

June 4, 2024

SUBMITTED VIA ELECTRONIC MAIL

Glenn May
New York State Department of Environmental Conservation
Region 9
700 Delaware Avenue
Buffalo, NY 14209
glenn.may@dec.ny.gov

**RE: Soil Vapor Intrusion Investigation Summary Report
Former Chemical Leaman Tank Lines Site, Tonawanda, New York
NYSDEC Site No. 915014**

Dear Mr. May,

On behalf of Quality Carriers, Inc. (QCI), AECOM Technical Services, Inc. (AECOM) herein submits this summary report of the Soil Vapor Intrusion (SVI) investigation and data collected at former Chemical Leaman Tank Lines Site located at 470 Fillmore Avenue, Tonawanda, New York (**Figure 1**). The SVI work was performed within the existing on-Site single-story commercial building, currently occupied by Dr. Trailer Repair Inc. (Dr. Trailer), a maintenance and service garage for commercial trucks, diesel, trailer and tractor trailers.

BACKGROUND

From March to June 2015, AECOM completed the remediation of operable units (OU) 1 through 3 (**Figure 1**) in accordance with the New York State Department of Environmental Conservation (NYSDEC) approved Phase II Remedial Design/Remedial Action Work Plan prepared by AECOM in December 2012. The soil and groundwater contamination encountered in all three OUs included volatile organic compounds (VOCs), which were downgradient of the Site building. Details of the remedial action were described in the Draft Final Engineering Report submitted to NYSDEC in April 2016. A Draft Site Management Plan (SMP) was also submitted to NYSDEC in January 2016.

2018 SVI Investigation - In April 2018, AECOM completed an SVI investigation in the Site office building, which consisted of the collection and analysis of two sub-slab vapor samples, two indoor air samples, one duplicate indoor air sample, and one outdoor air sample. Sampling results were compared to the New York State Department of Health (NYSDOH) Soil Vapor/Indoor Air Decision Matrices, which yielded an action of "Identify Source(s) and Resample or Mitigate" due to concentrations of tetrachloroethene (PCE) in sub-slab vapor and indoor air samples (**Table 1**). AECOM submitted the SVI Investigation Summary Report to the NYSDEC on June 14, 2018, with recommendations for further SVI investigation to verify results.

2022 SVI Investigation - AECOM submitted a new SVI Investigation Work Plan to NYSDEC on November 2, 2021, which was approved on January 5, 2022. In March 2022, AECOM performed resampling of the SVI sampling points completed in 2018. A chemical inventory survey was performed for the entire service bay area and other rooms in the truck/trailer service building including the workers' locker room, a paint storage room with a cabinet for flammable materials, and parts storage room. Total VOC screening of the truck/trailer service building indoor air was also performed to identify potential sources of VOCs located in the truck/trailer service building that might impact indoor air sample results from the samples collected in the office building. Numerous containers were identified as containing VOCs, including two types of containers containing chlorinated solvents:

- A total of 16 538-gram containers of brake cleaning fluid containing PCE; and,

- One 11-ounce container of starter fluid containing various VOCs, including chloroethane.

Additional measures to minimize possible indoor air sources of PCE included the following:

- 1) Any items identified during the service building inventory as containing any of the target compounds were removed from the building one day prior to sampling.
- 2) To minimize air flow between the truck/trailer service area and the office area, sampling was performed during non-business hours on a Saturday so that doors between the office building and service building remained closed during the sampling period. As an added precaution, door jams between the office building and service building were sealed to prevent any possible air movement through possibly loosely sealed door jams.
- 3) Because the sampling was performed on a weekend, the truck/trailer bay overhead doors were not able to be left open during sampling.

One potential source, the parts washing station, exhibited elevated photoionization detector (PID) readings of 63.7 parts per million (ppm) total VOCs. The Crystal Clean parts washing station consists of a washing basin for metal parts, that sits atop a 30-gallon drum and is equipped with a cleaning fluid nozzle and recirculating pump. The parts washing station is maintained by Heritage-Crystal Clean, Inc® – a company that provides and maintains solvent parts washers. The service also includes removal and management of the used mineral spirits. Cleaning fluids used in the parts washing station are mineral spirits based and may contain small percentages of VOCs such as 1,2,4-trimethylbenzene, toluene, and ethylbenzene. The parts washing station was not able to be removed from the truck/trailer service area during indoor air sampling.

Although additional steps were taken to identify and isolate possible sources of PCE in indoor air, the March 2022 sampling results were similar to the April 2018 results (**Table 1**). The 2022 sampling results yielded an action of “Identify Source(s) and Resample or Mitigate” due to concentrations of PCE in sub-slab vapor and indoor air samples. The indoor air PCE results were slightly higher in March 2022 than in April 2018, while the sub-slab PCE results were slightly lower in 2022 than in 2018. For both sampling locations collected in March 2022, indoor air PCE concentrations were higher than the sub-slab vapor PCE concentrations detected in their corresponding samples.

The March 2022 sampling results also indicated elevated concentrations of cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride (VC), which are both degradation products of PCE, in both sub-slab vapor and indoor air samples; these degradation compounds were not detected in April 2018. Although the reported results were very low and near the reporting limits, the 2022 sampling results yielded an action of “Identify Source(s) and Resample or Mitigate” due to the presence of VC.

The presence of PCE-containing brake cleaning solvent in the parts washing station could be a potential interfering source of chlorinated solvents identified in indoor air within the site building. Review of a waste shipping label for the spent solvent drum, obtained after the SVI sampling activities, indicated three hazardous waste codes: D001 (ignitable), D039 (PCE), and D040 (TCE).

According to the NYSDOH Decision Matrices, an action of mitigation for PCE and VC in indoor air would be recommended. However, due to the possibility of the parts washing station as a potential source of PCE, and since the sub-slab vapor PCE concentrations were lower than the indoor air PCE concentrations, it was unclear if the sampling results were indicative of a vapor intrusion pathway. As such, AECOM recommended further assessment and removal of the potential interfering source of chlorinated solvents prior to resampling. Recommended actions included the following:

- An evaluation of the ventilation system and air flow patterns between the truck/trailer service bay area and the office building using smoke emitting devices.
- Screening of indoor air quality in the immediate vicinity of the parts washing station to evaluate the station as a possible source of PCE that may impact indoor air sampling results in the office building.
- Removal of any possible indoor interfering sources for temporary storage in another location.

- Maximizing fresh air ventilation within the service area by opening the service bay garage doors prior to sample collection. This will minimize possible contaminant migration from the service garage area into the office area.

In February 2024, AECOM submitted a work plan to perform additional SVI investigation following the above recommendations. NYSDEC approved the SVI investigation work plan on February 22, 2024.

2024 SVI INVESTIGATION ACTIVITIES

Pre-Sampling Survey

A pre-sampling survey was performed on Friday, March 8, 2024, in accordance with the NYSDEC Structure Sampling Questionnaire and Building Inventory form. The pre-sampling survey included use of a PID capable of detecting parts per billion by volume (ppbv) levels to identify the presence of potential indoor VOC sources prior to collection of indoor air samples. This ensured that potential indoor sources were documented and removed prior to the collection of indoor air samples. AECOM personnel also conducted an inventory of chemicals found in each building. The completed NYSDEC Structure Sampling Questionnaire and Building Inventory forms are provided in **Attachment 2**.

The pre-sampling survey results indicated that the commercial building, which is made of brick, block foundation walls and includes unsealed concrete floors, is not airtight. Some cracks were observed in the floor slab in a storage room. The northern section of the building consists of several small offices, bathrooms, storage areas, a locker room, a utility room, a lounge and a lobby. The southern section of the building consists of a large truck bay service and repair area with nine (9) bay doors along the west wall, a service pit at the center of the floor, and four (4) bay doors along the east wall. Several trucks, repair equipment, chemical drums and lubricants/oils were present throughout the truck bay area. The parts washing station was present along the north wall of the truck bay area near the entrance to the office area. It should be noted that the tenant indicated that the parts washing station had been replaced earlier in the week with a new type of “environmentally friendly hot water” system. The parts washing solution is identified on the label as “ArmaKleen™ M-HP2 Solution”, and the following product contents are listed: water, carbonic acid, dipotassium salt, sodium xylene sulfonate, hexanoic acid, 3,5,5-trimethyl-, Alcohols, C6-10, ethoxylated propoxylated. It appeared that the previous parts washing station had been moved to truck bay #9 at the far south end of the service area.

One (1) indoor air sample was collected on Thursday, March 7, 2024, in the truck bay area near the current parts washing station (CL-IA-3) to assess the indoor air quality prior to removing potential indoor air interferences.

The pre-sampling survey also identified numerous chemicals, lubricants, oils and solvents, associated with the regular operation of the existing commercial business. The majority of products and pieces of equipment exhibited PID readings at or around background levels (100-300 ppb); whereas some products exhibited elevated PID readings, ranging from 450 ppb (e.g., lubricating oil) to 815,000 ppb (e.g., organic solvents). The product inventory forms are provided in **Attachment 2**.

Additional steps to identify possible PCE sources for the office indoor air were completed on Friday, March 8, 2024. Any areas that indicated the presence of elevated VOCs using the PID were further screened for PCE using compound-specific Dräger tubes at the 1 to 300 parts per million (ppm) range. The areas with identified levels of PCE using the Dräger tubes included a soiled rag bin in locker room #2 (1.5 ppm), a chemical storage cabinet in storage room #3 (2 ppm), the old parts washing station at Bay #9 (1 ppm), and a surface cleaner in office #6 (1 ppm). Any sources exhibiting any detections of PCE, as well as the parts washing station and any chemicals containing “chloro” compounds, were removed from the Site Building. The field notes of the PCE screening are provided in **Attachment 2**.

Airflow patterns between the service bay area and the office area were also evaluated on March 8, 2024, using smoke emitting devices to evaluate air movement through openings and/or vents between the areas. This information was used to evaluate the possibility of ongoing PCE impacts

from the service area into the office area. The smoke test results indicated that, at the time of measuring, air was flowing from the truck bay area underneath the doors and into the lobby, office #5 and locker room #1; whereas the air from the east hallway and locker room #2 was flowing into the truck bay area. In general, air was observed to be flowing from the outdoors into the office building. Refer to **Figure 2** for a schematic of the observed air flow patterns.

The results of the pre-sampling survey were provided to the property owner, QCI, and a request was made to the tenant, Dr. Trailer, to remove any possible indoor interfering sources, including the parts washing station, for temporary storage in another location. A request was also made to temporarily remove any vehicles located in the service bays to the extent possible.

The service bay garage doors were opened for at least one hour a day prior to the collection of indoor air samples, to maximize fresh air ventilation within the service area. The garage doors were closed during sampling collection. Bay doors #1, 2, 3 and 7 were open throughout the day on Thursday, March 7, 2024.

Weather conditions (i.e., precipitation, outdoor temperature, barometric pressure, wind speed and direction) were noted for the 24-hour period prior to sampling. Weather condition data from the Niagara Falls International Airport Station for Saturday, March 9, 2024, at 7AM to Sunday, March 10, 2024 at 7AM was downloaded from the following web site: <https://www.wunderground.com/>. Note that only partial data were available for March 10, 2024, between approximately 12AM and 4AM. Pertinent field observations (i.e., odors or readings from field instrumentation, personal materials or other items of concern in the area of the sample [e.g., work bench, aerosols, etc.]) were also noted during sampling. During the 24-hour period prior to sampling, the temperature decreased from 52°F to 40°F (average 45.7°F); humidity fluctuated between 68 and 90% (average 81.4%); wind direction was generally from the south and west with speeds decreasing from 23 to 7 miles per hour (mph) (average 14.4 mph); pressure steadily dropped from 29.1 to 28.94 inches (in) (average 29.0 in); no precipitation had accumulated; and, the weather conditions were cloudy with light rain.

Utility Clearance

Ground Penetrating Radar Systems LLC (GPRS) conducted a geophysical borehole clearance survey on Thursday, March 7, 2024, to identify subsurface utilities prior to the soil vapor pin drilling activities. GPRS utilized a Ground Penetrating Radar (GPR) unit coupled with a 250-megahertz (MHz) antenna and a Radio Detection RD8200 Electromagnetic Induction (EMI) instrument over the proposed vapor pin locations and marked out utilities directly on the building floor. GPRS documented their survey activities in a written report. Copies of utility clearance documents are provided in **Attachment 3**.

Sub-Slab Vapor Sampling Points

Drilling of the sub-slab vapor pins was performed by AECOM staff using a handheld hammer drill on Thursday, March 7, 2024. Two (2) vapor pins were installed (CL-SSV-1 and CL-SSV-2).

Each sub-slab vapor sampling location was initially drilled using a 1.5-inch drill bit to a depth of 1.75 inches. Using a drill guide that was inserted into this hole, a 5/8-inch hole was drilled through the remaining slab and extended several inches into the underlying material. Upon removing the drill bit, the hole was immediately blocked, and the spoils were examined for wetness. All debris was removed using a vacuum cleaner with a HEPA filter to prevent it from re-entering the hole after unblocking. A Vapor Pin™ was then hammered into place in the hole. Sub-slab vapor samples were collected through a 1/8-inch inside diameter by 1/4-inch outside diameter pure Teflon tubing which was connected to the Vapor Pin™ using a short piece of silicone tubing.

Prior to sample collection, each sub-slab vapor sampling location was leak tested using a helium tracer gas to evaluate if indoor (ambient) air was short circuiting into the sample collection tubing. To perform the leak test, a plastic enclosure sealed at the ground surface with a foam gasket was placed over the sealed sub-slab sample location. The sample tubing was run through a hole sealed with Sculpey® brand modeling clay in the enclosure. A tank containing ultra-high purity helium [99.999 percent (%)] was connected to the side port of the enclosure, and enough helium was released to displace any ambient air and to maintain a positive pressure within the enclosure. Following the application of the tracer gas, one liter of soil vapor was purged using a Gillian GilAir-3

air sample pump at a rate of approximately 0.2 L/min and collected into a 1-liter Tedlar bag. The contents of the Tedlar bag were measured for helium using a Radio detection/Dielectric MGD-2002 Multi-gas Detector and for VOCs with a ppbRae. If the helium concentration was less than 10%, the enclosure was removed, and the tubing was connected to the Summa® canister via the flow controller and sampling commenced. Following sample collection, the tubing was removed, a rubber cap was placed on the Vapor Pin™, and a flush-mount stainless steel threaded cap was installed. Leak testing equipment was calibrated and provided by Pine Environmental Services LLC (Pine) of Rochester, NY.

Leak testing logs are part of the Summa Canister Sampling Field Data Sheets provided in **Attachment 4**.

SVI Sample Collection and Analysis

SVI samples were collected during the heating season on Sunday, March 10, 2024, in accordance with the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, dated October 2006, and updates through May 2017) and the SVI Work Plan (AECOM, dated February 21, 2024).

The following SVI sampling program was completed, as shown on **Figure 2**, to evaluate the soil vapor intrusion pathway at the Site:

- One (1) indoor air sample was collected adjacent to the parts washing station in the truck bay portion of the Site buildings (CL-IA-3) prior to the removal of the parts washing station on March 7.
- One (1) indoor air sample (CL-IA-3) was collected adjacent to the parts washing station location following removal from the building and concurrently with the other indoor air and sub-slab samples on March 10.
- Two (2) sub-slab soil vapor samples were collected beneath the office portion of the Site building (CL-SSV-1 and CL-SSV-2).
- Two (2) co-located indoor air samples were collected in the office portion of the Site buildings (CL-IA-1 and CL-IA-2).
- One (1) outdoor air sample was collected from an area located upwind of the Site building. The outdoor air sample was taken at the parking lot west of the Site Building.
- One (1) field duplicate indoor air sample was collected to assess the precision of the sample collection process.

Photographs of the SVI field activities are provided in **Attachment 1**.

At each location, sample collection was performed using a 6.0-liter stainless steel, laboratory-provided Summa® canister equipped with an 8-hour regulator. Indoor and outdoor air samples were collected at breathing zone height (approximately 4' above ground). For the sub slab vapor samples, the inlet end of the canister was connected to the sub slab vapor pin using a small piece of silicone tubing. Upon opening the canister valve, the initial vacuum pressure reading on the flow controller was recorded. Once the soil vapor or air sample was collected, the final vacuum pressure reading was recorded to ensure residual vacuum remained in the canister.

Soil vapor and air sampling forms are provided in **Attachment 4**.

The SVI samples were dropped off at Pace Analytical Laboratory (Pace) in Tonawanda, NY. Pace couriered the samples under proper chain-of-custody protocol to the Pace laboratory located in East Longmeadow, MA, a NYSDOH ELAP-certified laboratory. Vapor and air samples were analyzed for VOCs using modified United States Environmental Protection Agency (USEPA) Method TO-15.

ANALYTICAL RESULTS SUMMARY

Upon receipt from the laboratory, the analytical results were validated by an AECOM chemist in accordance with NYSDEC DER-10 and USEPA Region II data validation procedures. A copy of the

Data Usability Summary Report (DUSR) is provided in **Attachment 5**. The validated analytical results are summarized in **Table 1**. The full laboratory results are provided in **Attachment 6**. The soil vapor and indoor air analytical results are compared to the screening levels in the May 2017 NYSDOH update, as provided in **Attachment 7**.

Several VOC parameters were detected in indoor air and sub-slab vapor during the March 2024 SVI sampling event. Comparison of sampling results at locations CL-SSV-1/CL-IA-1 to the NYSDOH Soil Vapor/Indoor Air Matrices recommend “no further action” for all compounds. Comparison of sampling results at locations CL-SSV-2/CL-IA-2 to the NYSDOH Soil Vapor/Indoor Air Matrices yielded a recommended result of “no further action” for all compounds except PCE. Based on the PCE concentrations in samples CL-SSV-2/CL-IA-2, a recommended action of “Monitor” is indicated. PCE was detected in sub-slab vapor at 150 µg/m³ and indoor air at 5.0 µg/m³, which may indicate a potential subsurface source. However, the indoor air value is similar to that identified at both CL-IA-1 (7.9 ug/m³) and CL-IA-3 (near the parts washing station) after the indoor interfering sources were removed (7.4 µg/m³), which may also indicate continued indoor air interference.

Results also indicate that the parts washing station and other activities associated with the maintenance and service garage at the south portion of the building contribute to elevated indoor air concentrations of target compounds. Along with elevated PCE concentrations in indoor air at CL-IA-3 (near the parts washing station) before the indoor interfering sources were removed, several other VOC parameters were also detected in indoor air; but concentrations had reduced significantly once the parts washing station and other identified interfering sources were removed.

FINDINGS

A SVI evaluation was completed in April 2018, March 2022 and March 2024, which included the collection of two (2) sub-slab soil vapor samples, two (2) co-located indoor air samples, one (1) field duplicate air sample and one (1) outdoor air sample during each event, for VOCs analysis using modified USEPA Method TO-15. Two (2) additional indoor air samples were collected in March 2024 to evaluate the parts washing station as a potential indoor air contamination source.

Several VOC parameters were detected in indoor air and sub-slab vapor during the March 2024 SVI sampling event. All parameters detected in indoor air within the northern section of the building had concentrations at levels that did not warrant further action, except for PCE concentrations at CL-SSV-2/CL-IA-2 (office #3), which may warrant additional monitoring.


The indoor air sampling results observed at CL-IA-3 (near the parts washing station), indicate that the activities associated with the maintenance and service garage at the south portion of the building contribute to the presence of PCE in indoor air, particularly since air flows from the garage into the lobby, office #5 and locker room #1. Although all identified sources of PCE were removed prior to sampling, results strongly indicate that PCE use in the truck service area impacts indoor air quality.

RECOMMENDATIONS

Indoor air quality within office #3 in the north portion of the building may be impacted by subsurface contamination and/or the indoor interfering sources associated with the maintenance and service garage. Alteration to the ventilation system and/or product usage and handling in the facility are recommended, to prevent air flowing from the garage into the northern section of the building, followed by indoor air sampling to ensure that air quality has improved within the office area. In addition, QCI will advise the current building tenant to begin use of a non-PCE solvent.

Please feel free to contact me if you have any questions regarding this submittal.

Sincerely yours,



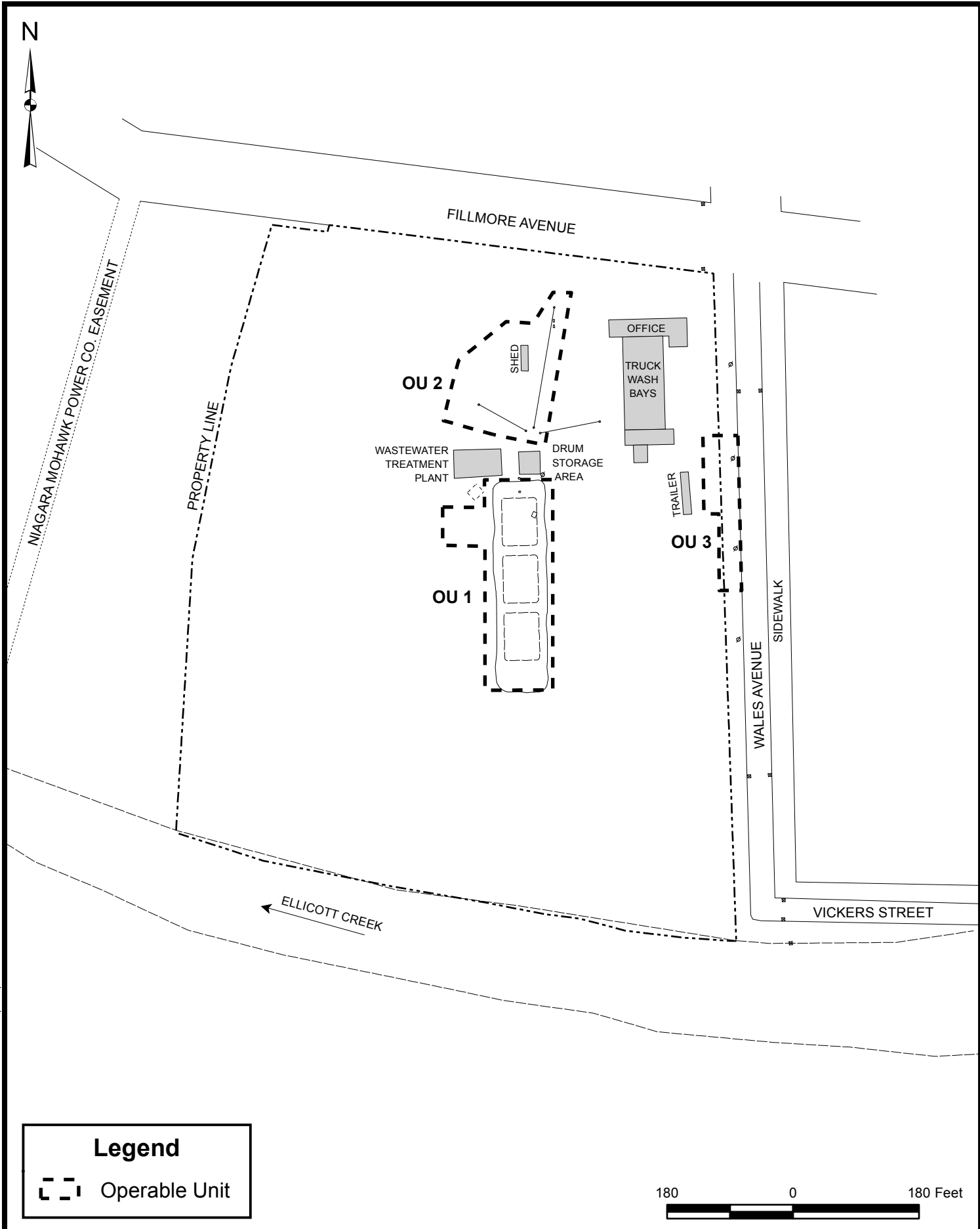
Colin Wasteneys, PG
Project Manager
716-225-4396
colin.wasteneys@aecom.com

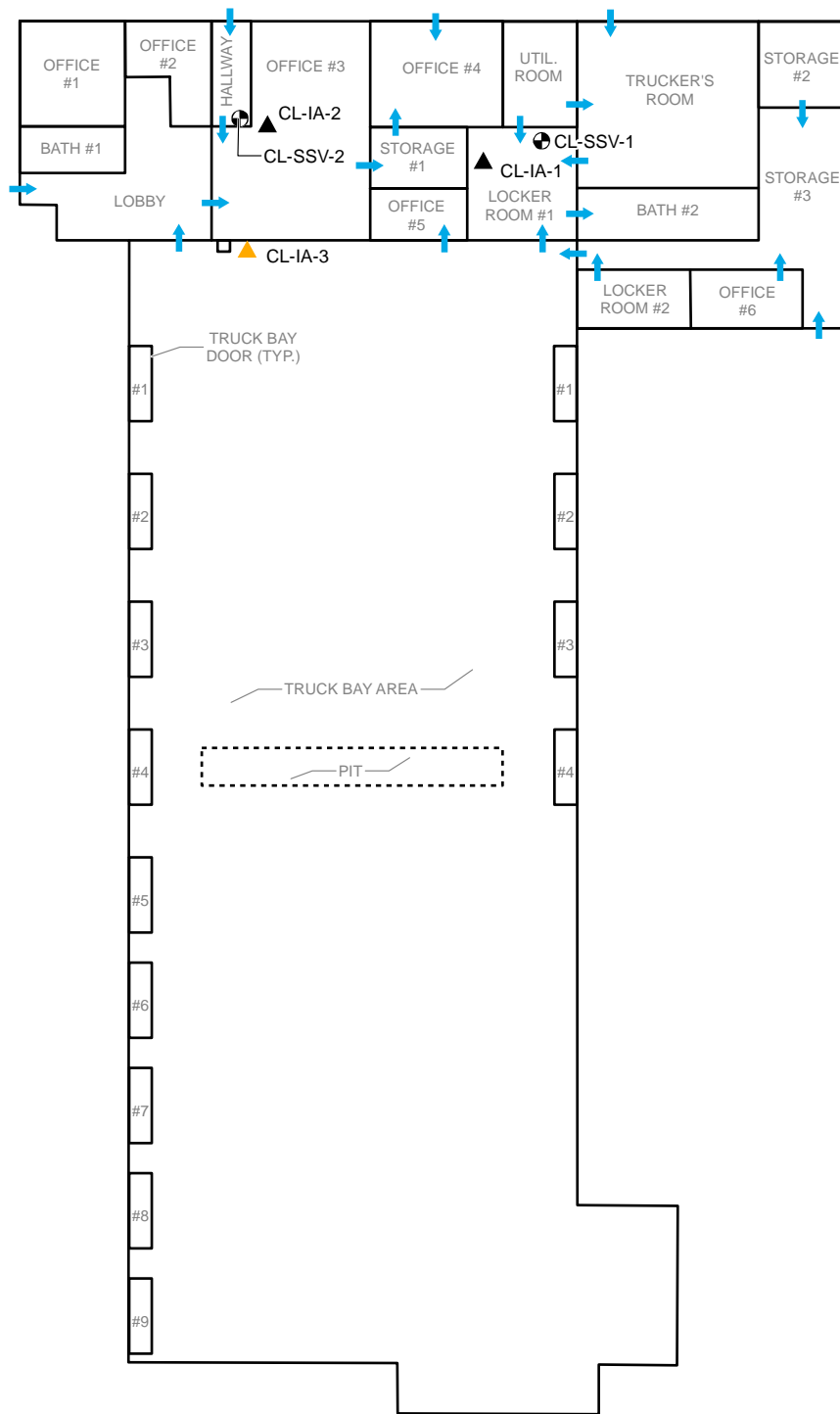
Attachments:

- Figure 1 – Site Plan
- Figure 2 – Soil Vapor Intrusion Sampling Locations
- Table 1 – Summary of Analytical Results
- Attachment 1 – Photograph Log
- Attachment 2 – NYSDEC Structure Sampling Questionnaire, Building Inventory Form, and Field Notes
- Attachment 3 – Underground Utility Clearance Report
- Attachment 4 – SVI Sampling Logs
- Attachment 5 – Data Usability Summary Report
- Attachment 6 – Analytical Data Report
- Attachment 7 – May 2017 NYSDOH Soil Vapor/Indoor Air Decision Matrices






cc: Project File 60722348

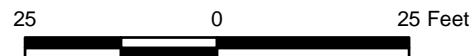
Figures





Legend

-  Direction of Air Flow (March 8, 2024)
-  Indoor Air Sample Location (2024)
-  Indoor Air Sample Location (2018, 2022, 2024)
-  Outdoor Air Sample Location (2018, 2022, 2024)
-  Sub-Slab Vapor Sample Location (2018, 2022, 2024)



Table

Table 1
Summary of Analytical Results (2018 - 2024)
Soil Vapor Intrusion Investigation
Former Chemical Leaman Tank Lines Site
Tonawanda, New York

April 2018											
NYSDOH Soil Vapor/Indoor Air Decision Matrix			Compounds	CL-SSV-1	CL-IA-1	NYSDOH Soil Vapor/Indoor Air Decision Matrix Action	CL-SSV-2	CL-IA-2	CL-IA-2	NYSDOH Soil Vapor/Indoor Air Decision Matrix Action	CL-OA-1
				4/10/2018	4/10/2018		4/10/2018	4/10/2018	4/10/2018		4/10/2018
Matrices	Sub-Slab Criteria	Indoor Air Criteria		Sub-Slab Vapor	Indoor Air		Sub-Slab Vapor	Indoor Air	Duplicate Indoor Air		Outdoor Air
Matrix A	<6 to >60	<0.2 to >1	Carbon tetrachloride	ND (1.3)	0.73	No further action	ND (4.0)	0.66	0.76 J	No further action	0.56
			1,1-Dichloroethene	ND (0.99)	ND (0.16)	No further action	ND (3.2)	ND (0.79)	ND (0.79)	No further action	ND (0.16)
			cis-1,2-Dichloroethene	ND (0.99)	ND (1.6)	No further action	ND (3.2)	0.51 J	0.59 J	No further action	ND (0.16)
			Trichloroethene	27	ND (1.9)	No further action	1.6 J	ND (0.97)	ND (0.97)	No further action	ND (0.19)
Matrix B	<100 to >1000	<3 to >10	Methylene chloride	ND (4.3)	6.5 J	No further action	ND (14)	3.6	5.1	No further action	1.6
			Tetrachloroethene	67	30	Identify source(s) and resample or mitigate	95	30	34	Identify source(s) and resample or mitigate	ND (0.54)
			1,1,1-Trichloroethane	ND (2.7)	ND (4.4)	No further action	ND (8.7)	ND (2.2)	ND (2.2)	No further action	ND (0.44)
Matrix C	<6 to >60	0.2	Vinyl chloride	ND (2.2)	ND (1.0)	No further action	ND (7.0)	ND (0.51)	ND (0.51)	No further action	ND (0.1)

March 2022											
NYSDOH Soil Vapor/Indoor Air Decision Matrix			Compounds	CL-SSV-1	CL-IA-1	NYSDOH Soil Vapor/Indoor Air Decision Matrix Action	CL-SSV-2	CL-IA-2	CL-IA-2	NYSDOH Soil Vapor/Indoor Air Decision Matrix Action	CL-OA-1
				3/26/2022	3/26/2022		3/26/2022	3/26/2022	3/26/2022		3/26/2022
Matrices	Sub-Slab Criteria	Indoor Air Criteria		Sub-Slab Vapor	Indoor Air		Sub-Slab Vapor	Indoor Air	Duplicate Indoor Air		Outdoor Air
Matrix A	<6 to >60	<0.2 to >1	Carbon tetrachloride	0.64	0.73	No further action	0.43 J	0.66	0.76 J	No further action	0.64
			1,1-Dichloroethene	ND (0.16)	ND (0.16)	No further action	ND (0.79)	ND (0.16)	ND (0.79)	No further action	ND (0.16)
			cis-1,2-Dichloroethene	1.1	0.94	No further action	0.37 J	0.52	0.61 J	No further action	ND (0.16)
			Trichloroethene	21	0.082 J	No further action	0.99	ND (0.19)	ND (0.97)	No further action	ND (0.19)
Matrix B	<100 to >1000	<3 to >10	Methylene chloride	1.5	1.9	No further action	ND (6.9)	2.9	ND (6.9)	No further action	1.3 J
			Tetrachloroethene	47	52	Identify source(s) and resample or mitigate	18	41	43	Identify source(s) and resample or mitigate	ND (0.54)
			1,1,1-Trichloroethane	0.28 J	ND (0.44)	No further action	ND (2.2)	ND (0.44)	ND (2.2)	No further action	ND (0.44)
Matrix C	<6 to >60	0.2	Vinyl chloride	0.86	0.41	Identify source(s) and resample or mitigate	1.5	0.23	ND (0.51)	Identify source(s) and resample or mitigate	ND (0.10)

March 2024													
NYSDOH Soil Vapor/Indoor Air Decision Matrix			Compounds	CL-SSV-1	CL-IA-1	NYSDOH Soil Vapor/Indoor Air Decision Matrix Action	CL-SSV-2	CL-IA-2	CL-IA-2	NYSDOH Soil Vapor/Indoor Air Decision Matrix Action	CL-OA-1	CL-IA-3	CL-IA-3
				3/10/2024	3/10/2024		3/10/2024	3/10/2024	3/10/2024		3/10/2024	3/10/2024	
Matrices	Sub-Slab Criteria	Indoor Air Criteria		Sub-Slab Vapor	Indoor Air		Sub-Slab Vapor	Indoor Air	Duplicate Indoor Air		Outdoor Air	Indoor Air	Indoor Air
Matrix A	<6 to >60	<0.2 to >1	Carbon tetrachloride	ND (0.5)	0.18 J	No further action	ND (0.5)	0.48	0.27	No further action	0.44	0.22	0.40
			1,1-Dichloroethene	ND (0.28)	ND (0.097)	No further action	ND (0.28)	ND (0.097)	ND (0.097)	No further action	ND (0.097)	ND (0.097)	ND (0.097)
			cis-1,2-Dichloroethene	ND (0.19)	0.094 J	No further action	ND (0.19)	ND (0.067)	ND (0.067)	No further action	ND (0.067)	0.20	0.097 J
			Trichloroethene	2.4	ND (0.14)	No further action	1.6	ND (0.14)	ND (0.14)	No further action	ND (0.14)	ND (0.14)	ND (0.14)
Matrix B	<100 to >1000	<3 to >10	Methylene chloride	ND (0.93)	0.45 J	No further action	ND (0.93)	0.35 J	0.41 J	No further action	0.34 J	0.41 J	0.39 J
			Tetrachloroethene	65	7.9	No further action	150	4.8	5	Monitor	ND (0.2)	24	7.4
			1,1,1-Trichloroethane	ND (0.17)	ND (0.059)	No further action	ND (0.17)	ND (0.059)	ND (0.059)	No further action	ND (0.059)	ND (0.059)	ND (0.059)
Matrix C	<6 to >60	0.2	Vinyl chloride	ND (0.13)	0.059 J	No further action	ND (0.13)	ND (0.045)	ND (0.045)	No further action	ND (0.045)	0.048 J	ND (0.045)

Notes:

Units - µg/m³ (micrograms per cubic meter)

ND (xxx) - Not Detected (reporting limit)

Bold - The combination of subslab vapor and indoor air concentrations triggers the NYSDOH recommended action in the column to the immediate right.

J - result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

NYSDOH May 2017 Soil Vapor/Indoor Air Matrices, accessed at: https://www.health.ny.gov/environmental/indoors/vapor_intrusion/docs/svi_decision_matrices_def.pdf

NYSDOH - New York State Department of Health

Attachment 1

Photograph Log

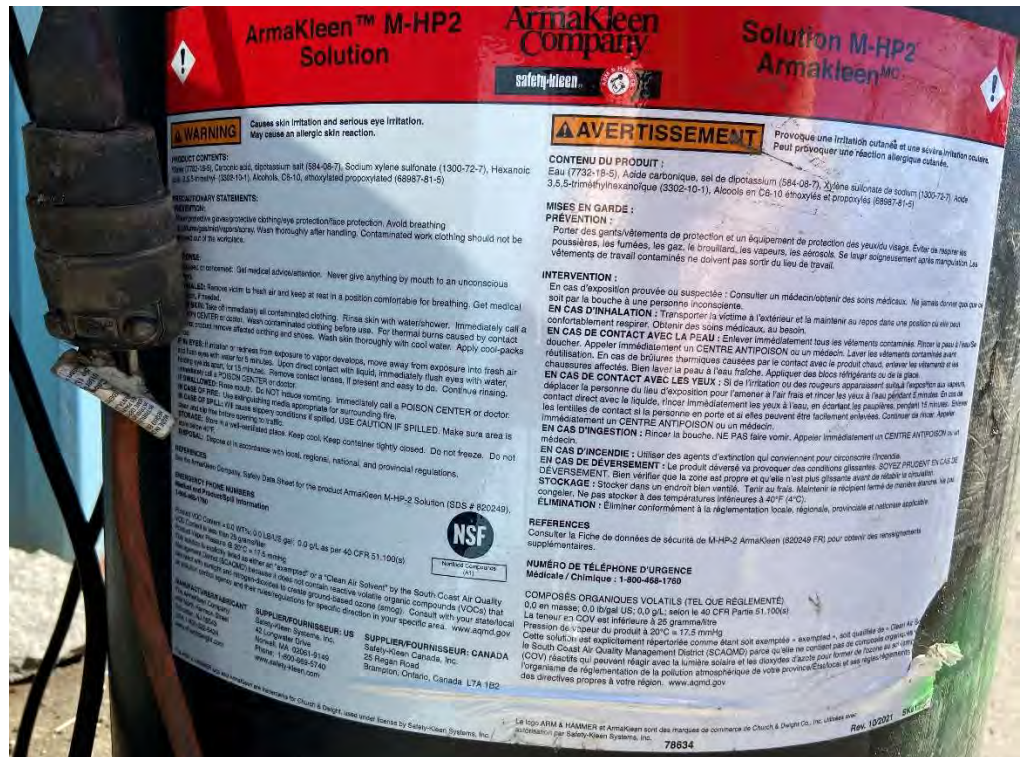
Client Name: Quality Distribution, Inc.

Site Location: 470 Fillmore Ave., Tonawanda,
New York

Site No. 915014

Photo No.
1Date:
3/7/2024Direction Photo Taken:
From above**Description:**

Sub-slab vapor pin CL-SSV-1 in locker room with flush mount cover

Photo No.
2Date:
3/8/2024Direction Photo Taken:
N/A**Description:**Parts washing station
(ArmaKleen™ M-HP2
Solution) label

Client Name: Quality Distribution, Inc.

Site Location: 470 Fillmore Ave., Tonawanda, New York

Site No. 915014

Photo No.
3

Date:
3/9/2024

Direction Photo Taken:
N/A

Description:
Chemical products storage



Photo No.
4

Date:
3/9/2024

Direction Photo Taken:
N/A

Description:
Lubricant and oil products storage



Client Name: Quality Distribution, Inc.

Site Location: 470 Fillmore Ave., Tonawanda,
New York

Site No. 915014

Photo No.
5

Date:
3/10/2024

Direction Photo Taken:
N/A

Description:
Lubricant storage tank in
Truck Bay Area



Photo No.
6

Date:
3/10/2024

Direction Photo Taken:
N/A

Description:
Product drums and totes
in Truck Bay Area



Client Name: Quality Distribution, Inc.

Site Location: 470 Fillmore Ave., Tonawanda, New York

Site No. 915014

Photo No.
7

Date:
3/7/2024

Direction Photo Taken:
N/A

Description:
Indoor air sample CL-IA-3 in the south portion of the building beside the parts washing station.



Photo No.
8

Date:
3/10/2024

Direction Photo Taken:
N/A

Description:
Sub-slab vapor sample CL-SSV-1 in the north portion of the building in office #3



Attachment 2

NYSDEC Structure Sampling Questionnaire,
Building Inventory Form, and Field Notes

**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 Tom Urban/Danielle VanMarter Date/Time Prepared 3/8/24 @ 10:00
Preparer's Affiliation AECOM Phone No. 716-856-5636
Purpose of Investigation SUI Investigation

1. OCCUPANT:

Interviewed: ☒ Y ☐ N

Last Name: David First Name: Texido
Address: 470 Fillmore Ave Tonawanda, NY
County: Erie

Home Phone: _____ Office Phone: 716-605-6409
Number of Occupants/persons at this location 8 Age of Occupants 19-70

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

Interviewed: Y ☒ N

Last Name: Peterson First Name: Roy
Address: Quality Carriers, Inc. 102 Pickering Way, Suite 105
County: Exton, PA
Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential
Industrial

School
Church

Commercial/Multi-use

Other: tractor trailer repair shop
(mechanical)

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: _____

N/A

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) tractor trailer repair

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

Other characteristics:

Number of floors 1

Building age 1960'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~~ Lobby

Air coming from truck bay underneath door to lobby, outdoor air coming into lobby through door, air flowing from lobby to office #3, hallway air flowing into office #3 (under door & thru window)

~~Airflow near source~~

(AF) Air flowing from office #3 to storage #1, air flow from storage #1 to office #4, outdoor air flow into office #4 thru door & window, outdoor air flow into hallway

~~Outdoor air infiltration~~

Truck bay AF into office #5, AF from ceiling into office #5 via duct, outdoor AF into truckers room, AF from utility room from T/vent to truckers room, AF from ceiling vent to truckers room, AF from truckers room to locker room #1

Locker room #1 receiving AF from utility room via wall vent, ceiling vent AF locker room #1, locker room #1 exit AF thru floor vent, AF from truck bay into locker room #1 via door, locker room #1 AF into bathroom, exhaust fan in bath #2 on east wall bathroom #2 vent outside via duct to roof. *continued

*continued...

AF from locker room #2/hallway into truck bay area. AF from office #6 into storage #3 via door & ceiling. AF from storage #2 into storage #3 via door.

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

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

Basement/Lowest level depth below grade: 0 (feet)

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

Crack in middle of slab in Storage #3; tiled in bath, locker + lounge areas, tiled in hallway; carpeted in offices, tiled in Storage #1; tiled in bath + lobby.

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 ceiling heating units in truck bays + storage areas
- Space heaters Steam radiation Radiant floor
- 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: nat'l gas

Boiler/furnace located in: Basement Outdoors Main Floor utility room Other _____

Air conditioning: Central Air Window units Open Windows None

Office #3 + #4

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.

ceiling supply ducts in bath #1, lobby, 3 supply ceiling ducts in office #3; 3 ceiling supply ducts in office #4; ceiling supply duct in office #5; 2 ceiling supply ducts in lounge + locker room. cold air return in locker room exhaust fan vented outside in bathroom #2

7. OCCUPANCY

Is basement/lowest level occupied? ☒ Full-time ^{work hours} ☐ Occasionally ☐ Seldom ☐ Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement	<u>N/A</u>
1 st Floor	<u>locker room, lounge, bath, offices</u>
2 nd Floor	<u></u>
3 rd Floor	<u></u>
4 th Floor	<u></u>

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage?

☒ Y ☐ N 9 Bays

b. Does the garage have a separate heating unit?

☒ Y ☐ N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)

☒ Y ☐ N / NA

Please specify _____

d. Has the building ever had a fire?

Y ☒ N When? _____

e. Is a kerosene or unvented gas space heater present?

Y ☒ N Where? _____

f. Is there a workshop or hobby/craft area?

☒ Y / N Where & Type? truck bay

g. Is there smoking in the building?

Y ☒ N How frequently? _____

h. Have cleaning products been used recently?

Y ☒ N When & Type? _____

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? outside
- o. Is there a clothes dryer? Y ☒ N If yes, is it vented outside? Y / N
- p. Has there been a pesticide application? Y ☒ N When & Type? _____

Are there odors in the building?

If yes, please describe: burnt metal, petroleum odors, welding, cutting

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? see prod. inventory

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: _____

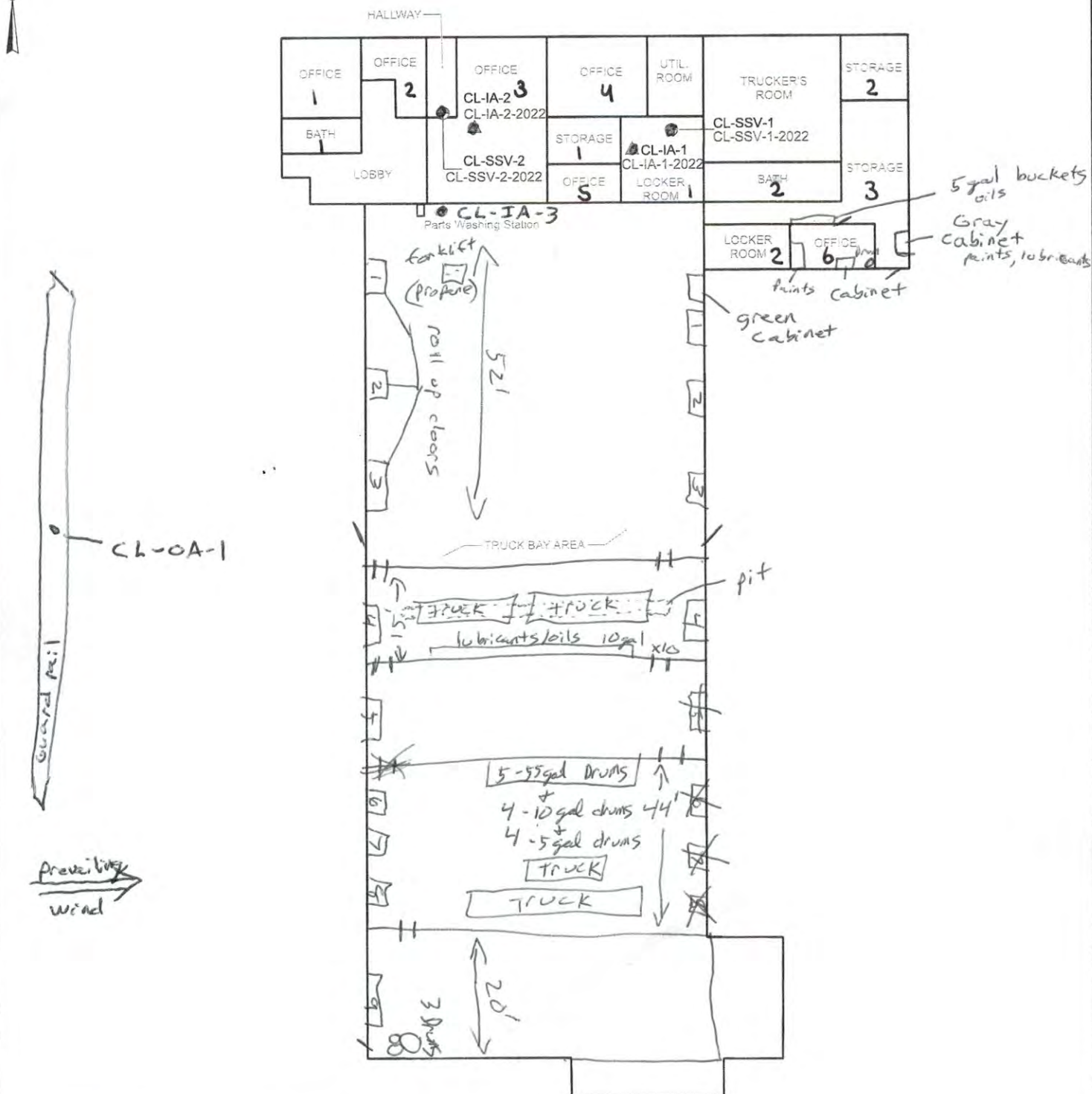
10. RELOCATION INFORMATION (for oil spill residential emergency)

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



Legend

- ▲ Indoor Air Sample Location (2018 & 2022)
- ⊕ Sub-Slab Vapor Sample Location (2018 & 2022)



AECOM

CHEMICAL LEAMAN
SOIL VAPOR INTRUSION SAMPLING LOCATIONS
2018 & 2022

FIGURE 2

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE 3000

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
office #1	no chemicals	Bkgd = 250 ppb				
Lobby Bkgd	portable inverter gas run			gas	17.5 ppm	
600 ppb						
hallway Bkgd 20 ppb	no chemicals					
office #2	no chemicals	Bkgd = 110 ppb				
office #3	lysol	19oz	U	ethanol	Bkgd	
Bkgd 80 ppb	2 scented candles	19oz	U	N.L.	Bkgd	
Storage #1	mold & mildew remover	32oz	U	sodium hypochlorite	Bkgd	
Bkgd 100 ppb	lysol	32oz	UO	alkyl dimethyl benzyl ammonium chloride	Bkgd	
	tilex	32oz	UO	sodium hypochlorite	Bkgd	
	furniture polish	16.6 oz	U	N.L.	Bkgd	
	Bleach	96oz	U	sodium hypochlorite	Bkgd	
office #4	no chemicals	Bkgd 80 ppb				
utility room	snowblower	1	U		4.6 ppm	
Bkgd 100 ppb	over the floor sealer	5 gal	UO	N.L.	Bkgd	
	liquid detergent for carpet	5 gal	UO	N.L.	Bkgd	
	floor finish	5 gal	UO	N.L.	Bkgd	
truckers room	no chemicals	Bkgd = 140 ppb				
locker room #1	latex paints	1 gal x 4	U	2 = no VOC listed	Bkgd	

Bkgd = 150 ppb

* 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.

N.L. - not listed

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE 3000

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
latter room #1	Fabuloso cleaner	45oz	U	L-lactic acid	Btad	
Btad 150 ppb	Comet w/ bleach	25oz	U	N.L.	180 ppb	
	900 gone	12oz	U	petr distillates	170 ppb	
	1501 bathroom foamer	32oz	U	citric acid	Btad	
	Raid	15oz	U	dl-phenothrin Pet. distillates pyrethrin	160 ppb	
	1501 disinfectant spray	125oz	U	ethanol	170 ppb	
	Clorox Bleaching Gel	24oz	U	sodium hypochlorite	263 ppb	
	germicidal bleach	1gal	U	sodium hypochlorite	170 ppb	
	Clorox germicidal	1gal	U	sodium hypochlorite	190 ppb	
Bath #2	no chemicals	-	Btad	500 ppb		
Storage #2	no chemicals	-	Btad	600 ppb		
Storage #3	rubber solvent	1qt x 4	U	N.L. VOC 722g/L	2.1 ppm	
Btad	tire repair cement	1/2 pt.	U	VOC 692g/L	1.9 ppm	
650 ppb	air brake antifreeze	32oz x 6	UO	N.L.	Btad	
	jump start fluid	11oz x 6	UO	heptane, diethyl ether, ethanol, chloroethane	1230 ppb	★
Cabinet	diesel fuel supplement	32oz x 5	UO	pet. distillates, aromatic hydrocarbons	Btad	
	starter fluid	11oz x 3	UO	diethyl ether, naphtha, n-heptane, pet. distillates, methyl cyclo-	Btad	
				heptane, butylated hydroxy-toluene	1200 ppb	
	diesel oil	32oz x 12	UO	aliphatic hydroxy hydrocarbons, pet. distillates	1100 ppb	

* 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.

N.L. - not listed

★ - removed from building

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
storage #3	Diesel fuel treatment	16oz x2	UO	2-butoxyethanol, 2-propanol aromatic solvent	990 ppb	
cabinet	fuel stabilizer	12oz	U	pet. distillates	750 ppb	
	phaze-coat gas (ethanol) add.	8oz x4	UO	N.L.	Bkgd	
	paper power	32oz	UO	N.L.	Bkgd	
	air brake conditioner	32oz x3	UO	methanol base	Bkgd	
	Heat gas line antifreeze	12oz x7	UO	methyl alcohol	Bkgd	
	battery terminal protector	11.75	UO	toluene, acetone, butane, propane, pet. distillates	1910 ppb	
	pb blaster	11oz x14	U	pet. distillates	950 ppb	
cabinet	FG Lube lubricant	12oz x2	UO	propane, butane	290 ppb	
	brake part cleaners	14oz x9	UO	acetone, heptane	1530 ppb	
	Brake fluid	1qt x3	UO	N.L.	Bkgd	
	motor oil	1qt x25	UO	N.L.	Bkgd	
	motor oil	1gal x10	UO	N.L.	Bkgd	
	latex paint	1gal x3	U	N.L.	Bkgd	
	home pest killer	1gal	U	sodium o-phenylphosphate	Bkgd	
	gear lubricant	1gal	U	N.L.	Bkgd	
	asphalt cement for roofs	5gal	U	N.L.	675 ppb	
	hydraulic oil	5gal x2	U	N.L.	Bkgd	
	latex paint	1gal	U	N.L.	Bkgd	

* 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.

N.L. - not listed

13. PRODUCT INVENTORY FORM

ppbRAE 3000 q

Make & Model of field instrument used: Honeywell MiniRAE 3000

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
Garage #3	lithium grease	5gal	U	antimony diamylthio carbamate lithium hydroxide solution	Bkg	
	motor oil	5gal	U	N.L.	Bkg	
	unknown	5gal	U	N.L.	Bkg	
Office #6	primer paint	1gal	U	xylene, toluene, pet- distillates	Bkg	
Bkg	silicone reducer	1gal	U	acetone	5563	
3700 ppb	wash solvent	5gal	U	toluene, methanol, acetone	471ppm	
	auto finish	5gal	U	acetone, toluene, n-butyl acetate, xylene	760ppm	
	acrylic enamel	12oz	U	MEK, ethylbenzene, ketones, toluene	Bkg	
	color line spray	10oz	UO	acetates, ketones	Bkg	
	paint thinner	1gal	U	pet- distillates	4791ppb	
	hydraulic oil	5gal	U	pet- lubricant	16.4ppm	
	flex seal	1gal	U	N.L.	8.5ppm	
	waste paint	55gal	U	N.L.	1237ppm	
	primer	1qt	U	solvent naphtha heptane, standard sol	Bkg	
	enamel	1qt	U	perachlorobenzotrifluoride	Bkg	*
	industrial mix	1gal	U	N.L.	Bkg	
	essential hardener	1pt	U	ethanol,	Bkg	
	marking paint	15oz	U	pet- distillates aromatic hydrocarbons	Bkg	
	galvanizing compound	20oz	U	liquefied pet- gas, pet- distillates, aromatic hydro	Bkg	

cells

* 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.

N.L. - Not listed

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
Office #6	hardener	1 qt	UO	n-butyl acetate, hexamethylene polymer	BKyd	
Cabinet	mineral spirits	1 gal	U	aliphatic hydrocarbon solvent	203 ppm	
	Standard reducer	1 gal	UO	Acetone	1.2 ppm	
	fiber glass resin	32 oz	U	Styrene	BKyd	
	epoxy hardener	1 qt	U	2-propanol	BKyd	
	auto refinish	1 gal	U	2-propanol, isobutyl ketone, xylene, acetone	5.0 ppm	
	spray paints	12 oz	U	pet. distillates, xylene	BKyd	
	weather protector	12 oz	UO	Ketones	BKyd	
	spray enamel	12 oz	U/O	aromatic hydrocarbons	BKyd	
	engine enamel	12 oz	U	acetones, toluene	BKyd	
	spray Flectric enamel	12 oz	U	acetone, propanol, toluol n-butane	1.2 ppm	
	Fal-Base reducer	1 qt	U	butyl acetate, acetone, toluene, heptane, ethylbenzene	14.2 ppm	
	DH 653	1 qt	U	Fed exempt solvents 4,3% by vol	BKyd	
	clear coat	1 qt	U	methyl ethyl ketone butyl acetate, acetone	BKyd	
	enamel paint Krylon	12 oz	UO	aliphatic hydrocarbons ketones	BKyd	
	fiberglass resin jelly	32 oz	U	polyester resin	BKyd	
	genesis paint	1 qt	U	Art. acetate, n-butyl acetate	BKyd	
	genesis additive	1 qt	U	2,4-pentanedione	BKyd	
	standard hardener	1 lb	UO	xylene, toluene	1.3 ppm	

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

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13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: PPBRAE 3000 & Honeywell MINIRAC 3000

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
Office 6 cabinet	Industrial coating	1 gal	U	Acetone	Bkgd	
Office 6 cabinet	Industrial paint	3.785L x 2.5	U	xylene, ethylbenzene, petroleum distillates, toluene	Bkgd	
Office 6 cabinet	Engine lacquer	11 oz	U	acetone, ethyl methyl ketone, propane, xylene, toluene, dioctyl phthalate	2.1 ppm	
Office 6 cabinet	Moderate reducer	946 x 2 mL	U	n-Butyl acetate, acetone, methyl ethyl ketone, toluene, acetate, ethylbenzene	1.4 ppm	
Office 6 cabinet	Rust Mort	1 qt x 2	U	phosphoric acid, chromic acetate	Bkgd	
Office 6 cabinet	433 Brushase solvent	1 qt	U	petroleum distillates	9.2 ppm	
Office 6 cabinet	Acrylic enamel optional hardener	1 qt	U	hexamethylene diisocyanate polymer, n-Butyl acetate	11.7 ppm	
Office 6 cabinet	AUS40 Polyurethane enamel activator	1 qt	U	Hexamethylene diisocyanate, 1,2,4-trimethylbenzene	Bkgd	
Office 6 cabinet	Tuff Stuff Multi-purpose foam cleaner	22 oz	U	2-butoxyethanol	Bkgd	
Office 6 cabinet	Touch up paint	12 oz	U	acetone, xylene, ethylbenzene, propane, butane	Bkgd	
Office 6 cabinet	Clearcoat finish	8 oz	U	ketones	3.4 ppm	
Office 6 cabinet	UNKNOWN spray	12 oz	U	N.L.	9.0 ppm	
Office 6 cabinet	Industrial coating	32 oz	U	aliphatic hydrocarbon solvent, 2-butoxyethanol	Bkgd	
Office 6 cabinet	standard accelerator	32 oz	U	Dibutyltin dilaurate	Bkgd	
Office 6 cabinet	Truck paint	473 mL	U	xylene, toluene, MEK, ethylbenzene	Bkgd	
Office 6 cabinet	Interior cabinet w/ doors mostly closed				8.2 ppm	
Office 6 cabinet	Interior cabinet w/ doors closed				40.0 ppm	

* 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.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAE

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
Office #5	seal gap	1 gal	UO	naphtha, petroleum hydrocarbon resin	Bkgd	
Bkgd	synthetic grease	1 lb. x 2	UO	N.L.	Bkgd	
600 ppb	wheel bearing grease	1 lb.	UO	petroleum hydrocarbon	Bkgd	
	cleaning duster	10 oz	U	N.L.	Bkgd	
	Ruststop enamel spray	15 oz x 2	U	acetone, aliphatic HCs	13.7 ppm	
	Butane fuel	6.4 oz	U	Butane	Bkgd	
	Thread sealant	4 oz	U	N.L.	720 ppb	
	Primer spray	12.8 oz	U	acetone, methyl acetate, toluene, xylene, ethylbenzene	1903 ppb	
	Propane torch	14 oz	U	Propane	Bkgd	
	spray enamel	12 oz	U	acetate, aliphatic HCs	2 ppm	
Locker Room #2	propane tank	5 gal	U	propane	Bkgd	
Bkgd	soiled rag container	10 gal			87.7 ppm	
450 ppb	_____	—	—	_____	—	
Truck bay cabinet	engine lacquer	11 oz	U	acetone, MEK, propane, xylene, isopropyl alcohol	1081 ppb	
Bkgd	starting fluid	11 oz	U	naphtha, n-heptane, dimethyl ether	478 ppb	
880 ppb	spray paint	12 oz x 6	U	petroleum distillates, PAHs	260 ppb	
	Electronic cleaner	11 oz.	U	hexanes, difluoroethane, n-pentane	535 ppb	
	Diesel fuel supplement	32 oz	U	petroleum distillates, PAHs	11.8 ppm	
	Battery terminal protector	12 oz x 2	U	toluene, acetone, butane, propane	365 ppb	

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13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: pph RAC 3000

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
Truck bay	Great stuff foam sealant	16 oz	U	N.L.	Bkgd	
Cabinet	acrylic lacquer	12 oz x 3	U	acetates, ketones	Bkgd	
Bkgd	Black gasket maker	4 oz	U	N.L.	185 ppb	
100 ppb	door hardware lubricant	9.3 oz.	U	petroleum distillates	Bkgd	
	stainless steel cleaner	18 oz	U	petroleum distillates	150 ppb	
	Belt dressing	6 oz	U	hexane, isobutane, polybutane	148 ppb	
	Battery terminal protector	13 oz	U	propane, butane, propanol	Bkgd	
Truck bay	Brake lube	8 oz	U	siloxanes, silicones	Bkgd	
	Diesel fuel supplement	32 oz	U	N.L.	Bkgd	
	Thread sealant	4 oz	U	ethanol, methanol	Bkgd	
	Anti-seize lubricant	8 oz	U	petroleum distillates	123 ppb	
	Sea-block	4 oz	U	organic solvents	815 ppm	
	Loctite	1.2 oz	U	hydroperoxide	Bkgd	
	Right stuff gasket maker	7.5 oz	U	2-butanone oxime	208 ppb	
	Diesel fuel supplement	32 oz	U	petroleum distillates, PAHs	220 ppb	
Bay 3	Thread sealant	4 oz	U	ethanol, methanol	Bkgd	
Bkgd	Thread sealant	8 oz	U	N.L.	158 ppb	
90 ppb						
Bay 4	open oil containers	15 gal			4200 ppb	
Bkgd						
145 ppb						

* 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.

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: ppb RAL 3000

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

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
Bay (6, 7) (40)	gas powered air compressor				166 ppm	
Bkgd	gas powered engine				7.9 ppm	
100 ppb	dieisel fuel tank (DEF Fluid)				3.6 ppm	
	unknown open 55 gal drum x 3				363 ppm	
	gear lubricant	16 gal x 3	U	Deteriorated (D)	Bkgd	
	door hardware lubricant	9.3 oz x 2	U	N.L.	Bkgd	
	FG LUBE	12 oz x 2	U	mineral oil, propane	Bkgd	
	PB Blaster x 2	11 oz x 2	U	naptha, petroleum distillates	Bkgd	
	premium starter fluid	11 oz	U	diethylether, naptha, n-heptane, petroleum distillates	203 ppb	
	Air brake antifreeze	32 oz	U	Ethanol	173 ppb	
Bay 8	methanol drum	55 gal	U	methanol	Bkgd	
Bkgd 300	2 unknown drums	55 gal x 2	U	unknown	Bkgd	
ppb	lubricating oil	11 oz	U	petroleum distillates, ethanol	450 ppb	

* 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.

Location Tonawanda, NY Date 3/8/24
 Project / Client Chemical Leaman

0800 - D. VanAnter + T. Urban - AECOM
 onsite. Tailgate meeting

0815 - cal PID + PPb RAE-

0830 - begin Draeger tube
 evaluation of high PID areas

Locker room #2 - soiled rag bin

PID 67.4 ppm - 1.5 ppm Draeger

Storage room # cabinet

PID 1.7 ppm - 0 ppm Draeger

NOTE: Jump start w/ chloroethane = 2 ppm Draeger

Location	PID	Draeger
office #6		
Drum	255 ppm	0 ppm
cabinet	21.4 ppm	0 ppm
parts washing	12.4 ppm	0 ppm T.C.
parts washing	12.4 ppm	0 ppm
old parts	3.11 ppm	1 ppm
washing bay 9	564 ppm	0 ppm
white	4.3 ppm	0 ppm
drum bay 6		
GREEN		
closet bay 1		
storage 3		
cabinet		
Battery		
terminal protector	2.4 ppm	0 ppm
OFFICE #6		
Tuff Stuff	3.9 ppm	0 ppm
foam cleaner	3.3 ppm	0 ppm
standard		
hardener		
wash solvent	564.9 ppm	0 ppm

Location Tonawanda, NY Date 3/8/24
 Project / Client Chemical Leaman

1115 Removed old parts washing
 station from bay 9. Put outside
 of bay 9 on a pallet.

Location	PID	Draeger
OFFICE #6 old		
automotive thinner	60.8 ppm	0 ppm
wash solvent	333.0 ppm	0 ppm
standard reducer	15.8 ppm	0 ppm
surface cleaner	11.2 ppm	1 ppm
File Seal	12.4 ppm	0 ppm
unknown container w/ paint sticks covered w/ dirty rag	118 ppm	0 ppm
Bay 1 Green cabinet		
stainless steel container	0 ppm	0 ppm
Electronic cleaner	0 ppm	0 ppm

1300 - removed chemicals containing
 "chbro" compounds from building
 + items w/ a hit on Draeger
 tube sampling.

Attachment 3

Underground Utility Clearance Report



JOB SUMMARY REPORT

Order Number:	Work Order #638552	Job Date:	Mar 7, 2024 10:24:00 AM
Customer:	49717 AECOM CORPORATE : AECOM	Billing Address:	AECOM 300 LAKESIDE DR SUITE 400 OAKLAND CA 94612 United States

JOB DETAILS

Jobsite Location	470 Fillmore Avenue, City of Tonawanda, New York, 14150
Work Order Number	Work Order #638552
Job Number	
PO Number	60722348

GPRS Project Manager: William McCowan

Thank you for using GPRS on your project. We appreciate the opportunity to work with you. If you have questions regarding the results of this scanning, please contact the lead GPRS project manager on this project.

EQUIPMENT USED

The following equipment was used on this project:

- **Concrete GPR Antenna:** This GPR Antenna is handheld and rolls over the surface. The device displays scan data on a screen, and the operator marks detected objects on the surface in real-time. The antenna needs a reasonably smooth, unobstructed surface for scanning and cannot scan within 2"-4" of obstructions such as walls and metal tracks. Ideally, the client removes obstacles such as these before our work begins. The total effective scan depth can be as much as 18" or more with this antenna but can vary depending on the concrete conditions, composition, and other factors such as the spacing of the reinforcing. Depth accuracy depends on obtaining a precise depth calibration for the concrete. This device does not emit harmful radiation and can be safely operated while people are in close proximity. For more information, please visit: [Link](#)



JOB SUMMARY REPORT

WORK PERFORMED

GENERAL CONCRETE SCAN

Client Provided Drawings	Yes
Scope of Work	Concrete scan for 2 soil vapor pins
Quantity of Floor Areas	2
Approximate Scan Area Size (sq. ft.)	4
Approximate Slab Thickness (in)	8
Approximate GPR Effective Depth (in)	12
Marking Medium	- Marker - Tape
Results Notes	2 areas cleared for vapor pins.



JOB SUMMARY REPORT

JOB SITE IMAGES



Jobsite Photo #1



Jobsite Photo #2



JOB SUMMARY REPORT



Jobsite Photo #3

CONTACT / SIGNATURE INFORMATION

Contact Information

Contact Name	Edyta Chorostkowska	Email	edyta.chorostkowska@aecom.com
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TERMS & CONDITIONS

<http://www.gprsinc.com/termsandconditions.html>

Attachment 4

SVI Sampling Logs

Summa Canister Sampling Field Data Sheet

Site: Chemical Leaman

Samplers: T. Urban / D. VanMarter

Date: 3/7/2024

Sample #	CL-IA-3				
Location	Truck Bay near parts washing station				
Summa Canister ID	1520				
Flow Controller ID	3260				
Additional Tubing Added	NO / YES How much?	NO / YES How much?	NO / YES How much?	NO / YES How much?	NO / YES How much?
Purge Time (Start)	-				
Purge Time (Stop)	-				
Total Purge Time (min)	-				
Purge Volume	-				
Initial Tracer Gas Results (ppm)	-				
PID (ppb)	-				
Pressure Gauge - before sampling	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator
	-28.5				
Sample Time (Start)	0815				
Sample Time (Stop)	1615				
Total Sample Time (min)	480				
Pressure Gauge - after sampling	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator
	-9				
Sample Volume	6 Liters				
Canister Pressure Went To Ambient Pressure?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
General Comments:					

Summa Canister Sampling Field Data Sheet

Site: Chemical Leaman

Samplers: T. Urban

Date: 3/10/2024

Sample #	CL-SSV-1	CL-IA-1	CL-SSV-2	CL-IA-2	FD-031024
Location	Locker room	Locker room	Hallway	Office	Duplicate of CL-IA-2
Summa Canister ID	1243	3345	3031	1081	2352
Flow Controller ID	3052	3584	3042	5080	5080
Additional Tubing Added	NO / YES How much? 3'	NO / YES How much? -	NO / YES How much? 3'	NO / YES How much? -	NO / YES How much? -
Purge Time (Start)	0738	-	0817	-	-
Purge Time (Stop)	0743	-	0822	-	-
Total Purge Time (min)	5	-	5	-	-
Purge Volume	1 L	-	1 L	-	-
Initial Tracer Gas Results (ppm)	0	-	0	-	-
PID (ppb)	0	-	243	-	-
Pressure Gauge - before sampling	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator
	-29	-29	-29	-30	-30
Sample Time (Start)	0748	0749	0829	0830	0830
Sample Time (Stop)	1518	1549	1629	1630	1630
Total Sample Time (min)	450	480	480	480	480
Pressure Gauge - after sampling	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator
	-4	-7	-7	-10.5	-10.5
Sample Volume	6 Liters	6 Liters	6 Liters	6 Liters	6 Liters
Canister Pressure Went To Ambient Pressure?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
General Comments:	Slab 8" thick		Slab 9" thick		

Summa Canister Sampling Field Data Sheet

Site: Chemical Leaman

Samplers: T. Urban

Date: 3/10/2024

Sample #	CL-IA-3	CL-OA-1			
Location	Truck bay near parts washing station	West parking lot on guardrail			
Summa Canister ID	1072	3592			
Flow Controller ID	3267	3749			
Additional Tubing Added	NO / YES How much?	NO / YES How much?	NO / YES How much?	NO / YES How much?	NO / YES How much?
Purge Time (Start)	-	-			
Purge Time (Stop)	-	-			
Total Purge Time (min)	-	-			
Purge Volume	-	-			
Initial Tracer Gas Results (ppm)	-	-			
PID (ppb)	-	-			
Pressure Gauge - before sampling	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator
	-30	-28.5			
Sample Time (Start)	0838	0840			
Sample Time (Stop)	1638	1640			
Total Sample Time (min)	480	480			
Pressure Gauge - after sampling	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator	Gauge Regulator
	-8	-8.5			
Sample Volume	6 Liters	6 Liters	6 Liters	6 Liters	6 Liters
Canister Pressure Went To Ambient Pressure?	YES / NO	YES / NO	YES / NO	YES / NO	YES / NO
General Comments:					

Attachment 5

Data Usability Summary Report

DATA USABILITY SUMMARY REPORT

**SOIL VAPOR INTRUSION INVESTIGATION
FORMER CHEMICAL LEAMAN TANK LINES SITE
TONAWANDA, NEW YORK**

Analyses Performed by:

**Pace
East Long Meadow, MA**

Prepared for:

**QUALITY DISTRIBUTION, INC.
4041 Park Oaks Boulevard
Tampa, FL 33610**

Prepared by:

**AECOM
50 Lakefront Boulevard
Suite 111
Buffalo, New York 14202**

APRIL 2024

TABLE OF CONTENTS

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2.0 ANALYTICAL METHODOLOGIES/DATA VALIDATION PROCEDURES.....	1
3.0 DATA DELIVERABLE COMPLETENESS	2
4.0 SAMPLE RECEIPT/PRESERVATION/HOLDING TIMES	2
5.0 NONCONFORMANCES	2
6.0 SAMPLE RESULTS AND REPORTING	2
7.0 SUMMARY	2

TABLES (Following Text)

Table 1	Validated Indoor Air, Sub-Slab Vapor, and Outdoor Air Sample Results
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ATTACHMENTS

Attachment A	Validated Form I's
Attachment B	Support Documentation

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 4 indoor air samples plus 1 field duplicate, 2 sub-slab vapor (soil gas) samples, and 1 ambient (outdoor) air sample collected March 7-10, 2024. The samples were collected in support of the soil vapor intrusion investigation at the former Chemical Leaman Tank Lines site located in Tonawanda, New York.

2.0 ANALYTICAL METHODOLOGIES/DATA VALIDATION PROCEDURES

All samples were sent to Pace (East Long Meadow, MA) 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 data 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.

Data qualifiers applied to the results during the validation included 'J' (estimated). Definitions of USEPA Region II data qualifiers are presented at the end of this text. The validated analytical results are presented on Table 1 (indoor air, sub-slab vapor, and outdoor air sample results). Copies of the validated laboratory results (i.e., Form I's) are presented in Attachment A. Documentation supporting the

qualification of data is presented in Attachment B. 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 exception. Sample canister #s P1520 and P1072 were received with the same sample identification - CL-IA-3. The laboratory was instructed to add -A and -B to differentiate between the samples and a revised COC was provided to them by AECOM. All samples were analyzed within the required holding times.

5.0 NONCONFORMANCES

Field Duplicate Samples

The field duplicate was collected at location CL-IA-2. The field duplicate relative percent differences (RPDs) exhibited good analytical precision (i.e., RPD < 50%).

6.0 SAMPLE RESULTS AND REPORTING

All quantitation/reporting limits were reported in accordance with method requirements. Due to the presence of elevated levels of target compounds, the samples were analyzed utilizing reduced sample volume/dilutions. The RLs for the non-detect compounds represent the lowest achievable at the reduced sample sizes utilized for the analyses.

The results for acetone and/or ethanol were over the upper calibration level in samples CL-IA-3-A, CL-IA-1, CL-IA-2, and FD-031024 (CL-IA-2). The lab did not analyze these samples at further dilutions. The 'E' qualifier applied by the lab has been changed to 'J' during the validation process.

7.0 SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified 'J' (estimated) are considered conditionally usable. AECOM does not recommend the recollection of any samples at this time.

Prepared By: Ann Marie Kropovitch, Chemist



Date: 4/2/2024

Reviewed By: Peter R. Fairbanks, Senior Chemist



Date: 4/2/2024

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 INDOOR AIR, SUB-SLAB VAPOR, AND OUTDOOR AIR SAMPLE RESULTS
CHEMICAL LEAMAN TANK LINES SITE

Location ID		CL-IA-1	CL-IA-2	CL-IA-2	CL-IA-3A	CL-IA-3B
Sample ID		CL-IA-1	CL-IA-2	FD-031024	CL-IA-3A	CL-IA-3B
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/10/24	03/10/24	03/10/24	03/07/24	03/10/24
Parameter	Units			Field Duplicate (1-1)		
Volatiles						
1,1,1-Trichloroethane	UG/M3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1,2,2-Tetrachloroethane	UG/M3	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.53 J	0.52 J	0.55 J	0.49 J	0.51 J
1,1,2-Trichloroethane	UG/M3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
1,1-Dichloroethane	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,1-Dichloroethene	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2,4-Trichlorobenzene	UG/M3	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
1,2,4-Trimethylbenzene	UG/M3	3.6	2.4	2.4	12	2.8
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,2-Dichlorobenzene	UG/M3	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,2-Dichloroethane	UG/M3	0.18	0.14 J	0.15	0.096 J	0.079 J
1,2-Dichloroethene (cis)	UG/M3	0.094 J	0.14 U	0.14 U	0.20	0.097 J
1,2-Dichloroethene (trans)	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2-Dichloropropane	UG/M3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.24 U	0.12 J	0.13 J	0.13 J	0.12 J
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.97	0.60	0.61	2.6	0.71
1,3-Butadiene	UG/M3	0.077 U	0.077 U	0.077 U	0.077 U	0.077 U
1,3-Dichlorobenzene	UG/M3	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,3-Dichloropropene (cis)	UG/M3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,3-Dichloropropene (trans)	UG/M3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,4-Dichlorobenzene	UG/M3	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
1,4-Dioxane	UG/M3	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
2-Hexanone	UG/M3	0.19	0.17	0.14 U	0.14 U	0.24

Flags assigned during chemistry validation are shown.

MADE BY: AMK 4/2/24
 CHECKED BY: PRF 4/2/24

Detection Limits shown are PQL

TABLE 1
VALIDATED INDOOR AIR, SUB-SLAB VAPOR, AND OUTDOOR AIR SAMPLE RESULTS
CHEMICAL LEAMAN TANK LINES SITE

Location ID		CL-IA-1	CL-IA-2	CL-IA-2	CL-IA-3A	CL-IA-3B
Sample ID		CL-IA-1	CL-IA-2	FD-031024	CL-IA-3A	CL-IA-3B
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/10/24	03/10/24	03/10/24	03/07/24	03/10/24
Parameter	Units			Field Duplicate (1-1)		
Volatiles						
4-Ethyltoluene	UG/M3	0.49	0.48	0.33	1.7	0.43
4-Methyl-2-pentanone	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Acetone	UG/M3	410 J	42	41	2,600 J	17
Benzene	UG/M3	0.58	0.62	0.59	0.99	0.65
Benzyl chloride	UG/M3	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Bromodichloromethane	UG/M3	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
Bromoform	UG/M3	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Bromomethane	UG/M3	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Carbon disulfide	UG/M3	1.1 U	1.1	1.1 U	1.1 U	1.1 U
Carbon tetrachloride	UG/M3	0.18 J	0.48	0.27	0.22	0.40
Chlorobenzene	UG/M3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Chloroethane	UG/M3	0.092 U	0.092 U	0.092 U	0.092 U	0.13
Chloroform	UG/M3	0.35	0.14 J	0.11 J	0.12 J	0.089 J
Chloromethane	UG/M3	0.92	0.98	0.87	1.0	1.1
Cyclohexane	UG/M3	0.27	0.30	0.33	5.2	0.21
Dibromochloromethane	UG/M3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Dichlorodifluoromethane	UG/M3	3.0	2.5	3.1	2.8	2.5
Ethanol	UG/M3	110 J	82 J	91 J	38	17
Ethyl acetate	UG/M3	0.53 J	0.60 J	1.3 U	0.80 J	2.9
Ethylbenzene	UG/M3	2.7	1.2	1.3	14	1.6
Heptane	UG/M3	2.0	2.0	1.6	320	1.8
Hexachlorobutadiene	UG/M3	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Hexane	UG/M3	4.9 U	4.9 U	4.9 U	3.6 J	4.9 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 4/2/24
 CHECKED BY: PRF 4/2/24

Detection Limits shown are PQL

TABLE 1
VALIDATED INDOOR AIR, SUB-SLAB VAPOR, AND OUTDOOR AIR SAMPLE RESULTS
CHEMICAL LEAMAN TANK LINES SITE

Location ID		CL-IA-1	CL-IA-2	CL-IA-2	CL-IA-3A	CL-IA-3B
Sample ID		CL-IA-1	CL-IA-2	FD-031024	CL-IA-3A	CL-IA-3B
Matrix		Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air
Depth Interval (ft)		-	-	-	-	-
Date Sampled		03/10/24	03/10/24	03/10/24	03/07/24	03/10/24
Parameter	Units			Field Duplicate (1-1)		
Volatiles						
Isopropyl alcohol	UG/M3	3.4 U	3.4 U	3.4 U	4.3	33
m&p-Xylene	UG/M3	11	4.4	4.4	48	5.3
Methyl ethyl ketone (2-Butanone)	UG/M3	4.1 U	4.1 U	4.1 U	9.0	4.1 U
Methyl tert-butyl ether	UG/M3	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Methylene chloride	UG/M3	0.45 J	0.35 J	0.41 J	0.41 J	0.39 J
Naphthalene	UG/M3	1.4	1.1	1.3	3.4	0.34
o-Xylene	UG/M3	3.3	1.7	1.7	13	2.0
Propylene	UG/M3	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U
Styrene	UG/M3	0.34	0.34	0.36	1.3	0.21
Tetrachloroethene	UG/M3	7.9	4.8	5.0	24	7.4
Tetrahydrofuran	UG/M3	1 U	1 U	1 U	1 U	1 U
Toluene	UG/M3	33	21	21	70	22
Trichloroethene	UG/M3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Trichlorofluoromethane	UG/M3	1.6	1.4	1.3	1.6	2.0
Vinyl acetate	UG/M3	2.5 U	2.0 J	2.5 U	2.5 U	2.2 J
Vinyl chloride	UG/M3	0.059 J	0.089 U	0.089 U	0.048 J	0.089 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 4/2/24
 CHECKED BY: PRF 4/2/24

Detection Limits shown are PQL

TABLE 1
VALIDATED INDOOR AIR, SUB-SLAB VAPOR, AND OUTDOOR AIR SAMPLE RESULTS
CHEMICAL LEAMAN TANK LINES SITE

Location ID		CL-OA-1	CL-SSV-1	CL-SSV-2
Sample ID		CL-OA-1	CL-SSV-1	CL-SSV-2
Matrix		Ambient Air	Sub-Slab Air	Sub-Slab Air
Depth Interval (ft)		-	-	-
Date Sampled		03/10/24	03/10/24	03/10/24
Parameter	Units			
Volatiles				
1,1,1-Trichloroethane	UG/M3	0.19 U	0.55 U	0.55 U
1,1,2,2-Tetrachloroethane	UG/M3	0.24 U	0.69 U	0.69 U
1,1,2-Trichloro-1,2,2-trifluoroethane	UG/M3	0.56 J	0.54 J	0.61 J
1,1,2-Trichloroethane	UG/M3	0.19 U	0.55 U	0.55 U
1,1-Dichloroethane	UG/M3	0.14 U	0.4 U	1.3
1,1-Dichloroethene	UG/M3	0.14 U	0.4 U	0.4 U
1,2,4-Trichlorobenzene	UG/M3	0.26 U	0.74 U	0.74 U
1,2,4-Trimethylbenzene	UG/M3	0.17 U	0.93	1.4
1,2-Dibromoethane (Ethylene dibromide)	UG/M3	0.27 U	0.77 U	0.77 U
1,2-Dichlorobenzene	UG/M3	0.21 U	0.6 U	0.6 U
1,2-Dichloroethane	UG/M3	0.056 J	0.49	0.49
1,2-Dichloroethene (cis)	UG/M3	0.14 U	0.4 U	0.4 U
1,2-Dichloroethene (trans)	UG/M3	0.14 U	0.4 U	0.4 U
1,2-Dichloropropane	UG/M3	0.16 U	0.46 U	0.46 U
1,2-Dichlorotetrafluoroethane	UG/M3	0.12 J	0.7 U	0.7 U
1,3,5-Trimethylbenzene (Mesitylene)	UG/M3	0.17 U	0.45 J	0.70
1,3-Butadiene	UG/M3	0.077 U	0.22 U	0.22 U
1,3-Dichlorobenzene	UG/M3	0.21 U	0.6 U	0.6 U
1,3-Dichloropropene (cis)	UG/M3	0.16 U	0.45 U	0.45 U
1,3-Dichloropropene (trans)	UG/M3	0.16 U	0.45 U	0.45 U
1,4-Dichlorobenzene	UG/M3	0.21 U	0.6 U	0.6 U
1,4-Dioxane	UG/M3	1.3 U	3.6 U	3.6 U
2-Hexanone	UG/M3	0.14 U	0.41 U	0.41 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 4/2/24
 CHECKED BY: PRF 4/2/24

Detection Limits shown are PQL

TABLE 1
VALIDATED INDOOR AIR, SUB-SLAB VAPOR, AND OUTDOOR AIR SAMPLE RESULTS
CHEMICAL LEAMAN TANK LINES SITE

Location ID		CL-OA-1	CL-SSV-1	CL-SSV-2
Sample ID		CL-OA-1	CL-SSV-1	CL-SSV-2
Matrix		Ambient Air	Sub-Slab Air	Sub-Slab Air
Depth Interval (ft)		-	-	-
Date Sampled		03/10/24	03/10/24	03/10/24
Parameter	Units			
Volatiles				
4-Ethyltoluene	UG/M3	0.17 U	0.49 U	0.49 U
4-Methyl-2-pentanone	UG/M3	0.14 U	0.41 U	0.41 U
Acetone	UG/M3	4.0	58	40
Benzene	UG/M3	0.38	0.54	0.75
Benzyl chloride	UG/M3	0.18 U	0.52 U	0.52 U
Bromodichloromethane	UG/M3	0.23 U	0.67 U	0.67 U
Bromoform	UG/M3	0.36 U	1 U	1 U
Bromomethane	UG/M3	0.14 U	0.39 U	0.39 U
Carbon disulfide	UG/M3	1.1 U	3.1 U	1.1 J
Carbon tetrachloride	UG/M3	0.44	0.63 U	0.63 U
Chlorobenzene	UG/M3	0.16 U	0.46 U	0.46 U
Chloroethane	UG/M3	0.088 J	0.26 U	0.26 U
Chloroform	UG/M3	0.17 U	0.49 U	40
Chloromethane	UG/M3	1.1	0.41 U	0.41 U
Cyclohexane	UG/M3	0.12 U	2.0	0.61
Dibromochloromethane	UG/M3	0.3 U	0.85 U	0.85 U
Dichlorodifluoromethane	UG/M3	2.8	2.6	3.5
Ethanol	UG/M3	2.1 J	130	95
Ethyl acetate	UG/M3	1.3 U	3.6 U	22
Ethylbenzene	UG/M3	0.15 U	0.84	1.2
Heptane	UG/M3	0.17	1.1	2.1
Hexachlorobutadiene	UG/M3	0.37 U	1.1 U	1.1 U
Hexane	UG/M3	4.9 U	14 U	14 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 4/2/24
 CHECKED BY: PRF 4/2/24

Detection Limits shown are PQL

TABLE 1
VALIDATED INDOOR AIR, SUB-SLAB VAPOR, AND OUTDOOR AIR SAMPLE RESULTS
CHEMICAL LEAMAN TANK LINES SITE

Location ID		CL-OA-1	CL-SSV-1	CL-SSV-2
Sample ID		CL-OA-1	CL-SSV-1	CL-SSV-2
Matrix		Ambient Air	Sub-Slab Air	Sub-Slab Air
Depth Interval (ft)		-	-	-
Date Sampled		03/10/24	03/10/24	03/10/24
Parameter	Units			
Volatiles				
Isopropyl alcohol	UG/M3	3.4 U	9.8 U	36
m&p-Xylene	UG/M3	0.3 U	2.1	4.4
Methyl ethyl ketone (2-Butanone)	UG/M3	4.1 U	12 U	12 U
Methyl tert-butyl ether	UG/M3	0.13 U	0.36 U	0.36 U
Methylene chloride	UG/M3	0.34 J	3.5 U	3.5 U
Naphthalene	UG/M3	0.18 U	0.56	0.52 U
o-Xylene	UG/M3	0.15 U	0.80	1.6
Propylene	UG/M3	2.4 U	6.9 U	6.9 U
Styrene	UG/M3	0.15 U	1.1	0.43 U
Tetrachloroethene	UG/M3	0.24 U	65	150
Tetrahydrofuran	UG/M3	1 U	2.9 U	2.9 U
Toluene	UG/M3	0.23	5.4	22
Trichloroethene	UG/M3	0.19 U	2.4	1.6
Trichlorofluoromethane	UG/M3	1.1	1.5 J	2.6
Vinyl acetate	UG/M3	2.5 U	7 U	7 U
Vinyl chloride	UG/M3	0.089 U	0.26 U	0.26 U

Flags assigned during chemistry validation are shown.

MADE BY: AMK 4/2/24
 CHECKED BY: PRF 4/2/24

Detection Limits shown are PQL

ATTACHMENT A
VALIDATED FORM I'S

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location:
Date Received: 3/12/2024
Field Sample #: CL-IA-3-A
Sample ID: 24C1287-01
Sample Matrix: Indoor air
Sampled: 3/7/2024 08:15

Sample Description/Location:
Sub Description/Location:
Canister ID: P1520
Canister Size: 6 liter
Flow Controller ID: 3260
Sample Type: 8 hr

Work Order: 24C1287
Initial Vacuum(in Hg): -28.5
Final Vacuum(in Hg): -9
Receipt Vacuum(in Hg): -6.3
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL		Analyzed		
Acetone	1100	20	10	J	2600	48	24	10	3/20/24 8:00		TPH
Benzene	0.31	0.035	0.011		0.99	0.11	0.034	0.698	3/19/24 15:09		TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 15:09		TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 15:09		TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 15:09		TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 15:09		TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 15:09		TPH
2-Butanone (MEK)	3.0	1.4	0.68		9.0	4.1	2.0	0.698	3/19/24 15:09		TPH
Carbon Disulfide	ND	0.35	0.067		ND	1.1	0.21	0.698	3/19/24 15:09		TPH
Carbon Tetrachloride	0.035	0.035	0.027		0.22	0.22	0.17	0.698	3/19/24 15:09		TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 15:09		TPH
Chloroethane	ND	0.035	0.032		ND	0.092	0.084	0.698	3/19/24 15:09		TPH
Chloroform	0.024	0.035	0.017	J	0.12	0.17	0.083	0.698	3/19/24 15:09		TPH
Chloromethane	0.50	0.070	0.047		1.0	0.14	0.096	0.698	3/19/24 15:09		TPH
Cyclohexane	1.5	0.035	0.027		5.2	0.12	0.093	0.698	3/19/24 15:09		TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 15:09		TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 15:09		TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 15:09		TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 15:09		TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 15:09		TPH
Dichlorodifluoromethane (Freon 12)	0.56	0.035	0.015		2.8	0.17	0.072	0.698	3/19/24 15:09		TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 15:09		TPH
1,2-Dichloroethane	0.024	0.035	0.013	J	0.096	0.14	0.053	0.698	3/19/24 15:09		TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 15:09		TPH
cis-1,2-Dichloroethylene	0.050	0.035	0.017		0.20	0.14	0.067	0.698	3/19/24 15:09		TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 15:09		TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 15:09		TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 15:09		TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 15:09		TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.018	0.035	0.014	J	0.13	0.24	0.098	0.698	3/19/24 15:09		TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 15:09		TPH
Ethanol	20	1.4	0.93		38	2.6	1.7	0.698	3/19/24 15:09		TPH
Ethyl Acetate	0.22	0.35	0.14	J	0.80	1.3	0.49	0.698	3/19/24 15:09		TPH
Ethylbenzene	3.2	0.035	0.012		14	0.15	0.052	0.698	3/19/24 15:09		TPH
4-Ethyltoluene	0.34	0.035	0.015		1.7	0.17	0.075	0.698	3/19/24 15:09		TPH
Heptane	79	0.50	0.32		320	2.0	1.3	10	3/20/24 8:00		TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 15:09		TPH
Hexane	1.0	1.4	0.73	J	3.6	4.9	2.6	0.698	3/19/24 15:09		TPH
2-Hexanone (MBK)	ND	0.035	0.015		ND	0.14	0.062	0.698	3/19/24 15:09		TPH
Isopropanol	1.7	1.4	0.73		4.3	3.4	1.8	0.698	3/19/24 15:09		TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 15:09		TPH
Methylene Chloride	0.12	0.35	0.094	J	0.41	1.2	0.33	0.698	3/19/24 15:09		TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 15:09		TPH
Naphthalene	0.65	0.035	0.028		3.4	0.18	0.15	0.698	3/19/24 15:09		TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 15:09		TPH
Styrene	0.31	0.035	0.027		1.3	0.15	0.12	0.698	3/19/24 15:09		TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 15:09		TPH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-3-A
Sample ID: 24C1287-01
 Sample Matrix: Indoor air
 Sampled: 3/7/2024 08:15

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P1520
 Canister Size: 6 liter
 Flow Controller ID: 3260
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -28.5
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -6.3
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv		Flag/Qual	Results	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL			RL	MDL		Analyzed		
Tetrachloroethylene	3.5	0.035	0.030		24	0.24	0.20	0.698	3/19/24 15:09		TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 15:09		TPH
Toluene	18	0.035	0.017		70	0.13	0.066	0.698	3/19/24 15:09		TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 15:09		TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 15:09		TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 15:09		TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 15:09		TPH
Trichlorofluoromethane (Freon 11)	0.28	0.14	0.014		1.6	0.78	0.080	0.698	3/19/24 15:09		TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.063	0.14	0.0095	J	0.49	1.1	0.073	0.698	3/19/24 15:09		TPH
1,2,4-Trimethylbenzene	2.4	0.035	0.021		12	0.17	0.10	0.698	3/19/24 15:09		TPH
1,3,5-Trimethylbenzene	0.53	0.035	0.027		2.6	0.17	0.13	0.698	3/19/24 15:09		TPH
Vinyl Acetate	ND	0.70	0.14		ND	2.5	0.50	0.698	3/19/24 15:09		TPH
Vinyl Chloride	0.019	0.035	0.018	J	0.048	0.089	0.045	0.698	3/19/24 15:09		TPH
m&p-Xylene	11	0.070	0.024		48	0.30	0.11	0.698	3/19/24 15:09		TPH
o-Xylene	3.1	0.035	0.013		13	0.15	0.055	0.698	3/19/24 15:09		TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.9	70-130	3/19/24 15:09
4-Bromofluorobenzene (1)	93.2	70-130	3/20/24 8:00

ANALYTICAL RESULTS

Project Location:
Date Received: 3/12/2024
Field Sample #: CL-SSV-1
Sample ID: 24C1287-02
Sample Matrix: Sub Slab
Sampled: 3/10/2024 07:48

Sample Description/Location:
Sub Description/Location:
Canister ID: P1243
Canister Size: 6 liter
Flow Controller ID: 3052
Sample Type: 8 hr

Work Order: 24C1287
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -5.0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	25	4.0	2.0		58	9.5	4.8	2	3/19/24 18:20	TPH
Benzene	0.17	0.10	0.031		0.54	0.32	0.099	2	3/19/24 18:20	TPH
Benzyl chloride	ND	0.10	0.054		ND	0.52	0.28	2	3/19/24 18:20	TPH
Bromodichloromethane	ND	0.10	0.041		ND	0.67	0.27	2	3/19/24 18:20	TPH
Bromoform	ND	0.10	0.036		ND	1.0	0.37	2	3/19/24 18:20	TPH
Bromomethane	ND	0.10	0.085		ND	0.39	0.33	2	3/19/24 18:20	TPH
1,3-Butadiene	ND	0.10	0.084		ND	0.22	0.19	2	3/19/24 18:20	TPH
2-Butanone (MEK)	ND	4.0	2.0		ND	12	5.8	2	3/19/24 18:20	TPH
Carbon Disulfide	ND	1.0	0.19		ND	3.1	0.60	2	3/19/24 18:20	TPH
Carbon Tetrachloride	ND	0.10	0.079		ND	0.63	0.50	2	3/19/24 18:20	TPH
Chlorobenzene	ND	0.10	0.033		ND	0.46	0.15	2	3/19/24 18:20	TPH
Chloroethane	ND	0.10	0.092		ND	0.26	0.24	2	3/19/24 18:20	TPH
Chloroform	ND	0.10	0.049		ND	0.49	0.24	2	3/19/24 18:20	TPH
Chloromethane	ND	0.20	0.13		ND	0.41	0.28	2	3/19/24 18:20	TPH
Cyclohexane	0.59	0.10	0.078		2.0	0.34	0.27	2	3/19/24 18:20	TPH
Dibromochloromethane	ND	0.10	0.067		ND	0.85	0.57	2	3/19/24 18:20	TPH
1,2-Dibromoethane (EDB)	ND	0.10	0.062		ND	0.77	0.48	2	3/19/24 18:20	TPH
1,2-Dichlorobenzene	ND	0.10	0.035		ND	0.60	0.21	2	3/19/24 18:20	TPH
1,3-Dichlorobenzene	ND	0.10	0.037		ND	0.60	0.22	2	3/19/24 18:20	TPH
1,4-Dichlorobenzene	ND	0.10	0.048		ND	0.60	0.29	2	3/19/24 18:20	TPH
Dichlorodifluoromethane (Freon 12)	0.52	0.10	0.042		2.6	0.49	0.21	2	3/19/24 18:20	TPH
1,1-Dichloroethane	ND	0.10	0.049		ND	0.40	0.20	2	3/19/24 18:20	TPH
1,2-Dichloroethane	0.12	0.10	0.038		0.49	0.40	0.15	2	3/19/24 18:20	TPH
1,1-Dichloroethylene	ND	0.10	0.070		ND	0.40	0.28	2	3/19/24 18:20	TPH
cis-1,2-Dichloroethylene	ND	0.10	0.048		ND	0.40	0.19	2	3/19/24 18:20	TPH
trans-1,2-Dichloroethylene	ND	0.10	0.047		ND	0.40	0.19	2	3/19/24 18:20	TPH
1,2-Dichloropropane	ND	0.10	0.074		ND	0.46	0.34	2	3/19/24 18:20	TPH
cis-1,3-Dichloropropene	ND	0.10	0.051		ND	0.45	0.23	2	3/19/24 18:20	TPH
trans-1,3-Dichloropropene	ND	0.10	0.097		ND	0.45	0.44	2	3/19/24 18:20	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10	0.040		ND	0.70	0.28	2	3/19/24 18:20	TPH
1,4-Dioxane	ND	1.0	0.49		ND	3.6	1.8	2	3/19/24 18:20	TPH
Ethanol	68	4.0	2.7		130	7.5	5.0	2	3/19/24 18:20	TPH
Ethyl Acetate	ND	1.0	0.39		ND	3.6	1.4	2	3/19/24 18:20	TPH
Ethylbenzene	0.19	0.10	0.034		0.84	0.43	0.15	2	3/19/24 18:20	TPH
4-Ethyltoluene	ND	0.10	0.043		ND	0.49	0.21	2	3/19/24 18:20	TPH
Heptane	0.27	0.10	0.063		1.1	0.41	0.26	2	3/19/24 18:20	TPH
Hexachlorobutadiene	ND	0.10	0.058		ND	1.1	0.61	2	3/19/24 18:20	TPH
Hexane	ND	4.0	2.1		ND	14	7.4	2	3/19/24 18:20	TPH
2-Hexanone (MBK)	ND	0.10	0.043		ND	0.41	0.18	2	3/19/24 18:20	TPH
Isopropanol	ND	4.0	2.1		ND	9.8	5.2	2	3/19/24 18:20	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.049		ND	0.36	0.18	2	3/19/24 18:20	TPH
Methylene Chloride	ND	1.0	0.27		ND	3.5	0.93	2	3/19/24 18:20	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.053		ND	0.41	0.22	2	3/19/24 18:20	TPH
Naphthalene	0.11	0.10	0.081		0.56	0.52	0.43	2	3/19/24 18:20	TPH
Propene	ND	4.0	2.2		ND	6.9	3.8	2	3/19/24 18:20	TPH
Styrene	0.26	0.10	0.077		1.1	0.43	0.33	2	3/19/24 18:20	TPH
1,1,2,2-Tetrachloroethane	ND	0.10	0.025		ND	0.69	0.17	2	3/19/24 18:20	TPH

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ANALYTICAL RESULTS

Project Location:
Date Received: 3/12/2024
Field Sample #: CL-SSV-1
Sample ID: 24C1287-02
Sample Matrix: Sub Slab
Sampled: 3/10/2024 07:48

Sample Description/Location:
Sub Description/Location:
Canister ID: P1243
Canister Size: 6 liter
Flow Controller ID: 3052
Sample Type: 8 hr

Work Order: 24C1287
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -4
Receipt Vacuum(in Hg): -5.0
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Dilution	Date/Time	
	Results	RL	MDL		Results	RL	MDL		Analyzed	Analyst
Tetrachloroethylene	9.5	0.10	0.086		65	0.68	0.58	2	3/19/24 18:20	TPH
Tetrahydrofuran	ND	1.0	0.38		ND	2.9	1.1	2	3/19/24 18:20	TPH
Toluene	1.4	0.10	0.050		5.4	0.38	0.19	2	3/19/24 18:20	TPH
1,2,4-Trichlorobenzene	ND	0.10	0.055		ND	0.74	0.41	2	3/19/24 18:20	TPH
1,1,1-Trichloroethane	ND	0.10	0.031		ND	0.55	0.17	2	3/19/24 18:20	TPH
1,1,2-Trichloroethane	ND	0.10	0.035		ND	0.55	0.19	2	3/19/24 18:20	TPH
Trichloroethylene	0.45	0.10	0.077		2.4	0.54	0.41	2	3/19/24 18:20	TPH
Trichlorofluoromethane (Freon 11)	0.26	0.40	0.041	J	1.5	2.2	0.23	2	3/19/24 18:20	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.070	0.40	0.027	J	0.54	3.1	0.21	2	3/19/24 18:20	TPH
1,2,4-Trimethylbenzene	0.19	0.10	0.060		0.93	0.49	0.29	2	3/19/24 18:20	TPH
1,3,5-Trimethylbenzene	0.092	0.10	0.077	J	0.45	0.49	0.38	2	3/19/24 18:20	TPH
Vinyl Acetate	ND	2.0	0.41		ND	7.0	1.4	2	3/19/24 18:20	TPH
Vinyl Chloride	ND	0.10	0.051		ND	0.26	0.13	2	3/19/24 18:20	TPH
m&p-Xylene	0.49	0.20	0.070		2.1	0.87	0.30	2	3/19/24 18:20	TPH
o-Xylene	0.18	0.10	0.037		0.80	0.43	0.16	2	3/19/24 18:20	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.1	70-130	3/19/24 18:20

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-1
Sample ID: 24C1287-03
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 07:49

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P3345
 Canister Size: 6 liter
 Flow Controller ID: 3584
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -7.5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	170	1.4	0.71	J	410	3.3	1.7	0.698	3/19/24 15:41	TPH
Benzene	0.18	0.035	0.011		0.58	0.11	0.034	0.698	3/19/24 15:41	TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 15:41	TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 15:41	TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 15:41	TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 15:41	TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 15:41	TPH
2-Butanone (MEK)	ND	1.4	0.68		ND	4.1	2.0	0.698	3/19/24 15:41	TPH
Carbon Disulfide	ND	0.35	0.067		ND	1.1	0.21	0.698	3/19/24 15:41	TPH
Carbon Tetrachloride	0.028	0.035	0.027	J	0.18	0.22	0.17	0.698	3/19/24 15:41	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 15:41	TPH
Chloroethane	ND	0.035	0.032		ND	0.092	0.084	0.698	3/19/24 15:41	TPH
Chloroform	0.072	0.035	0.017		0.35	0.17	0.083	0.698	3/19/24 15:41	TPH
Chloromethane	0.45	0.070	0.047		0.92	0.14	0.096	0.698	3/19/24 15:41	TPH
Cyclohexane	0.077	0.035	0.027		0.27	0.12	0.093	0.698	3/19/24 15:41	TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 15:41	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 15:41	TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 15:41	TPH
1,3-Dichlorobenzene	ND	0.035	0.013	J	ND	0.21	0.078	0.698	3/19/24 15:41	TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 15:41	TPH
Dichlorodifluoromethane (Freon 12)	0.60	0.035	0.015		3.0	0.17	0.072	0.698	3/19/24 15:41	TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 15:41	TPH
1,2-Dichloroethane	0.044	0.035	0.013		0.18	0.14	0.053	0.698	3/19/24 15:41	TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 15:41	TPH
cis-1,2-Dichloroethylene	0.024	0.035	0.017		0.094	0.14	0.067	0.698	3/19/24 15:41	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 15:41	TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 15:41	TPH
cis-1,3-Dichloropropene	ND	0.035	0.018	J	ND	0.16	0.080	0.698	3/19/24 15:41	TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 15:41	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035	0.014		ND	0.24	0.098	0.698	3/19/24 15:41	TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 15:41	TPH
Ethanol	56	1.4	0.93		110	2.6	1.7	0.698	3/19/24 15:41	TPH
Ethyl Acetate	0.15	0.35	0.14		0.53	1.3	0.49	0.698	3/19/24 15:41	TPH
Ethylbenzene	0.61	0.035	0.012		2.7	0.15	0.052	0.698	3/19/24 15:41	TPH
4-Ethyltoluene	0.10	0.035	0.015		0.49	0.17	0.075	0.698	3/19/24 15:41	TPH
Heptane	0.49	0.035	0.022		2.0	0.14	0.090	0.698	3/19/24 15:41	TPH
Hexachlorobutadiene	ND	0.035	0.020	J	ND	0.37	0.21	0.698	3/19/24 15:41	TPH
Hexane	ND	1.4	0.73		ND	4.9	2.6	0.698	3/19/24 15:41	TPH
2-Hexanone (MBK)	0.045	0.035	0.015		0.19	0.14	0.062	0.698	3/19/24 15:41	TPH
Isopropanol	ND	1.4	0.73		ND	3.4	1.8	0.698	3/19/24 15:41	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 15:41	TPH
Methylene Chloride	0.13	0.35	0.094		0.45	1.2	0.33	0.698	3/19/24 15:41	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 15:41	TPH
Naphthalene	0.27	0.035	0.028		1.4	0.18	0.15	0.698	3/19/24 15:41	TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 15:41	TPH
Styrene	0.079	0.035	0.027	J	0.34	0.15	0.12	0.698	3/19/24 15:41	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 15:41	TPH

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ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-1
Sample ID: 24C1287-03
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 07:49

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P3345
 Canister Size: 6 liter
 Flow Controller ID: 3584
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -7.5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	
Tetrachloroethylene	1.2	0.035	0.030		7.9	0.24	0.20	0.698	3/19/24 15:41	TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 15:41	TPH
Toluene	8.7	0.035	0.017		33	0.13	0.066	0.698	3/19/24 15:41	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 15:41	TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 15:41	TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 15:41	TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 15:41	TPH
Trichlorofluoromethane (Freon 11)	0.29	0.14	0.014		1.6	0.78	0.080	0.698	3/19/24 15:41	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.069	0.14	0.0095	J	0.53	1.1	0.073	0.698	3/19/24 15:41	TPH
1,2,4-Trimethylbenzene	0.73	0.035	0.021		3.6	0.17	0.10	0.698	3/19/24 15:41	TPH
1,3,5-Trimethylbenzene	0.20	0.035	0.027		0.97	0.17	0.13	0.698	3/19/24 15:41	TPH
Vinyl Acetate	ND	0.70	0.14		ND	2.5	0.50	0.698	3/19/24 15:41	TPH
Vinyl Chloride	0.023	0.035	0.018	J	0.059	0.089	0.045	0.698	3/19/24 15:41	TPH
m&p-Xylene	2.5	0.070	0.024		11	0.30	0.11	0.698	3/19/24 15:41	TPH
o-Xylene	0.76	0.035	0.013		3.3	0.15	0.055	0.698	3/19/24 15:41	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.8	70-130	3/19/24 15:41

ANALYTICAL RESULTS

Project Location:
Date Received: 3/12/2024
Field Sample #: CL-SSV-2
Sample ID: 24C1287-04
Sample Matrix: Sub Slab
Sampled: 3/10/2024 08:29

Sample Description/Location:
Sub Description/Location:
Canister ID: P0331
Canister Size: 6 liter
Flow Controller ID: 3042
Sample Type: 8 hr

Work Order: 24C1287
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -8.4
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv				Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL	Results		RL	MDL	Dilution	Analyzed	Analyst	
Acetone	17	4.0	2.0			40	9.5	4.8	2	3/19/24 18:47	TPH
Benzene	0.24	0.10	0.031			0.75	0.32	0.099	2	3/19/24 18:47	TPH
Benzyl chloride	ND	0.10	0.054			ND	0.52	0.28	2	3/19/24 18:47	TPH
Bromodichloromethane	ND	0.10	0.041			ND	0.67	0.27	2	3/19/24 18:47	TPH
Bromoform	ND	0.10	0.036			ND	1.0	0.37	2	3/19/24 18:47	TPH
Bromomethane	ND	0.10	0.085			ND	0.39	0.33	2	3/19/24 18:47	TPH
1,3-Butadiene	ND	0.10	0.084			ND	0.22	0.19	2	3/19/24 18:47	TPH
2-Butanone (MEK)	ND	4.0	2.0			ND	12	5.8	2	3/19/24 18:47	TPH
Carbon Disulfide	0.35	1.0	0.19	J		1.1	3.1	0.60	2	3/19/24 18:47	TPH
Carbon Tetrachloride	ND	0.10	0.079			ND	0.63	0.50	2	3/19/24 18:47	TPH
Chlorobenzene	ND	0.10	0.033			ND	0.46	0.15	2	3/19/24 18:47	TPH
Chloroethane	ND	0.10	0.092			ND	0.26	0.24	2	3/19/24 18:47	TPH
Chloroform	8.3	0.10	0.049			40	0.49	0.24	2	3/19/24 18:47	TPH
Chloromethane	ND	0.20	0.13			ND	0.41	0.28	2	3/19/24 18:47	TPH
Cyclohexane	0.18	0.10	0.078			0.61	0.34	0.27	2	3/19/24 18:47	TPH
Dibromochloromethane	ND	0.10	0.067			ND	0.85	0.57	2	3/19/24 18:47	TPH
1,2-Dibromoethane (EDB)	ND	0.10	0.062			ND	0.77	0.48	2	3/19/24 18:47	TPH
1,2-Dichlorobenzene	ND	0.10	0.035			ND	0.60	0.21	2	3/19/24 18:47	TPH
1,3-Dichlorobenzene	ND	0.10	0.037			ND	0.60	0.22	2	3/19/24 18:47	TPH
1,4-Dichlorobenzene	ND	0.10	0.048			ND	0.60	0.29	2	3/19/24 18:47	TPH
Dichlorodifluoromethane (Freon 12)	0.71	0.10	0.042			3.5	0.49	0.21	2	3/19/24 18:47	TPH
1,1-Dichloroethane	0.32	0.10	0.049			1.3	0.40	0.20	2	3/19/24 18:47	TPH
1,2-Dichloroethane	0.12	0.10	0.038			0.49	0.40	0.15	2	3/19/24 18:47	TPH
1,1-Dichloroethylene	ND	0.10	0.070			ND	0.40	0.28	2	3/19/24 18:47	TPH
cis-1,2-Dichloroethylene	ND	0.10	0.048			ND	0.40	0.19	2	3/19/24 18:47	TPH
trans-1,2-Dichloroethylene	ND	0.10	0.047			ND	0.40	0.19	2	3/19/24 18:47	TPH
1,2-Dichloropropane	ND	0.10	0.074			ND	0.46	0.34	2	3/19/24 18:47	TPH
cis-1,3-Dichloropropene	ND	0.10	0.051			ND	0.45	0.23	2	3/19/24 18:47	TPH
trans-1,3-Dichloropropene	ND	0.10	0.097			ND	0.45	0.44	2	3/19/24 18:47	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10	0.040			ND	0.70	0.28	2	3/19/24 18:47	TPH
1,4-Dioxane	ND	1.0	0.49			ND	3.6	1.8	2	3/19/24 18:47	TPH
Ethanol	50	4.0	2.7			95	7.5	5.0	2	3/19/24 18:47	TPH
Ethyl Acetate	6.1	1.0	0.39			22	3.6	1.4	2	3/19/24 18:47	TPH
Ethylbenzene	0.28	0.10	0.034			1.2	0.43	0.15	2	3/19/24 18:47	TPH
4-Ethyltoluene	ND	0.10	0.043			ND	0.49	0.21	2	3/19/24 18:47	TPH
Heptane	0.51	0.10	0.063			2.1	0.41	0.26	2	3/19/24 18:47	TPH
Hexachlorobutadiene	ND	0.10	0.058			ND	1.1	0.61	2	3/19/24 18:47	TPH
Hexane	ND	4.0	2.1			ND	14	7.4	2	3/19/24 18:47	TPH
2-Hexanone (MBK)	ND	0.10	0.043			ND	0.41	0.18	2	3/19/24 18:47	TPH
Isopropanol	15	4.0	2.1			36	9.8	5.2	2	3/19/24 18:47	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.049			ND	0.36	0.18	2	3/19/24 18:47	TPH
Methylene Chloride	ND	1.0	0.27			ND	3.5	0.93	2	3/19/24 18:47	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.053			ND	0.41	0.22	2	3/19/24 18:47	TPH
Naphthalene	ND	0.10	0.081			ND	0.52	0.43	2	3/19/24 18:47	TPH
Propene	ND	4.0	2.2			ND	6.9	3.8	2	3/19/24 18:47	TPH
Styrene	ND	0.10	0.077			ND	0.43	0.33	2	3/19/24 18:47	TPH
1,1,2,2-Tetrachloroethane	ND	0.10	0.025			ND	0.69	0.17	2	3/19/24 18:47	TPH

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ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-SSV-2
Sample ID: 24C1287-04
 Sample Matrix: Sub Slab
 Sampled: 3/10/2024 08:29

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P0331
 Canister Size: 6 liter
 Flow Controller ID: 3042
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -8.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv		Flag/Qual	Results	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL			RL	MDL		Analyzed		
Tetrachloroethylene	23	0.10	0.086		150	0.68	0.58	2	3/19/24 18:47		TPH
Tetrahydrofuran	ND	1.0	0.38		ND	2.9	1.1	2	3/19/24 18:47		TPH
Toluene	5.7	0.10	0.050		22	0.38	0.19	2	3/19/24 18:47		TPH
1,2,4-Trichlorobenzene	ND	0.10	0.055		ND	0.74	0.41	2	3/19/24 18:47		TPH
1,1,1-Trichloroethane	ND	0.10	0.031		ND	0.55	0.17	2	3/19/24 18:47		TPH
1,1,2-Trichloroethane	ND	0.10	0.035		ND	0.55	0.19	2	3/19/24 18:47		TPH
Trichloroethylene	0.30	0.10	0.077		1.6	0.54	0.41	2	3/19/24 18:47		TPH
Trichlorofluoromethane (Freon 11)	0.47	0.40	0.041		2.6	2.2	0.23	2	3/19/24 18:47		TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.080	0.40	0.027	J	0.61	3.1	0.21	2	3/19/24 18:47		TPH
1,2,4-Trimethylbenzene	0.28	0.10	0.060		1.4	0.49	0.29	2	3/19/24 18:47		TPH
1,3,5-Trimethylbenzene	0.14	0.10	0.077		0.70	0.49	0.38	2	3/19/24 18:47		TPH
Vinyl Acetate	ND	2.0	0.41		ND	7.0	1.4	2	3/19/24 18:47		TPH
Vinyl Chloride	ND	0.10	0.051		ND	0.26	0.13	2	3/19/24 18:47		TPH
m&p-Xylene	1.0	0.20	0.070		4.4	0.87	0.30	2	3/19/24 18:47		TPH
o-Xylene	0.38	0.10	0.037		1.6	0.43	0.16	2	3/19/24 18:47		TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.9	70-130	
		3/19/24 18:47	

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-2
Sample ID: 24C1287-05
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 08:30

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1081
 Canister Size: 6 liter
 Flow Controller ID: 5080
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -30+
 Final Vacuum(in Hg): -10.5
 Receipt Vacuum(in Hg): -9.6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL		Analyzed		
Acetone	18	1.4	0.71		42	3.3	1.7	0.698	3/19/24 16:14		TPH
Benzene	0.19	0.035	0.011		0.62	0.11	0.034	0.698	3/19/24 16:14		TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 16:14		TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 16:14		TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 16:14		TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 16:14		TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 16:14		TPH
2-Butanone (MEK)	ND	1.4	0.68		ND	4.1	2.0	0.698	3/19/24 16:14		TPH
Carbon Disulfide	0.36	0.35	0.067		1.1	1.1	0.21	0.698	3/19/24 16:14		TPH
Carbon Tetrachloride	0.076	0.035	0.027		0.48	0.22	0.17	0.698	3/19/24 16:14		TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 16:14		TPH
Chloroethane	ND	0.035	0.032		ND	0.092	0.084	0.698	3/19/24 16:14		TPH
Chloroform	0.029	0.035	0.017	J	0.14	0.17	0.083	0.698	3/19/24 16:14		TPH
Chloromethane	0.48	0.070	0.047		0.98	0.14	0.096	0.698	3/19/24 16:14		TPH
Cyclohexane	0.087	0.035	0.027		0.30	0.12	0.093	0.698	3/19/24 16:14		TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 16:14		TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 16:14		TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 16:14		TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 16:14		TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 16:14		TPH
Dichlorodifluoromethane (Freon 12)	0.51	0.035	0.015		2.5	0.17	0.072	0.698	3/19/24 16:14		TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 16:14		TPH
1,2-Dichloroethane	0.033	0.035	0.013	J	0.14	0.14	0.053	0.698	3/19/24 16:14		TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 16:14		TPH
cis-1,2-Dichloroethylene	ND	0.035	0.017		ND	0.14	0.067	0.698	3/19/24 16:14		TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 16:14		TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 16:14		TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 16:14		TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 16:14		TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.017	0.035	0.014	J	0.12	0.24	0.098	0.698	3/19/24 16:14		TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 16:14		TPH
Ethanol	44	1.4	0.93	J	82	2.6	1.7	0.698	3/19/24 16:14		TPH
Ethyl Acetate	0.17	0.35	0.14	J	0.60	1.3	0.49	0.698	3/19/24 16:14		TPH
Ethylbenzene	0.28	0.035	0.012		1.2	0.15	0.052	0.698	3/19/24 16:14		TPH
4-Ethyltoluene	0.097	0.035	0.015		0.48	0.17	0.075	0.698	3/19/24 16:14		TPH
Heptane	0.49	0.035	0.022		2.0	0.14	0.090	0.698	3/19/24 16:14		TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 16:14		TPH
Hexane	ND	1.4	0.73		ND	4.9	2.6	0.698	3/19/24 16:14		TPH
2-Hexanone (MBK)	0.040	0.035	0.015		0.17	0.14	0.062	0.698	3/19/24 16:14		TPH
Isopropanol	ND	1.4	0.73		ND	3.4	1.8	0.698	3/19/24 16:14		TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 16:14		TPH
Methylene Chloride	0.10	0.35	0.094	J	0.35	1.2	0.33	0.698	3/19/24 16:14		TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 16:14		TPH
Naphthalene	0.22	0.035	0.028		1.1	0.18	0.15	0.698	3/19/24 16:14		TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 16:14		TPH
Styrene	0.079	0.035	0.027		0.34	0.15	0.12	0.698	3/19/24 16:14		TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 16:14		TPH

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ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-2
Sample ID: 24C1287-05
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 08:30

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1081
 Canister Size: 6 liter
 Flow Controller ID: 5080
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -30+
 Final Vacuum(in Hg): -10.5
 Receipt Vacuum(in Hg): -9.6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	Analyst
Tetrachloroethylene	0.70	0.035	0.030		4.8	0.24	0.20	0.698	3/19/24 16:14	TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 16:14	TPH
Toluene	5.6	0.035	0.017		21	0.13	0.066	0.698	3/19/24 16:14	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 16:14	TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 16:14	TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 16:14	TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 16:14	TPH
Trichlorofluoromethane (Freon 11)	0.25	0.14	0.014		1.4	0.78	0.080	0.698	3/19/24 16:14	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.068	0.14	0.0095	J	0.52	1.1	0.073	0.698	3/19/24 16:14	TPH
1,2,4-Trimethylbenzene	0.48	0.035	0.021		2.4	0.17	0.10	0.698	3/19/24 16:14	TPH
1,3,5-Trimethylbenzene	0.12	0.035	0.027		0.60	0.17	0.13	0.698	3/19/24 16:14	TPH
Vinyl Acetate	0.58	0.70	0.14	J	2.0	2.5	0.50	0.698	3/19/24 16:14	TPH
Vinyl Chloride	ND	0.035	0.018		ND	0.089	0.045	0.698	3/19/24 16:14	TPH
m&p-Xylene	1.0	0.070	0.024		4.4	0.30	0.11	0.698	3/19/24 16:14	TPH
o-Xylene	0.38	0.035	0.013		1.7	0.15	0.055	0.698	3/19/24 16:14	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.7	70-130	3/19/24 16:14

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: FD-031024
Sample ID: 24C1287-06
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 00:00

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P2352
 Canister Size: 6 liter
 Flow Controller ID: 5080
 Sample Type: 8 hr

FD of CL-IA-2

Work Order: 24C1287
 Initial Vacuum(in Hg): -30+
 Final Vacuum(in Hg): -10.5
 Receipt Vacuum(in Hg): -9.6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	17	1.4	0.71		41	3.3	1.7	0.698	3/19/24 16:47	TPH
Benzene	0.19	0.035	0.011		0.59	0.11	0.034	0.698	3/19/24 16:47	TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 16:47	TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 16:47	TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 16:47	TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 16:47	TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 16:47	TPH
2-Butanone (MEK)	ND	1.4	0.68		ND	4.1	2.0	0.698	3/19/24 16:47	TPH
Carbon Disulfide	ND	0.35	0.067		ND	1.1	0.21	0.698	3/19/24 16:47	TPH
Carbon Tetrachloride	0.043	0.035	0.027		0.27	0.22	0.17	0.698	3/19/24 16:47	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 16:47	TPH
Chloroethane	ND	0.035	0.032		ND	0.092	0.084	0.698	3/19/24 16:47	TPH
Chloroform	0.023	0.035	0.017	J	0.11	0.17	0.083	0.698	3/19/24 16:47	TPH
Chloromethane	0.42	0.070	0.047		0.87	0.14	0.096	0.698	3/19/24 16:47	TPH
Cyclohexane	0.096	0.035	0.027		0.33	0.12	0.093	0.698	3/19/24 16:47	TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 16:47	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 16:47	TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 16:47	TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 16:47	TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 16:47	TPH
Dichlorodifluoromethane (Freon 12)	0.63	0.035	0.015		3.1	0.17	0.072	0.698	3/19/24 16:47	TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 16:47	TPH
1,2-Dichloroethane	0.038	0.035	0.013		0.15	0.14	0.053	0.698	3/19/24 16:47	TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 16:47	TPH
cis-1,2-Dichloroethylene	ND	0.035	0.017		ND	0.14	0.067	0.698	3/19/24 16:47	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 16:47	TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 16:47	TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 16:47	TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 16:47	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.018	0.035	0.014	J	0.13	0.24	0.098	0.698	3/19/24 16:47	TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 16:47	TPH
Ethanol	49	1.4	0.93	J	91	2.6	1.7	0.698	3/19/24 16:47	TPH
Ethyl Acetate	ND	0.35	0.14		ND	1.3	0.49	0.698	3/19/24 16:47	TPH
Ethylbenzene	0.29	0.035	0.012		1.3	0.15	0.052	0.698	3/19/24 16:47	TPH
4-Ethyltoluene	0.067	0.035	0.015		0.33	0.17	0.075	0.698	3/19/24 16:47	TPH
Heptane	0.39	0.035	0.022		1.6	0.14	0.090	0.698	3/19/24 16:47	TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 16:47	TPH
Hexane	ND	1.4	0.73		ND	4.9	2.6	0.698	3/19/24 16:47	TPH
2-Hexanone (MBK)	ND	0.035	0.015		ND	0.14	0.062	0.698	3/19/24 16:47	TPH
Isopropanol	ND	1.4	0.73		ND	3.4	1.8	0.698	3/19/24 16:47	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 16:47	TPH
Methylene Chloride	0.12	0.35	0.094	J	0.41	1.2	0.33	0.698	3/19/24 16:47	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 16:47	TPH
Naphthalene	0.25	0.035	0.028		1.3	0.18	0.15	0.698	3/19/24 16:47	TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 16:47	TPH
Styrene	0.084	0.035	0.027		0.36	0.15	0.12	0.698	3/19/24 16:47	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 16:47	TPH

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ANALYTICAL RESULTS

Project Location:
Date Received: 3/12/2024
Field Sample #: FD-031024
Sample ID: 24C1287-06
Sample Matrix: Indoor air
Sampled: 3/10/2024 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: P2352
Canister Size: 6 liter
Flow Controller ID: 5080
Sample Type: 8 hr

FD of CL-IA-2

Work Order: 24C1287
Initial Vacuum(in Hg): -30+
Final Vacuum(in Hg): -10.5
Receipt Vacuum(in Hg): -9.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv		Flag/Qual	Results	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL			RL	MDL		Analyzed		
Tetrachloroethylene	0.73	0.035	0.030		5.0	0.24	0.20	0.698	3/19/24 16:47		TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 16:47		TPH
Toluene	5.6	0.035	0.017		21	0.13	0.066	0.698	3/19/24 16:47		TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 16:47		TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 16:47		TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 16:47		TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 16:47		TPH
Trichlorofluoromethane (Freon 11)	0.23	0.14	0.014		1.3	0.78	0.080	0.698	3/19/24 16:47		TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.071	0.14	0.0095	J	0.55	1.1	0.073	0.698	3/19/24 16:47		TPH
1,2,4-Trimethylbenzene	0.49	0.035	0.021		2.4	0.17	0.10	0.698	3/19/24 16:47		TPH
1,3,5-Trimethylbenzene	0.12	0.035	0.027		0.61	0.17	0.13	0.698	3/19/24 16:47		TPH
Vinyl Acetate	ND	0.70	0.14		ND	2.5	0.50	0.698	3/19/24 16:47		TPH
Vinyl Chloride	ND	0.035	0.018		ND	0.089	0.045	0.698	3/19/24 16:47		TPH
m&p-Xylene	1.0	0.070	0.024		4.4	0.30	0.11	0.698	3/19/24 16:47		TPH
o-Xylene	0.38	0.035	0.013		1.7	0.15	0.055	0.698	3/19/24 16:47		TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.1	70-130	3/19/24 16:47

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-3-B
Sample ID: 24C1287-07
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 08:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P1072
 Canister Size: 6 liter
 Flow Controller ID: 3267
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -30+
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -8.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	7.3	1.4	0.71		17	3.3	1.7	0.698	3/19/24 17:19	TPH
Benzene	0.20	0.035	0.011		0.65	0.11	0.034	0.698	3/19/24 17:19	TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 17:19	TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 17:19	TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 17:19	TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 17:19	TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 17:19	TPH
2-Butanone (MEK)	ND	1.4	0.68		ND	4.1	2.0	0.698	3/19/24 17:19	TPH
Carbon Disulfide	ND	0.35	0.067		ND	1.1	0.21	0.698	3/19/24 17:19	TPH
Carbon Tetrachloride	0.063	0.035	0.027		0.40	0.22	0.17	0.698	3/19/24 17:19	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 17:19	TPH
Chloroethane	0.048	0.035	0.032		0.13	0.092	0.084	0.698	3/19/24 17:19	TPH
Chloroform	0.018	0.035	0.017	J	0.089	0.17	0.083	0.698	3/19/24 17:19	TPH
Chloromethane	0.55	0.070	0.047		1.1	0.14	0.096	0.698	3/19/24 17:19	TPH
Cyclohexane	0.061	0.035	0.027		0.21	0.12	0.093	0.698	3/19/24 17:19	TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 17:19	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 17:19	TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 17:19	TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 17:19	TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 17:19	TPH
Dichlorodifluoromethane (Freon 12)	0.52	0.035	0.015		2.5	0.17	0.072	0.698	3/19/24 17:19	TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 17:19	TPH
1,2-Dichloroethane	0.020	0.035	0.013	J	0.079	0.14	0.053	0.698	3/19/24 17:19	TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 17:19	TPH
cis-1,2-Dichloroethylene	0.024	0.035	0.017	J	0.097	0.14	0.067	0.698	3/19/24 17:19	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 17:19	TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 17:19	TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 17:19	TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 17:19	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.017	0.035	0.014	J	0.12	0.24	0.098	0.698	3/19/24 17:19	TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 17:19	TPH
Ethanol	9.3	1.4	0.93		17	2.6	1.7	0.698	3/19/24 17:19	TPH
Ethyl Acetate	0.82	0.35	0.14		2.9	1.3	0.49	0.698	3/19/24 17:19	TPH
Ethylbenzene	0.37	0.035	0.012		1.6	0.15	0.052	0.698	3/19/24 17:19	TPH
4-Ethyltoluene	0.087	0.035	0.015		0.43	0.17	0.075	0.698	3/19/24 17:19	TPH
Heptane	0.45	0.035	0.022		1.8	0.14	0.090	0.698	3/19/24 17:19	TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 17:19	TPH
Hexane	ND	1.4	0.73		ND	4.9	2.6	0.698	3/19/24 17:19	TPH
2-Hexanone (MBK)	0.058	0.035	0.015		0.24	0.14	0.062	0.698	3/19/24 17:19	TPH
Isopropanol	13	1.4	0.73		33	3.4	1.8	0.698	3/19/24 17:19	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 17:19	TPH
Methylene Chloride	0.11	0.35	0.094	J	0.39	1.2	0.33	0.698	3/19/24 17:19	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 17:19	TPH
Naphthalene	0.065	0.035	0.028		0.34	0.18	0.15	0.698	3/19/24 17:19	TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 17:19	TPH
Styrene	0.049	0.035	0.027		0.21	0.15	0.12	0.698	3/19/24 17:19	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 17:19	TPH

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-3-B
Sample ID: 24C1287-07
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 08:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P1072
 Canister Size: 6 liter
 Flow Controller ID: 3267
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -30+
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -8.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv		Flag/Qual	Results	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL			RL	MDL		Analyzed		
Tetrachloroethylene	1.1	0.035	0.030		7.4	0.24	0.20	0.698	3/19/24 17:19		TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 17:19		TPH
Toluene	5.9	0.035	0.017		22	0.13	0.066	0.698	3/19/24 17:19		TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 17:19		TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 17:19		TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 17:19		TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 17:19		TPH
Trichlorofluoromethane (Freon 11)	0.35	0.14	0.014		2.0	0.78	0.080	0.698	3/19/24 17:19		TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.067	0.14	0.0095	J	0.51	1.1	0.073	0.698	3/19/24 17:19		TPH
1,2,4-Trimethylbenzene	0.56	0.035	0.021		2.8	0.17	0.10	0.698	3/19/24 17:19		TPH
1,3,5-Trimethylbenzene	0.15	0.035	0.027		0.71	0.17	0.13	0.698	3/19/24 17:19		TPH
Vinyl Acetate	0.63	0.70	0.14	J	2.2	2.5	0.50	0.698	3/19/24 17:19		TPH
Vinyl Chloride	ND	0.035	0.018		ND	0.089	0.045	0.698	3/19/24 17:19		TPH
m&p-Xylene	1.2	0.070	0.024		5.3	0.30	0.11	0.698	3/19/24 17:19		TPH
o-Xylene	0.45	0.035	0.013		2.0	0.15	0.055	0.698	3/19/24 17:19		TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.5	70-130	3/19/24 17:19

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-OA-1
Sample ID: 24C1287-08
 Sample Matrix: Ambient Air
 Sampled: 3/10/2024 08:40

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P3592
 Canister Size: 6 liter
 Flow Controller ID: 3749
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -28.5
 Final Vacuum(in Hg): -8.5
 Receipt Vacuum(in Hg): -7.7
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	1.7	1.4	0.71		4.0	3.3	1.7	0.698	3/19/24 17:52	TPH
Benzene	0.12	0.035	0.011		0.38	0.11	0.034	0.698	3/19/24 17:52	TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 17:52	TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 17:52	TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 17:52	TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 17:52	TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 17:52	TPH
2-Butanone (MEK)	ND	1.4	0.68		ND	4.1	2.0	0.698	3/19/24 17:52	TPH
Carbon Disulfide	ND	0.35	0.067		ND	1.1	0.21	0.698	3/19/24 17:52	TPH
Carbon Tetrachloride	0.070	0.035	0.027		0.44	0.22	0.17	0.698	3/19/24 17:52	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 17:52	TPH
Chloroethane	0.033	0.035	0.032	J	0.088	0.092	0.084	0.698	3/19/24 17:52	TPH
Chloroform	ND	0.035	0.017		ND	0.17	0.083	0.698	3/19/24 17:52	TPH
Chloromethane	0.53	0.070	0.047		1.1	0.14	0.096	0.698	3/19/24 17:52	TPH
Cyclohexane	ND	0.035	0.027		ND	0.12	0.093	0.698	3/19/24 17:52	TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 17:52	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 17:52	TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 17:52	TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 17:52	TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 17:52	TPH
Dichlorodifluoromethane (Freon 12)	0.57	0.035	0.015		2.8	0.17	0.072	0.698	3/19/24 17:52	TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 17:52	TPH
1,2-Dichloroethane	0.014	0.035	0.013	J	0.056	0.14	0.053	0.698	3/19/24 17:52	TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 17:52	TPH
cis-1,2-Dichloroethylene	ND	0.035	0.017		ND	0.14	0.067	0.698	3/19/24 17:52	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 17:52	TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 17:52	TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 17:52	TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 17:52	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.017	0.035	0.014	J	0.12	0.24	0.098	0.698	3/19/24 17:52	TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 17:52	TPH
Ethanol	1.1	1.4	0.93	J	2.1	2.6	1.7	0.698	3/19/24 17:52	TPH
Ethyl Acetate	ND	0.35	0.14		ND	1.3	0.49	0.698	3/19/24 17:52	TPH
Ethylbenzene	ND	0.035	0.012		ND	0.15	0.052	0.698	3/19/24 17:52	TPH
4-Ethyltoluene	ND	0.035	0.015		ND	0.17	0.075	0.698	3/19/24 17:52	TPH
Heptane	0.042	0.035	0.022		0.17	0.14	0.090	0.698	3/19/24 17:52	TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 17:52	TPH
Hexane	ND	1.4	0.73		ND	4.9	2.6	0.698	3/19/24 17:52	TPH
2-Hexanone (MBK)	ND	0.035	0.015		ND	0.14	0.062	0.698	3/19/24 17:52	TPH
Isopropanol	ND	1.4	0.73		ND	3.4	1.8	0.698	3/19/24 17:52	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 17:52	TPH
Methylene Chloride	0.099	0.35	0.094	J	0.34	1.2	0.33	0.698	3/19/24 17:52	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 17:52	TPH
Naphthalene	ND	0.035	0.028		ND	0.18	0.15	0.698	3/19/24 17:52	TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 17:52	TPH
Styrene	ND	0.035	0.027		ND	0.15	0.12	0.698	3/19/24 17:52	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 17:52	TPH

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ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-OA-1
Sample ID: 24C1287-08
 Sample Matrix: Ambient Air
 Sampled: 3/10/2024 08:40

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P3592
 Canister Size: 6 liter
 Flow Controller ID: 3749
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -28.5
 Final Vacuum(in Hg): -8.5
 Receipt Vacuum(in Hg): -7.7
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv		Flag/Qual	Results	ug/m3		Dilution	Date/Time		Analyst
		RL	MDL			RL	MDL		Analyzed		
Tetrachloroethylene	ND	0.035	0.030		ND	0.24	0.20	0.698	3/19/24 17:52	TPH	
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 17:52	TPH	
Toluene	0.062	0.035	0.017		0.23	0.13	0.066	0.698	3/19/24 17:52	TPH	
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 17:52	TPH	
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 17:52	TPH	
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 17:52	TPH	
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 17:52	TPH	
Trichlorofluoromethane (Freon 11)	0.19	0.14	0.014		1.1	0.78	0.080	0.698	3/19/24 17:52	TPH	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.073	0.14	0.0095	J	0.56	1.1	0.073	0.698	3/19/24 17:52	TPH	
1,2,4-Trimethylbenzene	ND	0.035	0.021		ND	0.17	0.10	0.698	3/19/24 17:52	TPH	
1,3,5-Trimethylbenzene	ND	0.035	0.027		ND	0.17	0.13	0.698	3/19/24 17:52	TPH	
Vinyl Acetate	ND	0.70	0.14		ND	2.5	0.50	0.698	3/19/24 17:52	TPH	
Vinyl Chloride	ND	0.035	0.018		ND	0.089	0.045	0.698	3/19/24 17:52	TPH	
m&p-Xylene	ND	0.070	0.024		ND	0.30	0.11	0.698	3/19/24 17:52	TPH	
o-Xylene	ND	0.035	0.013		ND	0.15	0.055	0.698	3/19/24 17:52	TPH	

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	89.7	70-130	3/19/24 17:52

ATTACHMENT B
SUPPORT DOCUMENTATION

AECOM 30 Leffert
Avenue Port Jefferson, NY 11777
BUFFALO, NY 14202
PHONE: 716-856-5636
AECOM CONTACT: *Blud, Suite 111*

AECOM CONTACT: Caitlin Wastfreny

URSF-075K/1 OF 1/CofCR/GCM

24C1287

AIR SAMPLE CHAIN OF CUSTODY RECORD

ACOM 500 Lakeshore Blvd, Suite 111
257 WEST GENESEE STREET, SUITE 406
BUFFALO, NY 14202
PHONE: 716-856-5636

ACOM CONTACT: Celia Wasteneys

PROJECT NUMBER <u>60722348</u>		SITE NAME <u>Chenango Levee</u>		SAMPLE INFORMATION					LAB Face				
SAMPLERS (PRINT/SIGNATURE) <u>Tom Urban / Tom Urban</u>				DELIVERY SERVICE: <u>Prep off</u> AIRBILL NO.: <u>N/A</u>					SHIPPING CONTAINER <u>1</u> of <u>1</u>				
LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)	CANISTER ID	FLOW CONTROLLER ID	INITIAL PRESSURE/ VACUUM ("Hg)	FINAL PRESSURE/ VACUUM ("Hg)	PRESSURE/VACUUM UPON LAB RECEIPT ("Hg)	REQUIRED ANALYSIS	REMARKS	SAMPLE TYPE CODE
01	3/17/24	0815	CL-IA-3-A	AI	6	1520	3260	28.5-9.3 ⁰	29-4.5 ⁰	29-4.5 ⁰	X		N ₁
02	3/10/24	0748	CL-SSV-1	AS	6	1243	3052	29-4.5 ⁰	29-4.5 ⁰	29-4.5 ⁰	X		N ₁
03	3/10/24	0749	CL-IA-1	AI	6	3345	3584	29-7.5 ⁰	29-7.5 ⁰	29-7.5 ⁰	X		N ₁
04	3/10/24	0829	CL-SSV-2	AS	6	3031	3042	29-7.5 ⁰	29-7.5 ⁰	29-7.5 ⁰	X		N ₁
05	3/10/24	0836	CL-IA-2	AI	6	1081	5080	30-10.5 ⁰	30-10.5 ⁰	30-10.5 ⁰	X		N ₁
06	3/10/24	—	FD-031024	AQ	6	2352	5080	30-10.5 ⁰	30-10.5 ⁰	30-10.5 ⁰	X		FD ₁
07	3/10/24	0838	CL-IA-3-B	AI	6	1072	3267	30-8.5 ⁰	30-8.5 ⁰	30-8.5 ⁰	X		N ₁
08	3/10/24	0840	CL-OA-1	AA	6	3592	3749	28.5-8.5 ⁰	28.5-8.5 ⁰	28.5-8.5 ⁰	X		N ₁
09						0655	3631					unused can't regulate	

MATRIX CODES	AA - AMBIENT AIR	AI - INDOOR AIR	AQ - FIELD QC	AS - SUB-SLAB AIR	GS - SOIL GAS
SAMPLE TYPE CODES	N# - NORMAL ENVIRONMENTAL SAMPLE	FD# - FIELD DUPLICATE	MS# - MATRIX SPIKE	(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)	
RELINQUISHED BY (SIGNATURE) <u>Tom Urban</u>	DATE <u>3/11/24</u>	TIME <u>10:55</u>	RECEIVED BY (SIGNATURE) <u>Joey Hiley (AAL)</u>	DATE <u>3/11/24</u>	TIME <u>10:55</u>
RELINQUISHED BY (SIGNATURE) <u>Joey Hiley (AAL)</u>	DATE <u>3/11/24</u>	TIME <u>10:55</u>	RECEIVED FOR LAB BY (SIGNATURE) <u>Kan Conner</u>	DATE <u>3/12/24</u>	TIME <u>10:20</u>
Distribution: Original accompanies shipment, copy to project file					

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15**Qualifications:**

E Reported result is estimated. Value reported over verified calibration range.

Analyte & Samples(s) Qualified:**Acetone, Ethanol**


24C1287-01RE1[CL-IA-3-A], 24C1287-03[CL-IA-1], 24C1287-05[CL-IA-2], 24C1287-06[FD-031024]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

	DC#_Title: ENV-FRM-ELON-0009 v04_Air Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client AECOM
 Project Chemical Leaman
 MCP/RCP Required _____
 Deliverable Package Requirement _____
 Location _____
 PWSID# (When Applicable) _____
 Arrival Method Courier
 Received By / Date / Time KMC 3/12/24 1020
 Back-Sheet By / Date / Time KMC 3/12/24 1120
 Temperature Method _____ # _____
 Temp $\leq 6^{\circ}\text{C}$ ☐ Actual Temperature _____
 Rush Samples: Yes / No _____ Notify _____
 Short Hold: Yes / No _____ Notify _____

Notes regarding Samples/COC outside of SOP:

Can P1520 + P1072 have the
same sample ID.

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy)
 Any False statement will be brought to the attention of the Client – True or False

True False

Received on Ice	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Received in Cooler	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Custody Seal: DATE TIME	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Relinquished	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC/Samples Labels Agree	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All Samples in Good Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Samples Received within Holding Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is there enough Volume	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Proper Media/Container Used	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Individually Certified Cans	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Trip Blanks	<input type="checkbox"/>	<input checked="" type="checkbox"/>
COC Legible	<input checked="" type="checkbox"/>	<input type="checkbox"/>

COC Included: (Check all included)

Client	<input checked="" type="checkbox"/>	Analysis	<input checked="" type="checkbox"/>	Sampler Name	<input checked="" type="checkbox"/>
Project	<input checked="" type="checkbox"/>	IDs	<input checked="" type="checkbox"/>	Collection Date/Time	<input checked="" type="checkbox"/>

Container	#	Size	Regulator	Duration	Accessories		
Summa Cans	9	6L	8	8hr	Nut/Ferrule	8	IC Train
Tedlar Bags					Tubing		
TO-17 Tubes					T-Connector	1	Shipping Charges
Radiello					Syringe		
Pufs/ TO-11					Tedlar		

Can #'s					Regs #'s				
5	1081	10		15	5	5080	10		15
1 P1520	6 P2352	11		16	1 3260	6 5080	11		16
2 P1243	7 P1072	12		17	2 3052	7 3267	12		17
3 P3345	8 P3592	13		18	3 3584	8 3749	13		18
4 P0331	9	14		19	4 3042	9	14		19
Unused Media					Pufs/TO-17's				
4		9		14	5		10		15
1 P0655	5	10		15	1		11		16
2 3631	6	11		16	2		12		17
3	7	12		17	3		13		18
4	8	13		18	4		14		19

Attachment 6

Analytical Data Report

March 22, 2024

Colin Wasteneys
AECOM Environment - Buffalo, NY
50 Lakefront Boulevard Suite 3
Buffalo, NY 14202

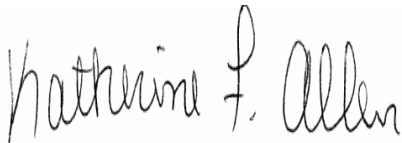
Project Location:
Client Job Number:
Project Number: 60722348
Laboratory Work Order Number: 24C1287

Enclosed are results of analyses for samples as received by the laboratory on March 12, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle K. Stuckey
Project Manager



QA Officer
Katherine Allen



Laboratory Manager
Daren Damboragian

AECOM Environment - Buffalo, NY
50 Lakefront Boulevard Suite 3
Buffalo, NY 14202
ATTN: Colin Wasteneys

REPORT DATE: 3/22/2024

PURCHASE ORDER NUMBER: 00156431

PROJECT NUMBER: 60722348

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24C1287

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION:

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
CL-IA-3-A	24C1287-01	Indoor air		- EPA TO-15	
CL-SSV-1	24C1287-02	Sub Slab		- EPA TO-15	
CL-IA-1	24C1287-03	Indoor air		- EPA TO-15	
CL-SSV-2	24C1287-04	Sub Slab		- EPA TO-15	
CL-IA-2	24C1287-05	Indoor air		- EPA TO-15	
FD-031024	24C1287-06	Indoor air		- EPA TO-15	
CL-IA-3-B	24C1287-07	Indoor air		- EPA TO-15	
CL-OA-1	24C1287-08	Ambient Air		- EPA TO-15	
UNUSED	24C1287-09			-	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

E Reported result is estimated. Value reported over verified calibration range.

Analyte & Samples(s) Qualified:

Acetone, Ethanol

24C1287-01RE1[CL-IA-3-A], 24C1287-03[CL-IA-1], 24C1287-05[CL-IA-2], 24C1287-06[FD-031024]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-3-A
Sample ID: 24C1287-01
 Sample Matrix: Indoor air
 Sampled: 3/7/2024 08:15

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P1520
 Canister Size: 6 liter
 Flow Controller ID: 3260
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -28.5
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -6.3
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL		Analyzed		
Acetone	1100	20	10	E	2600	48	24	10	3/20/24 8:00		TPH
Benzene	0.31	0.035	0.011		0.99	0.11	0.034	0.698	3/19/24 15:09		TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 15:09		TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 15:09		TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 15:09		TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 15:09		TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 15:09		TPH
2-Butanone (MEK)	3.0	1.4	0.68		9.0	4.1	2.0	0.698	3/19/24 15:09		TPH
Carbon Disulfide	ND	0.35	0.067		ND	1.1	0.21	0.698	3/19/24 15:09		TPH
Carbon Tetrachloride	0.035	0.035	0.027		0.22	0.22	0.17	0.698	3/19/24 15:09		TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 15:09		TPH
Chloroethane	ND	0.035	0.032		ND	0.092	0.084	0.698	3/19/24 15:09		TPH
Chloroform	0.024	0.035	0.017	J	0.12	0.17	0.083	0.698	3/19/24 15:09		TPH
Chloromethane	0.50	0.070	0.047		1.0	0.14	0.096	0.698	3/19/24 15:09		TPH
Cyclohexane	1.5	0.035	0.027		5.2	0.12	0.093	0.698	3/19/24 15:09		TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 15:09		TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 15:09		TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 15:09		TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 15:09		TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 15:09		TPH
Dichlorodifluoromethane (Freon 12)	0.56	0.035	0.015		2.8	0.17	0.072	0.698	3/19/24 15:09		TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 15:09		TPH
1,2-Dichloroethane	0.024	0.035	0.013	J	0.096	0.14	0.053	0.698	3/19/24 15:09		TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 15:09		TPH
cis-1,2-Dichloroethylene	0.050	0.035	0.017		0.20	0.14	0.067	0.698	3/19/24 15:09		TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 15:09		TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 15:09		TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 15:09		TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 15:09		TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.018	0.035	0.014	J	0.13	0.24	0.098	0.698	3/19/24 15:09		TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 15:09		TPH
Ethanol	20	1.4	0.93		38	2.6	1.7	0.698	3/19/24 15:09		TPH
Ethyl Acetate	0.22	0.35	0.14	J	0.80	1.3	0.49	0.698	3/19/24 15:09		TPH
Ethylbenzene	3.2	0.035	0.012		14	0.15	0.052	0.698	3/19/24 15:09		TPH
4-Ethyltoluene	0.34	0.035	0.015		1.7	0.17	0.075	0.698	3/19/24 15:09		TPH
Heptane	79	0.50	0.32		320	2.0	1.3	10	3/20/24 8:00		TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 15:09		TPH
Hexane	1.0	1.4	0.73	J	3.6	4.9	2.6	0.698	3/19/24 15:09		TPH
2-Hexanone (MBK)	ND	0.035	0.015		ND	0.14	0.062	0.698	3/19/24 15:09		TPH
Isopropanol	1.7	1.4	0.73		4.3	3.4	1.8	0.698	3/19/24 15:09		TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 15:09		TPH
Methylene Chloride	0.12	0.35	0.094	J	0.41	1.2	0.33	0.698	3/19/24 15:09		TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 15:09		TPH
Naphthalene	0.65	0.035	0.028		3.4	0.18	0.15	0.698	3/19/24 15:09		TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 15:09		TPH
Styrene	0.31	0.035	0.027		1.3	0.15	0.12	0.698	3/19/24 15:09		TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 15:09		TPH

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-3-A
Sample ID: 24C1287-01
 Sample Matrix: Indoor air
 Sampled: 3/7/2024 08:15

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P1520
 Canister Size: 6 liter
 Flow Controller ID: 3260
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -28.5
 Final Vacuum(in Hg): -9
 Receipt Vacuum(in Hg): -6.3
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL		Analyzed		
Tetrachloroethylene	3.5	0.035	0.030		24	0.24	0.20	0.698	3/19/24 15:09		TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 15:09		TPH
Toluene	18	0.035	0.017		70	0.13	0.066	0.698	3/19/24 15:09		TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 15:09		TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 15:09		TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 15:09		TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 15:09		TPH
Trichlorofluoromethane (Freon 11)	0.28	0.14	0.014		1.6	0.78	0.080	0.698	3/19/24 15:09		TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.063	0.14	0.0095	J	0.49	1.1	0.073	0.698	3/19/24 15:09		TPH
1,2,4-Trimethylbenzene	2.4	0.035	0.021		12	0.17	0.10	0.698	3/19/24 15:09		TPH
1,3,5-Trimethylbenzene	0.53	0.035	0.027		2.6	0.17	0.13	0.698	3/19/24 15:09		TPH
Vinyl Acetate	ND	0.70	0.14		ND	2.5	0.50	0.698	3/19/24 15:09		TPH
Vinyl Chloride	0.019	0.035	0.018	J	0.048	0.089	0.045	0.698	3/19/24 15:09		TPH
m&p-Xylene	11	0.070	0.024		48	0.30	0.11	0.698	3/19/24 15:09		TPH
o-Xylene	3.1	0.035	0.013		13	0.15	0.055	0.698	3/19/24 15:09		TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	95.9	70-130	3/19/24 15:09
4-Bromofluorobenzene (1)	93.2	70-130	3/20/24 8:00

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-SSV-1
Sample ID: 24C1287-02
 Sample Matrix: Sub Slab
 Sampled: 3/10/2024 07:48

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P1243
 Canister Size: 6 liter
 Flow Controller ID: 3052
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -4
 Receipt Vacuum(in Hg): -5.0
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	
Acetone	25	4.0	2.0		58	9.5	4.8	2	3/19/24 18:20	TPH
Benzene	0.17	0.10	0.031		0.54	0.32	0.099	2	3/19/24 18:20	TPH
Benzyl chloride	ND	0.10	0.054		ND	0.52	0.28	2	3/19/24 18:20	TPH
Bromodichloromethane	ND	0.10	0.041		ND	0.67	0.27	2	3/19/24 18:20	TPH
Bromoform	ND	0.10	0.036		ND	1.0	0.37	2	3/19/24 18:20	TPH
Bromomethane	ND	0.10	0.085		ND	0.39	0.33	2	3/19/24 18:20	TPH
1,3-Butadiene	ND	0.10	0.084		ND	0.22	0.19	2	3/19/24 18:20	TPH
2-Butanone (MEK)	ND	4.0	2.0		ND	12	5.8	2	3/19/24 18:20	TPH
Carbon Disulfide	ND	1.0	0.19		ND	3.1	0.60	2	3/19/24 18:20	TPH
Carbon Tetrachloride	ND	0.10	0.079		ND	0.63	0.50	2	3/19/24 18:20	TPH
Chlorobenzene	ND	0.10	0.033		ND	0.46	0.15	2	3/19/24 18:20	TPH
Chloroethane	ND	0.10	0.092		ND	0.26	0.24	2	3/19/24 18:20	TPH
Chloroform	ND	0.10	0.049		ND	0.49	0.24	2	3/19/24 18:20	TPH
Chloromethane	ND	0.20	0.13		ND	0.41	0.28	2	3/19/24 18:20	TPH
Cyclohexane	0.59	0.10	0.078		2.0	0.34	0.27	2	3/19/24 18:20	TPH
Dibromochloromethane	ND	0.10	0.067		ND	0.85	0.57	2	3/19/24 18:20	TPH
1,2-Dibromoethane (EDB)	ND	0.10	0.062		ND	0.77	0.48	2	3/19/24 18:20	TPH
1,2-Dichlorobenzene	ND	0.10	0.035		ND	0.60	0.21	2	3/19/24 18:20	TPH
1,3-Dichlorobenzene	ND	0.10	0.037		ND	0.60	0.22	2	3/19/24 18:20	TPH
1,4-Dichlorobenzene	ND	0.10	0.048		ND	0.60	0.29	2	3/19/24 18:20	TPH
Dichlorodifluoromethane (Freon 12)	0.52	0.10	0.042		2.6	0.49	0.21	2	3/19/24 18:20	TPH
1,1-Dichloroethane	ND	0.10	0.049		ND	0.40	0.20	2	3/19/24 18:20	TPH
1,2-Dichloroethane	0.12	0.10	0.038		0.49	0.40	0.15	2	3/19/24 18:20	TPH
1,1-Dichloroethylene	ND	0.10	0.070		ND	0.40	0.28	2	3/19/24 18:20	TPH
cis-1,2-Dichloroethylene	ND	0.10	0.048		ND	0.40	0.19	2	3/19/24 18:20	TPH
trans-1,2-Dichloroethylene	ND	0.10	0.047		ND	0.40	0.19	2	3/19/24 18:20	TPH
1,2-Dichloropropane	ND	0.10	0.074		ND	0.46	0.34	2	3/19/24 18:20	TPH
cis-1,3-Dichloropropene	ND	0.10	0.051		ND	0.45	0.23	2	3/19/24 18:20	TPH
trans-1,3-Dichloropropene	ND	0.10	0.097		ND	0.45	0.44	2	3/19/24 18:20	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10	0.040		ND	0.70	0.28	2	3/19/24 18:20	TPH
1,4-Dioxane	ND	1.0	0.49		ND	3.6	1.8	2	3/19/24 18:20	TPH
Ethanol	68	4.0	2.7		130	7.5	5.0	2	3/19/24 18:20	TPH
Ethyl Acetate	ND	1.0	0.39		ND	3.6	1.4	2	3/19/24 18:20	TPH
Ethylbenzene	0.19	0.10	0.034		0.84	0.43	0.15	2	3/19/24 18:20	TPH
4-Ethyltoluene	ND	0.10	0.043		ND	0.49	0.21	2	3/19/24 18:20	TPH
Heptane	0.27	0.10	0.063		1.1	0.41	0.26	2	3/19/24 18:20	TPH
Hexachlorobutadiene	ND	0.10	0.058		ND	1.1	0.61	2	3/19/24 18:20	TPH
Hexane	ND	4.0	2.1		ND	14	7.4	2	3/19/24 18:20	TPH
2-Hexanone (MBK)	ND	0.10	0.043		ND	0.41	0.18	2	3/19/24 18:20	TPH
Isopropanol	ND	4.0	2.1		ND	9.8	5.2	2	3/19/24 18:20	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.049		ND	0.36	0.18	2	3/19/24 18:20	TPH
Methylene Chloride	ND	1.0	0.27		ND	3.5	0.93	2	3/19/24 18:20	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.053		ND	0.41	0.22	2	3/19/24 18:20	TPH
Naphthalene	0.11	0.10	0.081		0.56	0.52	0.43	2	3/19/24 18:20	TPH
Propene	ND	4.0	2.2		ND	6.9	3.8	2	3/19/24 18:20	TPH
Styrene	0.26	0.10	0.077		1.1	0.43	0.33	2	3/19/24 18:20	TPH
1,1,2,2-Tetrachloroethane	ND	0.10	0.025		ND	0.69	0.17	2	3/19/24 18:20	TPH

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-SSV-1
Sample ID: 24C1287-02
 Sample Matrix: Sub Slab
 Sampled: 3/10/2024 07:48

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P1243
 Canister Size: 6 liter
 Flow Controller ID: 3052
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -4
 Receipt Vacuum(in Hg): -5.0
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL		Analyzed		
Tetrachloroethylene	9.5	0.10	0.086		65	0.68	0.58	2	3/19/24 18:20		TPH
Tetrahydrofuran	ND	1.0	0.38		ND	2.9	1.1	2	3/19/24 18:20		TPH
Toluene	1.4	0.10	0.050		5.4	0.38	0.19	2	3/19/24 18:20		TPH
1,2,4-Trichlorobenzene	ND	0.10	0.055		ND	0.74	0.41	2	3/19/24 18:20		TPH
1,1,1-Trichloroethane	ND	0.10	0.031		ND	0.55	0.17	2	3/19/24 18:20		TPH
1,1,2-Trichloroethane	ND	0.10	0.035		ND	0.55	0.19	2	3/19/24 18:20		TPH
Trichloroethylene	0.45	0.10	0.077		2.4	0.54	0.41	2	3/19/24 18:20		TPH
Trichlorofluoromethane (Freon 11)	0.26	0.40	0.041	J	1.5	2.2	0.23	2	3/19/24 18:20		TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.070	0.40	0.027	J	0.54	3.1	0.21	2	3/19/24 18:20		TPH
1,2,4-Trimethylbenzene	0.19	0.10	0.060		0.93	0.49	0.29	2	3/19/24 18:20		TPH
1,3,5-Trimethylbenzene	0.092	0.10	0.077	J	0.45	0.49	0.38	2	3/19/24 18:20		TPH
Vinyl Acetate	ND	2.0	0.41		ND	7.0	1.4	2	3/19/24 18:20		TPH
Vinyl Chloride	ND	0.10	0.051		ND	0.26	0.13	2	3/19/24 18:20		TPH
m&p-Xylene	0.49	0.20	0.070		2.1	0.87	0.30	2	3/19/24 18:20		TPH
o-Xylene	0.18	0.10	0.037		0.80	0.43	0.16	2	3/19/24 18:20		TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	97.1	70-130	3/19/24 18:20

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-1
Sample ID: 24C1287-03
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 07:49

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P3345
 Canister Size: 6 liter
 Flow Controller ID: 3584
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -7.5
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	170	1.4	0.71	E	410	3.3	1.7	0.698	3/19/24 15:41	TPH
Benzene	0.18	0.035	0.011		0.58	0.11	0.034	0.698	3/19/24 15:41	TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 15:41	TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 15:41	TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 15:41	TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 15:41	TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 15:41	TPH
2-Butanone (MEK)	ND	1.4	0.68		ND	4.1	2.0	0.698	3/19/24 15:41	TPH
Carbon Disulfide	ND	0.35	0.067		ND	1.1	0.21	0.698	3/19/24 15:41	TPH
Carbon Tetrachloride	0.028	0.035	0.027	J	0.18	0.22	0.17	0.698	3/19/24 15:41	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 15:41	TPH
Chloroethane	ND	0.035	0.032		ND	0.092	0.084	0.698	3/19/24 15:41	TPH
Chloroform	0.072	0.035	0.017		0.35	0.17	0.083	0.698	3/19/24 15:41	TPH
Chloromethane	0.45	0.070	0.047		0.92	0.14	0.096	0.698	3/19/24 15:41	TPH
Cyclohexane	0.077	0.035	0.027		0.27	0.12	0.093	0.698	3/19/24 15:41	TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 15:41	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 15:41	TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 15:41	TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 15:41	TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 15:41	TPH
Dichlorodifluoromethane (Freon 12)	0.60	0.035	0.015		3.0	0.17	0.072	0.698	3/19/24 15:41	TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 15:41	TPH
1,2-Dichloroethane	0.044	0.035	0.013		0.18	0.14	0.053	0.698	3/19/24 15:41	TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 15:41	TPH
cis-1,2-Dichloroethylene	0.024	0.035	0.017	J	0.094	0.14	0.067	0.698	3/19/24 15:41	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 15:41	TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 15:41	TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 15:41	TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 15:41	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035	0.014		ND	0.24	0.098	0.698	3/19/24 15:41	TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 15:41	TPH
Ethanol	56	1.4	0.93	E	110	2.6	1.7	0.698	3/19/24 15:41	TPH
Ethyl Acetate	0.15	0.35	0.14	J	0.53	1.3	0.49	0.698	3/19/24 15:41	TPH
Ethylbenzene	0.61	0.035	0.012		2.7	0.15	0.052	0.698	3/19/24 15:41	TPH
4-Ethyltoluene	0.10	0.035	0.015		0.49	0.17	0.075	0.698	3/19/24 15:41	TPH
Heptane	0.49	0.035	0.022		2.0	0.14	0.090	0.698	3/19/24 15:41	TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 15:41	TPH
Hexane	ND	1.4	0.73		ND	4.9	2.6	0.698	3/19/24 15:41	TPH
2-Hexanone (MBK)	0.045	0.035	0.015		0.19	0.14	0.062	0.698	3/19/24 15:41	TPH
Isopropanol	ND	1.4	0.73		ND	3.4	1.8	0.698	3/19/24 15:41	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 15:41	TPH
Methylene Chloride	0.13	0.35	0.094	J	0.45	1.2	0.33	0.698	3/19/24 15:41	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 15:41	TPH
Naphthalene	0.27	0.035	0.028		1.4	0.18	0.15	0.698	3/19/24 15:41	TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 15:41	TPH
Styrene	0.079	0.035	0.027		0.34	0.15	0.12	0.698	3/19/24 15:41	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 15:41	TPH

ANALYTICAL RESULTS

Project Location:
Date Received: 3/12/2024
Field Sample #: CL-IA-1
Sample ID: 24C1287-03
Sample Matrix: Indoor air
Sampled: 3/10/2024 07:49

Sample Description/Location:
Sub Description/Location:
Canister ID: P3345
Canister Size: 6 liter
Flow Controller ID: 3584
Sample Type: 8 hr

Work Order: 24C1287
Initial Vacuum(in Hg): -29
Final Vacuum(in Hg): -7
Receipt Vacuum(in Hg): -7.5
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	
Tetrachloroethylene	1.2	0.035	0.030		7.9	0.24	0.20	0.698	3/19/24 15:41	TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 15:41	TPH
Toluene	8.7	0.035	0.017		33	0.13	0.066	0.698	3/19/24 15:41	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 15:41	TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 15:41	TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 15:41	TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 15:41	TPH
Trichlorofluoromethane (Freon 11)	0.29	0.14	0.014		1.6	0.78	0.080	0.698	3/19/24 15:41	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.069	0.14	0.0095	J	0.53	1.1	0.073	0.698	3/19/24 15:41	TPH
1,2,4-Trimethylbenzene	0.73	0.035	0.021		3.6	0.17	0.10	0.698	3/19/24 15:41	TPH
1,3,5-Trimethylbenzene	0.20	0.035	0.027		0.97	0.17	0.13	0.698	3/19/24 15:41	TPH
Vinyl Acetate	ND	0.70	0.14		ND	2.5	0.50	0.698	3/19/24 15:41	TPH
Vinyl Chloride	0.023	0.035	0.018	J	0.059	0.089	0.045	0.698	3/19/24 15:41	TPH
m&p-Xylene	2.5	0.070	0.024		11	0.30	0.11	0.698	3/19/24 15:41	TPH
o-Xylene	0.76	0.035	0.013		3.3	0.15	0.055	0.698	3/19/24 15:41	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	96.8	70-130	3/19/24 15:41

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-SSV-2
Sample ID: 24C1287-04
 Sample Matrix: Sub Slab
 Sampled: 3/10/2024 08:29

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P0331
 Canister Size: 6 liter
 Flow Controller ID: 3042
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -8.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv				Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL	Results		RL	MDL	Dilution	Analyzed	Analyst	
Acetone	17	4.0	2.0			40	9.5	4.8	2	3/19/24 18:47	TPH
Benzene	0.24	0.10	0.031			0.75	0.32	0.099	2	3/19/24 18:47	TPH
Benzyl chloride	ND	0.10	0.054			ND	0.52	0.28	2	3/19/24 18:47	TPH
Bromodichloromethane	ND	0.10	0.041			ND	0.67	0.27	2	3/19/24 18:47	TPH
Bromoform	ND	0.10	0.036			ND	1.0	0.37	2	3/19/24 18:47	TPH
Bromomethane	ND	0.10	0.085			ND	0.39	0.33	2	3/19/24 18:47	TPH
1,3-Butadiene	ND	0.10	0.084			ND	0.22	0.19	2	3/19/24 18:47	TPH
2-Butanone (MEK)	ND	4.0	2.0			ND	12	5.8	2	3/19/24 18:47	TPH
Carbon Disulfide	0.35	1.0	0.19	J		1.1	3.1	0.60	2	3/19/24 18:47	TPH
Carbon Tetrachloride	ND	0.10	0.079			ND	0.63	0.50	2	3/19/24 18:47	TPH
Chlorobenzene	ND	0.10	0.033			ND	0.46	0.15	2	3/19/24 18:47	TPH
Chloroethane	ND	0.10	0.092			ND	0.26	0.24	2	3/19/24 18:47	TPH
Chloroform	8.3	0.10	0.049			40	0.49	0.24	2	3/19/24 18:47	TPH
Chloromethane	ND	0.20	0.13			ND	0.41	0.28	2	3/19/24 18:47	TPH
Cyclohexane	0.18	0.10	0.078			0.61	0.34	0.27	2	3/19/24 18:47	TPH
Dibromochloromethane	ND	0.10	0.067			ND	0.85	0.57	2	3/19/24 18:47	TPH
1,2-Dibromoethane (EDB)	ND	0.10	0.062			ND	0.77	0.48	2	3/19/24 18:47	TPH
1,2-Dichlorobenzene	ND	0.10	0.035			ND	0.60	0.21	2	3/19/24 18:47	TPH
1,3-Dichlorobenzene	ND	0.10	0.037			ND	0.60	0.22	2	3/19/24 18:47	TPH
1,4-Dichlorobenzene	ND	0.10	0.048			ND	0.60	0.29	2	3/19/24 18:47	TPH
Dichlorodifluoromethane (Freon 12)	0.71	0.10	0.042			3.5	0.49	0.21	2	3/19/24 18:47	TPH
1,1-Dichloroethane	0.32	0.10	0.049			1.3	0.40	0.20	2	3/19/24 18:47	TPH
1,2-Dichloroethane	0.12	0.10	0.038			0.49	0.40	0.15	2	3/19/24 18:47	TPH
1,1-Dichloroethylene	ND	0.10	0.070			ND	0.40	0.28	2	3/19/24 18:47	TPH
cis-1,2-Dichloroethylene	ND	0.10	0.048			ND	0.40	0.19	2	3/19/24 18:47	TPH
trans-1,2-Dichloroethylene	ND	0.10	0.047			ND	0.40	0.19	2	3/19/24 18:47	TPH
1,2-Dichloropropane	ND	0.10	0.074			ND	0.46	0.34	2	3/19/24 18:47	TPH
cis-1,3-Dichloropropene	ND	0.10	0.051			ND	0.45	0.23	2	3/19/24 18:47	TPH
trans-1,3-Dichloropropene	ND	0.10	0.097			ND	0.45	0.44	2	3/19/24 18:47	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10	0.040			ND	0.70	0.28	2	3/19/24 18:47	TPH
1,4-Dioxane	ND	1.0	0.49			ND	3.6	1.8	2	3/19/24 18:47	TPH
Ethanol	50	4.0	2.7			95	7.5	5.0	2	3/19/24 18:47	TPH
Ethyl Acetate	6.1	1.0	0.39			22	3.6	1.4	2	3/19/24 18:47	TPH
Ethylbenzene	0.28	0.10	0.034			1.2	0.43	0.15	2	3/19/24 18:47	TPH
4-Ethyltoluene	ND	0.10	0.043			ND	0.49	0.21	2	3/19/24 18:47	TPH
Heptane	0.51	0.10	0.063			2.1	0.41	0.26	2	3/19/24 18:47	TPH
Hexachlorobutadiene	ND	0.10	0.058			ND	1.1	0.61	2	3/19/24 18:47	TPH
Hexane	ND	4.0	2.1			ND	14	7.4	2	3/19/24 18:47	TPH
2-Hexanone (MBK)	ND	0.10	0.043			ND	0.41	0.18	2	3/19/24 18:47	TPH
Isopropanol	15	4.0	2.1			36	9.8	5.2	2	3/19/24 18:47	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.10	0.049			ND	0.36	0.18	2	3/19/24 18:47	TPH
Methylene Chloride	ND	1.0	0.27			ND	3.5	0.93	2	3/19/24 18:47	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.053			ND	0.41	0.22	2	3/19/24 18:47	TPH
Naphthalene	ND	0.10	0.081			ND	0.52	0.43	2	3/19/24 18:47	TPH
Propene	ND	4.0	2.2			ND	6.9	3.8	2	3/19/24 18:47	TPH
Styrene	ND	0.10	0.077			ND	0.43	0.33	2	3/19/24 18:47	TPH
1,1,2,2-Tetrachloroethane	ND	0.10	0.025			ND	0.69	0.17	2	3/19/24 18:47	TPH

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-SSV-2
Sample ID: 24C1287-04
 Sample Matrix: Sub Slab
 Sampled: 3/10/2024 08:29

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P0331
 Canister Size: 6 liter
 Flow Controller ID: 3042
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -7
 Receipt Vacuum(in Hg): -8.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Dilution	Date/Time	
	Results	RL	MDL		Results	RL	MDL		Analyzed	Analyst
Tetrachloroethylene	23	0.10	0.086		150	0.68	0.58	2	3/19/24 18:47	TPH
Tetrahydrofuran	ND	1.0	0.38		ND	2.9	1.1	2	3/19/24 18:47	TPH
Toluene	5.7	0.10	0.050		22	0.38	0.19	2	3/19/24 18:47	TPH
1,2,4-Trichlorobenzene	ND	0.10	0.055		ND	0.74	0.41	2	3/19/24 18:47	TPH
1,1,1-Trichloroethane	ND	0.10	0.031		ND	0.55	0.17	2	3/19/24 18:47	TPH
1,1,2-Trichloroethane	ND	0.10	0.035		ND	0.55	0.19	2	3/19/24 18:47	TPH
Trichloroethylene	0.30	0.10	0.077		1.6	0.54	0.41	2	3/19/24 18:47	TPH
Trichlorofluoromethane (Freon 11)	0.47	0.40	0.041		2.6	2.2	0.23	2	3/19/24 18:47	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.080	0.40	0.027	J	0.61	3.1	0.21	2	3/19/24 18:47	TPH
1,2,4-Trimethylbenzene	0.28	0.10	0.060		1.4	0.49	0.29	2	3/19/24 18:47	TPH
1,3,5-Trimethylbenzene	0.14	0.10	0.077		0.70	0.49	0.38	2	3/19/24 18:47	TPH
Vinyl Acetate	ND	2.0	0.41		ND	7.0	1.4	2	3/19/24 18:47	TPH
Vinyl Chloride	ND	0.10	0.051		ND	0.26	0.13	2	3/19/24 18:47	TPH
m&p-Xylene	1.0	0.20	0.070		4.4	0.87	0.30	2	3/19/24 18:47	TPH
o-Xylene	0.38	0.10	0.037		1.6	0.43	0.16	2	3/19/24 18:47	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.9	70-130	3/19/24 18:47

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-2
Sample ID: 24C1287-05
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 08:30

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 1081
 Canister Size: 6 liter
 Flow Controller ID: 5080
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -30+
 Final Vacuum(in Hg): -10.5
 Receipt Vacuum(in Hg): -9.6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	
Acetone	18	1.4	0.71		42	3.3	1.7	0.698	3/19/24 16:14	TPH
Benzene	0.19	0.035	0.011		0.62	0.11	0.034	0.698	3/19/24 16:14	TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 16:14	TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 16:14	TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 16:14	TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 16:14	TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 16:14	TPH
2-Butanone (MEK)	ND	1.4	0.68		ND	4.1	2.0	0.698	3/19/24 16:14	TPH
Carbon Disulfide	0.36	0.35	0.067		1.1	1.1	0.21	0.698	3/19/24 16:14	TPH
Carbon Tetrachloride	0.076	0.035	0.027		0.48	0.22	0.17	0.698	3/19/24 16:14	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 16:14	TPH
Chloroethane	ND	0.035	0.032		ND	0.092	0.084	0.698	3/19/24 16:14	TPH
Chloroform	0.029	0.035	0.017	J	0.14	0.17	0.083	0.698	3/19/24 16:14	TPH
Chloromethane	0.48	0.070	0.047		0.98	0.14	0.096	0.698	3/19/24 16:14	TPH
Cyclohexane	0.087	0.035	0.027		0.30	0.12	0.093	0.698	3/19/24 16:14	TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 16:14	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 16:14	TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 16:14	TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 16:14	TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 16:14	TPH
Dichlorodifluoromethane (Freon 12)	0.51	0.035	0.015		2.5	0.17	0.072	0.698	3/19/24 16:14	TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 16:14	TPH
1,2-Dichloroethane	0.033	0.035	0.013	J	0.14	0.14	0.053	0.698	3/19/24 16:14	TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 16:14	TPH
cis-1,2-Dichloroethylene	ND	0.035	0.017		ND	0.14	0.067	0.698	3/19/24 16:14	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 16:14	TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 16:14	TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 16:14	TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 16:14	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.017	0.035	0.014	J	0.12	0.24	0.098	0.698	3/19/24 16:14	TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 16:14	TPH
Ethanol	44	1.4	0.93	E	82	2.6	1.7	0.698	3/19/24 16:14	TPH
Ethyl Acetate	0.17	0.35	0.14	J	0.60	1.3	0.49	0.698	3/19/24 16:14	TPH
Ethylbenzene	0.28	0.035	0.012		1.2	0.15	0.052	0.698	3/19/24 16:14	TPH
4-Ethyltoluene	0.097	0.035	0.015		0.48	0.17	0.075	0.698	3/19/24 16:14	TPH
Heptane	0.49	0.035	0.022		2.0	0.14	0.090	0.698	3/19/24 16:14	TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 16:14	TPH
Hexane	ND	1.4	0.73		ND	4.9	2.6	0.698	3/19/24 16:14	TPH
2-Hexanone (MBK)	0.040	0.035	0.015		0.17	0.14	0.062	0.698	3/19/24 16:14	TPH
Isopropanol	ND	1.4	0.73		ND	3.4	1.8	0.698	3/19/24 16:14	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 16:14	TPH
Methylene Chloride	0.10	0.35	0.094	J	0.35	1.2	0.33	0.698	3/19/24 16:14	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 16:14	TPH
Naphthalene	0.22	0.035	0.028		1.1	0.18	0.15	0.698	3/19/24 16:14	TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 16:14	TPH
Styrene	0.079	0.035	0.027		0.34	0.15	0.12	0.698	3/19/24 16:14	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 16:14	TPH

ANALYTICAL RESULTS

Project Location:
Date Received: 3/12/2024
Field Sample #: CL-IA-2
Sample ID: 24C1287-05
Sample Matrix: Indoor air
Sampled: 3/10/2024 08:30

Sample Description/Location:
Sub Description/Location:
Canister ID: 1081
Canister Size: 6 liter
Flow Controller ID: 5080
Sample Type: 8 hr

Work Order: 24C1287
Initial Vacuum(in Hg): -30+
Final Vacuum(in Hg): -10.5
Receipt Vacuum(in Hg): -9.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv		Flag/Qual	ug/m3			Dilution	Date/Time	
		RL	MDL		Results	RL	MDL		Analyzed	Analyst
Tetrachloroethylene	0.70	0.035	0.030		4.8	0.24	0.20	0.698	3/19/24 16:14	TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 16:14	TPH
Toluene	5.6	0.035	0.017		21	0.13	0.066	0.698	3/19/24 16:14	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 16:14	TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 16:14	TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 16:14	TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 16:14	TPH
Trichlorofluoromethane (Freon 11)	0.25	0.14	0.014		1.4	0.78	0.080	0.698	3/19/24 16:14	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.068	0.14	0.0095	J	0.52	1.1	0.073	0.698	3/19/24 16:14	TPH
1,2,4-Trimethylbenzene	0.48	0.035	0.021		2.4	0.17	0.10	0.698	3/19/24 16:14	TPH
1,3,5-Trimethylbenzene	0.12	0.035	0.027		0.60	0.17	0.13	0.698	3/19/24 16:14	TPH
Vinyl Acetate	0.58	0.70	0.14	J	2.0	2.5	0.50	0.698	3/19/24 16:14	TPH
Vinyl Chloride	ND	0.035	0.018		ND	0.089	0.045	0.698	3/19/24 16:14	TPH
m&p-Xylene	1.0	0.070	0.024		4.4	0.30	0.11	0.698	3/19/24 16:14	TPH
o-Xylene	0.38	0.035	0.013		1.7	0.15	0.055	0.698	3/19/24 16:14	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	93.7	70-130	3/19/24 16:14

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: FD-031024
Sample ID: 24C1287-06
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 00:00

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P2352
 Canister Size: 6 liter
 Flow Controller ID: 5080
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -30+
 Final Vacuum(in Hg): -10.5
 Receipt Vacuum(in Hg): -9.6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	
Acetone	17	1.4	0.71		41	3.3	1.7	0.698	3/19/24 16:47	TPH
Benzene	0.19	0.035	0.011		0.59	0.11	0.034	0.698	3/19/24 16:47	TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 16:47	TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 16:47	TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 16:47	TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 16:47	TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 16:47	TPH
2-Butanone (MEK)	ND	1.4	0.68		ND	4.1	2.0	0.698	3/19/24 16:47	TPH
Carbon Disulfide	ND	0.35	0.067		ND	1.1	0.21	0.698	3/19/24 16:47	TPH
Carbon Tetrachloride	0.043	0.035	0.027		0.27	0.22	0.17	0.698	3/19/24 16:47	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 16:47	TPH
Chloroethane	ND	0.035	0.032		ND	0.092	0.084	0.698	3/19/24 16:47	TPH
Chloroform	0.023	0.035	0.017	J	0.11	0.17	0.083	0.698	3/19/24 16:47	TPH
Chloromethane	0.42	0.070	0.047		0.87	0.14	0.096	0.698	3/19/24 16:47	TPH
Cyclohexane	0.096	0.035	0.027		0.33	0.12	0.093	0.698	3/19/24 16:47	TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 16:47	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 16:47	TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 16:47	TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 16:47	TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 16:47	TPH
Dichlorodifluoromethane (Freon 12)	0.63	0.035	0.015		3.1	0.17	0.072	0.698	3/19/24 16:47	TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 16:47	TPH
1,2-Dichloroethane	0.038	0.035	0.013		0.15	0.14	0.053	0.698	3/19/24 16:47	TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 16:47	TPH
cis-1,2-Dichloroethylene	ND	0.035	0.017		ND	0.14	0.067	0.698	3/19/24 16:47	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 16:47	TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 16:47	TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 16:47	TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 16:47	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.018	0.035	0.014	J	0.13	0.24	0.098	0.698	3/19/24 16:47	TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 16:47	TPH
Ethanol	49	1.4	0.93	E	91	2.6	1.7	0.698	3/19/24 16:47	TPH
Ethyl Acetate	ND	0.35	0.14		ND	1.3	0.49	0.698	3/19/24 16:47	TPH
Ethylbenzene	0.29	0.035	0.012		1.3	0.15	0.052	0.698	3/19/24 16:47	TPH
4-Ethyltoluene	0.067	0.035	0.015		0.33	0.17	0.075	0.698	3/19/24 16:47	TPH
Heptane	0.39	0.035	0.022		1.6	0.14	0.090	0.698	3/19/24 16:47	TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 16:47	TPH
Hexane	ND	1.4	0.73		ND	4.9	2.6	0.698	3/19/24 16:47	TPH
2-Hexanone (MBK)	ND	0.035	0.015		ND	0.14	0.062	0.698	3/19/24 16:47	TPH
Isopropanol	ND	1.4	0.73		ND	3.4	1.8	0.698	3/19/24 16:47	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 16:47	TPH
Methylene Chloride	0.12	0.35	0.094	J	0.41	1.2	0.33	0.698	3/19/24 16:47	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 16:47	TPH
Naphthalene	0.25	0.035	0.028		1.3	0.18	0.15	0.698	3/19/24 16:47	TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 16:47	TPH
Styrene	0.084	0.035	0.027		0.36	0.15	0.12	0.698	3/19/24 16:47	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 16:47	TPH

ANALYTICAL RESULTS

Project Location:
Date Received: 3/12/2024
Field Sample #: FD-031024
Sample ID: 24C1287-06
Sample Matrix: Indoor air
Sampled: 3/10/2024 00:00

Sample Description/Location:
Sub Description/Location:
Canister ID: P2352
Canister Size: 6 liter
Flow Controller ID: 5080
Sample Type: 8 hr

Work Order: 24C1287
Initial Vacuum(in Hg): -30+
Final Vacuum(in Hg): -10.5
Receipt Vacuum(in Hg): -9.6
Flow Controller Type: Fixed-Orifice
Flow Controller Calibration
RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Dilution	Date/Time		Analyst
	Results	RL	MDL		Results	RL	MDL		Analyzed		
Tetrachloroethylene	0.73	0.035	0.030		5.0	0.24	0.20	0.698	3/19/24 16:47		TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 16:47		TPH
Toluene	5.6	0.035	0.017		21	0.13	0.066	0.698	3/19/24 16:47		TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 16:47		TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 16:47		TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 16:47		TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 16:47		TPH
Trichlorofluoromethane (Freon 11)	0.23	0.14	0.014		1.3	0.78	0.080	0.698	3/19/24 16:47		TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.071	0.14	0.0095	J	0.55	1.1	0.073	0.698	3/19/24 16:47		TPH
1,2,4-Trimethylbenzene	0.49	0.035	0.021		2.4	0.17	0.10	0.698	3/19/24 16:47		TPH
1,3,5-Trimethylbenzene	0.12	0.035	0.027		0.61	0.17	0.13	0.698	3/19/24 16:47		TPH
Vinyl Acetate	ND	0.70	0.14		ND	2.5	0.50	0.698	3/19/24 16:47		TPH
Vinyl Chloride	ND	0.035	0.018		ND	0.089	0.045	0.698	3/19/24 16:47		TPH
m&p-Xylene	1.0	0.070	0.024		4.4	0.30	0.11	0.698	3/19/24 16:47		TPH
o-Xylene	0.38	0.035	0.013		1.7	0.15	0.055	0.698	3/19/24 16:47		TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.1	70-130	3/19/24 16:47

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-3-B
Sample ID: 24C1287-07
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 08:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P1072
 Canister Size: 6 liter
 Flow Controller ID: 3267
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -30+
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -8.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	7.3	1.4	0.71		17	3.3	1.7	0.698	3/19/24 17:19	TPH
Benzene	0.20	0.035	0.011		0.65	0.11	0.034	0.698	3/19/24 17:19	TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 17:19	TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 17:19	TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 17:19	TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 17:19	TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 17:19	TPH
2-Butanone (MEK)	ND	1.4	0.68		ND	4.1	2.0	0.698	3/19/24 17:19	TPH
Carbon Disulfide	ND	0.35	0.067		ND	1.1	0.21	0.698	3/19/24 17:19	TPH
Carbon Tetrachloride	0.063	0.035	0.027		0.40	0.22	0.17	0.698	3/19/24 17:19	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 17:19	TPH
Chloroethane	0.048	0.035	0.032		0.13	0.092	0.084	0.698	3/19/24 17:19	TPH
Chloroform	0.018	0.035	0.017	J	0.089	0.17	0.083	0.698	3/19/24 17:19	TPH
Chloromethane	0.55	0.070	0.047		1.1	0.14	0.096	0.698	3/19/24 17:19	TPH
Cyclohexane	0.061	0.035	0.027		0.21	0.12	0.093	0.698	3/19/24 17:19	TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 17:19	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 17:19	TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 17:19	TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 17:19	TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 17:19	TPH
Dichlorodifluoromethane (Freon 12)	0.52	0.035	0.015		2.5	0.17	0.072	0.698	3/19/24 17:19	TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 17:19	TPH
1,2-Dichloroethane	0.020	0.035	0.013	J	0.079	0.14	0.053	0.698	3/19/24 17:19	TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 17:19	TPH
cis-1,2-Dichloroethylene	0.024	0.035	0.017	J	0.097	0.14	0.067	0.698	3/19/24 17:19	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 17:19	TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 17:19	TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 17:19	TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 17:19	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.017	0.035	0.014	J	0.12	0.24	0.098	0.698	3/19/24 17:19	TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 17:19	TPH
Ethanol	9.3	1.4	0.93		17	2.6	1.7	0.698	3/19/24 17:19	TPH
Ethyl Acetate	0.82	0.35	0.14		2.9	1.3	0.49	0.698	3/19/24 17:19	TPH
Ethylbenzene	0.37	0.035	0.012		1.6	0.15	0.052	0.698	3/19/24 17:19	TPH
4-Ethyltoluene	0.087	0.035	0.015		0.43	0.17	0.075	0.698	3/19/24 17:19	TPH
Heptane	0.45	0.035	0.022		1.8	0.14	0.090	0.698	3/19/24 17:19	TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 17:19	TPH
Hexane	ND	1.4	0.73		ND	4.9	2.6	0.698	3/19/24 17:19	TPH
2-Hexanone (MBK)	0.058	0.035	0.015		0.24	0.14	0.062	0.698	3/19/24 17:19	TPH
Isopropanol	13	1.4	0.73		33	3.4	1.8	0.698	3/19/24 17:19	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 17:19	TPH
Methylene Chloride	0.11	0.35	0.094	J	0.39	1.2	0.33	0.698	3/19/24 17:19	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 17:19	TPH
Naphthalene	0.065	0.035	0.028		0.34	0.18	0.15	0.698	3/19/24 17:19	TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 17:19	TPH
Styrene	0.049	0.035	0.027		0.21	0.15	0.12	0.698	3/19/24 17:19	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 17:19	TPH

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-IA-3-B
Sample ID: 24C1287-07
 Sample Matrix: Indoor air
 Sampled: 3/10/2024 08:38

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P1072
 Canister Size: 6 liter
 Flow Controller ID: 3267
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -30+
 Final Vacuum(in Hg): -8
 Receipt Vacuum(in Hg): -8.4
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv		Flag/Qual	ug/m3			Dilution	Date/Time	
		RL	MDL		Results	RL	MDL		Analyzed	Analyst
Tetrachloroethylene	1.1	0.035	0.030		7.4	0.24	0.20	0.698	3/19/24 17:19	TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 17:19	TPH
Toluene	5.9	0.035	0.017		22	0.13	0.066	0.698	3/19/24 17:19	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 17:19	TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 17:19	TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 17:19	TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 17:19	TPH
Trichlorofluoromethane (Freon 11)	0.35	0.14	0.014		2.0	0.78	0.080	0.698	3/19/24 17:19	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.067	0.14	0.0095	J	0.51	1.1	0.073	0.698	3/19/24 17:19	TPH
1,2,4-Trimethylbenzene	0.56	0.035	0.021		2.8	0.17	0.10	0.698	3/19/24 17:19	TPH
1,3,5-Trimethylbenzene	0.15	0.035	0.027		0.71	0.17	0.13	0.698	3/19/24 17:19	TPH
Vinyl Acetate	0.63	0.70	0.14	J	2.2	2.5	0.50	0.698	3/19/24 17:19	TPH
Vinyl Chloride	ND	0.035	0.018		ND	0.089	0.045	0.698	3/19/24 17:19	TPH
m&p-Xylene	1.2	0.070	0.024		5.3	0.30	0.11	0.698	3/19/24 17:19	TPH
o-Xylene	0.45	0.035	0.013		2.0	0.15	0.055	0.698	3/19/24 17:19	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	94.5	70-130	3/19/24 17:19

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-OA-1
Sample ID: 24C1287-08
 Sample Matrix: Ambient Air
 Sampled: 3/10/2024 08:40

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P3592
 Canister Size: 6 liter
 Flow Controller ID: 3749
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -28.5
 Final Vacuum(in Hg): -8.5
 Receipt Vacuum(in Hg): -7.7
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv			Flag/Qual	ug/m3			Date/Time		
	Results	RL	MDL		Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	1.7	1.4	0.71		4.0	3.3	1.7	0.698	3/19/24 17:52	TPH
Benzene	0.12	0.035	0.011		0.38	0.11	0.034	0.698	3/19/24 17:52	TPH
Benzyl chloride	ND	0.035	0.019		ND	0.18	0.097	0.698	3/19/24 17:52	TPH
Bromodichloromethane	ND	0.035	0.014		ND	0.23	0.096	0.698	3/19/24 17:52	TPH
Bromoform	ND	0.035	0.012		ND	0.36	0.13	0.698	3/19/24 17:52	TPH
Bromomethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/19/24 17:52	TPH
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/19/24 17:52	TPH
2-Butanone (MEK)	ND	1.4	0.68		ND	4.1	2.0	0.698	3/19/24 17:52	TPH
Carbon Disulfide	ND	0.35	0.067		ND	1.1	0.21	0.698	3/19/24 17:52	TPH
Carbon Tetrachloride	0.070	0.035	0.027		0.44	0.22	0.17	0.698	3/19/24 17:52	TPH
Chlorobenzene	ND	0.035	0.012		ND	0.16	0.053	0.698	3/19/24 17:52	TPH
Chloroethane	0.033	0.035	0.032	J	0.088	0.092	0.084	0.698	3/19/24 17:52	TPH
Chloroform	ND	0.035	0.017		ND	0.17	0.083	0.698	3/19/24 17:52	TPH
Chloromethane	0.53	0.070	0.047		1.1	0.14	0.096	0.698	3/19/24 17:52	TPH
Cyclohexane	ND	0.035	0.027		ND	0.12	0.093	0.698	3/19/24 17:52	TPH
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/19/24 17:52	TPH
1,2-Dibromoethane (EDB)	ND	0.035	0.022		ND	0.27	0.17	0.698	3/19/24 17:52	TPH
1,2-Dichlorobenzene	ND	0.035	0.012		ND	0.21	0.073	0.698	3/19/24 17:52	TPH
1,3-Dichlorobenzene	ND	0.035	0.013		ND	0.21	0.078	0.698	3/19/24 17:52	TPH
1,4-Dichlorobenzene	ND	0.035	0.017		ND	0.21	0.10	0.698	3/19/24 17:52	TPH
Dichlorodifluoromethane (Freon 12)	0.57	0.035	0.015		2.8	0.17	0.072	0.698	3/19/24 17:52	TPH
1,1-Dichloroethane	ND	0.035	0.017		ND	0.14	0.069	0.698	3/19/24 17:52	TPH
1,2-Dichloroethane	0.014	0.035	0.013	J	0.056	0.14	0.053	0.698	3/19/24 17:52	TPH
1,1-Dichloroethylene	ND	0.035	0.024		ND	0.14	0.097	0.698	3/19/24 17:52	TPH
cis-1,2-Dichloroethylene	ND	0.035	0.017		ND	0.14	0.067	0.698	3/19/24 17:52	TPH
trans-1,2-Dichloroethylene	ND	0.035	0.016		ND	0.14	0.065	0.698	3/19/24 17:52	TPH
1,2-Dichloropropane	ND	0.035	0.026		ND	0.16	0.12	0.698	3/19/24 17:52	TPH
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.080	0.698	3/19/24 17:52	TPH
trans-1,3-Dichloropropene	ND	0.035	0.034		ND	0.16	0.15	0.698	3/19/24 17:52	TPH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.017	0.035	0.014	J	0.12	0.24	0.098	0.698	3/19/24 17:52	TPH
1,4-Dioxane	ND	0.35	0.17		ND	1.3	0.62	0.698	3/19/24 17:52	TPH
Ethanol	1.1	1.4	0.93	J	2.1	2.6	1.7	0.698	3/19/24 17:52	TPH
Ethyl Acetate	ND	0.35	0.14		ND	1.3	0.49	0.698	3/19/24 17:52	TPH
Ethylbenzene	ND	0.035	0.012		ND	0.15	0.052	0.698	3/19/24 17:52	TPH
4-Ethyltoluene	ND	0.035	0.015		ND	0.17	0.075	0.698	3/19/24 17:52	TPH
Heptane	0.042	0.035	0.022		0.17	0.14	0.090	0.698	3/19/24 17:52	TPH
Hexachlorobutadiene	ND	0.035	0.020		ND	0.37	0.21	0.698	3/19/24 17:52	TPH
Hexane	ND	1.4	0.73		ND	4.9	2.6	0.698	3/19/24 17:52	TPH
2-Hexanone (MBK)	ND	0.035	0.015		ND	0.14	0.062	0.698	3/19/24 17:52	TPH
Isopropanol	ND	1.4	0.73		ND	3.4	1.8	0.698	3/19/24 17:52	TPH
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.017		ND	0.13	0.062	0.698	3/19/24 17:52	TPH
Methylene Chloride	0.099	0.35	0.094	J	0.34	1.2	0.33	0.698	3/19/24 17:52	TPH
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.076	0.698	3/19/24 17:52	TPH
Naphthalene	ND	0.035	0.028		ND	0.18	0.15	0.698	3/19/24 17:52	TPH
Propene	ND	1.4	0.77		ND	2.4	1.3	0.698	3/19/24 17:52	TPH
Styrene	ND	0.035	0.027		ND	0.15	0.12	0.698	3/19/24 17:52	TPH
1,1,2,2-Tetrachloroethane	ND	0.035	0.0086		ND	0.24	0.059	0.698	3/19/24 17:52	TPH

ANALYTICAL RESULTS

Project Location:
 Date Received: 3/12/2024
Field Sample #: CL-OA-1
Sample ID: 24C1287-08
 Sample Matrix: Ambient Air
 Sampled: 3/10/2024 08:40

Sample Description/Location:
 Sub Description/Location:
 Canister ID: P3592
 Canister Size: 6 liter
 Flow Controller ID: 3749
 Sample Type: 8 hr

Work Order: 24C1287
 Initial Vacuum(in Hg): -28.5
 Final Vacuum(in Hg): -8.5
 Receipt Vacuum(in Hg): -7.7
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv		Flag/Qual	ug/m3			Dilution	Date/Time	
		RL	MDL		Results	RL	MDL		Analyzed	Analyst
Tetrachloroethylene	ND	0.035	0.030		ND	0.24	0.20	0.698	3/19/24 17:52	TPH
Tetrahydrofuran	ND	0.35	0.13		ND	1.0	0.39	0.698	3/19/24 17:52	TPH
Toluene	0.062	0.035	0.017		0.23	0.13	0.066	0.698	3/19/24 17:52	TPH
1,2,4-Trichlorobenzene	ND	0.035	0.019		ND	0.26	0.14	0.698	3/19/24 17:52	TPH
1,1,1-Trichloroethane	ND	0.035	0.011		ND	0.19	0.059	0.698	3/19/24 17:52	TPH
1,1,2-Trichloroethane	ND	0.035	0.012		ND	0.19	0.066	0.698	3/19/24 17:52	TPH
Trichloroethylene	ND	0.035	0.027		ND	0.19	0.14	0.698	3/19/24 17:52	TPH
Trichlorofluoromethane (Freon 11)	0.19	0.14	0.014		1.1	0.78	0.080	0.698	3/19/24 17:52	TPH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.073	0.14	0.0095	J	0.56	1.1	0.073	0.698	3/19/24 17:52	TPH
1,2,4-Trimethylbenzene	ND	0.035	0.021		ND	0.17	0.10	0.698	3/19/24 17:52	TPH
1,3,5-Trimethylbenzene	ND	0.035	0.027		ND	0.17	0.13	0.698	3/19/24 17:52	TPH
Vinyl Acetate	ND	0.70	0.14		ND	2.5	0.50	0.698	3/19/24 17:52	TPH
Vinyl Chloride	ND	0.035	0.018		ND	0.089	0.045	0.698	3/19/24 17:52	TPH
m&p-Xylene	ND	0.070	0.024		ND	0.30	0.11	0.698	3/19/24 17:52	TPH
o-Xylene	ND	0.035	0.013		ND	0.15	0.055	0.698	3/19/24 17:52	TPH

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	89.7	70-130	3/19/24 17:52

Sample Extraction Data**Prep Method: TO-15 Prep-EPA TO-15**

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
24C1287-01 [CL-IA-3-A]	B369212	1.5	1	N/A	1000	200	430	03/19/24
24C1287-01RE1 [CL-IA-3-A]	B369212	1.5	1	N/A	1000	200	30	03/19/24
24C1287-02 [CL-SSV-1]	B369212	1.5	1	N/A	1000	200	150	03/19/24
24C1287-03 [CL-IA-1]	B369212	1.5	1	N/A	1000	200	430	03/19/24
24C1287-04 [CL-SSV-2]	B369212	1.5	1	N/A	1000	200	150	03/19/24
24C1287-05 [CL-IA-2]	B369212	1.5	1	N/A	1000	200	430	03/19/24
24C1287-06 [FD-031024]	B369212	1.5	1	N/A	1000	200	430	03/19/24
24C1287-07 [CL-IA-3-B]	B369212	1.5	1	N/A	1000	200	430	03/19/24
24C1287-08 [CL-OA-1]	B369212	1.5	1	N/A	1000	200	430	03/19/24

QUALITY CONTROL

Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	

Batch B369212 - TO-15 Prep

Blank (B369212-BLK1)

Prepared & Analyzed: 03/19/24

Acetone	ND	1.4
Benzene	ND	0.034
Benzyl chloride	ND	0.034
Bromodichloromethane	ND	0.034
Bromoform	ND	0.034
Bromomethane	ND	0.034
1,3-Butadiene	ND	0.034
2-Butanone (MEK)	ND	1.4
Carbon Disulfide	ND	0.34
Carbon Tetrachloride	ND	0.034
Chlorobenzene	ND	0.034
Chloroethane	ND	0.034
Chloroform	ND	0.034
Chloromethane	ND	0.069
Cyclohexane	ND	0.034
Dibromochloromethane	ND	0.034
1,2-Dibromoethane (EDB)	ND	0.034
1,2-Dichlorobenzene	ND	0.034
1,3-Dichlorobenzene	ND	0.034
1,4-Dichlorobenzene	ND	0.034
Dichlorodifluoromethane (Freon 12)	ND	0.034
1,1-Dichloroethane	ND	0.034
1,2-Dichloroethane	ND	0.034
1,1-Dichloroethylene	ND	0.034
cis-1,2-Dichloroethylene	ND	0.034
trans-1,2-Dichloroethylene	ND	0.034
1,2-Dichloropropane	ND	0.034
cis-1,3-Dichloropropene	ND	0.034
trans-1,3-Dichloropropene	ND	0.034
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.034
1,4-Dioxane	ND	0.34
Ethanol	ND	1.4
Ethyl Acetate	ND	0.34
Ethylbenzene	ND	0.034
4-Ethyltoluene	ND	0.034
Heptane	ND	0.034
Hexachlorobutadiene	ND	0.034
Hexane	ND	1.4
2-Hexanone (MBK)	ND	0.034
Isopropanol	ND	1.4
Methyl tert-Butyl Ether (MTBE)	ND	0.034
Methylene Chloride	ND	0.34
4-Methyl-2-pentanone (MIBK)	ND	0.034
Naphthalene	ND	0.034
Propene	ND	1.4
Styrene	ND	0.034

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	

Batch B369212 - TO-15 Prep
Blank (B369212-BLK1)

Prepared & Analyzed: 03/19/24

1,1,2,2-Tetrachloroethane	ND	0.034
Tetrachloroethylene	ND	0.034
Tetrahydrofuran	ND	0.34
Toluene	ND	0.034
1,2,4-Trichlorobenzene	ND	0.034
1,1,1-Trichloroethane	ND	0.034
1,1,2-Trichloroethane	ND	0.034
Trichloroethylene	ND	0.034
Trichlorofluoromethane (Freon 11)	ND	0.14
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.14
1,2,4-Trimethylbenzene	ND	0.034
1,3,5-Trimethylbenzene	ND	0.034
Vinyl Acetate	ND	0.69
Vinyl Chloride	ND	0.034
m&p-Xylene	ND	0.069
o-Xylene	ND	0.034

<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>7.22</i>	<i>8.00</i>	<i>90.2</i>	<i>70-130</i>
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LCS (B369212-BS1)

Prepared & Analyzed: 03/19/24

Acetone	3.67	5.00	73.4	70-130
Benzene	5.03	5.00	101	70-130
Benzyl chloride	4.69	5.00	93.8	70-130
Bromodichloromethane	4.69	5.00	93.9	70-130
Bromoform	4.58	5.00	91.6	70-130
Bromomethane	5.30	5.00	106	70-130
1,3-Butadiene	4.88	5.00	97.5	70-130
2-Butanone (MEK)	4.34	5.00	86.7	70-130
Carbon Disulfide	5.36	5.00	107	70-130
Carbon Tetrachloride	4.51	5.00	90.3	70-130
Chlorobenzene	5.17	5.00	103	70-130
Chloroethane	4.69	5.00	93.8	70-130
Chloroform	5.26	5.00	105	70-130
Chloromethane	4.48	5.00	89.5	70-130
Cyclohexane	4.88	5.00	97.7	70-130
Dibromochloromethane	5.03	5.00	101	70-130
1,2-Dibromoethane (EDB)	5.17	5.00	103	70-130
1,2-Dichlorobenzene	5.34	5.00	107	70-130
1,3-Dichlorobenzene	5.81	5.00	116	70-130
1,4-Dichlorobenzene	5.73	5.00	115	70-130
Dichlorodifluoromethane (Freon 12)	4.92	5.00	98.5	70-130
1,1-Dichloroethane	4.50	5.00	90.0	70-130
1,2-Dichloroethane	4.41	5.00	88.1	70-130
1,1-Dichloroethylene	4.75	5.00	95.0	70-130
cis-1,2-Dichloroethylene	5.03	5.00	101	70-130
trans-1,2-Dichloroethylene	4.40	5.00	87.9	70-130
1,2-Dichloropropane	5.34	5.00	107	70-130

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B369212 - TO-15 Prep											
LCS (B369212-BS1)					Prepared & Analyzed: 03/19/24						
cis-1,3-Dichloropropene	5.05				5.00		101	70-130			
trans-1,3-Dichloropropene	4.86				5.00		97.1	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.88				5.00		97.6	70-130			
1,4-Dioxane	5.35				5.00		107	70-130			
Ethanol	5.02				5.00		100	70-130			
Ethyl Acetate	4.15				5.00		82.9	70-130			
Ethylbenzene	5.24				5.00		105	70-130			
4-Ethyltoluene	5.25				5.00		105	70-130			
Heptane	4.79				5.00		95.8	70-130			
Hexachlorobutadiene	4.36				5.00		87.2	70-130			
Hexane	3.97				5.00		79.4	70-130			
2-Hexanone (MBK)	4.82				5.00		96.5	70-130			
Isopropanol	4.34				5.00		86.7	70-130			
Methyl tert-Butyl Ether (MTBE)	4.40				5.00		88.1	70-130			
Methylene Chloride	4.31				5.00		86.1	70-130			
4-Methyl-2-pentanone (MIBK)	5.27				5.00		105	70-130			
Naphthalene	4.81				5.00		96.2	70-130			
Propene	5.37				5.00		107	70-130			
Styrene	5.39				5.00		108	70-130			
1,1,2,2-Tetrachloroethane	5.87				5.00		117	70-130			
Tetrachloroethylene	4.98				5.00		99.6	70-130			
Tetrahydrofuran	4.48				5.00		89.7	70-130			
Toluene	5.29				5.00		106	70-130			
1,2,4-Trichlorobenzene	4.43				5.00		88.6	70-130			
1,1,1-Trichloroethane	4.44				5.00		88.8	70-130			
1,1,2-Trichloroethane	5.56				5.00		111	70-130			
Trichloroethylene	4.83				5.00		96.5	70-130			
Trichlorofluoromethane (Freon 11)	4.67				5.00		93.3	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.06				5.00		101	70-130			
1,2,4-Trimethylbenzene	5.07				5.00		101	70-130			
1,3,5-Trimethylbenzene	5.25				5.00		105	70-130			
Vinyl Acetate	4.55				5.00		91.1	70-130			
Vinyl Chloride	5.10				5.00		102	70-130			
m&p-Xylene	10.6				10.0		106	70-130			
o-Xylene	5.21				5.00		104	70-130			
Surrogate: 4-Bromofluorobenzene (1)	7.73				8.00		96.6	70-130			

Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m3	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
E	Reported result is estimated. Value reported over verified calibration range.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

ANALYST

TPH Thomas P. Hnitecki
STATION Report Queue Station
KKS Kyle K. Stuckey
KMC Kristen M Couture
CMR Catherine M. Rouleau

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S091464-ICV1)			Lab File ID: L23A214020.D			Analyzed: 08/02/23 23:42			
Bromochloromethane (1)	300782	2.867	314027	2.871	96	60 - 140	-0.0040	+/-0.50	
1,4-Difluorobenzene (1)	878479	3.54	895773	3.54	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	823159	5.202	837397	5.202	98	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S102007-CCV1)			Lab File ID: L24A079003.D			Analyzed: 03/19/24 09:40			
Bromochloromethane (1)	261211	2.864	314027	2.871	83	60 - 140	-0.0070	+/-0.50	
1,4-Difluorobenzene (1)	791912	3.538	895773	3.54	88	60 - 140	-0.0020	+/-0.50	
Chlorobenzene-d5 (1)	699872	5.196	837397	5.202	84	60 - 140	-0.0060	+/-0.50	
LCS (B369212-BS1)			Lab File ID: L24A079004.D			Analyzed: 03/19/24 10:06			
Bromochloromethane (1)	264845	2.864	261211	2.864	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	810567	3.538	791912	3.538	102	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	713330	5.195	699872	5.196	102	60 - 140	-0.0010	+/-0.50	
Blank (B369212-BLK1)			Lab File ID: L24A079007.D			Analyzed: 03/19/24 11:33			
Bromochloromethane (1)	262719	2.864	261211	2.864	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	749960	3.537	791912	3.538	95	60 - 140	-0.0010	+/-0.50	
Chlorobenzene-d5 (1)	676721	5.194	699872	5.196	97	60 - 140	-0.0020	+/-0.50	
CL-IA-3-A (24C1287-01)			Lab File ID: L24A079013.D			Analyzed: 03/19/24 15:09			
Bromochloromethane (1)	258534	2.864	261211	2.864	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	774679	3.538	791912	3.538	98	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	712997	5.196	699872	5.196	102	60 - 140	0.0000	+/-0.50	
CL-IA-1 (24C1287-03)			Lab File ID: L24A079014.D			Analyzed: 03/19/24 15:41			
Bromochloromethane (1)	258395	2.864	261211	2.864	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	759787	3.538	791912	3.538	96	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	697009	5.196	699872	5.196	100	60 - 140	0.0000	+/-0.50	
CL-IA-2 (24C1287-05)			Lab File ID: L24A079015.D			Analyzed: 03/19/24 16:14			
Bromochloromethane (1)	259616	2.864	261211	2.864	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	742784	3.538	791912	3.538	94	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	691656	5.195	699872	5.196	99	60 - 140	-0.0010	+/-0.50	
FD-031024 (24C1287-06)			Lab File ID: L24A079016.D			Analyzed: 03/19/24 16:47			
Bromochloromethane (1)	262712	2.864	261211	2.864	101	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	755769	3.538	791912	3.538	95	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	685682	5.196	699872	5.196	98	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
CL-IA-3-B (24C1287-07) Lab File ID: L24A079017.D Analyzed: 03/19/24 17:19									
Bromochloromethane (1)	258357	2.864	261211	2.864	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	768533	3.538	791912	3.538	97	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	696495	5.195	699872	5.196	100	60 - 140	-0.0010	+/-0.50	
CL-OA-1 (24C1287-08) Lab File ID: L24A079018.D Analyzed: 03/19/24 17:52									
Bromochloromethane (1)	254074	2.864	261211	2.864	97	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	740256	3.537	791912	3.538	93	60 - 140	-0.0010	+/-0.50	
Chlorobenzene-d5 (1)	667728	5.195	699872	5.196	95	60 - 140	-0.0010	+/-0.50	
CL-SSV-1 (24C1287-02) Lab File ID: L24A079019.D Analyzed: 03/19/24 18:20									
Bromochloromethane (1)	270789	2.875	261211	2.864	104	60 - 140	0.0110	+/-0.50	
1,4-Difluorobenzene (1)	824657	3.543	791912	3.538	104	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	744256	5.196	699872	5.196	106	60 - 140	0.0000	+/-0.50	
CL-SSV-2 (24C1287-04) Lab File ID: L24A079020.D Analyzed: 03/19/24 18:47									
Bromochloromethane (1)	264347	2.874	261211	2.864	101	60 - 140	0.0100	+/-0.50	
1,4-Difluorobenzene (1)	797280	3.543	791912	3.538	101	60 - 140	0.0050	+/-0.50	
Chlorobenzene-d5 (1)	699982	5.195	699872	5.196	100	60 - 140	-0.0010	+/-0.50	
CL-IA-3-A (24C1287-01RE1) Lab File ID: L24A079038.D Analyzed: 03/20/24 08:00									
Bromochloromethane (1)	252424	2.863	261211	2.864	97	60 - 140	-0.0010	+/-0.50	
1,4-Difluorobenzene (1)	688809	3.537	791912	3.538	87	60 - 140	-0.0010	+/-0.50	
Chlorobenzene-d5 (1)	634970	5.195	699872	5.196	91	60 - 140	-0.0010	+/-0.50	

CONTINUING CALIBRATION CHECK

EPA TO-15

S102007-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	3.87	1.122255	0.8685882		-22.6	30
Benzene	A	5.00	5.42	0.7254293	0.7860591		8.4	30
Benzyl chloride	A	5.00	4.47	0.65192	0.5822893		-10.7	30
Bromodichloromethane	A	5.00	5.10	0.5567047	0.5676732		2.0	30
Bromoform	A	5.00	5.44	0.4926101	0.5355836		8.7	30
Bromomethane	A	5.00	5.44	0.6308676	0.6869175		8.9	30
1,3-Butadiene	A	5.00	5.11	0.551149	0.5631248		2.2	30
2-Butanone (MEK)	A	5.00	4.51	1.381604	1.246888		-9.8	30
Carbon Disulfide	A	5.00	5.38	2.063757	2.221089		7.6	30
Carbon Tetrachloride	A	5.00	5.02	0.5110368	0.5130025		0.4	30
Chlorobenzene	A	5.00	5.52	0.7219812	0.7975538		10.5	30
Chloroethane	A	5.00	4.84	0.411751	0.3987948		-3.1	30
Chloroform	A	5.00	5.52	1.439332	1.58936		10.4	30
Chloromethane	A	5.00	4.84	0.6101459	0.5900395		-3.3	30
Cyclohexane	A	5.00	5.09	0.3030286	0.3082848		1.7	30
Dibromochloromethane	A	5.00	5.37	0.5644122	0.6062709		7.4	30
1,2-Dibromoethane (EDB)	A	5.00	5.53	0.5076449	0.5615061		10.6	30
1,2-Dichlorobenzene	A	5.00	5.08	0.6234765	0.6330506		1.5	30
1,3-Dichlorobenzene	A	5.00	5.63	0.6267236	0.7052101		12.5	30
1,4-Dichlorobenzene	A	5.00	5.69	0.5801365	0.6598967		13.7	30
Dichlorodifluoromethane (Freon 12)	A	5.00	5.33	1.768079	1.883896		6.6	30
1,1-Dichloroethane	A	5.00	4.70	1.392824	1.309231		-6.0	30
1,2-Dichloroethane	A	5.00	4.60	0.9772927	0.8998273		-7.9	30
1,1-Dichloroethylene	A	5.00	4.98	1.127187	1.123199		-0.4	30
cis-1,2-Dichloroethylene	A	5.00	5.30	0.908952	0.9627221		5.9	30
trans-1,2-Dichloroethylene	A	5.00	4.58	1.128232	1.034345		-8.3	30
1,2-Dichloropropane	A	5.00	5.80	0.2601948	0.3015466		15.9	30
cis-1,3-Dichloropropene	A	5.00	5.69	0.3962271	0.4512259		13.9	30
trans-1,3-Dichloropropene	A	5.00	4.76	0.3522842	0.3354433		-4.8	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	5.46	1.784687	1.949615		9.2	30
1,4-Dioxane	A	5.00	4.99	0.1742852	0.1739547		-0.2	30
Ethanol	A	5.00	4.23	0.1732414	0.1464196		-15.5	30
Ethyl Acetate	A	5.00	4.20	0.2390169	0.2010084		-15.9	30
Ethylbenzene	A	5.00	5.55	1.176902	1.306467		11.0	30
4-Ethyltoluene	A	5.00	5.21	1.247069	1.299561		4.2	30
Heptane	A	5.00	5.16	0.2286847	0.2358989		3.2	30
Hexachlorobutadiene	A	5.00	4.00	0.4755616	0.3801747		-20.1	30
Hexane	A	5.00	4.16	0.7442178	0.6197656		-16.7	30

CONTINUING CALIBRATION CHECK

EPA TO-15

S102007-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	4.82	0.5993899	0.5783389		-3.5	30
Isopropanol	A	5.00	4.37	1.180699	1.032006		-12.6	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	4.52	2.130891	1.924544		-9.7	30
Methylene Chloride	A	5.00	4.50	0.8716214	0.784604		-10.0	30
4-Methyl-2-pentanone (MIBK)	A	5.00	5.29	0.2414371	0.2552445		5.7	30
Naphthalene	A	5.00	4.16	0.954618	0.7935211		-16.9	30
Propene	A	5.00	5.43	0.4075236	0.4427134		8.6	30
Styrene	A	5.00	5.52	0.6680173	0.7373417		10.4	30
1,1,2,2-Tetrachloroethane	A	5.00	6.14	0.6838293	0.8404668		22.9	30
Tetrachloroethylene	A	5.00	5.36	0.4174566	0.4478533		7.3	30
Tetrahydrofuran	A	5.00	4.16	0.9111963	0.758602		-16.7	30
Toluene	A	5.00	5.54	0.9385805	1.039607		10.8	30
1,2,4-Trichlorobenzene	A	5.00	3.78	0.3693275	0.2791208		-24.4	30
1,1,1-Trichloroethane	A	5.00	4.88	0.5075792	0.4952025		-2.4	30
1,1,2-Trichloroethane	A	5.00	6.14	0.309655	0.3802432		22.8	30
Trichloroethylene	A	5.00	5.10	0.3356598	0.3426057		2.1	30
Trichlorofluoromethane (Freon 11)	A	5.00	4.94	1.816743	1.796102		-1.1	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	5.35	1.436582	1.537418		7.0	30
1,2,4-Trimethylbenzene	A	5.00	5.39	1.021302	1.100258		7.7	30
1,3,5-Trimethylbenzene	A	5.00	5.39	1.055296	1.138279		7.9	30
Vinyl Acetate	A	5.00	4.84	1.463541	1.416559		-3.2	30
Vinyl Chloride	A	5.00	5.48	0.7105757	0.7786931		9.6	30
m&p-Xylene	A	10.0	11.2	0.9711506	1.085444		11.8	30
o-Xylene	A	5.00	5.52	0.9550518	1.053962		10.4	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Acetone	NY,ME,NH
Benzene	FL,NJ,NY,ME,NH,VA
Benzyl chloride	FL,NJ,NY,ME,NH,VA
Bromodichloromethane	NJ,NY,ME,NH,VA
Bromoform	NJ,NY,ME,NH,VA
Bromomethane	FL,NJ,NY,ME,NH
1,3-Butadiene	NJ,NY,ME,NH,VA
2-Butanone (MEK)	FL,NJ,NY,ME,NH,VA
Carbon Disulfide	NJ,NY,ME,NH,VA
Carbon Tetrachloride	FL,NJ,NY,ME,NH,VA
Chlorobenzene	FL,NJ,NY,ME,NH,VA
Chloroethane	FL,NJ,NY,ME,NH,VA
Chloroform	FL,NJ,NY,ME,NH,VA
Chloromethane	FL,NJ,NY,ME,NH,VA
Cyclohexane	NJ,NY,ME,NH,VA
Dibromochloromethane	NY,ME,NH
1,2-Dibromoethane (EDB)	NJ,NY,ME,NH
1,2-Dichlorobenzene	FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	NJ,NY,ME,NH
1,4-Dichlorobenzene	FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	NY,ME,NH
1,1-Dichloroethane	FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	NJ,NY,ME,NH,VA
1,2-Dichloropropane	FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	NJ,NY,ME,NH,VA
1,4-Dioxane	NJ,NY,ME,NH,VA
Ethylbenzene	FL,NJ,NY,ME,NH,VA
Heptane	NJ,NY,ME,NH,VA
Hexachlorobutadiene	NJ,NY,ME,NH,VA
Hexane	FL,NJ,NY,ME,NH,VA
Isopropanol	NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	FL,NJ,NY,ME,NH,VA
Methylene Chloride	FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Styrene	FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	FL,NJ,NY,ME,NH,VA
Tetrachloroethylene	FL,NJ,NY,ME,NH,VA
Toluene	FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	FL,NJ,NY,ME,NH,VA

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Trichloroethylene	FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	NJ,NY,ME,NH
1,3,5-Trimethylbenzene	NJ,NY,ME,NH
Vinyl Acetate	FL,NJ,NY,ME,NH,VA
Vinyl Chloride	FL,NJ,NY,ME,NH,VA
m&p-Xylene	FL,NJ,NY,ME,NH,VA
o-Xylene	FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2025
NJ	New Jersey DEP	MA007 NELAP	06/30/2024
FL	Florida Department of Health	E871027 NELAP	06/30/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024

24C1287

AIR SAMPLE CHAIN OF CUSTODY RECORD

AECOM 300 Lakefront Blvd, Suite 111
257 West Genesee Street, Suite 400
Buffalo, NY 14202
PHONE: 716-856-5536

AECOM CONTACT: Calin Wasteneys

PROJECT NUMBER 60722348 SITE NAME Chemical Leachate
SAMPLERS (PRINT/SIGNATURE) Tom Urban / Tom Urban

DELIVERY SERVICE: Prep off AIRBILL NO.: N/A

SAMPLE INFORMATION

LAB face

SHIPPING CONTAINER 1 of 1
PAGE 1 of 1

LOCATION IDENTIFIER	SAMPLE DATE	SAMPLE TIME	SAMPLE ID	MATRIX CODE	CANISTER SIZE (LITERS)	CANISTER ID	FLOW CONTROLLER ID	INITIAL PRESSURE/ VACUUM (" Hg)	FINAL PRESSURE/ VACUUM (" Hg)	PRESSURE/VACUUM UPON LAB RECEIPT (" Hg)	REQUIRED ANALYSIS	REMARKS	SAMPLE TYPE CODE
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01	3/17/24	0815	CL-IA-3-A	AI	6	1520	3260	-29.5	-9.3	-29.5	X		N ₁
02	3/16/24	0748	CL-SSV-1	AS	6	1243	3052	-29.4	-4.9	-29.4	X		N ₁
03	3/16/24	0749	CL-IA-1	AI	6	3345	3584	-29.7	-7.6	-29.7	X		N ₁
04	3/16/24	0829	CL-SSV-2	AS	6	3031	3042	-29.7	-7.6	-29.7	X		N ₁
05	3/16/24	0836	CL-IA-2	AI	6	1081	5080	-30.4	-10.5	-30.4	X		N ₁
06	3/16/24	-	FD-03/024	AI	6	2352	5080	-30.4	-10.5	-30.4	X		N ₁
07	3/16/24	0838	CL-IA-3-B	AI	6	1072	3267	-30.4	-8.5	-30.4	X		N ₁
08	3/16/24	0840	CL-OA-1	AA	6	3592	3749	-28.5	-8.5	-28.5	X		N ₁

09						0655	3631						N ₁
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													N ₁
--	--	--	--	--	--	--	--	--	--	--	--	--	----------------

													N ₁
--	--	--	--	--	--	--	--	--	--	--	--	--	----------------

													N ₁
--	--	--	--	--	--	--	--	--	--	--	--	--	----------------


													N ₁
--	--	--	--	--	--	--	--	--	--	--	--	--	----------------

													N ₁
--	--	--	--	--	--	--	--	--	--	--	--	--	----------------

													N ₁
--	--	--	--	--	--	--	--	--	--	--	--	--	----------------

													N ₁
--	--	--	--	--	--	--	--	--	--	--	--	--	----------------

Log in Back-Sheet

	DC#_Title: ENV-FRM-ELON-0009 v04_Air Sample Receiving Checklist Effective Date: 07/13/2023
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Log in sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy)

Any False statement will be brought to the attention of the Client – True or False

True

False

Client	ACCOM
Project	Chemical Leaman
MCP/RCP Required	
Deliverable Package Requirement	
Location	
PWSID# (When Applicable)	
Arrival Method	Courier
Received By / Date / Time	KMC 3/12/24 10:20
Back-Sheet By / Date / Time	KMC 3/12/24 11:20
Temperature Method	<input type="checkbox"/>
Temp $\leq 6^{\circ}\text{C}$	
Rush Samples: Yes / <input checked="" type="radio"/> No	
Notify	
Short Hold: Yes / <input checked="" type="radio"/> No	
Notify	
Notes regarding Samples/COC outside of SOP:	
Can P1520 + P1672 have the Same Sample ID.	

	Analysis	IDs	Client	Project
Received on Ice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Received in Cooler	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Custody Seal: DATE TIME	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
COC Relinquished	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
COC/Samples Labels Agree	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
All Samples in Good Condition	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Samples Received within Holding Time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Is there enough Volume	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Proper Media/Container Used	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Individually Certified Cans	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Trip Blanks	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
COC Legible	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
COC Included: (Check all included)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sampler Name	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Collection Date/Time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Container	#	Size	Regulator	Duration	Accessories
Summa Cans	9	6L	8	8hr	Nut/Ferrule
Tedar Bags					Tubing
TO-17 Tubes					T-Connector
RadioIIo					Syringe
Pufs/ TO-11					Tedar

[illegible]



Air Sampling Media Certificate of Analysis

Date Analyzed: 2/23/2024 Batch #: 24CC0180

Certification Type: Batch Certified ☒ Individual Certified ☐

Media Type: Summa Canister ☒ Flow Controllers ☐

Media IDs: P1520

Note: Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1,3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: TPH 3/22/24



Air Sampling Media Certificate of Analysis

Date Analyzed: 3/1/2024 Batch #: 24CC0201

Certification Type: Batch Certified ☒ Individual Certified ☐

Media Type: Summa Canister ☒ Flow Controllers ☐

Media IDs: P2352

Note: Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1,3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: TPH 3/22/24



Air Sampling Media Certificate of Analysis

Date Analyzed: 3/1/2024 Batch #: 24CC0202

Certification Type: Batch Certified ☒ Individual Certified ☐

Media Type: Summa Canister ☒ Flow Controllers ☐

Media IDs: P1243 P1072

Note: Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1,3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: TPH 3/22/24



Air Sampling Media Certificate of Analysis

Date Analyzed: 3/1/2024 Batch #: 24CC0203

Certification Type: Batch Certified ☒ Individual Certified ☐

Media Type: Summa Canister ☒ Flow Controllers ☐

Media IDs:	P3345	P0331	BC1081
	P3592		

Note: Two ID's grouped together, for example BC2136/BC3145, represents matched pairs of certified summa canisters and flow controllers.

Units: PPBv

<0.80	Propene	<0.04	Vinyl acetate	<0.02	Dibromchloromethane
<0.02	Dichlorodifluoromethane	<0.20	Hexane	<0.02	1,2-Dibromomethane
<0.04	Chloromethane	<0.02	Ethyl acetate	<0.02	Tetrachloroethylene
<0.02	Freon 114	<0.02	Chloroform	<0.02	Chlorobenzene
<0.02	Vinyl chloride	<0.02	Tetrahydrofuran	<0.02	Ethylbenzene
<0.02	1,3-Butadiene	<0.02	1,2-Dichloroethane	<0.04	m,p-Xylenes
<0.02	Bromomethane	<0.02	1,1,1-Trichloroethane	<0.02	Bromoform
<0.02	Chloroethane	<0.02	Benzene	<0.02	Styrene
<0.08	Acrolein	<0.02	Carbon Tetrachloride	<0.02	o-Xylene
<0.80	Acetone	<0.02	Cyclohexane	<0.02	1,1,2,2-Tetrachloroethane
<0.20	Trichlorofluoromethane	<0.02	1,2-Dichloropropane	<0.02	4-Ethyltoluene
<0.80	Ethanol	<0.02	Bromodichloromethane	<0.02	1,3,5-Trimethylbenzene
<0.02	1,1-Dichloroethylene	<0.02	Trichloroethylene	<0.02	1,2,4-Trimethylbenzene
<0.20	Methylene chloride	<0.02	1,4-Dioxane	<0.02	1,3-Dichlorobenzene
<0.20	Freon 113	<0.02	Methylmethacrylate	<0.02	Benzyl chloride
<0.2	Carbon disulfide	<0.02	Heptane	<0.02	1,4-Dichlorobenzene
<0.02	t-1,2-Dichloroethylene	<0.02	MIBK	<0.02	1,2-Dichlorobenzene
<0.02	1,1-Dichloroethane	<0.02	c-1,3-Dichloropropylene	<0.04	1,2,4-Trichlorobenzene
<0.02	MTBE	<0.02	t-1,3-Dichloropropylene	<0.02	Naphthalene
<0.80	IPA	<0.02	1,1,2-Trichloroethylene	<0.02	Hexachlorobutadiene
<0.20	2-Butanone (MEK)	<0.02	Toluene		
<0.02	c-1,2-Dichloroethylene	<0.02	2-Hexanone (MBK)		

Special Notes:

Analyst Initials/Date: TPH 3/22/24

Attachment 7

May 2017 NYSDOH Soil Vapor/Indoor Air Decision Matrices

Soil Vapor/Indoor Air Matrix A

May 2017

Analytes Assigned:

Trichloroethene (TCE), *cis*-1,2-Dichloroethene (*c*-1,2-DCE), 1,1-Dichloroethene (1,1-DCE), Carbon Tetrachloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)		
	< 0.2	0.2 to < 1	1 and above
< 6	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	4. No further action	5. MONITOR	6. MITIGATE
60 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

mcg/m³ = micrograms per cubic meter

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX A

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix B

May 2017

Analytes Assigned:

Tetrachloroethene (PCE), 1,1,1-Trichloroethane (1,1,1-TCA), Methylene Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)		
	< 3	3 to < 10	10 and above
< 100	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
100 to < 1,000	4. No further action	5. MONITOR	6. MITIGATE
1,000 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

mcg/m³ = micrograms per cubic meter

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX B

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 1 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix C

May 2017

Analytes Assigned:

Vinyl Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)	
	< 0.2	0.2 and above
< 6	1. No further action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	4. MONITOR	6. MITIGATE
60 and above	7. MITIGATE	9. MITIGATE

mcg/m³ = micrograms per cubic meter

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX C

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.