs	UG/M3	20.58	10.52	11,080.00	948.00	771.30	28,660.00	55.80	3,680.00	52.79	232.05	26.11	954.10	32.42	624.50	63.75	101,700	150.87	5,620	209.94	19,060	200.93	208.43	861.62

NYSDOH Decision Matrix Recommen Applied to sub-slab vapor and corresponding indoor air sample collected on the same date.

No further action

Identify source(s) and Resample or Mitigate

Monitor

Mitigate

Notes: 1) Outdoor air samples are not included in comparisons for the decision matrix.

< = Not detected, value shown is method detection limit (MDL). Empty cell = not detected.

TABLE 3
INDOOR AND OUTDOOR AIR ANALYTICAL RESULTS
LAPP INSULATOR SITE

Location				OUTDOOR UPWIND							BUILDING B31												
Location ID				OUTDOOR AIR							B31-IA-01					B31-IA-02							
Field Sample ID				PB-OA-01	Outdoor Air-2	Outdoor Air-2	Outdoor Air-2	Outdoor Air-03	OA-01	Outdoor Air-2	B31-IA-01	B31-IA-01	B31-IA-01	B31-IA-01	B31-IA-01	B31-IA-02	B31-IA-02	B31-IA-02	FD 091918	B31-IA-01	FD121418	B31-IA-02	B-31-IA-02
Matrix				Outdoor Air							Indoor Air					Indoor Air							
Date Sampled				12/19/17	06/07/18	09/19/18	12/14/18	02/08/19	06/21/19	09/27/19	06/07/18	09/19/18	12/14/18	06/21/19	09/27/19	12/19/17	06/07/18	09/19/18	09/19/18	12/14/18	12/14/18	06/21/19	09/27/19
Parameter	Units	Limit 1	Limit 2																Field Duplicate		Field Duplicate		
1,1,1-Trichloroethane (1,1,1-TCA)	UG/M^3	-	-													0.74							
1,1-Dichloroethene (1,1-DCE)	UG/M^3	-	-																				
cis1-,2-Dichloroethene (cis-1,2-DCE)	UG/M^3	-	-																				
Carbon tetrachloride	UG/M^3	-	-	0.48	0.46	0.45	0.47	0.51	0.42	0.42	0.48	0.62		0.45	0.45	0.49		0.54	0.57	0.52	0.53	0.44	0.42
Methylene chloride	UG/M^3	60	-	0.94	1.3	2.9	2.3		1.3	1.1	1.4	3.6	2.5	1.3		76	2.6	3.6	5.4	1.9	1.4	0.92	
Tetrachloroethene (PCE)	UG/M^3	30	300			1.0				1.0							26						
Trichloroethene (TCE)	UG/M^3	2	20			0.85				0.53	4.3	0.87		0.50	0.47	1.9		0.98	0.95	0.23	0.23	0.45	0.29
Vinyl chloride	UG/M^3	-	-					0.13															
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M^3	-	-																				
1,1,2-Trichloroethane (1,1,2-TCA)	UG/M^3	-	-																				
1,1-Dichloroethane (1,1-DCA)	UG/M^3	-	-																				
1,2,4-Trichlorobenzene	UG/M^3	-	-												1.4								
1,2,4-Trimethylbenzene	UG/M^3	-	-											0.46				0.49	0.45				
1,2-Dichloroethane (1,2-DCA)	UG/M^3	-	-															0.33					
trans-1,2-Dichloroethene (trans-1,2-DCE)	UG/M^3	-	-																				
1,2-Dichloropropane	UG/M^3	-	-											0.98		0.97				0.45	0.47	1.2	
1,3,5-Trimethylbenzene (Mesitylene)	UG/M^3	-	-																				
1,3-Dichlorobenzene	UG/M^3	-	-												1.8	1.9		0.55		1.1	1.2		1.4
cis-1,3-Dichloroproene	UG/M^3	-	-																				
1,4-Dichlorobenzene	UG/M^3	-	-																	1.0			
1,4-Dioxane	UG/M^3	-	-							1.2		4.0											
2,2,4-Trimethylpentane	UG/M^3	-	-																				
4-Methyl-2-pentanone	UG/M^3	-	-						13			1.0						1.6					
Benzene	UG/M^3	-	-	0.52			0.50	0.56			1.3	0.99		1.2	0.83	0.61		0.55	0.51	0.88	1.5	0.48	0.30
Bromoform	UG/M^3	-	-																				
Chlorobenzene	UG/M^3	-	-																				
Chloroethane	UG/M^3	-	-																				
Chloroform	UG/M^3	-	-									1.2											
Chloromethane	UG/M^3	-	-	1.3	1.3	1.2	1.1	1.2	0.93	1.4	1.1	1.7	1.2	1.4	0.96	1.6	1.2	1.6	1.2	1.2	1.5	1.3	1.2
Cyclohexane	UG/M^3	-	-												2.4	0.82	0.77	1.6	1.5	0.79	0.87	1.7	7.5
Dichlorodifluoromethane	UG/M^3	-	-	2.9	0.95	1.0	2.3	0.80	1.30	0.80	1.0	2.6	2.7	1.2	1.1	2.9	0.98	2.7	2.8	2.5	2.5	1.2	0.99
Ethanol	UG/M^3	-	-	5.0	4.1	11	6.5	9.4	4.7		5.8	7.2	8.1	13	7.3	58	10	15	12	27	42	18	10
Ethylbenzene	UG/M^3	-	-											0.47		0.42		0.62	0.54		0.42	0.47	
Hexachlorobutadiene	UG/M^3	-	-												1.4								
Hexane	UG/M^3	-	-													1.1		1.2	0.94	0.76	0.76	0.71	1.3
Methyl ethyl ketone (2-Butanone)	UG/M^3	-	-	2.3	2.9	3.3		3.2			1.1	3.2		2.0	1.8	4.3		4.0	2.9	1.4	1.3	4.1	1.6
Styrene	UG/M^3	-	-											0.54				1.4	1.3		0.35	1.0	0.53
tert-Butyl alcohol	UG/M^3	-	-					2.1			11	5.2		11	7.7			5.9	6.7	0.99	2.8	11	9.3
Toluene	UG/M^3	-	-	0.94	0.54		0.56	0.69	0.48	0.88	0.91	1.5		2.2	1.6	0.93		3.1	2.6	1.0	1.1	2.2	1.5
Trichlorofluoromethane	UG/M^3	-	-	1.7	1.1	1.4	1.2	1.4	0.99	0.91	1.1	1.6	0.90	1.1	1.0	2.0	1.0	2.5	2.5	1.3	1.9	1.3	1.3
m&p-Xylene	UG/M^3	-	-	0.39							0.73	0.97		1.6	0.39	1.5		1.7	1.5	0.55	1.1	1.5	0.59
o-Xylene	UG/M^3	-	-									0.41		0.66		0.42		0.68	0.59		0.44	0.57	
Total VOCs	UG/M^3	-	-	16.47	12.65	23.1	14.93	19.99	23.12	8.23	30.22	36.66	15.4	40.06	30.6	156.6	42.55	50.64	44.95	43.57	62.37	48.54	38.22

Guidance limits are based on Action level Guidance for Evaluation in New York State (NYSDOH, Rev. May 2017)

Limit 1 — Exceeds NYSDOH Air Guideline value of 60 UG/M^3 for methylene chloride, 30 UG/M^3 for PCE or 2 UG/M^3 for TCE.

Limit 2 — Exceeds NYSDOH Recommended Immediate Action Level 300 UG/M^3 for PCE or 20 UG/M^3 for TCE.

UG/M^3 - Micrograms per cubic meter. Empty cell - not detected above the method detection limit (MDL).

TABLE 3
INDOOR AND OUTDOOR AIR ANALYTICAL RESULTS
LAPP INSULATOR SITE

Location				BUILDING B35							BUILDING B37														
Location ID				B35-IA-01							B37-IA-01					B37-IA-02					B37-IA-03				
Field Sample ID				B35-IA-01	FD 060718	B35-IA-01	B35-IA-01	B-35-IA-01	FD-062119	FD-092719	B37-IA-01	B37-IA-01	B37-IA-01	B37-IA-01	B37-IA-01	B37-IA-02	B37-IA-02	B37-IA-02	B37-IA-02	B37-IA-02	B37-IA-03	B37-IA-03	B37-IA-03	B37-IA-03	B37-IA-03
Matrix				Indoor Air							Indoor Air					Indoor Air					Indoor Air				
Date Sampled				06/07/18	06/07/18	09/19/18	12/14/18	06/21/19	06/21/19	09/27/19	06/07/18	09/19/18	12/14/18	06/21/19	09/27/19	06/07/18	09/19/18	12/14/18	06/21/19	09/27/19	12/19/17	06/07/18	09/19/18	12/14/18	09/27/19
Parameter	**Units**	**Limit 1**	**Limit 2**		Field Duplicate				Field Duplicate	Field Duplicate															
1,1,1-Trichloroethane (1,1,1-TCA)	UG/M^3	-	-	0.57	0.55		0.86						0.64			0.69		0.88			0.71				
1,1-Dichloroethene (1,1-DCE)	UG/M^3	-	-																						
cis1-,2-Dichloroethene (cis-1,2-DCE)	UG/M^3	-	-										0.30												
Carbon tetrachloride	UG/M^3	-	-	0.54	0.49	0.65	0.48		0.45	0.44	0.46	0.60	0.60	0.42	0.41	0.45	0.55	0.84	0.44	0.4	0.44	0.47	0.58	0.49	0.44
Methylene chloride	UG/M^3	60	-	0.80	0.84	1.8	1.8	11			1.3	5.4	4.7	270		95	5.1	5.2	1.7	3.9	0.86	2.2	5.4	5.1	
Tetrachloroethene (PCE)	UG/M^3	30	300	0.63		0.65							15			33	4.8	12				17	3.3		
Trichloroethene (TCE)	UG/M^3	2	20	2.4	2.4	1.3	2.9			0.36	0.23	0.37	2.7	0.80	0.62	1.1	0.55	1.3	0.43	0.97	0.24			1.2	0.2
Vinyl chloride	UG/M^3	-	-				0.15																		
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M^3	-	-			0.63						0.65													
1,1,2-Trichloroethane (1,1,2-TCA)	UG/M^3	-	-																						
1,1-Dichloroethane (1,1-DCA)	UG/M^3	-	-															0.39							
1,2,4-Trichlorobenzene	UG/M^3	-	-																						
1,2,4-Trimethylbenzene	UG/M^3	-	-			0.54					3.4	2.3	5.4	3.6	1.1	1.0	2.2		4.5	4.8	6.2	0.91	2.4	1.4	0.92
1,2-Dichloroethane (1,2-DCA)	UG/M^3	-	-																						
trans-1,2-Dichloroethene (trans-1,2-DCE)	UG/M^3	-	-																						
1,2-Dichloropropane	UG/M^3	-	-																						
1,3,5-Trimethylbenzene (Mesitylene)	UG/M^3	-	-								1.4	0.59	1.0	1.1			0.54		1.2	1.3	1.5		0.58		
1,3-Dichlorobenzene	UG/M^3	-	-	330	160	38	950	84	110	91			1.1												
cis-1,3-Dichloroproene	UG/M^3	-	-																						
1,4-Dichlorobenzene	UG/M^3	-	-																						
1,4-Dioxane	UG/M^3	-	-																						
2,2,4-Trimethylpentane	UG/M^3	-	-				1.5														0.93				
4-Methyl-2-pentanone	UG/M^3	-	-	3.1	3.0	3.4	1.7		1.5	0.88			1.0			0.82			0.97			10		1.2	
Benzene	UG/M^3	-	-			0.37	0.96		0.41	0.52		0.33	1.1	0.90		0.39	0.33	0.86			1.5		0.26	0.72	0.40
Bromoform	UG/M^3	-	-																						
Chlorobenzene	UG/M^3	-	-																						
Chloroethane	UG/M^3	-	-																						
Chloroform	UG/M^3	-	-																			0.69	0.45		0.45
Chloromethane	UG/M^3	-	-	1.0	1.0	1.1	0.86		1.3	1.0	1.0	1.0	1.2	1.0	0.97	1.2	0.87	1.2	1.1	0.99	1.6	1.3	1.1	1.0	0.89
Cyclohexane	UG/M^3	-	-																		1.3				
Dichlorodifluoromethane	UG/M^3	-	-	1.0	0.94	2.7	1.5		1.3	0.85	0.97	3.1	2.8	1.2	0.97	1.0	2.7	2.5	1.3	0.93	2.6	0.97	2.9	1.0	1.0
Ethanol	UG/M^3	-	-	670	440	120	350		60	75	7.5	14	79	18	7.1	49	15	81	12	34	32	4.3	4.4	17	6.2
Ethylbenzene	UG/M^3	-	-	0.55	0.51	0.49	0.72			1.1	1.1	0.39		1.4			0.47		0.37		0.66		0.54		
Hexachlorobutadiene	UG/M^3	-	-																						
Hexane	UG/M^3	-	-									3.5	1.1	3.5	0.82	6.8	0.71	0.92			4.7			0.90	
Methyl ethyl ketone (2-Butanone)	UG/M^3	-	-	5.3	2.9	3.3	1.5		2.3			7.3	4.8	1.8	10	1.3	1.7	2.0	1.2	1.8	2.6	2.2	2.5	6.2	1.1
Styrene	UG/M^3	-	-			0.45																			
tert-Butyl alcohol	UG/M^3	-	-	180	120	87	52	84	75	43														1.3	
Toluene	UG/M^3	-	-	1.4	1.5	1.7	2.4		1.1	1.6	3.2	8.9	1.6	6.4	3.5	2.5	2.0	0.52	0.74	0.85	3.0	1.8	13	1.2	0.89
Trichlorofluoromethane	UG/M^3	-	-	1.1	1.1	1.6	1.1		0.99	0.96	4.8	6.6	4.8	2.2	2.3	2.6	2.2	1.7	1.1	1.2	2.1	2.0	3.0	2.0	1.6
m&p-Xylene	UG/M^3	-	-	2.1	2.1	1.6	3.5		0.94	7.3	8.5	1.5	1.3	7.4	1.0	2.1	1.3		1.3	0.69	2.2	0.47	1.6	0.69	0.67
o-Xylene	UG/M^3	-	-	0.80	0.73	0.66	1.1		0.39	2.3	2.9	0.59	0.51	2.2	0.41	0.66	0.61		0.65		0.95		0.72		
Total VOCs	UG/M^3	-	-	1201.29	738.06	267.94	1375.03	179	255.68	226.31	36.76	57.12	130.65	321.92	29.2	199.61	41.63	111.31	29	51.83	66.09	44.31	42.73	41.4	14.76

Guidance limits are based on Action level Guidance for Evaluation in New York State (NYSDOH, Rev. May 2017)

Limit 1 — Exceeds NYSDOH Air Guideline value of 60 UG/M^3 for methylene chloride, 30 UG/M^3 for PCE or 2 UG/M^3 for TCE.

Limit 2 — Exceeds NYSDOH Recommended Immediate Action Level 300 UG/M^3 for PCE or 20 UG/M^3 for TCE.

UG/M^3 - Micrograms per cubic meter. Empty cell - not detected above the method detection limit (MDL).

TABLE 3
INDOOR AND OUTDOOR AIR ANALYTICAL RESULTS
LAPP INSULATOR SITE

Location				PCORE BUILDING																	
Location ID				P1-IA-01					P1-IA-02					PB-IA-01				PB-IA-02		
Field Sample ID				P1-IA-01	P1-IA-01	P1-IA-01	P1-IA-01	P1-IA-01	P1-IA-02	P1-IA-02	P1-IA-02	P1-IA-02	P1-IA-02	PB-IA-01	PB-IA-01	PB-IA-01	PB-IA-01	PB-IA-02	PB-IA-02	PB-IA-02
Matrix				Indoor Air					Indoor Air					Indoor Air				Indoor Air		
Date Sampled				06/07/18	09/19/18	12/14/18	06/21/19	09/27/19	06/07/18	09/19/18	12/14/18	06/21/19	09/27/19	06/07/18	09/19/18	06/21/19	09/27/19	06/07/18	09/19/18	12/14/18
Parameter	Units	Limit 1	Limit 2																	
1,1,1-Trichloroethane (1,1,1-TCA)	UG/M^3	-	-	1.6	4.6	13			12		3.7	1.5	1.0	4.8	14		1.6	17	16	21
1,1-Dichloroethene (1,1-DCE)	UG/M^3	-	-			0.18									0.33			0.25	0.25	0.35
cis1-,2-Dichloroethene (cis-1,2-DCE)	UG/M^3	-	-						0.16		0.20			0.35	1.1			1.1	1.1	0.99
Carbon tetrachloride	UG/M^3	-	-	0.47	0.45	0.55	0.42	0.46	0.48	0.43	0.44	0.36	0.44	0.48	0.43	0.43	0.47	0.49	0.50	0.55
Methylene chloride	UG/M^3	60	-	1.5	2.3	2.1	2.7		7.0	1.3	1.7	10		1.2	2.8	64	5.3	1.2	1.5	3.0
Tetrachloroethene (PCE)	UG/M^3	30	300	0.75					0.73			0.93	0.57	2.2	210		1.2	1.3	2.2	4.6
Trichloroethene (TCE)	UG/M^3	2	20	0.68	1.0	1.7	0.23		2.6	0.20	1.7	0.92	0.53	3.4	13	1.1	0.78	14	12	10
Vinyl chloride	UG/M^3	-	-																	
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M^3	-	-																	
1,1,2-Trichloroethane (1,1,2-TCA)	UG/M^3	-	-												1.4					
1,1-Dichloroethane (1,1-DCA)	UG/M^3	-	-						0.39						0.49			0.64	0.48	0.54
1,2,4-Trichlorobenzene	UG/M^3	-	-																	
1,2,4-Trimethylbenzene	UG/M^3	-	-				4.2					12								
1,2-Dichloroethane (1,2-DCA)	UG/M^3	-	-																	
trans-1,2-Dichloroethene (trans-1,2-DCE)	UG/M^3	-	-					4.4					74				6.8			
1,2-Dichloropropane	UG/M^3	-	-				0.43													
1,3,5-Trimethylbenzene (Mesitylene)	UG/M^3	-	-				1.1					3.4								
1,3-Dichlorobenzene	UG/M^3	-	-																	
cis-1,3-Dichloroproene	UG/M^3	-	-												0.47					
1,4-Dichlorobenzene	UG/M^3	-	-																	
1,4-Dioxane	UG/M^3	-	-																	
2,2,4-Trimethylpentane	UG/M^3	-	-												23					
4-Methyl-2-pentanone	UG/M^3	-	-												1.9					
Benzene	UG/M^3	-	-			0.61			0.29		0.73								0.27	0.60
Bromoform	UG/M^3	-	-												4.8					
Chlorobenzene	UG/M^3	-	-												0.71					
Chloroethane	UG/M^3	-	-																	
Chloroform	UG/M^3	-	-																	
Chloromethane	UG/M^3	-	-	1.1	1.3	1.1	1.1	0.88	1.1	1.3	0.99	1.1	0.91	1.0	1.2	1.1	1.3	0.98	1.1	1.1
Cyclohexane	UG/M^3	-	-																	
Dichlorodifluoromethane	UG/M^3	-	-	0.97	1.1	2.6	1.3	0.89	1.0	1.0	2.2	1.3	0.84	1.1	1.0	1.5	0.97	1.0	1.1	2.5
Ethanol	UG/M^3	-	-	6.2	12	11	13		16	7.5	7.3	10	6.0	13	23	17	11	31	29	20
Ethylbenzene	UG/M^3	-	-	0.49		0.48	3.0					17	2.7		0.58	0.85				
Hexachlorobutadiene	UG/M^3	-	-																	
Hexane	UG/M^3	-	-			0.72						2.2	0.85		6.7					0.96
Methyl ethyl ketone (2-Butanone)	UG/M^3	-	-	1.0	1.8	15	59	6.6	2.2	1.4	1.2	220	79	2.7	1.7	17	5.1	4.3	4.5	7.4
Styrene	UG/M^3	-	-																0.46	
tert-Butyl alcohol	UG/M^3	-	-																	
Toluene	UG/M^3	-	-	3.5	3.3	32	160	14	10	1.6	4.6	680	170	1.6	2.5	47	9.8	1.3	7.3	14
Trichlorofluoromethane	UG/M^3	-	-	1.1	1.4	1.2	1.0	1.1	1.3	1.3	1.0	1.1	1.0	1.2	1.5	1.3	1.1	1.1	1.4	1.1
m&p-Xylene	UG/M^3	-	-	1.8	0.70	2.1	12	0.93	0.41	0.84	0.72	66	9.8	0.93	0.39	3	1.2	0.54	1.1	1.4
o-Xylene	UG/M^3	-	-	0.59		0.68	4.0			0.35		20	2.7			0.88	0.44		0.41	0.48
Total VOCs	UG/M^3	-	-	21.75	29.95	85.02	263.48	29.26	55.66	17.22	26.48	1047.81	350.34	33.96	313	155.16	47.06	76.2	80.67	90.57

Guidance limits are based on Action level Guidance for Evaluation in New York State (NYSDOH, Rev. May 2017)

Limit 1 — Exceeds NYSDOH Air Guideline value of 60 UG/M^3 for methylene chloride, 30 UG/M^3 for PCE or 2 UG/M^3 for TCE.

Limit 2 — Exceeds NYSDOH Recommended Immediate Action Level 300 UG/M^3 for PCE or 20 UG/M^3 for TCE.

UG/M^3 - Micrograms per cubic meter. Empty cell - not detected above the method detection limit (MDL).

TABLE 3
INDOOR AND OUTDOOR AIR ANALYTICAL RESULTS
LAPP INSULATOR SITE

Location				PCORE BUILDING												
Location ID				PB-IA-03			PB-IA-05						PB-OFFICE			
Field Sample ID				PB-IA-03	PB-IA-03	PB-IA-03	PB-IA-05	FD-121817	PB-IA-05	PB-IA-05	PB-IA-05	PB-IA-05	PB-OFFICE-01	PB-OFFICE-01	PB-OFFICE
Matrix				Indoor Air			Indoor Air						Indoor Air			
Date Sampled				12/14/18	06/21/19	09/27/19	12/19/17	12/19/17	06/07/18	02/08/19	06/21/19	09/27/19	09/19/18	12/14/18	02/08/19
Parameter	Units	Limit 1	Limit 2					Field Duplicate							
1,1,1-Trichloroethane (1,1,1-TCA)	UG/M^3	-	-	8.7		1.6	19	19	69	38		0.69	14	17	17
1,1-Dichloroethene (1,1-DCE)	UG/M^3	-	-	0.22			0.97	0.94	3.5	2.0			0.54	0.95	0.84
cis1-,2-Dichloroethene (cis-1,2-DCE)	UG/M^3	-	-	0.77	0.39	0.26	6.0	6.0	15	10		0.17	1.7	6.8	4.9
Carbon tetrachloride	UG/M^3	-	-	0.44	0.43	0.43	0.45	0.46	0.50	0.47	0.42	0.45	0.47	0.53	0.44
Methylene chloride	UG/M^3	60	-	30	1.4	68	3.1	3.2	5.1		1.1		2.2	1.6	
Tetrachloroethene (PCE)	UG/M^3	30	300	9.7	6.0	1.3	3.7	3.6	7.7	4.7		1.5	1.3	3.0	2.9
Trichloroethene (TCE)	UG/M^3	2	20	3.7	1.0	0.58	12	12	25	15	0.25	0.83	3.8	9.8	8.6
Vinyl chloride	UG/M^3	-	-							0.23					0.11
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M^3	-	-												
1,1,2-Trichloroethane (1,1,2-TCA)	UG/M^3	-	-												
1,1-Dichloroethane (1,1-DCA)	UG/M^3	-	-	0.62		0.56	3.5	3.5	10	5.8			1.6	3.1	2.7
1,2,4-Trichlorobenzene	UG/M^3	-	-												
1,2,4-Trimethylbenzene	UG/M^3	-	-		4.1				1.2		1.6	0.78	3.2	0.47	0.54
1,2-Dichloroethane (1,2-DCA)	UG/M^3	-	-			0.91	0.34	0.34							
trans-1,2-Dichloroethene (trans-1,2-DCE)	UG/M^3	-	-			5.3			0.63	0.40					
1,2-Dichloropropane	UG/M^3	-	-												
1,3,5-Trimethylbenzene (Mesitylene)	UG/M^3	-	-		1.2				0.54		0.69		1.4		
1,3-Dichlorobenzene	UG/M^3	-	-												
cis-1,3-Dichloroproene	UG/M^3	-	-												
1,4-Dichlorobenzene	UG/M^3	-	-												
1,4-Dioxane	UG/M^3	-	-												
2,2,4-Trimethylpentane	UG/M^3	-	-												
4-Methyl-2-pentanone	UG/M^3	-	-	1.0	1.2	1.4							0.92		
Benzene	UG/M^3	-	-	0.59			0.45	0.44		0.53			0.31	0.57	0.55
Bromoform	UG/M^3	-	-												
Chlorobenzene	UG/M^3	-	-												
Chloroethane	UG/M^3	-	-						0.29						
Chloroform	UG/M^3	-	-		0.39										
Chloromethane	UG/M^3	-	-	1.2	1.0	0.91	1.3	1.2	0.94	1.4	1.0	0.82	1.1	1.2	1.5
Cyclohexane	UG/M^3	-	-												
Dichlorodifluoromethane	UG/M^3	-	-	2.5	1.3	0.86	2.8	2.3	0.98	1.7	1.2	0.86	1.0	2.7	1.6
Ethanol	UG/M^3	-	-	140	100	93	45	39	30	21	41	64	140	51	52
Ethylbenzene	UG/M^3	-	-	0.60	1.5	0.99			0.45				0.48		
Hexachlorobutadiene	UG/M^3	-	-												
Hexane	UG/M^3	-	-	1.2				0.70		3.8		6.1	4.5	1.8	1.6
Methyl ethyl ketone (2-Butanone)	UG/M^3	-	-	16	18	15	1.8		1.4		2.1	1.4	4.6	1.1	1.2
Styrene	UG/M^3	-	-										0.39		
tert-Butyl alcohol	UG/M^3	-	-										1.0		
Toluene	UG/M^3	-	-	27	44	43	2.3	2.4	3.3	1.5	1.1	2.9	3.3	1.3	2.6
Trichlorofluoromethane	UG/M^3	-	-	1.4	1.1	1.1	1.9	1.8	2.1	1.8	2.2	1.5	3.4	2.2	1.9
m&p-Xylene	UG/M^3	-	-	1.8	6.1	3.7	1.4	1.4	1.6	1.1	0.51	0.97	1.3	0.63	1.1
o-Xylene	UG/M^3	-	-	0.41	2.1	1.1	0.48	0.46	0.59			0.35	0.65		0.40
Total VOCs	UG/M^3	-	-	247.85	191.21	240	106.49	98.74	179.82	109.43	53.17	83.32	193.16	105.75	102.48

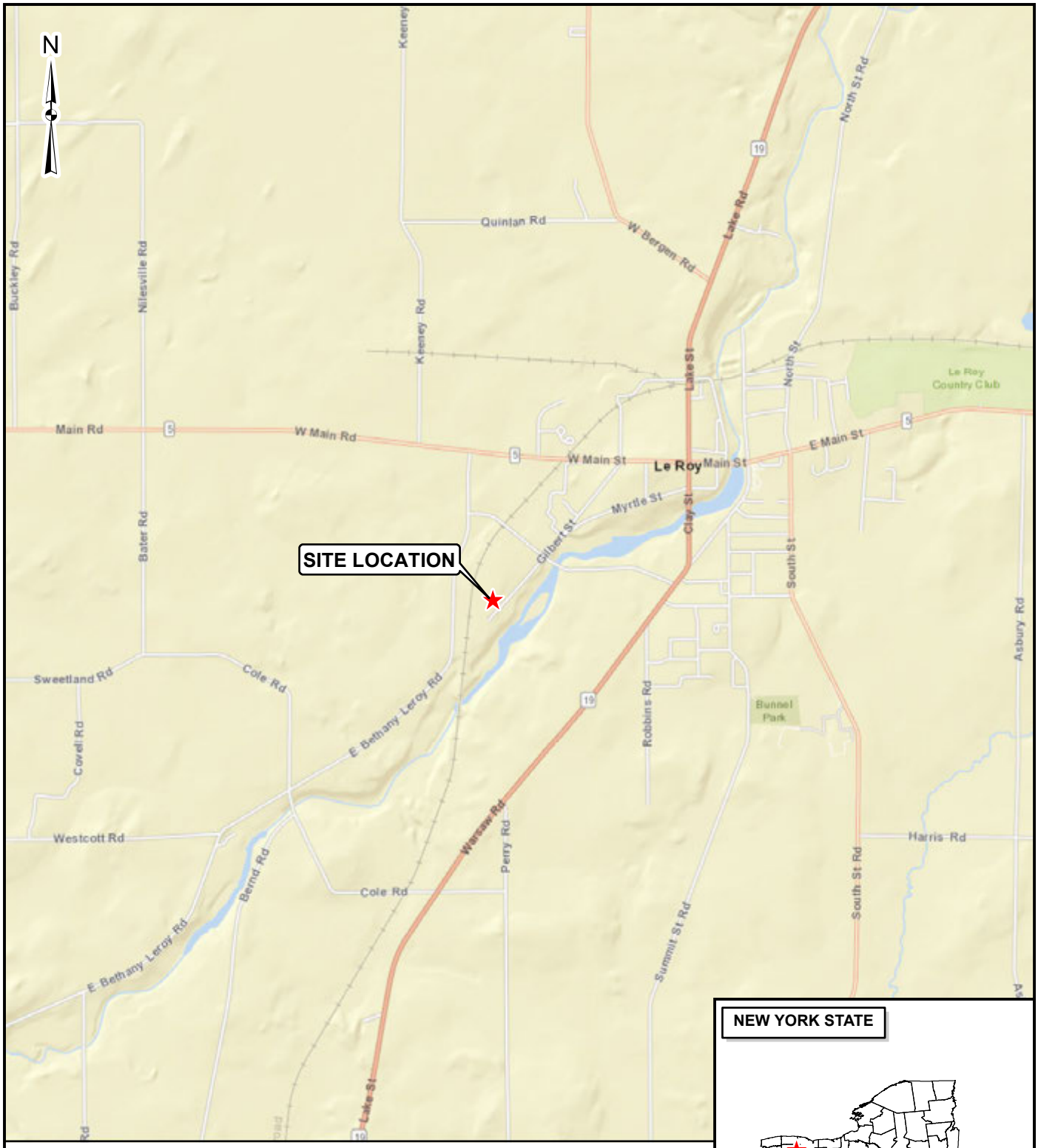
Guidance limits are based on Action level Guidance for Evaluation in New York State (NYSDOH, Rev. May 2017)

Limit 1 Exceeds NYSDOH Air Guideline value of 60 UG/M^3 for methylene chloride, 30 UG/M^3 for PCE or 2 UG/M^3 for T

Limit 2 Exceeds NYSDOH Recommended Immediate Action Level 300 UG/M^3 for PCE or 20 UG/M^3 for TCE.

UG/M^3 - Micrograms per cubic meter. Empty cell - not detected above the method detection limit (MDL).

FIGURES



Source: ESRI World Street Map 2012

3,000 0 3,000 Feet

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URS

LAPP INSULATOR
130 GILBERT STREET, LEROY, NY
SITE LOCATION

FIGURE 1

N

E Bethany Le Roy Rd

B-37

Gilbert St

FHW

B-35

B-31

P-CORE

NORTHEAST FILL AREA

Munson St

SOUTH FILL AREA

OATKA CREEK

Legend

- Site Boundary
- Railroad

Source: ESRI World Imagery

200 0 200 Feet

LAPP INSULATOR
SITE PLAN

URS

FIGURE 2

J:\Projects\11176787\GIS\Maps\Site Plan (REV).mxd 11/15/2019

N

B37-SS-03

B37-IA-03

B37-SS-02

B37-IA-02

B-37

B37-IA-01

B37-SS-01

SITE BOUNDARY

B31-IA-01

B-35

B-31

FHW

FHW-IA-01

FHW-SS-01

B35-SS-01

B35-IA-01

B31-SS-01

APPROXIMATE
OFFICE AREA

B31-IA-02

OUTDOOR AIR-1

OUTDOOR AIR-3

P1-IA-01

P1-SS-01

PB-IA-03

PB-OFFICE-01

PB-SS-05

PB-IA-05

PB-IA-01

PB-SS-01

P1-IA-02

P1-SS-02

PB-SS-02

PB-IA-02

OUTDOOR AIR-2

TREE LINE

Legend

- Indoor Air Location
- SubSlab Air Location
- Outdoor Air Location

NOTES: P-Core Building is a split level building. Locations identified with "P-B-" are on the lower level of the building.

100 0 100 Feet

LAPP INSULATOR
SVI SAMPLE LOCATIONS

URS

FIGURE 3

J:\Projects\11176787\GIS\Maps\All SVI Sample Locations_1218.mxd 2/4/2019

N

SITE BOUNDARY

FHW

B-35

B-31

B-37

P-CORE SPLIT LEVEL

TREE LINE

OATKA CREEK

FHW-IA-01	05/17
VOCs:	
1,1,1-Trichloroethane	16
4-Methyl-2-pentanone	1.4
Carbon tetrachloride	0.36
Chloromethane	0.95
Dichlorodifluoromethane	2
Ethanol	27
mÃ¡p-Xylene	0.7
Methyl ethyl ketone (2-Butanone)	3.1
Methylene chloride	2.2
Toluene	15
Trichlorofluoromethane	1.5

OUTDOOR AIR-1	05/17
VOCs:	
1,4-Dioxane	0.94
4-Methyl-2-pentanone	6.8
Carbon tetrachloride	0.39
Chloromethane	1.2
Dichlorodifluoromethane	2.5
Ethanol	6.4
Methylene chloride	0.95
Trichlorofluoromethane	1.5

B11-IA-01	06/18	09/18	12/18	06/19	09/19
VOCs:					
1,2,4-Trichlorobenzene	ND	ND	ND	ND	1.4
1,2,4-Trimethylbenzene	ND	ND	ND	0.46	ND
1,2-Dichloropropane	ND	ND	ND	0.38	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	1.8
1,4-Dioxane	ND	4	ND	ND	ND
4-Methyl-2-pentanone	ND	1	ND	ND	ND
Benzene	1.3	0.99	ND	1.2	0.83
Carbon tetrachloride	0.48	0.62	ND	0.45	0.45
Chloroform	ND	1.2	ND	ND	ND
Chloromethane	1.1	1.7	1.2	1.4	0.96
Cyclohexane	ND	ND	ND	ND	2.4
Dichlorodifluoromethane	1	2.6	2.7	1.2	1.1
Ethanol	5.8	7.2	8.1	13	7.3
Ethylbenzene	ND	ND	ND	0.47	ND
Hexachlorobutadiene	ND	ND	ND	ND	1.4
mÃ¡p-Xylene	0.73	0.97	ND	1.6	0.39
Methyl ethyl ketone (2-Butanone)	1.3	3.2	ND	2	1.8
Methylene chloride	1.4	3.6	2.5	1.3	ND
o-Xylene	ND	0.41	ND	0.66	ND
Styrene	ND	ND	ND	0.54	ND
tert-Butyl alcohol	11	5.2	ND	11	7.7
Toluene	0.91	1.5	ND	2.2	1.6
Trichloroethene	4.3	0.87	ND	0.5	0.47
Trichlorofluoromethane	1.1	1.6	0.9	1.1	1

B35-IA-01	05/17	06/18	09/18	12/18	06/19	09/19
VOCs:						
1,1,1-Trichloroethane	16	0.57	ND	0.86	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ND	0.63	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	0.54	ND	ND	ND
1,3-Dichlorobenzene	200	330	38	950	110	91
2,2,4-Trimethylpentane	ND	ND	ND	1.5	ND	ND
4-Methyl-2-pentanone	ND	3.1	3.4	1.7	1.5	0.88
Benzene	ND	ND	0.37	0.96	0.41	0.52
Carbon tetrachloride	ND	0.54	0.65	0.48	0.45	0.44
Chloromethane	ND	1	1.1	0.86	1.3	1
Dichlorodifluoromethane	2.4	1	2.7	1.5	1.3	0.85
Ethanol	550	670	120	350	60	75
Ethylbenzene	ND	0.55	0.49	0.72	ND	1.1
mÃ¡p-Xylene	ND	2.1	1.6	3.5	0.94	1.3
Methyl ethyl ketone (2-Butanone)	ND	5.3	3.3	1.5	2.3	ND
Methylene chloride	ND	0.83	1.8	1.8	11	ND
o-Xylene	ND	0.8	0.66	1.1	0.39	2.3
Styrene	ND	ND	0.45	ND	ND	ND
tert-Butyl alcohol	190	180	87	52	84	41
Tetrachloroethene	ND	0.63	0.65	ND	ND	ND
Toluene	3.5	3.1	1.7	2.4	1.1	1.6
Trichloroethene	5.3	2.4	1.1	2.9	ND	0.36
Trichlorofluoromethane	ND	1.3	1.6	1.1	0.99	0.96
Vinyl chloride	ND	ND	ND	0.15	ND	ND

B37-IA-01	08/17	06/18	09/18	12/18	06/19	09/19
VOCs:						
1,1,1-Trichloroethane	ND	ND	ND	0.64	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ND	0.65	ND	ND	ND
1,2,4-Trimethylbenzene	0.78	3.4	2.3	5.4	3.6	1.1
1,2-Dichloroethene (cis)	ND	ND	ND	0.3	ND	ND
1,3,5-Trimethylbenzene (Mesitylene)	ND	1.4	0.59	1	1.1	ND
1,3-Dichlorobenzene	ND	ND	ND	1.1	ND	ND
4-Methyl-2-pentanone	1.2	ND	ND	1	ND	ND
Benzene	0.3	ND	0.33	1.1	0.9	ND
Carbon tetrachloride	0.47	0.46	0.6	0.6	0.42	0.41
Chloromethane	1.2	1	1	1.2	1	0.97
Dichlorodifluoromethane	2.6	0.97	3.1	2.8	1.2	0.97
Ethanol	28	7.5	14	79	18	7.1
Ethylbenzene	ND	1.1	0.39	ND	1.4	ND
Hexane	ND	ND	3.5	1.1	3.5	0.82
mÃ¡p-Xylene	0.99	8.5	1.5	1.3	7.4	1
Methyl ethyl ketone (2-Butanone)	6.9	ND	7.3	4.8	1.8	10
Methylene chloride	1.3	1.3	5.4	4.7	270	ND
o-Xylene	0.37	2.9	0.59	0.51	2.2	0.41
Tetrachloroethene	ND	ND	ND	15	ND	ND
Toluene	0.69	3.2	8.9	1.6	6.4	3.5
Trichloroethene	ND	0.23	0.37	2.7	0.8	0.62
Trichlorofluoromethane	11	4.8	6.6	4.8	2.2	2.3

B31-IA-02	12/17	06/18	09/18	12/18	06/19	09/19
VOCs:						
1,1,1-Trichloroethane	0.74	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	0.49	ND	ND	ND
1,2-Dichloroethane	ND	ND	0.33	ND	ND	ND
1,2-Dichloropropane	0.97	ND	ND	0.47	1.2	ND
1,3-Dichlorobenzene	1.9	ND	0.55	1.2	ND	1.4
1,4-Dichlorobenzene	ND	ND	ND	1	ND	ND
4-Methyl-2-pentanone	ND	ND	1.6	ND	ND	ND
Benzene	0.61	ND	0.55	1.5	0.48	0.3
Carbon tetrachloride	0.49	ND	0.57	0.53	0.44	0.42
Chloromethane	1.6	1.2	1.6	1.5	1.3	1.2
Cyclohexane	0.82	0.77	1.6	0.87	1.7	7.5
Dichlorodifluoromethane	2.9	0.98	2.8	2.5	ND	0.99
Ethanol	58	10	15	42	18	10
Ethylbenzene	0.42	ND	0.62	0.42	0.47	ND
Hexane	1.1	ND	1.2	0.76	0.71	1.3
mÃ¡p-Xylene	1.5	ND	1.7	1.1	1.5	0.59
Methyl ethyl ketone (2-Butanone)	4.3	ND	4	1.4	4.1	1.6
Methylene chloride	76	1.6	5.4	1.9	0.91	ND
o-Xylene	0.42	ND	0.68	0.44	0.57	ND
Styrene	ND	ND	1.4	0.35	1	0.53
tert-Butyl alcohol	ND	ND	6.7	2.8	11	9.3
Tetrachloroethene	ND	26	ND	ND	ND	ND
Toluene	0.93	ND	3.1	1.1	2.2	1.5
Trichloroethene	1.9	ND	0.98	0.23	0.45	0.29
Trichlorofluoromethane	2	1	2.5	1.9	1.3	1.3

P1-IA-01	05/17	06/18	09/18	12/18	06/19	09/19
VOCs:						
1,1,1-Trichloroethane	2.9	1.6	4.6	13	ND	ND
1,1-Dichloroethene	ND	ND	ND	0.18	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	4.2	ND
1,2-Dichloroethene (trans)	ND	ND	ND	ND	ND	4.4
1,2-Dichloropropane	ND	ND	ND	ND	0.43	ND
1,3,5-Trimethylbenzene (Mesitylene)	ND	ND	ND	ND	1.1	ND
4-Methyl-2-pentanone	1.1	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	0.61	ND	ND
Carbon tetrachloride	0.39	0.47	0.45	0.55	0.42	0.46
Chloromethane	1.2	1.1	1.3	1.1	1.1	0.88
Dichlorodifluoromethane	2.3	0.97	1.1	2.6	1.3	0.89
Ethanol	15	6.2	12	11	13	ND
Ethylbenzene	ND	ND	0.49	ND	0.48	ND
Hexane	ND	ND	ND	0.72	ND	ND
mÃ¡p-Xylene	1.4	1.8	0.7	2.1	12	0.93
Methyl ethyl ketone (2-Butanone)	2.2	1	1.8	15	59	6.6
Methylene chloride	1	1.5	2.3	2.1	ND	ND
o-Xylene	0.44	0.59	ND	0.68	4	ND
Tetrachloroethene	ND	0.75	ND	ND	ND	ND
Toluene	2.5	3.5	3.3	32	160	14
Trichloroethene	0.49	0.68	1	1.7	0.23	ND
Trichlorofluoromethane	1.3	1.1	1.4	1.2	1	1.1

P1-IA-02	05/17	06/18	09/18	12/18	06/19	09/19
VOCs:						
1,1,1-Trichloroethane	10	12	ND	3.7	1.5	1
1,1-Dichloroethene	0.39	0.39	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	12	ND
1,2-Dichloroethane	0.32	ND	ND	ND	ND	ND
1,2-Dichloroethene (cis)	ND	0.16	ND	0.2	ND	ND
1,2-Dichloroethene (trans)	ND	ND	ND	ND	ND	74
1,3,5-Trimethylbenzene (Mesitylene)	ND	ND	ND	ND	3.4	ND
4-Methyl-2-pentanone	1.1	ND	ND	ND	ND	ND
Benzene	ND	0.29	ND	0.73	ND	ND
Carbon tetrachloride	0.39	0.48	0.43	0.44	0.36	0.44
Chloromethane	1.1	1.1	1.3	0.99	1.1	0.91
Dichlorodifluoromethane	2.3	1	3	2.2	1.3	0.84
Ethanol	29	16	7.5	7.3	10	6
Ethylbenzene	0.75	ND	ND	ND	17	2.7
Hexane	ND	ND	ND	ND	2.2	0.85
mÃ¡p-Xylene	3.3	0.41	0.84	0.72	66	9.8
Methyl ethyl ketone (2-Butanone)	2	2.2	1.4	1.2	220	79
Methylene chloride	1.2	7	1.3	1.7	10	ND
o-Xylene	1	ND	0.35	ND	20	2.7
Tetrachloroethene	1.1	0.73	ND	ND	0.91	0.57
Toluene	6.5	10	1.6	4.6	680	170
Trichloroethene	1.9	2.6	0.2	1.7	0.92	0.53
Trichlorofluoromethane	1.4	1.3	1.3	1	1.1	1

P8-IA-02	05/17	06/18	09/18	12/18
VOCs:				
1,1,1-Trichloroethane	36	17	16	21
1,1-Dichloroethene	0.98	0.64	0.48	0.54
1,1-Dichloroethane	0.52	0.25	0.25	0.35
1,2-Dichloroethene (cis)	2.4	1.1	1.1	0.99
4-Methyl-2-pentanone	2.3	ND	ND	ND
Benzene	ND	ND	0.27	0.6
Carbon tetrachloride	0.35	0.49	0.5	0.55
Chloromethane	1.1	0.98	1.1	1.1
Dichlorodifluoromethane	2.3	1	1.1	2.5
Ethanol	130	38	23	28
Ethylbenzene	0.47	ND	ND	ND
Hexane	1.5	ND	ND	0.96
mÃ¡p-Xylene	2	0.54	1.1	1.4
Methyl ethyl ketone (2-Butanone)	1.4	4.3	4.5	7.4
Methylene chloride	1.6	1.2	1.5	1
o-Xylene	0.62	ND	0.41	0.48
Styrene	ND	ND	0.46	ND
Tetrachloroethene	3.1	1.3	2.2	4.6
Toluene	1.9	1.3	7.3	14
Trichloroethene	20	14	12	10
Trichlorofluoromethane	1.4	1.1	1.4	1.3

OUTDOOR AIR-3	12/17	02/19	06/19
VOCs:			
4-Methyl-2-pentanone	ND	ND	13
Benzene	0.52	0.56	ND
Carbon tetrachloride	0.48	0.51	0.42
Chloromethane	1.3	1.2	0.93
Dichlorodifluoromethane	2.9	0.8	1.3
Ethanol	5	9.4	4.7
mÃ¡p-Xylene	0.39	ND	ND
Methyl ethyl ketone (2-Butanone)	2.3	3.2	ND
Methylene chloride	0.94	ND	1.3
tert-Butyl alcohol	ND	2.1	ND
Toluene	0.94	0.69	0.48
Trichlorofluoromethane	1.7	1.4	0.99
Vinyl chloride	ND	0.13	ND

P8-IA-01	05/17	06/18	09/18	06/19	09/19
VOCs:					
1,1,1-Trichloroethane	24	4.8	14	ND	1.6
1,1,2-Trichloroethane	ND	ND	1.6	ND	ND
1,1-Dichloroethene	0.75	ND	0.49	ND	ND
1,1-Dichloroethane	0.34	ND	0.33	ND	ND
1,2-Dichloroethene (cis)	2.1	0.78	1.1	ND	ND
1,2-Dichloroethene (trans)	ND	ND	ND	ND	6.8
1,3-Dichlorobenzene (cis)	ND	ND	0.47	ND	ND
2,2,4-Trimethylpentane	ND	ND	23	ND	ND
4-Methyl-2-pentanone	1.2	ND	1.9	ND	ND
Benzene	0.28	ND	ND	ND	ND
Bromoform	ND	ND	4.8	ND	ND
Carbon tetrachloride	0.38	0.48	0.43	0.43	0.47
Chloroform	ND	ND	0.71	ND	ND
Chloromethane	1.2	1	1.2	1.1	1.3
Dichlorodifluoromethane	2.4	1.1	2.3	1.6	0.97
Ethanol	84	13	23	17	11
Ethylbenzene	0.57	ND	0.58	0.85	ND
Hexane	1.7	ND	6.7	ND	ND
mÃ¡p-Xylene	2.4	0.93	3.9	1	1.2
Methyl ethyl ketone (2-Butanone)	1.3	2.7	1.7	17	5.1
Methylene chloride	1.3	1.2	2.8	64	5.2
o-Xylene	0.75	ND	ND	0.88	0.44
Tetrachloroethene	4	2.2	210	ND	1.2
Toluene	2.2	1.6	2.5	47	9.8
Trichloroethene	18	3.4	13	1.1	0.78
Trichlorofluoromethane	1.6	1.2	1.5	1.3	1.1

P8-IA-03	12/18	06/19	09/19
VOCs:			
1,1,1-Trichloroethane	8.7	ND	1.6
1,1-Dichloroethene	0.62	ND	0.56
1,1-Dichloroethane	0.22	ND	ND
1,2,4-Trimethylbenzene	ND	4.1	ND
1,2-Dichloroethane	ND	ND	0.91
1,2-Dichloroethene (cis)	0.77	0.39	0.26
1,2-Dichloroethene (trans)	ND	ND	5.3
1,3,5-Trimethylbenzene (Mesitylene)	ND	1.2	ND
4-Methyl-2-pentanone	1	1.2	1.4
Benzene	0.59	ND	ND
Carbon tetrachloride	0.44	0.43	0.5
Chloroform	ND	0.39	ND
Chloromethane	1.2	1	0.91
Dichlorodifluoromethane	2.5	1.3	0.86
Ethanol	140	100	93
Ethylbenzene	0.6	1.5	0.99
Hexane	1.2	ND	ND
mÃ¡p-Xylene	1.8	6.1	3.7
Methyl ethyl ketone (2-Butanone)	16	18	15
Methylene chloride	30	1.4	68
o-Xylene	0.41	2.1	1.1
Tetrachloroethene	9.7	6	1.3
Toluene	27	44	43
Trichloroethene	3.7	1	0.58
Trichlorofluoromethane	1.4	1.1	1.1

B37-IA-02	08/17	06/18	09/18	12/18	06/19	09/19
VOCs:						
1,1,1-Trichloroethane	ND	0.69	ND	0.88	ND	ND
1,1-Dichloroethane	ND	ND	ND	0.39	ND	ND
1,2,4-Trimethylbenzene	1.1	1	2.2	ND	4.5	4.8
1,3,5-Trimethylbenzene (Mesitylene)	ND	ND	0.54	ND	1.2	1.3
2,2,4-Trimethylpentane	1	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	2.3	0.82	ND	ND	0.97	ND
Benzene	0.28	0.39	0.33	0.86	ND	ND
Carbon tetrachloride	0.46	0.45	0.55	0.84	0.44	0.4
Chloromethane	1.1	1.2	0.87	1.2	1.1	0.99
Dichlorodifluoromethane	2.5	1	2.7	2.5	1.3	0.93
Ethanol	27	49	15	81	12	34
Ethylbenzene	ND	ND	0.47	ND	0.37	ND
Hexane	0.72	6.8	0.71	0.92	ND	ND
mÃ¡p-Xylene	0.66	2.1	1.3	ND	1.3	0.69
Methyl ethyl ketone (2-Butanone)	4.8	1.3	1.7	2	1.2	1.8
Methylene chloride	1.9	95	5.1	5.2	1.7	3.9
o-Xylene	0.35	0.66	0.61	ND	0.65	ND
Tetrachloroethene	4.5	31	4.8	12	ND	ND
Toluene	0.89	2.5	2	0.52	0.74	0.85
Trichloroethene	0.23	1.1	0.55	1.3	0.43	0.97
Trichlorofluoromethane	3	2.6	2.2	1.7	1.1	1.2

B37-IA-03	08/17	12/17	06/18	09/18	12/18	09/19
VOCs:						
1,1,1-Trichloroethane	ND	0.71	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.67	6.2	0.91	2.4	1.4	0.92
1,3,5-Trimethylbenzene (Mesitylene)	ND	1.5	ND	0.58	ND	ND
2,2,4-Trimethylpentane	ND	0.93	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	10	ND	1.2	ND
Benzene	ND	1.5	ND	0.26	0.72	0.4
Carbon tetrachloride	0.42	0.44	0.47	0.58	0.49	0.44
Chloroform	ND	ND	0.69	0.45	ND	0.45
Chloromethane	1	1.6	1.3	1.1	1	0.89
Cyclohexane	ND	1.3	ND	ND	ND	ND
Dichlorodifluoromethane	2.3	2.6	0.97	2.9	1	1
Ethanol	5.5	32	4.3	4.4	17	6.2
Ethylbenzene	ND	0.66	ND	0.54	ND	ND
Hexane	ND	4.7	ND	ND	0.9	ND
mÃ¡p-Xylene	0.6	2.2	0.47	1.6	0.69	0.67
Methyl ethyl ketone (2-Butanone)	1.7	2.6	2.2	2.5	6.2	1.1
Methylene chloride	2.1	0.86	2.2	5.4	5.1	ND
o-Xylene	ND	0.95	ND	0.72	ND	ND
tert-Butyl alcohol	ND	ND	ND	ND	1.3	ND
Tetrachloroethene	8.9	ND	17	3.3	ND	ND
Toluene	0.72	3	1.8	13	1.2	0.89
Trichloroethene	ND	0.24	ND	ND	1.2	0.2
Trichlorofluoromethane	2.2	2.1	2	3	2	1.6

P8-IA-05	08/17	12/17	06/18	02/19	06/19	09/19
VOCs:						
1,1,1-Trichloroethane	46	19	69	38	ND	0.69
1,1-Dichloroethane	4.3	3.5	10	5.8	ND	ND
1,1-Dichloroethene	1.3	0.97	3.5	2	ND	ND
1,2,4-Trimethylbenzene	4.4	ND	1.2	ND	1.6	0.78
1,2-Dichloroethane	0.78	0.34	ND	ND	ND	ND
1,2-Dichloroethene (cis)	5.6	6	15	10	0.77	0.17
1,2-Dichloroethene (trans)	ND	ND	0.63	0.4	ND	ND
1,3,5-Trimethylbenzene (Mesitylene)	1.9	ND	0.54	ND	0.69	ND
4-Methyl-2-pentanone	1.5	ND	ND	ND	ND	ND
Benzene	0.42	0.45	ND	0.53	ND	ND
Carbon tetrachloride	0.47	0.46	0.5	0.47	0.42	0.45
Chloroform	ND	ND	0.29	ND	ND	ND
Chloromethane	1.3	1.3	0.94	1.4	1	0.82
Dichlorodifluoromethane	2.5	2.5	2.8	0.98	1.7	1.2	0.86
Ethanol	86	45	30	21	41	64
Ethylbenzene	1.4	ND	0.45	ND	ND	ND
Hexane	14	0.7	ND	3.8	ND	6.1
mÃ¡p-Xylene	4.8	1.4	1.6	1.1	0.51	0.97
Methyl ethyl ketone (2-Butanone)	4.7	1.8	1.4	ND	2.1	1.4
Methylene chloride	3.3	3.2	5.1	ND	1.1	ND
o-Xylene	1.2	0.48	0.59	ND	ND	0.35
Tetrachloroethene	4.1	3.7	7.7	4.7	ND	1.5
Toluene	6.4	2.4	3.3	1.5	1.1	2.9
Trichloroethene	12	12	28	15	0.25	0.83
Trichlorofluoromethane	3.2	1.9	2.1	1.8	2.2	1.5
Vinyl chloride	ND	ND	ND	0.23	ND	ND

P8-OFFICE-01	09/18	12/18	02/19
VOCs:			
1,1,1-Trichloroethane	14	17	17
1,1-Dichloroethane	1.6	3.1	2.7
1,1-Dichloroethene	1	2.7	1.6
1,2,4-Trimethylbenzene	3.2	0.47	0.54
1,2-Dichloroethene (cis)	1.7	6.8	4.9
1,3,5-Trimethylbenzene (Mesitylene)	1.4	ND	ND
4-Methyl-2-pentanone	0.92	ND	ND
Benzene	0.31	0.57	0.55
Carbon tetrachloride	0.47	0.53	0.44
Chloromethane	1.1	1.2	1.5
Dichlorodifluoromethane	1	2.7	1.6
Ethanol	140	51	52
Ethylbenzene	0.48	ND	ND
Hexane	4.5	1.8	1.6
mÃ¡p-Xylene	1.3	0.63	1.1
Methyl ethyl ketone (2-Butanone)	4.6	1.1	1.2
Methylene chloride	2.2	1.6	ND
o-Xylene	0.65	ND	0.4
Styrene	0.39	ND	ND
tert-Butyl alcohol	1	ND	ND
Tetrachloroethene	1.3	3	2.9
Toluene	3.3	1.3	2.6
Trichloroethene	3.8	9.8	8.6
Trichlorofluoromethane	3.4	2.2	1.9
Vinyl chloride	ND	ND	0.11

OUTDOOR AIR-2	08/17	06/18	09/18	12/18	09/19
VOCs:					
1,4-Dioxane	ND	ND	ND	ND	1.2
4-Methyl-2-pentanone	1.1	ND	ND	ND	ND
Benzene	ND	ND	ND	0.5	ND
Carbon tetrachloride	0.42	0.46	0.45	0.47	0.42
Chloromethane	0.96	1.3	1.2	1.1	1.4
Dichlorodifluoromethane	2.3	0.95	1	2.3	0.8
Ethanol	ND	4.1	11	6.5	ND
Methyl ethyl ketone (2-Butanone)	2.7	2.9	3.3	ND	ND
Methylene chloride	1.2	1.3	2.9	2.3	1.1
Tetrachloroethene	ND	ND	1	ND	0.99
Toluene	0.54	0.54	0.85	0.56	0.88
Trichloroethene	ND	ND	ND	ND	0.53
Trichlorofluoromethane	1.3	1.1	1.4	1.2	0.91

Legend

- Approximate Indoor Air Location
- Approximate Outdoor Air Location

NOTES:
(1) P-Core Building is a split level building. Locations identified with "P-B-" are on the lower level of the building.
(2) Units in µg/m^3
(3) ND = Not Detected

GUIDANCE LIMITS:
Guidance limits are based on Action level Guidance for Evaluation in New York State (NYSDOH, Rev. May 2017)
Limit 1 Exceeds NYSDOH Air Guideline value of 60 µg/m^3 for Methylene chloride, 30 µg/m^3 for PCE and 2 µg/m^3 for TCE
Limit 2 Exceeds NYSDOH Recommended Immediate Action Level 300 µg/m^3 for PCE and 20 µg/m^3 for TCE

100 0 100 Feet

LAPP INSULATOR
INDOOR AND OUTDOOR AIR SAMPLE RESULTS
MAY 2017 - SEPTEMBER 2019

URS

FIGURE 4

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APPENDIX A
INDOOR AIR QUALITY QUESTIONNAIRES AND BUILDING INVENTORIES

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Revised 12-13-18
D. McDaid
Updated 9-26-19

Site Name: Lapp Insulator Site Site Code: 819017 Operable Unit:

Building Code: Office Building Name: B-31

Address: 130 Gilbert St Apt/Suite No: Office

City: LeRoy State: NY Zip: 14482 County: Genesee

Contact Information

Preparer's Name: Kevin J. McGovern D. McDaid Phone No: (716) 923-1101

Preparer's Affiliation: AECOM Company Code: AECOM

Purpose of Investigation: Date of Inspection: Dec 18, 2017

Contact Name: Ron Richards Affiliation: MANAGER

Phone No: (585) 768-6221 Alt. Phone No: Email:

Number of Occupants (total): Number of Children:

☐ Occupant Interviewed? ☒ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): Owner Phone:

Owner Mailing Address:

Building Details

Bldg Type (Res/Com/Ind/Mixed): INDUSTRIAL Bldg Size (S/M/L): LARGE

If Commercial or Industrial Facility, Select Operations: MANUFACTURING

If Residential Select Structure Type:

Number of Floors: 1 Approx. Year Construction: 1940 ☐ Building Insulated? ☐ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Not Tight

Foundation Description

Foundation Type: NO BASEMENT/SLAB Foundation Depth (bgs): Unit: FEET

Foundation Floor Material: POURED CONCRETE Foundation Floor Thickness:

Foundation Wall Material: POURED CONCRETE Foundation Wall Thickness: Unit: INCHES

☐ Floor penetrations? Describe Floor Penetrations:

☒ Wall penetrations? Describe Wall Penetrations: Man doors, several garage doors, tiered ceiling

Basement is: Basement is: ☐ Sumps/Drains? Water in Sump?:

Describe Foundation Condition (cracks, seepage, etc.) : Cracks are sealed or do not promote airflow

☐ Radon Mitigation System Installed? ☐ VOC Mitigation System Installed? ☐ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: OTHER Heat Fuel Type: ELECTRIC ☐ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: NONE Clothes Dryer Fuel Type:

Water Htr Vent Location: Dryer Vent Location:

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Revised 12-13-18
D. McDaid

Site Name: Lapp Insulator Site Site Code: 819017 Operable Unit:

Building Code: Office Building Name: B-31

Address: 130 Gilbert St Apt/Suite No: Office

City: LeRoy State: NY Zip: 14482 County: Genesee

Factors Affecting Indoor Air Quality

Frequency Basement/Lowest Level is Occupied?: FULL TIME Floor Material: CEMENT

☐ Inhabited? ☒ HVAC System On? ☐ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source: ☐ Is there smoking in the building?

☒ Air Fresheners? Description/Location of Air Freshener: 3 plug ins along office walls

☐ Cleaning Products Used Recently?: Description of Cleaning Products:

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products:

☐ New Carpet or Furniture? Location of New Carpet/Furniture:

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics:

☐ Recent Painting/Staining? Location of New Painting:

☐ Solvent or Chemical Odors? Describe Odors (if any):

☐ Do Any Occupants Use Solvents At Work? If So, List Solvents Used:

☐ Recent Pesticide/Rodenticide? Description of Last Use:

Describe Any Household Activities (chemical use/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

BACK ROOM DOORS CLOSED & HEATER (FURNACE) ON 12-13-18, 12-14-18

" OPEN 9-26-19

ALL DOORS IN BLDG. OPEN 9-26-19

☐ Any Prior Testing For Radon? If So, When?:

☒ Any Prior Testing For VOCs? If So, When?: May 11, 2017

Sampling Conditions

Weather Conditions: SNOW Outdoor Temperature: 40 °F

Current Building Use: MANUFACTURING Barometric Pressure: 29.9 in(hg)

Product Inventory Complete? Yes ☐ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: B-31 Bldg Code: _____ Date: 6-20-19

Bldg Address: _____ Apt/Suite No: _____

Bldg City/State/Zip: _____

Make and Model of PID: _____ Date of Calibration: _____

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
B31A-01	BKGD				3PPM	☐
	AIR FRESHENERS	6	U	UNKNOWN	0PPM	☐
						☐
B31A-02	BKGD				3PPM	☐
	SPRAY PAINT	3 12OZ	U		1PPM	☐
	LUBRICANTS	VAR	U	ALIPHATIC HYDROCARBONS PETROLEUM OIL METHOXY-2 METHYL-BUTANOL	0PPM	☐
	PAINT STRIPPER	18OZ	U		3PPM	☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: B-31 Bldg Code: Date: 9-26-19

Bldg Address: Apt/Suite No:

Bldg City/State/Zip:

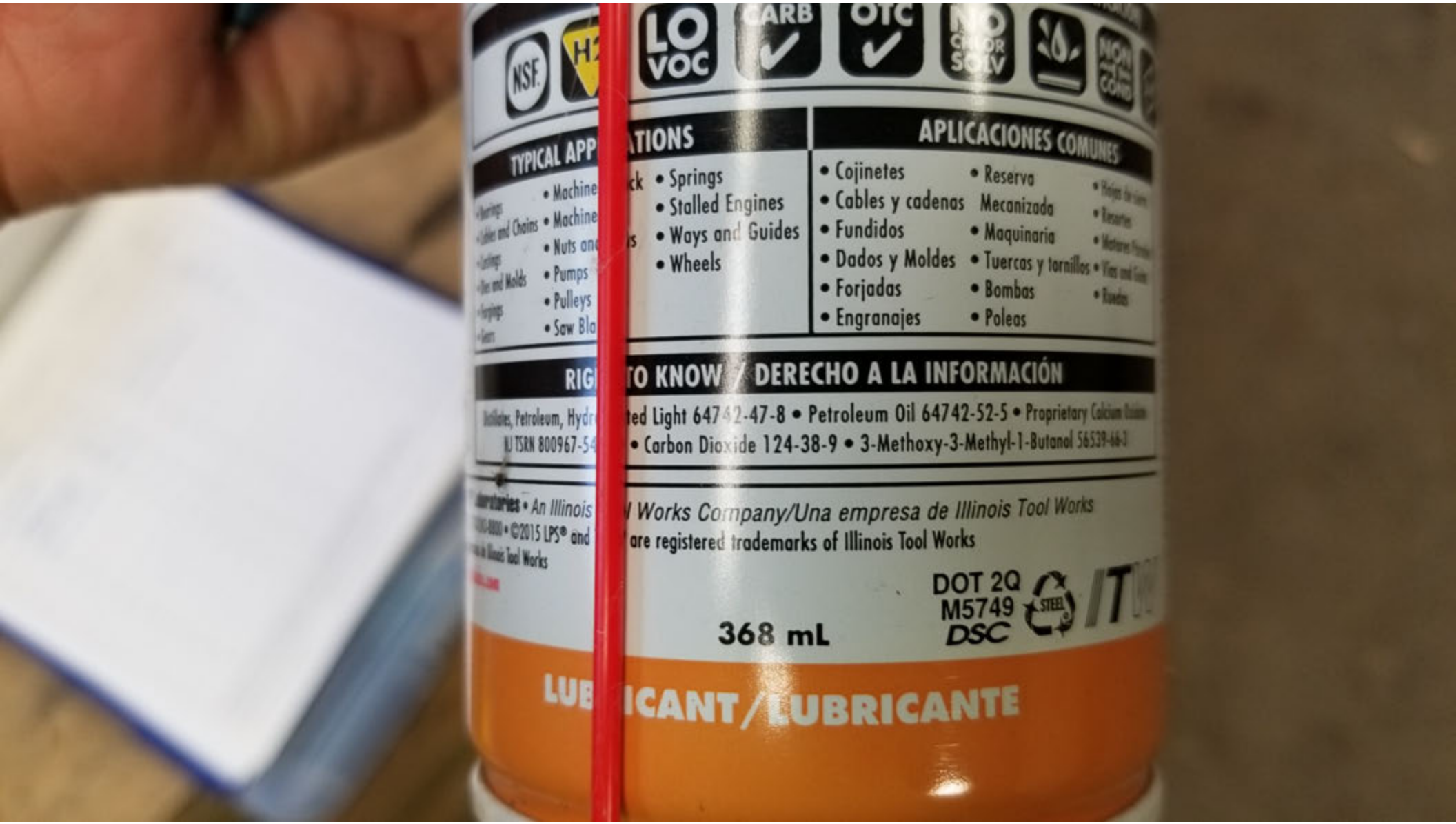
Make and Model of PID: Date of Calibration:

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
B-31-IA-02	BACKGROUND				0PPM	☐
						☐
B-31-IA-01	BACKGROUND				0PPM	☐
	PLIOBOND	1/2 PT	U	NOT LISTED	4 PPM	☐
	(PAINT STRIPPER) LOCTITE CHISEL	18OZ	U	METHYLENE CHLORIDE	0PPM	☐
	LPS TKX LUBRICANT	11OZ	UO	SEE PHOTO	0PPM	☐
	RUST STOP OIL BASED ENAMEL	12OZ	U	PETROLEUM DISTILLATES	0PPM	☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?


NSF
LO VOC
CARB
OTC
TYPICAL APP
• Springs
• Stalled Engines
• Ways and Guides
• Wheels
APLICACIONES COMUNES
• Cojinetes
• Cables y cadenas
• Fundidos
• Dados y Moldes
• Forjadas
• Engranajes
• Reserva Mecanizada
• Maquinaria
• Tuercas y tornillos
• Bombas
• Poleas
TO KNOW / DERECHO A LA INFORMACIÓN
• Carbon Dioxide 124-38-9 • 3-Methoxy-3-Methyl-1-Butanol 56539-66-3
Works Company/Una empresa de Illinois Tool Works
are registered trademarks of Illinois Tool Works
DOT 2Q
M5749
DSC
STEEL
368 mL
ICANT/LUBRICANTE

Pliobond
TPO Bonding Adhesive

Material Safety Data Sheet

Updated: 8/08

GAF®

GAF MATERIALS CORPORATION

Quality You Can Trust Since 1886…
From North America's Largest Roofing Manufacturer™

GAF Materials Corporation
Material Safety Data Sheet
MSDS # 2101
MSDS Date: August 2008

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAME:	Pliobond® TPO Bonding Adhesive
TRADE NAME:	N/A
CHEMICAL NAME / SYNONYM:	N/A
CHEMICAL FAMILY:	Adhesive
MANUFACTURER:	GAF Materials Corporation
ADDRESS:	1361 Alps Road, Wayne, NJ 07470
24-HOUR EMERGENCY PHONE (CHEMTREC):	800 – 424 – 9300
INFORMATION ONLY:	800 – 766 – 3411
PREPARED BY:	Randy Redwine
APPROVED BY:	Phil Curry

	NFPA Hazard Rating		**HMIS Hazard Rating**
Health	2	**Health**	2
Flammable	3	**Flammable**	3
Reactive	0	**Reactive**	0
Special Hazards	-	**Personal Protection**	X

OSHA HAZARDOUS: **Yes X** **No** ☐

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

			OCCUPATIONAL EXPOSURE LIMITS		
CHEMICAL NAME	**CAS #**	**% (BY WT)**	**OSHA**	**ACGIH**	**OTHER**
Toluene	108-88-3	30-40%	200 ppm 300 ppm – ceiling	20 ppm	REL: 100 ppm 150 ppm STEL
Acetone	67-64-1	20-30%	1000 ppm	500 ppm 750 ppm STEL	REL: 250 ppm

			OCCUPATIONAL EXPOSURE LIMITS		
CHEMICAL NAME	**CAS #**	**% (BY WT)**	**OSHA**	**ACGIH**	**OTHER**
Solvent Naphtha (Petroleum), Light Aliphatic	64742-89-8	5-10%	NE	300 ppm	REL: 350 mg/m3 1800 mg/m3 – ceiling
N-Hexane	110-54-3	5-10%	500 ppm	50 ppm	REL: 50 ppm
Cyclohexane	110-82-7	1.5-5%	300 ppm	100 ppm	REL: 300 ppm
n-Heptane	142-82-5	1-1.5%	500 ppm	400 ppm	REL: 85 ppm
Ethyl Benzene	100-41-4	.1-.5%	100 ppm	100 ppm	REL: 100 ppm

NE = Non Established

SECTION 3: HAZARDS IDENTIFICATION

PRIMARY ROUTE OF EXPOSURE: Inhalation, Skin, Eye, Ingestion

SIGNS & SYMPTOMS OF EXPOSURE

EYES: May cause irritation to the eyes. Symptoms include stinging, tearing, redness, and swelling of the eyes.

SKIN: May cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

INGESTION: Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing and vomiting. This results in lung inflammation and other lung injuries.

INHALATION: Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits. May cause allergic respiratory reaction.

ACUTE HEALTH HAZARDS: Preexisting disorders of the following organs (or organ system) may be aggravated by exposure to this material; Upper respiratory track, skin, lung, liver, kidney, central nervous system, blood-forming system, male reproductive system, auditory system. Individuals with preexisting heart disorders may be more

susceptible to arrhythmias is exposed to high concentrations of this material.

CHRONIC HEALTH HAZARDS: Overexposure to this material has been suggested as a cause of the following effects in humans; kidney damage, visual impairment, central nervous system effects. Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intential abuse of toluene during pregenancy can cause birth defects in humans. Prolonged intentional toluene abuse may lead to hearing loss progressing to deafness. Prolonged and repeated exposure to n-hexane may cause peripheral neuropathy by damaging peripheral nerve tissue and result in muscular weakness and loss of sensation.

CARCINOGENICITY: Ethyl benzene has been shown to cause cancer in laboratory animals. The relevance of this finding in humans is uncertain. The International Agency for Research on Cancer (IRAC) has classified ethyl benzene as a possible human carcinogen (Group 2B).

SECTION 4: FIRST AID MEASRURES

FIRST AID PROCEDURES

EYES: Immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart. Seek immediate medical attention.

SKIN: Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek immediate medical attention. Launder clothing before reuse.

INHALATION: Immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep individual warm and quiet. If breathing is difficult, administer oxygen.

INGESTION: Seek immediate medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.

SECTION 5: FIRE FIGHTING PROCEDURES

SUITABLE EXTINGUISHING MEDIA:	Dry chemical, Carbon Dioxide (CO2)
HAZARDOUS COMBUSTION PRODUCTS:	Carbon dioxide and carbon monoxide, Hydrocarbons.
RECOMMENDED FIRE FIGHTING PROCEDURES:	Wear self-contained breathing apparatus and full protective clothing. Material is volatile and readily gives off vapors. Water may be ineffective for extinguishment unless used under favorable conditions by experienced fire fighters. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.
UNUSUAL FIRE & EXPLOSION HAZARDS:	Vapors may accumulate and travel to ignition sources distant from handling site. Isolate from heat, sparks, and open flame. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:	Contain spillage and collect with non-combustible absorbent material and place in container for disposal. Suppress gases/vapors/mists with a water spray jet. Prevent run-off to sewers, streams or other bodies of water.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE:	Containers of this material may be hazardous when emptied. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer. Store in a cool, dry, ventilated area, away form incompatible substances. Keep containers closed when not in use. Do not store near extreme heat, open flame, or sources of ignition.
OTHER PRECAUTIONS:	N/A

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS / VENTILATION:	Provide sufficient mechanical ventilation to maintain exposure below exposure guidelines or below levels that cause known, suspected or apparent adverse affects.
RESPIRATORY PROTECTION:	A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.
EYE PROTECTION:	Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.
SKIN PROTECTION:	Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse.
OTHER PROTECTIVE EQUIPMENT:	Eye washes and safety showers could also be provided.
WORK HYGIENIC PRACTICES:	Wash thoroughly after handling and before eating or smoking.
EXPOSURE GUIDELINES:	N/A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR:	Amber liquid with a slight odor.		
FLASH POINT:	0.0 ^{o}F (-17.78 ^{o}C)	**LOWER EXPLOSIVE LIMIT:**	No data
METHOD USED:	No data	**UPPER EXPLOSIVE LIMIT:**	No data
EVAPORATION RATE:	> 1 (butyl acetate = 1)	**BOILING POINT:**	131 – 289 ^{o}F (55 – 143 ^{o}C)
pH (undiluted product):	No data	**MELTING POINT:**	No data
SOLUBILITY IN WATER:	Immiscible	**SPECIFIC GRAVITY:**	No data
VAPOR DENSITY:	No data	**PERCENT VOLATILE:**	No data
VAPOR PRESSURE:	46.10 hPa	**MOLECULAR WEIGHT:**	No data
VOC WITH WATER (LBS/GAL):	No data	**WITHOUT WATER (LBS/GAL):**	No data

SECTION 10: STABILITY AND REACTIVITY

THERMAL STABILITY: **STABLE X** **UNSTABLE ☐**

CONDITIONS TO AVOID (STABILITY): N/A

INCOMPATIBILITY (MATERIAL TO AVOID): Strong acids, Strong oxidizing agents, Acids, Alkalis, Reducing agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon dioxide and carbon monoxide, Hydrocarbons.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Acute Oral Toxicity

Toluene	LD 50 Rat: 2,600-7,500 mg/kg
Acetone	LD 50 Rat: 5,800 mg/kg
Solvent Naphtha (Petroleum), Light Aliphatic	LD 50 Rat: > 8,000 mg/kg
N-Hexane	LD 50 Rat: 25 mg/kg
Cyclohexane	LD 50 Mouse: 1,300 mg/kg LD 50 Rat: 29,820 mg/kg
n-Heptane	LD 50 Rat: > 15,000 mg/kg
Ethyl Benzene	LD 50 Rat: 3,500 mg/kg

Acute Inhalation Toxicity

Toluene	LC 50 Rat: 8000 ppm, 4h
Acetone	LC 50 Rat: > 16000 ppm, 4h
Solvent Naphtha (Petroleum), Light Aliphatic	LC 50 Rat: 3400 ppm, 4h
N-Hexane	LC 50 Rat: 48000 ppm, 4h
Cyclohexane	LC 50 Rat: > 4044 ppm
n-Heptane	LC 50 Rat: 103 g/m3, 4h
Ethyl Benzene	LC 50 Rat: 4000 ppm, 4h

Acute Dermal Toxicity

Toluene	LD 50 Rabbit: 12,124 mg/kg
Acetone	LD 50 Rabbit: > 20,000 mg/kg
Solvent Naphtha (Petroleum), Light Aliphatic	LD 50 Rat: > 4,000 mg/kg
N-Hexane	LD 50 Rabbit: > 1.3 g/kg
Cyclohexane	LD 50 Rabbit: > 2.0 mg/kg
n-Heptane	LD 50 Rabbit: > 2,001 mg/kg

Ethyl Benzene	LD 50 Rabbit: 15,433 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/A

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of containers and absorbed material in accordance with all federal, state, and local requirements.

RCRA HAZARD CLASS: See Above.

SECTION 14: TRANSPORTATION INFORMATION

U.S. DOT TRANSPORTATION

PROPER SHIPPING NAME: ADHESIVES, 3, UN1133, II

HAZARD CLASS: 3

ID NUMBER: UN1133

PACKING GROUP: Flammable liquid

LABEL STATEMENT: 49 CFR 172.101 Adhesives, UN1133, IMDG Class 3.2, Pg. 3174, Flash Point <40.01^{o}F (4.45^{o}C)

OTHER: N/A

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA: This product and its components are listed on the TSCA 8(b) inventory.

CERCLA: N/A

SARA

311/312 HAZARD CATEGORIES: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

313 REPORTABLE INGREDIENTS:

Toluene	108-88-3	38.84%
N-Hexane	110-54-3	6.4032%
Cyclohexane	110-82-7	1.6968%
Ethyl Benzene	100-41-4	0.2601%

CALIFORNIA PROPOSITION 65: This product contains a chemical known to the state of California to cause cancer and birth defects, or other reproductive harm.

Other state regulations may apply. Check individual state requirements. The following components appear on one or more of the following state hazardous substances lists:

Chemical Name	CAS #	CA	MA	MN	NJ	PA	RI
Toluene	108-88-3	Yes	Yes	Yes	Yes	No	Yes
Acetone	67-64-1	No	No	No	Yes	No	No
Solvent Naphtha (Petroleum), Light Aliphatic	64742-89-8	Yes	Yes	Yes	Yes	Yes	Yes
N-Hexane	110-54-3	No	Yes	Yes	Yes	Yes	Yes
Cyclohexane	110-82-7	Yes	Yes	Yes	Yes	Yes	Yes
n-Heptane	142-82-5	No	Yes	Yes	Yes	Yes	Yes
Ethyl Benzene	100-41-4	Yes	Yes	Yes	Yes	No	Yes

SECTION 16: OTHER INFORMATION

ADDITIONAL COMMENTS: N/A

DATE OF PREVIOUS MSDS: N/A

CHANGES SINCE PREVIOUS MSDS: New MSDS

This information relates to the specific material designated and may not be valid for such material used on combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license of valid patents.

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Revised 12-13-18
D. McDaid

Site Name: Lapp Insulator Site Site Code: 819017 Operable Unit:

Building Code: B35 Building Name: B-35

Address: 130 Gilbert St

City: Le Roy State: NY Zip: 14482 County: Genesee Apt/Suite No:

Factors Affecting Indoor Air Quality

Frequency Basement/Lowest Level is Occupied?: Floor Material:

☐ Inhabited? ☐ HVAC System On? ☐ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source: OTHER

☐ Air Fresheners? Description/Location of Air Freshener: ☐ Is there smoking in the building?

☐ Cleaning Products Used Recently?: Description of Cleaning Products:

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products:

☐ New Carpet or Furniture? Location of New Carpet/Furniture:

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics:

☐ Recent Painting/Staining? Location of New Painting:

☐ Solvent or Chemical Odors? Describe Odors (if any):

☒ Do Any Occupants Use Solvents At Work? If So, List Solvents Used: Napthalene, Acetone

☐ Recent Pesticide/Rodenticide? Description of Last Use:

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:
Manufacturing area in building uses acetone and napthalene.

☐ Any Prior Testing For Radon? If So, When?:

☒ Any Prior Testing For VOCs? If So, When?: August 2017

Sampling Conditions

Weather Conditions: SUNNY Outdoor Temperature: 70 °F

Current Building Use: MANUFACTURING Barometric Pressure: In(hg)

Product Inventory Complete? Yes ☒ Building Questionnaire Completed?

Revised 12-13-18
D. McDaid
Updated 9-26-19

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Lapp Insulator Site
Site Code: 819017 Operable Unit:
Building Code: B35 Building Name: B-35
Address: 130 Gilbert St
City: Le Roy Apt/Suite No:
State: NY Zip: 14482 County: Genesee

Contact Information

Preparer's Name: Dan McDaid
Preparer's Affiliation: AECOM Phone No: (716) 923-1166
Purpose of Investigation: Company Code: URS
Contact Name: Ron Richards Date of Inspection: 6-6-18
Phone No: (585) 768-6221 Alt. Phone No: Affiliation: MANAGER
Number of Occupants (total): Number of Children: Email:
☐ Occupant Interviewed? ☐ Owner Occupied?
Owner Name (if different): ☐ Owner Interviewed?
Owner Mailing Address: Owner Phone:

Building Details

Bldg Type (Res/Com/Ind/Mixed): INDUSTRIAL
If Commercial or Industrial Facility, Select Operations: MANUFACTURING
Bldg Size (S/M/L): LARGE
If Residential Select Structure Type:
Number of Floors: 1 Approx. Year Construction: 1940 ☐ Building Insulated? ☐ Attached Garage?
Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):
Not tight. Air flow at loading dock lifts, garage doors in frequent use.

Foundation Description

Foundation Type: NO BASEMENT/SLAB
Foundation Floor Material: POURED CONCRETE Foundation Depth (bgs): Unit: FEET
Foundation Wall Material: POURED CONCRETE Foundation Floor Thickness: 8
Foundation Wall Thickness: Unit: INCHES
☐ Floor penetrations? Describe Floor Penetrations:
☒ Wall penetrations? Describe Wall Penetrations: garage doors, man doors and several windows
Basement is: Basement is: ☐ Sumps/Drains? Water in Sump?:
Describe Foundation Condition (cracks, seepage, etc.) : Some cracks in floor, but no air flow apparent
☐ Radon Mitigation System Installed? ☐ VOC Mitigation System Installed? ☐ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: OTHER Heat Fuel Type: GAS ☐ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: GAS
Water Htr Vent Location: Clothes Dryer Fuel Type:
Dryer Vent Location:

Revised 12-13-18
D. McDaid

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: B-35 Bldg Code: B35 Date: 5-5-18

Bldg Address: 130 Gilbert St Apt/Suite No:

Bldg City/State/Zip: Le Roy NY, 14482

Make and Model of PID: PPBRae Date of Calibration:

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
~~North End~~	~~Oil (2 drums)~~	~~55 gal~~	U	~~Background near drums 0 ppb, heavy air circulation in north end of bldgg.~~	~~200 ppb~~ 107	☐
~~North End~~	~~Napthalene~~		u	~~Background near drums 0 ppb, heavy air circulation in north end of bldgg.~~		☐
~~North End~~	~~Acetone~~		u	~~Background near drums 0 ppb, heavy air circulation in north end of bldgg.~~		☐
Background	Background VOC Concentratio			Peak reading of 18 ppm in low-traffic areas with less air flow.	18 ppm	☐
	BACKGROUND			9-18-18	1.3 PPM	☐
MANUFACTURE STORAGE AREA	BACKGROUND			12-13-18	9.0 PPM	☐
	SPRAY CLEANER	55GAL	UO	SPRAY CLEANER NOT LISTED	BLANK	☐
	UNLABELED DRUM	55GAL	U	SILICONE ~~UNLABELED~~	11 PPM	☐
	ELASTOSIL (X) (10)	5GAL	UO	POLYHYDROGEN METHYLSILOXANE	BLANK	☐
NORTH END	WASTE OIL	55GAL	U	WASTE OIL	910 PPM	☐
	NAPTHALENE	55GAL	U	NAPTHALENE	97 PPM	☐
	ACETONE @	VAR	U	ACETONE		☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: B-35 Bldg Code: _____ Date: 6-20-A UPDATE

Bldg Address: _____ Apt/Suite No: _____

Bldg City/State/Zip: _____

Make and Model of PID: _____ Date of Calibration: _____

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
B35	BLKD				9 ppm	☐
	NO OTHER CHANGES (SEE PREV. PAGE)					☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO), Used (U), or Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: B-35 Bldg Code: Date: 9-26-19 UPDATE

Bldg Address: Apt/Suite No:

Bldg City/State/Zip:

Make and Model of PID: Date of Calibration:

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
	BCKD				2ppm	☐
	NO OTHER CHANGES					☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?

Revised 12-13-18
D. McDaid
Updated 9-26-19

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Lapp Insulator Site Site Code: 819017 Operable Unit:

Building Code: ~~Warehouse~~ B-37 Building Name: B-37

Address: 130 Gilbert St Apt/Suite No:

City: LeRoy State: NY Zip: 14482 County: Genesee

Contact Information

Preparer's Name: Kevin J. McGovern D. McDaid Phone No: (716) 923-1101

Preparer's Affiliation: AECOM Company Code: AECOM

Purpose of Investigation: Date of Inspection: Dec 18, 2017

Contact Name: Ron Richards Affiliation: MANAGER

Phone No: (585) 768-6221 Alt. Phone No: Email:

Number of Occupants (total): Number of Children:

☐ Occupant Interviewed? ☒ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): Owner Phone:

Owner Mailing Address:

Building Details

Bldg Type (Res/Com/Ind/Mixed): INDUSTRIAL Bldg Size (S/M/L): LARGE

If Commercial or Industrial Facility, Select Operations: MANUFACTURING

If Residential Select Structure Type:

Number of Floors: 1 Approx. Year Construction: ☒ Building Insulated? ☐ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Average

Foundation Description

Foundation Type: NO BASEMENT/SLAB Foundation Depth (bgs): Unit: FEET

Foundation Floor Material: POURED CONCRETE Foundation Floor Thickness:

Foundation Wall Material: POURED CONCRETE Foundation Wall Thickness: Unit: INCHES

☐ Floor penetrations? Describe Floor Penetrations:

☒ Wall penetrations? Describe Wall Penetrations: Man doors, several garage doors, tiered ceiling

Basement is: Basement is: ☐ Sumps/Drains? Water in Sump?:

Describe Foundation Condition (cracks, seepage, etc.) : Cracks are sealed or do not promote airflow

☐ Radon Mitigation System Installed? ☐ VOC Mitigation System Installed? ☐ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: RADIANT HEATING Heat Fuel Type: GAS ☐ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: GAS Clothes Dryer Fuel Type:

Water Htr Vent Location: OUTSIDE Dryer Vent Location:

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Revised 12-13-18
D. McDaid

Site Name: Lapp Insulator Site Site Code: 819017 Operable Unit:

Building Code: Warehouse Building Name: B-37

Address: 130 Gilbert St Apt/Suite No:

City: LeRoy State: NY Zip: 14482 County: Genesee

Factors Affecting Indoor Air Quality

Frequency Basement/Lowest Level is Occupied?: OCCASIONALLY Floor Material: CEMENT

☐ Inhabited? ☐ HVAC System On? ☐ Bathroom Exhaust Fan? ☐ Kitchen Exhaust Fan?

Alternate Heat Source:

☐ Is there smoking in the building?

☐ Air Fresheners? Description/Location of Air Freshener:

☐ Cleaning Products Used Recently?: Description of Cleaning Products:

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products:

☐ New Carpet or Furniture? Location of New Carpet/Furniture:

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics:

☐ Recent Painting/Staining? Location of New Painting:

☐ Solvent or Chemical Odors? Describe Odors (if any):

☐ Do Any Occupants Use Solvents At Work? If So, List Solvents Used:

☐ Recent Pesticide/Rodenticide? Description of Last Use:

Describe Any Household Activities (chemical use/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

MOST DOORS AND WINDOWS WERE OPEN PROVIDING MORE AIR FLOW THAN NORMAL

☐ Any Prior Testing For Radon? If So, When?:

☒ Any Prior Testing For VOCs? If So, When?: Aug 31, 2017

Sampling Conditions

Weather Conditions: RAINY Outdoor Temperature: 40 °F

Current Building Use: MANUFACTURING Barometric Pressure: 29.9 In(hg)

Product Inventory Complete? Yes ☐ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory
New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: B-37 Bldg Code: _____ Date: 6-20-19

Bldg Address: _____ Apt/Suite No: _____

Bldg City/State/Zip: _____

Make and Model of PID: _____ Date of Calibration: _____

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
B37-01	WASTE OIL	3 5GAL	U		0	☐
	BCKGD				0	☐
						☐
B37-02	BCKGD				23ppm	☐
						☐
B37-03	BCKD				27ppm	☐
	WATER ON FLOOR			?	90ppm!	☐
	LEAK FROM ROOF					☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

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

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: B-37 Bldg Code: Date: 9-26-19

Bldg Address: Apt/Suite No:

Bldg City/State/Zip:

Make and Model of PID: Date of Calibration:

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
☆	UPDATE TO PREVIOUS SHEET					☐
	BCKGD				0	☐
—	PAINTING ROOM (B-37-IA-01)					☐
	FLAMMABLES CABINET(S)		NO PID READINGS		0	☐
	- VARIOUS PAINTS/MINERAL SPIRITS			- NO PID READINGS	0	☐
						☐
B-37-IA-02	BCKGD -				0	☐
	NO UPDATES Bckgd				0	☐
						☐
B-37-IA-03						☐
	NO UPDATES (BCKGD = 0)				0	☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?

SR – 3

PCOZE BLDG
Updated 9-26-19

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

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

Preparer's Name DAN McDADE Date/Time Prepared 5-5-17 / 1300 / 5/10/17

Preparer's Affiliation AECOM Phone No. 716-923-1166

Purpose of Investigation SVI MONITORING / INDS VAPOR INTRUSION

1. OCCUPANT: (OPERATIONS MANAGER)

Interviewed: (Y) N

Last Name: WANDELL First Name: BRIAN (LOU GUERIN SITE CONTACT NEXT WEEK)

Address: 135 GILBERT ST. LEROY, NY 14482

County: GENESEE

Home Phone: 585-943-3386 Office Phone: 585-768-1200

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

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

Interviewed: Y/N/~~N/A~~ LAPP INSULATOR

Last Name: _____ First Name: _____

Address: 130 GILBERT ST LEROY, NY 1482

County: GENESEE

Home Phone: _____ Office Phone: 585-768-6224

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
(Industrial)	Church	Other: _____

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

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

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) _____

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

Other characteristics:

Number of floors 1 STOCKROOM IS LOWER LEVEL, PARTIALLY BELOW GRADE Building age 60's

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

4. AIRFLOW

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

Airflow between floors

SLIGHT FLOW FROM MAIN FLOOR TO DOWNSTAIRS ALONG RAMP

Airflow near source

Outdoor air infiltration

2 GARAGE DOORS UPSTAIRS, 1 DOWNSTAIRS
SEVERAL MAN DOORS " , 2 "
SEVERAL WINDOWS UPSTAIRS

Infiltration into air ducts

N/A

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

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other LOWER LEVEL
c. Basement floor:	concrete	dirt	stone	other _____
d. Basement floor:	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other IRON? STEEL
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is:	wet	damp	dry	moldy
i. The basement is:	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: N/A (feet)

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

DRAIN PIPE FLOOR PENETRATION BOTH LEVELS

CRACKS ARE SEALED OR DO NOT PROMOTE AIRFLOW

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

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

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

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: N/A

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

Are there air distribution ducts present? Y / N

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

NONE FOUND

7. OCCUPANCY

2 SHIFTS

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

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	STOCK ROOM
1st Floor	RECEIVING/W.H.
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

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

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

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

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

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

f. Is there a workshop or hobby/craft area? (Y) / N Where & Type? MAINTENANCE

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

h. Have cleaning products been used recently? (Y) / N When & Type? WATER BASED CLEANERS

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

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

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

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

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented? _____

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

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

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

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

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

If yes, what types of solvents are used? _____

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

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

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

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

9. WATER AND SEWAGE

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

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

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

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

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

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

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: PCORE BLDG Bldg Code: _____ Date: 6-20-19

Bldg Address: _____ Apt/Suite No: _____

Bldg City/State/Zip: _____

Make and Model of PID: _____ Date of Calibration: _____

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
P1-IA-01	BULK(D)				5	☐
	WASTE OIL DRUMS	(~25) 55GAL	U		5	☐
	VARIOUS DRUMS	(25) 55GAL	UO	VAR. EPOXY RESINS	5	☐
	VAR. PAILS	(8) 5GAL		BUTYL ALCOHOL	5	☐
				DOORS CLOSED		☐
						☐
P1-IA02	BULK(D)				4PPM	☐
Painting of metal structures taking place approx. 50 ft north of sample P1-IA-02 - using paint and paint thinner.					NOT TAKING PLACE 9-26-19	☐
PB1A-01	BULK(D)				3	☐
						☐
PD1A-03	BULK(D)				3 PPM	☐
	VARIOUS SPRAY PAINTS					☐
	PAINT THINNERS					☐
	WD-40					☐
	ADHESIVES (SPRAY)					☐
	PAINT THINNER METHANOL					☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: _____ Bldg Code: _____ Date: 9-26-14

Bldg Address: _____ Apt/Suite No: _____

Bldg City/State/Zip: _____

Make and Model of PID: _____ Date of Calibration: _____

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
PB IA-02	BACKGROUND				0PPM	☐
	HYDRAULIC OIL	2@260 GAL	U	HYDRAULIC OIL	0PPM	☐
						☐
PB IA-01	BACKGROUND				0PPM	☐
						☐
PB IA-01	BACKGROUND				0PPM	☐
						☐
PB IA-03	BACKGROUND				0PPM	☐
	CHEM. CABINET, CLOSED		See Photo		7-10PPM	☐
	CONTAINS VARIOUS SPRAY PAINTS, OIL CLEANERS, BRAKE CLEANER				5PPM	☐
	CASTROL SUPER CLEAN				0PPM	☐
						☐
~~PB IA-05~~						☐
NOTE -	MOST GARAGE DOORS OPEN DURING WORK DAY					☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Updated 9-26-19

Site Name: Lapp Insulator Site Code: _____ Operable Unit: _____

Building Code: PCore LAB Building Name: PCore

Address: 130 Gilbert St Apt/Suite No: _____

City: Le Roy State: NY Zip: 14482 County: Genesee

Contact Information

Preparer's Name: Dan McDaid Phone No: 716-923-1166

Preparer's Affiliation: URS Company Code: _____

Purpose of Investigation: Indoor Air Sampling Date of Inspection: 2-7-19/2-8-19

Contact Name: Rob Cassatt Affiliation: _____

Phone No: 585-472-4256 Alt. Phone No: _____ Email: _____

Number of Occupants (total): 1 Number of Children: _____

☐ Occupant Interviewed? ☐ Owner Occupied? ☐ Owner Interviewed?

Owner Name (if different): Lapp Insulator (Owner), Hubbell (Renter) Owner Phone: _____

Owner Mailing Address: _____

Building Details

Bldg Type (Res/Com/Ind/Mixed): COMMERCIAL/MIXED Bldg Size (S/M/L): LARGE

If Commercial or Industrial Facility, Select Operations: MANUFACTURING

If Residential Select Structure Type:

Number of Floors: 2 Approx. Year Construction: 1960 ☒ Building Insulated? ☐ Attached Garage?

Describe Overall Building 'Tightness' and Airflows(e.g., results of smoke tests):

Airflow is generally tight in the laboratory, except for one air conditioner.

Foundation Description

Foundation Type: NO BASEMENT/SLAB Foundation Depth (bgs): _____ Unit: FEET

Foundation Floor Material: _____

Foundation Wall Material: _____

Foundation Floor Thickness: _____

Foundation Wall Thickness: _____ Unit: INCHES

☒ Floor penetrations? Describe Floor Penetrations: Sump Pit in center of lab

☒ Wall penetrations? Describe Wall Penetrations: Drain Pipes

Basement is: PARTIALLY FINISHED Basement is: DRY ☒ Sumps/Drains? Water In Sump?: NO

Describe Foundation Condition (cracks, seepage, etc.) : One crack across lab, no airflow associated with it

☐ Radon Mitigation System Installed? ☐ VOC Mitigation System Installed? ☐ Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: FORCED AIR Heat Fuel Type: GAS ☐ Central A/C Present?

Vented Appliances

Water Heater Fuel Type: _____ Clothes Dryer Fuel Type: _____

Water Htr Vent Location: _____ Dryer Vent Location: _____

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Lapp Insulator Site Code: _____ Operable Unit: _____

Building Code: PCore Building Name: PCore

Address: 130 Gilbert St Apt/Suite No: _____

City: Le Roy State: NY Zip: 14482 County: Genesee

Factors Affecting Indoor Air Quailty

Frequency Basement/Lowest Level is Occupied?: OCCASIONALLY Floor Material: CEMENT

☐ Inhabited? ☐ HVAC System On? ☐ Bathroom Exhaust Fan? ☒ Kitchen Exhaust Fan?

Alternate Heat Source: _____ ☐ Is there smoking in the building?

☐ Air Fresheners? Description/Location of Air Freshener: _____

☒ Cleaning Products Used Recently?: Description of Cleaning Products: Windex

☐ Cosmetic Products Used Recently?: Description of Cosmetic Products: _____

☐ New Carpet or Furniture? Location of New Carpet/Furniture: _____

☐ Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics: _____

☐ Recent Painting/Staining? Location of New Painting: _____

☐ Solvent or Chemical Odors? Describe Odors (if any): _____

☒ Do Any Occupants Use Solvents At Work? If So, List Solvents Used: Resin Laboratory - see inventory

☐ Recent Pesticide/Rodenticide? Description of Last Use: _____

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

This Laboratory is used for the creation and testing of resins for various applications. As such, there are numerous chemicals that are used and tested regularly.

Laboratory sump has been sealed by URS/AECOM (May 1, 2019)

☐ Any Prior Testing For Radon? If So, When?: _____

☒ Any Prior Testing For VOCs? If So, When?: Jan 1, 2017

Sampling Conditions

Weather Conditions: RAINY Outdoor Temperature: 30 °F

Current Building Use: _____ Barometric Pressure: _____ in(hg)

Product Inventory Complete? _____ ☒ Building Questionnaire Completed?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: PCore Bldg Code: PCore Date:

Bldg Address: 130 Gilbert Street Apt/Suite No:

Bldg City/State/Zip: Le Roy NY, 14482

Make and Model of PID: MiniRAE 3000 Date of Calibration: 2-5-19

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
Laboratory	Background				0	☐
Flammables Cabinet (contents removed for June 2019 Sampling)	Part A	32	U	methyl ethyl ketone	0	☐
	Accellerator (qty 4)	1/2 gal	U	not listed	0	☐
	Fluorescent Leak Detector	16	U	not listed	0	☐
	Rust Stop	15	U	Ketones, aromatic hydrocarbons, aliphatic hydrocarbons	0	☐
	Terro Ant Killer	15	U	See Attached Photo	0	☐
	Adhesive sealant	305 ml	U	See Attached Photo	0	☐
	Hexane	1 qt	U	Hexane	**1 ppm**	☐
	Elastosil (qty 2)	0.15 kg	U	not listed	0	☐
	Air-dry shellac	1 qt	U	not listed	0.1 ppm	☐
Laboratory	Hi-Gloss Acrylic Enamel	1 qt	U	Ethylene glycol, ester alcohol, acrylic polymer	0	☐
Laboratory	Touch-up Paint	4	U	not listed	4.7 ppm	☐
Laboratory	Mold Release	1 gal	U	cyclic tetramer	0	☐
Laboratory	Pump Oil	1 gal	U		0	☐
Laboratory	Oil Samples (qty 17)	4 oz	U		0	☐
			U		0	☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: PCore Bldg Code: PCore Date:

Bldg Address: 130 Gilbert Street Apt/Suite No:

Bldg City/State/Zip: Le Roy NY, 14482

Make and Model of PID: MiniRAE 3000 Date of Calibration: 2-5-19

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
Laboratory	Background				0	☐
	Transformer Oil (qty 23)	32	U		0	☐
	Transformer Oil (qty 18)	12	U		0	☐
	Glycerine	1 qt	U		0	☐
	Viscosity Standard	1 pt	U	unknown	0	☐
	Resin (qty approx. 40)	various	U	Anhydrides, and other unknown compounds	0	☐
	Resin Hardener qty approx. 20	various	U	See attached photo	0	☐
	Resin Flexibileizers (qty 30)	various	U	Anhydrides and other unknown compounds	**0**	☐
	Pigments (qty 10)	1 pt, 1 qt	U	6-bisphenol-A-epichlorhydrin; 2-oxirane; mono (12-14-alkyloxy) methyl dervis	0	☐
	Windex	26	U		0	☐
	Silicon	5 gal	U		0	☐
	Isopropanol (qty 5)	var	U		0	☐
	Ethanol	12	U		0	☐
	Alumina	5 gal	U	???	0	☐
	Alpha 1	5 gal	U	???	0	☐
	Epoxy	32	U		0	☐

* Describe the condition of the product containers as **Unopened (UO), Used (U), or Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?

Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: PCORE LAB Bldg Code: Date: ~~6-25-19~~ 9-26-19

Bldg Address: Apt/Suite No:

Bldg City/State/Zip:

Make and Model of PID: Date of Calibration:

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
~~PBIA-OS PCORE~~	BKGD				⊗1	☐
★	KLAM. CABINET REMOVED					☐
	NO OTHER SIGNIFICANT CHANGES					☐
	REFER TO PREVIOUS PAGE					☐
PBIA-OS	BACKGROUND				0 PPM	☐
★	FLAMMABLES CABINET NOT REMOVED FROM LAB FOR THIS					☐
	SAMPLING EVENT					☐
	REFER TO PREV. PAGES - NO CHANGES TO LAB INVENTORY					☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐
						☐

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? ☐ Were there any elevated PID readings taken on site? ☐ ☐ Products with COC?


FLAMMABLE
KEEP FIRE AWAY
INFLAMABLE
MANTENGA ALEJADO DEL FUEGO
INFLAMMABLE
TENIR LOIN DES FLAMMES
Sure-Grip® EX
FLAMMABLE LIQUID
STORAGE CABINET
890400
4 GAL. CAPACITY
15 LITER CAPACITY
N.F.P.A. CODE 30
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www.justritemfg.com
CLEANING SUPPLY
LUBRICATING SUPPLY
OSHA QUICK CARD
Pneumatic Nail Gun
Safety
7.2 ppm
CF = 1.00 Isobutyl
See packing list for return information


TEF TAPE
GLYPTAL
METHANOL
HEALTH HAZARD
FLAMMABILITY HAZARD
INSTABILITY HAZARD
RUST-OLEUM
PAINTERS TOUCH
2X
ULTRA COVER
FLAT GRAY
PRIMER
JUSTRITE
PAINTS & LUBS

APPENDIX B
PHOTOGRAPHS


B35-IA-01
VOLANI METAIS
MADE IN BRAZIL
ELASTOSIL
TestAr
020180524

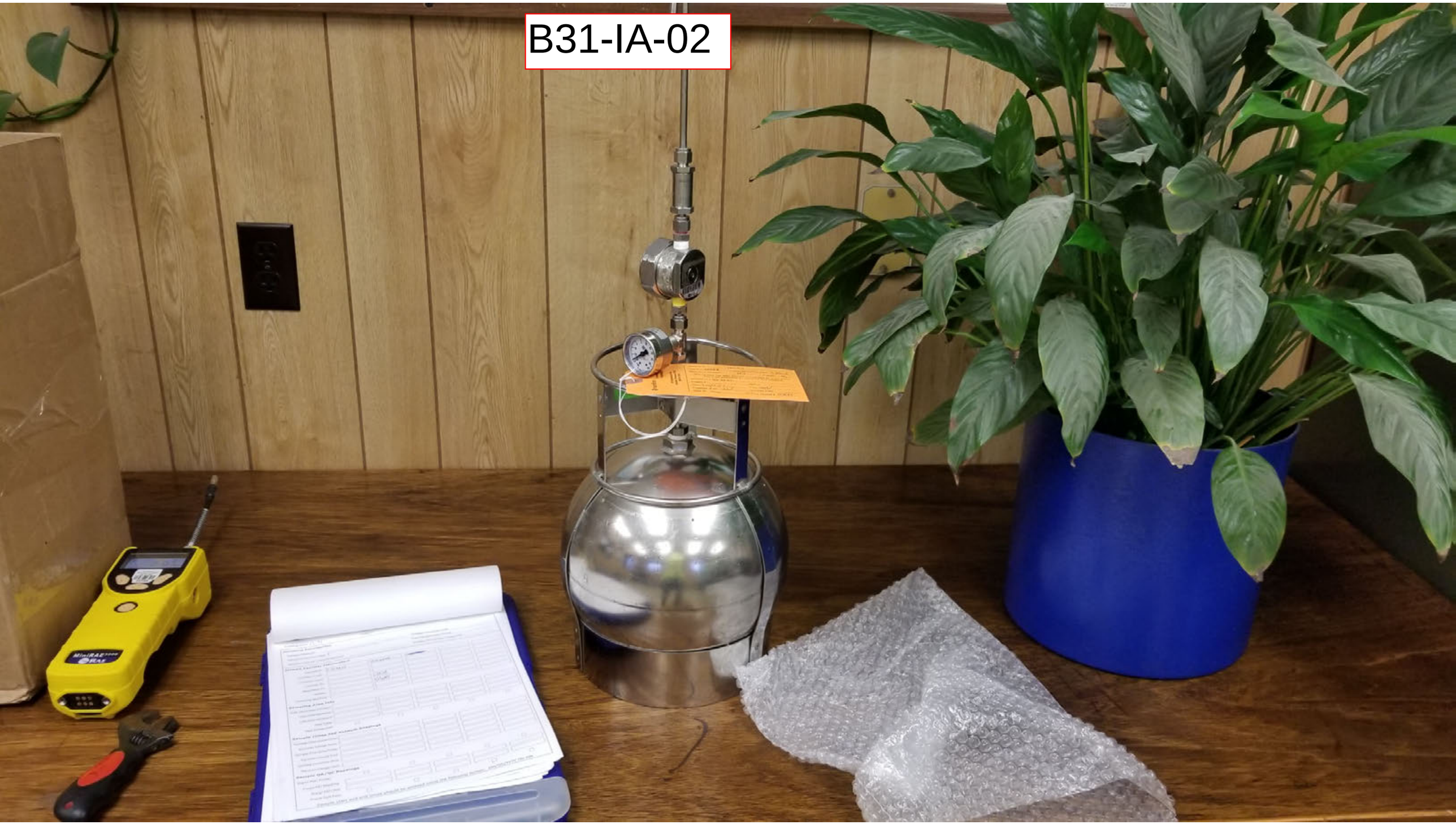

B37-IA-01


B37-IA-02

B37-IA-03

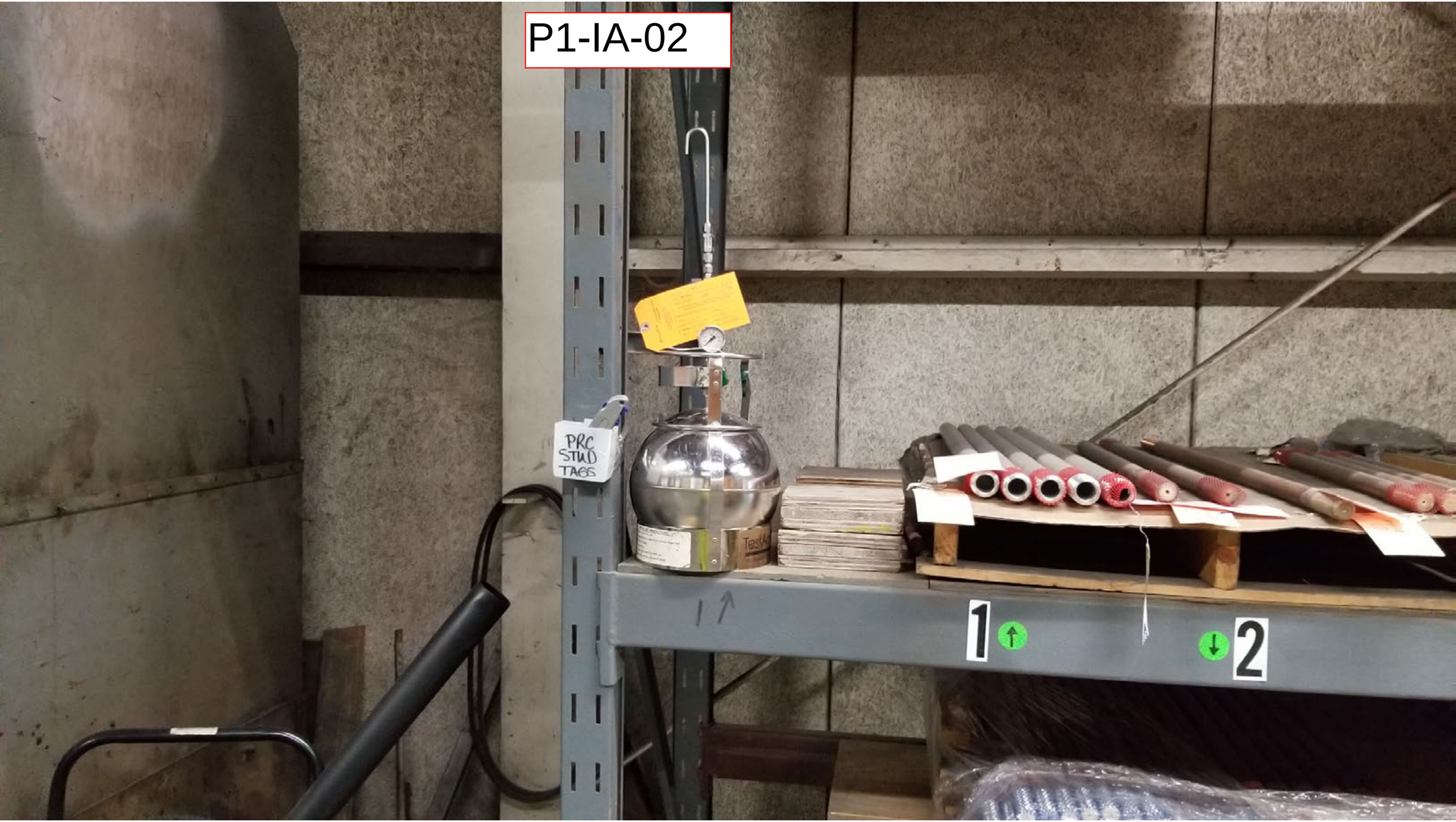
B31-IA-01

B31-IA-02




P1-IA-01

P1-IA-02




PB-IA-01
TestAmerica
Norcon
Flange
Adapters
I-5


PB-IA-03
NO TOOLING


PB-IA-05
L-693R
12 PCS
950CC WM PACKER
AMBER


OA-02
17

APPENDIX C

DATA USABILITY SUMMARY REPORTS

DATA USABILITY SUMMARY REPORT

SOIL VAPOR INTRUSION STUDY
LAPP INSULATOR SITE
LEROY, NEW YORK
WORK ASSIGNMENT D007622-11.2
SITE #819017

Analyses Performed by:

EUROFINS TESTAMERICA, KNOXVILLE
KNOXVILLE, TN

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

Prepared by:

URS CORPORATION
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202-2657

OCTOBER 2019

TABLE OF CONTENTS

TABLES
(Following Text)

ATTACHMENTS

1.0 INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *DER-10 Technical Guidance for Site Investigation and Remediation, Appendix 2B, Guidance for Data Deliverables and the Development of Data Usability Summary Reports,* May 2010. Discussed in this DUSR are analytical data for eleven indoor air samples, one indoor air field duplicate (FD), and one ambient (outdoor) air sample collected on September 26-27, 2019. The samples were collected in support of the Soil Vapor Intrusion Study assigned to URS under the direction of NYSDEC Work Assignment D007622-11.2 for the Lapp Insulator Site (Site #819017), located in LeRoy, New York.

2.0 ANALYTICAL METHODOLOGIES/DATA VALIDATION PROCEDURES

All samples were sent to Eurofins TestAmerica, Knoxville (Knoxville, TN) for analysis. The samples were analyzed for volatile organic compounds (VOCs) following United States Environmental Protection Agency (USEPA) *Compendium Method TO-15, Determination of VOCs in Air Collected in Specially Prepared Canisters and Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS),* EPA/625/R-96/010b, January 1999.

A limited data validation was performed in accordance with the guidelines in the following USEPA Region II document:

- *Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15, SOP HW-31, Rev. 6,* June 2014.

The limited validation included: a completeness review of all required deliverables; holding times; a review of quality control (QC) results [blanks, instrument tunings, calibration standards, duplicate analyses, and laboratory control sample (LCS) recoveries] to determine if the data are within the protocol-required limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers.

Definitions of USEPA data qualifiers are presented at the end of this text. The validated analytical results are presented on Table 1 (outdoor air/indoor air). Documentation supporting the qualification of data is presented in Attachment A. Only analytical deviations affecting data usability are discussed in this report.

3.0 DATA DELIVERABLE COMPLETENESS

Full deliverable data packages (i.e., NYSDEC ASP Category B or equivalent) were provided by the laboratory, which included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

4.0 SAMPLE RECEIPT/PRESERVATION/HOLDING TIMES

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC) with the following exceptions:

Sample PB-IA-03 was received at ambient pressure (i.e., Summa® can pressure was zero). Because the integrity of the sample cannot be verified, all results have been qualified 'J' or 'UJ'.

All samples were analyzed within the required holding times.

5.0 NONCONFORMANCES

Instrument Calibration

The percent relative standard deviation (%RSD) between the initial calibration (ICAL) relative response factors (RRF) was greater than the QC limit of 30% for methylene chloride. The detected results for this compound in samples B35-IA-01, B37-IA-02, PB-IA-01, PB-IA-03, and OA-02 were qualified 'J'.

Support documentation (i.e., Form 6) are presented in Attachment B.

Laboratory Blanks

Methylene chloride was detected in the laboratory blanks at concentrations greater than the reporting limit (RL). The results for this compound in samples B31-IA-01, B31-IA-02, FD092719 (B35-IA-01), B37-IA-01, B37-IA-03, P1-IA-01, P1-IA-02, and PB-IA-05 were qualified 'U' at two times the RL or the detected result, whichever was greater. If the sample result exceeded four times the RL the 'B' qualifier applied by the laboratory was removed.

Support documentation (i.e., Forms 1,4) are presented in Attachment B.

6.0 SAMPLE RESULTS AND REPORTING

A FD was collected at location B35-IA-01. Upon review of the results large discrepancies were noted between the parent sample and FD. The laboratory was contacted and discovered the summa® canister for the parent sample contained residue that had not been removed by the batch cleaning process prior to sample collection. This residue impacted the sample results and could have caused false positives. To be conservative all the results from sample B35-IA-01 have been rejected. The results for the field duplicate sample were not affected.

7.0 SUMMARY

All sample analyses were found to be compliant with the method and validation criteria, except where previously noted. Those results qualified 'R' (rejected) should not be used. Those results qualified 'UJ' (estimated quantitation limit) or 'J' (estimated concentration) during the data review are considered conditionally usable. Those samples qualified 'U' during the data review are considered non-detect. All sample results are usable as reported. URS does not recommend the recollection of any samples at this time.

Prepared By: Ann Marie Kropovitch, Chemist **Date:** 10/16/19

Reviewed By: George E. Kisluk, Senior Chemist **Date:** 10/16/19

DEFINITIONS OF USEPA DATA QUALIFIERS

U – The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

R – The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.

D – The sample result was reported from a secondary dilution analysis.

TABLE 1
VALIDATED OUTDOOR AIR AND INDOOR AIR SAMPLE RESULTS
LAPP INSULATOR SITE

Location ID		B31-IA-01	B31-IA-02	B35-IA-01	B35-IA-01	B37-IA-01
Sample ID		B31-IA-01	B31-IA-02	B35-IA-01	FD 092719	B37-IA-01
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/27/19	09/27/19	09/27/19	09/27/19	09/27/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.44 U	0.44 U	R	0.44 U	0.44 U
1,1,2,2-Tetrachloroethane	UG/M3	0.55 U	0.55 U	R	0.55 U	0.55 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.61 U	0.61 U	R	0.61 U	0.61 U
1,1,2-Trichloroethane	UG/M3	0.44 U	0.44 U	R	0.44 U	0.44 U
1,1-Dichloroethane	UG/M3	0.32 U	0.32 U	R	0.32 U	0.32 U
1,1-Dichloroethene	UG/M3	0.16 U	0.16 U	R	0.16 U	0.16 U
1,2,4-Trichlorobenzene	UG/M3	1.4	0.59 U	R	0.59 U	0.59 U
1,2,4-Trimethylbenzene	UG/M3	0.39 U	0.39 U	R	0.39 U	1.1
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.61 U	0.61 U	R	0.61 U	0.61 U
1,2-Dichlorobenzene	UG/M3	0.48 U	0.48 U	R	0.48 U	0.48 U
1,2-Dichloroethane	UG/M3	0.32 U	0.32 U	R	0.32 U	0.32 U
1,2-Dichloroethene (cis)	UG/M3	0.16 U	0.16 U	R	0.16 U	0.16 U
1,2-Dichloroethene (trans)	UG/M3	0.32 U	0.32 U	R	0.32 U	0.32 U
1,2-Dichloropropane	UG/M3	0.37 U	0.37 U	R	0.37 U	0.37 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.56 U	0.56 U	R	0.56 U	0.56 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.39 U	0.39 U	R	0.39 U	0.39 U
1,3-Dichlorobenzene	UG/M3	1.8	1.4	R	91 D	0.48 U
1,3-Dichloropropene (cis)	UG/M3	0.36 U	0.36 U	R	0.36 U	0.36 U
1,3-Dichloropropene (trans)	UG/M3	0.36 U	0.36 U	R	0.36 U	0.36 U
1,4-Dichlorobenzene	UG/M3	0.48 U	0.48 U	R	0.48 U	0.48 U
1,4-Dioxane	UG/M3	0.72 U	0.72 U	R	0.72 U	0.72 U
2,2,4-Trimethylpentane	UG/M3	0.93 U	0.93 U	R	0.93 U	0.93 U
4-Methyl-2-pentanone	UG/M3	0.82 U	0.82 U	R	0.88	0.82 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/16/19
Checked By: GEK 10/16/19

Detection Limits shown are PQL

TABLE 1
VALIDATED OUTDOOR AIR AND INDOOR AIR SAMPLE RESULTS
LAPP INSULATOR SITE

Location ID		B31-IA-01	B31-IA-02	B35-IA-01	B35-IA-01	B37-IA-01
Sample ID		B31-IA-01	B31-IA-02	B35-IA-01	FD 092719	B37-IA-01
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/27/19	09/27/19	09/27/19	09/27/19	09/27/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
Benzene	UG/M3	0.83	0.30	R	0.52	0.26 U
Benzyl chloride	UG/M3	0.83 U	0.83 U	R	0.83 U	0.83 U
Bromodichloromethane	UG/M3	0.54 U	0.54 U	R	0.54 U	0.54 U
Bromoform	UG/M3	0.83 U	0.83 U	R	0.83 U	0.83 U
Bromomethane	UG/M3	0.31 U	0.31 U	R	0.31 U	0.31 U
Carbon tetrachloride	UG/M3	0.45	0.42	R	0.44	0.41
Chlorobenzene	UG/M3	0.37 U	0.37 U	R	0.37 U	0.37 U
Chloroethane	UG/M3	0.21 U	0.21 U	R	0.21 U	0.21 U
Chloroform	UG/M3	0.39 U	0.39 U	R	0.39 U	0.39 U
Chloromethane	UG/M3	0.96	1.2	R	1.0	0.97
Cyclohexane	UG/M3	2.4	7.5	R	0.69 U	0.69 U
Dibromochloromethane	UG/M3	0.68 U	0.68 U	R	0.68 U	0.68 U
Dichlorodifluoromethane	UG/M3	1.1	0.99	R	0.85	0.97
Ethanol	UG/M3	7.3	10	R	75	7.1
Ethylbenzene	UG/M3	0.35 U	0.35 U	R	1.1	0.35 U
Hexachlorobutadiene	UG/M3	1.4	0.85 U	R	0.85 U	0.85 U
Hexane	UG/M3	0.70 U	1.3	R	0.70 U	0.82
m&p-Xylene	UG/M3	0.39	0.59	R	7.3	1.0
Methyl ethyl ketone (2-Butanone)	UG/M3	1.8	1.6	R	0.94 U	10
Methyl tert-butyl ether	UG/M3	0.58 U	0.58 U	R	0.58 U	0.58 U
Methylene chloride	UG/M3	2.0 U	1.4 U	R	1.5 U	1.4 U
o-Xylene	UG/M3	0.35 U	0.35 U	R	2.3	0.41
Styrene	UG/M3	0.34 U	0.53	R	0.34 U	0.34 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/16/19
Checked By: GEK 10/16/19

Detection Limits shown are PQL

TABLE 1
VALIDATED OUTDOOR AIR AND INDOOR AIR SAMPLE RESULTS
LAPP INSULATOR SITE

Location ID		B31-IA-01	B31-IA-02	B35-IA-01	B35-IA-01	B37-IA-01
Sample ID		B31-IA-01	B31-IA-02	B35-IA-01	FD 092719	B37-IA-01
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/27/19	09/27/19	09/27/19	09/27/19	09/27/19
Parameter	Units				Field Duplicate (1-1)	
Volatile Organic Compounds						
tert-Butyl alcohol	UG/M3	7.7	9.3	R	43	0.97 U
Tetrachloroethene	UG/M3	0.54 U	0.54 U	R	0.54 UJ	0.54 U
Toluene	UG/M3	1.6	1.5	R	1.6	3.5
Trichloroethene	UG/M3	0.47	0.29	R	0.36	0.62
Trichlorofluoromethane	UG/M3	1.0	1.3	R	0.96	2.3
Vinyl chloride	UG/M3	0.10 U	0.10 U	R	0.10 U	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/16/19
Checked By: GEK 10/16/19

Detection Limits shown are PQL

TABLE 1
VALIDATED OUTDOOR AIR AND INDOOR AIR SAMPLE RESULTS
LAPP INSULATOR SITE

Location ID		B37-IA-02	B37-IA-03	OUTDOOR AIR-2	P1-IA-01	P1-IA-02
Sample ID		B37-IA-02	B37-IA-03	OA-02	P1-IA-01	P1-IA-02
Matrix		Indoor Air	Indoor Air	Ambient Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/27/19	09/27/19	09/27/19	09/27/19	09/27/19
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/M3	0.44 U	0.44 U	0.44 U	0.44 U	1.0
1,1,2,2-Tetrachloroethane	UG/M3	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
1,1,2-Trichloroethane	UG/M3	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,1-Dichloroethane	UG/M3	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,1-Dichloroethene	UG/M3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,2,4-Trichlorobenzene	UG/M3	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
1,2,4-Trimethylbenzene	UG/M3	4.8	0.92	0.39 U	0.39 U	0.39 U
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.61 U	0.61 U	0.61 U	0.61 U	0.61 U
1,2-Dichlorobenzene	UG/M3	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
1,2-Dichloroethane	UG/M3	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethene (cis)	UG/M3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,2-Dichloroethene (trans)	UG/M3	0.32 U	0.32 U	0.32 U	4.4	74 D
1,2-Dichloropropane	UG/M3	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.56 U	0.56 U	0.56 U	0.56 U	0.56 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	1.3	0.39 U	0.39 U	0.39 U	0.39 U
1,3-Dichlorobenzene	UG/M3	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
1,3-Dichloropropene (cis)	UG/M3	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,3-Dichloropropene (trans)	UG/M3	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
1,4-Dichlorobenzene	UG/M3	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
1,4-Dioxane	UG/M3	0.72 U	0.72 U	1.2	0.72 U	0.72 U
2,2,4-Trimethylpentane	UG/M3	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U
4-Methyl-2-pentanone	UG/M3	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/16/19
Checked By: GEK 10/16/19

Detection Limits shown are PQL

TABLE 1
VALIDATED OUTDOOR AIR AND INDOOR AIR SAMPLE RESULTS
LAPP INSULATOR SITE

Location ID		B37-IA-02	B37-IA-03	OUTDOOR AIR-2	P1-IA-01	P1-IA-02
Sample ID		B37-IA-02	B37-IA-03	OA-02	P1-IA-01	P1-IA-02
Matrix		Indoor Air	Indoor Air	Ambient Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/27/19	09/27/19	09/27/19	09/27/19	09/27/19
Parameter	Units					
Volatile Organic Compounds						
Benzene	UG/M3	0.26 U	0.40	0.26 U	0.26 U	0.26 U
Benzyl chloride	UG/M3	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
Bromodichloromethane	UG/M3	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Bromoform	UG/M3	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
Bromomethane	UG/M3	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Carbon tetrachloride	UG/M3	0.40	0.44	0.42	0.46	0.44
Chlorobenzene	UG/M3	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Chloroethane	UG/M3	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Chloroform	UG/M3	0.39 U	0.45	0.39 U	0.39 U	0.39 U
Chloromethane	UG/M3	0.99	0.89	1.4	0.88	0.91
Cyclohexane	UG/M3	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Dibromochloromethane	UG/M3	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Dichlorodifluoromethane	UG/M3	0.93	1.0	0.80	0.89	0.84
Ethanol	UG/M3	34	6.2	3.8 U	3.8 U	6.0
Ethylbenzene	UG/M3	0.35 U	0.35 U	0.35 U	0.35 U	2.7
Hexachlorobutadiene	UG/M3	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
Hexane	UG/M3	0.70 U	0.70 U	0.70 U	0.70 U	0.85
m&p-Xylene	UG/M3	0.69	0.67	0.35 U	0.93	9.8
Methyl ethyl ketone (2-Butanone)	UG/M3	1.8	1.1	0.94 U	6.6	79 D
Methyl tert-butyl ether	UG/M3	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Methylene chloride	UG/M3	3.9 J	1.7 U	1.1 J	2.4 U	2.1 U
o-Xylene	UG/M3	0.35 U	0.35 U	0.35 U	0.35 U	2.7
Styrene	UG/M3	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/16/19
Checked By: GEK 10/16/19

Detection Limits shown are PQL

TABLE 1
VALIDATED OUTDOOR AIR AND INDOOR AIR SAMPLE RESULTS
LAPP INSULATOR SITE

Location ID		B37-IA-02	B37-IA-03	OUTDOOR AIR-2	P1-IA-01	P1-IA-02
Sample ID		B37-IA-02	B37-IA-03	OA-02	P1-IA-01	P1-IA-02
Matrix		Indoor Air	Indoor Air	Ambient Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		09/27/19	09/27/19	09/27/19	09/27/19	09/27/19
Parameter	Units					
Volatile Organic Compounds						
tert-Butyl alcohol	UG/M3	0.97 U	0.97 U	0.97 U	0.97 U	0.97 U
Tetrachloroethene	UG/M3	0.54 U	0.54 U	0.99	0.54 U	0.57
Toluene	UG/M3	0.85	0.89	0.88	14	170 D
Trichloroethene	UG/M3	0.97	0.20	0.53	0.19 U	0.53
Trichlorofluoromethane	UG/M3	1.2	1.6	0.91	1.1	1.0
Vinyl chloride	UG/M3	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/16/19
Checked By: GEK 10/16/19

Detection Limits shown are PQL

TABLE 1
VALIDATED OUTDOOR AIR AND INDOOR AIR SAMPLE RESULTS
LAPP INSULATOR SITE

Location ID		PB-IA-01	PB-IA-03	PB-IA-05
Sample ID		PB-IA-01	PB-IA-03	PB-IA-05
Matrix		Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-
Date Sampled		09/27/19	09/27/19	09/27/19
Parameter	**Units**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	UG/M3	1.6	1.6 J	0.69
1,1,2,2-Tetrachloroethane	UG/M3	0.55 U	0.55 UJ	0.55 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.61 U	0.61 UJ	0.61 U
1,1,2-Trichloroethane	UG/M3	0.44 U	0.44 UJ	0.44 U
1,1-Dichloroethane	UG/M3	0.32 U	0.56 J	0.32 U
1,1-Dichloroethene	UG/M3	0.16 U	0.16 UJ	0.16 U
1,2,4-Trichlorobenzene	UG/M3	0.59 U	0.59 UJ	0.59 U
1,2,4-Trimethylbenzene	UG/M3	0.39 U	0.39 UJ	0.78
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.61 U	0.61 UJ	0.61 U
1,2-Dichlorobenzene	UG/M3	0.48 U	0.48 UJ	0.48 U
1,2-Dichloroethane	UG/M3	0.32 U	0.91 J	0.32 U
1,2-Dichloroethene (cis)	UG/M3	0.16 U	0.26 J	0.17
1,2-Dichloroethene (trans)	UG/M3	6.8	5.3 J	0.32 U
1,2-Dichloropropane	UG/M3	0.37 U	0.37 UJ	0.37 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.56 U	0.56 UJ	0.56 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.39 U	0.39 UJ	0.39 U
1,3-Dichlorobenzene	UG/M3	0.48 U	0.48 UJ	0.48 U
1,3-Dichloropropene (cis)	UG/M3	0.36 U	0.36 UJ	0.36 U
1,3-Dichloropropene (trans)	UG/M3	0.36 U	0.36 UJ	0.36 U
1,4-Dichlorobenzene	UG/M3	0.48 U	0.48 UJ	0.48 U
1,4-Dioxane	UG/M3	0.72 U	0.72 UJ	0.72 U
2,2,4-Trimethylpentane	UG/M3	0.93 U	0.93 UJ	0.93 U
4-Methyl-2-pentanone	UG/M3	0.82 U	1.4 J	0.82 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/16/19
Checked By: GEK 10/16/19

Detection Limits shown are PQL

TABLE 1
VALIDATED OUTDOOR AIR AND INDOOR AIR SAMPLE RESULTS
LAPP INSULATOR SITE

Location ID		PB-IA-01	PB-IA-03	PB-IA-05
Sample ID		PB-IA-01	PB-IA-03	PB-IA-05
Matrix		Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-
Date Sampled		09/27/19	09/27/19	09/27/19
Parameter	**Units**			
Volatile Organic Compounds				
Benzene	UG/M3	0.26 U	0.26 UJ	0.26 U
Benzyl chloride	UG/M3	0.83 U	0.83 UJ	0.83 U
Bromodichloromethane	UG/M3	0.54 U	0.54 UJ	0.54 U
Bromoform	UG/M3	0.83 U	0.83 UJ	0.83 U
Bromomethane	UG/M3	0.31 U	0.31 UJ	0.31 U
Carbon tetrachloride	UG/M3	0.47	0.43 J	0.45
Chlorobenzene	UG/M3	0.37 U	0.37 UJ	0.37 U
Chloroethane	UG/M3	0.21 U	0.21 UJ	0.21 U
Chloroform	UG/M3	0.39 U	0.39 UJ	0.39 U
Chloromethane	UG/M3	1.3	0.91 J	0.82
Cyclohexane	UG/M3	0.69 U	0.69 UJ	0.69 U
Dibromochloromethane	UG/M3	0.68 U	0.68 UJ	0.68 U
Dichlorodifluoromethane	UG/M3	0.97	0.86 J	0.86
Ethanol	UG/M3	11	93 J	64
Ethylbenzene	UG/M3	0.35 U	0.99 J	0.35 U
Hexachlorobutadiene	UG/M3	0.85 U	0.85 UJ	0.85 U
Hexane	UG/M3	0.70 U	0.70 UJ	6.1
m&p-Xylene	UG/M3	1.2	3.7 J	0.97
Methyl ethyl ketone (2-Butanone)	UG/M3	5.1	15 J	1.4
Methyl tert-butyl ether	UG/M3	0.58 U	0.58 UJ	0.58 U
Methylene chloride	UG/M3	5.3 J	68 DJ	2.1 U
o-Xylene	UG/M3	0.44	1.1 J	0.35
Styrene	UG/M3	0.34 U	0.34 UJ	0.34 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/16/19
Checked By: GEK 10/16/19

Detection Limits shown are PQL

TABLE 1
VALIDATED OUTDOOR AIR AND INDOOR AIR SAMPLE RESULTS
LAPP INSULATOR SITE

Location ID		PB-IA-01	PB-IA-03	PB-IA-05
Sample ID		PB-IA-01	PB-IA-03	PB-IA-05
Matrix		Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-
Date Sampled		09/27/19	09/27/19	09/27/19
Parameter	Units			
Volatile Organic Compounds				
tert-Butyl alcohol	UG/M3	0.97 U	0.97 UJ	0.97 U
Tetrachloroethene	UG/M3	1.2	1.3 J	1.5
Toluene	UG/M3	9.8	43 J	2.9
Trichloroethene	UG/M3	0.78	0.58 J	0.83
Trichlorofluoromethane	UG/M3	1.1	1.1 J	1.5
Vinyl chloride	UG/M3	0.10 U	0.10 UJ	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 10/16/19
Checked By: GEK 10/16/19

Detection Limits shown are PQL

ATTACHMENT A

VALIDATED FORM I'S

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B31-IA-01 Lab Sample ID: 140-16796-1

Matrix: Air Lab File ID: RI30P101.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:35

Sample wt/vol: 500(mL) Date Analyzed: 09/30/2019 19:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33985 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	1.4		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND	*	0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	1.8		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.8		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.83		0.26	
100-44-7	Benzyl chloride	126.58	ND	*	0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.45		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	0.96		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	2.4		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B31-IA-01 Lab Sample ID: 140-16796-1

Matrix: Air Lab File ID: RI30P101.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:35

Sample wt/vol: 500(mL) Date Analyzed: 09/30/2019 19:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33985 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.1		0.40	
64-17-5	Ethanol	46.07	7.3		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	1.4		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND ~~2.0~~ B U		~~0.69~~ 2.0	
179601-23-1	m-Xylene & p-Xylene	106.17	0.39		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	7.7		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	1.6		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.47		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.0		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

DAK 10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B31-IA-02 Lab Sample ID: 140-16796-2

Matrix: Air Lab File ID: RI30P102.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:24

Sample wt/vol: 500(mL) Date Analyzed: 09/30/2019 20:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33985 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND	*	0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	1.4		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.6		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.30		0.26	
100-44-7	Benzyl chloride	126.58	ND	*	0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.42		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.2		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	7.5		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B31-IA-02 Lab Sample ID: 140-16796-2

Matrix: Air Lab File ID: RI30P102.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:24

Sample wt/vol: 500(mL) Date Analyzed: 09/30/2019 20:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33985 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.99		0.40	
64-17-5	Ethanol	46.07	10		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	1.3		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	~~1.2~~ ND	~~B~~	~~0.69~~ 1.4	
179601-23-1	m-Xylene & p-Xylene	106.17	0.59		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	0.53		0.34	
75-65-0	t-Butyl alcohol	74.12	9.3		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	1.5		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.29		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

12/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B35-IA-01 Lab Sample ID: 140-16796-3

Matrix: Air Lab File ID: RJ019P103.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:31

Sample wt/vol: 50(mL) Date Analyzed: 10/01/2019 14:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND	R	4.4	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		5.5	
79-00-5	1,1,2-Trichloroethane	133.41	ND		4.4	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		6.1	
75-34-3	1,1-Dichloroethane	98.96	ND		3.2	
75-35-4	1,1-Dichloroethene	96.94	ND		1.6	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		5.9	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		3.9	
106-93-4	1,2-Dibromoethane	187.87	ND		6.1	
95-50-1	1,2-Dichlorobenzene	147.00	ND		4.8	
107-06-2	1,2-Dichloroethane	98.96	ND		3.2	
78-87-5	1,2-Dichloropropane	112.99	ND		3.7	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		5.6	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		3.9	
541-73-1	1,3-Dichlorobenzene	147.00	40		4.8	
106-46-7	1,4-Dichlorobenzene	147.00	16		4.8	
123-91-1	1,4-Dioxane	88.11	ND		7.2	
540-84-1	2,2,4-Trimethylpentane	114.23	12		9.3	
78-93-3	2-Butanone	72.11	12		9.4	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	14	CI	8.2	
71-43-2	Benzene	78.11	5.6		2.6	
100-44-7	Benzyl chloride	126.58	ND		8.3	
75-27-4	Bromodichloromethane	163.83	ND		5.4	
75-25-2	Bromoform	252.75	ND		8.3	
74-83-9	Bromomethane	94.94	ND		3.1	
56-23-5	Carbon tetrachloride	153.81	4.8		2.0	
108-90-7	Chlorobenzene	112.56	ND		3.7	
75-00-3	Chloroethane	64.52	ND		2.1	
67-66-3	Chloroform	119.38	ND		3.9	
74-87-3	Chloromethane	50.49	11		4.1	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		1.6	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		3.6	
110-82-7	Cyclohexane	84.16	ND		6.9	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B35-IA-01 Lab Sample ID: 140-16796-3

Matrix: Air Lab File ID: RJ019P103.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:31

Sample wt/vol: 50(mL) Date Analyzed: 10/01/2019 14:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND	R	6.8	
75-71-8	Dichlorodifluoromethane	120.91	8.3		4.0	
64-17-5	Ethanol	46.07	760		38	
100-41-4	Ethylbenzene	106.17	20		3.5	
87-68-3	Hexachlorobutadiene	260.76	ND		8.5	
110-54-3	Hexane	86.17	ND		7.0	
1634-04-4	Methyl tert-butyl ether	88.15	ND		5.8	
75-09-2	Methylene Chloride	84.93	29	B	6.9	
179601-23-1	m-Xylene & p-Xylene	106.17	51		3.5	
95-47-6	o-Xylene	106.17	13		3.5	
100-42-5	Styrene	104.15	ND		3.4	
75-65-0	t-Butyl alcohol	74.12	370		9.7	
127-18-4	Tetrachloroethene	165.83	300		5.4	
108-88-3	Toluene	92.14	65		4.5	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		3.2	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		3.6	
79-01-6	Trichloroethene	131.39	8.3		1.9	
75-69-4	Trichlorofluoromethane	137.37	9.6		4.5	
75-01-4	Vinyl chloride	62.50	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

10/16/19

B-35-IA-C

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: FD 092719 Lab Sample ID: 140-16796-7

Matrix: Air Lab File ID: RJ019P107.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 00:00

Sample wt/vol: 500 (mL) Date Analyzed: 10/01/2019 18:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	*1,3-Dichlorobenzene*	*147.00*	91 ~~110~~	*E D*	*0.48*	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	0.88	CI	0.82	
71-43-2	Benzene	78.11	0.52		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.44		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.0		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

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B35-IA-01

FORM I

AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: FD 092719 Lab Sample ID: 140-16796-7

Matrix: Air Lab File ID: RJ019P107.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 00:00

Sample wt/vol: 500(mL) Date Analyzed: 10/01/2019 18:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.85		0.40	
64-17-5	Ethanol	46.07	75		3.8	
100-41-4	Ethylbenzene	106.17	1.1		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.5	B	0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	7.3		0.35	
95-47-6	o-Xylene	106.17	2.3		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	43		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	1.6		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.36		0.19	
75-69-4	Trichlorofluoromethane	137.37	0.96		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	100		60-140

10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: FD 092719 DL Lab Sample ID: 140-16796-7 DL

Matrix: Air Lab File ID: RJ02P105.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 00:00

Sample wt/vol: 50 (mL) Date Analyzed: 10/02/2019 16:38

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33987 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
541-73-1	1,3-Dichlorobenzene	147.00	91	D	4.8	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B37-IA-01 Lab Sample ID: 140-16796-4

Matrix: Air Lab File ID: RJ019P104.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 07:57

Sample wt/vol: 745(mL) Date Analyzed: 10/01/2019 15:46

Soil Aliquot Vol: Dilution Factor: 1.49

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.1		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	10		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.41		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	0.97		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B37-IA-01 Lab Sample ID: 140-16796-4

Matrix: Air Lab File ID: RJ019P104.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 07:57

Sample wt/vol: 745(mL) Date Analyzed: 10/01/2019 15:46

Soil Aliquot Vol: Dilution Factor: 1.49

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.97		0.40	
64-17-5	Ethanol	46.07	7.1		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.82		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	~~1.3~~ ND	~~B~~	~~0.69~~	1.4
179601-23-1	m-Xylene & p-Xylene	106.17	1.0		0.35	
95-47-6	o-Xylene	106.17	0.41		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	3.5		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.62		0.19	
75-69-4	Trichlorofluoromethane	137.37	2.3		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B37-IA-02 Lab Sample ID: 140-16796-5

Matrix: Air Lab File ID: RJ019P105.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 08:00

Sample wt/vol: 765(mL) Date Analyzed: 10/01/2019 16:41

Soil Aliquot Vol: Dilution Factor: 1.53

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	4.8		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	1.3		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.8		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.40		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	0.99		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B37-IA-02 Lab Sample ID: 140-16796-5

Matrix: Air Lab File ID: RJ019P105.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 08:00

Sample wt/vol: 765(mL) Date Analyzed: 10/01/2019 16:41

Soil Aliquot Vol: Dilution Factor: 1.53

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.93		0.40	
64-17-5	Ethanol	46.07	34		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	3.9	~~B~~ J	0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	0.69		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	0.85		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.97		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: B37-IA-03 Lab Sample ID: 140-16796-6

Matrix: Air Lab File ID: RJ019P106.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:19

Sample wt/vol: 500(mL) Date Analyzed: 10/01/2019 17:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.92		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	0.40		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.44		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	0.45		0.39	
74-87-3	Chloromethane	50.49	0.89		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1
SDG No.:
Client Sample ID: B37-IA-03 Lab Sample ID: 140-16796-6
Matrix: Air Lab File ID: RJ019P106.D
Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:19
Sample wt/vol: 500 (mL) Date Analyzed: 10/01/2019 17:37
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.0		0.40	
64-17-5	Ethanol	46.07	6.2		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND 1.7	B	0.69	1.7
179601-23-1	m-Xylene & p-Xylene	106.17	0.67		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	0.89		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.20		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.6		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

dwk 10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: P1-IA-01 Lab Sample ID: 140-16796-8

Matrix: Air Lab File ID: RJ019P108.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:48

Sample wt/vol: 500(mL) Date Analyzed: 10/01/2019 19:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	6.6		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.46		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	0.88		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: P1-IA-01 Lab Sample ID: 140-16796-8

Matrix: Air Lab File ID: RJ019P108.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:48

Sample wt/vol: 500(mL) Date Analyzed: 10/01/2019 19:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.89		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	~~2.4~~ ND	~~B~~	~~0.69~~ 2.4	
179601-23-1	m-Xylene & p-Xylene	106.17	0.93		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	14		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	4.4		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	94		60-140

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FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: P1-IA-02 Lab Sample ID: 140-16796-9

Matrix: Air Lab File ID: RJ019P109.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:45

Sample wt/vol: 500 (mL) Date Analyzed: 10/01/2019 20:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.0		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	*2-Butanone*	*72.11*	79 ~~80~~	*E D*	~~0.94~~	16
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.44		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	0.91		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1
SDG No.:
Client Sample ID: P1-IA-02 Lab Sample ID: 140-16796-9
Matrix: Air Lab File ID: RJ019P109.D
Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:45
Sample wt/vol: 500(mL) Date Analyzed: 10/01/2019 20:27
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.84		0.40	
64-17-5	Ethanol	46.07	6.0		3.8	
100-41-4	Ethylbenzene	106.17	2.7		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.85		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	~~2.1~~ ND	B	~~0.69~~	2.1
179601-23-1	m-Xylene & p-Xylene	106.17	9.8		0.35	
95-47-6	o-Xylene	106.17	2.7		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	0.57		0.54	
108-88-3	*Toluene*	*92.14*	~~110~~ 170	E D	~~0.45~~	7.5
156-60-5	*trans-1,2-Dichloroethene*	*96.94*	~~76~~ 74	E D	~~0.32~~	5.3
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.53		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.0		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: P1-IA-02 DL Lab Sample ID: 140-16796-9 DL

Matrix: Air Lab File ID: RJ02P106.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:45

Sample wt/vol: 30 (mL) Date Analyzed: 10/02/2019 17:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33987 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
78-93-3	2-Butanone	72.11	79	D	16	
108-88-3	Toluene	92.14	170	D	7.5	
156-60-5	trans-1,2-Dichloroethene	96.94	74	D	5.3	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	91		60-140

10/4/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: PB-IA-01 Lab Sample ID: 140-16796-10

Matrix: Air Lab File ID: RJ019P110R.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:29

Sample wt/vol: 500(mL) Date Analyzed: 10/02/2019 08:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.6		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	5.1		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.47		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.3		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: PB-IA-01 Lab Sample ID: 140-16796-10

Matrix: Air Lab File ID: RJ019P110R.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:29

Sample wt/vol: 500 (mL) Date Analyzed: 10/02/2019 08:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.97		0.40	
64-17-5	Ethanol	46.07	11		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	5.3	B J	0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	1.2		0.35	
95-47-6	o-Xylene	106.17	0.44		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	1.2		0.54	
108-88-3	Toluene	92.14	9.8		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	6.8		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.78		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: PB-IA-03 Lab Sample ID: 140-16796-11

Matrix: Air Lab File ID: RJ019P111.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 08:47

Sample wt/vol: 500(mL) Date Analyzed: 10/01/2019 22:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	133.41	1.6		0.44
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61
75-34-3	1,1-Dichloroethane	98.96	0.56		0.32
75-35-4	1,1-Dichloroethene	96.94	ND		0.16
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39
106-93-4	1,2-Dibromoethane	187.87	ND		0.61
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48
107-06-2	1,2-Dichloroethane	98.96	0.91		0.32
78-87-5	1,2-Dichloropropane	112.99	ND		0.37
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48
123-91-1	1,4-Dioxane	88.11	ND		0.72
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93
78-93-3	2-Butanone	72.11	15		0.94
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.4		0.82
71-43-2	Benzene	78.11	ND		0.26
100-44-7	Benzyl chloride	126.58	ND		0.83
75-27-4	Bromodichloromethane	163.83	ND		0.54
75-25-2	Bromoform	252.75	ND		0.83
74-83-9	Bromomethane	94.94	ND		0.31
56-23-5	Carbon tetrachloride	153.81	0.43		0.20
108-90-7	Chlorobenzene	112.56	ND		0.37
75-00-3	Chloroethane	64.52	ND		0.21
67-66-3	Chloroform	119.38	ND		0.39
74-87-3	Chloromethane	50.49	0.91	CI	0.41
156-59-2	cis-1,2-Dichloroethene	96.94	0.26		0.16
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36
110-82-7	Cyclohexane	84.16	ND		0.69

10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: PB-IA-03 Lab Sample ID: 140-16796-11

Matrix: Air Lab File ID: RJ019P111.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 08:47

Sample wt/vol: 500 (mL) Date Analyzed: 10/01/2019 22:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND	UJ	0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.86	J	0.40	
64-17-5	Ethanol	46.07	93		3.8	
100-41-4	Ethylbenzene	106.17	0.99	J	0.35	
87-68-3	Hexachlorobutadiene	260.76	ND	UJ	0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	*Methylene Chloride*	*84.93*	68 ~~60~~	~~B~~ B DJ	~~0.69~~ 2.3	
179601-23-1	m-Xylene & p-Xylene	106.17	3.7	J	0.35	
95-47-6	o-Xylene	106.17	1.1	J	0.35	
100-42-5	Styrene	104.15	ND	UJ	0.34	
75-65-0	t-Butyl alcohol	74.12	ND	UJ	0.97	
127-18-4	Tetrachloroethene	165.83	1.3	J	0.54	
108-88-3	Toluene	92.14	43		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	5.3	J	0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND	UJ	0.36	
79-01-6	Trichloroethene	131.39	0.58	J	0.19	
75-69-4	Trichlorofluoromethane	137.37	1.1	J	0.45	
75-01-4	Vinyl chloride	62.50	ND	UJ	0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

dmk 10/1/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: PB-IA-03 DL Lab Sample ID: 140-16796-11 DL

Matrix: Air Lab File ID: RJ02P107.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 08:47

Sample wt/vol: 150 (mL) Date Analyzed: 10/02/2019 18:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33987 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
75-09-2	Methylene Chloride	84.93	68	D	2.3	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: PB-IA-05 Lab Sample ID: 140-16796-12

Matrix: Air Lab File ID: RJ019P112.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:50

Sample wt/vol: 500(mL) Date Analyzed: 10/01/2019 23:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	0.69		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.78		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.4		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.45		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	0.82		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	0.17		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: PB-IA-05 Lab Sample ID: 140-16796-12

Matrix: Air Lab File ID: RJ019P112.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:50

Sample wt/vol: 500 (mL) Date Analyzed: 10/01/2019 23:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32 (mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.86		0.40	
64-17-5	Ethanol	46.07	64		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	6.1		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND ~~2.1~~ B		~~0.69~~ 2.1	
179601-23-1	m-Xylene & p-Xylene	106.17	0.97		0.35	
95-47-6	o-Xylene	106.17	0.35		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	1.5		0.54	
108-88-3	Toluene	92.14	2.9		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.83		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.5		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

10/11/19

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: OA-02 Lab Sample ID: 140-16796-13

Matrix: Air Lab File ID: RJ019P113.D

Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:15

Sample wt/vol: 720(mL) Date Analyzed: 10/02/2019 00:06

Soil Aliquot Vol: Dilution Factor: 1.44

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	1.2		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.42		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.4		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1
SDG No.:
Client Sample ID: OA-02 Lab Sample ID: 140-16796-13
Matrix: Air Lab File ID: RJ019P113.D
Analysis Method: TO 15 LL Date Collected: 09/27/2019 09:15
Sample wt/vol: 720(mL) Date Analyzed: 10/02/2019 00:06
Soil Aliquot Vol: Dilution Factor: 1.44
Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	0.80		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.1	B J	0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	0.99		0.54	
108-88-3	Toluene	92.14	0.88		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	0.53		0.19	
75-69-4	Trichlorofluoromethane	137.37	0.91		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	93		60-140

10/11/19

ATTACHMENT B

SUPPORT DOCUMENTATION

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Phone 865-291-3000
Fax 865-584-4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

140-16796 Chain of Custody

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information: DAN MCDARD	Client Project Manager: CHUCK DUSEL	Samples Collected By: D. MCDARD
Company Name: AECOM	Phone: 716-923-7211	COC No: 1 of 2 COCs
Address: 257 W. GENESEE ST, STE 400	Email:	
City/State/Zip: BUFFALO, NY 14202		For Lab Use Only: Walk-in Client: Lab Sampling:
Phone: 716-856-5636	Site Contact: DAN MCDARD	
FAX:	Tel/Fax: 716-903-6506	
Project Name: LAPP INSULATOR	Analysis Turnaround Time	Job / SDG No.:
Site/Location: LEROY, NY	Standard (Specific):	(See below for Add'l Items)
PO# 60419769 TASK 8	Rush (Specify):	

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum In Field, "Hg (Start)	Canister Vacuum In Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 16/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
B31-IA-01	9-26-19	~~1037~~ 0935	9-27-19	0935	-30	-5.5	10584	~~B~~ 11019	✓														
B31-IA-02		1024		1024	-26	-2	09649	10554															
B35-IA-01		0931		0931	-30	-6.5	09955	10040															
B37-IA-01		0959		0957	-28	-5	09550	11681															
B37-IA-02		1009		0900	-27	-5	10160	09934															
B37-IA-03		1013		1019	-30	-6	09655	1450															
FD092719					-27	-4	09846	09976			B35-IA-01												FD
									↓														

Temperature (Fahrenheit)		
	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)		
	Interior	Ambient
Start		
Stop		

Received @ ambient, 3 Fedex to trk# 4276 0721 2994, No Custody seal
" " 2263 KW 9/28/19

Special Instructions/QC Requirements & Comments: CAT B DELIV.
TA PM: JAMIE MCKINNEY AECOM CONTACT: ANN MARIE KROPOVITCH (CONTACT PRIOR TO RUNNING DILUTIONS @ 716-923-1137)

Samples Shipped by:	Date / Time: 9-27-19 1150	Samples Received by:	
Samples Relinquished by: Chuck Dusel	Date / Time: 09/27/19 1700	Received by: 9/28/19 ETA 0940	1T, 14cc 14 flow, 14 can
Relinquished by:	Date / Time: 9-27-19 1150	Received by:	
Lab Use Only: Shipper Name:	Opened by:	Condition:	

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Phone 865-291-3000
Fax 865-584-4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information: DAN MCDADE	Client Project Manager: CHUCK DOLCE	Samples Collected By: D. McDADE
Company Name: AECOM	Phone: 716-923-1211	COC No: ____ of ____ COCs
Address: 257 W. GENESEE ST, STE 400	Email:	
City/State/Zip: BUFFALO, NY 14202		For Lab Use Only: Walk-in Client: Lab Sampling:
Phone: 716-856-5636	Site Contact: DAN MCDADE	
FAX:	Tel/Fax: 716-903-6500	Job / SDG No.:
Project Name: LAPP INSULATOR	Analysis Turnaround Time	(See below for Add'l Items)
Site/Location: LERON, NY	Standard (Specific):	
PO# 6091476A TASK 8	Rush (Specifiy):	

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum In Field, "Hg (Start)	Canister Vacuum In Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
PI-IA-01	9-26-19	1048	9-27-19	0948	-29	-5	09552	10309	✓														
PI-IA-02		1049		0945	-28	-5	09855	10216															
PB-IA-01		1053		1029	-29	-5	7917	09675															
PB-IA-03		1100		0847	-30	-1	10174	10925															
PB-IA-05		1132		1050	-30	-5.5	8780	10812															
OA-02		1136		0915	-28	-2.5	11937	10848															

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: CAT B DELIV.
TA PM: JAMIE MCKINNEY
AECOM CONTACT: ANN MARIE KROKOVITCH (CONTACT PRIOR TO RUNNING DILUTIONS @ 716-923-1137)

Samples Shipped by:	Date / Time: 9-27-19/1150	Samples Received by:
Samples Relinquished by: Matthew Cirko/D	Date / Time: 09/27/19 1700	Received by: FedEx ETA 9/28/19 0946
Relinquished by:	Date / Time: 9-27-19 1150	Received by:
Lab Use Only: Shipper Name:	Opened by:	Condition:

Form No. CA-C-WI-003, Rev. 2.13, dated 4/10/2019

Kropovitch, Ann Marie

From: Dusel, Chuck
Sent: Wednesday, October 16, 2019 10:32 AM
To: Gorton, Lisa A (DEC)
Cc: McDaid, Daniel; Kisluk, George; Kropovitch, Ann Marie; 'Harrington, David (DEC)'
Subject: FW: Lapp Insulator sample B35-IA-01 invalid

See email chain below.

From: Kropovitch, Ann Marie <ann.marie.kropovitch@aecom.com>
Sent: Wednesday, October 16, 2019 10:13 AM
To: Dusel, Chuck <chuck.dusel@aecom.com>
Cc: Kisluk, George <george.kisluk@aecom.com>
Subject: FW: Lapp Insulator sample B35-IA-01 invalid

Hi All,

To summarize the results for sample B35-IA-01 should be considered invalid. Please see labs explanation below.

Thanks,
Ann Marie

From: McKinney, Jamie <Jamie.McKinney@testamericainc.com>
Sent: Wednesday, October 16, 2019 9:41 AM
To: Kropovitch, Ann Marie <ann.marie.kropovitch@aecom.com>
Subject: RE: Question of WO#140-16796-1 Lapp Insulator

Hi Ann Marie,
All the calculations were reviewed and were correct.
The historical information on the use of canister 10040 which was used on sample 140-16796-3 was reviewed. The canister was confirmed to have been batch certified in canister cleaning job 140-16453. Prior to that the canister was returned unused with job 140-16424 without any flow controller association. As part of the investigation, the summa canister valve was removed and the canister was rinsed with methanol. The resulting rinsate showed some particulates in the canister. The particulates are suspected of causing false positives in the reported sample results. The laboratory believes that the canister returned as unused from the previous job was actually used without a flow controller and particulate filter which caused the presence of debris in the canister. Canister 10040 has been segregated for additional testing. The reported results for sample 140-16796-3 should be considered invalid.
Please let me know if you have other questions.
Jamie

Jamie McKinney

Phone: 865-291-3051

E-mail: jamie.mckinney@testamericainc.com

From: Kropovitch, Ann Marie [mailto:ann.marie.kropovitch@aecom.com]
Sent: Friday, October 11, 2019 4:22 PM
To: McKinney, Jamie

Cc: Lange, Diane
Subject: RE: Question of WO#140-16796-1 Lapp Insulator

-External Email-

Hi Jaime, Diane,

Can you please have the lab look at samples 140-16796-3 and 140-16796-7 and recheck the calcs, ect.... These samples are dups of each other and the results are really different. One of the things that is odd is that we have a high concentration of PCE in sample -3 (amongst other compounds). I checked the old air results in our database for that sample point and it has never even been close to being that high for PCE and the other compounds. Of course the FD is a lot lower or even non-detect for the same compounds.

Thanks,
Ann Marie

Ann Marie Kropovitch
Environmental Chemist, Environment Upstate NY
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aecom.com

Built to deliver a better world

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Job Narrative
140-16796-1

Comments
No additional comments.

Receipt
The samples were received on 9/28/2019 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA
Method(s) TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by Eurofins TestAmerica Knoxville.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-33985 exhibited % difference of > 30% for the following analyte(s) 1,2-Dichlorobenzene and Benzyl chloride; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method(s) TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-33985: 1,2-Dichlorobenzene and Benzyl chloride. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) TO 15 LL: The method blank for analytical batch 140-33985 contained Methylene Chloride above the reporting limit (RL). This compound is considered a common laboratory contaminant. The associated sample(s) were not re-analyzed because the concentration of the common lab contaminant in the method blank was less than 5 times the RL. Only samples B31-IA-01 (140-16796-1) and B31-IA-02 (140-16796-2) were affected. The result was "B" qualified.

Method(s) TO 15 LL: The method blank for analytical batch 140-33986 contained Methylene Chloride above the reporting limit (RL). This compound is considered a common laboratory contaminant. The associated sample(s) were not re-analyzed because the concentration of the common lab contaminant in the method blank was less than 5 times the RL. Samples B35-IA-01 (140-16796-3), B37-IA-01 (140-16796-4), B37-IA-02 (140-16796-5), B37-IA-03 (140-16796-6), FD 092719 (140-16796-7), P1-IA-01 (140-16796-8), P1-IA-02 (140-16796-9), PB-IA-01 (140-16796-10), PB-IA-03 (140-16796-11), PB-IA-05 (140-16796-12) and OA-02 (140-16796-13) were affected. The result was "B" qualified

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1 Analy Batch No.: 33257

SDG No.:

Instrument ID: MR GC Column: RTX-5 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	+++++ 3.3282	3.3774 3.3203	3.0491 3.2570	3.3050 3.1386	3.4667 3.0258	Ave		3.2520				4.6		30.0			
Acrolein	+++++ 0.3645	+++++ 0.3873	+++++ 0.4333	+++++ 0.3449	0.4416 0.3410	Ave		0.3855				11.3		30.0			
Acetonitrile	+++++ 0.6425	+++++ 0.6542	+++++ 0.6025	0.4649 0.5769	0.5491 0.5355	Ave		0.5751				11.4		30.0			
Acetone	+++++ 0.6576	+++++ 0.6345	+++++ 0.5939	+++++ 0.5462	0.8838 0.5119	Ave		0.6380				20.7		30.0			
Pentane	+++++ 0.2223	+++++ 0.2394	+++++ 0.2318	0.2204 0.2239	0.2420 0.2223	Ave		0.2289				3.9		30.0			
Isopropyl alcohol	2.0445 1.8052	1.9846 1.9795	1.9329 1.7719	1.8817 1.7209	1.8939 1.6692	Ave		1.8684				6.6		30.0			
Ethyl ether	+++++ 1.5177	+++++ 1.6254	1.6032 1.5133	1.7440 1.4199	1.6884 1.3733	Ave		1.5607				8.2		30.0			
1,1-Dichloroethene	+++++ 1.2768	1.3859 1.2885	1.2342 1.3283	1.3969 1.2458	1.3854 1.1635	Ave		1.3006				6.2		30.0			
Acrylonitrile	+++++ 0.9656	+++++ 1.0127	+++++ 0.9799	0.9002 0.9252	1.0388 0.8895	Ave		0.9589				5.9		30.0			
t-Butyl alcohol	+++++ 2.2589	+++++ 2.4248	2.6173 2.2857	2.3278 2.1550	2.3602 2.1201	Ave		2.3187				6.8		30.0			
1,1,2-Trichlorotrifluoroethane	+++++ 2.6175	+++++ 2.7892	2.7427 2.6846	3.0147 2.6294	2.9235 2.5912	Ave		2.7491				5.6		30.0			
Methylene Chloride	+++++ 1.3354	+++++ 1.2126	+++++ 1.1602	2.6564 1.1104	1.7848 +++++	Ave		1.5433				38.7	*	30.0			
3-Chloropropene	+++++ 1.2873	+++++ 1.3056	1.3978 1.1673	1.3442 1.1350	1.4259 1.1393	Ave		1.2753				9.1		30.0			
Carbon disulfide	+++++ 3.4529	+++++ 3.5063	3.4533 3.4547	3.3067 3.3496	3.6966 3.1287	Ave		3.4186				4.8		30.0			
trans-1,2-Dichloroethene	+++++ 1.3377	1.4290 1.4552	1.3966 1.4046	1.4119 1.3783	1.4326 1.3593	Ave		1.4006				2.7		30.0			
2-Methylpentane	+++++ 3.2013	3.5636 3.4610	3.3036 3.3080	3.3865 2.9713	3.5514 3.0086	Ave		3.3061				6.5		30.0			
Methyl tert-butyl ether	+++++ 3.3757	+++++ 3.4980	3.2509 3.4526	3.3858 3.2852	3.6039 3.1045	Ave		3.3696				4.6		30.0			
1,1-Dichloroethane	+++++ 2.3751	2.5086 2.4366	2.3878 2.3574	2.6268 2.2552	2.5766 2.1291	Ave		2.4059				6.4		30.0			
Vinyl acetate	+++++ 3.8272	+++++ 4.0947	3.6725 3.8070	3.4480 3.7636	3.9587 3.7530	Ave		3.7906				5.0		30.0			
2-Butanone	+++++ 0.6406	+++++ 0.6920	+++++ 0.6145	0.8285 0.6299	0.6904 0.6279	Ave		0.6748				11.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Lab File ID: R500BI30.D Lab Sample ID: MB 140-33985/12

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 09/30/2019 17:31

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-33985/1009	RCCVI30C-LCS.d	09/30/2019 15:07
B31-IA-01	140-16796-1	RI30P101.D	09/30/2019 19:14
B31-IA-02	140-16796-2	RI30P102.D	09/30/2019 20:09

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1
SDG No.:
Client Sample ID: Lab Sample ID: MB 140-33985/12
Matrix: Air Lab File ID: R500BI30.D
Analysis Method: TO 15 LL Date Collected:
Sample wt/vol: 500(mL) Date Analyzed: 09/30/2019 17:31
Soil Aliquot Vol: Dilution Factor: 1
Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)
% Moisture: Level: (low/med) Low
Analysis Batch No.: 33985 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.852		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Lab File ID: J01L16810X.D Lab Sample ID: MB 140-33986/6

Matrix: Air Heated Purge:(Y/N) N

Instrument ID: MR Date Analyzed: 10/01/2019 11:50

GC Column: RTX-5 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-33986/1002	RCCVJ01-LCS.d	10/01/2019 09:24
B35-IA-01	140-16796-3	RJ019P103.D	10/01/2019 14:51
B37-IA-01	140-16796-4	RJ019P104.D	10/01/2019 15:46
B37-IA-02	140-16796-5	RJ019P105.D	10/01/2019 16:41
B37-IA-03	140-16796-6	RJ019P106.D	10/01/2019 17:37
FD 092719	140-16796-7	RJ019P107.D	10/01/2019 18:34
P1-IA-01	140-16796-8	RJ019P108.D	10/01/2019 19:30
P1-IA-02	140-16796-9	RJ019P109.D	10/01/2019 20:27
PB-IA-03	140-16796-11	RJ019P111.D	10/01/2019 22:14
PB-IA-05	140-16796-12	RJ019P112.D	10/01/2019 23:09
OA-02	140-16796-13	RJ019P113.D	10/02/2019 00:06
PB-IA-01	140-16796-10	RJ019P110R.D	10/02/2019 08:48

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16796-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 140-33986/6

Matrix: Air Lab File ID: J01L16810X.D

Analysis Method: TO 15 LL Date Collected:

Sample wt/vol: 500(mL) Date Analyzed: 10/01/2019 11:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-5 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 33986 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.701		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140