FORMER DURASPEC ELECTROPLATING FACILITY

QUEENS COUNTY

JAMAICA, NEW YORK

2022-2023 PERIODIC REVIEW REPORT

NYSDEC Site Number: 241204

Prepared for:

Hastings Capital, LLC

100 Field Street

West Babylon, NY 11704

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February 2023

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2022-2023 Periodic Review Report
Former Duraspec Electroplating Facility
87-83 139th Street
Jamaica, New York

1.0 EXECUTIVE SUMMARY

The following Periodic Review Report (PRR) has been prepared by AMEC E&E, PC (AMEC) on behalf of Hastings Capital, LLC. This report was prepared in accordance with the NYSDEC's PRR General Guidance document and a NYSDEC Order On Consent R2-20170622-235.

A. Nature and Extent of Contamination

Historically, the contaminated media at the former Durspec Electroplating Facility (the Site) included soil, soil vapor and groundwater.

- The primary contaminants in the soil were the metals cadmium, chromium, copper and nickel.
- The primary contaminant of concern in the soil vapor was trichloroethene (TCE).
- The groundwater historically contained detections of ethylbenzene and several semi-volatile organic compounds in the upgradient site well. The downgradient well has not display exceedances of the metals and VOCs detected in the soil and soil vapor.

The active sub-slab depressurization (SSD) system will not be discontinued unless prior written approval is granted by the NYSDEC and the NYSDOH. For further details regarding operation and maintenance of the SSD system, please refer to the Site Management Plan (SMP) dated May 2019 (Ref. 1). A composite cover system and SSD system were installed underneath the building on the Site.

B. Effectiveness of Remedial Program

The remedial program has been effective.

- The majority of the soil impacted by these metals was excavated and removed from the property as part of the renovation activities. The entire property is capped with pavement or a concrete slab.
- The active SSD system is maintaining negative pressure below the slap. Indoor air sample results do not exceed the NYSDOH matrices values for PCE or TCE.
- The samples collected and analyzed over the past three sampling rounds from the site's downgradient well do not indicate that groundwater below the site has been negatively impacted by the past activities at Duraspec (Ref. 2).

C. Compliance

The site is in compliance with the SMP.

D. Recommendations

Annual inspections and indoor air sampling during the heating season should continue in accordance with the SMP.

2.0 SITE OVERVIEW

A. Site Location, Surrounding Area and Nature & Extent of Contamination Prior to Site Remediation

The Site is located in Jamaica, Queens, NY and currently encompasses a 90-foot by 55-foot property developed with a two-story industrial/commercial building and basement level with an associated driveway along the northern portion of the property. The NYC Tax Map designates the Site as Queens County; Block: 9685; Lot: 50. The neighborhood surrounding the subject property consists of a highly urbanized area of Jamaica with adjacent properties generally consisting of commercial use along Hillside Avenue toward the north and residential use toward the south (Figure 1). The tenants of the building on the Site are Narrow Security and Different Touch Décor Storage. Indoor air samples were taken inside the building on both the first floor and in the basement.

Prior to redevelopment, the soils below the plating areas were impacted with the metals cadmium, chromium, copper and nickel to a depth of approximately 11 feet below sidewalk grade. Chromium, copper, and nickel were detected in concentrations exceeding the Commercial Soil Cleanup Objectives (SCOs) and Cadmium was detected in concentrations exceeding the Industrial SCOs.

Soil vapor below the building slab contained TCE at a concentration of 82.8 ug/m^3.

Benzene, Ethylbenzene, Toluene and Xylene (BTEX) type compounds and several Polynuclear Aromatic Hydrocarbons (PAHs) were detected in the upgradient well at the site. These were not detected in the site's downgradient well and are believed to have originated from auto repair facilities or filling stations located to the north along Hillside Avenue.

Several naturally occurring metals such as iron, manganese and sodium were detected in the upgradient well and, to a lesser degree, in the downgradient well. Cadmium and chromium were detected above groundwater standards in the site's upgradient well but were not detected above the groundwater standard in site's the downgradient well. Generally, the concentrations of metals in the groundwater displayed a decreasing or stable trend over a three-year period following the approval of the SMP.

B. Chronology of Remedial Program

The following narrative provides a remedial history timeline and a brief summary of the available project records to document key investigative and remedial milestones for the Site.

Facility Decommissioning

Duraspec operated an electroplating facility and was a hazardous waste generator under EPA ID NYD012379798. They ceased operation during the summer of 2015. Prior to closing, metal parts were electroplated with cadmium, copper, and zinc. In previous years, Duraspec also plated parts with chromium, gold, nickel, and silver. Metallic parts were prepared for plating using alkaline cleaners, acid etching solutions, and/or stripping solutions (depending on the process at the time) and rinsed. Once the metallic parts were prepared, the parts were electroplated in process solutions that contained the required metals in solution followed by a parts rinse. Parts were

cleaned and plated in tanks located in different sections of the plant. This includes Plating Area 1 which was used for plating metal parts with chromium & nickel and Plating Area 2 which was used to plate metal parts with cadmium, copper, gold, nickel, silver, & zinc. (See Appendix B.)

The property was acquired by Hastings Capital, LLC in December 2015. Subsequently, Hastings retained Innovative Recycling Technologies, Inc. (IRT) to initiate decommissioning procedures. The first step in decommissioning the facility was to pressure wash and dispose of the metal equipment as scrap metal. The plastic process tanks, rubber coating over the floors, and concrete containment berms were also pressure washed and disposed of as hazardous waste. The concrete floors were pressure washed, broken up, and disposed of. All the pressure wash water from the above operations was collected into 55-gallon drums and disposed of by a contractor under a hazardous manifest at Republic Environmental Systems (P) LLC of Hatfield, PA.

Wastewater generated during the operation of the Duraspec facility was pretreated on-site before being discharged to the New York City municipal sewer system pursuant to a New York City Department of Environmental Protection Industrial Wastewater Discharge Permit. The wastewater treatment system consisted of five 400-gallon tanks, which contained the hazardous waste generated at Duraspec. During the decommissioning process, the wastewater remaining in the tanks was pumped into a total of eight 275-gallon, DOT approved totes. These were in turn, shipped to Republic Environmental Systems, LLC.

RCRA Closure Activities

In June 2016, Hastings retained AMEC to prepare a RCRA Closure Plan for submittal and approval by the NYSDEC. The procedures outlined in the NYSDEC-approved RCRA Closure Plan and dated October 2016, involved a soil boring program in Plating Area 1, Plating Area 2, and the Alleyway to evaluate the presence and/or extent of contamination onsite. The soil boring program revealed exceedances above the Commercial Soil Cleanup Objectives (SCOs) for several metals (i.e. chromium, copper, and nickel) at numerous boring locations. Cadmium was detected at concentrations exceeding the Industrial SCOs in some boring locations. In addition, some SVOCs (i.e. benzo(b)fluoranthene, chrysene, and ideno(1,2,3-cd)pyrene) were detected at concentrations exceeding the Unrestricted SCO and benzo(a)pyrene was detected at a concentration exceeding the Commercial SCO for one sample. However, the SVOCs exceedances were attributed to urban fill.

Based on the results of the soil boring program, Hastings initiated an excavation program to remove the concrete floors and underlying metals-impacted soils from below Plating Area 1, Plating Area 2, and the Wastewater Treatment Area. The excavation extended to a depth of 5 feet bgs in Plating Area 1, to a depth of 11 feet bgs in Plating Area 2 and the Wastewater Treatment Area, and to a depth of 2 feet bgs in the Alleyway. With the exception of the Alleyway, the excavation continued to the maximum extent possible without comprising the building's structural integrity.

AMEC returned to the site to collect excavation endpoint samples in accordance with the NYSDEC DER-10. The laboratory analytical results for the endpoint samples continued to display exceedances comparable to those detected during the soil boring program. In Plating Area 1, no metals exceeded the Industrial SCOs, however the several metals (i.e. chromium, copper, and nickel) exceeded the Commercial SCOs in numerous endpoint samples. In Plating Area 2 and the Wastewater Treatment Area, copper exceeded the Commercial SCOs and cadmium exceeded the Industrial SCOs at numerous endpoint sample locations. In the Alleyway, there were several exceedances for metals above the Unrestricted SCOs, but none above the Commercial or Industrial SCOs.

Due to the exceedances of various metals in the soil, the NYSDEC requested that other subsurface media (i.e. groundwater and soil vapor) be evaluated. An existing onsite groundwater

monitoring well and an existing off-site downgradient groundwater monitoring well were sampled using low-flow sampling procedures. The groundwater samples were analyzed for VOCs, SVOCs, cyanide, and the metals of concern from the RCRA Closure. In summary, the laboratory analytical results indicated the presences of several petroleum-related VOCs in the upgradient well. Very few SVOCs exceedances above the TOGS Ambient Water Quality Standards were detected. The VOCs and SVOCs contaminants were attributed to an offsite source. No metal contaminants in exceedance of the TOGS Ambient Water Quality Standards was detected. One sub-slab vapor sample was collected beneath the floor of the office area and analyzed for VOCs using EPA method TO-15. The laboratory analytical report for the sub-slab vapor sample indicated TCE was present at an elevated concertation of at 82.8 ug/m^3.

Post-RCRA Remedial Activities

The investigation completed under the RCRA Closure program revealed that contamination remained at the Site. More specifically, the investigative activities identified the contaminants of concerns as cadmium, chromium, copper, and to a lesser extent nickel in the soil as well as TCE in the soil vapor.

To address the contamination revealed from the RCRA Closure activities, an Interim Remedial Measures (IRM) Work Plan dated November 6, 2017, was prepared and submitted to the NYSDEC for approval. Upon approval, the IRM was implemented as outlined in the Work Plan. The IRM consisted of excavation in the Alleyway with clean soil replacement, installation of a Sub-Slab Depressurization System, a site cover system, and a post-remediation groundwater monitoring program.

3.0 REMEDIAL PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

The remedial actions performed at the site have been effective and protective of human health.

PERFORMANCE

The soil excavation activities have been completed. A sub-slab depressurization system (SSDS) has been installed and remains in operation. Groundwater was sampled for a period of three years and indoor air monitoring is completed on an annual basis.

EFFECTIVENESS

The remedy has been effective. The site is completely covered by a pavement or concrete slab cap. An SSDS has been installed and is in operation.

PROTECTIVENESS

The remedy is protective

- The entire property is capped with pavement or a concrete slab.
- The active SSD system is maintaining negative pressure below the slap. Indoor air sample results do not exceed the NYSDOH matrices values.
- Three rounds of samples collected from the Site's downgradient well and analyzed do not indicate that groundwater below the site has been negatively impacted by the past activities at Duraspec.

4.0 INSTITUTIONAL CONTROL/ENGINEERING CONTROL (IC/ECs) PLAN

A. IC/EC Requirements and Compliance

The following institutional controls for this Site have been implemented by the property owner:

1) The property may only be used for commercial and industrial use;

2) All ECs must be operated and maintained as specified in the SMP;

3) All ECs must be inspected at a frequency and in a manner defined in the SMP;

4) The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Queens County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;

5) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;

6) Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP;

7) All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;

8) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;

9) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP;

10) Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;

11) The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries and any potential impacts that are identified must be monitored or mitigated; and

12) Vegetable gardens and farming on the Site are prohibited. The property owner has implemented these twelve institutional controls.

The following engineering controls for this Site have been implemented by the property owner and are in good condition:

1) In Plating Area 1, a section of 4-inch diameter perforated PVC pipe surrounded with filter fabric was placed in the bottom of an excavation. The pipe was placed with the perforation holes facing downward so that condensation water can drain from the pipe. The pipe was then covered with ¾ - inch graded recycled concrete aggregate followed by a 20-mil vapor barrier as manufactured by Stego™ and installed in accordance with the manufacturer's recommendations.

Plating Area 2, which was excavated to a depth of 11 feet below sidewalk grade, was completed as a basement. A section of 4-inch diameter perforated PVC pipe surrounded with filter fabric was placed in the bottom of the excavation. The pipe was then covered with ¾ - inch graded recycled concrete aggregate followed by a 20-mil vapor barrier;

Trenches were cut into the floors of the former Office and the Shipping & Receiving area. These trenches were excavated to a depth of approximately 1 foot below grade. A section of 4-inch diameter perforated PVC pipe surrounded with filter fabric were placed in the bottom of the trenches. The pipe was then covered with ¾ - inch graded recycled concrete aggregate. The trench was then covered with 6 inches of concrete;

Four-inch diameter sheet metal risers were extended from the vent pipes to the roof. A sign was posted on the duct that says "This is part of a Sub Slab Depressurization System. Do not alter or disconnect". The fans were connected to their respected risers. An electrical connection was completed along with a weather tight on/off switch. A vacuum switch was installed within the duct work servicing each fan.

2) Site Cover System: After the placement of the soil, piping, aggregate, and vapor barriers were completed, new concrete floors at least 4-inches thick were poured to serve as a cap between the underlying soil and future occupants of the building. The area of excavation in the alleyway was also restored with a concrete or asphalt cover.

B. IC/EC Certification

We certify that the ICs and ECs for this project are: in place and effective; are performing as designed; nothing has occurred that would impair the ability of the controls to protect public health and the environment; no violations have occurred and there were no failures to comply with the Site Management Plan; site access is available to maintain the engineering controls; and, there is no groundwater usage at the site.

A PRR Certification Form is included in Appendix A.

5.0 MONITORING PLAN COMPLIANCE REPORT

Groundwater Sampling Procedures

In the 2020-2021 Periodic Review Report, AMEC recommended that groundwater sampling be discontinued after the 2020 sampling event. Samples from the Sites downgradient well taken over three rounds of sampling indicate the site has not been negatively impacted by the past activities at Duraspec. NYSDEC approved this request on May 28, 2021.

Indoor Air Monitoring Procedures
In accordance with the SMP, indoor air samples were collected, on an annual basis during the winter heating season, at the former Durapsec Electroplating Facility (currently Narrow Security

and Different Touch Decor) on the first floor and in the basement. Sample location maps are included on Figures 2 and 3. Samples were collected using Summa Canisters calibrated to collect air for an 8-hour period. The samples were delivered to an ELAP-approved Laboratory and are analyzed for halogenated volatile organic compounds using EPA Method TO-15.

Summary of Results

Since the SSDS was placed into operation, there have been no exceedances of the NYSDOH indoor air Matrices for PCE or TCE. In November 2022 TCE was not detected in either of the indoor air samples. PCE was detected at 0.373 ug/m^3 and 0.400 ug/m^3. Carbon tetrachloride, a substance not related to the operations at Duraspec and not detected in the previous soil vapor samples, was detected between 0.491 ug/m^3 and 0.440 ug/m^3 during the most recent sampling round. Other VOC detections were record at relatively low levels. The data collected from the November 2022 sampling round is included on Table 1. A presentation of the historical detections during the last three sampling rounds are included on Table 2.

6.0 OPERATIONS AND MAINTENANCE PLAN

Operations and Maintenance (O&M) procedures that apply to the Fantech® fans includes a physical inspection of the fans to confirm that air is being discharged and that the units are operating. No other maintenance is recommended in the owner's manual.

All of the SSD fans and piping were inspected during the November 2022 sampling event and everything was observed to be in good working order. A map summarizing our observations is included as Figure 4.

The exterior pavement and interior floor slabs (the capping system) were observed to be in good condition on the date of our inspections.

7.0 OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

- On November 22, 2022, AMEC conducted an annual physical inspection of SSD system. The fans were operating and the ducts, floor and pavement were in good condition. TCE was not detected in either of the indoor air samples. PCE was detected at 0.373 ug/m^3 and 0.400 ug/m^3, which are both below the NYSDOH indoor air matrices.

- We recommend that the SSD system remain in operation and that monitoring continue as outlined in the SMP.

- Prior to the 2023 sampling event, AMEC will notify the tenants in advance in order to make sure the vacuum monitoring points on the riser vents are accessible.

REFERENCES

1. Amec (May 2019) Site Management Plan, Former Duraspec Electroplating Facility, 87-83 139th Street, Jamaica, NY 11435.
2. Amec (May 2021) 2020-2021 Periodic Review Report, Former Duraspec Electroplating Facility, 87-83 139th Street, Jamaica, NY 11435.

FIGURES

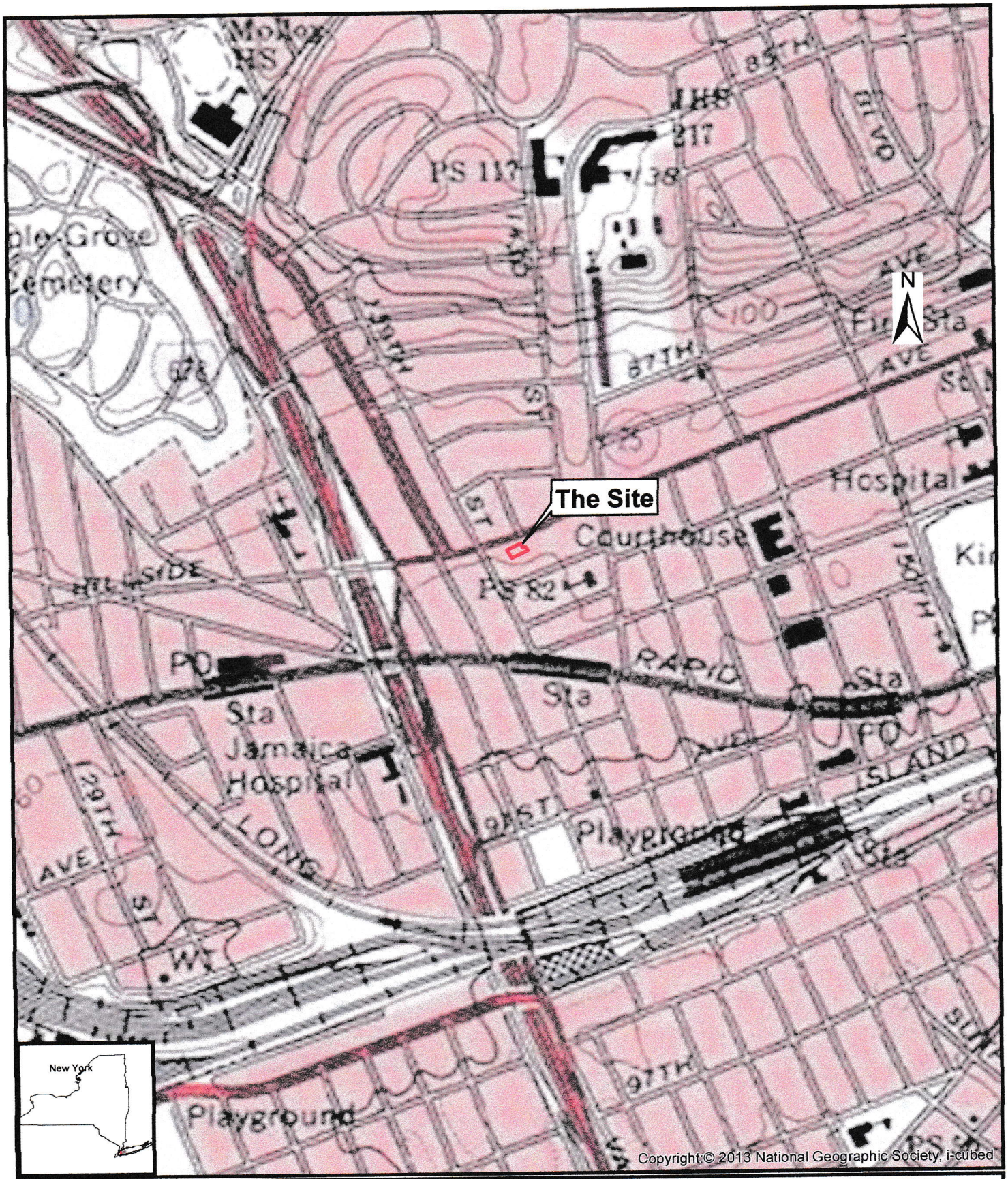


Figure 1
Site Location Map

Former Duraspec Electroplating, Inc.
87-83 139th Street, Jamaica, NY 11435

0 500 1,000 Feet

Prepared/Date: JCL 11/7/18	Checked/Date: EAW 11/7/18

amec

N

0 100 200 400 Miles

Figure 2
Monitoring Well Network

Former Duraspec Electroplating, Inc.
87-83 139th Street
Jamaica, NY 11435

Prepared/Date: JCL 04/25/17 | Checked/Date: EAW 04/25/17

Location	Former Duraspec Electroplating Facility/RCA Stone & Tiles					MON./MIT. for IAQ & AA Indoor Air (1)	NYSDOH Action Levels Indoor Air (2)
Matrix / Date Sampled	Indoor Air 1/16/2019	Indoor Air 2/12/2020	Indoor Air 12/29/2020	Indoor Air 11/20/2021	Indoor Air 11/22/2022		
Level	First Floor	First Floor	First Floor	First Floor	First Floor		
Sample ID	IAQ-FIRST-012019	IAQ-FIRST-022020	IAQ-FIRST-122020	IAQ-BASEMENT-112021	IAQ-BASEMENT-112222		
Sample Method	TO-15 SIM	TO-15 SIM	TO-15 SIM	TO-15 SIM	TO-15 SIM		
Parameter							
Methylene Chloride (µg/m3)	7.3	ND	ND	ND	ND	3	60
Carbon Tetrachloride (µg/m3)	0.56	0.352	0.459	0.409	0.440	0.2	NS
Tetrachloroethene (µg/m3)	0.42	2.04	0.8	0.251	0.400	3	30
Trichloroethene (µg/m3)	ND	ND	ND	ND	ND	0.2	2

Notes:

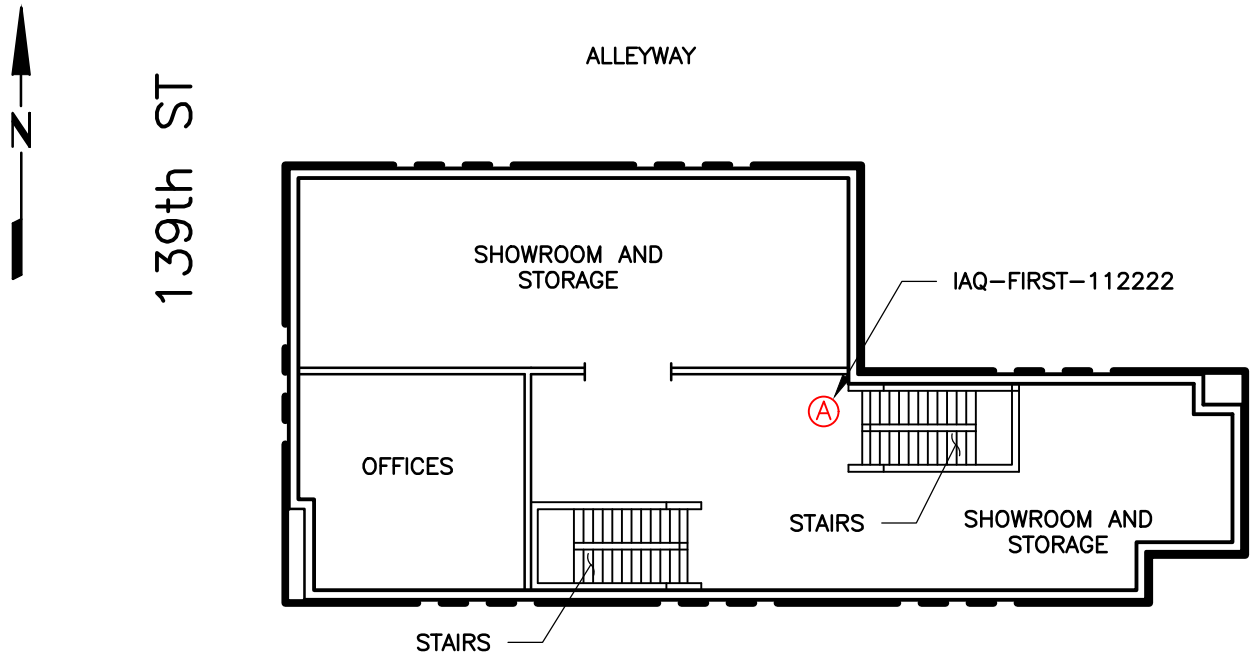
µg/m3 - micrograms per cubic meter

NS - No Standard

(1) New York State Department of Health Soil Vapor Intrusion Guidance No Further Action criteria for Indoor Air Samples

(2) New York State Department of Health Indoor Air Guideline

Concentration exceeds MON./MIT. for IAQ & AA Standard



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Ⓐ INDOOR AIR QUALITY SAMPLE LOCATION

0 10 20 40

SCALE IN FEET

Prepared/Date: WJW 1/06/23
Checked/Date: EAW 1/06/23

Former Duraspec Electroplating, Inc. 87-83, 139th Street, Jamaica, NY 11435	Amec E & E, PC 209–35 Northern Blvd., Suite 203 Bayside, New York 11361	Indoor Air Sampling Location First Floor Project 3612-16-2326 Figure 3A

Location	Former Duraspec Electroplating Facility/RCA Stone & Tiles					MON./MIT. for IAQ & AA Indoor Air (1)	NYSDOH Action Levels Indoor Air (2)
Matrix / Date Sampled	Indoor Air 1/16/2019	Indoor Air 2/12/2020	Indoor Air 12/29/2020	Indoor Air 11/20/2021	Indoor Air 11/22/2022		
Level	Basement	Basement	Basement	Basement	Basement		
Sample ID	IAQ-BASEMENT-0119	IAQ-BASEMENT-022020	IAQ-BASEMENT-122020	IAQ-BASEMENT-112021	IAQ-BASEMENT-112222		
Sample Method	TO-15 SIM	TO-15 SIM	TO-15 SIM	TO-15 SIM	TO-15 SIM		
Parameter							
Methylene Chloride (µg/m3)	ND	ND	ND	ND	ND	3	60
Carbon Tetrachloride (µg/m3)	0.541	0.409	0.44	0.409	0.491	0.2	NS
Tetrachloroethene (µg/m3)	0.481	1.61	0.658	0.251	0.373	3	30
Trichloroethene (µg/m3)	ND	ND	ND	ND	ND	0.2	2

Notes:

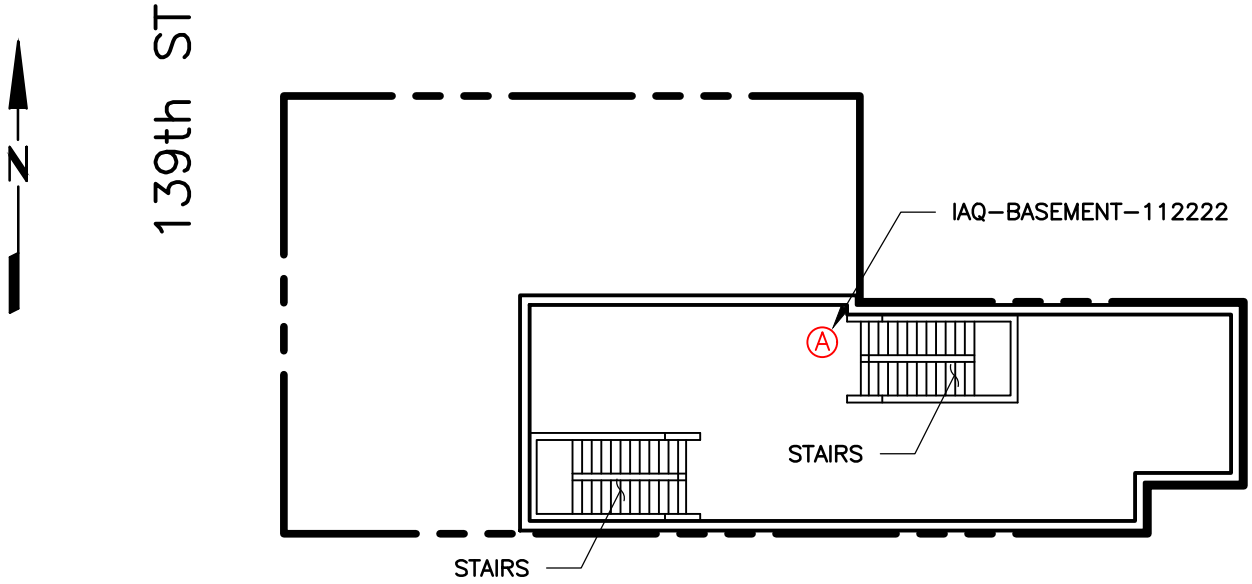
µg/m3 - micrograms per cubic meter

NS - No Standard

(1) New York State Department of Health Soil Vapor Intrusion Guidance No Further Action criteria for Indoor Air Samples

(2) New York State Department of Health Indoor Air Guideline

Concentration exceeds MON./MIT. for IAQ & AA Standard



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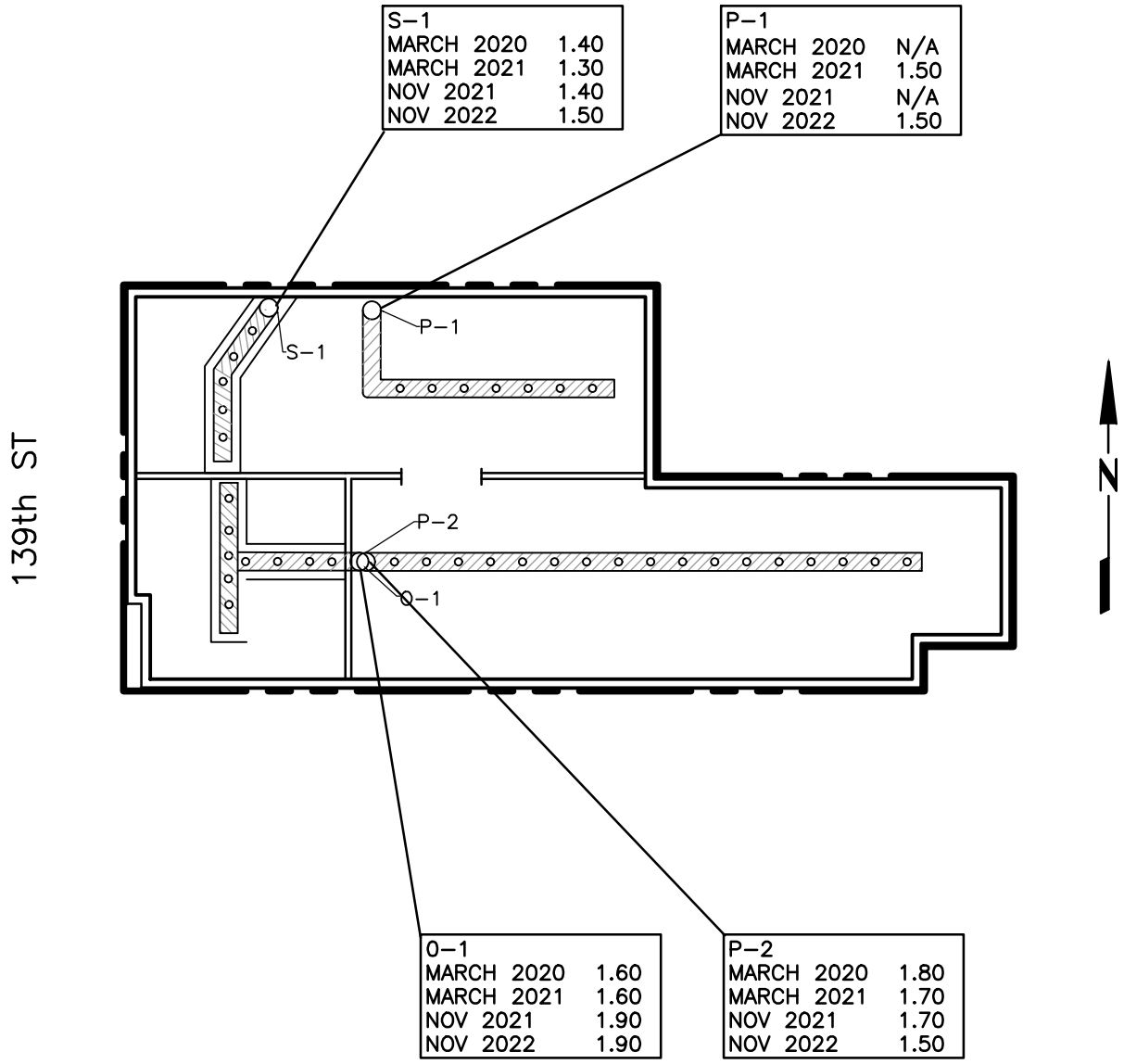
Ⓐ INDOOR AIR QUALITY SAMPLE LOCATION

0 10 20 40

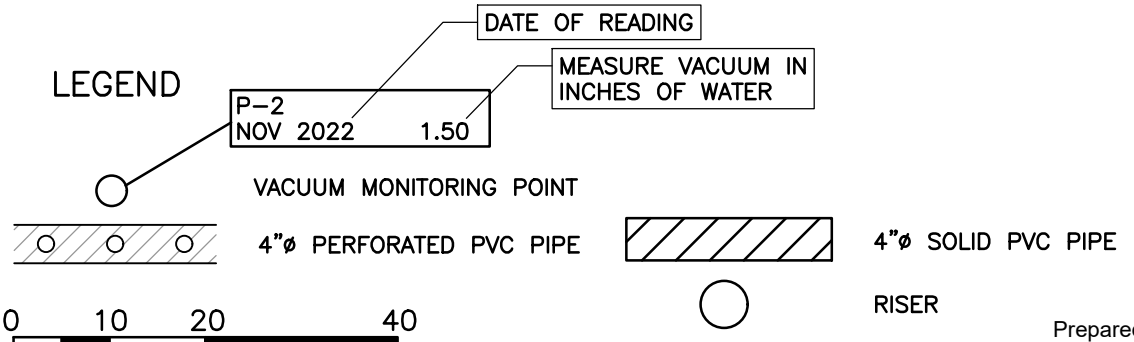
SCALE IN FEET

Prepared/Date: WJW 1/06/23
Checked/Date: EAW 1/06/23

Former Duraspec Electroplating, Inc. 87-83, 139th Street, Jamaica, NY 11435	Amec E & E, PC 1979 Marcus Ave., Suite 210 Lake Success, New York 11042 (516) 622-2254	Indoor Air Sampling Location Basement Project 3612-16-2326 Figure 3B



LEGEND



Prepared/Date: MB 11/30/22
Checked/Date: EAW 12/01/22

Former Duraspec Electroplating, Inc. 87-83, 139th Street, Jamaica, NY 11435	Amec E & E, PC 209-35 Northern Blvd., Suite 203, Bayside, New York 11361	SSD SYSTEM ANNUAL VACUUM READING Project 3612-16-2326 Figure 4

TABLES

Table 1
Former Duraspec Electroplating
Vapor Intrusion Sampling
87-83 139th Street, Jamacia, NY

			LOCATION			IAQ-BASEMENT-112022		IAQ-FIRST-112022	
			SAMPLING DATE			11/22/2022		11/22/2022	
			LAB SAMPLE ID			L2266295-01		L2266295-02	
			SAMPLE TYPE			AIR		AIR	
		NY-IAC-A	NY-IAC-B	NY-IAC-C	Units	Concentration	Qual	Concentration	Qual
Volatile Organics in Air									
	Dichlorodifluoromethane	NS	NS	NS	ug/m3	2.23		2.24	
	Chloromethane	NS	NS	NS	ug/m3	1.05		0.983	
	Freon-114	NS	NS	NS	ug/m3	1.4	U	1.4	U
	1,3-Butadiene	NS	NS	NS	ug/m3	0.442	U	0.442	U
	Bromomethane	NS	NS	NS	ug/m3	0.777	U	0.777	U
	Chloroethane	NS	NS	NS	ug/m3	0.528	U	0.528	U
	Ethanol	NS	NS	NS	ug/m3	29.4		24.9	
	Vinyl bromide	NS	NS	NS	ug/m3	0.874	U	0.874	U
	Acetone	NS	NS	NS	ug/m3	15.6		13.2	
	Trichlorofluoromethane	NS	NS	NS	ug/m3	1.14		1.13	
	Isopropanol	NS	NS	NS	ug/m3	3.1		3.34	
	Tertiary butyl Alcohol	NS	NS	NS	ug/m3	1.52	U	1.52	U
	Methylene chloride	NS	3	NS	ug/m3	1.74	U	1.74	U
	3-Chloropropene	NS	NS	NS	ug/m3	0.626	U	0.626	U
	Carbon disulfide	NS	NS	NS	ug/m3	0.623	U	0.623	U
	Freon-113	NS	NS	NS	ug/m3	1.53	U	1.53	U
	trans-1,2-Dichloroethene	NS	NS	NS	ug/m3	0.793	U	0.793	U
	1,1-Dichloroethane	NS	NS	NS	ug/m3	0.809	U	0.809	U
	Methyl tert butyl ether	NS	NS	NS	ug/m3	0.721	U	0.721	U
	2-Butanone	NS	NS	NS	ug/m3	5.28		4.42	
	Ethyl Acetate	NS	NS	NS	ug/m3	1.8	U	1.8	U
	Chloroform	NS	NS	NS	ug/m3	0.977	U	0.977	U
	Tetrahydrofuran	NS	NS	NS	ug/m3	1.47	U	1.47	U
	1,2-Dichloroethane	NS	NS	NS	ug/m3	0.809	U	0.809	U
	n-Hexane	NS	NS	NS	ug/m3	1.46		1.44	
	Benzene	NS	NS	NS	ug/m3	1.09		1.11	
	Cyclohexane	NS	NS	NS	ug/m3	0.688	U	0.688	U
	1,2-Dichloropropane	NS	NS	NS	ug/m3	0.924	U	0.924	U
	Bromodichloromethane	NS	NS	NS	ug/m3	1.34	U	1.34	U
	1,4-Dioxane	NS	NS	NS	ug/m3	0.721	U	0.721	U
	2,2,4-Trimethylpentane	NS	NS	NS	ug/m3	0.934	U	0.934	U
	Heptane	NS	NS	NS	ug/m3	1.01		1.05	
	cis-1,3-Dichloropropene	NS	NS	NS	ug/m3	0.908	U	0.908	U
	4-Methyl-2-pentanone	NS	NS	NS	ug/m3	2.05	U	2.05	U
	trans-1,3-Dichloropropene	NS	NS	NS	ug/m3	0.908	U	0.908	U
	1,1,2-Trichloroethane	NS	NS	NS	ug/m3	1.09	U	1.09	U
	Toluene	NS	NS	NS	ug/m3	7.57		7.27	
	2-Hexanone	NS	NS	NS	ug/m3	0.82	U	0.82	U
	Dibromochloromethane	NS	NS	NS	ug/m3	1.7	U	1.7	U
	1,2-Dibromoethane	NS	NS	NS	ug/m3	1.54	U	1.54	U
	Chlorobenzene	NS	NS	NS	ug/m3	0.921	U	0.921	U
	Ethylbenzene	NS	NS	NS	ug/m3	0.869	U	0.869	U
	p/m-Xylene	NS	NS	NS	ug/m3	1.74		1.9	
	Bromoform	NS	NS	NS	ug/m3	2.07	U	2.07	U
	Styrene	NS	NS	NS	ug/m3	0.852	U	0.852	U
	1,1,2,2-Tetrachloroethane	NS	NS	NS	ug/m3	1.37	U	1.37	U
	o-Xylene	NS	NS	NS	ug/m3	0.873		0.869	
	4-Ethyltoluene	NS	NS	NS	ug/m3	0.983	U	0.983	U
	1,3,5-Trimethylbenzene	NS	NS	NS	ug/m3	0.983	U	0.983	U
	1,2,4-Trimethylbenzene	NS	NS	NS	ug/m3	0.983	U	0.983	U
	Benzyl chloride	NS	NS	NS	ug/m3	1.04	U	1.04	U
	1,3-Dichlorobenzene	NS	NS	NS	ug/m3	1.2	U	1.2	U
	1,4-Dichlorobenzene	NS	NS	NS	ug/m3	1.2	U	1.2	U
	1,2-Dichlorobenzene	NS	NS	NS	ug/m3	1.2	U	1.2	U
	1,2,4-Trichlorobenzene	NS	NS	NS	ug/m3	1.48	U	1.48	U
	Hexachlorobutadiene	NS	NS	NS	ug/m3	2.13	U	2.13	U
Volatile Organics in Air by SIM									
	Vinyl chloride			0.2	ug/m3	0.051	U	0.051	U
	1,1-Dichloroethene	0.2			ug/m3	0.079	U	0.079	U
	cis-1,2-Dichloroethene	0.2			ug/m3	0.079	U	0.079	U
	1,1,1-Trichloroethane		3		ug/m3	0.109	U	0.109	U
	Carbon tetrachloride	0.2			ug/m3	0.491		0.44	
	Trichloroethene	0.2			ug/m3	0.107	U	0.107	U
	Tetrachloroethene		3		ug/m3	0.373		0.4	

U - Not detected at the reported detection limit for the sample
ug/m3 - micrograms/cubic meter
NS - No Standard

Prepared by: EAW
Checked by: EMP

NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
NY-IAC-B: New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
NY-IAC-C: New York DOH Matrix C Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

Table 2
Historical Indoor Air Sample Results for Contaminants of Concern
Former Duraspec Electrplating Facility
87-83 139th Street, Jamaica, NY

Location	**Former Duraspec Electroplating Facility/RCA Stone & Tiles**					**MON./MIT. for IAQ & AA**	**NYSDOH Action Levels**
Matrix	Indoor Air	Indoor Air	Indoor Air	Indoor Air	Indoor Air	**Indoor Air (1)**	**Indoor Air (2)**
Date Sampled	1/16/2019	2/12/2020	12/29/2020	11/20/2021	11/22/2022		
Level	**First Floor**	**First Floor**	**First Floor**	**First Floor**	**First Floor**		
Sample ID	IAQ-FIRST-012019	IAQ-FIRST-022020	IAQ-FIRST-122020	IAQ-BASEMENT-112021	IAQ-BASEMENT-112222		
Sample Method	TO-15 SIM	TO-15 SIM	TO-15 SIM	TO-15 SIM	TO-15 SIM		
Parameter							
Methylene Chloride (µg/m3)	7.3	ND	ND	ND	ND	3	60
Carbon Tetrachloride (µg/m3)	0.56	0.352	0.459	0.409	0.440	0.2	NS
Tetrachloroethene (µg/m3)	0.42	2.04	0.8	0.251	0.400	3	30
Trichloroethene (µg/m3)	ND	ND	ND	ND	ND	0.2	2
Level	**Basement**	**Basement**	**Basement**	**Basement**	**Basement**		
Sample ID	IAQ-BASEMENT-0119	IAQ-BASEMENT-022020	IAQ-BASEMENT-122020	IAQ-BASEMENT-112021	IAQ-BASEMENT-112222		
Sample Method	TO-15 SIM	TO-15 SIM	TO-15 SIM	TO-15 SIM	TO-15 SIM		
Parameter							
Methylene Chloride (µg/m3)	ND	ND	ND	ND	ND	3	60
Carbon Tetrachloride (µg/m3)	0.541	0.409	0.44	0.409	0.491	0.2	NS
Tetrachloroethene (µg/m3)	0.481	1.61	0.658	0.251	0.373	3	30
Trichloroethene (µg/m3)	ND	ND	ND	ND	ND	0.2	2

Notes:

µg/m3 - micrograms per cubic meter

NS - No Standard

(1) New York State Department of Health Soil Vapor Intrusion Guidance No Further Action criteria for Indoor Air Samples

(2) New York State Department of Health Indoor Air Guideline

Concentration exceeds MON./MIT. for IAQ & AA Standard

Prepared by: EMP
Checked by: EAW

APPENDIX A – CERTIFICATION FORM

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Site Management Periodic Review Report Notice

Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **241204**

Site Name Former Duraspec Electroplating

Site Address: 87-83 139th Street Zip Code: 11435
City/Town: Jamaica
County: Queens
Site Acreage: 0.093

Reporting Period: December 12, 2021 to December 12, 2022

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	X
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

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

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

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

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 241204 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
9685-50	*Hastings Capital, LLC*	Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

- The property may be used for commercial use;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Queens Department of Health to render it safe for use as drinking water or for industrial purpose, and the user must first notify and obtain written approval to do so from the Department;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
- Property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated for any buildings developed in the area within the IC boundaries, and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens and farming on the site are prohibited.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
9685-50	Vapor Mitigation Cover System

- A cover system was installed consisting of a concrete slab at least 4-inches in thick.
- A Sub-Slab Depressurization System with two fans and a plastic vapor barrier were installed below the concrete slab.

Box 5

Periodic Review Report (PRR) Certification Statements

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

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

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

YES	NO
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

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

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

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

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

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

YES	NO
X	☐

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

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

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. 241204

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

I Robert Birnbaum (print name) at Hastings Capital, LLC, 100 Field Street, West Babylon, NY 11704 (print business address),

am certifying as Owner (Owner or Remedial Party)

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

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

12-27-2022
Date

EC CERTIFICATIONS

Box 7

Signature

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

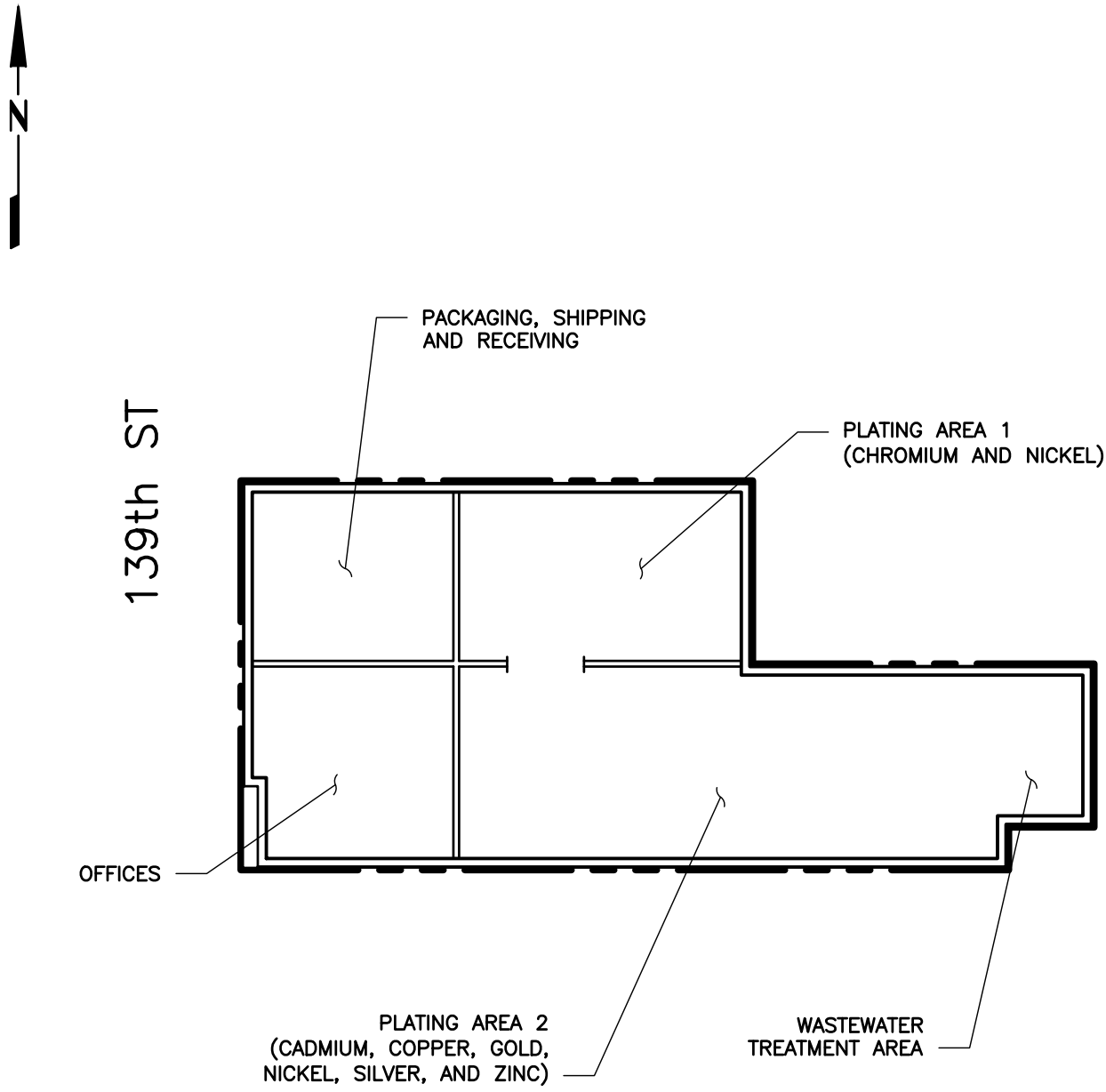
I Eric Weinstock (print name) at Amec E+E, PC, 209-35 Northern Blvd, suite 203, Bayside, NY 11361 (print business address)

am certifying as a QEP for the Owner (Owner or Remedial Party)

Eric Weinstock — 12/27/2022

Signature of QEP, for the Owner or Remedial Party, Rendering Certification | Stamp (Required for PE) | Date

APPENDIX B – PLANT LAYOUT



0 10 20 40

SCALE IN FEET

Prepared/Date: WJW 3/27/2017
Checked/Date: EAW 3/27/2017

Former Duraspec Electroplating, Inc. 87-83, 139th Street, Jamaica, NY 11435	Amec E & E, PC 214-25 42nd Ave. Suite 3R Bayside, New York 11361 347-836-4343	Plant Layout Project 3612-162-326 Figure 5

APPENDIX C – IAQ QUESTIONAIRE

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 Menl M Benny Date/Time Prepared 11/21/2022 - 11/22/2022

Preparer's Affiliation Contractor Phone No. 347 216 5559

Purpose of Investigation Annual check of SSDS

1. OCCUPANT:

Interviewed: (Y) / N

Last Name: Khan First Name: Fazeela

Address: 87-83 134th Street, Jamaica

County: Queens

Home Phone: _____ Office Phone: (347) 792 1995

Number of Occupants/persons at this location 12 Age of Occupants _____

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

Interviewed: Y / (N) Hashngs Capital

Last Name: NA First Name: NA

Address: 100 Field Street, West Babylon

County: Suffolk

Home Phone: NA Office Phone: (631)-293-1998

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

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

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

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

If multiple units, how many? _____

If the property is commercial, type?

Business Type(s) Security office (Narrow Security), Flower Shop

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

Other characteristics:

Number of floors 2 Building age 5

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

NA

Airflow near source

NA

Outdoor air infiltration

NA

Infiltration into air ducts

NA

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

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

Basement/Lowest level depth below grade: 12 (feet)

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

_____

_____

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

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

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	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: gas

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

Are there air distribution ducts present? (Y) / N

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

NA

7. OCCUPANCY

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

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	storage
1st Floor	office and ~~flowershop~~, storage for Event decoration business
2nd Floor	offices
3rd Floor	NA
4th Floor	NA

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

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

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

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

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? _____

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? December 2021 1st and 2nd floor

l. Have air fresheners been used recently? (Y) N When & Type? 1st and 2nd floor (febreeze)

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented? ~~4st~~ _____

n. Is there a bathroom exhaust fan? (Y) N If yes, where vented? 1st and 2nd floor.

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

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

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

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

If yes, what types of solvents are used? _____

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

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

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

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

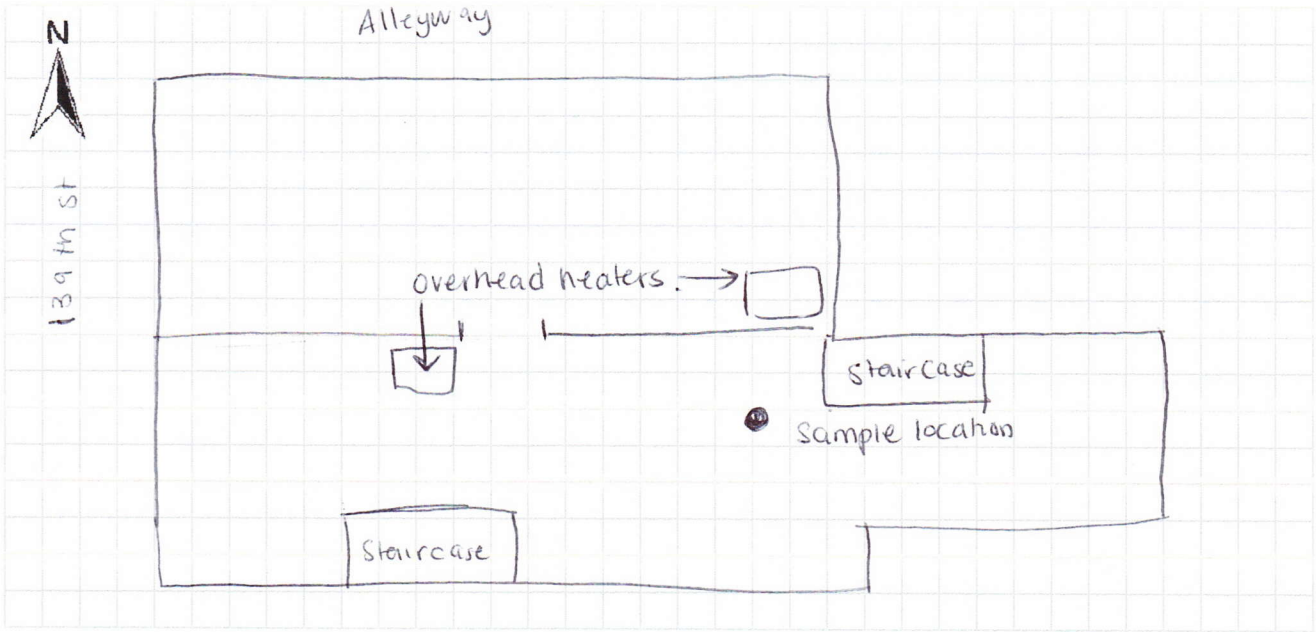
d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

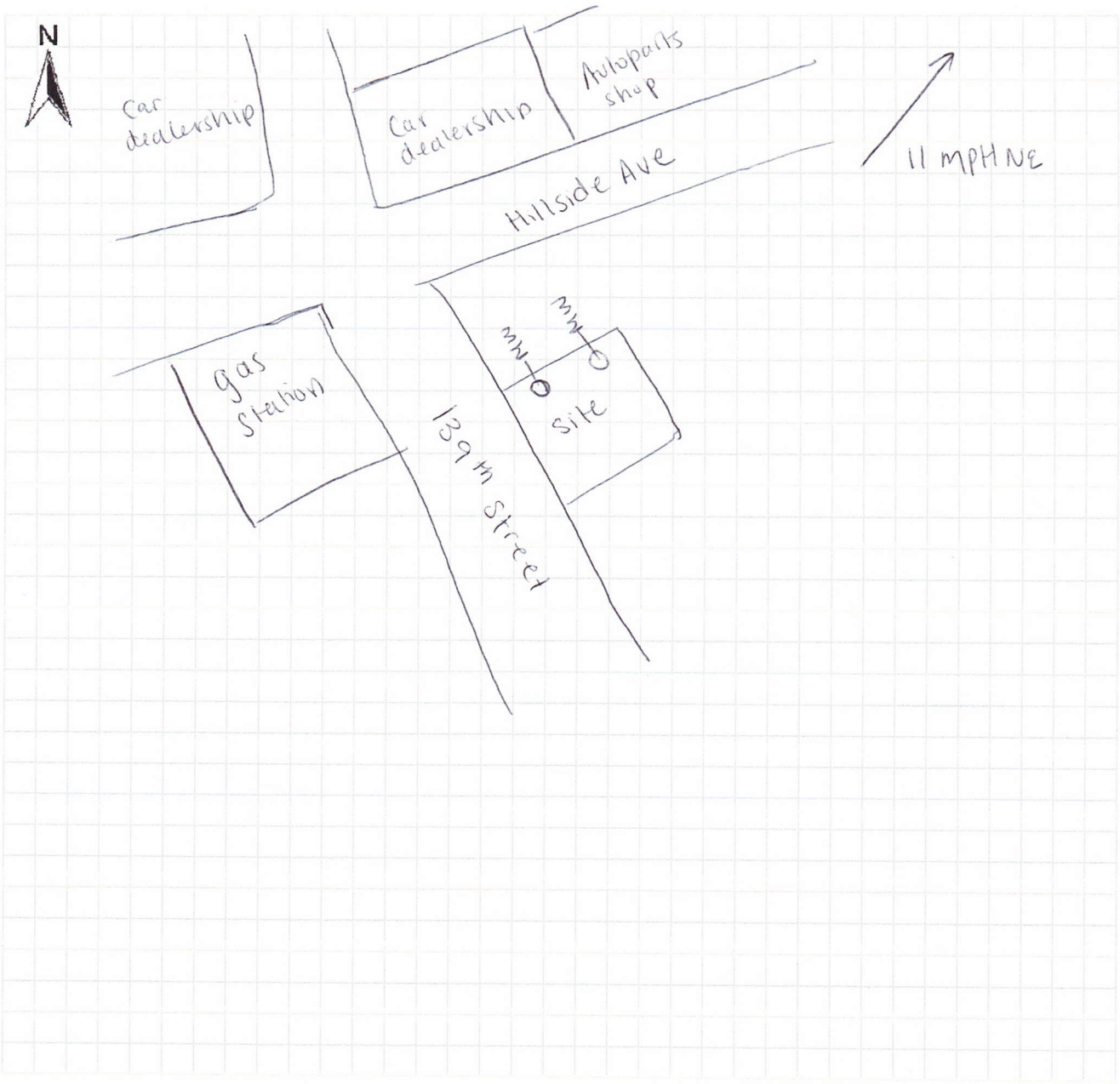
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: NA

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
1st floor	Behr interior/exterior	3.72	U	water based paint	NA	Y
flower storage	Paint (masonry, stucco, brick paint)	liter				
1st floor	Clorox Cleaner +	946	U	cleaner and bleach	NA	Y
cleaning supply	bleach	mL		~~sodium, acetate~~		
1st floor	Emerald interior acrylic latex white paint	3.66L	U	acrylic latex paint	NA	Y
supply closet						
"	Sherwin Williams ProMar200 interior latex	3.63L	U	zero voc white paint	NA	Y
	Paint					
"	Emerald urethane Trim enamel interior /	366L	U	white paint	NA	Y
	exterior paint (Gloss)					
"	Zinsser B-N shellac base Primer.	946	U	Stain blocking primer Ethanol, crystalline silica	NA	Y
		mL				
"	Behr waterproof stain and seal	8.58 mL	U	2,2,4 trimethyl-1,3-pentanediol monoisobutyrate	NA	Y
"	Klean Strip Acetone	946 mL	U	Cryst: Acetone	NA	
"	USG Sheetrock	8.1kg	U	Crystalline silica, Plaster of Paris limestone, mica, perlite,	NA	Y
1st floor flower shop	Loctite heavy duty adhesive	266 mL		attapulgite, petroleum distillate and		Y
storage				crystalline silica		

* 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.

Note: part of the first floor and basement is now used as storage for an event decorating business; they are storing sofas, tables, chairs, banners, artifical silk flowers, statues, beddings, pillars, stands, drapes, etc.

APPENDIX D – DUSR

DATA USABILITY SUMMARY REPORT
NOVEMBER 2022 AIR MONITORING EVENT
HASTINGS CAPITAL – DURASPEC SITE
JAMAICA, QUEENS, NEW YORK

1.0 INTRODUCTION

Air samples were collected at the Hastings Capital - Duraspec site in November 2022 and submitted to Alpha Analytical Laboratories, located in Westborough, Massachusetts, for analysis. Samples were analyzed by one or more of the following methods:

- VOCs in Air by Method TO-15 and TO-15 Selected Ion Monitoring (SIM)

Results were reported in the following sample delivery groups (SDGs):

- L2266295

A Data Usability Summary Report (DUSR) review was completed based on the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation guidance (NYSDEC, 2010) and the Project Quality Assurance Project Plan (QAPP) [AMEC, 2016]. Sample event information included in this DUSR is presented in the following tables:

- Table 1 – Summary of Samples and Analytical Methods
- Table 2 – Summary of Analytical Results

Laboratory deliverables included:

- Category B deliverables as defined in the NYSDEC Analytical Services Protocols (NYSDEC, 2005).

The DUSR review included the checks listed below. A table of the project control limits used for QC evaluations is presented in Attachment A. Applicable laboratory QC summary forms are included in Attachment B to document QC outliers associated with qualification actions.

- Lab Report Narrative Review
- Data Package Completeness and COC records (Table 1 verification)
- Sample Preservation and Holding Times
- Instrument Calibration (report narrative/lab-qualifier evaluation)
- QC Blanks
- Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)
- Surrogate Spikes/Isotope Dilutions (if applicable)
- Field Duplicates
- Target Analyte Identification and Quantitation
- Raw Data (chromatograms), Calculation Checks and Transcription Verifications
- Reporting Limits
- Electronic Data Qualification and Verification

Data qualification actions are applied when necessary based on general procedures in United States Environmental Protection Agency (USEPA) validation guidelines (USEPA, 2016) and the judgment of the project chemist. The following laboratory or data review qualifiers are used in the final data presentation:

U = target analyte is not detected above the reported detection limit

Results are interpreted to be usable as reported by the laboratory or as qualified in the following sections.

2.0 POTENTIAL DATA LIMITATIONS

Based on the DUSR review the data can be used as reported by the laboratory. No data limitations were found.

3.0 ADDITIONAL QC EXCEEDANCES AND OBSERVATIONS

There were no additional observations or quality control exceedances not specifically addressed above (Section 2.0).

Reference:

AMEC Environment and Infrastructure (Amec), 2016. Closure Plan Appendix N Quality Assurance Project Plan; October 12, 2016.

NYSDEC, 2005. "Analytical Services Protocols"; June 2005.

NYSDEC, 2010. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; DER-10; Division of Environmental Remediation; May 2010.

USEPA, 2016. “Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15”; SOP NO. HW-31; Revision 6; Hazardous Waste Support Section; September 2016.

Data Validator: Kassidy Patoine

December 20, 2022

Reviewed by:

December 21, 2022

Standard Table Notes:

Sample Type (QC Code)

FS – field sample

FD – field duplicate

TB – trip blank

EB – equipment blank

FB – field blank

Matrix

GW – ground water

BW – blank water

TW – tap water

SV – soil vapor

SED - sediment

Units

mg/L – milligrams per liter

ng/L – nanograms per liter

µg/L – micrograms per liter

mg/kg – milligrams per kilogram

µg/kg – micrograms per kilogram

µg/m^3 – micrograms per cubic meter

Qualifiers

U – not detected above quantitation limit

J – estimated quantity

J+ - estimated quantity, biased high

J- - estimated quantity, biased low

R – data unusable

Fraction

T – total

D – dissolved

N – normal

Qualification Reason Codes

BL1 – method blank qualifier

BL2 – field or trip blank qualifier

CCV – continuing calibration verification recovery outside limits

CCV%D – continuing calibration verification percent difference exceeds goal

CCVRRF – continuing calibration relative response factor low

CI – chromatographic interference present

DCPD – dual column percent difference exceeds limit

E – result exceeds calibration range

FD – field duplicate precision goal exceeded

FP – false positive interference

HT – holding time for prep or analysis exceeded

HTG – holding time for prep or analysis grossly exceeded

ICV – initial calibration verification recovery outside limit

ICVRRF – initial calibration verification relative response factor low

ICVRSD – initial calibration verification % relative standard deviation exceeds goal

ISH – internal standard response greater than limit

ISL – internal standard response less than limit

LCSH – laboratory control sample recovery high

LCSL – laboratory control sample recovery low

LCSRPD – laboratory control sample/duplicate relative % difference precision goal exceeded

LD – lab duplicate precision goal exceeded

MSH – matrix spike and/or MS duplicate recovery high

MSL – matrix spike and/or MS duplicate recovery low

MSRPD – matrix spike/duplicate relative % difference precision goal exceeded

N – analyte identification is not certain

PEM – performance evaluation mixture exceeds limit

PM – sample percent moisture exceeds EPA guideline

SD – serial dilution result exceeds percent difference limit

SP – sample preservation/collection does not meet method requirement

SSH – surrogate recovery high

SSL – surrogate recovery low

TD – dissolved concentration exceeds total

TABLE 1
DATA USABILITY SUMMARY REPORT
NOVEMBER 2022 AIR MONITORING EVENT
HASTINGS CAPITAL – DURASPEC SITE
JAMAICA, QUEENS, NEW YORK

SDG	Location	Field Sample ID	Sample Date	Media	Lab Sample ID	Method Fraction QC Code	TO-15 N Count	TO15 SIM N Count
L2266295	IAQ-BASEMENT	IAQ-BASEMENT-112022	11/22/2022	AIR	L2266295-01	FS	56	7
L2266295	IAQ-FIRST	IAQ-FIRST-112022	11/22/2022	AIR	L2266295-02	FS	56	7

Created by: WCG 12/20/2022
Checked by: KRP 12/20/2022

TABLE 2
DATA USABILITY SUMMARY REPORT
NOVEMBER 2022 AIR MONITORING EVENT
HASTINGS CAPITAL – DURASPEC SITE
JAMAICA, QUEENS, NEW YORK

		SDG	L2266295		L2266295	
		Location	IAQ-BASEMENT		IAQ-FIRST	
		Sample Date	11/22/2022		11/22/2022	
		Sample ID	IAQ-BASEMENT-112022		IAQ-FIRST-112022	
		QC Code	FS		FS	
Method	Parameter	Unit	Final Result	Final Qualifier	Final Result	Final Qualifier
TO-15	1,1,2,2-Tetrachloroethane	UG/M3	1.37	U	1.37	U
TO-15	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	UG/M3	1.53	U	1.53	U
TO-15	1,1,2-Trichloroethane	UG/M3	1.09	U	1.09	U
TO-15	1,1-Dichloroethane	UG/M3	0.809	U	0.809	U
TO-15	1,2,4-Trichlorobenzene	UG/M3	1.48	U	1.48	U
TO-15	1,2,4-Trimethylbenzene	UG/M3	0.983	U	0.983	U
TO-15	1,2-Dibromoethane	UG/M3	1.54	U	1.54	U
TO-15	1,2-Dichloro-1,1,2,2-tetrafluoroethane	UG/M3	1.4	U	1.4	U
TO-15	1,2-Dichlorobenzene	UG/M3	1.2	U	1.2	U
TO-15	1,2-Dichloroethane	UG/M3	0.809	U	0.809	U
TO-15	1,2-Dichloropropane	UG/M3	0.924	U	0.924	U
TO-15	1,3,5-Trimethylbenzene	UG/M3	0.983	U	0.983	U
TO-15	1,3-Butadiene	UG/M3	0.442	U	0.442	U
TO-15	1,3-Dichlorobenzene	UG/M3	1.2	U	1.2	U
TO-15	1,4-Dichlorobenzene	UG/M3	1.2	U	1.2	U
TO-15	1,4-Dioxane	UG/M3	0.721	U	0.721	U
TO-15	2-Butanone	UG/M3	5.28		4.42	
TO-15	2-Hexanone	UG/M3	0.82	U	0.82	U
TO-15	2-Propanol	UG/M3	3.1		3.34	
TO-15	4-Ethyltoluene	UG/M3	0.983	U	0.983	U
TO-15	4-Methyl-2-pentanone	UG/M3	2.05	U	2.05	U
TO-15	Acetone	UG/M3	15.6		13.2	
TO-15	Allyl chloride	UG/M3	0.626	U	0.626	U
TO-15	Benzene	UG/M3	1.09		1.11	
TO-15	Benzyl chloride	UG/M3	1.04	U	1.04	U
TO-15	Bromodichloromethane	UG/M3	1.34	U	1.34	U
TO-15	Bromoform	UG/M3	2.07	U	2.07	U
TO-15	Bromomethane	UG/M3	0.777	U	0.777	U
TO-15	Carbon disulfide	UG/M3	0.623	U	0.623	U
TO-15	Chlorobenzene	UG/M3	0.921	U	0.921	U
TO-15	Chloroethane	UG/M3	0.528	U	0.528	U
TO-15	Chloroform	UG/M3	0.977	U	0.977	U
TO-15	Chloromethane	UG/M3	1.05		0.983	
TO-15	cis-1,3-Dichloropropene	UG/M3	0.908	U	0.908	U
TO-15	Cyclohexane	UG/M3	0.688	U	0.688	U
TO-15	Dibromochloromethane	UG/M3	1.7	U	1.7	U
TO-15	Dichlorodifluoromethane	UG/M3	2.23		2.24	

Created by: WCG 12/21/22
Checked by: KRP 12/21/22

TABLE 2
DATA USABILITY SUMMARY REPORT
NOVEMBER 2022 AIR MONITORING EVENT
HASTINGS CAPITAL – DURASPEC SITE
JAMAICA, QUEENS, NEW YORK

		SDG	L2266295		L2266295	
		Location	IAQ-BASEMENT		IAQ-FIRST	
		Sample Date	11/22/2022		11/22/2022	
		Sample ID	IAQ-BASEMENT-112022		IAQ-FIRST-112022	
		QC Code	FS		FS	
Method	Parameter	Unit	Final Result	Final Qualifier	Final Result	Final Qualifier
TO-15	Ethanol	UG/M3	29.4		24.9	
TO-15	Ethyl acetate	UG/M3	1.8	U	1.8	U
TO-15	Ethylbenzene	UG/M3	0.869	U	0.869	U
TO-15	Heptane	UG/M3	1.01		1.05	
TO-15	Hexachlorobutadiene	UG/M3	2.13	U	2.13	U
TO-15	Hexane	UG/M3	1.46		1.44	
TO-15	Isooctane	UG/M3	0.934	U	0.934	U
TO-15	Methyl Tertbutyl Ether	UG/M3	0.721	U	0.721	U
TO-15	Methylene chloride	UG/M3	1.74	U	1.74	U
TO-15	Styrene	UG/M3	0.852	U	0.852	U
TO-15	t-Butyl alcohol	UG/M3	1.52	U	1.52	U
TO-15	Tetrahydrofuran	UG/M3	1.47	U	1.47	U
TO-15	Toluene	UG/M3	7.57		7.27	
TO-15	trans-1,2-Dichloroethene	UG/M3	0.793	U	0.793	U
TO-15	trans-1,3-Dichloropropene	UG/M3	0.908	U	0.908	U
TO-15	Trichlorofluoromethane	UG/M3	1.14		1.13	
TO-15	Vinyl bromide	UG/M3	0.874	U	0.874	U
TO-15	Xylene, o	UG/M3	0.873		0.869	
TO-15	Xylenes (m&p)	UG/M3	1.74		1.9	
TO15 SIM	1,1,1-Trichloroethane	UG/M3	0.109	U	0.109	U
TO15 SIM	1,1-Dichloroethene	UG/M3	0.079	U	0.079	U
TO15 SIM	Carbon tetrachloride	UG/M3	0.491		0.44	
TO15 SIM	cis-1,2-Dichloroethene	UG/M3	0.079	U	0.079	U
TO15 SIM	Tetrachloroethene	UG/M3	0.373		0.4	
TO15 SIM	Trichloroethene	UG/M3	0.107	U	0.107	U
TO15 SIM	Vinyl chloride	UG/M3	0.051	U	0.051	U

Created by: WCG 12/21/22
Checked by: KRP 12/21/22

ATTACHMENT A
SUMMARY OF VALIDATION QC LIMITS FOR SURROGATES, SPIKES, AND DUPLICATES
BASED ON THE REGION 2 VALIDATION GUIDELINES

PARAMETER	QC TEST	ANALYTE	Air (%R)	Air (RPD)
Volatiles TO-15	Surrogate	All Surrogate Compounds	Lab Limits	
	LCS	All Target Compounds	70 - 130	25
	Field Duplicate	All Target Compounds		50

Notes:
LCS - Laboratory Control Sample
RPD = Relative percent difference
%R = percent recovery
QC Limits are based on USEPA Region II Data Validation Guidelines and Project QA/QC Objectives
Surrogates are not specified in the Region II Data Validation Guidelines (2016)

DATA USABILITY SUMMARY REPORT
NOVEMBER 2022 AIR MONITORING EVENT
HASTINGS CAPITAL – DURASPEC SITE
JAMAICA, QUEENS, NEW YORK

ATTACHMENT B

VOCs in Air

NYSDEC DUSR PROJECT CHEMIST REVIEW RECORD
Project: Duraspec
Method : TO-15 / TO-15 SIM
Laboratory and SDG(s): Alpha Analytical **SDG#** L2266295
Date: 12/19/2022
Reviewer: Kassidy Patoine
Review Level [X] NYSDEC DUSR [ ] USEPA Region II Guideline

Control limits are from EPA Region 2 - SOP# HW-31, October 2006.

1. ☑ **Case Narrative Review and Data Package Completeness** COMMENTS
   Were problems noted? no problems noted
   Are Field Sample IDs and Locations assigned correctly? YES NO (circle one)
   Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)
2. ☑ **Holding time and Sample Collection**
   Were samples analyzed within the 30 day holding time? YES NO (circle one)
3. ☑ **QC Blanks** (use 5x rule for calculating action levels)
   Are method blanks free of contamination? YES NO (circle one)
4. ☑ **Instrument Tuning – Data Package Narrative Review**
   Did the laboratory narrative identify any results that were not within method criteria? YES NO (circle one)
   If yes, use professional judgment to evaluate data and qualify results if needed
5. ☑ **Instrument Calibration - Data Package Narrative Review**
   Did the laboratory narrative identify compounds that were not within method criteria (%RSD ≤30; %D ≤30) in the initial calibration and/or continuing calibration standards? YES NO

   Did the laboratory qualify results based on initial or continuing calibration exceedances? YES NO NA
   If yes to above, use professional judgment to evaluate data and qualify results if needed
6. ☑ **Internal Standards – Data Package Narrative Review**
   (Area Limits = +40% to -40%, RTs within 20 seconds of daily CCAL standard (or ICAL mid-point if samples follow ICAL))
   Did the laboratory narrative identify any sample internal standards that were not within criteria? YES NO (circle one)

   Did the laboratory qualify results based on internal standard exceedances? YES NO NA
   If yes to above, use professional judgment to evaluate data and qualify results if needed
7. ☑ **Surrogate Recovery** N/A - no surrogates provides

   Were all results within laboratory limits? YES NO (circle one)
8. ☑ **Field Duplicates**
   Were Field Duplicates submitted/analyzed? YES NO

   Were all results were within criteria (Field Dup RPD goal = 50). YES NO NA (circle one)
9. ☑ **Laboratory Control Sample Results** (limits 70-130%)

   Were all results within limits? YES NO (circle one)

10. ☑ **Reporting Limits:** Were samples analyzed at a dilution? YES NO (circle one)

11. ☑ **Raw Data Review and Calculation Checks**

12. ☑ **Electronic Data Review and Edits**

Does the EDD match the Form Is? YES NO (circle one)

13. ☑ **Tables Review**

Table 1 (Samples and Analytical Methods)
Table 2 (Analytical Results)
Table 3 (Qualification Actions)
Were all tables produced and reviewed? YES NO (circle one)

Table 4 (TICs) Did lab report TICs? YES NO (circle one)

Project Name:	FORMER DURASPEC	**Lab Number:**	L2266295
Project Number:	3612162326	**Report Date:**	12/09/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	FORMER DURASPEC	**Lab Number:**	L2266295
Project Number:	3612162326	**Report Date:**	12/09/22

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on November 17, 2022. The canister certification results are provided as an addendum.

The canister ID numbers were transposed on the sample tags placed on the canisters by the laboratory when preparing the air media order. The correct canister ID for IAQ-BASEMENT-112022 (IAQ-BASEMENT-112022) is 3311 and for IAQ-FIRST-112022 (L2266295-02) should be 3066. Okay; no impact on reported results (COC incorrectly assigned canister IDs but field sample IDs and sample collection times are correct and were correctly reported by the lab) --JAR 12/21/22

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

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 12/09/22

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER DURASPEC
Project Number: 3612162326

Lab Number: L2266295
Report Date: 12/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1721098-3								
Propylene not analyzed in samples	2	Q	-		70-130	-		
Dichlorodifluoromethane	74		-		70-130	-		
Chloromethane	92		-		70-130	-		
Freon-114	94		-		70-130	-		
Vinyl chloride	93		-		70-130	-		
1,3-Butadiene	95		-		70-130	-		
Bromomethane	95		-		70-130	-		
Chloroethane	91		-		70-130	-		
Ethanol	96		-		40-160	-		
Vinyl bromide	97		-		70-130	-		
Acetone	106		-		40-160	-		
Trichlorofluoromethane	97		-		70-130	-		
Isopropanol	106		-		40-160	-		
1,1-Dichloroethene	98		-		70-130	-		
Tertiary butyl Alcohol	98		-		70-130	-		
Methylene chloride	100		-		70-130	-		
3-Chloropropene	99		-		70-130	-		
Carbon disulfide	96		-		70-130	-		
Freon-113	101		-		70-130	-		
trans-1,2-Dichloroethene	96		-		70-130	-		
1,1-Dichloroethane	98		-		70-130	-		
Methyl tert butyl ether	103		-		70-130	-		
Vinyl acetate	93		-		70-130	-		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2022\12\1208T\
Data File : r1918747.D
Acq On : 8 Dec 2022 8:29 PM
Operator : AIRLAB19:TJS
Sample : L2266295-02,3,250,250
Misc : WG1721098,ICAL19537
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 09 14:31:35 2022
Quant Method : O:\Forensics\Data\Airlab19\2022\12\1208T\TFS19_221130.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Dec 01 10:06:16 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2022\12\1208T\r1918742.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.300	49	327027	10.000	ppbV	-0.04
Standard Area = 335331			Recovery =		97.52%	
43) 1,4-difluorobenzene	10.517	114	851603	10.000	ppbV	-0.04
Standard Area = 885990			Recovery =		96.12%	
67) chlorobenzene-D5	15.325	54	149807	10.000	ppbV	-0.03
Standard Area = 156238			Recovery =		95.88%	
System Monitoring Compounds						
Target Compounds						Qvalue
5) dichlorodifluoromethane	3.428	85	12768	0.454	ppbV	97
6) chloromethane	3.578	50	6802	0.476	ppbV	100
7) Freon-114	3.674		0	N.D.		
10) 1,3-butadiene	3.908	54	609	0.044	ppbV	94
13) bromomethane	0.000		0	N.D.		
14) chloroethane	0.000		0	N.D.		
15) ethanol	4.502	31	172155	13.223	ppbV	97
17) vinyl bromide	0.000		0	N.D.		
19) acetone	4.967	43	119950M6	5.552	ppbV	
21) trichlorofluoromethane	5.097	101	4764	0.201	ppbV	98
22) isopropyl alcohol	5.323	45	33481	1.363	ppbV	99
27) tertiary butyl alcohol	5.938		0	N.D.		
28) methylene chloride	5.920	49	8337	0.438	ppbV	97
29) 3-chloropropene	6.064		0	N.D.		
30) carbon disulfide	6.208		0	N.D.		
31) Freon 113	6.214	101	1495	0.061	ppbV	92
32) trans-1,2-dichloroethene	0.000		0	N.D.		
33) 1,1-dichloroethane	0.000		0	N.D.		
34) MTBE	0.000		0	N.D.		
36) 2-butanone	7.708	43	53103	1.505	ppbV	100
38) Ethyl Acetate	8.475	61	584	0.114	ppbV #	25
39) chloroform	8.458	83	1297	0.049	ppbV #	88
40) Tetrahydrofuran	9.008	42	1062	0.048	ppbV	93
42) 1,2-dichloroethane	0.000		0	N.D. d		
44) hexane	8.375	57	12556	0.409	ppbV #	36
50) benzene	10.083	78	18925	0.349	ppbV	98
53) cyclohexane	10.397	56	3230	0.099	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2022\12\1208T\
Data File : r1918747.D
Acq On : 8 Dec 2022 8:29 PM
Operator : AIRLAB19:TJS
Sample : L2266295-02,3,250,250
Misc : WG1721098,ICAL19537
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 09 14:31:35 2022
Quant Method : O:\Forensics\Data\Airlab19\2022\12\1208T\TFS19_221130.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Dec 01 10:06:16 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2022\12\1208T\r1918742.D
Sub List : TO15-NY-7-SIM - .

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
56)	1,2-dichloropropane	0.000		0	N.D.			
57)	bromodichloromethane	0.000		0	N.D.			
58)	1,4-dioxane	0.000		0	N.D.			
60)	2,2,4-trimethylpentane	11.363	57	17004	0.172	ppbV		96
62)	heptane	11.683	43	9292	0.256	ppbV		98
63)	cis-1,3-dichloropropene	0.000		0	N.D.			
64)	4-methyl-2-pentanone	12.417		0	N.D.			
65)	trans-1,3-dichloropropene	0.000		0	N.D.			
66)	1,1,2-trichloroethane	0.000		0	N.D.			
68)	toluene	13.467	91	112422	1.933	ppbV	✓	98
72)	2-hexanone	0.000		0	N.D.	d		
74)	dibromochloromethane	0.000		0	N.D.			
75)	1,2-dibromoethane	0.000		0	N.D.			
80)	chlorobenzene	15.392		0	N.D.			
81)	ethylbenzene	15.725	91	10997	0.161	ppbV		99
83)	m+p-xylene	15.875	91	24131	0.438	ppbV		99
84)	bromoform	0.000		0	N.D.			
85)	styrene	16.208	104	3586	0.084	ppbV		98
86)	1,1,2,2-tetrachloroethane	16.350		0	N.D.			
87)	o-xylene	16.300	91	10810	0.200	ppbV		96
96)	4-ethyl toluene	17.350	105	2355M6	0.033	ppbV		
97)	1,3,5-trimethylbenzene	17.417	105	2867	0.046	ppbV		98
99)	1,2,4-trimethylbenzene	17.750	105	9679	0.167	ppbV	#	52
101)	Benzyl Chloride	17.933		0	N.D.			
102)	1,3-dichlorobenzene	0.000		0	N.D.	d		
103)	1,4-dichlorobenzene	17.925	146	1977	0.070	ppbV		93
107)	1,2-dichlorobenzene	0.000		0	N.D.			
115)	1,2,4-trichlorobenzene	0.000		0	N.D.			
119)	hexachlorobutadiene	0.000		0	N.D.			

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2022\11\1130T_I\
Data File : r1918558.D
Acq On : 1 Dec 2022 10:53 AM
Operator : AIRLAB19:RAY
Sample : CTO15-LLSTD10.0
Misc : WG1718142
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 01 11:08:07 2022
Quant Method : O:\Forensics\Data\Airlab19\2022\11\1130T_I\TFS19_221130.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Dec 01 10:06:16 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2022\11\1130T_I\r1918552.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) 1,1-dichloroethene	5.79	61	235484	10.330	ppbV	99
27) tertiary butyl alcohol	5.92	59	307403	10.173	ppbV	98
28) methylene chloride	5.93	49	181000	10.086	ppbV	98
29) 3-chloropropene	6.06	41	244644	10.347	ppbV	98
30) carbon disulfide	6.22	76	408919	9.775	ppbV	99
31) Freon 113	6.23	101	239003	10.407	ppbV	99
32) trans-1,2-dichloroethene	6.97	61	227062	10.195	ppbV	99
33) 1,1-dichloroethane	7.19	63	281861	10.307	ppbV	99
34) MTBE	7.27	73	415097	10.538	ppbV	99
35) vinyl acetate	7.39	43	295370	9.439	ppbV	100
36) 2-butanone	7.64	43	345858	10.385	ppbV	99
37) cis-1,2-dichloroethene	8.13	61	216069	10.480	ppbV	99
38) Ethyl Acetate	8.42	61	60196	12.470	ppbV	83
39) chloroform	8.47	83	263721	10.512	ppbV	99
40) Tetrahydrofuran	8.91	42	213943	10.287	ppbV	99
41) 2,2-dichloropropane	8.49	77	202536	9.336	ppbV	98
42) 1,2-dichloroethane	9.30	62	179729	9.977	ppbV	100
44) hexane	8.39	57	312422	10.523	ppbV	94
45) diisopropyl ether	8.39	87	138814	8.936	ppbV	96
46) tert-butyl ethyl ether	9.01	59	509478	9.349	ppbV	99
48) 1,1,1-trichloroethane	9.57	97	225223	10.070	ppbV	99
49) 1,1-dichloropropene	9.94	75	214542	9.309	ppbV	99
50) benzene	10.10	78	494249	9.443	ppbV	100
52) carbon tetrachloride	10.27	117	204711	10.450	ppbV	98
53) cyclohexane	10.41	56	332260	10.553	ppbV	99
54) tert-amyl methyl ether	10.82	73	436330	9.863	ppbV	99
55) dibromomethane	11.01	93	125608	9.070	ppbV	99
56) 1,2-dichloropropane	11.04	63	188868	10.285	ppbV	98
57) bromodichloromethane	11.27	83	288807	10.325	ppbV	100
58) 1,4-dioxane	11.34	88	111989	11.496	ppbV	99
59) trichloroethene	11.32	130	174465	10.394	ppbV	98
60) 2,2,4-trimethylpentane	11.37	57	1028812	10.775	ppbV	98
61) methyl methacrylate	11.58	41	219213	10.106	ppbV	99
62) heptane	11.70	43	361639	10.312	ppbV	98
63) cis-1,3-dichloropropene	12.33	75	272414	10.772	ppbV	99
64) 4-methyl-2-pentanone	12.40	43	405818	10.538	ppbV	97
65) trans-1,3-dichloropropene	12.95	75	221518	9.444	ppbV	99
66) 1,1,2-trichloroethane	13.14	97	176001	10.561	ppbV	100
68) toluene	13.48	91	561430	9.932	ppbV	99
71) 1,3-dichloropropane	13.51	76	255925	9.075	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2022\11\1130T_I\
Data File : r1918558.D
Acq On : 1 Dec 2022 10:53 AM
Operator : AIRLAB19:RAY
Sample : CTO15-LLSTD10.0
Misc : WG1718142
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 01 11:08:07 2022
Quant Method : O:\Forensics\Data\Airlab19\2022\11\1130T_I\TFS19_221130.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Dec 01 10:06:16 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2022\11\1130T_I\r1918552.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.32	49	308657	10.000	ppbV	-0.03
Standard Area = 337659			Recovery = 91.41%			
43) 1,4-difluorobenzene	10.53	114	822733	10.000	ppbV	-0.03
Standard Area = 885044			Recovery = 92.96%			
67) chlorobenzene-D5	15.33	54	145620	10.000	ppbV	-0.02
Standard Area = 159214			Recovery = 91.46%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.18	65	212018	9.628	ppbV	-0.02
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.28%			
69) toluene-D8	13.36	98	699725	10.209	ppbV	-0.03
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.09%			
90) bromofluorobenzene	16.70	95	435572	9.867	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.67%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.34	51	194982	8.668	ppbV	99
3) propylene	3.37	41	139647M6	11.096	ppbV	
4) propane	3.39	29	158351	8.925	ppbV	98
5) dichlorodifluoromethane	3.43	85	267696	10.094	ppbV	99
6) chloromethane	3.58	50	136681	10.126	ppbV	99
7) Freon-114	3.69	85	312519	10.195	ppbV	99
8) methanol	3.76	31	317667	42.195	ppbV	97
9) vinyl chloride	3.79	62	155906	10.336	ppbV	99
10) 1,3-butadiene	3.92	54	137372	10.597	ppbV	98
11) butane	3.97	43	215987	8.475	ppbV	99
13) bromomethane	4.17	94	109776	10.377	ppbV	99
14) chloroethane	4.33	64	83682	10.196	ppbV	99
15) ethanol	4.48	31	569260	46.327	ppbV	99
16) dichlorofluoromethane	4.43	67	232512	8.785	ppbV	100
17) vinyl bromide	4.68	106	105212	9.887	ppbV	99
18) acrolein	4.81	56	68059	9.341	ppbV	98
19) acetone	4.94	43	1112050	54.539	ppbV	96
20) acetonitrile	4.68	41	126184	9.210	ppbV	100
21) trichlorofluoromethane	5.11	101	221756	9.928	ppbV	96
22) isopropyl alcohol	5.25	45	624538	26.928	ppbV	99
23) acrylonitrile	5.43	53	122930	9.349	ppbV	96
24) pentane	5.50	43	266294M6	9.163	ppbV	
25) ethyl ether	5.53	31	255929	8.276	ppbV	98

Initial Calibration Summary
Form 6
Air Volatiles

Client	: Wood Env & Infrastructure Solutions	**Lab Number**	: L2266295
Project Name	: FORMER DURASPEC	**Project Number**	: 3612162326
Instrument ID	: AIRLAB19	**Ical Ref**	: ICAL19537
Calibration dates	: 11/30/22 20:39 12/01/22 01:55		

Calibration Files

0.2 =r1918548.D 0.5 =r1918549.D 1.0 =r1918550.D 5.0 =r1918551.D 10 =r1918552.D 20 =r1918553.D

50 =r1918554.D 100 =r1918555.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
37)		cis-1,2-dichloroethene	0.750	0.698	0.673	0.661	0.653	0.694	0.629	0.586	0.6680	7.36
38)		Ethyl Acetate	0.098	0.126	0.148	0.173	0.173	0.188	0.177	0.168	0.1564	19.50
39)	C	chloroform	0.941	0.870	0.847	0.824	0.803	0.848	0.736	0.634	0.8128	11.41
40)		Tetrahydrofuran	0.720	0.712	0.662	0.663	0.657	0.714	0.651	0.611	0.6738	5.66
41)		2,2-dichloropropane	0.765	0.697	0.719	0.712	0.704	0.768	0.671	0.586	0.7029	8.19
42)	C	1,2-dichloroethane	0.659	0.609	0.605	0.587	0.579	0.606	0.535	0.489	0.5836	8.85
43)	I	1,4-difluorobenzene	----------ISTD----------									
44)	C	hexane	0.405	0.368	0.366	0.354	0.350	0.387	0.345	0.313	0.3609	7.64
45)		diisopropyl ether	0.214	0.211	0.214	0.178	0.174	0.192	0.171	0.157	0.1888	11.73
46)		tert-butyl ethyl ether	0.698	0.654	0.643	0.653	0.650	0.723	0.657	0.621	0.6624	4.92
47)	s	1,2-dichloroethane-D4	0.271	0.272	0.269	0.269	0.266	0.269	0.263	0.262	0.2677	1.38
48)	C	1,1,1-trichloroethane	0.309	0.283	0.267	0.271	0.268	0.284	0.251	0.242	0.2718	7.62
49)		1,1-dichloropropene	0.309	0.290	0.282	0.274	0.272	0.299	0.267	0.248	0.2801	6.93
50)	C	benzene	0.848	0.687	0.635	0.602	0.593	0.635	0.564	0.525	0.6362	15.50
51)		thiophene	0.416	0.385	0.372	0.381	0.377	0.394	0.353	0.325	0.3755	7.27
52)	C	carbon tetrachloride	0.259	0.240	0.237	0.244	0.242	0.259	0.225	0.199	0.2381	8.14
53)		cyclohexane	0.419	0.385	0.379	0.368	0.367	0.411	0.375	0.358	0.3827	5.66
54)		tert-amyl methyl ether	0.432	0.523	0.536	0.549	0.563	0.624	0.557	0.517	0.5377	9.99
55)		dibromomethane	0.195	0.171	0.175	0.164	0.163	0.178	0.157	0.144	0.1683	8.93
56)	C	1,2-dichloropropane	0.253	0.232	0.220	0.218	0.215	0.234	0.212	0.202	0.2232	7.06
57)		bromodichloromethane	0.371	0.356	0.345	0.335	0.332	0.365	0.323	0.293	0.3400	7.48
58)	C	1,4-dioxane	0.036	0.126	0.134	0.124	0.125	0.146	0.133	0.122	0.1184	28.94
59)	C	trichloroethene	0.233	0.211	0.204	0.201	0.198	0.216	0.192	0.176	0.2040	8.27
60)	C	2,2,4-trimethylpentane	1.268	1.171	1.153	1.137	1.129	1.258	1.128	1.041	1.1606	6.35
61)		methyl methacrylate		0.242	0.251	0.261	0.264	0.296	0.271	0.259	0.2637	6.48
62)		heptane	0.483	0.438	0.437	0.415	0.409	0.449	0.403	0.375	0.4262	7.75
63)	C	cis-1,3-dichloropropene	0.325	0.306	0.297	0.306	0.306	0.335	0.301	0.283	0.3074	5.24
64)	C	4-methyl-2-pentanone		0.476	0.413	0.464	0.464	0.527	0.482	0.450	0.4681	7.41
65)		trans-1,3-dichloropropene	0.276	0.262	0.273	0.291	0.293	0.322	0.290	0.273	0.2851	6.46
66)	C	1,1,2-trichloroethane	0.218	0.210	0.204	0.203	0.201	0.213	0.192	0.180	0.2026	6.03
67)	I	chlorobenzene-D5	----------ISTD----------									
68)	C	toluene	5.178	4.229	3.906	3.664	3.594	3.804	3.458	3.223	3.8820 ✓	15.55 ✓
69)	s	toluene-D8	4.710	4.631	4.680	4.665	4.694	4.709	4.703	4.859	4.7066	1.43
70)		2-methylthiophene	3.175	2.956	2.862	2.947	2.900	2.972	2.700	2.544	2.8820	6.58
71)		1,3-dichloropropane	2.129	1.997	1.978	1.894	1.873	2.044	1.845	1.733	1.9366	6.46
72)		2-hexanone		2.095	2.322	2.069	2.270	2.608	2.473	2.403	2.3200	8.42

DUSR Calculations Sheet

TO-15

Sample ID: IAQ-FIRST-112022
TC: Toluene
ICAL Level: STD1.0
Val File Result for TC: 7.27

Ical Calc

Area TC	561430
Area IS	145620
Conc TC	9.932
Conc IS	10
RRF =	3.881842

1	5.178
2	4.229
3	3.906
4	3.664
5	3.594
6	3.804
7	3.458
8	3.223
9	
10	
Avg RRF =	3.882
Std Dev =	0.603704
%RSD =	15.55137

Sample Calc

Area TC	112422
Area IS	149807
Conc IS	10
Avg RRF	3.882
Conc TC (ng/L) =	1.933142

Pi	
Pf	
Canister DF	1
Conc (ug/m3) =	1.933142

Notes:
Green = matched reported value
Red = did not match reported value

Response Factor Report

Method Path : O:\Forensics\Data\Airlab19\2022\11\1130T_I\
Method File : TFS19_221130.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Thu Dec 01 10:06:16 2022
Response Via : Initial Calibration

Calibration Files
0.2 =r1918548.D 0.5 =r1918549.D 1.0 =r1918550.D 5.0 =r1918551.D 10 =r1918552.D 20 =r1918553.D
50 =r1918554.D 100 =r1918555.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
32)		trans-1,2-dichloroethene	0.787	0.726	0.732	0.709	0.703	0.771	0.696	0.650	0.7216	6.00
33)	C	1,1-dichloroethane	0.978	0.920	0.891	0.880	0.869	0.934	0.836	0.780	0.8860	6.86
34)	C	MTBE	1.333	1.307	1.319	1.285	1.258	1.374	1.219	1.113	1.2761	6.35
35)	C	vinyl acetate			1.021	0.925	0.950	1.118	1.061	1.008	1.0138	6.99
36)	C	2-butanone		1.078	1.103	1.142	1.059	1.152	1.045	0.974	1.0790	5.67
37)		cis-1,2-dichloroethene	0.750	0.698	0.673	0.661	0.653	0.694	0.629	0.586	0.6680	7.36
38)		Ethyl Acetate	0.098	0.126	0.148	0.173	0.173	0.188	0.177	0.168	0.1564	19.50
39)	C	chloroform	0.941	0.870	0.847	0.824	0.803	0.848	0.736	0.634	0.8128	11.41
40)		Tetrahydrofuran	0.720	0.712	0.662	0.663	0.657	0.714	0.651	0.611	0.6738	5.66
41)		2,2-dichloropropane	0.765	0.697	0.719	0.712	0.704	0.768	0.671	0.586	0.7029	8.19
42)	C	1,2-dichloroethane	0.659	0.609	0.605	0.587	0.579	0.606	0.535	0.489	0.5836	8.85
43)	I	1,4-difluorobenzene	----------ISTD----------									
44)	C	hexane	0.405	0.368	0.366	0.354	0.350	0.387	0.345	0.313	0.3609	7.64
45)		diisopropyl ether	0.214	0.211	0.214	0.178	0.174	0.192	0.171	0.157	0.1888	11.73
46)		tert-butyl ethyl ether	0.698	0.654	0.643	0.653	0.650	0.723	0.657	0.621	0.6624	4.92
47)	s	1,2-dichloroethane-D4	0.271	0.272	0.269	0.269	0.266	0.269	0.263	0.262	0.2677	1.38
48)	C	1,1,1-trichloroethane	0.309	0.283	0.267	0.271	0.268	0.284	0.251	0.242	0.2718	7.62
49)		1,1-dichloropropene	0.309	0.290	0.282	0.274	0.272	0.299	0.267	0.248	0.2801	6.93
50)	C	benzene	0.848	0.687	0.635	0.602	0.593	0.635	0.564	0.525	0.6362 ✓	15.50 ✓
51)		thiophene	0.416	0.385	0.372	0.381	0.377	0.394	0.353	0.325	0.3755	7.27
52)	C	carbon tetrachloride	0.259	0.240	0.237	0.244	0.242	0.259	0.225	0.199	0.2381	8.14
53)		cyclohexane	0.419	0.385	0.379	0.368	0.367	0.411	0.375	0.358	0.3827	5.66
54)		tert-amyl methyl ether	0.432	0.523	0.536	0.549	0.563	0.624	0.557	0.517	0.5377	9.99
55)		dibromomethane	0.195	0.171	0.175	0.164	0.163	0.178	0.157	0.144	0.1683	8.93
56)	C	1,2-dichloropropane	0.253	0.232	0.220	0.218	0.215	0.234	0.212	0.202	0.2232	7.06
57)		bromodichloromethane	0.371	0.356	0.345	0.335	0.332	0.365	0.323	0.293	0.3400	7.48
58)	C	1,4-dioxane	0.036	0.126	0.134	0.124	0.125	0.146	0.133	0.122	0.1184	28.94
59)	C	trichloroethene	0.233	0.211	0.204	0.201	0.198	0.216	0.192	0.176	0.2040	8.27
60)	C	2,2,4-trimethylpentane	1.268	1.171	1.153	1.137	1.129	1.258	1.128	1.041	1.1606	6.35
61)		methyl methacrylate		0.242	0.251	0.261	0.264	0.296	0.271	0.259	0.2637	6.48
62)		heptane	0.483	0.438	0.437	0.415	0.409	0.449	0.403	0.375	0.4262	7.75

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2022\12\1208T\
Data File : r1918746.D
Acq On : 8 Dec 2022 7:46 PM
Operator : AIRLAB19:TJS
Sample : L2266295-01,3,250,250
Misc : WG1721098,ICAL19537
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 09 14:30:10 2022
Quant Method : O:\Forensics\Data\Airlab19\2022\12\1208T\TFS19_221130.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Dec 01 10:06:16 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2022\12\1208T\r1918742.D
Sub List : TO15-NY-7-SIM - .

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) bromochloromethane	8.300	49	329290	10.000	ppbV		-0.04
Standard Area = 335331			Recovery =		98.20%		
43) 1,4-difluorobenzene	10.517	114	862552	10.000	ppbV		-0.04
Standard Area = 885990			Recovery =		97.35%		
67) chlorobenzene-D5	15.325	54	152288	10.000	ppbV		-0.03
Standard Area = 156238			Recovery =		97.47%		
System Monitoring Compounds							
Target Compounds							Qvalue
5) dichlorodifluoromethane	3.428	85	12741	0.450	ppbV		99
6) chloromethane	3.572	50	7349	0.510	ppbV		98
7) Freon-114	0.000		0	N.D.			
10) 1,3-butadiene	3.908	54	466	0.034	ppbV		98
13) bromomethane	4.154		0	N.D.			
14) chloroethane	0.000		0	N.D.			
15) ethanol	4.490	31	205164	15.650	ppbV		97
17) vinyl bromide	0.000		0	N.D.			
19) acetone	4.957	43	142552M6	6.553	ppbV		
21) trichlorofluoromethane	5.097	101	4815	0.202	ppbV		94
22) isopropyl alcohol	5.310	45	31110	1.257	ppbV		99
27) tertiary butyl alcohol	5.926		0	N.D.			
28) methylene chloride	5.914	49	9204	0.481	ppbV		97
29) 3-chloropropene	6.028		0	N.D.			
30) carbon disulfide	6.208		0	N.D.			
31) Freon 113	6.214	101	1582	0.065	ppbV		96
32) trans-1,2-dichloroethene	0.000		0	N.D.			
33) 1,1-dichloroethane	0.000		0	N.D.			
34) MTBE	0.000		0	N.D.			
36) 2-butanone	7.692	43	63562	1.789	ppbV		99
38) Ethyl Acetate	8.467	61	782	0.152	ppbV	#	30
39) chloroform	8.450	83	1617	0.060	ppbV	#	95
40) Tetrahydrofuran	8.983	42	1846	0.083	ppbV		93
42) 1,2-dichloroethane	0.000		0	N.D.	d		
44) hexane	8.375	57	12901	0.414	ppbV	#	37
50) benzene	10.083	78	18745	0.342	ppbV	✓	98
53) cyclohexane	10.397	56	3097	0.094	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2022\11\1130T_I\
Data File : r1918550.D
Acq On : 30 Nov 2022 10:10 PM
Operator : AIRLAB19:RAY
Sample : ITO15-SIMSTD1.0
Misc : WG1718142
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 01 09:57:27 2022
Quant Method : O:\Forensics\Data\Airlab19\2022\11\1130T_I\TFS19_221130.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Dec 01 05:48:16 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2022\11\1130T_I\r1918552.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	5.59	31	36166	1.260	ppbV		98
26) 1,1-dichloroethene	5.81	61	25203	1.045	ppbV		99
27) tertiary butyl alcohol	6.08	59	29960	0.905	ppbV	#	1
28) methylene chloride	5.96	49	20877	1.093	ppbV		100
29) 3-chloropropene	6.09	41	31431	1.349	ppbV		93
30) carbon disulfide	6.24	76	47724	1.073	ppbV		98
31) Freon 113	6.26	101	26194	1.065	ppbV		98
32) trans-1,2-dichloroethene	6.99	61	24537	1.042	ppbV		99
33) 1,1-dichloroethane	7.22	63	29870	1.026	ppbV		98
34) MTBE	7.36	73	44205	1.048	ppbV		100
35) vinyl acetate	7.43	43	34215	1.075	ppbV		98
36) 2-butanone	7.73	43	36968	1.042	ppbV		98
37) cis-1,2-dichloroethene	8.16	61	22552	1.031	ppbV		98
38) Ethyl Acetate	8.50	61	4952M6	0.856	ppbV		
39) chloroform	8.49	83	28380	1.054	ppbV		99
40) Tetrahydrofuran	9.00	42	22195	1.008	ppbV		98
41) 2,2-dichloropropane	8.52	77	24087	1.021	ppbV		91
42) 1,2-dichloroethane	9.32	62	20287	1.046	ppbV		98
44) hexane	8.42	57	32616	1.045	ppbV	#	38
45) diisopropyl ether	8.47	87	19072	1.229	ppbV		99
46) tert-butyl ethyl ether	9.09	59	57325	0.990	ppbV		98
48) 1,1,1-trichloroethane	9.61	97	23842	1.000	ppbV		98
49) 1,1-dichloropropene	9.97	75	25138	1.038	ppbV		99
50) benzene	10.13	78	56588	1.069	ppbV		99
51) thiophene	10.27	84	33200	0.988	ppbV		98
52) carbon tetrachloride	10.30	117	21117	0.978	ppbV		99
53) cyclohexane	10.44	56	33813	1.034	ppbV		99
54) tert-amyl methyl ether	10.90	73	47798	0.952	ppbV		100
55) dibromomethane	11.04	93	15620	1.078	ppbV		99
56) 1,2-dichloropropane	11.07	63	19575	1.019	ppbV		99
57) bromodichloromethane	11.30	83	30788	1.041	ppbV		100
58) 1,4-dioxane	11.50	88	11942	1.068	ppbV		89
59) trichloroethene	11.35	130	18191	1.029	ppbV		99
60) 2,2,4-trimethylpentane	11.40	57	102795	1.051	ppbV		99
61) methyl methacrylate	11.63	41	22401	0.950	ppbV		99
62) heptane	11.72	43	38962	1.069	ppbV		98
63) cis-1,3-dichloropropene	12.36	75	26465	0.969	ppbV		98
64) 4-methyl-2-pentanone	12.50	43	36789	0.889	ppbV		99
65) trans-1,3-dichloropropene	12.98	75	24307	0.930	ppbV		99
66) 1,1,2-trichloroethane	13.18	97	18149	1.015	ppbV		98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\Airlab19\2022\11\1130T_I\
Data File : r1918550.D
Acq On : 30 Nov 2022 10:10 PM
Operator : AIRLAB19:RAY
Sample : ITO15-SIMSTD1.0
Misc : WG1718142
ALS Vial : 0 Sample Multiplier: 1

Quant Time: Dec 01 09:57:27 2022
Quant Method : O:\Forensics\Data\Airlab19\2022\11\1130T_I\TFS19_221130.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Thu Dec 01 05:48:16 2022
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\Airlab19\2022\11\1130T_I\r1918552.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	8.34	49	335093	10.000	ppbV	0.00
Standard Area = 337659			Recovery = 99.24%			
43) 1,4-difluorobenzene	10.56	114	891624	10.000	ppbV	0.00
Standard Area = 885044			Recovery = 100.74%			
67) chlorobenzene-D5	15.36	54	160038	10.000	ppbV	0.00
Standard Area = 159214			Recovery = 100.52%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	9.20	65	239831	10.095	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.95%			
69) toluene-D8	13.38	98	749028	9.971	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.71%			
90) bromofluorobenzene	16.72	95	487113	10.129	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.29%			
Target Compounds						Qvalue
2) chlorodifluoromethane	3.36	51	25344	1.082	ppbV	99
3) propylene	3.39	41	14570M6	1.069	ppbV	
4) propane	3.41	29	21320	1.177	ppbV	98
5) dichlorodifluoromethane	3.45	85	30309	1.068	ppbV	99
6) chloromethane	3.60	50	14874	1.041	ppbV	97
7) Freon-114	3.70	85	35057	1.056	ppbV	99
8) methanol	3.79	31	59219	7.788	ppbV	94
9) vinyl chloride	3.81	62	16392	1.037	ppbV	99
10) 1,3-butadiene	3.93	54	14631	1.073	ppbV	98
11) butane	3.99	43	28380	1.151	ppbV	100
12) acetaldehyde	3.73	29	46688	5.385	ppbV	99
13) bromomethane	4.18	94	11850	1.054	ppbV	100
14) chloroethane	4.35	64	8941	1.044	ppbV	99
15) ethanol	4.53	31	79476	5.831	ppbV	98
16) dichlorofluoromethane	4.45	67	29419	1.071	ppbV	100
17) vinyl bromide	4.70	106	12113	1.088	ppbV	98
18) acrolein	4.85	56	7981	1.048	ppbV	96
19) acetone	5.01	43	117116	5.546	ppbV	99
20) acetonitrile	4.71	41	14652	1.017	ppbV	99
21) trichlorofluoromethane	5.13	101	25630	1.067	ppbV	99
22) isopropyl alcohol	5.34	45	63449	2.561	ppbV	99
23) acrylonitrile	5.47	53	14478	1.065	ppbV	99
24) pentane	5.52	43	32335	1.066	ppbV	99

DUSR Calculations Sheet

TO-15 SIM

Sample ID: IAQ-FIRST-112022
TC: Carbon Tetrachloride
ICAL Level: STD1.0
Val File Result for TC: 1.11

Ical Calc

Area TC	56588
Area IS	891624
Conc TC	1.069
Conc IS	10
RRF =	0.593697

1	0.848
2	0.687
3	0.635
4	0.602
5	0.593
6	0.635
7	0.564
8	0.525
9	
10	
Avg RRF =	0.636125
Std Dev =	0.098602
%RSD =	15.50046

Sample Calc

Area TC	18745
Area IS	862552
Conc IS	10
Avg RRF	0.636125
Conc TC (ng/L) =	0.341631

Pi	
Pf	
Canister DF	1
Conc (ug/m3) =	0.341631

Notes:
Green = matched reported value
Red = did not match reported value

APPENDIX E – LABORATORY REPORT

ANALYTICAL REPORT

Lab Number:	L2266295
Client:	Wood Env & Infrastructure Solutions, Inc 209-35 Northern Blvd Suite 203 Bayside, NY 11361
ATTN:	Corinne Ketcham
Phone:	(347) 836-4445
Project Name:	FORMER DURASPEC
Project Number:	3612162326
Report Date:	12/09/22

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

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

Project Name: FORMER DURASPEC
Project Number: 3612162326

Lab Number: L2266295
Report Date: 12/09/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2266295-01	IAQ-BASEMENT-112022	AIR	JAMAICA, NY	11/22/22 17:05	11/23/22
L2266295-02	IAQ-FIRST-112022	AIR	JAMAICA, NY	11/22/22 17:06	11/23/22

Project Name:	FORMER DURASPEC	**Lab Number:**	L2266295
Project Number:	3612162326	**Report Date:**	12/09/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	FORMER DURASPEC	**Lab Number:**	L2266295
Project Number:	3612162326	**Report Date:**	12/09/22

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on November 17, 2022. The canister certification results are provided as an addendum.

The canister ID numbers were transposed on the sample tags placed on the canisters by the laboratory when preparing the air media order. The correct canister ID for IAQ-BASEMENT-112022 (IAQ-BASEMENT-112022) is 3311 and for IAQ-FIRST-112022 (L2266295-02) should be 3066.

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

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 12/09/22

AIR

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

SAMPLE RESULTS

Lab ID: L2266295-01
Client ID: IAQ-BASEMENT-112022
Sample Location: JAMAICA, NY

Date Collected: 11/22/22 17:05
Date Received: 11/23/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 12/08/22 19:46
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.450	0.200	--	2.23	0.989	--		1
Chloromethane	0.510	0.200	--	1.05	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	15.6	5.00	--	29.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.55	1.00	--	15.6	2.38	--		1
Trichlorofluoromethane	0.202	0.200	--	1.14	1.12	--		1
Isopropanol	1.26	0.500	--	3.10	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.79	0.500	--	5.28	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

SAMPLE RESULTS

Lab ID: L2266295-01
Client ID: IAQ-BASEMENT-112022
Sample Location: JAMAICA, NY

Date Collected: 11/22/22 17:05
Date Received: 11/23/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.414	0.200	--	1.46	0.705	--		1
Benzene	0.342	0.200	--	1.09	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.246	0.200	--	1.01	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.01	0.200	--	7.57	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.400	0.400	--	1.74	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.201	0.200	--	0.873	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

SAMPLE RESULTS

Lab ID: L2266295-01
Client ID: IAQ-BASEMENT-112022
Sample Location: JAMAICA, NY

Date Collected: 11/22/22 17:05
Date Received: 11/23/22
Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	97		60-140

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

SAMPLE RESULTS

Lab ID: L2266295-01
Client ID: IAQ-BASEMENT-112022
Sample Location: JAMAICA, NY

Date Collected: 11/22/22 17:05
Date Received: 11/23/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/08/22 19:46
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.078	0.020	--	0.491	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.055	0.020	--	0.373	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	98		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	98		60-140

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

SAMPLE RESULTS

Lab ID: L2266295-02
Client ID: IAQ-FIRST-112022
Sample Location: JAMAICA, NY

Date Collected: 11/22/22 17:06
Date Received: 11/23/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 12/08/22 20:29
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.454	0.200	--	2.24	0.989	--		1
Chloromethane	0.476	0.200	--	0.983	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	13.2	5.00	--	24.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.55	1.00	--	13.2	2.38	--		1
Trichlorofluoromethane	0.201	0.200	--	1.13	1.12	--		1
Isopropanol	1.36	0.500	--	3.34	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.50	0.500	--	4.42	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

SAMPLE RESULTS

Lab ID: L2266295-02
Client ID: IAQ-FIRST-112022
Sample Location: JAMAICA, NY

Date Collected: 11/22/22 17:06
Date Received: 11/23/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.409	0.200	--	1.44	0.705	--		1
Benzene	0.349	0.200	--	1.11	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.256	0.200	--	1.05	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.93	0.200	--	7.27	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.438	0.400	--	1.90	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.200	0.200	--	0.869	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: FORMER DURASPEC
Project Number: 3612162326

Lab Number: L2266295
Report Date: 12/09/22

SAMPLE RESULTS

Lab ID: L2266295-02
Client ID: IAQ-FIRST-112022
Sample Location: JAMAICA, NY

Date Collected: 11/22/22 17:06
Date Received: 11/23/22
Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	96		60-140

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

SAMPLE RESULTS

Lab ID: L2266295-02
Client ID: IAQ-FIRST-112022
Sample Location: JAMAICA, NY

Date Collected: 11/22/22 17:06
Date Received: 11/23/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 12/08/22 20:29
Analyst: TJS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.070	0.020	--	0.440	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.059	0.020	--	0.400	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	97		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	97		60-140

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 12/08/22 16:46

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02 Batch: WG1721095-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/08/22 16:02

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1721098-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/08/22 16:02

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1721098-4								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1

Project Name: FORMER DURASPEC
Project Number: 3612162326
Lab Number: L2266295
Report Date: 12/09/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 12/08/22 16:02

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG1721098-4								
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER DURASPEC

Project Number: 3612162326

Lab Number: L2266295

Report Date: 12/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02 Batch: WG1721095-3								
Vinyl chloride	87		-		70-130	-		25
1,1-Dichloroethene	95		-		70-130	-		25
cis-1,2-Dichloroethene	95		-		70-130	-		25
1,1,1-Trichloroethane	92		-		70-130	-		25
Carbon tetrachloride	99		-		70-130	-		25
Trichloroethene	93		-		70-130	-		25
Tetrachloroethene	93		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER DURASPEC

Project Number: 3612162326

Lab Number: L2266295

Report Date: 12/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1721098-3								
Propylene	**2**	Q	-		70-130	-		
Dichlorodifluoromethane	74		-		70-130	-		
Chloromethane	92		-		70-130	-		
Freon-114	94		-		70-130	-		
Vinyl chloride	93		-		70-130	-		
1,3-Butadiene	95		-		70-130	-		
Bromomethane	95		-		70-130	-		
Chloroethane	91		-		70-130	-		
Ethanol	96		-		40-160	-		
Vinyl bromide	97		-		70-130	-		
Acetone	106		-		40-160	-		
Trichlorofluoromethane	97		-		70-130	-		
Isopropanol	106		-		40-160	-		
1,1-Dichloroethene	98		-		70-130	-		
Tertiary butyl Alcohol	98		-		70-130	-		
Methylene chloride	100		-		70-130	-		
3-Chloropropene	99		-		70-130	-		
Carbon disulfide	96		-		70-130	-		
Freon-113	101		-		70-130	-		
trans-1,2-Dichloroethene	96		-		70-130	-		
1,1-Dichloroethane	98		-		70-130	-		
Methyl tert butyl ether	103		-		70-130	-		
Vinyl acetate	93		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER DURASPEC

Project Number: 3612162326

Lab Number: L2266295

Report Date: 12/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1721098-3								
2-Butanone	101		-		70-130	-		
cis-1,2-Dichloroethene	99		-		70-130	-		
Ethyl Acetate	114		-		70-130	-		
Chloroform	102		-		70-130	-		
Tetrahydrofuran	99		-		70-130	-		
1,2-Dichloroethane	96		-		70-130	-		
n-Hexane	98		-		70-130	-		
1,1,1-Trichloroethane	98		-		70-130	-		
Benzene	92		-		70-130	-		
Carbon tetrachloride	104		-		70-130	-		
Cyclohexane	98		-		70-130	-		
1,2-Dichloropropane	98		-		70-130	-		
Bromodichloromethane	101		-		70-130	-		
1,4-Dioxane	112		-		70-130	-		
Trichloroethene	97		-		70-130	-		
2,2,4-Trimethylpentane	99		-		70-130	-		
Heptane	101		-		70-130	-		
cis-1,3-Dichloropropene	105		-		70-130	-		
4-Methyl-2-pentanone	106		-		70-130	-		
trans-1,3-Dichloropropene	93		-		70-130	-		
1,1,2-Trichloroethane	101		-		70-130	-		
Toluene	94		-		70-130	-		
2-Hexanone	104		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER DURASPEC
Project Number: 3612162326

Lab Number: L2266295
Report Date: 12/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG1721098-3								
Dibromochloromethane	106		-		70-130	-		
1,2-Dibromoethane	103		-		70-130	-		
Tetrachloroethene	100		-		70-130	-		
Chlorobenzene	104		-		70-130	-		
Ethylbenzene	102		-		70-130	-		
p/m-Xylene	104		-		70-130	-		
Bromoform	112		-		70-130	-		
Styrene	107		-		70-130	-		
1,1,2,2-Tetrachloroethane	112		-		70-130	-		
o-Xylene	106		-		70-130	-		
4-Ethyltoluene	108		-		70-130	-		
1,3,5-Trimethylbenzene	108		-		70-130	-		
1,2,4-Trimethylbenzene	110		-		70-130	-		
Benzyl chloride	121		-		70-130	-		
1,3-Dichlorobenzene	110		-		70-130	-		
1,4-Dichlorobenzene	113		-		70-130	-		
1,2-Dichlorobenzene	106		-		70-130	-		
1,2,4-Trichlorobenzene	118		-		70-130	-		
Hexachlorobutadiene	113		-		70-130	-		

Project Name: FORMER DURASPEC

Lab Number: L2266295

Project Number: 3612162326

Report Date: 12/09/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2266295-01	IAQ-BASEMENT-112022	01081	Flow 4	11/17/22	405812		-	-	-	Pass	10.0	10.7	7
L2266295-01	IAQ-BASEMENT-112022	3311	6.0L Can	11/17/22	405812	L2263819-05	Pass	-29.5	-3.0	-	-	-	-
L2266295-02	IAQ-FIRST-112022	0133	Flow 4	11/17/22	405812		-	-	-	Pass	10.0	10.2	2
L2266295-02	IAQ-FIRST-112022	3066	6.0L Can	11/17/22	405812	L2263819-04	Pass	-29.5	-5.1	-	-	-	-

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

Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-04
Client ID: CAN 3296 SHELF 41
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 11/14/22 20:01
Analyst: TJS

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-04
Client ID: CAN 3296 SHELF 41
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-04
Client ID: CAN 3296 SHELF 41
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-04
Client ID: CAN 3296 SHELF 41
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-04
Client ID: CAN 3296 SHELF 41
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

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

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	85		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2263819

Project Number: CANISTER QC BAT **Report Date:** 12/09/22

Air Canister Certification Results

Lab ID: L2263819-04
Client ID: CAN 3296 SHELF 41
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 11/14/22 20:01
Analyst: TJS

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-04
Client ID: CAN 3296 SHELF 41
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2263819

Project Number: CANISTER QC BAT **Report Date:** 12/09/22

Air Canister Certification Results

Lab ID: L2263819-04
Client ID: CAN 3296 SHELF 41
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	91		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-05
Client ID: CAN 3273 SHELF 42
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 11/14/22 20:40
Analyst: TJS

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-05
Client ID: CAN 3273 SHELF 42
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-05
Client ID: CAN 3273 SHELF 42
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-05
Client ID: CAN 3273 SHELF 42
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-05
Client ID: CAN 3273 SHELF 42
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

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

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	82		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-05
Client ID: CAN 3273 SHELF 42
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 11/14/22 20:40
Analyst: TJS

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

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2263819

Project Number: CANISTER QC BAT **Report Date:** 12/09/22

Air Canister Certification Results

Lab ID: L2263819-05
Client ID: CAN 3273 SHELF 42
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2263819
Report Date: 12/09/22

Air Canister Certification Results

Lab ID: L2263819-05
Client ID: CAN 3273 SHELF 42
Sample Location:

Date Collected: 11/12/22 13:00
Date Received: 11/14/22
Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	80		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	90		60-140

Project Name: FORMER DURASPEC
Project Number: 3612162326

Lab Number: L2266295
Report Date: 12/09/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2266295-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2266295-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)

*Values in parentheses indicate holding time in days

Project Name:	FORMER DURASPEC	**Lab Number:**	L2266295
Project Number:	3612162326	**Report Date:**	12/09/22

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	FORMER DURASPEC	**Lab Number:**	L2266295
Project Number:	3612162326	**Report Date:**	12/09/22

Footnotes

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

Terms

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

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

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

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

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report

Project Name:	FORMER DURASPEC	**Lab Number:**	L2266295
Project Number:	3612162326	**Report Date:**	12/09/22

Data Qualifiers

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

Project Name:	FORMER DURASPEC	**Lab Number:**	L2266295
Project Number:	3612162326	**Report Date:**	12/09/22

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

AIR ANALYSIS

PAGE 1 OF 1

CHAIN OF CUSTODY

ALPHA ANALYTICAL

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

Date Rec'd in Lab: 11/23/22

ALPHA Job #: L2246295

Client Information

Client: WSP E&E PC
Address: 209-35 Northern Boulevard
Bayside, NY 11361
Phone: 207-828-3608
Fax:
Email: julie.ricardi@wsp.com

Project Information

Project Name: Former Duraspec
Project Location: Jamaica, NY
Project #: 3612162326
Project Manager: Corinne Ketcham
ALPHA Quote #: 20348

Turn-Around-Time

☒ Standard ☐ Rush (only confirmed if pre-approved)

Date Due: Time:

Report/Data Deliverables Information

☐ FAX ☐ EMAIL
☒ ADEx ☒ Add'l Deliverables

Billing Information

☒ Same as Client info PO #: C012506244

Regulatory Requirements/Report Limits

State/Fed	Program	Residential/Commercial

☐ These samples have been Previously analyzed by Alpha

Other Project Specific Requirements/Comments:

☐ Project-Specific Target Compound List

Please provide Category B report

Also please CC corinne.ketcham@woodplc.com

Analysis

All Columns Below Must Be Filled Out

Alpha Lab Use Only	Sample ID	Collection: End Date	Start Time	End Time	Initial Vac	Final Vac	Sample Matrix*	Sampler Initials	Can Size	ID Can	ID Flow Controller	TO-15	TO-15 SIM	Subtract non-petroleum HCs: APH	FIXED GASES	Sulfides & Mercaptans by TO-15			Sample Specific Comments (i.e. PID)
L2246295-01	IAQ- BASEMENT-112022	11/22/22	0830	1705	-30.52	-3.72	AA	MB	6L	3066	0133	☒	☒	☐	☐	☐	☐	☐	
-02	IAQ-FIRST-112022	11/22/22	0835	1706	-30.78	-5.76	AA	MB	6L	3311	01081	☒	☒	☐	☐	☐	☐	☐	
												☐	☐	☐	☐	☐	☐	☐	
												☐	☐	☐	☐	☐	☐	☐	
												☐	☐	☐	☐	☐	☐	☐	
												☐	☐	☐	☐	☐	☐	☐	
											Container Type	-	-	-	-	-	-	-	

*SAMPLE MATRIX CODES:

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

Relinquished By	Date/Time	Received By:	Date/Time
[signature]	11/23/22	LORT AAL	11/23 1155
LORT 11/23 1406	1155	[signature]	11.23 1640
[signature] 11.23.22	1640	ECAAC 11/23/22 1950	
ECAAC	11/23/22 2240	Sam Aldrich	11/23/22 22:10

Please print clearly & legibly and completely. Samples cannot be logged in and turn around time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms

Form 101-02 (I) Rev. 25-Sept-15