Sub-Slab Depressurization System (SSDS) Construction Completion Report (CCR)

Shrub Oak Shopping Center
1360 East Main Street
Shrub Oak, New York

August 29, 2024

Prepared for:

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1. Introduction

Roux Environmental Engineering and Geology, D.P.C. (Roux), has prepared this Sub-Slab Depressurization System (SSDS) Construction Completion Report (CCR) on behalf of Shrub Oak Partners LLC (Participant) for the installation and testing of an active SSDS at the Shrub Oak Shopping Center located at 1360 East Main Street, Shrub Oak, New York (Site). The Site location map is provided as Figure 1.

The Site was accepted into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) on November 8, 2013 (Site No. C360117). The Participant entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC on January 27, 2014 (Index No. C360117-11-13). The Site is located in Westchester County and is shown on the United State Geological Survey (USGS) 7.5-minute Topographical Map for the Mohegan Lake Quadrangle. The Site is approximately 3.47 acres and comprised of three connected single-story buildings and an asphalt paved parking lot. The footprint of the building is approximately 46,586 square feet and contains eight tenant spaces.

A SSDS was installed during March and April of 2016 at the subject property by AWT Environmental Services Inc. of Sayreville, New Jersey (AWT) under the direction of Excel Environmental Services, Inc. (Excel).

On July 31 and August 1, 2017, Albertsons Companies, Inc. (Albertsons) installed a separate SSDS in the ACME grocery store tenant space (ACME Store #2830). Albertsons subcontracted Sovereign Consulting Inc. (Sovereign) to install the SSDS. Sovereign installed the SSDS with two extraction points as close to the common wall with the adjacent dry cleaner's tenant space as practical. In 2018, Albertsons directed Sovereign to install a third extraction point. On Albertsons behalf, Sovereign has been conducting annual SSDS operations and maintenance since 2017.

The SSDS serves as an Interim Remedial Measure (IRM) intended to address known chlorinated volatile organic compound (CVOC) impacts to indoor air and sub-slab soil vapor at the Site from the operation of former dry cleaners that exceeded the New York State Department of Health (NYSDOH) 2006 (as revised in 2017) Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH Vapor Guidance) decision matrices for mitigation.

1.1 Site Description

The Site is comprised of a parking lot and a single building currently occupied by various businesses and a restaurant. The former dry cleaners tenant space remains a dry cleaner, operated by a new tenant. Other tenants include ACME Store #2830, pizzeria, United States Postal Service office, Wells Fargo bank, laundromat, nail salon, and vacant space that was formerly a Chase bank.

The current zoning for the Site is C1, which allows for commercial shopping centers. The surrounding land uses include undeveloped land to the north, senior housing complex to the east, a parking lot to the west, and residential houses and a public high school to the south. There is currently no anticipated redevelopment plan for the Site.

Based on aerial photographs and field observations, the HVAC is understood to be comprised of two separate systems. There is one HVAC system that runs within ACME Store #2830 and the second HVAC system envelops the rest of the tenant spaces.

2. Description of Investigation Findings

2.1 Objectives and Scope of IRM

The IRM, described in this CCR, is a component of the overall remedy for the Site, which addresses soil vapor intrusion issues at the Site. This advanced the BCP goals but did not complete the investigation or remediation of the Site. Further discussion of soil and groundwater contamination at the Site will be addressed as part of the Remedial Investigation Report (RIR).

The IRM retrofitted portions of the existing tenant spaces with the exception of ACME Store #2830 located at the Site, shown on Plates 2A and 2B, with an SSDS capable of creating a negative pressure under the buildings and collecting potentially contaminated vapor for subsequent discharge to the atmosphere above the roof of the tenant spaces.

2.1.1 Soil Vapor and Indoor Air

Based on review of the Site Characterization Report prepared by HRP Associates, Inc. (HRP) in November 2012, investigations completed by Excel between 2015 and 2019, and investigations by Roux between 2022 and 2024, soil vapor and indoor air at the Site have been impacted by CVOCs, most notably tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2-Dichloroethene (c12-DCE); that warrant mitigation.

3. Description of IRM

3.1 Remedial Program Elements

The following sections describe the major elements of the IRM.

3.1.1 Contractors and Consultants

The SSDS was installed between March and April 2016 by AWT under the direction of Excel and in coordination with NYSDEC and NYSDOH. Albertsons installed a separate SSDS in 2017.

Roux's initial site visit to inspect the SSDS occurred on May 13, 2022, and there was no vacuum observed at the extraction point located within the dry cleaner (EP-1).

Start-up testing and troubleshooting of the SSDS was conducted by Roux from June 2022 through February 2023. Performance monitoring and sampling was conducted by Roux in August 2023 and February 2024.

3.1.3 General Site Controls

Security for the work, equipment, materials, supplies, personnel, and incidentals were provided throughout the installation of the SSDS. The work on behalf of the Participant was conducted on the building roof, within the dry cleaner, and within the post office. The work on behalf of Albertsons was conducted within ACME Store #2830. IRM activities were conducted during normal business hours and the buildings were locked when there was no activity at the Site.

Personnel conducting the work or providing oversight completed the 40-hour OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) training, with annual refreshers as applicable.

3.2 SSDS Installation and Operation

The following section describes the installation, start-up, and performance monitoring of the SSDS.

A site plan including extraction point and monitoring point locations is shown on Plate 1. System component specifications are provided in Appendix A.

A total of sixteen vacuum monitoring points were installed within the building on Site. To simplify the identifications (IDs) and make them more cohesive across the whole Site, Roux has renamed the IDs and therefore they may be inconsistent with past reports prepared by Excel and Sovereign.

3.2.1 SSDS Installation – Excel (March to April 2016)

Two vapor extraction points (EP-1 and EP-2) were installed by AWT under the supervision of Excel, one in the utility room of the dry cleaner and one in the post office. Vacuum monitoring points MP-4 through MP-14 were installed by Excel within the dry cleaner, post office, and pizzeria.

As documented by Excel, each extraction point was installed by coring a 10-inch boring through the concrete slab floor, installing a vertical 3-inch solid PVC riser to the roof, backfilling the boring surrounding the pipe with gravel, and finishing the surface with concrete grout to match surrounding conditions and create a seal to ambient air. Above ground piping was pitched towards each extraction point in a manner that allows for

any moisture build up to drain back into the suction points. The riser was fitted with a shut off valve, Magnehelic vacuum gauge, and sampling port that are accessible at ground level in each tenant space. A RadonAway Checkpoint IIa Radon System Alarm was also connected to each riser, with an indicator light visible to the Site supervisor for inspection of SSDS operation.

At the roof level, each riser pipe is connected to an in-line fan mounted on a stanchion and vented to the open air individually via an exhaust stack which terminates no less than 12 inches above the roof line and no less than 10 feet away from any window or other building opening. The in-line fans for each extraction point were designed to create a low-vacuum influence beneath the concrete slab while avoiding extraction of water that would prevent SSDS functionality.

According to past reports prepared by Excel, RadonAway High Suction Series Fans (HS2000 and HS5000) were reportedly installed at each extraction point. Photos taken by Excel during installation of the system are included in Appendix B. An installation checklist prepared by Excel is provided in Appendix C.

3.2.2 SSDS Installation – ACME Store #2830 (July 2017 to April 2018)

Three vapor extraction points (VMP-1, VMP-2, and VMP-3) and four vacuum monitoring points were installed by Sovereign on behalf of Albertsons within ACME Store #2830. Each extraction point consists of a 3-inch Schedule 80 PVC riser pipe fitted with a RadonAway mercury vacuum gauge and sampling port. As documented by Sovereign, the pipes penetrate the store floor into the engineered fill material under the slab. The engineered fill material was observed to be 3/4-inch thick crusher base followed by a 3/8-inch thick stone layer, and topped with a 4-5 inch thick concrete slab. The base material was compacted with limited void space between the slab and native soil.

The three riser pipes are connected to a single 4-inch Schedule 40 PVC header pipe that leads to a fan unit located on the southeastern exterior wall of the store. The combined header pipe also is fitted with a Tjernlund Products, Inc. Model PVC4 booster fan and has a sampling port, labeled at the Site as V-3, that is accessible inside the back of the store. The main fan, a Fantech Model HP109SL, is in line with the booster fan and located outside of ACME Store #2830. Specifications on the fan and booster fan are included in Appendix A. Photos of this system are included in Appendices D and E.

The IDs for the extraction points used in this CCR and shown on Plate 1 is consistent with IDs visible on the extraction points at the Site; however, they may differ from the identifications assigned in previous reports prepared by Sovereign.

There is one monitoring point that was found in the vicinity of VMP-2, but consistently inaccessible across multiple testing efforts by Roux. The inaccessible monitoring point is excluded from this CCR. The other three vacuum monitoring points have been accessible at various times and are labeled as MP-1 through MP-3 in this CCR.

3.2.3 SSDS Start-Up/Testing Activities (May 2022 to February 2023)

Roux conducted initial SSDS start-up/testing activities on May 13, 2022. During this visit, there was no vacuum observed at EP-1. Upon mobilizing to the roof, Roux observed that the fan connected to EP-1 was not a RadonAway fan, but instead an Obar Systems fan, and it was not operating properly. Roux contacted the manufacturer and promptly ordered a replacement. The replacement fan is an Obar Systems GBR76 SOE-16 fan and was installed by Roux on June 24, 2022.

On December 12, 2022, Roux mobilized to the Site to install additional vacuum monitoring points requested by NYSDEC. This included a point in the pizzeria, identified as MP-8R; and a point in the front of the dry cleaner, identified as MP-15. Roux had observed MP-4 to be damaged and reinstalled that point as well, identified as MP-4R. During this visit, it was observed that the EP-1 fan was off again and the alarm was unplugged. Roux disconnected the fan and sent to the manufacturer for repairs. Roux emphasized to Site personnel that the alarm should never be unplugged and Roux must be contacted in any event when the alarm is triggered.

The cause of the shutdown was determined to be an electrical issue and the fan was replaced with the same model as previous, an Obar Systems GBR76 SOE-16; however, this time the fan was equipped with a modified electrical switch. This fan was installed at EP-1 on February 24, 2023, and the fan has operated continuously to date without issues.

Roux screened the effluent air with a photoionization detector (PID) to evaluate the need for vapor treatment prior to discharge to the atmosphere. The maximum PID reading that Roux collected during testing was 1.5 parts per million (ppm) at EP-1. In accordance with 6 NYCRR Subpart 212-2.1, treatment is required for any remedial system that has a potential to emit greater than 0.1 lbs/hr of a High Toxicity Air Contaminant (HTAC). Based on the PID reading collected at the stack effluent and soil vapor data collected from sub-slab samples, treatment is not recommended unless specified by NYSDEC.

Throughout Roux's testing activities, the RadonAway fan installed at EP-2 and the Fantech fan installed at VMP-1 thru VMP-3 have operated continuously without issues.

Photos taken by Roux during this period are included in Appendix E.

3.2.4 SSDS Performance Monitoring (August 2023 to February 2024)

Once operation of the SSDS was optimized and run time stabilized, Roux conducted performance monitoring to verify the SSDS was operating properly with adequate vacuum influence.

3.2.4.1 Vacuum Measurements

Vacuum readings from a total of 17 monitoring points (MP-1 through MP-4, MP-4R, MP-5 through MP-7, MP-8R, MP-9 through MP-16) and five extraction points (EP-1, EP-2, VMP-1 through VMP-3) were recorded throughout the Site over multiple Site visits. Vacuum was observed in 16 of the 17 monitoring points ranging between 0.003 (MP-9) to 0.688 inches of H2O (MP-1) and all five extraction points ranging from 1.3 (VMP-2) to 16 inches of H2O (EP-2). Monitoring point MP-4 had a reading of 0.000 during multiple visits and was reinstalled as MP-4R.

All vacuum readings collected during Roux's testing activities are included in Table 1. Plate 3 shows the approximate radius of influence of the SSDS based on the vacuum data.

3.2.4.2 Sub-Slab and Indoor Air (SS/IA) Assessments

In response to an email from NYSDEC requesting to conduct SS/IA assessments before and during the heating season, Roux conducted an assessment on August 29, 2023, and February 8, 2024. In consultation with NYSDEC and NYSDOH, the assessments were performed in the ACME Store #2830, dry cleaner, pizzeria, post office, and Wells Fargo bank. Monitoring points for sub-slab samples were selected based on accessibility and location within the space. For each sub-slab sample, an indoor sample was collected

concurrently within proximity to the selected monitoring point. Approximate locations of each sample are shown on Plate 1.

Samples were collected using Summa canisters and analyzed for VOCs using USEPA Method TO-15 to verify that the SSDS is effectively reducing CVOC vapor intrusion into the building. Samples were collected during working hours and the canisters for the indoor air samples were placed at breathing zone. Prior to the collection of the sub-slab samples, a helium tracer test was performed to assure sub-slab pin seal integrity as described in the NYSDOH Vapor Guidance.

During the August 2023 sampling event, attempts were made to collect air samples at multiple monitoring points that yielded no results. Samples had either failed the helium tracer test, were inaccessible, or rejected by the laboratory due to insufficient volume. During the February 2024 assessment, samples were successfully collected at all tenant spaces with exception to the sub-slab sample from monitoring point MP-16 inside the Wells Fargo bank, which tested for negligible vacuum.

All samples were submitted to Alpha Analytical Laboratories, Inc. (Alpha), a laboratory with a current NYSDOH Environmental Laboratory Approval Program (ELAP) certification for TO-15 analysis. The results of the sub-slab and indoor air sampling are included in Table 2 and Plates 2A and 2B. Laboratory analytical reports and data usability summary reports (DUSRs) for each event are included in Appendices F and G, respectively.

Sub-slab sample results have consistently yielded detections exceeding limits defined in the decision matrices of the NYSDOH Vapor Guidance. As shown on Plates 2A and 2B, exceedances of 60 mcg/m^3 for TCE and c1,2-DCE and 1,000 mcg/m^3 for PCE were observed in sub-slab samples during multiple assessments beneath ACME Store #2830 and the dry cleaner. In addition, sampling conducted by Excel yielded detections exceeding limits for TCE, c1,2-DCE, and PCE beneath the pizzeria and post office, though these exceedances were not evident in repeat assessments. The highest concentrations continue to be in the vicinity of the source area located at the rear of the dry cleaner. Based on these results, the decision matrices of the NYSDOH Vapor Guidance dictate that mitigation is required and therefore the SSDS will remain operational.

Based on the two SS/IA assessments performed by Roux, the most widespread finding is exceedance of 1 mcg/m^3 for TCE beneath the ACME Store #2830, dry cleaner, pizzeria, post office, and bank. There were also exceedances of 1 mcg/m^3 for carbon tetrachloride in ACME Store #2830.

During a site visit in November 2023, it was found that the dry cleaner had used a cleaning product containing TCE. This product was not identified to Roux during other inventories. The dry cleaner was informed to no longer use the product; however, there is evidence to suggest the recent impacts to indoor air are not a result of soil vapor intrusion, but rather caused by tenant operations. Further reasoning provided below:

- The highest detections of TCE in indoor air were in both samples collected inside dry cleaner (MP-6 and MP-15).
- The elevated detections of PCE and c1,2-DCE reported in sub-slab samples are not reflected in recent indoor air samples, suggesting the SSDS operation is effectively mitigating soil vapor intrusion.
- TCE detected in indoor air of the pizzeria and bank was measured at higher concentrations than their corresponding sub-slab samples.
- Methylene chloride detected in indoor air of the pizzeria and post office was measured at higher concentrations than their corresponding sub-slab samples.
- Carbon tetrachloride was detected in indoor air of ACME Store #2830, dry cleaner, pizzeria, post office, and bank; however it was non-detect in all sub-slab samples.

4. Conclusions and Recommendations

The installation of the SSDS was completed to mitigate the risk of soil vapor intrusion at the Site. The SSDS serves as an effective IRM that advances goals of the BCP.

Based on the performance monitoring data, the SSDS is operating as designed and effectively influencing the building slabs. The SSDS will remain operational and influence the building slab until the NYSDEC/NYSDOH have concurred that no additional mitigation is required.

SSDS operation, maintenance, and monitoring (O,M&M) procedures, including routine and non-routine equipment maintenance, will be conducted in accordance with NYSDEC approval of a Site Management Plan (SMP) for the Site. O,M&M procedures will be incorporated into the SMP for the Site.

TABLES

Table 1. Vacuum Readings in Sub-Slab and SSDS Extraction Points
Shrub Oak Shopping Center, Shrub Oak, New York

Tenant	ID	Date	Vacuum (" H2O)	Comments
Monitoring Points				
ACME	MP-1	5/13/2022	0.483	
		8/29/2023	0.602	
		11/15/2023	0.688	
		2/8/2024	0.609	
	MP-2	5/13/2022	0.039	
	MP-3	5/13/2022	0.042	
		11/15/2023	0.033	
		2/8/2024	0.027	
Dry Cleaner	MP-4	5/13/2022	0.000	
		6/24/2022	0.000	
	MP-4R	2/24/2023	0.017	MP-4 removed, reinstalled as MP-4R
		2/8/2024	0.004	
	MP-5	5/13/2022	0.000	
		6/24/2022	0.025	
		2/24/2023	0.033	
		2/8/2024	0.033	
	MP-6	5/13/2022	0.004	
		6/24/2022	0.168	
		2/24/2023	0.126	
		8/29/2023	0.080	
		2/8/2024	0.083	
	MP-7	5/13/2022	0.005	
		6/24/2022	0.061	
		2/24/2023	0.045	
		2/8/2024	0.004	
	MP-15	2/24/2023	0.117	
		11/15/2023	0.051	
		2/8/2024	0.048	
Pizzeria	MP-8R	12/14/2022	0.005	
		2/24/2023	0.006	
		8/29/2023	0.226	
		11/15/2023	0.222	
		2/8/2024	0.006	

Table 1. Vacuum Readings in Sub-Slab and SSDS Extraction Points
Shrub Oak Shopping Center, Shrub Oak, New York

Tenant	ID	Date	Vacuum (" H2O)	Comments
Monitoring Points (cont'd)				
Post Office	MP-9	5/13/2022	0.003	
	MP-10	5/13/2022	0.275	
	MP-11	5/13/2022	0.030	
	MP-12	5/13/2022	0.224	
	MP-13	5/13/2022	0.087	
		8/29/2023	0.111	
		11/15/2023	0.053	
		2/8/2024	0.044	
	MP-14	5/13/2022	0.004	
Wells Fargo	MP-16	8/29/2023	0.006	
		11/15/2023	0.001	
Extraction Points				
Dry Cleaner	EP-1	5/13/2022	0	
		6/24/2022	12	
		2/24/2023	13	
		8/29/2023	13	
		2/8/2024	13	
ACME	VMP-1	5/13/2022	1.8	
		8/29/2023	1.3	
		11/15/2023	1.4	
		2/8/2024	1.7	
	VMP-2	5/13/2022	1.6	
		8/29/2023	1.5	
		11/15/2023	1.3	
		2/8/2024	1.3	
	VMP-3	5/13/2022	1.6	
		8/29/2023	1.5	
		11/15/2023	1.6	
		2/8/2024	1.6	
Post Office	EP-2	5/13/2022	15	
		8/29/2023	15	
		11/15/2023	16	
		2/8/2024	15	

Table 2. Summary of Volatile Organic Compounds in Sub-Slab and Indoor Air, 1360 East Main Street, Shrub Oak, New York

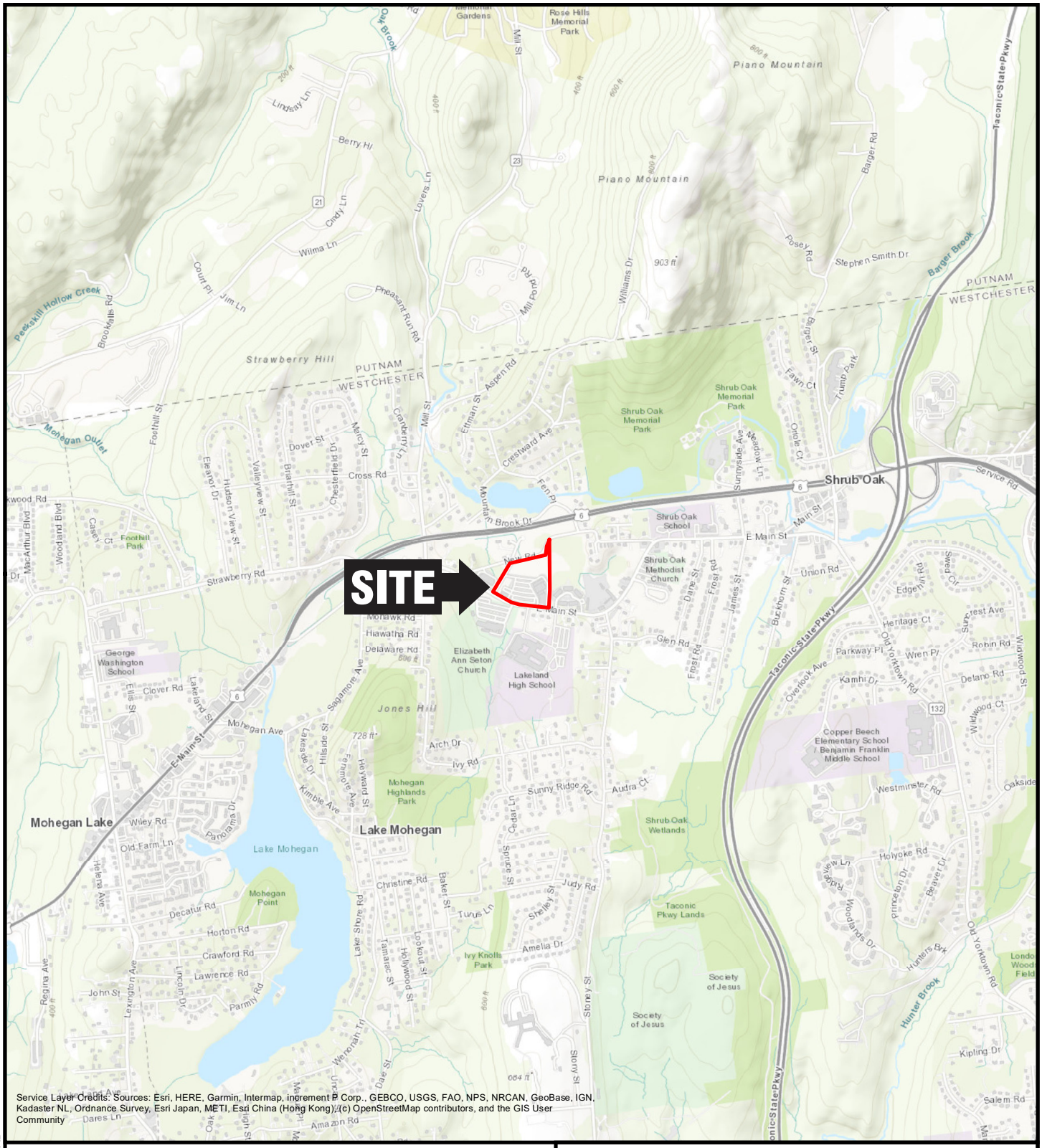
					Sample Designation:	MP-1	MP-1_IA	MP-1_IA	VMP-2_IA	MP-3	MP-3_IA	MP-6	MP-6_IA	MP-15	MP-15_IA	MP-8R	MP-8R
					Sample Date:	02/08/2024	08/29/2023	02/08/2024	08/29/2023	02/08/2024	02/08/2024	08/29/2023	08/29/2023	02/08/2024	02/08/2024	08/29/2023	02/08/2024
					Normal Sample or Field Duplicate:	N	N	N	N	N	N	N	N	N	N	N	N
					Tenant	ACME Grocery						Dry Cleaner (Back)		Dry Cleaner (Front)		Pizzeria	
Parameter	Indoor/Outdoor Air		Sub-Slab Air		Units												
Matrix A	Monitor	Mitigate	Monitor	Mitigate													
Carbon Tetrachloride	0.2	1	6	60	UG/M3	1.26 U	3.93	1.14	54.1	58.8 U	1.04	113 U	0.793	17.6 U	0.535	1.26 U	1.26 U
Trichloroethylene (TCE)	0.2	1	6	60	UG/M3	1.07 U	0.935	1.71	1.26	12600	1.14	6880	14	844	10.4	11.4	3.86
Cis-1,2-Dichloroethylene	0.2	1	6	60	UG/M3	0.793 U	0.079 U	0.079 U	0.079 U	10900	0.079 U	817	0.079 U	4960	0.079 U	0.793 U	0.793 U
1,1-Dichloroethene	0.2	1	6	60	UG/M3	0.793 U	0.079 U	0.079 U	0.079 U	37.1 U	0.079 U	71.4 U	0.079 U	11.1 U	0.079 U	0.793 U	0.793 U
Matrix B																	
Tetrachloroethylene (PCE)	3	10	100	1000	UG/M3	1.36 U	6.98	0.197	0.231	20300	0.149	58400	1.06	431	0.176	39.2	3
1,1,1-Trichloroethane (TCA)	3	10	100	1000	UG/M3	1.09 U	0.109 U	0.109 U	0.109 U	51 U	0.109 U	98.2 U	0.109 U	15.2 U	0.109 U	1.09 U	1.09 U
Methylene Chloride	3	10	100	1000	UG/M3	1.74 U	1.74 U	1.79	1.74 U	81.3 U	1.74 U	157 U	1.74 U	24.2 U	1.74 U	2.09	1.74 U
Matrix C																	
Vinyl Chloride	0	0.2	6	60	UG/M3	0.511 U	0.051 U	0.051 U	0.051 U	23.9 U	0.051 U	46 U	0.051 U	7.13 U	0.051 U	0.511 U	0.511 U
1,1,2,2-Tetrachloroethane					UG/M3	1.37 U	1.37 U	1.37 U	1.37 U	64.2 U	1.37 U	124 U	1.37 U	19.2 U	1.37 U	1.37 U	1.37 U
1,1,2-Trichloro-1,2,2-Trifluoroethane					UG/M3	1.53 U	1.53 U	1.53 U	1.53 U	71.7 U	1.53 U	138 U	1.53 U	21.4 U	1.53 U	1.53 U	1.53 U
1,1,2-Trichloroethane					UG/M3	1.09 U	1.09 U	1.09 U	1.09 U	51 U	1.09 U	98.2 U	1.09 U	15.2 U	1.09 U	1.09 U	1.09 U
1,1-Dichloroethane					UG/M3	0.809 U	0.809 U	0.809 U	0.809 U	37.8 U	0.809 U	72.9 U	0.809 U	11.3 U	0.809 U	0.809 U	0.809 U
1,2,4-Trichlorobenzene					UG/M3	1.48 U	1.48 U	1.48 U	1.48 U	69.4 U	1.48 U	134 U	1.48 U	20.7 U	1.48 U	1.48 U	1.48 U
1,2,4-Trimethylbenzene					UG/M3	4.33	6.39	0.983 U	6.49	46 U	0.983 U	88.5 U	1.49	13.7 U	0.983 U	2.06	2.53
1,2-Dibromoethane (Ethylene Dibromide)					UG/M3	1.54 U	1.54 U	1.54 U	1.54 U	71.9 U	1.54 U	138 U	1.54 U	21.4 U	1.54 U	1.54 U	1.54 U
1,2-Dichlorobenzene					UG/M3	1.2 U	1.2 U	1.2 U	1.2 U	56.2 U	1.2 U	108 U	1.2 U	16.8 U	1.2 U	1.2 U	1.2 U
1,2-Dichloroethane					UG/M3	0.809 U	0.809 U	0.809 U	0.809 U	37.8 U	0.809 U	72.9 U	0.809 U	11.3 U	0.809 U	0.809 U	0.809 U
1,2-Dichloropropane					UG/M3	0.924 U	0.924 U	0.924 U	0.924 U	43.2 U	0.924 U	83.2 U	0.924 U	12.9 U	0.924 U	0.924 U	0.924 U
1,2-Dichlorotetrafluoroethane					UG/M3	1.4 U	1.4 U	1.4 U	1.4 U	65.4 U	1.4 U	126 U	1.4 U	19.5 U	1.4 U	1.4 U	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)					UG/M3	1.18	2.14	0.983 U	2.01	46 U	0.983 U	88.5 U	0.983 U	13.7 U	0.983 U	0.983 U	0.983 U
1,3-Butadiene					UG/M3	0.442 U	0.442 U	0.442 U	0.442 U	20.7 U	0.442 U	39.8 U	0.442 U	6.17 U	0.442 U	0.442 U	0.442 U
1,3-Dichlorobenzene					UG/M3	1.2 U	1.2 U	1.2 U	1.2 U	56.2 U	1.2 U	108 U	1.2 U	16.8 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene					UG/M3	1.2 U	1.2 U	1.2 U	1.2 U	56.2 U	1.2 U	108 U	1.2 U	16.8 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane (P-Dioxane)					UG/M3	0.721 U	0.721 U	0.721 U	0.721 U	33.7 U	0.721 U	64.9 U	0.721 U	10.1 U	0.721 U	0.721 U	0.721 U
2,2,4-Trimethylpentane					UG/M3	1.39	0.934 U	0.934 U	0.934 U	44.7	0.934 U	84.1 U	0.934 U	13 U	0.934 U	2.13	3.14
2-Hexanone					UG/M3	0.82 U	0.82 U	0.82 U	0.82 U	38.3 U	0.82 U	73.8 U	0.82 U	11.4 U	0.82 U	0.82 U	0.82 U
4-Ethyltoluene					UG/M3	0.983 U	1.46	0.983 U	1.46	46 U	0.983 U	88.5 U	0.983 U	13.7 U	0.983 U	0.983 U	0.983 U
Acetone					UG/M3	17.4	20.5	13.8	25.7	111 U	13.2	214 U	18	33.3 U	6.56	32.3	29
Allyl Chloride (3-Chloropropene)					UG/M3	0.626 U	0.626 U	0.626 U	0.626 U	29.3 U	0.626 U	56.3 U	0.626 U	8.73 U	0.626 U	0.626 U	0.626 U
Benzene					UG/M3	2.16	0.639 U	1.08	0.639 U	29.9 U	0.987	57.5 U	0.639 U	8.91 U	0.649	2.38	2.14
Benzyl Chloride					UG/M3	1.04 U	1.04 U	1.04 U	1.04 U	48.4 U	1.04 U	93.2 U	1.04 U	14.4 U	1.04 U	1.04 U	1.04 U
Bromodichloromethane					UG/M3	1.34 U	1.34 U	1.34 U	1.34 U	62.6 U	1.34 U	121 U	1.34 U	18.7 U	1.34 U	1.79	1.34 U
Bromoform					UG/M3	2.07 U	2.07 U	2.07 U	2.07 U	96.7 U	2.07 U	186 U	2.07 U	28.8 U	2.07 U	2.07 U	2.07 U
Bromomethane					UG/M3	0.777 U	0.777 U	0.777 U	0.777 U	36.3 U	0.777 U	69.9 U	0.777 U	10.8 U	0.777 U	0.777 U	0.777 U
Carbon Disulfide					UG/M3	0.623 U	0.623 U	0.623 U	0.623 U	29.1 U	0.623 U	56.1 U	0.623 U	8.69 U	0.623 U	0.688	0.623 U
Chlorobenzene					UG/M3	0.921 U	0.921 U	0.921 U	0.921 U	43.1 U	0.921 U	82.9 U	0.921 U	12.8 U	0.921 U	0.921 U	0.921 U
Chloroethane					UG/M3	0.528 U	0.528 U	0.528 U	0.528 U	24.7 U	0.528 U	47.5 U	0.528 U	7.36 U	0.528 U	0.528 U	0.528 U
Chloroform					UG/M3	0.977 U	1.1	0.977 U	3.76	45.7 U	0.977 U	87.9 U	0.977 U	64.5	0.977 U	20	4.3
Chloromethane					UG/M3	1.34	1.46	1.37	1.35	19.3 U	1.39	37.2 U	1.15	5.76 U	1.24	0.599	0.555
Cis-1,3-Dichloropropene					UG/M3	0.908 U	0.908 U	0.908 U	0.908 U	42.4 U	0.908 U	81.7 U	0.908 U	12.7 U	0.908 U	0.908 U	0.908 U
Cyclohexane					UG/M3	0.688 U	0.688 U	0.688 U	0.688 U	32.2 U	0.688 U	62 U	0.688 U	9.6 U	0.688 U	0.991	1.3
Dibromochloromethane					UG/M3	1.7 U	1.7 U	1.7 U	1.7 U	79.7 U	1.7 U	153 U	1.7 U	23.8 U	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane					UG/M3	3.41	3.31	4.13	3.19	46.2 U	4	89 U	2	13.8 U	2.78	1.72	2.85
Ethanol					UG/M3	273	445	398	612	441 U	416	850 U	96.9	364	53.9	317	360
Ethyl Acetate					UG/M3	21.5	4.32	6.05	39.6	84.3 U	5.26	163 U	1.8 U	25.2 U	1.8 U	12.7	6.02
Ethylbenzene					UG/M3	2.14	0.869 U	0.869 U	0.869 U	40.6 U	0.869 U	78.2 U	0.869 U	12.1 U	0.869 U	1.37	1.53
Hexachlorobutadiene					UG/M3	2.13 U	2.13 U	2.13 U	2.13 U	99.7 U	2.13 U	192 U	2.13 U	29.8 U	2.13 U	2.13 U	2.13 U
Isopropanol					UG/M3	43.5	9.39	5.6	15.1	59	5.43	111 U	1.78	104	1.47	8.04	169
m,p-Xylene					UG/M3	9.16	1.74 U	1.74 U	1.74 U	81.2 U	1.74 U	157 U	1.74 U	24.2 U	1.74 U	4.52	5.82
Methyl Ethyl Ketone (2-Butanone)					UG/M3	1.5	1.72	1.47 U	2.36	69 U	1.47 U	133 U	1.47 U	20.6 U	1.47 U	18.6	3.24
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)					UG/M3	2.05 U	2.05 U	2.05 U	2.05 U	95.9 U	2.05 U	185 U	2.05 U	28.6 U	2.05 U	11.1	2.05 U
N-Heptane					UG/M3	3.21	1.09	0.865	1.29	38.3 U	0.885	73.8 U	0.82 U	11.4 U	0.82 U	2.14	4.88
N-Hexane					UG/M3	2.41	0.705 U	0.708	0.705 U	33 U	0.705 U	63.4 U	0.705 U	9.83 U	0.705 U	1.72	3.31
O-Xylene (1,2-Dimethylbenzene)					UG/M3	3.35	0.869 U	0.869 U	0.869 U	40.6 U	0.869 U	78.2 U	0.869 U	12.1 U	0.869 U	1.71	2.18
Styrene					UG/M3	0.852 U	0.852 U	0.852 U	0.852 U	39.8 U	0.852 U	76.6 U	0.852 U	11.9 U	0.852 U	0.852 U	0.852 U
Tert-Butyl Alcohol					UG/M3	1.52 U	1.52 U	1.52 U	1.55	70.9 U	1.52 U	137 U	1.52 U	21.2 U	1.52 U	10.3	1.52 U
Tert-Butyl Methyl Ether					UG/M3	0.721 U	0.721 U	0.721 U	0.721 U	33.7 U	0.721 U	64.9 U	0.721 U	10.1 U	0.721 U	0.721 U	0.721 U
Tetrahydrofuran					UG/M3	1.47 U	2.04	1.47 U	1.93	69 U	1.47 U	133 U	1.94	20.6 U	1.47 U	1.62	1.47 U
Toluene					UG/M3	13.6	1.58	1.42	1.27	35.2 U	1.05	67.8 U	0.754 U	14.6	0.754 U	9.5	8.03
Trans-1,2-Dichloroethene					UG/M3	0.793 U	0.793 U	0.793 U	0.793 U	492	0.793 U	71.4 U	0.793 U	801	0.793 U	0.793 U	0.793 U
Trans-1,3-Dichloropropene					UG/M3	0.908 U	0.908 U	0.908 U	0.908 U	42.4 U	0.908 U	81.7 U	0.908 U	12.7 U	0.908 U	0.908 U	0.908 U
Trichlorofluoromethane					UG/M3	3.86	4.6	3.57	4.65	52.5 U	3.66	101 U	1.87	15.7 U	1.19	1.28	1.43
Vinyl Bromide					UG/M3	0.874 U	0.874 U	0.874 U	0.874 U	40.9 U	0.874 U	78.7 U	0.874 U	12.2 U	0.874 U	0.874 U	0.874 U

Table 2. Summary of Volatile Organic Compounds in Sub-Slab and Indoor Air, 1360 East Main Street, Shrub Oak, New York

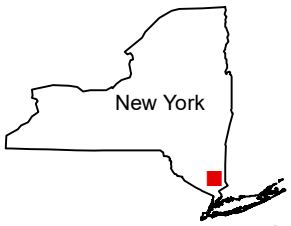
Sample Designation:						MP-8R_IA	MP-8R_IA	MP-8R_IA	MP-13	MP-13_IA	MP-13_IA	MP-13_IA	MP-16_IA	MP-16_IA	OA-1	OA-1
Sample Date:						08/29/2023	08/29/2023	02/08/2024	02/08/2024	08/29/2023	02/08/2024	02/08/2024	08/29/2023	02/08/2024	08/29/2023	02/08/2024
Normal Sample or Field Duplicate:						N	FD	N	N	N	N	FD	N	N	N	N
Tenant						Pizzeria			Post Office				Wells Fargo Bank		Ambient Air	
Parameter	Indoor/Outdoor Air		Sub-Slab Air		Units											
Matrix A	Monitor	Mitigate	Monitor	Mitigate												
Carbon Tetrachloride	0.2	1	6	60	UG/M3	**0.541**	**0.510**	**0.497**	1.26 U	**0.472**	**0.522**	**0.484**	**0.642**	**0.516**	**0.522**	**0.541**
Trichloroethylene (TCE)	0.2	1	6	60	UG/M3	**2.57**	**2.55**	**6.13**	**2.61**	**0.462**	**2.07**	**2.11**	**0.72**	**1.1**	**0.892**	**2.06**
Cis-1,2-Dichloroethylene	0.2	1	6	60	UG/M3	0.079 U	0.079 U	0.079 U	**2.8**	0.079 U	0.079 U	0.079 U	0.08 U	0.079 U	0.079 U	**0.246**
1,1-Dichloroethene	0.2	1	6	60	UG/M3	0.079 U	0.079 U	0.079 U	0.793 U	0.079 U	0.079 U	0.079 U	0.08 U	0.079 U	0.079 U	0.079 U
Matrix B																
Tetrachloroethylene (PCE)	3	10	100	1000	UG/M3	**0.827**	**0.814**	**0.576**	**2.29**	0.136 U	**0.163**	**0.244**	**0.309**	**0.21**	**0.726**	**0.475**
1,1,1-Trichloroethane (TCA)	3	10	100	1000	UG/M3	0.109 U	0.109 U	0.109 U	1.09 U	0.109 U	0.109 U	0.109 U	0.11 U	0.109 U	0.109 U	0.109 U
Methylene Chloride	3	10	100	1000	UG/M3	**3.24**	1.74 U	1.74 U	**2.22**	**8.69**	1.74 U	1.74 U	1.76 U	1.74 U	1.74 U	1.74 U
Matrix C																
Vinyl Chloride	0	0.2	6	60	UG/M3	0.051 U	0.051 U	0.051 U	0.511 U	0.051 U	0.051 U	0.051 U	0.052 U	0.051 U	0.051 U	0.051 U
1,1,2,2-Tetrachloroethane					UG/M3	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.39 U	1.37 U	1.37 U	1.37 U
1,1,2-Trichloro-1,2,2-Trifluoroethane					UG/M3	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.55 U	1.53 U	1.53 U	1.53 U
1,1,2-Trichloroethane					UG/M3	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.1 U	1.09 U	1.09 U	1.09 U
1,1-Dichloroethane					UG/M3	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.818 U	0.809 U	0.809 U	0.809 U
1,2,4-Trichlorobenzene					UG/M3	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.5 U	1.48 U	1.48 U	1.48 U
1,2,4-Trimethylbenzene					UG/M3	0.983 U	0.983 U	0.983 U	**4.08**	0.983 U	0.983 U	**1.09**	0.993 U	0.983 U	0.983 U	0.983 U
1,2-Dibromoethane (Ethylene Dibromide)					UG/M3	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.55 U	1.54 U	1.54 U	1.54 U
1,2-Dichlorobenzene					UG/M3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.21 U	1.2 U	1.2 U	1.2 U
1,2-Dichloroethane					UG/M3	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.818 U	0.809 U	0.809 U	0.809 U
1,2-Dichloropropane					UG/M3	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.934 U	0.924 U	0.924 U	0.924 U
1,2-Dichlorotetrafluoroethane					UG/M3	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.41 U	1.4 U	1.4 U	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)					UG/M3	0.983 U	0.983 U	0.983 U	**1.01**	0.983 U	0.983 U	0.983 U	0.993 U	0.983 U	0.983 U	0.983 U
1,3-Butadiene					UG/M3	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.447 U	0.442 U	0.442 U	0.442 U
1,3-Dichlorobenzene					UG/M3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.21 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene					UG/M3	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.21 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane (P-Dioxane)					UG/M3	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.728 U	0.721 U	0.721 U	0.721 U
2,2,4-Trimethylpentane					UG/M3	0.934 U	0.934 U	0.934 U	**3.12**	0.934 U	**1.44**	**1.18**	0.943 U	0.934 U	0.934 U	0.934 U
2-Hexanone					UG/M3	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.828 U	0.82 U	0.82 U	0.82 U
4-Ethyltoluene					UG/M3	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.993 U	0.983 U	0.983 U	0.983 U
Acetone					UG/M3	**50.4**	**51.8**	**7.72**	**40.6**	**25.7**	**9.98**	**26.8**	**135**	**33**	**13.5**	**4.56**
Allyl Chloride (3-Chloropropene)					UG/M3	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.632 U	0.626 U	0.626 U	0.626 U
Benzene					UG/M3	0.639 U	0.639 U	**0.738**	**3.08**	0.639 U	**1.56**	**1.53**	0.645 U	**1.02**	0.639 U	**0.76**
Benzyl Chloride					UG/M3	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.05 U	1.04 U	1.04 U	1.04 U
Bromodichloromethane					UG/M3	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.35 U	1.34 U	1.34 U	1.34 U
Bromoform					UG/M3	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.09 U	2.07 U	2.07 U	2.07 U
Bromomethane					UG/M3	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.784 U	0.777 U	0.777 U	0.777 U
Carbon Disulfide					UG/M3	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.629 U	0.623 U	0.623 U	0.623 U
Chlorobenzene					UG/M3	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.93 U	0.921 U	0.921 U	0.921 U
Chloroethane					UG/M3	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.533 U	0.528 U	0.528 U	0.528 U
Chloroform					UG/M3	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	0.986 U	0.977 U	0.977 U	0.977 U
Chloromethane					UG/M3	**1.1**	**1.04**	**1.18**	**0.9**	**1.13**	**1.28**	**1.12**	**1.22**	**1.31**	**1.03**	**1.21**
Cis-1,3-Dichloropropene					UG/M3	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.917 U	0.908 U	0.908 U	0.908 U
Cyclohexane					UG/M3	0.688 U	0.688 U	0.688 U	**1.7**	0.688 U	**0.83**	0.688 U	0.695 U	0.688 U	0.688 U	0.688 U
Dibromochloromethane					UG/M3	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.72 U	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane					UG/M3	**1.79**	**1.7**	**2.56**	**2.63**	**1.71**	**2.73**	**2.52**	**1.85**	**2.73**	**1.6**	**2.71**
Ethanol					UG/M3	**73.9**	**63.5**	**45.6**	**369**	**110**	**103**	**120**	**1250**	**1130**	**26.4**	**32.2**
Ethyl Acetate					UG/M3	1.8 U	1.8 U	1.8 U	**15.7**	1.8 U	1.8 U	1.8 U	**5.77**	1.8 U	1.8 U	1.8 U
Ethylbenzene					UG/M3	0.869 U	0.869 U	0.869 U	**2.28**	0.869 U	0.869 U	0.869 U	0.877 U	0.869 U	0.869 U	0.869 U
Hexachlorobutadiene					UG/M3	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.15 U	2.13 U	2.13 U	2.13 U
Isopropanol					UG/M3	**2.97**	**2.85**	**2.23**	**122**	**4.2**	**5.33**	**16.3**	**58.5**	**47.7**	1.23 U	1.23 U
m,p-Xylene					UG/M3	1.74 U	1.74 U	1.74 U	**9.51**	1.74 U	**1.75**	**2.71**	1.76 U	1.74 U	1.74 U	1.74 U
Methyl Ethyl Ketone (2-Butanone)					UG/M3	**1.74**	**2.11**	1.47 U	**3.83**	1.47 U	1.47 U	1.47 U	1.49 U	1.47 U	**12.8**	1.47 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)					UG/M3	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.07 U	2.05 U	2.05 U	2.05 U
N-Heptane					UG/M3	0.82 U	0.82 U	0.82 U	**5.16**	0.82 U	**1.23**	**1.07**	0.828 U	0.82 U	0.82 U	0.82 U
N-Hexane					UG/M3	0.705 U	0.705 U	0.705 U	**4.62**	0.705 U	**2.73**	**2.18**	0.712 U	**0.952**	0.705 U	0.705 U
O-Xylene (1,2-Dimethylbenzene)					UG/M3	0.869 U	0.869 U	0.869 U	**3.39**	0.869 U	0.869 U	**1.04**	0.877 U	0.869 U	0.869 U	0.869 U
Styrene					UG/M3	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.86 U	0.852 U	0.852 U	0.852 U
Tert-Butyl Alcohol					UG/M3	1.52 U	1.52 U	1.52 U	**2.02**	1.52 U	1.52 U	1.52 U	1.53 U	1.52 U	1.52 U	1.52 U
Tert-Butyl Methyl Ether					UG/M3	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.728 U	0.721 U	0.721 U	0.721 U
Tetrahydrofuran					UG/M3	1.47 U	1.47 U	1.47 U	**3.3**	1.47 U	1.47 U	1.47 U	**2**	1.47 U	1.47 U	1.47 U
Toluene					UG/M3	**1.19**	**1.21**	**1.25**	**13.1**	**3.42**	**2.67**	**3.6**	**1.08**	**1.45**	**0.837**	**0.889**
Trans-1,2-Dichloroethene					UG/M3	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.801 U	0.793 U	0.793 U	0.793 U
Trans-1,3-Dichloropropene					UG/M3	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.917 U	0.908 U	0.908 U	0.908 U
Trichlorofluoromethane					UG/M3	**1.33**	**1.2**	**1.43**	**1.16**	1.12 U	**1.17**	**1.3**	**1.23**	**1.21**	**1.2**	**1.15**
Vinyl Bromide					UG/M3	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.883 U	0.874 U	0.874 U	0.874 U

FIGURES

1. Site Location Map



QUADRANGLE LOCATION



N

2,000 0 2,000'

Title:

SITE LOCATION MAP

CONSTRUCTION COMPLETION REPORT -
SHRUB OAK SHOPPING CENTER
1360 EAST MAIN STREET
SHRUB OAK, YORKTOWN, NEW YORK

Prepared for:

SHRUB OAK PARTNERS LLC

ROUX

Compiled by: C.H.	Date: 02/16/24
Prepared by: M.S.R.	Scale: AS SHOWN
Project Mgr: C.H.	Project: 3950.0001Y000
File: 3950.0001Y106.1.mxd	

FIGURE 1

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APPENDICES

A. SSDS Specifications
B. Excel Photographic Log
C. SSDS Inspection Forms
D. Sovereign Photographic Log
E. Roux Photographic Log
F. Laboratory Analytical Report
G. Data Usability Summary Reports

APPENDIX A

SSDS Specifications

Products for a Healthier Indoor Environment

RadonAway® High Suction Series Fans

Home (/index.php) > Products (/spruce-products.php) > RadonAway® High Suction Series Fans

Fan Summary

RadonAway® High Suction series radon mitigation fans are intended for use as a component of an active soil depressurization (ASD) system for reducing radon, other soil gases and moisture. HS fans offer a proven solution for tough mitigation jobs, providing up to 25 times the suction of inline tube fans to deal with sand, tight soil or clay sub-slab material.

				Typical CFM vs. Static Pressure WC					
Model	**P/N**	**Watts**	**Recomm Max Op Pressure "WC**	**0"**	**10"**	**15"**	**20"**	**25"**	**35"**
HS2000 w/cord	23004-1	159-318	14	63	37	12	-	-	-
HS2000 w/switch box	23004-4	159-318	14	63	37	12	-	-	-
HS3000 w/cord	23004-2	120-250	21	39	30	25	19	-	-
HS3000 w/switch box	23004-5	120-250	21	39	30	25	19	-	-
HS5000 w/cord	23004-3	202-350	35	44	37	33	29	25	16
HS5000 w/switch box	23004-6	202-350	35	44	37	33	29	25	16

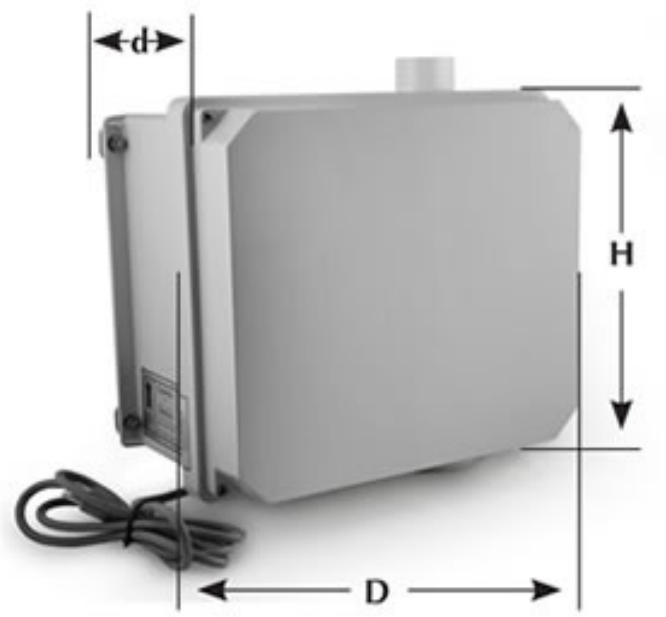
Features

- Internal condensate bypass
- Brackets for vertical mounting indoors and outdoors
- Inlet: 3.0" PVC / Outlet: 2.0" PVC

- Weight: 18 lbs.
- Size: 15.5" W x 13.3" H x 8.2" D
- Warranty: 1 year (3-year option available

Why choose this fan?

HS fans offer a proven solution for tough radon mitigation jobs, providing up to 25 times the suction of inline tube fans to deal with sand, tight soil or clay sub-slab material.

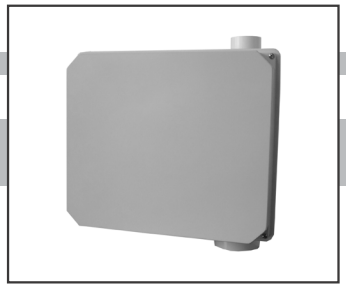


Model	H	D	d
HS2000	13.3"	15.5"	8.2"
HS3000	13.3"	15.5"	8.2"
HS5000	13.3"	15.5"	8.2"
HS2000E	13.3"	15.5"	8.2"
HS3000E	13.3"	15.5"	8.2"
HS5000E	13.3"	15.5"	8.2"

RadonAway™

The World's Leading
Radon Fan Manufaturer





HS Series

Installation & Operating Instructions

RadonAway
3 Saber Way | Ward Hill, MA 01835
www.radonaway.com

P/N IN007-REV J 9/13

RadonAway Ward Hill, MA.

HS Series Fan Installation & Operating Instructions

Please Read and Save These Instructions.

DO NOT CONNECT POWER SUPPLY UNTIL FAN IS COMPLETELY INSTALLED. MAKE SURE ELECTRICAL SERVICE TO FAN IS LOCKED IN "OFF" POSITION. DISCONNECT POWER BEFORE SERVICING FAN.

1. **WARNING!** Do not use fan in hazardous environments where fan electrical system could provide ignition to combustible or flammable materials.
2. **WARNING!** Do not use fan to pump explosive or corrosive gases.
   See Vapor Intrusion Application Note #AN001 for important information on VI applications. RadonAway.com/vapor-intrusion
3. **WARNING!** Check voltage at the fan to insure it corresponds with nameplate.
4. **WARNING!** Normal operation of this device may affect the combustion airflow needed for safe operation of fuel burning equipment. Check for possible backdraft conditions on all combustion devices after installation.
5. **NOTICE!** There are no user serviceable parts located inside the fan unit.
   Do NOT attempt to open. Return unit to the factory for service.
6. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician.
7. **WARNING!** In the event that the fan is immersed in water, return unit to factory for service before operating.
8. **WARNING!** Do not twist or torque fan inlet or outlet piping as Leakage may result.
9. **WARNING!** Do not leave fan unit installed on system piping without electrical power for more than 48 hours. Fan failure could result from this non-operational storage.
10. **WARNING!** TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

    a) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.

    b) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The HS Series Fan is intended for use by trained, certified/licensed, professional Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of the HS Series Fan. This instruction should be considered as a supplement to EPA/Radon Industry standard practices, state and local building codes and state regulations. In the event of a conflict, those codes, practices and regulations take precedence over this instruction.

1.2 ENVIRONMENTALS

The HS Series Fan is designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the HS Series Fan should be stored in an area where the temperature is never less than 32 degrees F. or more than 100 degrees F. The HS Series Fan is thermally protected such that it will shut off when the internal temperature is above 104 degrees F. Thus if the HS Series Fan is idle in an area where the ambient temperature exceeds this shut off, it will not restart until the internal temperature falls below 104 degrees F.

1.3 ACOUSTICS

The HS Series Fan, when installed properly, operates with little or no noticeable noise to the building occupants. There are, however, some considerations to be taken into account in the system design and installation. When installing the HS Series Fan above sleeping areas, select a location for mounting which is as far away as possible from those areas. Avoid mounting near doors, fold-down stairs or other uninsulated structures which may transmit sound. Insure a solid mounting for the HS Series Fan to avoid structure-borne vibration or noise.

The velocity of the outgoing air must also be considered in the overall system design. With small diameter piping, the "rushing" sound of the outlet air can be disturbing. The system design should incorporate a means to slow and quiet the outlet air. The use of the RadonAway Exhaust Muffler, p/n 24002, is strongly recommended.

1.4 GROUND WATER

Under no circumstances should water be allowed to be drawn into the inlet of the HS Series Fan as this may result in damage to the unit. The HS Series Fan should be mounted at least 5 feet above the slab penetration to minimize the risk of filling the HS Series Fan with water in installations with occasional high water tables.

In the event that a temporary high water table results in water at or above slab level, water will be drawn into the riser pipes thus blocking air flow to the HS Series Fan. The lack of cooling air will result in the HS Series Fan cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, it is recommended that the HS Series Fan be disconnected until the water recedes allowing for return to normal operation.

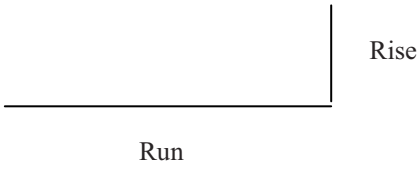
1.5 CONDENSATION & DRAINAGE

(WARNING!: Failure to provide adequate drainage for condensation can result in system failure and damage the HS Series Fan).

Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation.

The use of small diameter piping in a system increases the speed at which the air moves. The speed of the air can pull water uphill and at sufficient velocity it can actually move water vertically up the side walls of the pipe. This has the potential of creating a problem in the negative pressure (inlet) side piping. For HS Series Fan inlet piping, the following table provides the minimum recommended pipe diameters as well as minimum pitch under several system conditions. Use this chart to size piping for a system.

Pipe Diam.	Minimum Rise per Foot of Run*		
	@ 25 CFM	@ 50 CFM	@ 100 CFM
4"	1/32 "	3/32 "	3/8 "
3"	1/8 "	3/8 "	1 1/2 "



*Typical operational flow rates:

HS3000, or HS5000	20 - 40 CFM
HS2000	50 - 90 CFM

All exhaust piping should be 2" PVC.

1.6 SYSTEM MONITOR AND LABEL

A properly designed system should incorporate a "System On" Indicator for affirmation of system operation. A Magnehelic pressure gauge is recommended for this purpose. The indicator should be mounted at least 5 feet above the slab penetration to minimize the risk of filling the gauge with water in installations with occasional high water tables. A System Label (P/N 15022) with instructions for contacting the installing contractor for service and also identifying the necessity for regular radon tests to be conducted by the building occupants, must be conspicuously placed where the occupants frequent and can see the label.

1.7 SLAB COVERAGE

The HS Series Fan can provide coverage of well over 1000 sq. ft. per slab penetration. This will, of course, depend on the sub-slab aggregate in any particular installation and the diagnostic results. In general, sand and gravel are much looser aggregates than dirt and clay. Additional suction points can be added as required. It is recommended that a small pit (2 to 10 gallons in size) be created below the slab at each suction hole.

1.8 ELECTRICAL WIRING

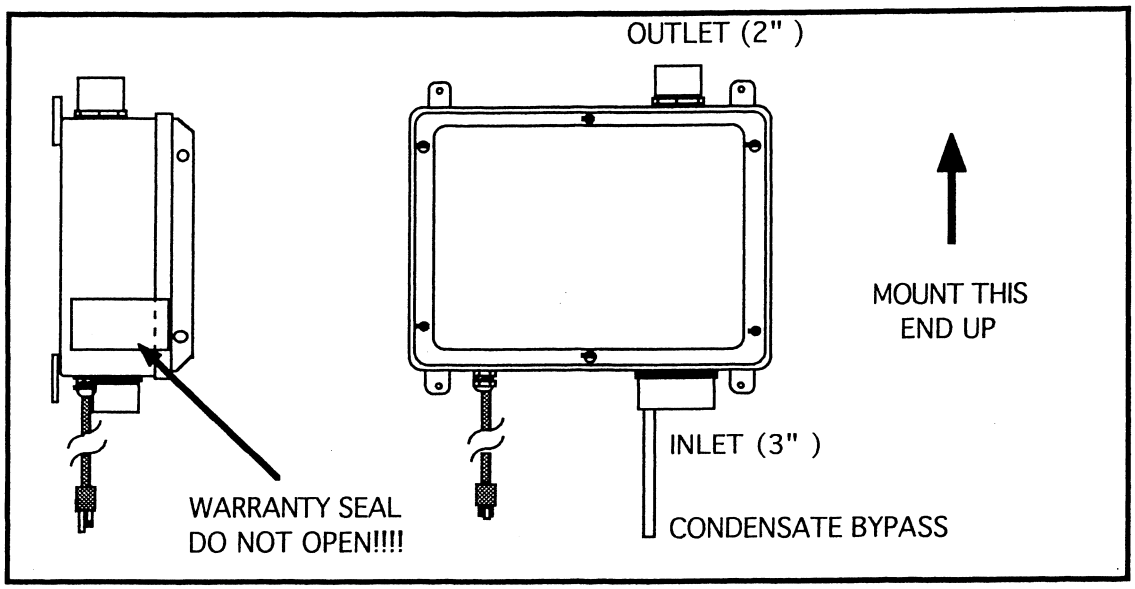
The HS Series Fan plugs into a standard 120V outlet. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit. Ensure that all exterior electrical boxes are outdoor rated and properly caulked to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

1.8a ELECTRICAL BOX (optional)

The optional Electrical Box (p/n 20003) provides a weather tight box with switch for outdoor hardwire connection. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA)"National Electrical Code, Standard #70"-current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit. Ensure that all exterior electrical boxes are outdoor rated and properly caulked to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

1.9 SPEED CONTROLS

Electronic speed controls can **NOT** be used on HS Series units.



2.0 INSTALLATION

2.1 MOUNTING

Mount the HS Series Fan to the wall studs, or similar structure, in the selected location with (4) 1/4" x 1 1/2" lag screws (not provided). Insure the HS Series Fan is both plumb and level.

2.2 DUCTING CONNECTIONS

Make final ducting connection to HS Series Fan with flexible couplings. Insure all connections are tight. Do not twist or torque inlet and outlet piping on HS Series Fan or leaks may result.

2.3 VENT MUFFLER INSTALLATION

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed above the roofline at the end of the vent pipe.

2.5 OPERATION CHECKS & ANNUAL SYSTEM MAINTENANCE

____ Make final operation checks by verifying all connections are tight and leak-free.

____ Insure the HS Series Fan and all ducting is secure and vibration-free.

____ Verify system vacuum pressure with Magnehelic. Insure vacuum pressure is within normal operating range and less than the maximum recommended as shown below:

HS2000	14" WC
HS3000	21" WC
HS5000	40" WC

(Above are based on sea-level operation, at higher altitudes reduce above by about 4% per 1000 Feet.) If these are exceeded, increase number of suction points.

____ Verify Radon levels by testing to EPA protocol.

PRODUCT SPECIFICATIONS

Model	Maximum Static Suction	Typical CFM vs Static Suction WC (Recommended Operating Range)						Power* Watts @ 115 VAC
		0"	10"	15"	20"	25"	35"	
HS2000	18"	110	72	40	-	-	-	150-270
HS3000	27"	40	33	30	23	18	-	105-195
HS5000	50"	53	47	42	38	34	24	180-320

*Power consumption varies with actual load conditions

Inlet: 3.0" PVC

Outlet: 2.0" PVC

Mounting: Brackets for vertical mount

Weight: Approximately 18 lbs.

Size: Approximately 15"W x 13"H x 8"D

Minimum recommended inlet ducting (greater diameter may always be used):

HS3000, HS5000 --- 2.0" PVC Pipe

HS2000 --- Main feeder line of 3.0" or greater PVC Pipe

Branch lines (if 3 or more) may be 2.0" PVC Pipe

Outlet ducting: 2.0" PVC

Storage temperature range: 32 - 100 degrees F.

Thermally protected

Locked rotor protection

Internal Condensate Bypass

IMPORTANT INSTRUCTIONS TO INSTALLER

Inspect the HS Series Fan for shipping damage within 15 days of receipt. Notify **RadonAway of any damages immediately**. RadonAway is not responsible for damages incurred during shipping. However, for your benefit, RadonAway does insure shipments.

There are no user serviceable parts inside the fan. **Do not attempt to open.** Return unit to factory for service.

Install the HS Series Fan in accordance with all EPA standard practices, and state and local building codes and state regulations.

Provide a copy of this instruction or comparable radon system and testing information to the building occupants after completing system installation.

WARRANTY

Subject to any applicable consumer protection legislation, RadonAway warrants that the HS Series Fan (the "Fan") will be free from defects in materials and workmanship for a period of one (1) year from the date of manufacture (the "Warranty Term"). Outside the Continental United States and Canada the Warranty Term is one (1) year from the date of manufacture.

RadonAway will repair any fan which fails due to defects in materials or workmanship. The Fan must be returned (at owner's cost) to the RadonAway factory. Proof of purchase must be supplied upon request for service under this Warranty.

This Warranty is contingent on installation of the Fan in accordance with the instructions provided. This Warranty does not apply where any repairs or alterations have been made or attempted by others, or if the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of RadonAway.

RadonAway is not responsible for installation, removal or delivery costs associated with this Warranty.

EXCEPT AS STATED ABOVE, THE HS SERIES FANS ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL RADONAWAY BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR RELATING TO, THE FAN OR THE PERFORMANCE THEREOF. RADONAWAY'S AGGREGATE LIABILITY HEREUNDER SHALL NOT IN ANY EVENT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF SAID PRODUCT. THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT, TO THE EXTENT THE SAME DOES NOT MEET WITH RADONAWAY'S WARRANTY AS PROVIDED ABOVE.

For service under this Warranty, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. No returns can be accepted without an RMA. If factory return is required, the customer assumes all shipping cost to and from factory.

RadonAway
3 Saber Way
Ward Hill, MA 01835
TEL. (978) 521-3703
FAX (978) 521-3964

Record the following information for your records:

Serial No._____

Purchase Date_____

INSTALLATION & OPERATING INSTRUCTIONS
Instruction P/N IN015 Rev E
FOR *CHECKPOINT IIa*™ P/N 28001-2 & 28001-3
RADON SYSTEM ALARM

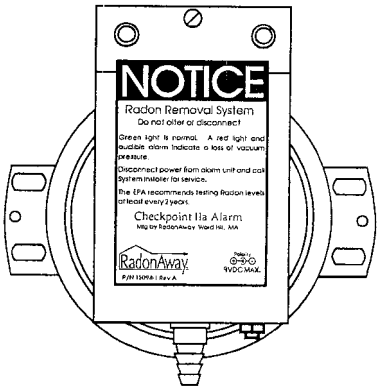
INSTALLATION INSTRUCTIONS
(WALL MOUNTING)

Select a suitable wall location near a vertical section of the suction pipe. The unit should be mounted about four or five feet above the floor and as close to the suction pipe as possible. Keep in mind that with the plug-in transformer provided, the unit must also be within six feet of a 120V receptacle. **NOTE: The Checkpoint IIa is calibrated for vertical mounting, horizontal mounting will affect switchpoint calibration.**

Drill two ¼" holes 4" apart horizontally where the unit is to be mounted.

Install the two ¼" wall anchors provided.

Hang the CHECKPOINT IIa from the two mouting holes located on the mounting bracket. Tighten the mounting screws so the unit fits snugly and securely against the wall.



Drill a 5/16" hole into the side of the vent pipe about 6" higher than the top of the unit.

Insert the vinyl tubing provided about 1" inside the suction pipe.

Cut a suitable length of vinyl tubing and attach it to the pressure switch connector on the CHECKPOINT IIa.

CALIBRATION AND OPERATION.

The CHECKPOINT IIa units are calibrated and sealed at the factory to alarm when the vacuum pressure falls below the factory setting and should not normally require field calibration. Factory Settings are:
28001-2 -.25" WC Vacuum
28001-3 -.10" WC Vacuum

To Verify Operation:

With the exhaust fan off or the pressure tubing disconnected and the CHECKPOINT IIa plugged in, both the red indicator light and the audible alarm should be on.

Turn the fan system on or connect the pressure tubing to the fan piping. The red light and the audible alarm should go off. The green light should come on.

Now turn the fan off. The red light and audible alarm should come on in about two or three seconds and the green light should go out.

WARRANTY INFORMATION

Subject to applicable consumer protection legislation, RadonAway warrants that the CHECKPOINT IIa will be free from defective material and workmanship for a period of (1) year from the date of purchase. Warranty is contingent on installation in accordance with the instructions provided. This warranty does not apply where repairs or alterations have been made or attempted by others; or the unit has been abused or misused. Warranty does not include damage in shipment unless the damage is due to the negligence of RadonAway. All other warranties, expressed or written, are not valid. To make a claim under these limited warranties, you must return the defective item to RadonAway with a copy of the purchase receipt. RadonAway is not responsible for installation or removal cost associated with this warranty. In no case is RadonAway liable beyond the repair or replacement of the defective product FOB RadonAway.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO WARRANTY OF MERCHANTIBILITY. ALL OTHER WARRANTIES, EXPRESSED OR WRITTEN, ARE NOT VALID.

For service under these warranties, contact RadonAway for a Return Material Authorization (RMA) number and shipping information. **No returns can be accepted without an RMA.** If factory return is required, the customer assumes all shipping costs to and from factory.

Manufactured by:
RadonAway
Ward Hill, MA
(978)-521-3703

OBAR
SYSTEMS, INC.

2969 Route 23 South
Newfoundland, New Jersey 07435
1-800-949-OBAR
www.obarsystems.com
wholesale@obarsystems.com

THIS BLOWER HAS A REMOTE POTENTIOMETER WHICH ALLOWS FOR A WIDE RANGE OF ADJUSTMENT.

ALWAYS ENSURE THAT THE PRESSURE AND FLOW ARE WITHIN SAFE OPERATING RANGE. FAILURE TO DO SO MAY VOID WARRANTY.

REFER TO TUNING DIAGRAM AND WARRANTY AND INSTALLATION PACKET

FOR TECHNICAL ASSISTANCE PLEASE CALL 1-800-949-OBAR

OR

EMAIL: WHOLESALE@OBARSYSTEMS.COM

Distributed by Obar Systems

Installation & Warranty

Read these instructions completely and retain for future reference.

1. Warning! The use of this fan may affect combustion devices, always check for a backdraft on all combustion devices before and after installation.
2. Warning! This fan is not intended for use in hazardous environments where a motor spark could ignite combustible or flammable materials.
3. All wiring must be performed by a licensed electrical contractor in accordance with the National Electrical Code and all local and state codes governing the municipality in which it is installed.
4. The GBR series blowers are intended for use and installation by professionals familiar with installation and design of systems for the remediation of radon and volatile organic compounds. Unqualified or unlicensed individuals should not undertake the installation or service of this product.

INSTALLATION

The installation instructions provided are for guidance only, any installation should meet all state and local codes and guidelines.

1. Temperature restrictions: The GBR SOE/UD will run and start in a temperature range from -20 to 180 degrees F. The GBR HA will run at a temperature of -20 to 180 degrees F but may not start if the motor temperature is below 0 degrees F at time of startup.
2. Ground water restrictions: The blower should not be installed at a height above water table that is less than the vacuum setting for the blower, if the water table is unknown then the base of the slab should be used as a default. The GBR series is a high vacuum blower and will draw water into the assembly and damage the impeller and motor if not properly installed.
3. Speed control: The GBR series blowers have a built in speed control that can be used to field adjust the vacuum on your system. These should only be adjusted by an experienced installer familiar advanced systems design and installation. For information regarding on site adjustments please contact Obar Systems for further information.
4. Enclosure: It is not recommended that the enclosure be opened except for repairs and adjustments. Contact Obar Systems before removing the cover.
5. Mounting: The fan should be mounted in a vertical orientation with the discharge pointing

upward. The inlet and discharge should be attached with a PipeConx or similar flexible connector of the appropriate size. The connector should provide a gap of 1.5 inches between the inlet pipe and inlet fitting and discharge pipe and discharge fitting. This will allow for motor assembly replacement in future repairs. The GBR comes with wall fastening lugs that provide for a flush installation on a flat even surface. Optional roof and wall mounts are available and are designed to reduce installation times dramatically. Contact Obar Systems for additional information on mounting systems. The fan should be located in an area that provides easy access and does not obstruct the operations of the building to which it is attached.

6. Discharge: Make sure the discharge meets or exceeds National guidelines and local codes for the installation and venting of Radon and or VOCs (Volatile Organic Compounds). In the event that there is the possibility of debris entering the discharge of the fan, it is recommended that a guard be installed to protect the blower from damage.

Warranty

Subject to any applicable consumer protection legislation, Obar Systems warrants the GBR series fans for 12 months from the date of purchase.

Obar systems will repair or replace any fan which fails due to defects in materials and workmanship. A RMA must be obtained and proof of purchase is required to be serviced by this warranty.

This warranty is contingent upon the fan having been installed as per the installation requirements set forth by Obar Systems and in accordance with the requirements of federal and state authorities governing the installation systems designed for radon and volatile organic compounds.

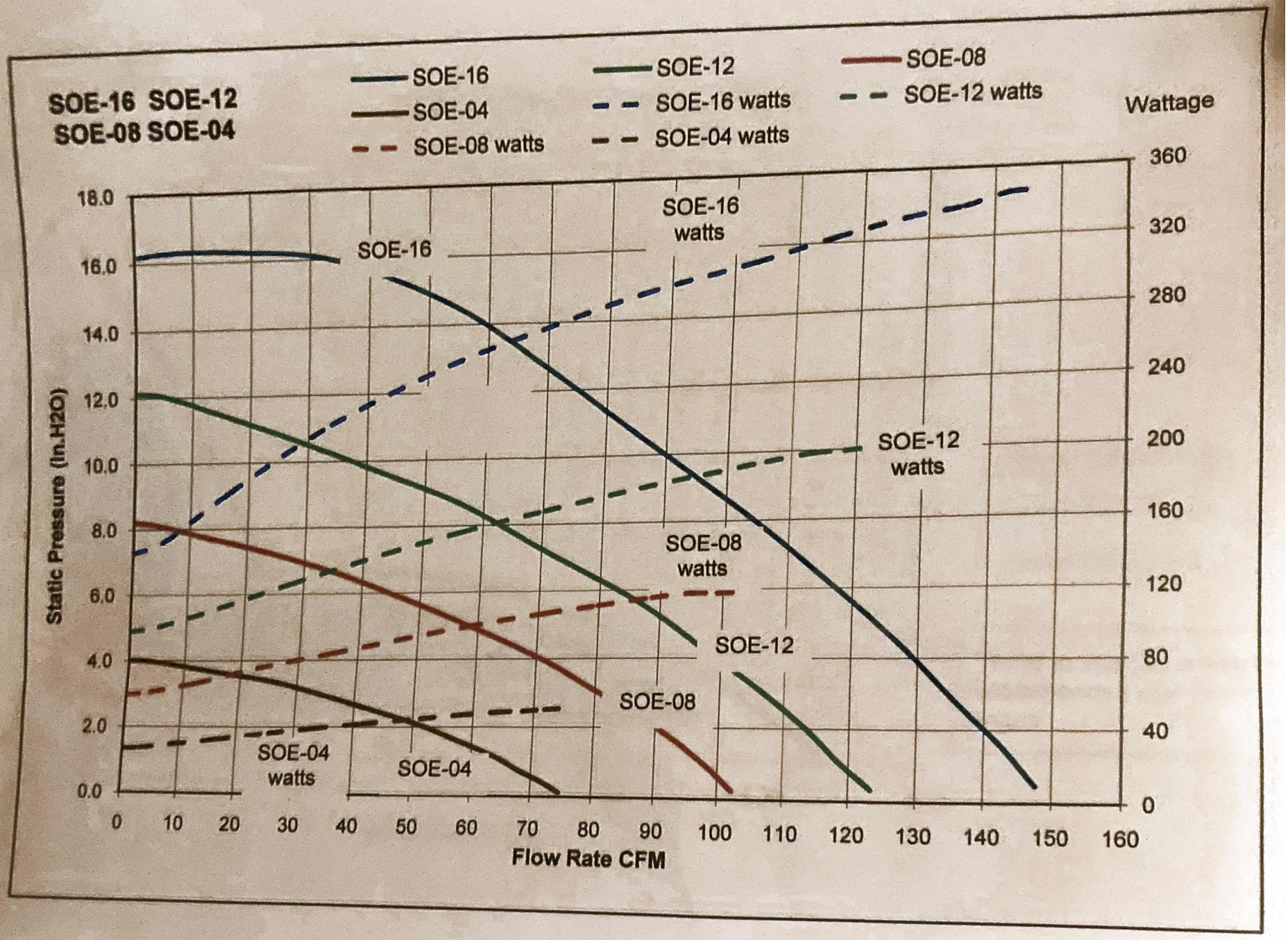
Obar systems is not responsible for the installation, removal or delivery costs associated with this warranty.

Except as stated, the GBR series are provided without warranty of any kind, either expressed or implied, including without limitation, implied warranties of merchantability and fitness for a particular use.

Obar systems is in no way responsible for any direct or indirect damages relating to the performance of the GBR series fan. Any liability shall not exceed the purchase price of the unit. The sole remedy under this warranty shall be the repair or replacement of the unit

Contact Obar Systems to obtain a RMA (Return Material Authorization) number for any and all warranties. If return is required, the customer is responsible for all freight charges.

Obar Systems Inc.
2969 Route 23 South
Newfoundland NJ 07435
800 949 6227


SOE-16 SOE-12
SOE-08 SOE-04
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SOE-12 watts
Wattage
Static Pressure (In.H2O)
Flow Rate CFM
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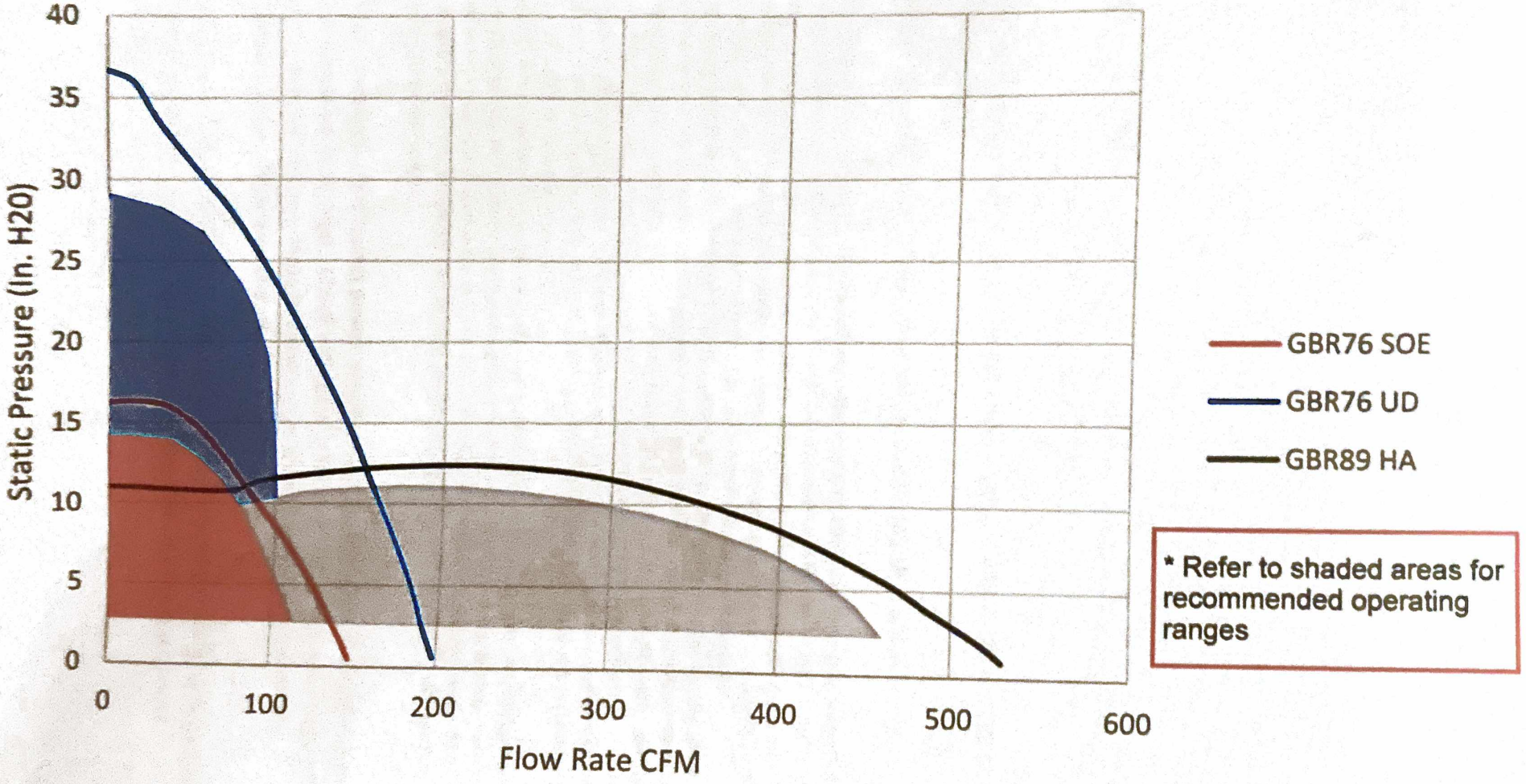
GBR Blower Comparison



HP190SL

Slimline Radon Fans

Product #: 40564

Fantech has utilized its twenty years of experience as a radon fan manufacturer to develop the new HP190SL. This new fan features a patent-pending design starting from its outward low profile appearance to the high efficiency, continuous duty ebm-papst motor and integrated condensate bypass system.

Radon mitigators will appreciate the ease of its direct wall-mount design that eliminates the need for elbows and reduces labor costs.

Features

- Constructed from durable. UV resistant polycarbonate
- Factory sealed, no leak design
- Integral condensate bypass
- Direct wall-mount with integral vibration isolation
- Cabinet is paintable to match external decor. And include masking seal for non-paintable logo medallion.
- Weighs 12 lbs (5 Kg)

Specifications

- Duct size – 4" (102 mm)
- Voltage/Phase – 120/1
- Power rated – 88 W
- Amp – 0.78 A

The HP190SL is engineered specifically for the demanding environments of radon mitigation applications.

Low profile, wall-mount design minimizes installation time.

Fan and discharge pipe are located on surface of exterior wall eliminating need for elbows.

Fan connects directly to low pressure pipe opening on exterior wall.

Motors

- High efficiency, continuous duty ebm-papst motor.
- Non-overloading motorized impeller.
- Built-in thermal overload protection.

Case

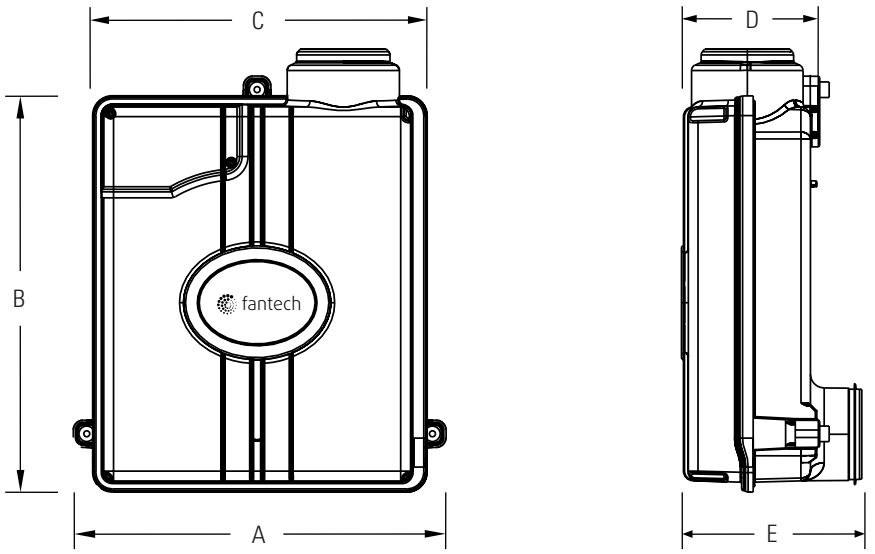
- Constructed from durable, UV resistant polycarbonate.
- Factory sealed, no leak design.
- Integral condensate bypass.
- Direct wall-mount with integral vibration isolation.

Warranty

5 year warranty.

fantech

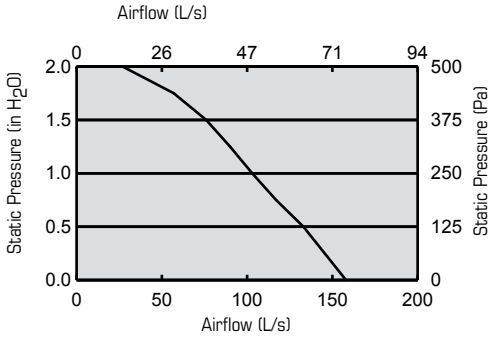
Dimensions & Airflow



Model	A		B		C		D		E	
	in	mm	in	mm	in	mm	in	mm	in	mm
HP 190SL	14 15/16	380	15 7/8	404	13 7/16	341	5 1/16	129	7 3/16	182

Ventilation Performance

in. wg. (Pa)	0.0 (0)	0.5 (125)	1.0 (250)	1.5 (375)	2.0 (500)
	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)	cfm (L/s)
Net airflow	158 75)	133 (63)	103 (49)	76 (36)	27 (13)



Requirements and standards

- Complies with the UL 507 requirements regulating the construction and installation of Electric Fans

Contacts

Submitted by: Date:
Quantity: Model: Project #:
Comments:
Location:
Architect:
Engineer: Contractor:

Distributed by:

United States 10048 Industrial Blvd. • Lenexa, KS 66061 • 1.800.747.1762 • www.fantech.net
Canada 50 Kanalflakt Way • Bouctouche, NB E4S 3M5 • 1.800.565.3548 • www.fantech.net

fantech

TJERNLUND PRODUCTS, INC.
1601 Ninth Street • White Bear Lake, MN 55110-6794
PHONE (800) 255-4208 • (651) 426-2993 • FAX (651) 426-9547
Visit our web site • www.tjernlund.com

READ OWNERS INSTRUCTIONS CAREFULLY PRIOR TO INSTALLATION.
THESE INSTRUCTIONS MUST REMAIN WITH EQUIPMENT. DO NOT DESTROY.

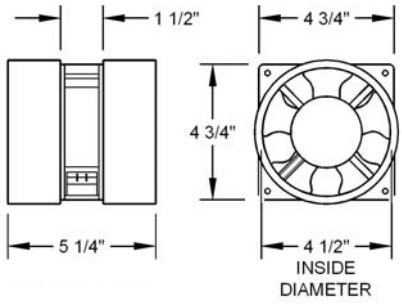
4" PVC Fan, Model PVC4

DESCRIPTION

The PVC4 fan directly connects to 4" Schedule 40 PVC and can be used as a Booster Fan in passive Radon Mitigation Systems or as a general utility fan when PVC is the preferred ducting material. Use an adapter to connect the PVC4 with other pipe diameters or schedules.

SPECIFICATIONS

CFM:	80
Voltage:	115 VAC
Motor RPM:	2800
Motor Watts:	18
Motor Amps:	0.20
PVC Coupler:	4" Schedule 40



GENERAL APPLICATION INFORMATION

⚠ WARNING

The PVC4 must be installed in accordance with these instructions and all local codes or in their absence in accordance with the latest editions of the International Residential Code and International Electrical Code. Improper installation can create a hazardous condition such as fire, electric shock or personal injury. To reduce these risks significantly, use this unit only in the manner intended by the manufacturer. If you have questions, contact Tjernlund Products. Always disconnect the PVC4 from its power source before installation and servicing.

CAUTION: For general ventilation use only. Do not use to exhaust hazardous or explosive materials and vapors. Limit exposure to extreme temperatures. Use gooseneck termination, condensate drain, or other preventative steps to protect fan from moisture. The PVC4 is NOT waterproof.

Radon Mitigation System Booster Fan Applications

The draw of passive radon mitigation systems can be improved easily and inexpensively by adding the PVC4 to the system. Connect fan to PVC in attic or other space and plug in for additional draw from under the home's foundation with very little power use. The fan is rated for continuous operation. Use appropriate Schedule 40 PVC glue.

Utility Fan

The PVC4 can be used in a variety of applications to move air through PVC pipe. Use appropriate Schedule 40 PVC glue.

WARRANTY

TJERNLUND LIMITED ONE YEAR WARRANTY

Tjernlund Products, Inc. warrants to the original purchaser of this product that the product will be free from defects due to faulty material or workmanship for a period of (1) year from the date of original purchase or delivery to the original purchaser, whichever is earlier. Remedies under this warranty are limited to repairing or replacing, at our option, any product which shall, within the above stated warranty period, be returned to Tjernlund Products, Inc. at the address listed below, postage prepaid. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, AND TJERNLUND PRODUCTS, INC. EXPRESSLY DISCLAIMS LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF THIS PRODUCT. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES AND NO AGENT IS AUTHORIZED TO ASSUME FOR US ANY LIABILITY ADDITIONAL TO THOSE SET FORTH IN THIS LIMITED WARRANTY. IMPLIED WARRANTIES ARE LIMITED TO THE STATED DURATION OF THIS LIMITED WARRANTY. Some states do not allow limitation on how long an implied warranty lasts, so that limitation may not apply to you. In addition, some states do not allow the exclusion or limitation of incidental or consequential damages, so that above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which may vary from State to State. Send all inquiries regarding warranty work to Tjernlund Products, Inc. 1601 9th Street, White Bear Lake, MN 55110-6794. Phone (651) 426-2993 • (800) 255-4208 • Fax (651) 426-9547 • Email fanmail@tjfans.com.

P/N: 8504185

APPENDIX B

Excel Photographic Log

EXCEL ENVIRONMENTAL RESOURCES, INC.
PHOTOGRAPHIC SUMMARY

Project Name/Number: Shrub Oak Shopping Center Photographer: MB

Photo No.: 1
Description: View of the borehole for the sub-slab depressurization system point located in the Post Office tenant space.

Photo No.: 2
Description: View of gravel pack around the newly installed SSDS 3" PVC Riser.

EXCEL ENVIRONMENTAL RESOURCES, INC.
PHOTOGRAPHIC SUMMARY

Project Name/Number: Shrub Oak Shopping Center Photographer: MB

Photo No.: 3
Description: View of SSDS point with grouted seal around 3" PVC Riser.

Photo No.: 4
Description: View of representative vapor monitoring point, MP-6, located in Mr. Cleaners.

EXCEL ENVIRONMENTAL RESOURCES, INC.
PHOTOGRAPHIC SUMMARY

Project Name/Number: Shrub Oak Shopping Center Photographer: MB

Photo No.: 5
Description: View of the sub-slab depressurization system point operating in the Post Office tenant space.

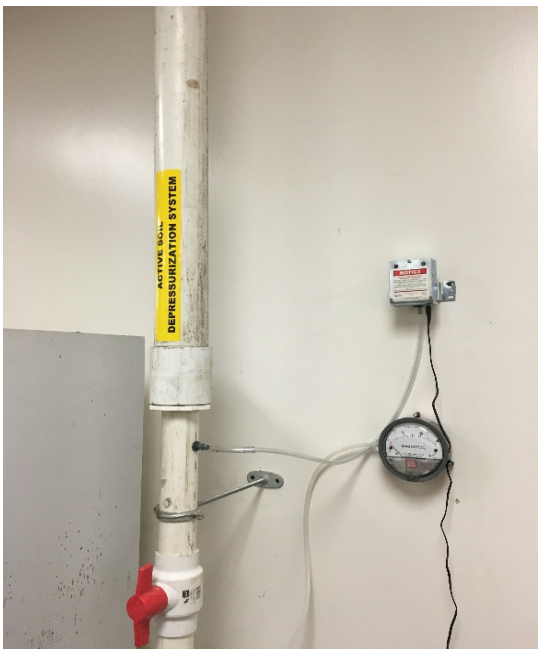


Photo No.: 6
Description: View of the audible alarm attached to the point located in the tenant space.

EXCEL ENVIRONMENTAL RESOURCES, INC.
PHOTOGRAPHIC SUMMARY

Project Name/Number: Shrub Oak Shopping Center Photographer: MB

Photo No.: 7
Description: View of the sub-slab depressurization system point operating in the dry cleaner tenant space.

Photo No.: 8
Description: View of the extraction pipe exiting the building in the dry cleaner tenant space.

EXCEL ENVIRONMENTAL RESOURCES, INC.
PHOTOGRAPHIC SUMMARY

Project Name/Number: Shrub Oak Shopping Center Photographer: MB

Photo No.: 9
Description: View of the blower and exhaust pipe on the roof of the building.

Photo No.: 10
Description: View of the blower and exhaust pipe on the roof of the building.

APPENDIX C

SSDS Inspection Forms

VAPOR INTRUSION MITIGATION SYSTEM
& INSTALLATION CHECKLIST
(Optional Tool for Investigator)

Address inspected: 1336-1378 Main St.
Shrub Oak, NY

Person(s) interviewed: NA

Date of inspection: 4-22-16 Time of inspection: 0800 to 1000

Company: Excel Env. Resources Phone Number: 732-545-9525

Mitigation System Designer: AWT - Rob Gaupp Phone Number: 800-732-7701

Company: AWT, Sayreville NJ

Type of License: ☐ PE ☐ Certified Radon Mitigation Specialist ☒ None

License #: _____

Date System Installation Completed: 4-5-16

1.0 System Installation	**Yes**	**No**
1.1 Is the system installed as designed? List non-conformance items and corrective actions taken in Section 7.0.	X	
1.2 Were permits obtained prior to the installation? If yes, list type and permit number: 1. Electric 4067 2.	X	
1.3 Has the system passed the permit inspections? If not, detail circumstances in Section 7.0.	X	

1.4 Installation Contractor:

Company Name: AWT

Contact Person: Rob Gaupp Phone #: 800-732-7701

License Number: _____ (Professional or Business)

1.5 Electrical Contractor:

Company Name: Spirelli Electric

Contact Person: Joe Spirelli Phone #: 914-455-2158

License Number: _____

2.0 General Sealing Recommendations	**Yes**	**No**
2.1 Are accessible openings around utility penetrations in the foundation walls and slab, test holes, suction point piping penetrations of the slab, slab/wall juncture, and other openings and/or penetrations in the slab or foundation walls properly sealed using methods and materials that are applicable to the application and pass the smoke stick check?	X	
2.2 Did all accessible cracks or openings in the slab or wall pass the smoke test? If not, identify the location of failed cracks or openings and corrective actions taken in Section 7.0.	X	

3.0 Monitors and Labeling Recommendations		
3.1 Does each suction point have a permanently installed mechanism (manometer, vacuum gauge or port) to measure vacuum?	X	
3.2 Are sample ports present to measure air flow, vacuum and acquire samples at each suction point?	X	
3.3 Are sample ports present to measure air flow, vacuum and acquire samples at the blower/fan influent and discharge?	X	
3.4 Is the pressure reading from the latest commissioning clearly marked on the suction point riser?	X	
3.5 Does the mitigation system avoid inducing backdrafting of combustion products into the building?	X	
3.6 Were the vacuum readings in the system stable during the backdraft test?	X	
3.7 Does the mitigation system include an operational audible alarm to inform occupants of a system malfunction?	X	
3.8 Were SSP installed permanently according to the design to test the area of influence?	X	
3.9 Is the circuit breaker controlling the vent fan labeled "Vapor Mitigation System?	X	

4.0 Diagnostic Measurements		
4.1 Have commissioning values been established and documented for the system vacuum and air flow at the blower/fan and suction points?	X	

	Yes	No
Make and model of instrument used for air flow measurements: TSI Velocicalc 9565		
4.2 Was the total area of influence by the mitigation system confirmed at all SSPs to a measured vacuum equal to or greater than 0.004" WC?	X	
Make and model of instrument used for vacuum measurement: TSI Velocicalc 9565		
4.3 Does the instrument used for sub-slab vacuum measurements have a resolution of 0.0001" WC?	X	
4.4 Was indoor air sampling performed to confirm mitigation system performance?	X	
4.5 Has an estimate for electrical costs been provided based on electrical measurements?		X
4.6 Is a spreadsheet provided summarizing the diagnostic measurements?		X

5.0 Blower/Fan Installation Recommendations

5.1 Is the blower/fan installed in a configuration that avoids condensation buildup in the housing or is a condensate bypass system present?	X	
5.2 Is the blower/fan mounted and secured in a manner that minimizes transfer of vibration to the structural framing of the building?	X	
5.3 Does the system operate without excessive noise or vibration?	X	

6.0 Mitigation System Assessment

6.1 Is the mitigation system protective based on conditions at the time of the inspection?	X	

7.0 Non-Conformance Items and Corrective Actions

Periodic Operations Visit Form

☐ Check box if new sys info

System ID: C360117-B001

Date of Visit: 5/13/22

Owner Name: Shrub Oak LLC

Date Installed: 04/05/2016

System Address: 1360 East Main Street

Telephone: 516-625-4266

City: Shrub Oak Zip: 10588

Alt. Telephone:

Performed By: Alfredo Fernandez

Site No: C360117

Company: Rax Associates, Inc.

Site Name: Mr. Cleaners-Shrub Oak Shoppi

EXTERIOR

Fan Operation Confirmation

	Fan #1	Fan #2	Fan #3
Fan Model No(s).	HS5000 RadonAway	RadonAway HS2000	Unknown - ACME
Is Fan Operating (arrival)?	○ Yes ● No	● Yes ○ No	● Yes ○ No
Confirmation Method	Vacuum gauge/manometer/ alarm	~~Pressure~~ Vac gauge/manometer/ alarm	Vac Gauge/manometer
Is Fan Operating (departure)?	○ Yes ● No	● Yes ○ No	● Yes ○ No

Requested to inspect interior system components? ● Yes ○ No

If yes, when and by whom? Rax opened ~~both~~ both RadonAway enclosures to inspect wiring, piping, and other components Date: 5/13/22

INTERIOR

		Notes
Structural Review		
Change in building footprint since last inspection?	○ Yes ● No	
Basement occupied (>4 hrs per day)?	○ Yes ● No	No basement - slab on grade
Heating/ventilation system modifications?	○ Yes ● No	
Crawlspace inspected?	○ Yes ● No	
Large cracks in floor or near sumps?	○ Yes ● No	
Wall penetrations or cracks noted?	○ Yes ● No	
Piping, Slab & Wall		
Are system suction points sealed?	● Yes ○ No	
Is piping system in need of repair?	○ Yes ● No	
Miscellaneous		
Are manometer levels equal?	● Yes ○ No	
Are system labels accurate and applied correctly?	● Yes ○ No	

Maintenance completed (check all that apply): ☐ Replace fan ☐ Seal pipe ☐ Electrical ☐ Other

Describe repairs made and any proposed actions requiring a subsequent visit (if necessary):

Fan #1 must be replaced. A new fan ~~was ordered on~~ will be promptly ordered and installed

APPENDIX D

Sovereign Photographic Log

PHOTOGRAPHIC LOG
SSDS Design and Installation Report
ACME Store #2830
1366 East Main Street, Shrub Oak, New York 10588
Fieldwork conducted during July 31 – August 1, 2017

Photo 1 – View of extraction pipe adjacent to sample location 2830-SS-1 by the store room doors.

PHOTOGRAPHIC LOG
SSDS Design and Installation Report
ACME Store #2830
1366 East Main Street, Shrub Oak, New York 10588
Fieldwork conducted during July 31 – August 1, 2017

Photo 2 - View of extraction pipe adjacent to sampling location 2830-SS-3 adjacent to the floral department.

PHOTOGRAPHIC LOG
SSDS Design and Installation Report
ACME Store #2830
1366 East Main Street, Shrub Oak, New York 10588
Fieldwork conducted during July 31 – August 1, 2017

Photo 3 – View of manometer and sampling port on extraction pipe at sample location 2830-SS-3.

PHOTOGRAPHIC LOG
SSDS Design and Installation Report
ACME Store #2830
1366 East Main Street, Shrub Oak, New York 10588
Fieldwork conducted during July 31 – August 1, 2017

Photo 4 - View of horizontal pipe run penetrating the storeroom wall by sampling location 2830-SS-1.

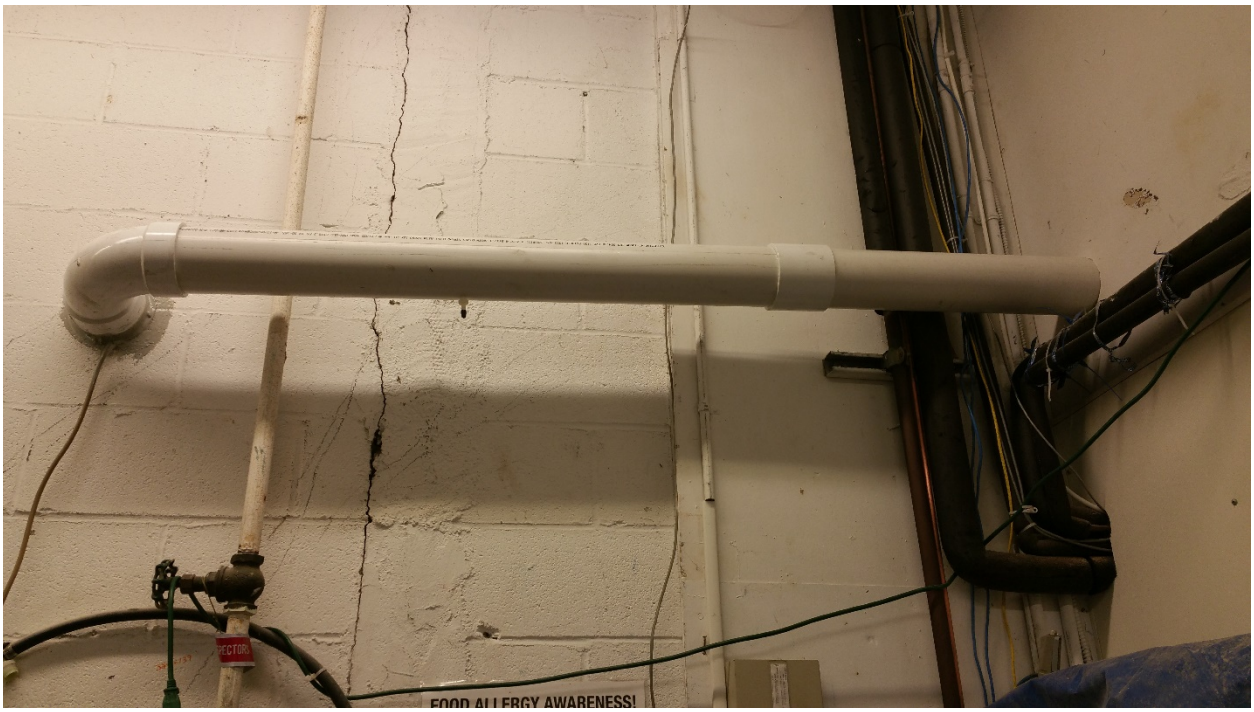
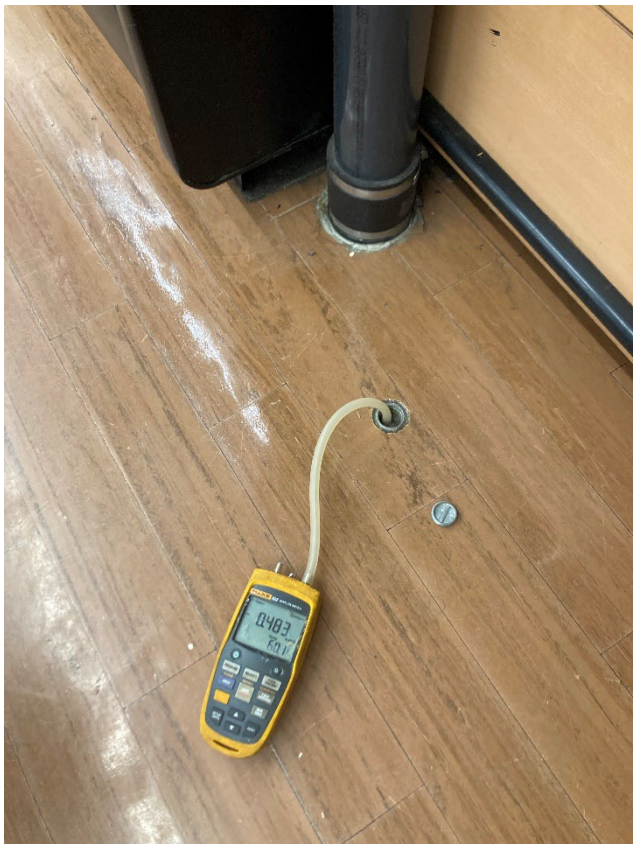


Photo 5 – Penetrations into store room (right) and exiting store room to exterior fan (left).

APPENDIX E

Roux Photographic Log



Photograph 1: [5/13/22] Vacuum Reading at monitoring point MP-1 inside ACME Grocery Store

Photograph 2: [5/13/22] Vacuum Reading at monitoring point MP-2 inside ACME Grocery Store

Photograph 3: [5/13/22] Vacuum Reading at monitoring point MP-3 inside ACME Grocery Store

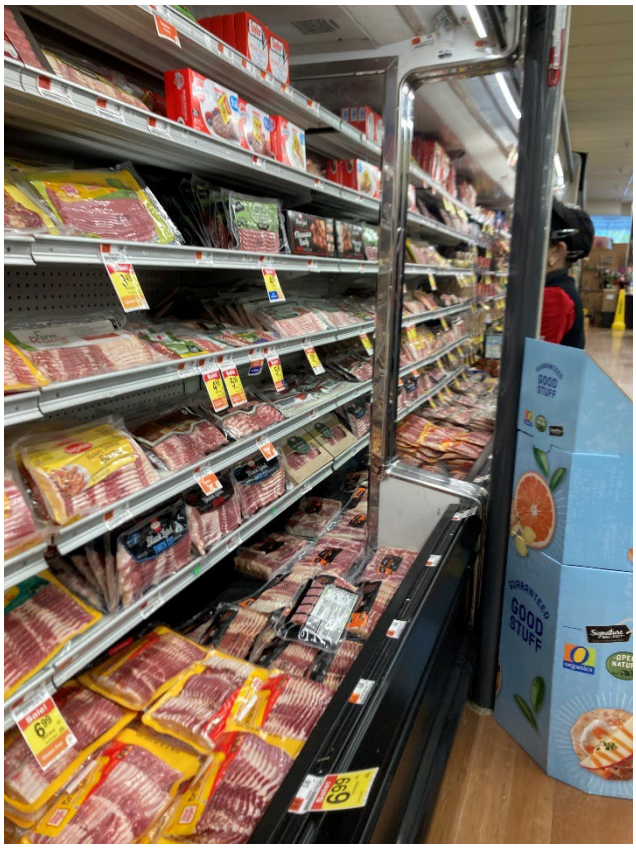
Photograph 4: [5/13/22] Fourth monitoring point located inside ACME Grocery Store near VMP-2 Inaccessible

Photograph 5: [5/13/22] View of extraction point VMP-1 inside ACME Grocery Store

Photograph 6: [5/13/22] Vacuum Reading at extraction point VMP-1

Photograph 7: [5/13/22] View of extraction point VMP-2 inside ACME Grocery Store

Photograph 8: [5/13/22] Vacuum Reading at extraction point VMP-2

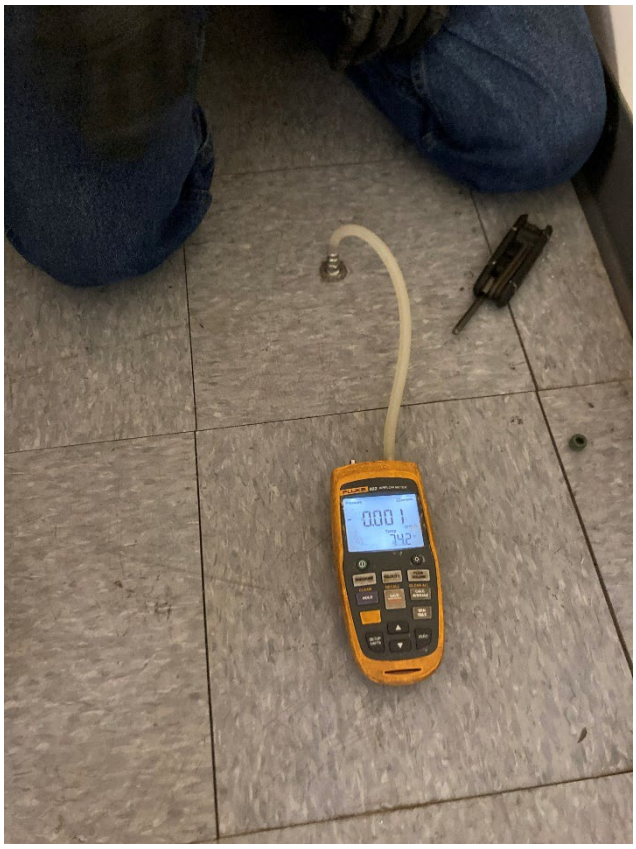


Photograph 9: [5/13/22] View of extraction point VMP-3 inside ACME Grocery Store

Photograph 10: [5/13/22] Vacuum Reading at extraction point VMP-3

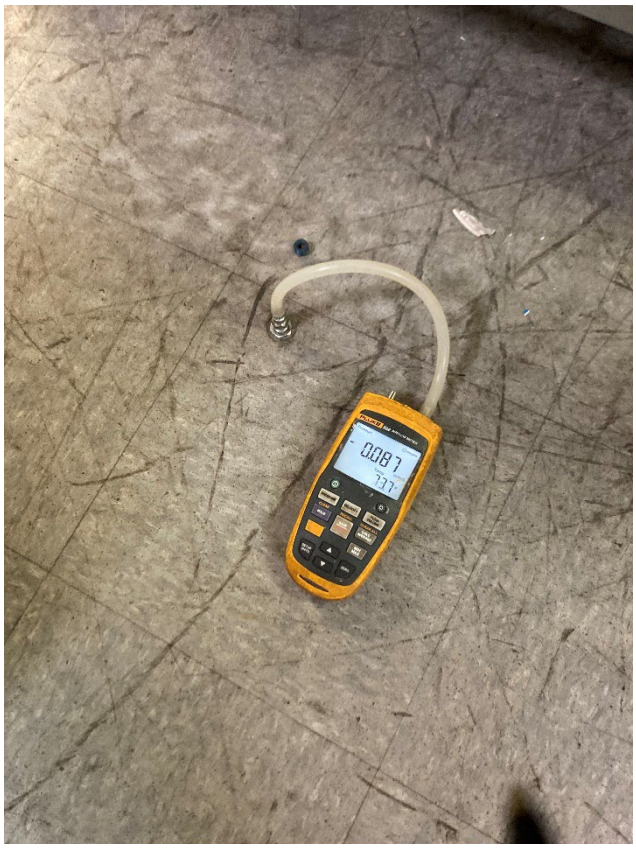
Photograph 11: [5/13/22] View of fan connected to VMP-1 through VMP-3

Photograph 12: [5/13/22] Sampling port located on combined header inside ACME Grocery Store (V-3)



Photograph 13: [5/13/22] Vacuum Reading at monitoring point MP-9 inside post office

Photograph 14: [5/13/22] Vacuum Reading at monitoring point MP-12 inside post office



Photograph 15: [5/13/22] Vacuum Reading at monitoring point MP-13 inside post office

Photograph 16: [5/13/22] Vacuum Reading at extraction point EP-2 inside post office

Photograph 17: [5/13/22] Faulty Obar Systems fan installed at EP-1

Photograph 18: [5/13/22] Maximum PID reading recorded at discharge stack

Photograph 19: [5/13/22] Alarm light for EP-2 indicating fan is on

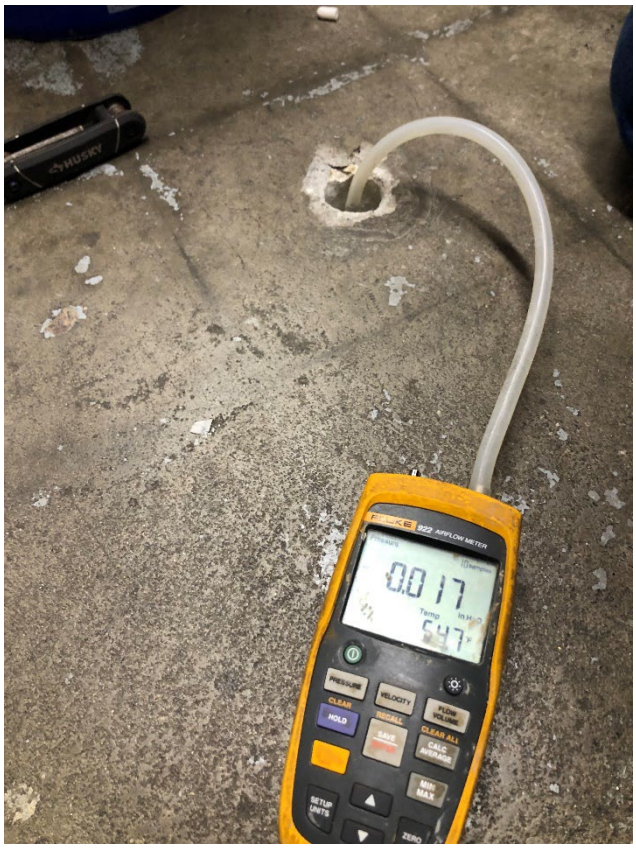
Photograph 20: [5/13/22] RadonAway fan installed at EP-2

Photograph 21: [2/24/23] Obar Systems fan reinstalled at EP-1

Photograph 22: [2/24/23] Obar Systems fan reinstalled at EP-1

Photograph 23: [2/24/23] Vacuum Reading at extraction point EP-1 inside dry cleaner

Photograph 24: [2/24/23] Alarm light for EP-1 indicating fan is on



Photograph 25: [2/24/23] Vacuum Reading at monitoring point MP-4R inside dry cleaner

Photograph 26: [2/24/23] Vacuum Reading at monitoring point MP-5 inside dry cleaner

Photograph 27: [2/24/23] Vacuum Reading at monitoring point MP-6 inside dry cleaner

Photograph 28: [2/24/23] Vacuum Reading at monitoring point MP-7 inside dry cleaner

Photograph 29: [2/24/23] Vacuum Reading at monitoring point MP-8R inside pizzeria

Photograph 30: [2/24/23] Vacuum Reading at monitoring point MP-15 inside dry cleaner

APPENDIX F

Laboratory Analytical Report

ANALYTICAL REPORT

Lab Number:	L2350542
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter Street Islandia, NY 11749-5074
ATTN:	Stephen Loonie
Phone:	(631) 630-2379
Project Name:	SHRUB OAK
Project Number:	Not Specified
Report Date:	09/11/23

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (99110) , NJ (MA015), NY (11627), NC (685), OH (CL106), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708), 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: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2350542-01	MP-6	SOIL_VAPOR	1650 E MAIN ST	08/29/23 16:35	08/30/23
L2350542-02	MP-13	SOIL_VAPOR	1650 E MAIN ST	08/29/23 17:30	08/30/23
L2350542-03	MP-8R	SOIL_VAPOR	1650 E MAIN ST	08/29/23 20:00	08/30/23
L2350542-04	MP-16	SOIL_VAPOR	1650 E MAIN ST	08/29/23 16:25	08/30/23
L2350542-05	MP-6_IA	AIR	1650 E MAIN ST	08/29/23 17:30	08/30/23
L2350542-06	MP-1_IA	AIR	1650 E MAIN ST	08/29/23 17:24	08/30/23
L2350542-07	VMP-2_IA	AIR	1650 E MAIN ST	08/29/23 17:29	08/30/23
L2350542-08	MP-13_IA	AIR	1650 E MAIN ST	08/29/23 18:00	08/30/23
L2350542-09	OA-1	AIR	1650 E MAIN ST	08/29/23 19:40	08/30/23
L2350542-10	MP-8R_IA	AIR	1650 E MAIN ST	08/29/23 20:01	08/30/23
L2350542-11	MP-16_IA	AIR	1650 E MAIN ST	08/29/23 18:33	08/30/23
L2350542-12	DUP_082923	AIR	1650 E MAIN ST	08/29/23 20:02	08/30/23
L2350542-13	UNUSED CAN #2198	SOIL_VAPOR	1650 E MAIN ST		08/30/23
L2350542-14	UNUSED CAN #3119	SOIL_VAPOR	1650 E MAIN ST		08/30/23
L2350542-15	UNUSED CAN #506	SOIL_VAPOR	1650 E MAIN ST		08/30/23

Project Name:	SHRUB OAK	**Lab Number:**	L2350542
Project Number:	Not Specified	**Report Date:**	09/11/23

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: SHRUB OAK
Project Number: Not Specified
Lab Number: L2350542
Report Date: 09/11/23

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on August 25, 2023. The canister certification results are provided as an addendum.

L2350542-01D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2350542-11D: The canister vacuum measured on receipt at the laboratory was > 15 in. Hg. Due to the low pressure in the canister, the sample did not pull the target volume of 250 mL required for a 1X analysis. A dilution factor has been applied as a result of the lower volume analyzed.

L2350542-11D: The canister vacuum measured on receipt at the laboratory was > 15 in. Hg. Due to the low pressure in the canister, the sample did not pull the target volume of 250 mL required for a 1X analysis. A dilution factor has been applied as a result of the lower volume analyzed.

L2350542-11D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

Sample Receipt

The sample designated MP-13 (L2350542-02) failed to collect in the field. The associated flow controller was clogged upon return. The anlaysis of this sample was cancelled.

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: 09/11/23

AIR

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-01 D
Client ID: MP-6
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 16:35
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 09/09/23 06:06
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	18.0	--	ND	89.0	--		90.25
Chloromethane	ND	18.0	--	ND	37.2	--		90.25
Freon-114	ND	18.0	--	ND	126	--		90.25
Vinyl chloride	ND	18.0	--	ND	46.0	--		90.25
1,3-Butadiene	ND	18.0	--	ND	39.8	--		90.25
Bromomethane	ND	18.0	--	ND	69.9	--		90.25
Chloroethane	ND	18.0	--	ND	47.5	--		90.25
Ethanol	ND	451	--	ND	850	--		90.25
Vinyl bromide	ND	18.0	--	ND	78.7	--		90.25
Acetone	ND	90.2	--	ND	214	--		90.25
Trichlorofluoromethane	ND	18.0	--	ND	101	--		90.25
Isopropanol	ND	45.1	--	ND	111	--		90.25
1,1-Dichloroethene	ND	18.0	--	ND	71.4	--		90.25
Tertiary butyl Alcohol	ND	45.1	--	ND	137	--		90.25
Methylene chloride	ND	45.1	--	ND	157	--		90.25
3-Chloropropene	ND	18.0	--	ND	56.3	--		90.25
Carbon disulfide	ND	18.0	--	ND	56.1	--		90.25
Freon-113	ND	18.0	--	ND	138	--		90.25
trans-1,2-Dichloroethene	ND	18.0	--	ND	71.4	--		90.25
1,1-Dichloroethane	ND	18.0	--	ND	72.9	--		90.25
Methyl tert butyl ether	ND	18.0	--	ND	64.9	--		90.25
2-Butanone	ND	45.1	--	ND	133	--		90.25
cis-1,2-Dichloroethene	206	18.0	--	817	71.4	--		90.25

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-01 D
Client ID: MP-6
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 16:35
Date Received: 08/30/23
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								
Ethyl Acetate	ND	45.1	--	ND	163	--		90.25
Chloroform	ND	18.0	--	ND	87.9	--		90.25
Tetrahydrofuran	ND	45.1	--	ND	133	--		90.25
1,2-Dichloroethane	ND	18.0	--	ND	72.9	--		90.25
n-Hexane	ND	18.0	--	ND	63.4	--		90.25
1,1,1-Trichloroethane	ND	18.0	--	ND	98.2	--		90.25
Benzene	ND	18.0	--	ND	57.5	--		90.25
Carbon tetrachloride	ND	18.0	--	ND	113	--		90.25
Cyclohexane	ND	18.0	--	ND	62.0	--		90.25
1,2-Dichloropropane	ND	18.0	--	ND	83.2	--		90.25
Bromodichloromethane	ND	18.0	--	ND	121	--		90.25
1,4-Dioxane	ND	18.0	--	ND	64.9	--		90.25
Trichloroethene	1280	18.0	--	6880	96.7	--		90.25
2,2,4-Trimethylpentane	ND	18.0	--	ND	84.1	--		90.25
Heptane	ND	18.0	--	ND	73.8	--		90.25
cis-1,3-Dichloropropene	ND	18.0	--	ND	81.7	--		90.25
4-Methyl-2-pentanone	ND	45.1	--	ND	185	--		90.25
trans-1,3-Dichloropropene	ND	18.0	--	ND	81.7	--		90.25
1,1,2-Trichloroethane	ND	18.0	--	ND	98.2	--		90.25
Toluene	ND	18.0	--	ND	67.8	--		90.25
2-Hexanone	ND	18.0	--	ND	73.8	--		90.25
Dibromochloromethane	ND	18.0	--	ND	153	--		90.25
1,2-Dibromoethane	ND	18.0	--	ND	138	--		90.25
Tetrachloroethene	8610	18.0	--	58400	122	--		90.25
Chlorobenzene	ND	18.0	--	ND	82.9	--		90.25
Ethylbenzene	ND	18.0	--	ND	78.2	--		90.25

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-01 D
Client ID: MP-6
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 16:35
Date Received: 08/30/23
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								
p/m-Xylene	ND	36.1	--	ND	157	--		90.25
Bromoform	ND	18.0	--	ND	186	--		90.25
Styrene	ND	18.0	--	ND	76.6	--		90.25
1,1,2,2-Tetrachloroethane	ND	18.0	--	ND	124	--		90.25
o-Xylene	ND	18.0	--	ND	78.2	--		90.25
4-Ethyltoluene	ND	18.0	--	ND	88.5	--		90.25
1,3,5-Trimethylbenzene	ND	18.0	--	ND	88.5	--		90.25
1,2,4-Trimethylbenzene	ND	18.0	--	ND	88.5	--		90.25
Benzyl chloride	ND	18.0	--	ND	93.2	--		90.25
1,3-Dichlorobenzene	ND	18.0	--	ND	108	--		90.25
1,4-Dichlorobenzene	ND	18.0	--	ND	108	--		90.25
1,2-Dichlorobenzene	ND	18.0	--	ND	108	--		90.25
1,2,4-Trichlorobenzene	ND	18.0	--	ND	134	--		90.25
Hexachlorobutadiene	ND	18.0	--	ND	192	--		90.25

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	110		60-140
Bromochloromethane	110		60-140
chlorobenzene-d5	107		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-03
Client ID: MP-8R
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:00
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 09/09/23 05:37
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.347	0.200	--	1.72	0.989	--		1
Chloromethane	0.290	0.200	--	0.599	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	168	5.00	--	317	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	13.6	1.00	--	32.3	2.38	--		1
Trichlorofluoromethane	0.227	0.200	--	1.28	1.12	--		1
Isopropanol	3.27	0.500	--	8.04	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	3.40	0.500	--	10.3	1.52	--		1
Methylene chloride	0.602	0.500	--	2.09	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.221	0.200	--	0.688	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	6.29	0.500	--	18.6	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-03
Client ID: MP-8R
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:00
Date Received: 08/30/23
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								
Ethyl Acetate	3.52	0.500	--	12.7	1.80	--		1
Chloroform	4.10	0.200	--	20.0	0.977	--		1
Tetrahydrofuran	0.549	0.500	--	1.62	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.487	0.200	--	1.72	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.744	0.200	--	2.38	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.288	0.200	--	0.991	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	0.267	0.200	--	1.79	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	2.13	0.200	--	11.4	1.07	--		1
2,2,4-Trimethylpentane	0.457	0.200	--	2.13	0.934	--		1
Heptane	0.521	0.200	--	2.14	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	2.71	0.500	--	11.1	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	2.52	0.200	--	9.50	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	5.78	0.200	--	39.2	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.316	0.200	--	1.37	0.869	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-03
Client ID: MP-8R
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:00
Date Received: 08/30/23
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								
p/m-Xylene	1.04	0.400	--	4.52	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	0.394	0.200	--	1.71	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	0.420	0.200	--	2.06	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	107		60-140
Bromochloromethane	106		60-140
chlorobenzene-d5	113		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-05
Client ID: MP-6_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:30
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/09/23 01:26
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.405	0.200	--	2.00	0.989	--		1
Chloromethane	0.556	0.200	--	1.15	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	51.4	5.00	--	96.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.59	1.00	--	18.0	2.38	--		1
Trichlorofluoromethane	0.333	0.200	--	1.87	1.12	--		1
Isopropanol	0.723	0.500	--	1.78	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.657	0.500	--	1.94	1.47	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-05
Client ID: MP-6_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:30
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:

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

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-05
Client ID: MP-6_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:30
Date Received: 08/30/23
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	0.303	0.200	--	1.49	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	95		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-05
Client ID: MP-6_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:30
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/09/23 01:26
Analyst: JMB

	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	0.126	0.020	--	0.793	0.126	--		1
Trichloroethene	2.60	0.020	--	14.0	0.107	--		1
Tetrachloroethene	0.156	0.020	--	1.06	0.136	--		1

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

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-06
Client ID: MP-1_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:24
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/09/23 02:49
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.670	0.200	--	3.31	0.989	--		1
Chloromethane	0.706	0.200	--	1.46	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	236	5.00	--	445	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.61	1.00	--	20.5	2.38	--		1
Trichlorofluoromethane	0.819	0.200	--	4.60	1.12	--		1
Isopropanol	3.82	0.500	--	9.39	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.583	0.500	--	1.72	1.47	--		1
Ethyl Acetate	1.20	0.500	--	4.32	1.80	--		1
Chloroform	0.225	0.200	--	1.10	0.977	--		1
Tetrahydrofuran	0.691	0.500	--	2.04	1.47	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-06
Client ID: MP-1_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:24
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.265	0.200	--	1.09	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.420	0.200	--	1.58	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	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	0.296	0.200	--	1.46	0.983	--		1
1,3,5-Trimethylbenzene	0.436	0.200	--	2.14	0.983	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-06
Client ID: MP-1_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:24
Date Received: 08/30/23
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	1.30	0.200	--	6.39	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	113		60-140
Bromochloromethane	108		60-140
chlorobenzene-d5	101		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-06
Client ID: MP-1_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:24
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/09/23 02:49
Analyst: JMB

	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	0.625	0.020	--	3.93	0.126	--		1
Trichloroethene	0.174	0.020	--	0.935	0.107	--		1
Tetrachloroethene	1.03	0.020	--	6.98	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	105		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	96		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-07
Client ID: VMP-2_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:29
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/09/23 03:24
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.645	0.200	--	3.19	0.989	--		1
Chloromethane	0.656	0.200	--	1.35	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	325	5.00	--	612	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.8	1.00	--	25.7	2.38	--		1
Trichlorofluoromethane	0.827	0.200	--	4.65	1.12	--		1
Isopropanol	6.14	0.500	--	15.1	1.23	--		1
Tertiary butyl Alcohol	0.511	0.500	--	1.55	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.799	0.500	--	2.36	1.47	--		1
Ethyl Acetate	11.0	0.500	--	39.6	1.80	--		1
Chloroform	0.770	0.200	--	3.76	0.977	--		1
Tetrahydrofuran	0.654	0.500	--	1.93	1.47	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-07
Client ID: VMP-2_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:29
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.314	0.200	--	1.29	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.336	0.200	--	1.27	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	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	0.297	0.200	--	1.46	0.983	--		1
1,3,5-Trimethylbenzene	0.408	0.200	--	2.01	0.983	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-07
Client ID: VMP-2_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:29
Date Received: 08/30/23
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	1.32	0.200	--	6.49	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	110		60-140
Bromochloromethane	107		60-140
chlorobenzene-d5	102		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-07
Client ID: VMP-2_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 17:29
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/09/23 03:24
Analyst: JMB

	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	8.60	0.020	--	54.1	0.126	--		1
Trichloroethene	0.235	0.020	--	1.26	0.107	--		1
Tetrachloroethene	0.034	0.020	--	0.231	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	102		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	98		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-08
Client ID: MP-13_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 18:00
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/09/23 03:57
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.345	0.200	--	1.71	0.989	--		1
Chloromethane	0.548	0.200	--	1.13	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	58.2	5.00	--	110	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.8	1.00	--	25.7	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	1.71	0.500	--	4.20	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	2.50	0.500	--	8.69	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-08
Client ID: MP-13_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 18:00
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.908	0.200	--	3.42	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-08
Client ID: MP-13_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 18:00
Date Received: 08/30/23
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	106		60-140
Bromochloromethane	106		60-140
chlorobenzene-d5	100		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-08
Client ID: MP-13_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 18:00
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/09/23 03:57
Analyst: JMB

	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	0.075	0.020	--	0.472	0.126	--		1
Trichloroethene	0.086	0.020	--	0.462	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	100		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	97		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-09
Client ID: OA-1
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 19:40
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/08/23 18:30
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.324	0.200	--	1.60	0.989	--		1
Chloromethane	0.499	0.200	--	1.03	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	14.0	5.00	--	26.4	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.67	1.00	--	13.5	2.38	--		1
Trichlorofluoromethane	0.214	0.200	--	1.20	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	4.34	0.500	--	12.8	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: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-09
Client ID: OA-1
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 19:40
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.222	0.200	--	0.837	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-09
Client ID: OA-1
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 19:40
Date Received: 08/30/23
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	95		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	94		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-09
Client ID: OA-1
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 19:40
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/08/23 18:30
Analyst: JMB

	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	0.083	0.020	--	0.522	0.126	--		1
Trichloroethene	0.166	0.020	--	0.892	0.107	--		1
Tetrachloroethene	0.107	0.020	--	0.726	0.136	--		1

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

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-10
Client ID: MP-8R_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:01
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/09/23 00:03
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.362	0.200	--	1.79	0.989	--		1
Chloromethane	0.534	0.200	--	1.10	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	39.2	5.00	--	73.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	21.2	1.00	--	50.4	2.38	--		1
Trichlorofluoromethane	0.237	0.200	--	1.33	1.12	--		1
Isopropanol	1.21	0.500	--	2.97	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.934	0.500	--	3.24	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.591	0.500	--	1.74	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: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-10
Client ID: MP-8R_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:01
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.316	0.200	--	1.19	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-10
Client ID: MP-8R_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:01
Date Received: 08/30/23
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	92		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	93		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-10
Client ID: MP-8R_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:01
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/09/23 00:03
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.086	0.020	--	0.541	0.126	--		1
Trichloroethene	0.479	0.020	--	2.57	0.107	--		1
Tetrachloroethene	0.122	0.020	--	0.827	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	86		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	89		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-11 D
Client ID: MP-16_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 18:33
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/09/23 00:49
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.374	0.202	--	1.85	0.999	--		1.012
Chloromethane	0.589	0.202	--	1.22	0.417	--		1.012
Freon-114	ND	0.202	--	ND	1.41	--		1.012
1,3-Butadiene	ND	0.202	--	ND	0.447	--		1.012
Bromomethane	ND	0.202	--	ND	0.784	--		1.012
Chloroethane	ND	0.202	--	ND	0.533	--		1.012
Ethanol	557	5.06	--	1050	9.53	--	E	1.012
Vinyl bromide	ND	0.202	--	ND	0.883	--		1.012
Acetone	56.9	1.01	--	135	2.40	--		1.012
Trichlorofluoromethane	0.218	0.202	--	1.23	1.14	--		1.012
Isopropanol	23.8	0.506	--	58.5	1.24	--		1.012
Tertiary butyl Alcohol	ND	0.506	--	ND	1.53	--		1.012
Methylene chloride	ND	0.506	--	ND	1.76	--		1.012
3-Chloropropene	ND	0.202	--	ND	0.632	--		1.012
Carbon disulfide	ND	0.202	--	ND	0.629	--		1.012
Freon-113	ND	0.202	--	ND	1.55	--		1.012
trans-1,2-Dichloroethene	ND	0.202	--	ND	0.801	--		1.012
1,1-Dichloroethane	ND	0.202	--	ND	0.818	--		1.012
Methyl tert butyl ether	ND	0.202	--	ND	0.728	--		1.012
2-Butanone	ND	0.506	--	ND	1.49	--		1.012
Ethyl Acetate	1.60	0.506	--	5.77	1.82	--		1.012
Chloroform	ND	0.202	--	ND	0.986	--		1.012
Tetrahydrofuran	0.678	0.506	--	2.00	1.49	--		1.012

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-11 D
Client ID: MP-16_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 18:33
Date Received: 08/30/23
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	0.202	--	ND	0.818	--		1.012
n-Hexane	ND	0.202	--	ND	0.712	--		1.012
Benzene	ND	0.202	--	ND	0.645	--		1.012
Cyclohexane	ND	0.202	--	ND	0.695	--		1.012
1,2-Dichloropropane	ND	0.202	--	ND	0.934	--		1.012
Bromodichloromethane	ND	0.202	--	ND	1.35	--		1.012
1,4-Dioxane	ND	0.202	--	ND	0.728	--		1.012
2,2,4-Trimethylpentane	ND	0.202	--	ND	0.943	--		1.012
Heptane	ND	0.202	--	ND	0.828	--		1.012
cis-1,3-Dichloropropene	ND	0.202	--	ND	0.917	--		1.012
4-Methyl-2-pentanone	ND	0.506	--	ND	2.07	--		1.012
trans-1,3-Dichloropropene	ND	0.202	--	ND	0.917	--		1.012
1,1,2-Trichloroethane	ND	0.202	--	ND	1.10	--		1.012
Toluene	0.286	0.202	--	1.08	0.761	--		1.012
2-Hexanone	ND	0.202	--	ND	0.828	--		1.012
Dibromochloromethane	ND	0.202	--	ND	1.72	--		1.012
1,2-Dibromoethane	ND	0.202	--	ND	1.55	--		1.012
Chlorobenzene	ND	0.202	--	ND	0.930	--		1.012
Ethylbenzene	ND	0.202	--	ND	0.877	--		1.012
p/m-Xylene	ND	0.405	--	ND	1.76	--		1.012
Bromoform	ND	0.202	--	ND	2.09	--		1.012
Styrene	ND	0.202	--	ND	0.860	--		1.012
1,1,2,2-Tetrachloroethane	ND	0.202	--	ND	1.39	--		1.012
o-Xylene	ND	0.202	--	ND	0.877	--		1.012
4-Ethyltoluene	ND	0.202	--	ND	0.993	--		1.012
1,3,5-Trimethylbenzene	ND	0.202	--	ND	0.993	--		1.012

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-11 D
Client ID: MP-16_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 18:33
Date Received: 08/30/23
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	0.202	--	ND	0.993	--		1.012
Benzyl chloride	ND	0.202	--	ND	1.05	--		1.012
1,3-Dichlorobenzene	ND	0.202	--	ND	1.21	--		1.012
1,4-Dichlorobenzene	ND	0.202	--	ND	1.21	--		1.012
1,2-Dichlorobenzene	ND	0.202	--	ND	1.21	--		1.012
1,2,4-Trichlorobenzene	ND	0.202	--	ND	1.50	--		1.012
Hexachlorobutadiene	ND	0.202	--	ND	2.15	--		1.012

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	102		60-140
chlorobenzene-d5	98		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-11 D
Client ID: MP-16_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 18:33
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/09/23 07:31
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	664	12.5	--	1250	23.6	--		2.5

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	108		60-140
Bromochloromethane	109		60-140
chlorobenzene-d5	105		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-11 D
Client ID: MP-16_IA
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 18:33
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/09/23 00:49
Analyst: JMB

	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	0.052	--		1.012
1,1-Dichloroethene	ND	0.020	--	ND	0.080	--		1.012
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.080	--		1.012
1,1,1-Trichloroethane	ND	0.020	--	ND	0.110	--		1.012
Carbon tetrachloride	0.102	0.020	--	0.642	0.127	--		1.012
Trichloroethene	0.134	0.020	--	0.720	0.109	--		1.012
Tetrachloroethene	0.046	0.020	--	0.309	0.137	--		1.012

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

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-12
Client ID: DUP_082923
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:02
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 09/09/23 05:03
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.343	0.200	--	1.70	0.989	--		1
Chloromethane	0.505	0.200	--	1.04	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	33.7	5.00	--	63.5	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	21.8	1.00	--	51.8	2.38	--		1
Trichlorofluoromethane	0.213	0.200	--	1.20	1.12	--		1
Isopropanol	1.16	0.500	--	2.85	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.716	0.500	--	2.11	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: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-12
Client ID: DUP_082923
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:02
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.320	0.200	--	1.21	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-12
Client ID: DUP_082923
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:02
Date Received: 08/30/23
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	104		60-140
Bromochloromethane	106		60-140
chlorobenzene-d5	102		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

SAMPLE RESULTS

Lab ID: L2350542-12
Client ID: DUP_082923
Sample Location: 1650 E MAIN ST

Date Collected: 08/29/23 20:02
Date Received: 08/30/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 09/09/23 05:03
Analyst: JMB

	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	0.081	0.020	--	0.510	0.126	--		1
Trichloroethene	0.475	0.020	--	2.55	0.107	--		1
Tetrachloroethene	0.120	0.020	--	0.814	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: SHRUB OAK
Project Number: Not Specified
Lab Number: L2350542
Report Date: 09/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 09/08/23 14:31

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): 01,03,05-12 Batch: WG1825394-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: SHRUB OAK
Project Number: Not Specified
Lab Number: L2350542
Report Date: 09/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 09/08/23 14:31

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): 01,03,05-12 Batch: WG1825394-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: SHRUB OAK
Project Number: Not Specified
Lab Number: L2350542
Report Date: 09/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 09/08/23 14:31

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): 01,03,05-12 Batch: WG1825394-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: SHRUB OAK
Project Number: Not Specified
Lab Number: L2350542
Report Date: 09/11/23

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 09/08/23 15:01

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): 05-12 Batch: WG1825395-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,03,05-12 Batch: WG1825394-3								
Dichlorodifluoromethane	87		-		70-130	-		
Chloromethane	96		-		70-130	-		
Freon-114	93		-		70-130	-		
Vinyl chloride	89		-		70-130	-		
1,3-Butadiene	96		-		70-130	-		
Bromomethane	93		-		70-130	-		
Chloroethane	89		-		70-130	-		
Ethanol	111		-		40-160	-		
Vinyl bromide	88		-		70-130	-		
Acetone	89		-		40-160	-		
Trichlorofluoromethane	92		-		70-130	-		
Isopropanol	77		-		40-160	-		
1,1-Dichloroethene	88		-		70-130	-		
Tertiary butyl Alcohol	81		-		70-130	-		
Methylene chloride	94		-		70-130	-		
3-Chloropropene	84		-		70-130	-		
Carbon disulfide	76		-		70-130	-		
Freon-113	88		-		70-130	-		
trans-1,2-Dichloroethene	77		-		70-130	-		
1,1-Dichloroethane	86		-		70-130	-		
Methyl tert butyl ether	85		-		70-130	-		
2-Butanone	83		-		70-130	-		
cis-1,2-Dichloroethene	85		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,03,05-12 Batch: WG1825394-3								
Ethyl Acetate	84		-		70-130	-		
Chloroform	89		-		70-130	-		
Tetrahydrofuran	77		-		70-130	-		
1,2-Dichloroethane	85		-		70-130	-		
n-Hexane	92		-		70-130	-		
1,1,1-Trichloroethane	104		-		70-130	-		
Benzene	94		-		70-130	-		
Carbon tetrachloride	107		-		70-130	-		
Cyclohexane	91		-		70-130	-		
1,2-Dichloropropane	99		-		70-130	-		
Bromodichloromethane	98		-		70-130	-		
1,4-Dioxane	92		-		70-130	-		
Trichloroethene	102		-		70-130	-		
2,2,4-Trimethylpentane	94		-		70-130	-		
Heptane	96		-		70-130	-		
cis-1,3-Dichloropropene	109		-		70-130	-		
4-Methyl-2-pentanone	100		-		70-130	-		
trans-1,3-Dichloropropene	95		-		70-130	-		
1,1,2-Trichloroethane	103		-		70-130	-		
Toluene	91		-		70-130	-		
2-Hexanone	86		-		70-130	-		
Dibromochloromethane	93		-		70-130	-		
1,2-Dibromoethane	89		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,03,05-12 Batch: WG1825394-3								
Tetrachloroethene	88		-		70-130	-		
Chlorobenzene	92		-		70-130	-		
Ethylbenzene	92		-		70-130	-		
p/m-Xylene	96		-		70-130	-		
Bromoform	96		-		70-130	-		
Styrene	90		-		70-130	-		
1,1,2,2-Tetrachloroethane	97		-		70-130	-		
o-Xylene	99		-		70-130	-		
4-Ethyltoluene	89		-		70-130	-		
1,3,5-Trimethylbenzene	100		-		70-130	-		
1,2,4-Trimethylbenzene	105		-		70-130	-		
Benzyl chloride	98		-		70-130	-		
1,3-Dichlorobenzene	96		-		70-130	-		
1,4-Dichlorobenzene	100		-		70-130	-		
1,2-Dichlorobenzene	98		-		70-130	-		
1,2,4-Trichlorobenzene	102		-		70-130	-		
Hexachlorobutadiene	111		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 05-12 Batch: WG1825395-3								
Vinyl chloride	89		-		70-130	-		25
1,1-Dichloroethene	91		-		70-130	-		25
cis-1,2-Dichloroethene	86		-		70-130	-		25
1,1,1-Trichloroethane	107		-		70-130	-		25
Carbon tetrachloride	106		-		70-130	-		25
Trichloroethene	96		-		70-130	-		25
Tetrachloroethene	91		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,03,05-12 QC Batch ID: WG1825394-5 QC Sample: L2350542-05 Client ID: MP-6_IA						
Dichlorodifluoromethane	0.405	0.400	ppbV	1		25
Chloromethane	0.556	0.596	ppbV	7		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	51.4	49.3	ppbV	4		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	7.59	6.80	ppbV	11		25
Trichlorofluoromethane	0.333	0.272	ppbV	20		25
Isopropanol	0.723	0.668	ppbV	8		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,03,05-12 QC Batch ID: WG1825394-5 QC Sample: L2350542-05 Client ID: MP-6_IA						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	0.657	0.678	ppbV	3		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	ND	0.212	ppbV	NC		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,03,05-12 QC Batch ID: WG1825394-5 QC Sample: L2350542-05 Client ID: MP-6_IA						
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.303	0.323	ppbV	6		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 05-12 QC Batch ID: WG1825395-5 QC Sample: L2350542-05 Client ID: MP-6_IA						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.126	0.118	ppbV	7		25
Trichloroethene	2.60	2.65	ppbV	2		25
Tetrachloroethene	0.156	0.171	ppbV	9		25

Project Name: SHRUB OAK

Lab Number: L2350542

Project Number:

Report Date: 09/11/23

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
L2350542-01	MP-6	02098	Flow 3	08/25/23	434429		-	-	-	Pass	-4.5	3.3	-1300
L2350542-01	MP-6	2308	2.7L Can	08/25/23	434429	L2346802-02	Pass	-29.9	-14.7	-	-	-	-
L2350542-02	MP-13	01046	Flow 3	08/25/23	434429		-	-	-	Pass	-4.5	0.0	-200
L2350542-02	MP-13	3191	2.7L Can	08/25/23	434429	L2346802-02	Pass	-29.9	-29.4	-	-	-	-
L2350542-03	MP-8R	01535	Flow 4	08/25/23	434429		-	-	-	Pass	-4.5	4.8	6200
L2350542-03	MP-8R	470	2.7L Can	08/25/23	434429	L2346961-06	Pass	-29.9	-9.1	-	-	-	-
L2350542-04	MP-16	01494	Flow 3	08/25/23	434429		-	-	-	Pass	-4.5	0.0	-200
L2350542-04	MP-16	2075	2.7L Can	08/25/23	434429	L2346802-02	Pass	-29.9	-29.6	-	-	-	-
L2350542-05	MP-6_IA	01793	Flow 3	08/25/23	434429		-	-	-	Pass	-4.5	4.8	6200
L2350542-05	MP-6_IA	2313	2.7L Can	08/25/23	434429	L2346802-02	Pass	-29.9	-8.6	-	-	-	-
L2350542-06	MP-1_IA	01117	Flow 5	08/25/23	434429		-	-	-	Pass	-4.5	4.1	-4300
L2350542-06	MP-1_IA	550	2.7L Can	08/25/23	434429	L2347593-01	Pass	-29.9	-9.9	-	-	-	-
L2350542-07	VMP-2_IA	01646	Flow 4	08/25/23	434429		-	-	-	Pass	-4.5	4.2	-5800
L2350542-07	VMP-2_IA	374	2.7L Can	08/25/23	434429	L2346961-06	Pass	-29.9	-8.2	-	-	-	-
L2350542-08	MP-13_IA	01508	Flow 4	08/25/23	434429		-	-	-	Pass	-4.5	4.7	9200

Project Name: SHRUB OAK

Project Number:

Lab Number: L2350542

Report Date: 09/11/23

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
L2350542-08	MP-13_IA	2822	2.7L Can	08/25/23	434429	L2347593-01	Pass	-29.9	-8.7	-	-	-	-
L2350542-09	OA-1	01119	Flow 4	08/25/23	434429		-	-	-	Pass	-4.5	4.4	-17800
L2350542-09	OA-1	2220	2.7L Can	08/25/23	434429	L2346961-06	Pass	-29.9	-6.1	-	-	-	-
L2350542-10	MP-8R_IA	01585	Flow 4	08/25/23	434429		-	-	-	Pass	-4.5	4.8	6200
L2350542-10	MP-8R_IA	3714	2.7L Can	08/25/23	434429	L2346961-06	Pass	-29.9	-10.9	-	-	-	-
L2350542-11	MP-16_IA	01774	Flow 4	08/25/23	434429		-	-	-	Pass	-4.5	4.2	-5800
L2350542-11	MP-16_IA	2383	2.7L Can	08/25/23	434429	L2346961-06	Pass	-29.9	-12.3	-	-	-	-
L2350542-12	DUP_082923	0286	Flow 5	08/25/23	434429		-	-	-	Pass	-4.5	4.3	-8800
L2350542-12	DUP_082923	3899	2.7L Can	08/25/23	434429	L2346961-06	Pass	-29.9	-7.8	-	-	-	-
L2350542-13	UNUSED CAN #2198	01495	Flow 3	08/25/23	434429		-	-	-	Pass	-4.5	0.9	-300
L2350542-13	UNUSED CAN #2198	2198	2.7L Can	08/25/23	434429	L2346961-06	Pass	-29.9	-29.7	-	-	-	-
L2350542-14	UNUSED CAN #3119	01492	Flow 3	08/25/23	434429		-	-	-	Pass	-4.5	1.3	-363
L2350542-14	UNUSED CAN #3119	3119	2.7L Can	08/25/23	434429	L2346961-06	Pass	-29.9	-28.9	-	-	-	-
L2350542-15	UNUSED CAN #506	01477	Flow 3	08/25/23	434429		-	-	-	Pass	-4.5	0.5	-250
L2350542-15	UNUSED CAN #506	506	2.7L Can	08/25/23	434429	L2346961-06	Pass	-29.9	-29.6	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2346802
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346802-02
Client ID: CAN 129 SHELF 10
Sample Location:

Date Collected: 08/11/23 18:00
Date Received: 08/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/15/23 17:37
Analyst: RAY

	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: L2346802
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346802-02
Client ID: CAN 129 SHELF 10
Sample Location:

Date Collected: 08/11/23 18:00
Date Received: 08/14/23
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: L2346802
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346802-02
Client ID: CAN 129 SHELF 10
Sample Location:

Date Collected: 08/11/23 18:00
Date Received: 08/14/23
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: L2346802
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346802-02
Client ID: CAN 129 SHELF 10
Sample Location:

Date Collected: 08/11/23 18:00
Date Received: 08/14/23
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: L2346802
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346802-02
Client ID: CAN 129 SHELF 10
Sample Location:

Date Collected: 08/11/23 18:00
Date Received: 08/14/23
Field Prep: Not Specified

Sample Depth:

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

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2346802
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346802-02
Client ID: CAN 129 SHELF 10
Sample Location:

Date Collected: 08/11/23 18:00
Date Received: 08/14/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/15/23 17:37
Analyst: RAY

	ppbV			ug/m3				Dilution
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**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:** L2346802

Project Number: CANISTER QC BAT **Report Date:** 09/11/23

Air Canister Certification Results

Lab ID: L2346802-02
Client ID: CAN 129 SHELF 10
Sample Location:

Date Collected: 08/11/23 18:00
Date Received: 08/14/23
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: L2346802
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346802-02
Client ID: CAN 129 SHELF 10
Sample Location:

Date Collected: 08/11/23 18:00
Date Received: 08/14/23
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	95		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2346961
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346961-06
Client ID: CAN 2362 SHELF 9
Sample Location:

Date Collected: 08/15/23 09:00
Date Received: 08/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/17/23 23:01
Analyst: RAY

	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: L2346961
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346961-06
Client ID: CAN 2362 SHELF 9
Sample Location:

Date Collected: 08/15/23 09:00
Date Received: 08/15/23
Field Prep: Not Specified

Sample Depth:

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2346961
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346961-06
Client ID: CAN 2362 SHELF 9
Sample Location:

Date Collected: 08/15/23 09:00
Date Received: 08/15/23
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: L2346961
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346961-06
Client ID: CAN 2362 SHELF 9
Sample Location:

Date Collected: 08/15/23 09:00
Date Received: 08/15/23
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: L2346961
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346961-06
Client ID: CAN 2362 SHELF 9
Sample Location:

Date Collected: 08/15/23 09:00
Date Received: 08/15/23
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	81		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2346961
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346961-06
Client ID: CAN 2362 SHELF 9
Sample Location:

Date Collected: 08/15/23 09:00
Date Received: 08/15/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/17/23 23:01
Analyst: RAY

	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: L2346961
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346961-06
Client ID: CAN 2362 SHELF 9
Sample Location:

Date Collected: 08/15/23 09:00
Date Received: 08/15/23
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: L2346961
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2346961-06
Client ID: CAN 2362 SHELF 9
Sample Location:

Date Collected: 08/15/23 09:00
Date Received: 08/15/23
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	79		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	92		60-140

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

Lab Number: L2347593
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2347593-01
Client ID: CAN 3421 SHELF 1
Sample Location:

Date Collected: 08/16/23 18:00
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/17/23 18:36
Analyst: RAY

	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: L2347593
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2347593-01
Client ID: CAN 3421 SHELF 1
Sample Location:

Date Collected: 08/16/23 18:00
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2347593
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2347593-01
Client ID: CAN 3421 SHELF 1
Sample Location:

Date Collected: 08/16/23 18:00
Date Received: 08/17/23
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: L2347593
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2347593-01
Client ID: CAN 3421 SHELF 1
Sample Location:

Date Collected: 08/16/23 18:00
Date Received: 08/17/23
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: L2347593
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2347593-01
Client ID: CAN 3421 SHELF 1
Sample Location:

Date Collected: 08/16/23 18:00
Date Received: 08/17/23
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	95		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2347593
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2347593-01
Client ID: CAN 3421 SHELF 1
Sample Location:

Date Collected: 08/16/23 18:00
Date Received: 08/17/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/17/23 18:36
Analyst: RAY

	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: L2347593
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2347593-01
Client ID: CAN 3421 SHELF 1
Sample Location:

Date Collected: 08/16/23 18:00
Date Received: 08/17/23
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: L2347593
Report Date: 09/11/23

Air Canister Certification Results

Lab ID: L2347593-01
Client ID: CAN 3421 SHELF 1
Sample Location:

Date Collected: 08/16/23 18:00
Date Received: 08/17/23
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	94		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	96		60-140

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

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(*)
L2350542-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2350542-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		CANCELLED()
L2350542-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2350542-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		CANCELLED()
L2350542-05A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2350542-06A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2350542-07A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2350542-08A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2350542-09A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2350542-10A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2350542-11A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2350542-12A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2350542-13A	Canister - 2.7 Liter	NA	NA			Y	Absent		CLEAN-FEE()
L2350542-14A	Canister - 2.7 Liter	NA	NA			Y	Absent		CLEAN-FEE()
L2350542-15A	Canister - 2.7 Liter	NA	NA			Y	Absent		CLEAN-FEE()

*Values in parentheses indicate holding time in days

Project Name:	SHRUB OAK	**Lab Number:**	L2350542
Project Number:	Not Specified	**Report Date:**	09/11/23

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:	SHRUB OAK	**Lab Number:**	L2350542
Project Number:	Not Specified	**Report Date:**	09/11/23

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:	SHRUB OAK	**Lab Number:**	L2350542
Project Number:	Not Specified	**Report Date:**	09/11/23

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

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 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 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 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 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).
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 2

CHAIN OF CUSTODY

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

Date Rec'd in Lab: 8/31/23

ALPHA Job #: L2350542

Client Information

Client: Roux
Address: 209 N Shafter St
Islandia NY 11749
Phone: 631-232-2600
Fax:
Email: SLoonie@roux-inc.com; CHoelzli@roux-inc.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Shub Oak
Project Location: 1650 E Main St
Project #:
Project Manager: Stephen Loonie
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

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

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH Subset Non-petroleum HCs	Fixed Gases ☐	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
50542-01	MP-6	~~8/24/23~~	835	1635	29.69	-14.30	SV	~~MH~~ SL	2.7L	01048	2308	X					
-02	MP-13		~~835~~ 1021	~~1635~~ 1720	29.69	-29.10	SV	MH		01646	3141	Y					
-03	MP-8R		1154	2000	-29.37	-8.53	SV			470	01535	Y					
-04	MP-16		1125	1625	-29.84	-29.50	SV			2075	01494	Y					
-05	MP-6_IA		9:36	1730	-29.60	-7.90	AA			2313	01743	Y					
-06	MP-1_IA		9:24	1724	-29.80	~~-7.98~~ -9.77	AA			550	01117	X					
-07	VMP-2_IA		929	1729	-29.75	~~-8~~ -8.17	AA			374	01646	Y					
-08	MP-13_IA		1000	1800	-29.50	~~-8~~ -7.98	AA			2822	01508	X					
-09	OA-1		1140	1940	-29.46	-5.50	AA			2220	01119	X					
-10	MP-8R_IA		1200	2001	-29.94	-9.98	AA			3714	01585	X					

*SAMPLE MATRIX CODES

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

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
MPW ALPHA	8/30/23 1645	MPW ALPHA	~~8/30/23~~ 8/30/23 1645
Anthony Green	8/30 2040	Anthony Green	AUG 30 2023 2025
	8/30/23 2345		8/30/23 2345

Serial_No:09112311:40

AIR ANALYSIS

ALPHA ANALYTICAL

CHAIN OF CUSTODY

PAGE 2 OF 2

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

Date Rec'd in Lab: 8/31/23

ALPHA Job #: L2350542

Client Information	
Client:	Roux
Address:	209 Shafter St Islandia NY 11749
Phone:	631 232 2600
Fax:	SLeonie@rouxinc
Email:	CHoelzli@rouxinc.

☐ These samples have been previously analyzed by Alpha

Project Information	
Project Name:	Shrub Oak
Project Location:	1650 E Main St.
Project #:	
Project Manager:	Stephen Leonie
ALPHA Quote #:	

Turn-Around Time

☐ Standard ☐ RUSH *(only confirmed if pre-approved!)*

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:

Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
50542-11	MP-16_IA	~~8/30/23~~ 8/29/23	1037	1833	-29.63	-11.00	AA	MH	2.7	2383	01774	X					
-12	Dup_082923	~~8/30/23~~ 8/29/23	1201	2002	-29.63	-6.43	AA	MH	2.7	3899	0286	X					

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

Container Type

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	8/30/23 1645	MPZN AIPHA	8/30 16:45
MPZN AIPHA	8/30 2020	Anthony Green	AUG 30 2023 2025
Anthony Green	8/30/23 2345	[signature]	8/30/23 2345
[signature]	8/31/23 0430	[signature] AAL	8/31/23 04:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions.
See reverse side.

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

ANALYTICAL REPORT

Lab Number:	L2407504
Client:	Roux Env. Eng. & Geology, DPC 209 Shafter St Islandia, NY 11749
ATTN:	Christian Hoelzli
Phone:	(631) 630-2477
Project Name:	SHRUB OAK CLEANER
Project Number:	3950.0001Y000
Report Date:	02/19/24

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (99110) , NJ (MA015), NY (11627), NC (685), OH (CL106), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708), 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: SHRUB OAK CLEANER
Project Number: 3950.0001Y000

Lab Number: L2407504
Report Date: 02/19/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2407504-01	MP-1	SOIL_VAPOR	SHRUB OAK, NY	02/08/24 15:24	02/09/24
L2407504-02	MP-1-IA	AIR	SHRUB OAK, NY	02/08/24 15:02	02/09/24
L2407504-03	MP-3	SOIL_VAPOR	SHRUB OAK, NY	02/08/24 15:30	02/09/24
L2407504-04	MP-3-IA	AIR	SHRUB OAK, NY	02/08/24 15:29	02/09/24
L2407504-05	MP-13	SOIL_VAPOR	SHRUB OAK, NY	02/08/24 16:43	02/09/24
L2407504-06	MP-13-IA	AIR	SHRUB OAK, NY	02/08/24 16:50	02/09/24
L2407504-07	MP-15	SOIL_VAPOR	SHRUB OAK, NY	02/08/24 16:31	02/09/24
L2407504-08	MP-15-IA	AIR	SHRUB OAK, NY	02/08/24 16:33	02/09/24
L2407504-09	MP-16-IA	AIR	SHRUB OAK, NY	02/08/24 16:38	02/09/24
L2407504-10	OA-1	AIR	SHRUB OAK, NY	02/08/24 15:38	02/09/24
L2407504-11	DUP-02082024	AIR	SHRUB OAK, NY	02/08/24 16:55	02/09/24
L2407504-12	MP-8R	SOIL_VAPOR	SHRUB OAK, NY	02/08/24 16:24	02/09/24
L2407504-13	MP-8R-IA	AIR	SHRUB OAK, NY	02/08/24 17:26	02/09/24
L2407504-14	UNUSED CAN #3023	SOIL_VAPOR	SHRUB OAK, NY		02/09/24
L2407504-15	UNUSED CAN #2018	AIR	SHRUB OAK, NY		02/09/24

Project Name:	SHRUB OAK CLEANER	**Lab Number:**	L2407504
Project Number:	3950.0001Y000	**Report Date:**	02/19/24

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:	SHRUB OAK CLEANER	**Lab Number:**	L2407504
Project Number:	3950.0001Y000	**Report Date:**	02/19/24

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on February 7, 2024. The canister certification data is provided as an addendum.

CS do not have reportable amounts of this analyte.

L2407504-03D, -07 and -09D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2407504-09: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

The WG1885731-3 LCS recovery for carbon tetrachloride (132%), dibromochloromethane (142%) and bromoform (144%), associated with L2407504-11 through -13, is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

WG1885731-3:The quality control sample LCS, associated with WG1885731-3, did not meet the acceptance criteria for the full scan analysis for bromodichloromethane (132%) The associated compound for those samples were reported from the SIM analysis.

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

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 02/19/24

AIR

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-01
Client ID: MP-1
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:24
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/18/24 01:22
Analyst: BJB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.689	0.200	--	3.41	0.989	--		1
Chloromethane	0.651	0.200	--	1.34	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	145	5.00	--	273	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.34	1.00	--	17.4	2.38	--		1
Trichlorofluoromethane	0.687	0.200	--	3.86	1.12	--		1
Isopropanol	17.7	0.500	--	43.5	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.507	0.500	--	1.50	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-01
Client ID: MP-1
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:24
Date Received: 02/09/24
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								
Ethyl Acetate	5.96	0.500	--	21.5	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	0.685	0.200	--	2.41	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.677	0.200	--	2.16	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	0.297	0.200	--	1.39	0.934	--		1
Heptane	0.784	0.200	--	3.21	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	3.60	0.200	--	13.6	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.492	0.200	--	2.14	0.869	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-01
Client ID: MP-1
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:24
Date Received: 02/09/24
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								
p/m-Xylene	2.11	0.400	--	9.16	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	0.771	0.200	--	3.35	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.241	0.200	--	1.18	0.983	--		1
1,2,4-Trimethylbenzene	0.880	0.200	--	4.33	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	97		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-02
Client ID: MP-1-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:02
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 00:56
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.835	0.200	--	4.13	0.989	--		1
Chloromethane	0.662	0.200	--	1.37	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	211	5.00	--	398	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.83	1.00	--	13.8	2.38	--		1
Trichlorofluoromethane	0.636	0.200	--	3.57	1.12	--		1
Isopropanol	2.28	0.500	--	5.60	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.515	0.500	--	1.79	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	1.68	0.500	--	6.05	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-02
Client ID: MP-1-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:02
Date Received: 02/09/24
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	0.201	0.200	--	0.708	0.705	--		1
Benzene	0.339	0.200	--	1.08	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	0.211	0.200	--	0.865	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.376	0.200	--	1.42	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-02
Client ID: MP-1-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:02
Date Received: 02/09/24
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	74		60-140
Bromochloromethane	78		60-140
chlorobenzene-d5	83		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-02
Client ID: MP-1-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:02
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/16/24 00:56
Analyst: JMB

	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	0.182	0.020	--	1.14	0.126	--		1
Trichloroethene	0.318	0.020	--	1.71	0.107	--		1
Tetrachloroethene	0.029	0.020	--	0.197	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	74		60-140
bromochloromethane	79		60-140
chlorobenzene-d5	84		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-03 D
Client ID: MP-3
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:30
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 09:16
Analyst: JMB

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	9.35	--	ND	46.2	--		46.73
Chloromethane	ND	9.35	--	ND	19.3	--		46.73
Freon-114	ND	9.35	--	ND	65.4	--		46.73
Vinyl chloride	ND	9.35	--	ND	23.9	--		46.73
1,3-Butadiene	ND	9.35	--	ND	20.7	--		46.73
Bromomethane	ND	9.35	--	ND	36.3	--		46.73
Chloroethane	ND	9.35	--	ND	24.7	--		46.73
Ethanol	ND	234	--	ND	441	--		46.73
Vinyl bromide	ND	9.35	--	ND	40.9	--		46.73
Acetone	ND	46.7	--	ND	111	--		46.73
Trichlorofluoromethane	ND	9.35	--	ND	52.5	--		46.73
Isopropanol	24.0	23.4	--	59.0	57.5	--		46.73
1,1-Dichloroethene	ND	9.35	--	ND	37.1	--		46.73
Tertiary butyl Alcohol	ND	23.4	--	ND	70.9	--		46.73
Methylene chloride	ND	23.4	--	ND	81.3	--		46.73
3-Chloropropene	ND	9.35	--	ND	29.3	--		46.73
Carbon disulfide	ND	9.35	--	ND	29.1	--		46.73
Freon-113	ND	9.35	--	ND	71.7	--		46.73
trans-1,2-Dichloroethene	124	9.35	--	492	37.1	--		46.73
1,1-Dichloroethane	ND	9.35	--	ND	37.8	--		46.73
Methyl tert butyl ether	ND	9.35	--	ND	33.7	--		46.73
2-Butanone	ND	23.4	--	ND	69.0	--		46.73
cis-1,2-Dichloroethene	2750	9.35	--	10900	37.1	--		46.73

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-03 D
Client ID: MP-3
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:30
Date Received: 02/09/24
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								
Ethyl Acetate	ND	23.4	--	ND	84.3	--		46.73
Chloroform	ND	9.35	--	ND	45.7	--		46.73
Tetrahydrofuran	ND	23.4	--	ND	69.0	--		46.73
1,2-Dichloroethane	ND	9.35	--	ND	37.8	--		46.73
n-Hexane	ND	9.35	--	ND	33.0	--		46.73
1,1,1-Trichloroethane	ND	9.35	--	ND	51.0	--		46.73
Benzene	ND	9.35	--	ND	29.9	--		46.73
Carbon tetrachloride	ND	9.35	--	ND	58.8	--		46.73
Cyclohexane	ND	9.35	--	ND	32.2	--		46.73
1,2-Dichloropropane	ND	9.35	--	ND	43.2	--		46.73
Bromodichloromethane	ND	9.35	--	ND	62.6	--		46.73
1,4-Dioxane	ND	9.35	--	ND	33.7	--		46.73
Trichloroethene	2340	9.35	--	12600	50.2	--		46.73
2,2,4-Trimethylpentane	9.58	9.35	--	44.7	43.7	--		46.73
Heptane	ND	9.35	--	ND	38.3	--		46.73
cis-1,3-Dichloropropene	ND	9.35	--	ND	42.4	--		46.73
4-Methyl-2-pentanone	ND	23.4	--	ND	95.9	--		46.73
trans-1,3-Dichloropropene	ND	9.35	--	ND	42.4	--		46.73
1,1,2-Trichloroethane	ND	9.35	--	ND	51.0	--		46.73
Toluene	ND	9.35	--	ND	35.2	--		46.73
2-Hexanone	ND	9.35	--	ND	38.3	--		46.73
Dibromochloromethane	ND	9.35	--	ND	79.7	--		46.73
1,2-Dibromoethane	ND	9.35	--	ND	71.9	--		46.73
Tetrachloroethene	2990	9.35	--	20300	63.4	--		46.73
Chlorobenzene	ND	9.35	--	ND	43.1	--		46.73
Ethylbenzene	ND	9.35	--	ND	40.6	--		46.73

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-03 D
Client ID: MP-3
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:30
Date Received: 02/09/24
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								
p/m-Xylene	ND	18.7	--	ND	81.2	--		46.73
Bromoform	ND	9.35	--	ND	96.7	--		46.73
Styrene	ND	9.35	--	ND	39.8	--		46.73
1,1,2,2-Tetrachloroethane	ND	9.35	--	ND	64.2	--		46.73
o-Xylene	ND	9.35	--	ND	40.6	--		46.73
4-Ethyltoluene	ND	9.35	--	ND	46.0	--		46.73
1,3,5-Trimethylbenzene	ND	9.35	--	ND	46.0	--		46.73
1,2,4-Trimethylbenzene	ND	9.35	--	ND	46.0	--		46.73
Benzyl chloride	ND	9.35	--	ND	48.4	--		46.73
1,3-Dichlorobenzene	ND	9.35	--	ND	56.2	--		46.73
1,4-Dichlorobenzene	ND	9.35	--	ND	56.2	--		46.73
1,2-Dichlorobenzene	ND	9.35	--	ND	56.2	--		46.73
1,2,4-Trichlorobenzene	ND	9.35	--	ND	69.4	--		46.73
Hexachlorobutadiene	ND	9.35	--	ND	99.7	--		46.73

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	80		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	87		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-04
Client ID: MP-3-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:29
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 01:37
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.809	0.200	--	4.00	0.989	--		1
Chloromethane	0.673	0.200	--	1.39	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	221	5.00	--	416	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.55	1.00	--	13.2	2.38	--		1
Trichlorofluoromethane	0.651	0.200	--	3.66	1.12	--		1
Isopropanol	2.21	0.500	--	5.43	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	1.46	0.500	--	5.26	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-04
Client ID: MP-3-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:29
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.309	0.200	--	0.987	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	0.216	0.200	--	0.885	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.279	0.200	--	1.05	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-04
Client ID: MP-3-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:29
Date Received: 02/09/24
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	77		60-140
Bromochloromethane	81		60-140
chlorobenzene-d5	86		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-04
Client ID: MP-3-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:29
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/16/24 01:37
Analyst: JMB

	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	0.166	0.020	--	1.04	0.126	--		1
Trichloroethene	0.213	0.020	--	1.14	0.107	--		1
Tetrachloroethene	0.022	0.020	--	0.149	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	78		60-140
bromochloromethane	82		60-140
chlorobenzene-d5	87		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-05
Client ID: MP-13
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:43
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 06:16
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.531	0.200	--	2.63	0.989	--		1
Chloromethane	0.436	0.200	--	0.900	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	196	5.00	--	369	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	17.1	1.00	--	40.6	2.38	--		1
Trichlorofluoromethane	0.206	0.200	--	1.16	1.12	--		1
Isopropanol	49.7	0.500	--	122	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	0.665	0.500	--	2.02	1.52	--		1
Methylene chloride	0.640	0.500	--	2.22	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	1.30	0.500	--	3.83	1.47	--		1
cis-1,2-Dichloroethene	0.707	0.200	--	2.80	0.793	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-05
Client ID: MP-13
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:43
Date Received: 02/09/24
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								
Ethyl Acetate	4.37	0.500	--	15.7	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	1.12	0.500	--	3.30	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	1.31	0.200	--	4.62	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.964	0.200	--	3.08	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.493	0.200	--	1.70	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	0.485	0.200	--	2.61	1.07	--		1
2,2,4-Trimethylpentane	0.667	0.200	--	3.12	0.934	--		1
Heptane	1.26	0.200	--	5.16	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	3.48	0.200	--	13.1	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	0.337	0.200	--	2.29	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.526	0.200	--	2.28	0.869	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-05
Client ID: MP-13
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:43
Date Received: 02/09/24
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								
p/m-Xylene	2.19	0.400	--	9.51	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	0.780	0.200	--	3.39	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.205	0.200	--	1.01	0.983	--		1
1,2,4-Trimethylbenzene	0.829	0.200	--	4.08	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	90		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-06
Client ID: MP-13-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:50
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 02:17
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.553	0.200	--	2.73	0.989	--		1
Chloromethane	0.621	0.200	--	1.28	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	54.5	5.00	--	103	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.20	1.00	--	9.98	2.38	--		1
Trichlorofluoromethane	0.208	0.200	--	1.17	1.12	--		1
Isopropanol	2.17	0.500	--	5.33	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-06
Client ID: MP-13-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:50
Date Received: 02/09/24
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	0.774	0.200	--	2.73	0.705	--		1
Benzene	0.488	0.200	--	1.56	0.639	--		1
Cyclohexane	0.241	0.200	--	0.830	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	0.308	0.200	--	1.44	0.934	--		1
Heptane	0.301	0.200	--	1.23	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.708	0.200	--	2.67	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	0.403	0.400	--	1.75	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-06
Client ID: MP-13-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:50
Date Received: 02/09/24
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	79		60-140
Bromochloromethane	82		60-140
chlorobenzene-d5	86		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-06
Client ID: MP-13-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:50
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/16/24 02:17
Analyst: JMB

	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	0.083	0.020	--	0.522	0.126	--		1
Trichloroethene	0.385	0.020	--	2.07	0.107	--		1
Tetrachloroethene	0.024	0.020	--	0.163	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	80		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	87		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-07
Client ID: MP-15
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:31
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 06:52
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	2.79	--	ND	13.8	--		13.96
Chloromethane	ND	2.79	--	ND	5.76	--		13.96
Freon-114	ND	2.79	--	ND	19.5	--		13.96
Vinyl chloride	ND	2.79	--	ND	7.13	--		13.96
1,3-Butadiene	ND	2.79	--	ND	6.17	--		13.96
Bromomethane	ND	2.79	--	ND	10.8	--		13.96
Chloroethane	ND	2.79	--	ND	7.36	--		13.96
Ethanol	193	69.8	--	364	132	--		13.96
Vinyl bromide	ND	2.79	--	ND	12.2	--		13.96
Acetone	ND	14.0	--	ND	33.3	--		13.96
Trichlorofluoromethane	ND	2.79	--	ND	15.7	--		13.96
Isopropanol	42.3	6.98	--	104	17.2	--		13.96
1,1-Dichloroethene	ND	2.79	--	ND	11.1	--		13.96
Tertiary butyl Alcohol	ND	6.98	--	ND	21.2	--		13.96
Methylene chloride	ND	6.98	--	ND	24.2	--		13.96
3-Chloropropene	ND	2.79	--	ND	8.73	--		13.96
Carbon disulfide	ND	2.79	--	ND	8.69	--		13.96
Freon-113	ND	2.79	--	ND	21.4	--		13.96
trans-1,2-Dichloroethene	202	2.79	--	801	11.1	--		13.96
1,1-Dichloroethane	ND	2.79	--	ND	11.3	--		13.96
Methyl tert butyl ether	ND	2.79	--	ND	10.1	--		13.96
2-Butanone	ND	6.98	--	ND	20.6	--		13.96
cis-1,2-Dichloroethene	1250	2.79	--	4960	11.1	--		13.96

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-07
Client ID: MP-15
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:31
Date Received: 02/09/24
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								
Ethyl Acetate	ND	6.98	--	ND	25.2	--		13.96
Chloroform	13.2	2.79	--	64.5	13.6	--		13.96
Tetrahydrofuran	ND	6.98	--	ND	20.6	--		13.96
1,2-Dichloroethane	ND	2.79	--	ND	11.3	--		13.96
n-Hexane	ND	2.79	--	ND	9.83	--		13.96
1,1,1-Trichloroethane	ND	2.79	--	ND	15.2	--		13.96
Benzene	ND	2.79	--	ND	8.91	--		13.96
Carbon tetrachloride	ND	2.79	--	ND	17.6	--		13.96
Cyclohexane	ND	2.79	--	ND	9.60	--		13.96
1,2-Dichloropropane	ND	2.79	--	ND	12.9	--		13.96
Bromodichloromethane	ND	2.79	--	ND	18.7	--		13.96
1,4-Dioxane	ND	2.79	--	ND	10.1	--		13.96
Trichloroethene	157	2.79	--	844	15.0	--		13.96
2,2,4-Trimethylpentane	ND	2.79	--	ND	13.0	--		13.96
Heptane	ND	2.79	--	ND	11.4	--		13.96
cis-1,3-Dichloropropene	ND	2.79	--	ND	12.7	--		13.96
4-Methyl-2-pentanone	ND	6.98	--	ND	28.6	--		13.96
trans-1,3-Dichloropropene	ND	2.79	--	ND	12.7	--		13.96
1,1,2-Trichloroethane	ND	2.79	--	ND	15.2	--		13.96
Toluene	3.88	2.79	--	14.6	10.5	--		13.96
2-Hexanone	ND	2.79	--	ND	11.4	--		13.96
Dibromochloromethane	ND	2.79	--	ND	23.8	--		13.96
1,2-Dibromoethane	ND	2.79	--	ND	21.4	--		13.96
Tetrachloroethene	63.6	2.79	--	431	18.9	--		13.96
Chlorobenzene	ND	2.79	--	ND	12.8	--		13.96
Ethylbenzene	ND	2.79	--	ND	12.1	--		13.96

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-07
Client ID: MP-15
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:31
Date Received: 02/09/24
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								
p/m-Xylene	ND	5.58	--	ND	24.2	--		13.96
Bromoform	ND	2.79	--	ND	28.8	--		13.96
Styrene	ND	2.79	--	ND	11.9	--		13.96
1,1,2,2-Tetrachloroethane	ND	2.79	--	ND	19.2	--		13.96
o-Xylene	ND	2.79	--	ND	12.1	--		13.96
4-Ethyltoluene	ND	2.79	--	ND	13.7	--		13.96
1,3,5-Trimethylbenzene	ND	2.79	--	ND	13.7	--		13.96
1,2,4-Trimethylbenzene	ND	2.79	--	ND	13.7	--		13.96
Benzyl chloride	ND	2.79	--	ND	14.4	--		13.96
1,3-Dichlorobenzene	ND	2.79	--	ND	16.8	--		13.96
1,4-Dichlorobenzene	ND	2.79	--	ND	16.8	--		13.96
1,2-Dichlorobenzene	ND	2.79	--	ND	16.8	--		13.96
1,2,4-Trichlorobenzene	ND	2.79	--	ND	20.7	--		13.96
Hexachlorobutadiene	ND	2.79	--	ND	29.8	--		13.96

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	93		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-08
Client ID: MP-15-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:33
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 02:58
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.563	0.200	--	2.78	0.989	--		1
Chloromethane	0.602	0.200	--	1.24	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	28.6	5.00	--	53.9	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.76	1.00	--	6.56	2.38	--		1
Trichlorofluoromethane	0.211	0.200	--	1.19	1.12	--		1
Isopropanol	0.600	0.500	--	1.47	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-08
Client ID: MP-15-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:33
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.203	0.200	--	0.649	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-08
Client ID: MP-15-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:33
Date Received: 02/09/24
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	78		60-140
Bromochloromethane	82		60-140
chlorobenzene-d5	84		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-08
Client ID: MP-15-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:33
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/16/24 02:58
Analyst: JMB

	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	0.085	0.020	--	0.535	0.126	--		1
Trichloroethene	1.93	0.020	--	10.4	0.107	--		1
Tetrachloroethene	0.026	0.020	--	0.176	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	78		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	85		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-09
Client ID: MP-16-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:38
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 03:38
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.553	0.200	--	2.73	0.989	--		1
Chloromethane	0.636	0.200	--	1.31	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	525	5.00	--	989	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	13.9	1.00	--	33.0	2.38	--		1
Trichlorofluoromethane	0.216	0.200	--	1.21	1.12	--		1
Isopropanol	19.4	0.500	--	47.7	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-09
Client ID: MP-16-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:38
Date Received: 02/09/24
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	0.270	0.200	--	0.952	0.705	--		1
Benzene	0.318	0.200	--	1.02	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.384	0.200	--	1.45	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-09
Client ID: MP-16-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:38
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	86		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-09
Client ID: MP-16-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:38
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/16/24 03:38
Analyst: JMB

	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	0.082	0.020	--	0.516	0.126	--		1
Trichloroethene	0.204	0.020	--	1.10	0.107	--		1
Tetrachloroethene	0.031	0.020	--	0.210	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	81		60-140
bromochloromethane	85		60-140
chlorobenzene-d5	87		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-09 D
Client ID: MP-16-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:38
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 08:01
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	599	50.0	--	1130	94.2	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	80		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	84		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-10
Client ID: OA-1
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:38
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 04:59
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.548	0.200	--	2.71	0.989	--		1
Chloromethane	0.584	0.200	--	1.21	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	17.1	5.00	--	32.2	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.92	1.00	--	4.56	2.38	--		1
Trichlorofluoromethane	0.205	0.200	--	1.15	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-10
Client ID: OA-1
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:38
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.238	0.200	--	0.760	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.236	0.200	--	0.889	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-10
Client ID: OA-1
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:38
Date Received: 02/09/24
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	79		60-140
Bromochloromethane	82		60-140
chlorobenzene-d5	85		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-10
Client ID: OA-1
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 15:38
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/16/24 04:59
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.062	0.020	--	0.246	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.086	0.020	--	0.541	0.126	--		1
Trichloroethene	0.383	0.020	--	2.06	0.107	--		1
Tetrachloroethene	0.070	0.020	--	0.475	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	79		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	86		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-11
Client ID: DUP-02082024
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:55
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 01:34
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.510	0.200	--	2.52	0.989	--		1
Chloromethane	0.543	0.200	--	1.12	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	63.7	5.00	--	120	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	11.3	1.00	--	26.8	2.38	--		1
Trichlorofluoromethane	0.231	0.200	--	1.30	1.12	--		1
Isopropanol	6.65	0.500	--	16.3	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-11
Client ID: DUP-02082024
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:55
Date Received: 02/09/24
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	0.618	0.200	--	2.18	0.705	--		1
Benzene	0.480	0.200	--	1.53	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	0.252	0.200	--	1.18	0.934	--		1
Heptane	0.261	0.200	--	1.07	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.954	0.200	--	3.60	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	0.623	0.400	--	2.71	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	0.239	0.200	--	1.04	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: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-11
Client ID: DUP-02082024
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:55
Date Received: 02/09/24
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	0.222	0.200	--	1.09	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

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

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-11
Client ID: DUP-02082024
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:55
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/16/24 01:34
Analyst: JMB

	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	0.077	0.020	--	0.484	0.126	--		1
Trichloroethene	0.393	0.020	--	2.11	0.107	--		1
Tetrachloroethene	0.036	0.020	--	0.244	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	101		60-140
bromochloromethane	102		60-140
chlorobenzene-d5	102		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-12
Client ID: MP-8R
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:24
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/16/24 02:53
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.576	0.200	--	2.85	0.989	--		1
Chloromethane	0.269	0.200	--	0.555	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	191	5.00	--	360	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.2	1.00	--	29.0	2.38	--		1
Trichlorofluoromethane	0.255	0.200	--	1.43	1.12	--		1
Isopropanol	68.8	0.500	--	169	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.10	0.500	--	3.24	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-12
Client ID: MP-8R
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:24
Date Received: 02/09/24
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								
Ethyl Acetate	1.67	0.500	--	6.02	1.80	--		1
Chloroform	0.881	0.200	--	4.30	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.940	0.200	--	3.31	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.669	0.200	--	2.14	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	0.379	0.200	--	1.30	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	0.719	0.200	--	3.86	1.07	--		1
2,2,4-Trimethylpentane	0.672	0.200	--	3.14	0.934	--		1
Heptane	1.19	0.200	--	4.88	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	2.13	0.200	--	8.03	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	0.442	0.200	--	3.00	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.353	0.200	--	1.53	0.869	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-12
Client ID: MP-8R
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 16:24
Date Received: 02/09/24
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								
p/m-Xylene	1.34	0.400	--	5.82	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	0.501	0.200	--	2.18	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	0.514	0.200	--	2.53	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	95		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-13
Client ID: MP-8R-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 17:26
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/15/24 22:18
Analyst: JMB

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.517	0.200	--	2.56	0.989	--		1
Chloromethane	0.571	0.200	--	1.18	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	24.2	5.00	--	45.6	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.25	1.00	--	7.72	2.38	--		1
Trichlorofluoromethane	0.254	0.200	--	1.43	1.12	--		1
Isopropanol	0.909	0.500	--	2.23	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-13
Client ID: MP-8R-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 17:26
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.231	0.200	--	0.738	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.332	0.200	--	1.25	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-13
Client ID: MP-8R-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 17:26
Date Received: 02/09/24
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	93		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	96		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

SAMPLE RESULTS

Lab ID: L2407504-13
Client ID: MP-8R-IA
Sample Location: SHRUB OAK, NY

Date Collected: 02/08/24 17:26
Date Received: 02/09/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/15/24 22:18
Analyst: JMB

	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	0.079	0.020	--	0.497	0.126	--		1
Trichloroethene	1.14	0.020	--	6.13	0.107	--		1
Tetrachloroethene	0.085	0.020	--	0.576	0.136	--		1

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

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/24 15:43

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): 02-10 Batch: WG1885725-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/24 15:43

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): 02-10 Batch: WG1885725-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/24 15:43

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): 02-10 Batch: WG1885725-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 02/15/24 16:23

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): 02,04,06,08-10 Batch: WG1885726-4								
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: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/24 19:01

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): 11-13 Batch: WG1885731-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/24 19:01

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): 11-13 Batch: WG1885731-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/24 19:01

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): 11-13 Batch: WG1885731-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 02/15/24 19:40

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): 11,13 Batch: WG1885733-4								
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: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/17/24 16:19

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 Batch: WG1886410-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/17/24 16:19

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 Batch: WG1886410-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000
Lab Number: L2407504
Report Date: 02/19/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/17/24 16:19

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 Batch: WG1886410-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: SHRUB OAK CLEANER

Project Number: 3950.0001Y000

Lab Number: L2407504

Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-10 Batch: WG1885725-3								
Dichlorodifluoromethane	98		-		70-130	-		
Chloromethane	101		-		70-130	-		
Freon-114	113		-		70-130	-		
Vinyl chloride	112		-		70-130	-		
1,3-Butadiene	120		-		70-130	-		
Bromomethane	114		-		70-130	-		
Chloroethane	109		-		70-130	-		
Ethanol	116		-		40-160	-		
Vinyl bromide	97		-		70-130	-		
Acetone	87		-		40-160	-		
Trichlorofluoromethane	97		-		70-130	-		
Isopropanol	78		-		40-160	-		
1,1-Dichloroethene	97		-		70-130	-		
Tertiary butyl Alcohol	101		-		70-130	-		
Methylene chloride	98		-		70-130	-		
3-Chloropropene	92		-		70-130	-		
Carbon disulfide	86		-		70-130	-		
Freon-113	89		-		70-130	-		
trans-1,2-Dichloroethene	91		-		70-130	-		
1,1-Dichloroethane	88		-		70-130	-		
Methyl tert butyl ether	90		-		70-130	-		
2-Butanone	86		-		70-130	-		
cis-1,2-Dichloroethene	92		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000

Lab Number: L2407504
Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-10 Batch: WG1885725-3								
Ethyl Acetate	97		-		70-130	-		
Chloroform	99		-		70-130	-		
Tetrahydrofuran	85		-		70-130	-		
1,2-Dichloroethane	96		-		70-130	-		
n-Hexane	116		-		70-130	-		
1,1,1-Trichloroethane	111		-		70-130	-		
Benzene	94		-		70-130	-		
Carbon tetrachloride	118		-		70-130	-		
Cyclohexane	114		-		70-130	-		
1,2-Dichloropropane	100		-		70-130	-		
Bromodichloromethane	125		-		70-130	-		
1,4-Dioxane	114		-		70-130	-		
Trichloroethene	107		-		70-130	-		
2,2,4-Trimethylpentane	113		-		70-130	-		
Heptane	108		-		70-130	-		
cis-1,3-Dichloropropene	106		-		70-130	-		
4-Methyl-2-pentanone	111		-		70-130	-		
trans-1,3-Dichloropropene	110		-		70-130	-		
1,1,2-Trichloroethane	104		-		70-130	-		
Toluene	84		-		70-130	-		
2-Hexanone	92		-		70-130	-		
Dibromochloromethane	110		-		70-130	-		
1,2-Dibromoethane	84		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000

Lab Number: L2407504
Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-10 Batch: WG1885725-3								
Tetrachloroethene	87		-		70-130	-		
Chlorobenzene	86		-		70-130	-		
Ethylbenzene	87		-		70-130	-		
p/m-Xylene	92		-		70-130	-		
Bromoform	114		-		70-130	-		
Styrene	88		-		70-130	-		
1,1,2,2-Tetrachloroethane	98		-		70-130	-		
o-Xylene	96		-		70-130	-		
4-Ethyltoluene	96		-		70-130	-		
1,3,5-Trimethylbenzene	94		-		70-130	-		
1,2,4-Trimethylbenzene	99		-		70-130	-		
Benzyl chloride	110		-		70-130	-		
1,3-Dichlorobenzene	101		-		70-130	-		
1,4-Dichlorobenzene	101		-		70-130	-		
1,2-Dichlorobenzene	97		-		70-130	-		
1,2,4-Trichlorobenzene	103		-		70-130	-		
Hexachlorobutadiene	96		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SHRUB OAK CLEANER

Project Number: 3950.0001Y000

Lab Number: L2407504

Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02,04,06,08-10 Batch: WG1885726-3								
Vinyl chloride	108		-		70-130	-		25
1,1-Dichloroethene	93		-		70-130	-		25
cis-1,2-Dichloroethene	90		-		70-130	-		25
1,1,1-Trichloroethane	108		-		70-130	-		25
Carbon tetrachloride	116		-		70-130	-		25
Trichloroethene	107		-		70-130	-		25
Tetrachloroethene	84		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: SHRUB OAK CLEANER

Project Number: 3950.0001Y000

Lab Number: L2407504

Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 11-13 Batch: WG1885731-3								
Dichlorodifluoromethane	120		-		70-130	-		
Chloromethane	96		-		70-130	-		
Freon-114	117		-		70-130	-		
Vinyl chloride	109		-		70-130	-		
1,3-Butadiene	106		-		70-130	-		
Bromomethane	115		-		70-130	-		
Chloroethane	112		-		70-130	-		
Ethanol	114		-		40-160	-		
Vinyl bromide	110		-		70-130	-		
Acetone	107		-		40-160	-		
Trichlorofluoromethane	129		-		70-130	-		
Isopropanol	88		-		40-160	-		
1,1-Dichloroethene	121		-		70-130	-		
Tertiary butyl Alcohol	100		-		70-130	-		
Methylene chloride	125		-		70-130	-		
3-Chloropropene	116		-		70-130	-		
Carbon disulfide	108		-		70-130	-		
Freon-113	120		-		70-130	-		
trans-1,2-Dichloroethene	116		-		70-130	-		
1,1-Dichloroethane	116		-		70-130	-		
Methyl tert butyl ether	104		-		70-130	-		
2-Butanone	112		-		70-130	-		
cis-1,2-Dichloroethene	117		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000

Lab Number: L2407504
Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 11-13 Batch: WG1885731-3								
Ethyl Acetate	120		-		70-130	-		
Chloroform	121		-		70-130	-		
Tetrahydrofuran	110		-		70-130	-		
1,2-Dichloroethane	125		-		70-130	-		
n-Hexane	115		-		70-130	-		
1,1,1-Trichloroethane	120		-		70-130	-		
Benzene	105		-		70-130	-		
Carbon tetrachloride	**132**	Q	-		70-130	-		
Cyclohexane	114		-		70-130	-		
1,2-Dichloropropane	114		-		70-130	-		
Bromodichloromethane	**132**	Q	-		70-130	-		
1,4-Dioxane	117		-		70-130	-		
Trichloroethene	117		-		70-130	-		
2,2,4-Trimethylpentane	112		-		70-130	-		
Heptane	114		-		70-130	-		
cis-1,3-Dichloropropene	105		-		70-130	-		
4-Methyl-2-pentanone	114		-		70-130	-		
trans-1,3-Dichloropropene	107		-		70-130	-		
1,1,2-Trichloroethane	117		-		70-130	-		
Toluene	107		-		70-130	-		
2-Hexanone	107		-		70-130	-		
Dibromochloromethane	**142**	Q	-		70-130	-		
1,2-Dibromoethane	111		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SHRUB OAK CLEANER

Project Number: 3950.0001Y000

Lab Number: L2407504

Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 11-13 Batch: WG1885731-3								
Tetrachloroethene	110		-		70-130	-		
Chlorobenzene	108		-		70-130	-		
Ethylbenzene	110		-		70-130	-		
p/m-Xylene	113		-		70-130	-		
Bromoform	**144**	Q	-		70-130	-		
Styrene	108		-		70-130	-		
1,1,2,2-Tetrachloroethane	119		-		70-130	-		
o-Xylene	115		-		70-130	-		
4-Ethyltoluene	115		-		70-130	-		
1,3,5-Trimethylbenzene	111		-		70-130	-		
1,2,4-Trimethylbenzene	110		-		70-130	-		
Benzyl chloride	110		-		70-130	-		
1,3-Dichlorobenzene	119		-		70-130	-		
1,4-Dichlorobenzene	117		-		70-130	-		
1,2-Dichlorobenzene	114		-		70-130	-		
1,2,4-Trichlorobenzene	95		-		70-130	-		
Hexachlorobutadiene	109		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SHRUB OAK CLEANER

Project Number: 3950.0001Y000

Lab Number: L2407504

Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 11,13 Batch: WG1885733-3								
Vinyl chloride	101		-		70-130	-		25
1,1-Dichloroethene	114		-		70-130	-		25
cis-1,2-Dichloroethene	103		-		70-130	-		25
1,1,1-Trichloroethane	110		-		70-130	-		25
Carbon tetrachloride	119		-		70-130	-		25
Trichloroethene	107		-		70-130	-		25
Tetrachloroethene	97		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: SHRUB OAK CLEANER

Project Number: 3950.0001Y000

Lab Number: L2407504

Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1886410-3								
Dichlorodifluoromethane	96		-		70-130	-		
Chloromethane	92		-		70-130	-		
Freon-114	103		-		70-130	-		
Vinyl chloride	95		-		70-130	-		
1,3-Butadiene	95		-		70-130	-		
Bromomethane	97		-		70-130	-		
Chloroethane	104		-		70-130	-		
Ethanol	82		-		40-160	-		
Vinyl bromide	108		-		70-130	-		
Acetone	121		-		40-160	-		
Trichlorofluoromethane	111		-		70-130	-		
Isopropanol	97		-		40-160	-		
1,1-Dichloroethene	114		-		70-130	-		
Tertiary butyl Alcohol	94		-		70-130	-		
Methylene chloride	95		-		70-130	-		
3-Chloropropene	115		-		70-130	-		
Carbon disulfide	94		-		70-130	-		
Freon-113	109		-		70-130	-		
trans-1,2-Dichloroethene	109		-		70-130	-		
1,1-Dichloroethane	110		-		70-130	-		
Methyl tert butyl ether	97		-		70-130	-		
2-Butanone	106		-		70-130	-		
cis-1,2-Dichloroethene	112		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SHRUB OAK CLEANER

Project Number: 3950.0001Y000

Lab Number: L2407504

Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1886410-3								
Ethyl Acetate	116		-		70-130	-		
Chloroform	95		-		70-130	-		
Tetrahydrofuran	103		-		70-130	-		
1,2-Dichloroethane	113		-		70-130	-		
n-Hexane	110		-		70-130	-		
1,1,1-Trichloroethane	109		-		70-130	-		
Benzene	89		-		70-130	-		
Carbon tetrachloride	100		-		70-130	-		
Cyclohexane	105		-		70-130	-		
1,2-Dichloropropane	105		-		70-130	-		
Bromodichloromethane	100		-		70-130	-		
1,4-Dioxane	99		-		70-130	-		
Trichloroethene	99		-		70-130	-		
2,2,4-Trimethylpentane	110		-		70-130	-		
Heptane	107		-		70-130	-		
cis-1,3-Dichloropropene	94		-		70-130	-		
4-Methyl-2-pentanone	106		-		70-130	-		
trans-1,3-Dichloropropene	91		-		70-130	-		
1,1,2-Trichloroethane	104		-		70-130	-		
Toluene	96		-		70-130	-		
2-Hexanone	99		-		70-130	-		
Dibromochloromethane	108		-		70-130	-		
1,2-Dibromoethane	91		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: SHRUB OAK CLEANER

Project Number: 3950.0001Y000

Lab Number: L2407504

Report Date: 02/19/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1886410-3								
Tetrachloroethene	88		-		70-130	-		
Chlorobenzene	88		-		70-130	-		
Ethylbenzene	96		-		70-130	-		
p/m-Xylene	100		-		70-130	-		
Bromoform	106		-		70-130	-		
Styrene	91		-		70-130	-		
1,1,2,2-Tetrachloroethane	92		-		70-130	-		
o-Xylene	104		-		70-130	-		
4-Ethyltoluene	100		-		70-130	-		
1,3,5-Trimethylbenzene	103		-		70-130	-		
1,2,4-Trimethylbenzene	102		-		70-130	-		
Benzyl chloride	98		-		70-130	-		
1,3-Dichlorobenzene	99		-		70-130	-		
1,4-Dichlorobenzene	99		-		70-130	-		
1,2-Dichlorobenzene	97		-		70-130	-		
1,2,4-Trichlorobenzene	96		-		70-130	-		
Hexachlorobutadiene	94		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000

Lab Number: L2407504
Report Date: 02/19/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-10 QC Batch ID: WG1885725-5 QC Sample: L2407504-09 Client ID: MP-16-IA						
Dichlorodifluoromethane	0.553	0.535	ppbV	3		25
Chloromethane	0.636	0.622	ppbV	2		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	525E	511E	ppbV	3		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	13.9	14.1	ppbV	1		25
Trichlorofluoromethane	0.216	0.210	ppbV	3		25
Isopropanol	19.4	19.2	ppbV	1		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000

Lab Number: L2407504
Report Date: 02/19/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-10 QC Batch ID: WG1885725-5 QC Sample: L2407504-09 Client ID: MP-16-IA						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.270	0.265	ppbV	2		25
Benzene	0.318	0.323	ppbV	2		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.384	0.380	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000

Lab Number: L2407504
Report Date: 02/19/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-10 QC Batch ID: WG1885725-5 QC Sample: L2407504-09 Client ID: MP-16-IA						
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02-10 QC Batch ID: WG1885725-5 QC Sample: L2407504-09 Client ID: MP-16-IA						
Ethanol	599	605	ppbV	1		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000

Lab Number: L2407504
Report Date: 02/19/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02,04,06,08-10 QC Batch ID: WG1885726-5 QC Sample: L2407504-09 Client ID: MP-16-IA						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.082	0.083	ppbV	1		25
Trichloroethene	0.204	0.213	ppbV	4		25
Tetrachloroethene	0.031	0.032	ppbV	3		25

Project Name: SHRUB OAK CLEANER

Project Number: 3950.0001Y000

Lab Number: L2407504

Report Date: 02/19/24

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
L2407504-01	MP-1	02257	Flow 4	02/07/24	453417		-	-	-	Pass	4.5	4.7	4
L2407504-01	MP-1	2072	2.7L Can	02/07/24	453417	L2405496-01	Pass	-30.0	-5.7	-	-	-	-
L2407504-02	MP-1-IA	02196	Flow 5	02/07/24	453417		-	-	-	Pass	4.5	3.2	34
L2407504-02	MP-1-IA	249	2.7L Can	02/07/24	453417	L2405799-06	Pass	-30.0	-5.8	-	-	-	-
L2407504-03	MP-3	01483	Flow 5	02/07/24	453417		-	-	-	Pass	4.5	4.6	2
L2407504-03	MP-3	2185	2.7L Can	02/07/24	453417	L2404937-01	Pass	-30.0	-5.0	-	-	-	-
L2407504-04	MP-3-IA	0334	Flow 5	02/07/24	453417		-	-	-	Pass	4.5	4.6	2
L2407504-04	MP-3-IA	425	2.7L Can	02/07/24	453417	L2405496-01	Pass	-29.9	-4.4	-	-	-	-
L2407504-05	MP-13	0791	Flow 4	02/07/24	453417		-	-	-	Pass	4.5	4.6	2
L2407504-05	MP-13	153	2.7L Can	02/07/24	453417	L2405496-01	Pass	-29.2	-4.8	-	-	-	-
L2407504-06	MP-13-IA	01295	Flow 4	02/07/24	453417		-	-	-	Pass	4.5	5.1	13
L2407504-06	MP-13-IA	2358	2.7L Can	02/07/24	453417	L2405496-01	Pass	-30.0	-3.3	-	-	-	-
L2407504-07	MP-15	02451	Flow 5	02/07/24	453417		-	-	-	Pass	4.5	5.1	13
L2407504-07	MP-15	2794	2.7L Can	02/07/24	453417	L2405799-06	Pass	-30.0	-5.6	-	-	-	-
L2407504-08	MP-15-IA	01006	Flow 5	02/07/24	453417		-	-	-	Pass	4.5	4.7	4

Project Name: SHRUB OAK CLEANER

Lab Number: L2407504

Project Number: 3950.0001Y000

Report Date: 02/19/24

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
L2407504-08	MP-15-IA	3751	2.7L Can	02/07/24	453417	L2405496-01	Pass	-30.0	-4.1	-	-	-	-
L2407504-09	MP-16-IA	01121	Flow 5	02/07/24	453417		-	-	-	Pass	4.5	4.2	7
L2407504-09	MP-16-IA	3940	2.7L Can	02/07/24	453417	L2405799-06	Pass	-30.0	-1.6	-	-	-	-
L2407504-10	OA-1	02123	FLOW 3	02/07/24	453417		-	-	-	Pass	4.5	5.0	11
L2407504-10	OA-1	3004	2.7L Can	02/07/24	453417	L2405496-01	Pass	-30.0	-2.2	-	-	-	-
L2407504-11	DUP-02082024	0124	Flow 4	02/07/24	453417		-	-	-	Pass	4.5	4.9	9
L2407504-11	DUP-02082024	3224	2.7L Can	02/07/24	453417	L2405496-01	Pass	-30.0	-5.5	-	-	-	-
L2407504-12	MP-8R	01725	Flow 3	02/07/24	453417		-	-	-	Pass	4.5	5.2	14
L2407504-12	MP-8R	3170	2.7L Can	02/07/24	453417	L2405496-01	Pass	-30.0	-3.8	-	-	-	-
L2407504-13	MP-8R-IA	02232	Flow 5	02/07/24	453417		-	-	-	Pass	4.5	4.7	4
L2407504-13	MP-8R-IA	2081	2.7L Can	02/07/24	453417	L2405799-06	Pass	-30.0	-5.2	-	-	-	-
L2407504-14	UNUSED CAN #3023	01395	Flow 4	02/07/24	453417		-	-	-	Pass	4.4	4.4	0
L2407504-14	UNUSED CAN #3023	3023	2.7L Can	02/07/24	453417	L2405496-01	Pass	-30.0	-29.2	-	-	-	-
L2407504-15	UNUSED CAN #2018	02274	Flow 4	02/07/24	453417		-	-	-	Pass	4.5	5.0	11
L2407504-15	UNUSED CAN #2018	2018	2.7L Can	02/07/24	453417	L2405496-01	Pass	-29.9	-13.1	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2404937
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2404937-01
Client ID: CAN 2204 SHELF 3
Sample Location:

Date Collected: 01/29/24 18:00
Date Received: 01/30/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/31/24 20:10
Analyst: JFI

	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: L2404937
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2404937-01
Client ID: CAN 2204 SHELF 3
Sample Location:

Date Collected: 01/29/24 18:00
Date Received: 01/30/24
Field Prep: Not Specified

Sample Depth:

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

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

Lab Number: L2404937
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2404937-01
Client ID: CAN 2204 SHELF 3
Sample Location:

Date Collected: 01/29/24 18:00
Date Received: 01/30/24
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: L2404937
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2404937-01
Client ID: CAN 2204 SHELF 3
Sample Location:

Date Collected: 01/29/24 18:00
Date Received: 01/30/24
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: L2404937
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2404937-01
Client ID: CAN 2204 SHELF 3
Sample Location:

Date Collected: 01/29/24 18:00
Date Received: 01/30/24
Field Prep: Not Specified

Sample Depth:

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

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	95		60-140

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

Lab Number: L2404937
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2404937-01
Client ID: CAN 2204 SHELF 3
Sample Location:

Date Collected: 01/29/24 18:00
Date Received: 01/30/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/30/24 18:57
Analyst: JFI

	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:** L2404937

Project Number: CANISTER QC BAT **Report Date:** 02/19/24

Air Canister Certification Results

Lab ID: L2404937-01
Client ID: CAN 2204 SHELF 3
Sample Location:

Date Collected: 01/29/24 18:00
Date Received: 01/30/24
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:** L2404937

Project Number: CANISTER QC BAT **Report Date:** 02/19/24

Air Canister Certification Results

Lab ID: L2404937-01
Client ID: CAN 2204 SHELF 3
Sample Location:

Date Collected: 01/29/24 18:00
Date Received: 01/30/24
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	97		60-140
bromochloromethane	99		60-140
chlorobenzene-d5	97		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2405496
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405496-01
Client ID: CAN 456 SHELF 2
Sample Location:

Date Collected: 01/31/24 18:00
Date Received: 02/01/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/01/24 20:04
Analyst: JMB

	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: L2405496
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405496-01
Client ID: CAN 456 SHELF 2
Sample Location:

Date Collected: 01/31/24 18:00
Date Received: 02/01/24
Field Prep: Not Specified

Sample Depth:

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2405496
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405496-01
Client ID: CAN 456 SHELF 2
Sample Location:

Date Collected: 01/31/24 18:00
Date Received: 02/01/24
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: L2405496
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405496-01
Client ID: CAN 456 SHELF 2
Sample Location:

Date Collected: 01/31/24 18:00
Date Received: 02/01/24
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: L2405496
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405496-01
Client ID: CAN 456 SHELF 2
Sample Location:

Date Collected: 01/31/24 18:00
Date Received: 02/01/24
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	89		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	87		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2405496
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405496-01
Client ID: CAN 456 SHELF 2
Sample Location:

Date Collected: 01/31/24 18:00
Date Received: 02/01/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/01/24 20:04
Analyst: JMB

	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: L2405496
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405496-01
Client ID: CAN 456 SHELF 2
Sample Location:

Date Collected: 01/31/24 18:00
Date Received: 02/01/24
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:** L2405496

Project Number: CANISTER QC BAT **Report Date:** 02/19/24

Air Canister Certification Results

Lab ID: L2405496-01
Client ID: CAN 456 SHELF 2
Sample Location:

Date Collected: 01/31/24 18:00
Date Received: 02/01/24
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	88		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	85		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2405799
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405799-06
Client ID: CAN 2767 SHELF 9
Sample Location:

Date Collected: 02/02/24 12:00
Date Received: 02/02/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/02/24 23:25
Analyst: JFI

	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: L2405799
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405799-06
Client ID: CAN 2767 SHELF 9
Sample Location:

Date Collected: 02/02/24 12:00
Date Received: 02/02/24
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: L2405799
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405799-06
Client ID: CAN 2767 SHELF 9
Sample Location:

Date Collected: 02/02/24 12:00
Date Received: 02/02/24
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: L2405799
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405799-06
Client ID: CAN 2767 SHELF 9
Sample Location:

Date Collected: 02/02/24 12:00
Date Received: 02/02/24
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: L2405799
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405799-06
Client ID: CAN 2767 SHELF 9
Sample Location:

Date Collected: 02/02/24 12:00
Date Received: 02/02/24
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	97		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	96		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2405799
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405799-06
Client ID: CAN 2767 SHELF 9
Sample Location:

Date Collected: 02/02/24 12:00
Date Received: 02/02/24
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/02/24 23:25
Analyst: JFI

	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: L2405799
Report Date: 02/19/24

Air Canister Certification Results

Lab ID: L2405799-06
Client ID: CAN 2767 SHELF 9
Sample Location:

Date Collected: 02/02/24 12:00
Date Received: 02/02/24
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:** L2405799

Project Number: CANISTER QC BAT **Report Date:** 02/19/24

Air Canister Certification Results

Lab ID: L2405799-06
Client ID: CAN 2767 SHELF 9
Sample Location:

Date Collected: 02/02/24 12:00
Date Received: 02/02/24
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	113		60-140
bromochloromethane	113		60-140
chlorobenzene-d5	113		60-140

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000

Lab Number: L2407504
Report Date: 02/19/24

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(*)
L2407504-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2407504-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2407504-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2407504-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2407504-05A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2407504-06A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2407504-07A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2407504-08A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2407504-09A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2407504-10A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2407504-11A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2407504-12A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2407504-13A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2407504-14A	Canister - 2.7 Liter	NA	NA			Y	Absent		CLEAN-FEE()
L2407504-15A	Canister - 2.7 Liter	NA	NA			Y	Absent		CLEAN-FEE()

*Values in parentheses indicate holding time in days

Project Name:	SHRUB OAK CLEANER	**Lab Number:**	L2407504
Project Number:	3950.0001Y000	**Report Date:**	02/19/24

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:	SHRUB OAK CLEANER	**Lab Number:**	L2407504
Project Number:	3950.0001Y000	**Report Date:**	02/19/24

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:	SHRUB OAK CLEANER	**Lab Number:**	L2407504
Project Number:	3950.0001Y000	**Report Date:**	02/19/24

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:	SHRUB OAK CLEANER	**Lab Number:**	L2407504
Project Number:	3950.0001Y000	**Report Date:**	02/19/24

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 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 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 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 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).
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 2

ALPHA ANALYTICAL — CHAIN OF CUSTODY

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

Date Rec'd in Lab: 2/10/24

ALPHA Job #: L2407504

Client Information

Client: ROUX
Address: 209 SHAFTER ST.
ISLANDIA, NY 11749
Phone: 631-232 2600
Fax: 631-2329898
Email: CHOELZLI@ROUXINC.COM

☑ These samples have been previously analyzed by Alpha

Project Information

Project Name: SHRUB OAK CLEANER
Project Location: SHRUB OAK, NY
Project #: 3950.0001Y000
Project Manager: CHRISTIAN HOELZLI
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

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

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

1524 -6.65

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum (CH)	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	ANALYSIS TO-15	TO-15 SIM	APH Subset Non-petroleum HCs	Fixed Gases ☐	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
07504-01	MP-1	2/8/24	0716	~~1502~~ (CH)	-30.23	~~-6.51~~	SV	MH/AF	2.7L	2072	2257	X					
02	MP-1-IA		0712	1502	-30.64	-6.51	AA			249	2196						
03	MP-3		0727	1530	-30.03	-5.43	SV			2185	1483						
04	MP-3-IA		0723	1529	-30.19	-5.14	AA			425	334						
05	MP-13		0901	1643	-29.35	-5.24	SV			153	791						
06	MP-13-IA		0855	1650	-30.56	-3.35	AA			2358	1295						
07	MP-15		0826	1631	-30.61	-6.51	SV			2794	2451						
08	MP-15-IA		0828	1633	-30.60	-4.70	AA			3751	1006						
09	MP-16-IA		0907	1638	-30.31	-3.60	AA			3940	1121						
10	OA-1		0735	1538	-30.51	-3.58	AA			3004	2123						

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

Container Type: SUMMA

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
2/9/24 13:50	2/9/24 18:36	2/9/24 13:50	2/9/24 2046
2/9/24 0140	2/10/24 0720	2/10/24 0148	2/10/24 0720

Form No: 101-02 Rev: 12c Sep-15)

AIR ANALYSIS

PAGE 2 OF 2

CHAIN OF CUSTODY

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

Date Rec'd in Lab: 2/10/24

ALPHA Job #: L2407504

Client Information

Client: ROUX
Address: 209 SHAFTER ST.
ISLANDIA, NY 11749
Phone: 631-2322600
Fax: 631-2329898
Email: CHOELZLI@ROUXINC.COM

☑ These samples have been previously analyzed by Alpha

Project Information

Project Name: SHRUB OAK CLEANER
Project Location: SHRUB OAK, NY
Project #: 3950.0001Y000
Project Manager: CHRISTIAN HOELZLI
ALPHA Quote #:

Turn-Around Time

☑ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: Time:

Report Information - Data Deliverables

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

Billing Information

☑ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments:

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH Subset Non-petroleum HCs	Fixed Gases	Sulfides & Mercaptans by TO-15	☐	Sample Comments (i.e. PID)
11	DUP-02082024	2/8/24	0857	1655	-30.35	-6.05	AA	MH/AF	2.7L	3224	124	X						
12	MP-8R	↓	0812	1624	-30.33	-4.44	SV	↓	↓	3170	1725	↓						
13	MP-8R-IA	↓	0920	1726	-30.61	-6.09	AA	↓	↓	2081	2232	↓						

*SAMPLE MATRIX CODES

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

Container Type: SUMMA

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	2/9/24 1350	[signature]	2/9/24 13:50
[signature]	2/9/24 1925	[signature]	2/9/24 2065
[signature]	2/9/24 0140	[signature]	2/10/24 0140
[signature]	2/10/24 0720	[signature]	2/10/24 0720

Form No. 30-662 Rev1 (25-Sep-15)

APPENDIX G

Data Usability Summary Reports

Data Validation Services

120 Cobble Creek Road P. O. Box
208 North Creek, NY 12853
Phone (518) 251-4429
harry@frontiernet.net

February 6, 2024; Revised March 4, 2024

Rachel Fenwick
Roux Environmental Engineering and Geology, D. P. C.
2558 Hamburg Turnpike Suite 300
Buffalo, NY 14218

RE: Shrub Oak, 1360 East Main Street Air Sampling Event
Data Usability Summary Report (DUSR); Validation of Analytical Laboratory Data Packages
Alpha SDG No. L2350542

Dear Ms. Fenwick:

Review has been completed for the data packages generated by Alpha Analytical that pertains to samples collected 08/29/23 at the Shrub Oak site. Nine 2.7 L summa canisters and a field duplicate were processed for volatile analytes by USEPA method TO-15, low and medium level.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation/Sample Receipt
* Holding Times
* Internal Standard Recoveries
* Method Blanks
* Blind Field Duplicate Correlations
* Laboratory Control Sample (LCS)
* Laboratory Duplicate Correlations
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data packages.

In summary, results for the samples are usable as reported.

Laboratory accuracy, precision, representativeness, reproducibility, sensitivity, and comparability are acceptable. Data completeness was impacted by the lack of data for two of the eleven field locations.

Client sample identifications are attached to this text. Also included in this report is the client EDD.

Chain-of-Custody/Sample Receipt

Samples MP-13 and MP-16 were received at full vacuum (-29.4"Hg and -29.6"Hg). Those sample analyses were cancelled.

The numerous scratchouts and writeovers observed on the custody forms should have been dated and initialed.

Blind Field Duplicates

Blind field duplicate evaluation was performed for MP-8R_IA. Correlations are within validation guidelines.

Volatile Analyses by EPA TO-15

Holding times were met, internal standard responses are compliant, and instrument tunes meet fragmentation requirements. LCSs show compliant recoveries. Method and canister blanks show no contamination.

Initial and continuing calibration standard (ICV and CCV) linearity and calibration verification responses were compliant.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

Attachments: Sample Identifications
Laboratory EQuIS EDD

Sample Identification Summary

Project Name: SHRUB OAK
Project Number: Not Specified

Lab Number: L2350542
Report Date: 09/11/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2350542-01	MP-6	SOIL_VAPOR	1650 E MAIN ST	08/29/23 16:35	08/30/23
L2350542-02	MP-13	SOIL_VAPOR	1650 E MAIN ST	08/29/23 17:30	08/30/23
L2350542-03	MP-8R	SOIL_VAPOR	1650 E MAIN ST	08/29/23 20:00	08/30/23
L2350542-04	MP-16	SOIL_VAPOR	1650 E MAIN ST	08/29/23 16:25	08/30/23
L2350542-05	MP-6_IA	AIR	1650 E MAIN ST	08/29/23 17:30	08/30/23
L2350542-06	MP-1_IA	AIR	1650 E MAIN ST	08/29/23 17:24	08/30/23
L2350542-07	VMP-2_IA	AIR	1650 E MAIN ST	08/29/23 17:29	08/30/23
L2350542-08	MP-13_IA	AIR	1650 E MAIN ST	08/29/23 18:00	08/30/23
L2350542-09	OA-1	AIR	1650 E MAIN ST	08/29/23 19:40	08/30/23
L2350542-10	MP-8R_IA	AIR	1650 E MAIN ST	08/29/23 20:01	08/30/23
L2350542-11	MP-16_IA	AIR	1650 E MAIN ST	08/29/23 18:33	08/30/23
L2350542-12	DUP_082923	AIR	1650 E MAIN ST	08/29/23 20:02	08/30/23
L2350542-13	UNUSED CAN #2198	SOIL_VAPOR	1650 E MAIN ST		08/30/23
L2350542-14	UNUSED CAN #3119	SOIL_VAPOR	1650 E MAIN ST		08/30/23
L2350542-15	UNUSED CAN #506	SOIL_VAPOR	1650 E MAIN ST		08/30/23

Data Validation Services

120 Cobble Creek Road P. O. Box
208 North Creek, NY 12853
Phone (518) 251-4429
harry@frontiernet.net

March 21, 2024

Rachel Fenwick
Roux Environmental Engineering and Geology, D. P. C.
209 Shafter St
Islandia, NY 11749

RE: Shrub Oak, 1360 East Main Street Air Sampling Event
Data Usability Summary Report (DUSR); Validation of Analytical Laboratory Data Packages
Alpha SDG No. L2407504

Dear Ms. Fenwick:

Review has been completed for the data package generated by Alpha Analytical that pertains to samples collected 02-08-24 at the Shrub Oak site. Twelve 2.7 L summa canisters and a field duplicate were processed for volatile analytes by USEPA method TO-15, low and medium level.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

* Data Completeness
* Case Narrative
* Custody Documentation/Sample Receipt
* Holding Times
* Internal Standard Recoveries
* Method Blanks
* Blind Field Duplicate Correlations
* Laboratory Control Sample (LCS)
* Laboratory Duplicate Correlations
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data packages.

In summary, results for the samples are usable either as reported or with minor qualification.

Data completeness, accuracy, precision, representativeness, reproducibility, sensitivity, and comparability are acceptable.

Client sample identifications are attached to this text. Also included in this report is the client EDD, edited to reflect the qualifications discussed in this report.

Blind Field Duplicates

Blind field duplicate evaluation was performed for MP-13-IA. Correlations are within validation guidelines, with the exceptions of those for acetone and isopropanol, which show concentrations approximately threefold higher in the duplicate. The results for those two analytes have been qualified as estimated in the parent sample and its duplicate.

Volatile Analyses by EPA TO-15

Holding times were met, internal standard responses are compliant, and instrument tunes meet fragmentation requirements. LCSs show compliant recoveries. Method and canister blanks show no contamination.

Laboratory duplicate correlations for MP-16-IA are within validation guidelines.

Initial and continuing calibration standard (ICV and CCV) linearity and calibration verification responses were compliant.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Attachments: Validation Data Qualifier Definitions
Sample Identifications
Qualified Laboratory EQuIS EDD

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

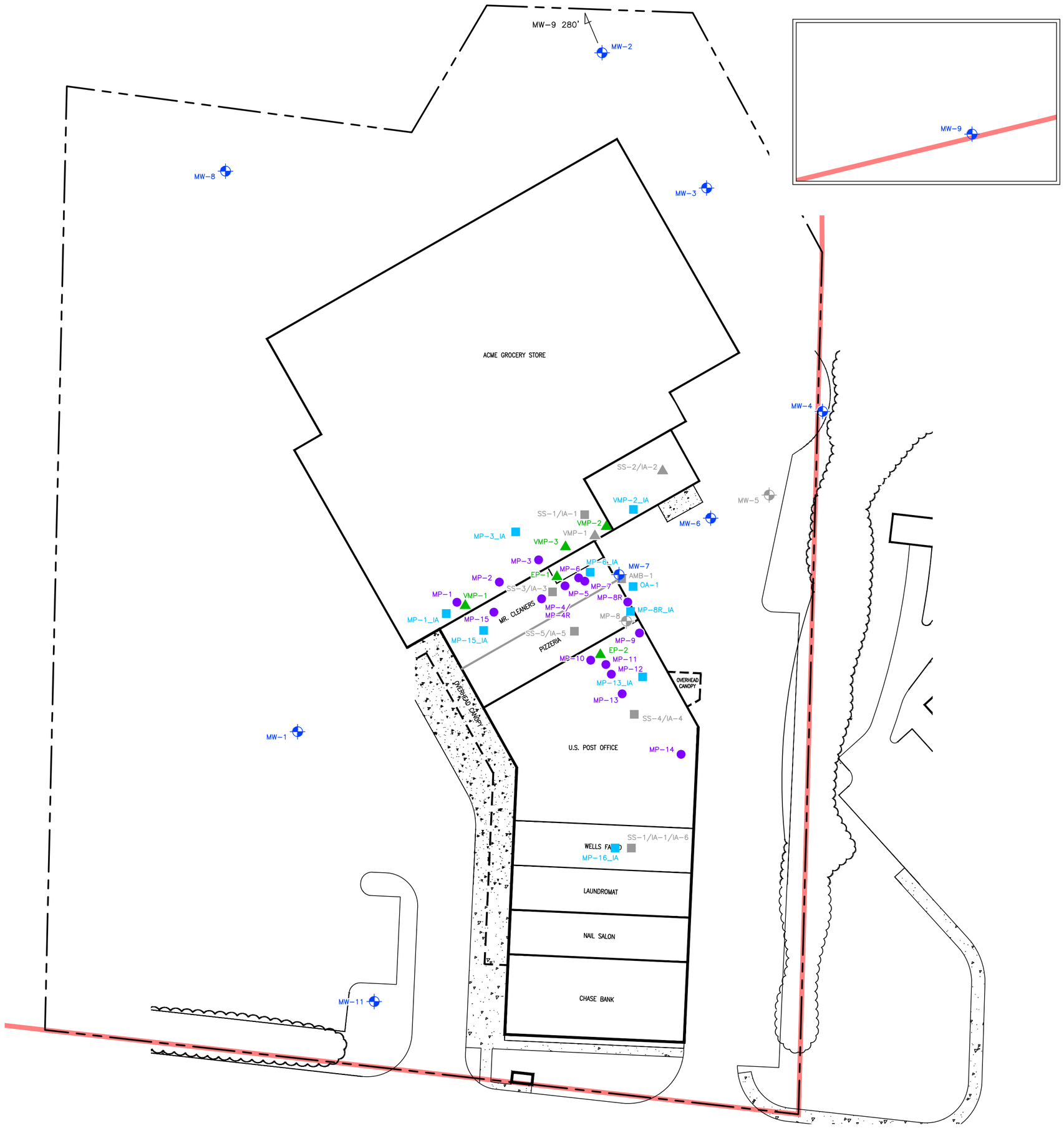
Sample Identification Summary

Project Name: SHRUB OAK CLEANER
Project Number: 3950.0001Y000

Lab Number: L2407504
Report Date: 02/19/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2407504-01	MP-1	SOIL_VAPOR	SHRUB OAK, NY	02/08/24 15:24	02/09/24
L2407504-02	MP-1-IA	AIR	SHRUB OAK, NY	02/08/24 15:02	02/09/24
L2407504-03	MP-3	SOIL_VAPOR	SHRUB OAK, NY	02/08/24 15:30	02/09/24
L2407504-04	MP-3-IA	AIR	SHRUB OAK, NY	02/08/24 15:29	02/09/24
L2407504-05	MP-13	SOIL_VAPOR	SHRUB OAK, NY	02/08/24 16:43	02/09/24
L2407504-06	MP-13-IA	AIR	SHRUB OAK, NY	02/08/24 16:50	02/09/24
L2407504-07	MP-15	SOIL_VAPOR	SHRUB OAK, NY	02/08/24 16:31	02/09/24
L2407504-08	MP-15-IA	AIR	SHRUB OAK, NY	02/08/24 16:33	02/09/24
L2407504-09	MP-16-IA	AIR	SHRUB OAK, NY	02/08/24 16:38	02/09/24
L2407504-10	OA-1	AIR	SHRUB OAK, NY	02/08/24 15:38	02/09/24
L2407504-11	DUP-02082024	AIR	SHRUB OAK, NY	02/08/24 16:55	02/09/24
L2407504-12	MP-8R	SOIL_VAPOR	SHRUB OAK, NY	02/08/24 16:24	02/09/24
L2407504-13	MP-8R-IA	AIR	SHRUB OAK, NY	02/08/24 17:26	02/09/24
L2407504-14	UNUSED CAN #3023	SOIL_VAPOR	SHRUB OAK, NY		02/09/24
L2407504-15	UNUSED CAN #2018	AIR	SHRUB OAK, NY		02/09/24

PLATES



LEGEND

- BROWNFIELD PARCEL LINE
- PROPERTY LINE
- SS-1/IA-1 — HISTORIC SUB-SLAB SOIL VAPOR/INDOOR AIR/ AMBIENT AIR SAMPLE LOCATION
- VMP-1 — ABANDONED EXTRACTION POINT LOCATION
- MP-1_IA — ROUX INDOOR AIR/AMBIENT AIR SAMPLE LOCATIONS
- EP-1 — EXTRACTION POINT LOCATION
- MP-1 — MONITORING POINT LOCATION
- MW-1 — MONITORING WELL LOCATION
- MW-5 — ABANDONED MONITORING WELL/ MONITORING POINT LOCATION

NOTE

1. THE ACTIVE EXTRACTION POINT NAMED VMP-1 WAS PREVIOUSLY REFERRED TO AS VMP-4.

SOURCE

EXCEL ENVIRONMENTAL RESOURCES, INC., PROJECT #12229, "GENERALIZED SITE PLAN" DATED APRIL 22, 2019.

30' 0 30'

N

Title:

SOIL VAPOR INTRUSION / INDOOR AIR ASSESSMENT SAMPLING LOCATIONS

CONSTRUCTION COMPLETION REPORT
MR. CLEANERS - SHRUB OAK SHOPPING CENTER
1360 EAST MAIN STREET, SHRUB OAK, NEW YORK

Prepared for:

SHRUB OAK PARTNERS LLC

ROUX

Compiled by: C.H.	Date: 22FEB24	PLATE
Prepared by: G.M.	Scale: AS SHOWN	1
Project Mgr: C.H.	Project: 3950.0001Y000	
File: 3950.0001Y107.01.DWG		

V:\CAD\PROJECTS\3950\Y0001Y\107\3950.0001Y107.01.DWG

	SS-2 2/25/2015	IA-2 2/25/2015	IA-2 4/22/2016	SS-2 12/2/2016	IA-2 12/2/2016	IA-2 3/8/2018	IA-2 3/26/2019
PCE	3.17	2.85	34.20	119	8.41	1.7	0.461
TCE	13.7	0.473	1.32	60.2	0.806	0.21	0.145
CT	ND	0.604	ND	ND	0.642	0.623	0.654
1,1,1-TCA	ND	ND	ND	ND	ND	ND	ND
c1,2-DCE	13.3	0.198	ND	201	0.119	ND	ND
1,1-DCE	ND	ND	ND	ND	ND	ND	ND
DCM	ND	ND	ND	ND	ND	ND	ND
VC	1.54	ND	ND	ND	ND	ND	ND

	SS-1 2/25/2015	IA-1 2/25/2015	IA-1 4/22/2016	SS-1 12/2/2016	IA-1 12/2/2016	IA-1 3/8/2018	IA-1 3/26/2019
PCE	3.0	3.66	34.2	4,980	8.68	2.59	0.339
TCE	8.81	0.559	1.30	3,910	0.978	0.43	0.113
CT	ND	0.566	0.78	ND	0.660	0.63	0.623
1,1,1-TCA	ND	ND	ND	ND	ND	ND	ND
c1,2-DCE	7.69	0.103	ND	34.0	ND	ND	ND
1,1-DCE	ND	ND	ND	ND	ND	ND	ND
DCM	ND	ND	ND	ND	ND	ND	ND
VC	0.736	ND	ND	ND	ND	ND	ND

	AMB-1						
	2/25/2015	6/18/2015	7/29/2015	4/22/2016	12/2/2016	3/8/2018	3/26/2019
PCE	0.441	0.848	3.42	1.23	5.56	ND	ND
TCE	ND	ND	ND	0.156	ND	ND	ND
CT	0.472	0.478	0.428	0.541	0.390	0.497	0.516
1,1,1-TCA	ND	ND	ND	ND	ND	ND	ND
c1,2-DCE	ND	ND	ND	ND	ND	ND	ND
1,1-DCE	ND	ND	ND	ND	ND	ND	ND
DCM	ND	32.7	ND	ND	ND	ND	3.38
VC	ND	ND	ND	ND	ND	ND	ND

	SS-4 6/18/2015	IA-4 6/18/2015	SS-4 12/2/2016	IA-4 12/2/2016	IA-4 4/22/2016	IA-4 3/8/2018	IA-4 3/26/2019
PCE	465	42.5	1,030	187	14.0	6.22	0.854
TCE	2.57	1.47	157	18.9	1.75	0.86	0.435
CT	ND	0.453	ND	0.503	0.51	0.371	0.459
1,1,1-TCA	15.1	ND	ND	ND	ND	ND	ND
c1,2-DCE	ND	0.091	149	0.956	ND	ND	ND
1,1-DCE	ND	ND	ND	ND	ND	ND	ND
DCM	ND	5.11	ND	ND	ND	ND	ND
VC	ND	ND	ND	ND	ND	ND	ND

	SS-3 2/25/2015	IA-3 2/25/2015	SS-3 12/2/2016	IA-3 12/2/2016	IA-3 3/8/2018	IA-3 3/26/2019
PCE	1,240,000 E	319	ND	1,240 E	50.7	6.17
TCE	308,000 E	49.6	ND	129	11	3.9
CT	ND	0.566	ND	0.447	0.472	0.484
1,1,1-TCA	ND	ND	ND	ND	ND	ND
c1,2-DCE	66,200 E	1.73	5.270	0.682	0.159	0.27
1,1-DCE	ND	0.127	ND	ND	ND	ND
DCM	ND	ND	ND	ND	2.88	ND
VC	ND	ND	ND	ND	ND	ND

	SS-1 7/29/2015	IA-1 7/29/2015	IA-6 3/8/2018	IA-6 3/26/2019
PCE	64.3	1.38	1.02	0.271
TCE	ND	ND	ND	ND
CT	ND	0.421	0.396	0.459
1,1,1-TCA	ND	ND	ND	ND
c1,2-DCE	ND	ND	ND	ND
1,1-DCE	ND	ND	ND	ND
DCM	200	1.92	ND	ND
VC	ND	ND	ND	ND

	SS-5 2/25/2015	IA-5 2/25/2015	SS-5 12/2/2016	IA-5 12/2/2016	IA-5 4/22/2016	IA-5 3/8/2018	IA-5 3/26/2019
PCE	370	51.7	1,010	30.6	30	24.5	9.97
TCE	77.9	9.51	53.4	2.53	0.382	3.8	1.38
CT	ND	0.629	ND	0.409	0.552	0.415	0.465
1,1,1-TCA	ND	ND	ND	ND	ND	ND	ND
c1,2-DCE	84.8	1.34	2.42	ND	ND	0.151	0.182
1,1-DCE	ND	ND	ND	ND	ND	ND	ND
DCM	2.92	9.94	ND	3.51	ND	ND	ND
VC	ND	ND	ND	ND	ND	ND	ND

LEGEND

- BROWNFIELD PARCEL LINE
- PROPERTY LINE
- SS-1/IA-1 — HISTORIC SUB-SLAB SOIL VAPOR/INDOOR AIR/AMBIENT AIR SAMPLE LOCATION
- VMP-1 — ABANDONED EXTRACTION POINT LOCATION
- MP-1_IA — AUGUST 2023 INDOOR AIR/AMBIENT AIR SAMPLE LOCATIONS
- EP-1 — EXTRACTION POINT LOCATION
- MP-1 — MONITORING POINT LOCATION
- MW-1 — MONITORING WELL LOCATION
- MW-5 — ABANDONED MONITORING WELL/MONITORING POINT LOCATION
- ORANGE — RESULT IS ABOVE THE "MONITOR" LEVEL AS DEFINED BY THE SOIL VAPOR/INDOOR AIR MATRICES FOR THE NYSDOH
- PINK — RESULT IS ABOVE THE "MITIGATE" LEVEL AS DEFINED BY THE SOIL VAPOR/INDOOR AIR MATRICES FOR THE NYSDOH
- NYSDOH — NEW YORK STATE DEPARTMENT OF HEALTH
- PCE — TETRACHLOROETHENE
- TCE — TRICHLOROETHENE
- CT — CARBON TETRACHLORIDE
- 1,1,1-TCA — 1,1,1-TRICHLOROETHANE
- c1,2-DCE — cis-1,2-DICHLOROETHENE
- 1,1-DCE — 1,1-DICHLOROETHENE
- DCM — METHYLENE CHLORIDE
- VC — VINYL CHLORIDE
- E — CONCENTRATION OF ANALYTE EXCEEDS THE RANGE OF THE CALIBRATION CURVE AND/OR LINEAR RANGE OF THE INSTRUMENT
- ND — COMPOUND NOT DETECTED

NOTES

1. THE ACTIVE EXTRACTION POINT NAMED VMP-1 WAS PREVIOUSLY REFERRED TO AS VMP-4.
2. CONCENTRATIONS ARE SHOWN IN MICROGRAMS PER CUBIC METER (mcg/m^3)

SOURCE

EXCEL ENVIRONMENTAL RESOURCES, INC., PROJECT #12229, "GENERALIZED SITE PLAN" DATED APRIL 22, 2019.

30' 0 30'

Title:

HISTORIC CONCENTRATIONS OF VOCs IN SUB-SLAB AND INDOOR AIR SAMPLES

CONSTRUCTION COMPLETION REPORT
MR. CLEANERS - SHRUB OAK SHOPPING CENTER
1360 EAST MAIN STREET, SHRUB OAK, NEW YORK

Prepared for:

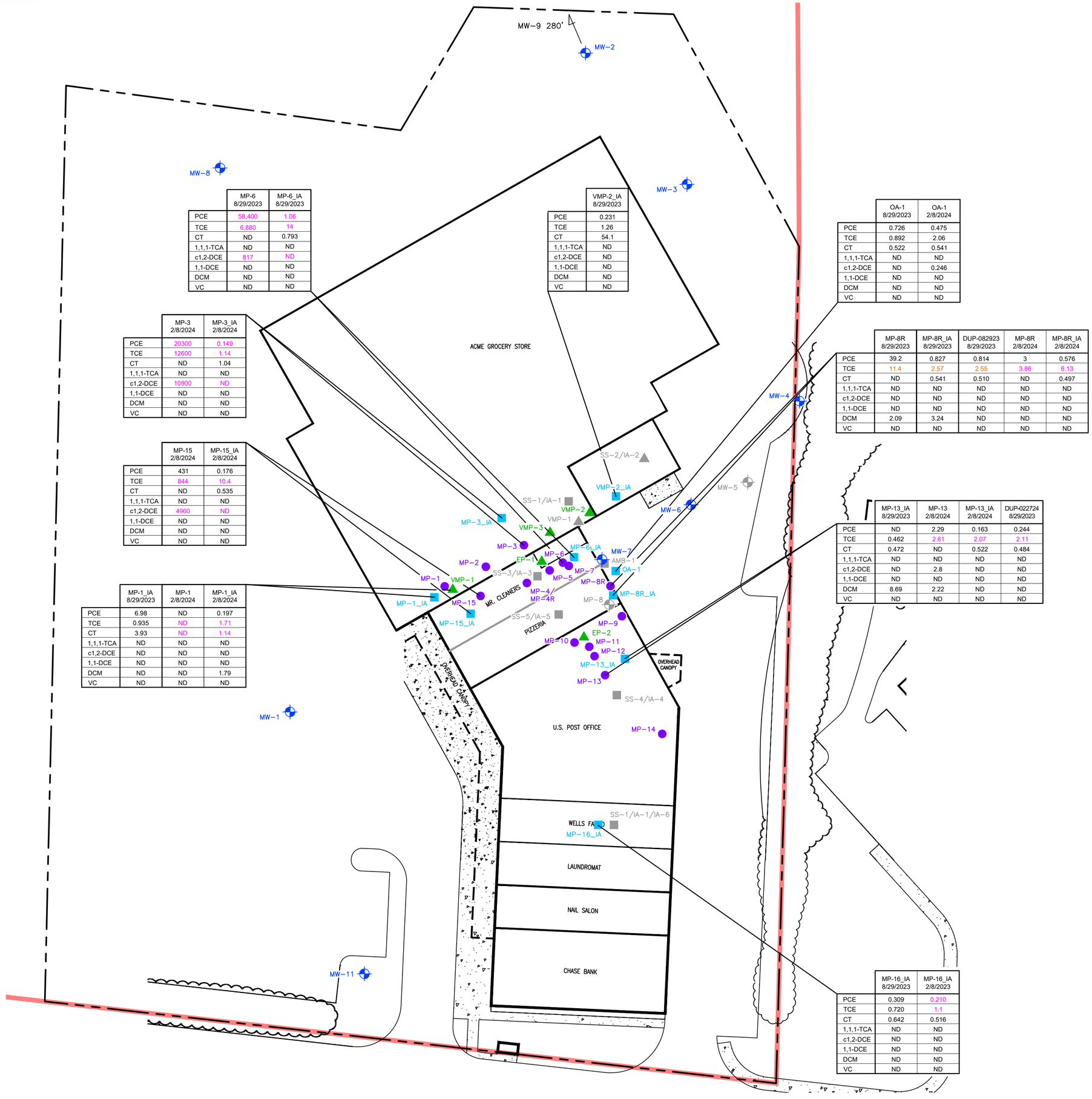
SHRUB OAK PARTNERS LLC

ROUX

Compiled by: C.H.	Date: 22FEB24
Prepared by: G.M.	Scale: AS SHOWN
Project Mgr: C.H.	Project: 3950.0001Y000
File: 3950.0001Y107.01.DWG	

PLATE 2A

V:\CAD\PROJECTS\3950Y\0001Y\107\3950.0001Y107.01.DWG



	MP-6 8/29/2023	MP-6_IA 8/29/2023
PCE	58,400	1.06
TCE	6,880	14
CT	ND	0.793
1,1,1-TCA	ND	ND
c1,2-DCE	817	ND
1,1-DCE	ND	ND
DCM	ND	ND
VC	ND	ND

	VMP-2_IA 8/29/2023
PCE	0.231
TCE	1.26
CT	54.1
1,1,1-TCA	ND
c1,2-DCE	ND
1,1-DCE	ND
DCM	ND
VC	ND

	OA-1 8/29/2023	OA-1 2/8/2024
PCE	0.726	0.475
TCE	0.892	2.06
CT	0.522	0.541
1,1,1-TCA	ND	ND
c1,2-DCE	ND	0.246
1,1-DCE	ND	ND
DCM	ND	ND
VC	ND	ND

	MP-3 2/8/2024	MP-3_IA 2/8/2024
PCE	20300	0.149
TCE	12600	1.14
CT	ND	1.04
1,1,1-TCA	ND	ND
c1,2-DCE	10900	ND
1,1-DCE	ND	ND
DCM	ND	ND
VC	ND	ND

	MP-8R 8/29/2023	MP-8R_IA 8/29/2023	DUP-082923 8/29/2023	MP-8R 2/8/2024	MP-8R_IA 2/8/2024
PCE	39.2	0.827	0.814	3	0.576
TCE	11.4	2.57	2.55	3.86	6.13
CT	ND	0.541	0.510	ND	0.497
1,1,1-TCA	ND	ND	ND	ND	ND
c1,2-DCE	ND	ND	ND	ND	ND
1,1-DCE	ND	ND	ND	ND	ND
DCM	2.09	3.24	ND	ND	ND
VC	ND	ND	ND	ND	ND

	MP-15 2/8/2024	MP-15_IA 2/8/2024
PCE	431	0.176
TCE	844	10.4
CT	ND	0.535
1,1,1-TCA	ND	ND
c1,2-DCE	4960	ND
1,1-DCE	ND	ND
DCM	ND	ND
VC	ND	ND

	MP-13_IA 8/29/2023	MP-13 2/8/2024	MP-13_IA 2/8/2024	DUP-022724 8/29/2023
PCE	ND	2.29	0.163	0.244
TCE	0.462	2.61	2.07	2.11
CT	0.472	ND	0.522	0.484
1,1,1-TCA	ND	ND	ND	ND
c1,2-DCE	ND	2.8	ND	ND
1,1-DCE	ND	ND	ND	ND
DCM	8.69	2.22	ND	ND
VC	ND	ND	ND	ND

	MP-1_IA 8/29/2023	MP-1 2/8/2024	MP-1_IA 2/8/2024
PCE	6.98	ND	0.197
TCE	0.935	ND	1.71
CT	3.93	ND	1.14
1,1,1-TCA	ND	ND	ND
c1,2-DCE	ND	ND	ND
1,1-DCE	ND	ND	ND
DCM	ND	ND	1.79
VC	ND	ND	ND

	MP-16_IA 8/29/2023	MP-16_IA 2/8/2023
PCE	0.309	0.210
TCE	0.720	1.1
CT	0.642	0.516
1,1,1-TCA	ND	ND
c1,2-DCE	ND	ND
1,1-DCE	ND	ND
DCM	ND	ND
VC	ND	ND

LEGEND

- BROWNFIELD PARCEL LINE
- PROPERTY LINE
- SS-1/IA-1 — HISTORIC SUB-SLAB SOIL VAPOR/INDOOR AIR/AMBIENT AIR SAMPLE LOCATION
- VMP-1 — ABANDONED EXTRACTION POINT LOCATION
- MP-1_IA — AUGUST 2023 INDOOR AIR/AMBIENT AIR SAMPLE LOCATIONS
- EP-1 — EXTRACTION POINT LOCATION
- MP-1 — MONITORING POINT LOCATION
- MW-1 — MONITORING WELL LOCATION
- MW-5 — ABANDONED MONITORING WELL/MONITORING POINT LOCATION
- ORANGE — RESULT IS ABOVE THE "MONITOR" LEVEL AS DEFINED BY THE SOIL VAPOR/INDOOR AIR MATRICES FOR THE NYSDOH
- PINK — RESULT IS ABOVE THE "MITIGATE" LEVEL AS DEFINED BY THE SOIL VAPOR/INDOOR AIR MATRICES FOR THE NYSDOH
- NYSDOH — NEW YORK STATE DEPARTMENT OF HEALTH
- PCE — TETRACHLOROETHENE
- TCE — TRICHLOROETHENE
- CT — CARBON TETRACHLORIDE
- 1,1,1-TCA — 1,1,1-TRICHLOROETHANE
- c1,2-DCE — cis-1,2-DICHLOROETHENE
- 1,1-DCE — 1,1-DICHLOROETHENE
- DCM — METHYLENE CHLORIDE
- VC — VINYL CHLORIDE
- E — CONCENTRATION OF ANALYTE EXCEEDS THE RANGE OF THE CALIBRATION CURVE AND/OR LINEAR RANGE OF THE INSTRUMENT
- ND — COMPOUND NOT DETECTED

NOTES

1. THE ACTIVE EXTRACTION POINT NAMED VMP-1 WAS PREVIOUSLY REFERRED TO AS VMP-4.
2. CONCENTRATIONS ARE SHOWN IN MICROGRAMS PER CUBIC METER (mcg/m^3)

SOURCE

EXCEL ENVIRONMENTAL RESOURCES, INC., PROJECT #12229, "GENERALIZED SITE PLAN" DATED APRIL 22, 2019.

30' 0 30'

N

Title:

CURRENT CONCENTRATIONS OF VOCs IN SUB-SLAB AND INDOOR AIR SAMPLES

CONSTRUCTION COMPLETION REPORT
MR. CLEANERS - SHRUB OAK SHOPPING CENTER
1360 EAST MAIN STREET, SHRUB OAK, NEW YORK

Prepared for:

SHRUB OAK PARTNERS LLC

ROUX

Compiled by: C.H.	Date: 22FEB24
Prepared by: G.M.	Scale: AS SHOWN
Project Mgr: C.H.	Project: 3950.0001Y000
File: 3950.0001Y107.01.DWG	

PLATE 2B

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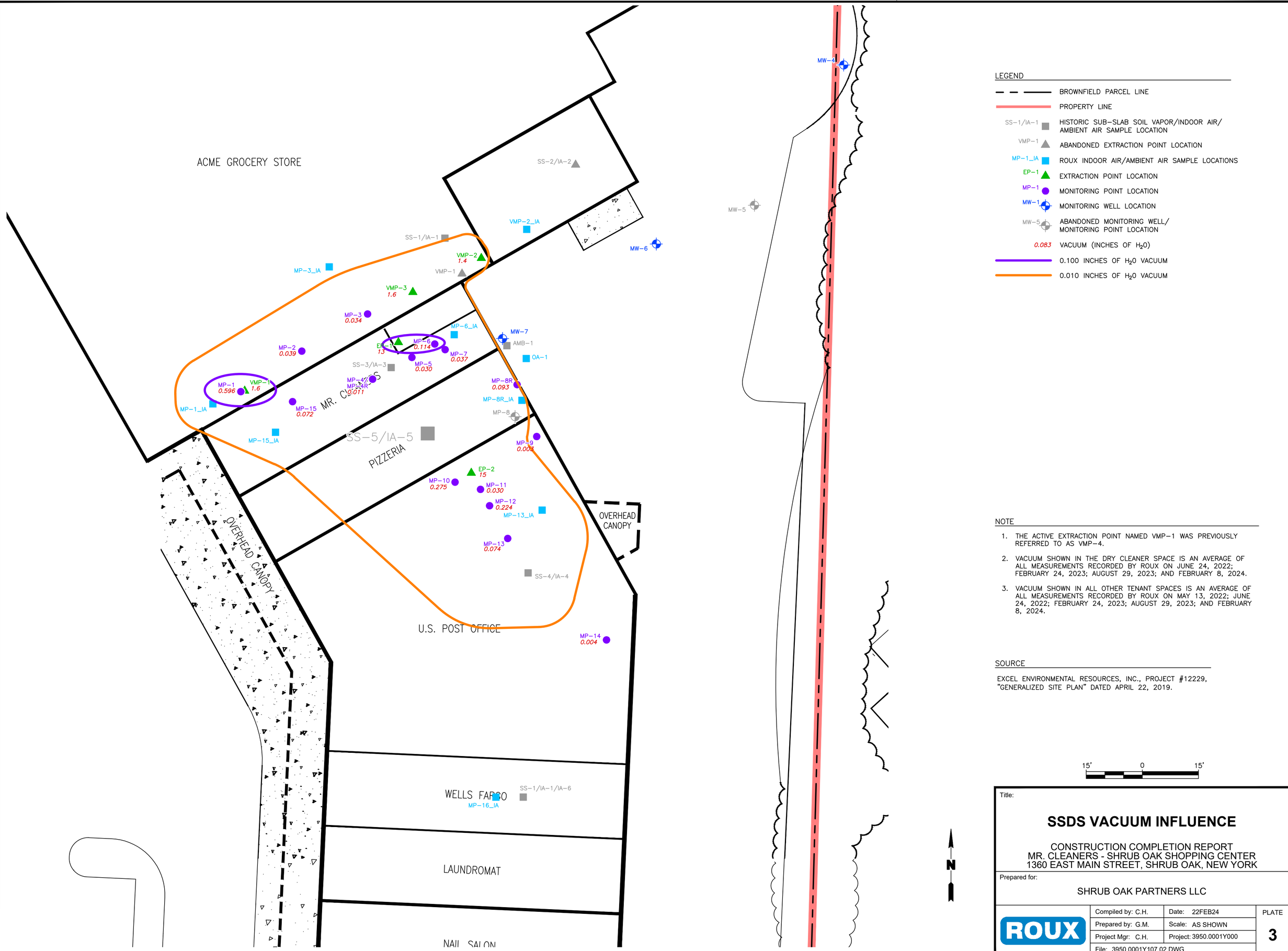

LEGEND

- BROWNFIELD PARCEL LINE
- PROPERTY LINE
- SS-1/IA-1 — HISTORIC SUB-SLAB SOIL VAPOR/INDOOR AIR/AMBIENT AIR SAMPLE LOCATION
- VMP-1 — ABANDONED EXTRACTION POINT LOCATION
- MP-1_IA — ROUX INDOOR AIR/AMBIENT AIR SAMPLE LOCATIONS
- EP-1 — EXTRACTION POINT LOCATION
- MP-1 — MONITORING POINT LOCATION
- MW-1 — MONITORING WELL LOCATION
- MW-5 — ABANDONED MONITORING WELL/MONITORING POINT LOCATION
- 0.083 — VACUUM (INCHES OF H_2O)
- 0.100 INCHES OF H_2O VACUUM
- 0.010 INCHES OF H_2O VACUUM

NOTE

1. THE ACTIVE EXTRACTION POINT NAMED VMP-1 WAS PREVIOUSLY REFERRED TO AS VMP-4.
2. VACUUM SHOWN IN THE DRY CLEANER SPACE IS AN AVERAGE OF ALL MEASUREMENTS RECORDED BY ROUX ON JUNE 24, 2022; FEBRUARY 24, 2023; AUGUST 29, 2023; AND FEBRUARY 8, 2024.
3. VACUUM SHOWN IN ALL OTHER TENANT SPACES IS AN AVERAGE OF ALL MEASUREMENTS RECORDED BY ROUX ON MAY 13, 2022; JUNE 24, 2022; FEBRUARY 24, 2023; AUGUST 29, 2023; AND FEBRUARY 8, 2024.

SOURCE

EXCEL ENVIRONMENTAL RESOURCES, INC., PROJECT #12229, "GENERALIZED SITE PLAN" DATED APRIL 22, 2019.

15' 0 15'

Title:

SSDS VACUUM INFLUENCE

CONSTRUCTION COMPLETION REPORT
MR. CLEANERS - SHRUB OAK SHOPPING CENTER
1360 EAST MAIN STREET, SHRUB OAK, NEW YORK

Prepared for:

SHRUB OAK PARTNERS LLC

ROUX

Compiled by: C.H.	Date: 22FEB24	PLATE
Prepared by: G.M.	Scale: AS SHOWN	3
Project Mgr: C.H.	Project: 3950.0001Y000	
File: 3950.0001Y107.02.DWG		

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