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8 April 2021
File No. 134976-002

New York State Department of Environmental Conservation
625 Broadway, 11th Floor
Albany, NY 12233-7014

Attention: Michael Squire
Project Manager
Remedial Bureau C

Subject: Vapor Intrusion Management Systems (VIMS)
NYSDEC Site No. C360064
Tarrytown Former MGP
Tarrytown, New York

Dear Mr. Squire:

On behalf of Ferry Landings, LLC, Haley & Aldrich of New York (Haley & Aldrich) has prepared this letter report of soil vapor and indoor air sampling for the above-referenced site. This report fulfills remaining sampling and reporting obligations of the commitment letter submitted by Haley & Aldrich dated 21 August 2019 on behalf of Ferry Landings and responds to NYSDEC's email dated 27 September 2019 regarding the subject site (the "Site"). For all locations referred to in this report, please see the attached Site Plan figure set. Results of the sampling program conducted between 16 and 23 February 2021 are presented herein.

Purpose

Sub-slab soil vapor (SS) and indoor air (IA) quality sampling and analysis were performed as outlined in Section 2.3.4 of the revised *Site Management Plan – Tarrytown Former MGP Site, Tarrytown, NY*, dated August 2010 and accepted by the NYSDEC on 26 August 2010 (the SMP), and as adapted to the phases and footprints of buildings developed on the site since the SMP was approved.

In general, the verification air sampling consisted of concurrent indoor air and sub-slab sampling for one ground floor location in each of 13 buildings present on the Site. Results of previous sampling in six buildings were reported to NYSDEC in the Haley & Aldrich letter report dated 7 May 2020. Results of sampling for the remaining seven buildings are reported herein.

Descriptions of the sampling program's scope, locations, methods, and laboratory analyses are presented in this report; our conclusions are presented in the following section.

General Conclusions

Based on the data resulting from the indoor air quality and sub-slab soil vapor sampling, we conclude:

- Soil vapor sampling and analysis for compounds required by New York State Department of Health (NYSDOH) vapor intrusion guidance indicated most target compounds were not detected in the soil vapor samples. Where chemical concentrations for target compounds were detected, the resulting concentrations are uniformly less than the NYSDOH vapor intrusion comparison criteria that would require further action or monitoring. Therefore, based on NYSDOH criteria and guidance, no further monitoring or action is required.

- Indoor air quality analyses conducted concurrently with the sub-slab soil vapor sampling indicate indoor air has not been compromised by the compounds of concern for the site. A limited set of compounds were detected in indoor air with results above EPA national survey 75th-percentile data for indoor air quality. We conclude these detections are not present due to the site conditions and instead appear to be related to common commercial cleaner products, personal care products, or building materials/building finishes.

Based on the data regarding the post-construction soil vapor sampling, we conclude:

- Soil vapor chemical concentrations for compounds detected in the samples collected are uniformly less than NYSDOH vapor intrusion matrix comparison criteria and USEPA vapor intrusion evaluation criteria.

- Vapor Intrusion Mitigation System (VIMS) controls described in the SMP should continue to be installed in future buildings constructed at the site, as they have been in the past; the data do not indicate any revision in VIMS design or modification to their current function is needed for future buildings.

Please note we have also prepared a letter with sample results for each of the seven individual residence locations noted herein. Each letter is being provided to that resident by Ferry Landings/National Resources under separate cover and following submittal of this report to NYSDEC.

INDOOR AIR AND SUB-SLAB SOIL VAPOR SAMPLING AND ANALYSIS

Scope and Methods

To be representative of the Site, one set of indoor air and sub-slab soil vapor samples was collected for each building at the Site to be consistent with the SMP. Sampling of the remaining seven buildings was completed in the 2020-2021 heating season, consistent with procedures contained in NYSDOH *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006*. See Figure 1 for the overall site layout, showing locations where the current sampling effort was completed. Sample locations within building groups (Carriage Houses, Townhouses) and specific sample locations within the residential units made accessible for sampling are shown in subsequent figures. Brief descriptions of the accessible buildings and sampling locations are as follows:

- Figure 2 – shows the general position of units sampled within the Carriage House buildings.

- Northeast Carriage House – each unit from this building has a garage, bathroom, and living space on the ground floor slab-on grade. An occupied unit was made accessible for both sub-slab and indoor air sampling. Sample locations are shown on Figure 3.

- Northwest Carriage House – each unit from this building has a garage, bathroom, and living space on the ground floor slab-on grade. An occupied unit was made accessible for both sub-slab and indoor air sampling. Sample locations are shown on Figure 4.

- Southeast Carriage House – each unit from this building has a garage, bathroom, and living space on the ground floor slab-on grade. An occupied unit was made accessible for both sub-slab and indoor air sampling. Sample locations are shown on Figure 5.

- Southwest Carriage House – each unit from this building has a garage, bathroom, and living space on the ground floor slab-on grade. An occupied unit was made accessible for both sub-slab and indoor air sampling. Sample locations are shown on Figure 6.

- Figure 7 – shows the general position of units sampled within the Townhouse buildings.

- Townhouse 1 – each unit from this building has a garage, bathroom, and living space on the ground floor slab-on grade. An occupied unit was made accessible for sub-slab and indoor air sampling. Sampling locations are shown on Figure 8.

- Townhouse 3 – each unit from this building has a garage, bathroom, and living space on the ground floor slab-on grade. An occupied unit was made accessible for both sub-slab and indoor air sampling. Sample locations are shown on Figure 9.

- Townhouse 4 – each unit from this building has a garage, bathroom, and living space on the ground floor slab-on grade. An occupied unit was made accessible for both sub-slab and indoor air sampling. Sample locations are shown on Figure 10.

Field methods used to complete the sampling program were consistent with guidance from the NYSDOH *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006*. Indoor air and sub-slab sampling occurred concurrently. For indoor air sampling, a laboratory-supplied 2.7-liter Summa canister with flow regulator was placed within the living space of a residential unit on the ground floor (floor in contact with the slab-on-grade) and the regulator was set to obtain a complete sample over an approximately one-hour sample duration.

For sub-slab soil vapor sampling a small hole was drilled through the concrete slab into the sub-slab gravel. A new vapor pin seal was used for each test hole and flexible tubing was connected a laboratory-supplied 2.7-liter Summa canister with a flow regulator set to fill at a rate to obtain a complete sample over an approximately one-hour duration (consistent with the indoor air sample). Following sampling, the test holes were sealed with hydrated bentonite and finished with non-shrinking grout. Per the SMP,

at least once for each round of sampling a tracer gas (Helium) was used as a quality assurance/quality control measure to verify the method to seal the soil vapor probe was satisfactory.

Please note that this overall project Site was cleaned up and redeveloped through NYSDEC's Brownfield Cleanup Program due to its past use as a manufactured gas plant, bus fleet fueling facility and asphalt batch plant, which in aggregate left residues of coal tar and petroleum products that were remediated. However, all samples were analyzed for all target VOCs included within the United States Environmental Protection Agency (USEPA) Method TO-15 at a NYSDOH certified laboratory, including compounds (such as chlorinated solvents) beyond just those necessary to assess just coal tar and petroleum residues. Laboratory analyses were performed by Alpha Analytical, Mansfield, Massachusetts (Alpha), which is accredited by the National Environmental Laboratory Accreditation Program (NELAP). Alpha is also a NYSDOH ELAP lab, ID #11627.

Laboratory Results and Evaluation

Laboratory testing results are provided in Table 1. A data usability summary report (DUSR) was prepared for each round of analyses performed by Alpha. The results presented by Alpha were compliant with the data quality objectives for the project. Results in Table 1 have been flagged as indicated by the laboratory and DUSR. Laboratory Data Reports and DUSRs are provided in Appendix A.

Analytical results of the indoor air sampling events were evaluated by comparison to two sets of comparison criteria:

- For compounds targeted for soil vapor intrusion evaluation by the NYSDOH, indoor air sample results were compared to matrices contained in the NYSDOH *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.*

- For all compounds, including those not targeted by the NYSDOH guidance, results were also compared to the Indoor Air Quality (IAQ) levels published by the USEPA Office of Indoor Air and Radiation in the Building Assessment Survey (BASE) Study (USEPA, 2001). The BASE study used a standardized protocol to collect extensive indoor air quality data from one hundred locations in thirty-seven cities in the U.S. The indoor and outdoor comparison levels used for comparison in the evaluation of analytical data were those published in the USEPA guidance document at the 75th percentile level.

Regarding the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, 2006)*, the analyte-appropriate decision matrix determinations used were provided by Tables 3.1, 3.2, and Appendix A of the NYSDOH guidance document as updated in May 2017. Specifically, NYSDOH has established guidance action levels for eight volatile chemicals, mainly chlorinated volatile organic compounds, based on state review of toxicity data, risk assessments, and soil vapor intrusion data. Regarding all other compounds, including compounds related to coal tar and petroleum residues associated with the past site use and addressed by remediation completed on the site, the USEPA BASE study provides comparison criteria for assessment of those compounds.

In overall summary, based on our comparison of the data to the applicable NYSDOH guidance matrices (Matrix A, Matrix B, Matrix C) for both indoor air and sub-slab vapor samples, all comparisons to the NYSDOH guidance values in Table 1 show that No Further Action is required.

The NYSDOH guidance provides comparison criteria within the risk matrices predominantly for chlorinated VOCs (e.g., trichloroethene) and does not provide criteria for coal tar or petroleum-based VOCs. Building-specific sampling descriptions are provided below. Please note that due to residence floor finishes, drilling through to the sub-slab soils was only feasible within the garage spaces for most residential units (an option allowed in the sampling plan approved for this work by NYSDEC).

In the Northeast Carriage House, the sub-slab sample was collected in the garage and the indoor air sample was collected at the approximate center of the open plan ground floor kitchen/living area. Both the indoor air and sub-slab soil vapor concentrations were below NYSDOH criteria for further action or monitoring and the BASE database comparison levels.

In the Northwest Carriage House, the sub-slab sample was collected in the garage, and the indoor air sample was collected at the approximate center of the open plan ground floor kitchen/living area. Both the indoor air and sub-slab soil vapor concentrations were below NYSDOH criteria for further action or monitoring. Only two results exceeded BASE 75th percentile levels: ethanol and methylene chloride, both common in cleaning and personal care products such as rubbing alcohol, nail polish remover, and common cleaning products.

In the Southeast Carriage House, the sub-slab sample was collected in the garage and the indoor air sample was collected at the approximate center of the open plan ground floor kitchen/living area. Both the indoor air and sub-slab soil vapor concentrations were below NYSDOH criteria for further action or monitoring and the BASE database comparison levels.

In the Southwest Carriage House, the sub-slab sample was collected in the garage, and the indoor air sample was collected at the approximate center of the open plan ground floor kitchen/living area. Both the indoor air and sub-slab soil vapor concentrations were below NYSDOH criteria for further action or monitoring. Results for four compounds exceeded BASE 75th percentile levels: 1,2-dichloroethane, trichloromethane, ethanol, ethyl acetate, and isopropyl alcohol. All of these compounds are commonly found in cleaning products and/or personal care products such as rubbing alcohol, nail polish remover, and common cleaning products.

In the Townhouse 1 building the sub-slab sample was collected in the garage, and the indoor air sample was collected in a hallway adjacent to a ground floor bathroom and playroom. Both the indoor air and sub-slab soil vapor concentrations were below NYSDOH criteria for further action or monitoring and BASE database comparison levels.

In the Townhouse 3 building the sub-slab sample was collected in a mechanical area just off the painted garage floor and the indoor air sample was collected in a hallway adjacent to a ground floor bathroom and bedroom. Both the indoor air and sub-slab soil vapor concentrations were below NYSDOH criteria for further action or monitoring and the BASE database comparison criteria.

In the Townhouse 4 building the sub-slab sample was collected in the garage, and the indoor air sample was collected in a hallway adjacent to a ground floor bathroom and living area. Both the indoor air and sub-slab soil vapor concentrations were below NYSDOH criteria for further action or monitoring. Results for one compound exceeded its BASE 75th percentile level: ethanol. This compound is commonly found in cleaning products and/or personal care products such as rubbing alcohol, nail polish remover, and common cleaning products.

Closing

Based on the sampling completed and comparison of the data to the applicable NYSDOH guidance matrices (Matrix A, Matrix B, Matrix C) for both indoor air and sub-slab vapor samples, all comparisons to the NYSDOH guidance values indicate that No Further Action or Monitoring is required for the buildings/locations where sampling has been completed.

The NYSDOH guidance provides comparison criteria within the risk matrices predominantly for chlorinated VOCs (e.g., trichloroethene) and does not provide criteria for coal tar or petroleum-based VOCs. For those compounds, comparison was made to the USEPA BASE data 75th percentile values. Results of indoor air compared to that database indicates only a select few compounds detected at concentrations greater than the BASE comparison criteria; all of the compounds detected above the 75th percentile threshold appear to be associated with common commercial cleaner products, personal care products and/or building materials or finishes.

Please note we have also prepared a letter with sample results for each of the seven individual occupied residences noted herein. Each letter is being provided to that resident by Ferry Landings/National Resources under separate cover and following submittal of this report to NYSDEC.

Please contact us if you have any questions.

Sincerely yours,
HALEY & ALDRICH OF NEW YORK

Vincent B. Dick
Principal

Jonathan D. Babcock, P.E.
Senior Technical Specialist

Attachments:

Table 1 – Summary of Air Quality Analytical Results, April 2021
Figure Set –Overall Site Plan and Individual Unit Sample Locations, updated April 2021
Appendix A – Data Usability Summary Reports and Laboratory Data Report

c: Ferry Landings, LLC; Attn: Carl Monheit
NYSDOH; Attn: Steven Berninger

TABLE 1

Summary of Air Quality Analytical Results, April 2021

HALEY ALDRICH

TABLE I
SUMMARY OF AIR QUALITY ANALYTICAL RESULTS - 2021
TARRYTOWN FORMER MGP SITE
TARRYTOWN, NY
FILE NO. 28590

Location Group	Comparison Criteria				Comparison Sample	Comparison Sample	Carriage House NE		Carriage House NW		Carriage House SE	
Location/Sample Description	NYSDOH Matrices Indoor Air No Further Action May 2017	NYSDOH Matrices Sub Slab Soil Vapor No Further Action May 2017	BASE database Indoor Air 75th Percentage USEPA, 2001	BASE database Outdoor Air 75th Percentage USEPA, 2001	Outdoor Ambient Air	Outdoor Ambient Air	Indoor Air - Carriage House NE	Subslab - Carriage House NE	Indoor Air - Carriage House NW	Subslab - Carriage House NW	Indoor Air - Carriage House SE	Subslab - Carriage House SE
Location					AACH-SW	AATH4	IACH-NE	SSCH-NE	IACH-NW	SSCH-NW	IACH-SE	SSCH-SE
Sample Date					02/16/2021	02/22/2021	02/18/2021	02/18/2021	02/17/2021	02/17/2021	02/23/2021	02/23/2021
Sample Type					N	N	N	N	N	N	N	N
Sample Name					AA-25RVR-021621	AA-165WMAIN-022221	IAQ-4HUD-021821	SS-4HUD-021821	IAQ-27RVR-021721	SS-27RVR-021721	IAQ-18ORCH-022321	SS-18ORCH-022321
Lab Sample ID					L2108837-03	L2108837-10	L2108837-08	L2108837-09	L2108837-06	L2108837-07	L2108837-15	L2108837-16
Matrix					AA	AA	IA	GS	IA	GS	IA	GS
Volatile Organic Compounds (ug/m3)												
1,1,1-Trichloroethane	3 - 10	100 - 1000	10.8	1.7	0.109 U	0.109 U	0.109 U	1.09 U	0.109 U	1.7 U	0.109 U	1.09 U
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	2.14 U	1.37 U	1.37 U
1,1,2-Trichloroethane	NA	NA	<1.4	<1.4	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.7 U	1.09 U	1.09 U
1,1-Dichloroethane	NA	NA	<0.5	<0.6	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	1.26 U	0.809 U	0.809 U
1,1-Dichloroethene	0.2 - 1	6 - 60	<1.2	<1.2	0.079 U	0.079 U	0.079 U	0.793 U	0.079 U	1.24 U	0.079 U	0.793 U
1,2,4-Trichlorobenzene	NA	NA	<1.2	<1.2	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	2.32 U	1.48 U	1.48 U
1,2,4-Trimethylbenzene	NA	NA	5.1	3.1	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	**1.62**	0.983 U	0.983 U
1,2-Dibromoethane (Ethylene Dibromide)	NA	NA	<1.4	<1.4	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	2.4 U	1.54 U	1.54 U
1,2-Dichlorobenzene	NA	NA	<1.0	<1.0	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.88 U	1.2 U	1.2 U
1,2-Dichloroethane	NA	NA	<0.7	<0.6	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	1.26 U	0.809 U	0.809 U
1,2-Dichloropropane	NA	NA	<1.6	<1.6	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	1.44 U	0.924 U	0.924 U
1,2-Dichlorotetrafluoroethane (CFC 114)	NA	NA	<3.0	<3.0	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	2.18 U	1.4 U	1.4 U
1,3,5-Trimethylbenzene	NA	NA	<4.6	<2.4	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	1.53 U	0.983 U	0.983 U
1,3-Butadiene	NA	NA	<2.7	<2.8	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.69 U	0.442 U	0.442 U
1,3-Dichlorobenzene	NA	NA	<1.1	<1.0	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.88 U	1.2 U	1.2 U
1,4-Dichlorobenzene	NA	NA	1.4	<1.4	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.88 U	1.2 U	1.2 U
1,4-Dioxane	NA	NA	NA	NA	0.721 U	0.721 U	0.721 U	**6.34**	0.721 U	**14.4**	0.721 U	0.721 U
2,2,4-Trimethylpentane	NA	NA	NA	NA	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	1.46 U	**1.28**	0.934 U
2-Butanone (Methyl Ethyl Ketone)	NA	NA	7.5	5.7	1.47 U	1.47 U	1.47 U	**6.05**	1.47 U	**4.1**	1.47 U	1.47 U
2-Hexanone	NA	NA	NA	NA	0.82 U	0.82 U	0.82 U	**0.889**	0.82 U	1.28 U	0.82 U	0.82 U
4-Ethyl toluene	NA	NA	<3.1	<2.0	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	1.53 U	0.983 U	0.983 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	NA	3	0.9	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	3.2 U	2.05 U	2.05 U
Acetone	NA	NA	59.8	31.7	**6.37**	**4.92**	**15.7**	**247**	**15.6**	**70.6**	**18.4**	**102**
Allyl chloride	NA	NA	NA	NA	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.977 U	0.626 U	0.626 U
Benzene	NA	NA	5.1	3.7	0.639 U	0.639 U	0.639 U	0.639 U	0.639 U	0.997 U	**2.32**	**0.987**
Benzyl Chloride (alpha-Chlorotoluene)	NA	NA	<1.7	<1.6	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.62 U	1.04 U	1.04 U
Bromodichloromethane	NA	NA	NA	NA	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	2.09 U	1.34 U	1.34 U
Bromoform	NA	NA	NA	NA	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	3.23 U	2.07 U	2.07 U
Bromomethane (Methyl Bromide)	NA	NA	<1.1	<1.0	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	1.21 U	0.777 U	0.777 U
Carbon disulfide	NA	NA	2.1	2.2	0.623 U	0.623 U	0.623 U	**0.629**	0.623 U	**1.27**	0.623 U	**0.838**
Carbon tetrachloride	0.2 - 1	6 - 60	<1.1	<1.0	**0.497**	**0.44**	**0.478**	1.26 U	**0.491**	1.96 U	**0.51**	1.26 U
Chlorobenzene	NA	NA	<0.8	<0.8	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	1.44 U	0.921 U	0.921 U
Chloroethane	NA	NA	<1.0	<1.0	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.823 U	0.528 U	0.528 U
Chloroform (Trichloromethane)	NA	NA	<1.2	<0.6	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	1.52 U	0.977 U	0.977 U
Chloromethane (Methyl Chloride)	NA	NA	3.1	3	**1.27**	**1.19**	**1.31**	**0.56**	**1.34**	**0.871**	**1.39**	**0.421**
cis-1,2-Dichloroethene	0.2 - 1	6 - 60	<1.2	<1.2	0.079 U	0.079 U	0.079 U	0.793 U	0.079 U	1.24 U	0.079 U	0.793 U
cis-1,3-Dichloropropene	NA	NA	<2.0	<2.0	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	1.42 U	0.908 U	0.908 U
Cyclohexane	NA	NA	NA	NA	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	1.07 U	**0.726**	0.688 U
Dibromochloromethane	NA	NA	NA	NA	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	2.66 U	1.7 U	1.7 U
Dichlorodifluoromethane (CFC-12)	NA	NA	10.5	5.8	**2.4**	**2.35**	**2.43**	**2.45**	**2.44**	**2.41**	**2.54**	**2.49**
Ethanol	NA	NA	140	47	9.42 U	9.42 U	**38.8**	**311**	**411**	**1240**	**89.1**	**366**
Ethyl acetate	NA	NA	3.2	<1.2	1.8 U	1.8 U	1.8 U	1.8 U	**2.64**	**5.95**	1.8 U	1.8 U
Ethylbenzene	NA	NA	3.4	1.6	0.869 U	0.869 U	0.869 U	**1.34**	0.869 U	**1.64**	0.869 U	**1.65**
Hexachlorobutadiene	NA	NA	<2.5	<2.6	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	3.33 U	2.13 U	2.13 U
Hexane	NA	NA	NA	NA	0.705 U	0.705 U	0.705 U	0.705 U	**0.751**	**1.29**	**2.04**	**0.789**
Isopropyl Alcohol (2-Propanol)	NA	NA	56	6.6	1.23 U	1.23 U	**2.78**	**5410**	**30.7**	**169**	**5.16**	**7.96**

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Location/Sample Description	NYSDOH Matrices Indoor Air No Further Action May 2017	NYSDOH Matrices Sub Slab Soil Vapor No Further Action May 2017	BASE database Indoor Air 75th Percentage USEPA, 2001	BASE database Outdoor Air 75th Percentage USEPA, 2001	Outdoor Ambient Air	Outdoor Ambient Air	Indoor Air - Carriage House NE	Subslab - Carriage House NE	Indoor Air - Carriage House NW	Subslab - Carriage House NW	Indoor Air - Carriage House SE	Subslab - Carriage House SE
Location					AACH-SW	AATH4	IACH-NE	SSCH-NE	IACH-NW	SSCH-NW	IACH-SE	SSCH-SE
Sample Date					02/16/2021	02/22/2021	02/18/2021	02/18/2021	02/17/2021	02/17/2021	02/23/2021	02/23/2021
Sample Type					N	N	N	N	N	N	N	N
Sample Name					AA-25RVR-021621	AA-165WMAIN-022221	IAQ-4HUD-021821	SS-4HUD-021821	IAQ-27RVR-021721	SS-27RVR-021721	IAQ-18ORCH-022321	SS-18ORCH-022321
Lab Sample ID					L2108837-03	L2108837-10	L2108837-08	L2108837-09	L2108837-06	L2108837-07	L2108837-15	L2108837-16
Matrix					AA	AA	IA	GS	IA	GS	IA	GS
Volatile Organic Compounds (ug/m3)												
m,p-Xylenes	NA	NA	12.2	7.3	1.74 U	1.74 U	1.74 U	**4.69**	1.74 U	**5.78**	**2.34**	**5.13**
Methyl Tert Butyl Ether	NA	NA	<6.4	<5.4	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	1.12 U	0.721 U	0.721 U
Methylene chloride	3 - 10	100 - 1000	5	3	1.74 U	1.74 U	1.74 U	**2.83**	**7.19**	2.71 U	1.74 U	1.74 U
N-Heptane	NA	NA	NA	NA	0.82 U	0.82 U	0.82 U	**3.87**	0.82 U	**3.41**	**1.55**	**2.52**
o-Xylene	NA	NA	4.4	2.6	0.869 U	0.869 U	0.869 U	**1.92**	0.869 U	**2.23**	**0.903**	**1.62**
Styrene	NA	NA	<2.3	<2.0	0.852 U	0.852 U	**0.92**	0.852 U	0.852 U	1.33 U	0.852 U	0.852 U
Tert-Butyl Alcohol (tert-Butanol)	NA	NA	NA	NA	1.52 U	1.52 U	1.52 U	**14.4**	1.52 U	**7.7**	1.52 U	**7.28**
Tetrachloroethene	3 - 10	100 - 1000	5.9	3	0.136 U	0.136 U	0.136 U	1.36 U	**0.231**	2.12 U	**0.136**	1.36 U
Tetrahydrofuran	NA	NA	NA	NA	1.47 U	1.47 U	1.47 U	1.47 U	1.47 U	**20.1**	1.47 U	1.47 U
Toluene	NA	NA	25.9	16.3	0.754 U	0.754 U	**1.57**	**1.61**	**1.84**	**2.19**	**5.05**	**1.64**
trans-1,2-Dichloroethene	NA	NA	NA	NA	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	1.24 U	0.793 U	0.793 U
trans-1,3-Dichloropropene	NA	NA	<1.2	<1.2	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	1.42 U	0.908 U	0.908 U
Trichloroethene	0.2 - 1	6 - 60	1.2	<1.6	0.107 U	0.107 U	0.107 U	1.07 U	0.107 U	1.68 U	0.107 U	1.07 U
Trichlorofluoromethane (CFC-11)	NA	NA	6.7	2.8	**1.44**	**1.43**	**1.44**	**1.45**	**1.48**	1.75 U	**1.53**	**1.46**
Trifluorotrichloroethane (Freon 113)	NA	NA	<3.0	<2.0	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	2.39 U	1.53 U	1.53 U
Vinyl Bromide (Bromoethene)	NA	NA	NA	NA	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	1.36 U	0.874 U	0.874 U
Vinyl chloride	0.2	6	<1.0	<1.0	0.051 U	0.051 U	0.051 U	0.511 U	0.051 U	0.798 U	0.051 U	0.511 U

Abbreviations:
- BASE: Building Assessment Survey Evaluation
- IA: Indoor Air
- AA: Ambient Air
- GS: Soil Gas (Sub-Slab)
- ug/m3: microgram per cubic meter
- U: compound not detected, number value is laboratory reporting limit

Notes Regarding Comparison Criteria and Results

1. No Further Action (NFA) Level – No further action is required when the detected concentration of the target compounds in both the Indoor Air (IA) and Sub Slab (GS) soil vapor samples are below the applicable concentration range provided by the May 2017 NYSDOH Decision Matrices (A or B) where "No Further Action" is recommended.
2. Results above that are in **BOLD** font are compounds detected at concentrations greater than the laboratory reporting limit. They do not exceed regulatory criteria unless they are also highlighted - see the notes below.
3. Target compounds detected at concentrations greater than the May 2017 NYSDOH Decision Matrix No Further Action levels for both the IA and SS samples are highlighted yellow.
4. Target compounds in Indoor Air and Ambient Air detected at concentrations greater than the USEPA 2001 BASE 75th Percentage comparison criteria are highlighted blue. This can be caused by emissions from nearby businesses, consumer products in the air space sampled or other similar common sources.
5. See the attached report for further details.

TABLE I
SUMMARY OF AIR QUALITY ANALYTICAL RESULTS - 2021
TARRYTOWN FORMER MGP SITE
TARRYTOWN, NY
FILE NO. 28590

Location Group	Comparison Criteria				Comparison Sample	Comparison Sample	Carriage House SW		Townhouse 1		Townhouse 3		Townhouse 4	
Location/Sample Description	NYSDOH Matrices Indoor Air No Further Action May 2017	NYSDOH Matrices Sub Slab Soil Vapor No Further Action May 2017	BASE database Indoor Air 75th Percentage USEPA, 2001	BASE database Outdoor Air 75th Percentage USEPA, 2001	Outdoor Ambient Air	Outdoor Ambient Air	Indoor Air - Carriage House SW	Subslab - Carriage House SW	Indoor Air - Townhouse 1	Subslab - Townhouse 1	Indoor Air - Townhouse 3	Subslab - Townhouse 3	Indoor Air - Townhouse 4	Subslab - Townhouse 4
Location					AACH-SW	AATH4	IACH-SW	SSCH-SW	IATH1	SSTH1	IATH3	SSTH3	IATH4	SSTH4
Sample Date					02/16/2021	02/22/2021	02/16/2021	02/16/2021	02/23/2021	02/23/2021	02/17/2021	02/17/2021	02/22/2021	02/22/2021
Sample Type					N	N	N	N	N	N	N	N	N	N
Sample Name					AA-25RVR-021621	AA-165WMAIN-022221	IAQ-25RVR-021621	SS-25RVR-021621	IAQ-4ORCH-022321	SS-4ORCH-022321	IAQ-9RVR-021721	SS-9RVR-021721	IAQ-165WMAIN-022221	SS-165WMAIN-022221
Lab Sample ID					L2108837-03	L2108837-10	L2108837-01	L2108837-02	L2108837-13	L2108837-14	L2108837-04	L2108837-05	L2108837-11	L2108837-12
Matrix					AA	AA	IA	GS	IA	GS	IA	GS	IA	GS
Volatile Organic Compounds (ug/m3)														
1,1,1-Trichloroethane	3 - 10	100 - 1000	10.8	1.7	0.109 U	0.109 U	0.109 U	1.09 U	0.109 U	1.09 U	0.109 U	1.09 U	0.109 U	1.09 U
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U	1.37 U
1,1,2-Trichloroethane	NA	NA	<1.4	<1.4	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U	1.09 U
1,1-Dichloroethane	NA	NA	<0.5	<0.6	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
1,1-Dichloroethene	0.2 - 1	6 - 60	<1.2	<1.2	0.079 U	0.079 U	0.079 U	0.793 U	0.079 U	0.793 U	0.079 U	0.793 U	0.079 U	0.793 U
1,2,4-Trichlorobenzene	NA	NA	<1.2	<1.2	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U	1.48 U
1,2,4-Trimethylbenzene	NA	NA	5.1	3.1	0.983 U	0.983 U	0.983 U	**1.98**	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	**1.32**
1,2-Dibromoethane (Ethylene Dibromide)	NA	NA	<1.4	<1.4	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U	1.54 U
1,2-Dichlorobenzene	NA	NA	<1.0	<1.0	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichloroethane	NA	NA	<0.7	<0.6	0.809 U	0.809 U	**1.93**	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U	0.809 U
1,2-Dichloropropane	NA	NA	<1.6	<1.6	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U	0.924 U
1,2-Dichlorotetrafluoroethane (CFC 114)	NA	NA	<3.0	<3.0	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
1,3,5-Trimethylbenzene	NA	NA	<4.6	<2.4	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
1,3-Butadiene	NA	NA	<2.7	<2.8	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U	0.442 U
1,3-Dichlorobenzene	NA	NA	<1.1	<1.0	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dichlorobenzene	NA	NA	1.4	<1.4	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-Dioxane	NA	NA	NA	NA	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	**1.29**	0.721 U	0.721 U
2,2,4-Trimethylpentane	NA	NA	NA	NA	0.934 U	0.934 U	**1.32**	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U	0.934 U
2-Butanone (Methyl Ethyl Ketone)	NA	NA	7.5	5.7	1.47 U	1.47 U	**1.6**	**1.93**	1.47 U	**4.63**	**3.89**	**9.32**	**1.55**	**14.4**
2-Hexanone	NA	NA	NA	NA	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
4-Ethyl toluene	NA	NA	<3.1	<2.0	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U	0.983 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	NA	3	0.9	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U	2.05 U
Acetone	NA	NA	59.8	31.7	**6.37**	**4.92**	**29**	**46.1**	**11.6**	**63.4**	**13.6**	**209**	**13.8**	**131**
Allyl chloride	NA	NA	NA	NA	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U	0.626 U
Benzene	NA	NA	5.1	3.7	0.639 U	0.639 U	**3.19**	**0.815**	**0.76**	0.639 U	**0.642**	**0.888**	**0.728**	**0.783**
Benzyl Chloride (alpha-Chlorotoluene)	NA	NA	<1.7	<1.6	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U	1.04 U
Bromodichloromethane	NA	NA	NA	NA	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U	1.34 U
Bromoform	NA	NA	NA	NA	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U	2.07 U
Bromomethane (Methyl Bromide)	NA	NA	<1.1	<1.0	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U	0.777 U
Carbon disulfide	NA	NA	2.1	2.2	0.623 U	0.623 U	0.623 U	**1.05**	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U	0.623 U
Carbon tetrachloride	0.2 - 1	6 - 60	<1.1	<1.0	**0.497**	**0.44**	**0.447**	1.26 U	**0.421**	1.26 U	**0.434**	1.26 U	**0.472**	1.26 U
Chlorobenzene	NA	NA	<0.8	<0.8	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U	0.921 U
Chloroethane	NA	NA	<1.0	<1.0	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U	0.528 U
Chloroform (Trichloromethane)	NA	NA	<1.2	<0.6	0.977 U	0.977 U	**1.53**	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U	0.977 U
Chloromethane (Methyl Chloride)	NA	NA	3.1	3	**1.27**	**1.19**	**1.47**	**0.574**	**1.28**	**0.496**	**1.31**	**1.41**	**1.42**	**0.525**
cis-1,2-Dichloroethene	0.2 - 1	6 - 60	<1.2	<1.2	0.079 U	0.079 U	0.079 U	0.793 U	0.079 U	0.793 U	0.079 U	0.793 U	0.079 U	0.793 U
cis-1,3-Dichloropropene	NA	NA	<2.0	<2.0	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
Cyclohexane	NA	NA	NA	NA	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U	0.688 U
Dibromochloromethane	NA	NA	NA	NA	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane (CFC-12)	NA	NA	10.5	5.8	**2.4**	**2.35**	**2.36**	**2.47**	**2.41**	**2.47**	**2.4**	**2.46**	**2.44**	**2.4**
Ethanol	NA	NA	140	47	9.42 U	9.42 U	**1160**	**226**	**105**	**215**	**119**	**256**	**782**	**220**
Ethyl acetate	NA	NA	3.2	<1.2	1.8 U	1.8 U	**4.22**	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Ethylbenzene	NA	NA	3.4	1.6	0.869 U	0.869 U	0.869 U	**1.1**	0.869 U	**1.3**	0.869 U	**1.23**	0.869 U	**2.77**
Hexachlorobutadiene	NA	NA	<2.5	<2.6	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U	2.13 U
Hexane	NA	NA	NA	NA	0.705 U	0.705 U	**1.17**	**0.818**	0.705 U	0.705 U	0.705 U	**1.34**	0.705 U	**0.923**
Isopropyl Alcohol (2-Propanol)	NA	NA	56	6.6	1.23 U	1.23 U	**167**	**15.6**	**20.8**	**10**	**2.61**	**19.6**	**3.42**	**13.8**

TABLE I
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TARRYTOWN FORMER MGP SITE
TARRYTOWN, NY
FILE NO. 28590

Location Group	Comparison Criteria				Comparison Sample	Comparison Sample	Carriage House SW		Townhouse 1		Townhouse 3		Townhouse 4	
Location/Sample Description	NYSDOH Matrices Indoor Air No Further Action May 2017	NYSDOH Matrices Sub Slab Soil Vapor No Further Action May 2017	BASE database Indoor Air 75th Percentage USEPA, 2001	BASE database Outdoor Air 75th Percentage USEPA, 2001	Outdoor Ambient Air	Outdoor Ambient Air	Indoor Air - Carriage House SW	Subslab - Carriage House SW	Indoor Air - Townhouse 1	Subslab - Townhouse 1	Indoor Air - Townhouse 3	Subslab - Townhouse 3	Indoor Air - Townhouse 4	Subslab - Townhouse 4
Location					AACH-SW	AATH4	IACH-SW	SSCH-SW	IATH1	SSTH1	IATH3	SSTH3	IATH4	SSTH4
Sample Date					02/16/2021	02/22/2021	02/16/2021	02/16/2021	02/23/2021	02/23/2021	02/17/2021	02/17/2021	02/22/2021	02/22/2021
Sample Type					N	N	N	N	N	N	N	N	N	N
Sample Name					AA-25RVR-021621	AA-165WMAIN-022221	IAQ-25RVR-021621	SS-25RVR-021621	IAQ-4ORCH-022321	SS-4ORCH-022321	IAQ-9RVR-021721	SS-9RVR-021721	IAQ-165WMAIN-022221	SS-165WMAIN-022221
Lab Sample ID					L2108837-03	L2108837-10	L2108837-01	L2108837-02	L2108837-13	L2108837-14	L2108837-04	L2108837-05	L2108837-11	L2108837-12
Matrix					AA	AA	IA	GS	IA	GS	IA	GS	IA	GS
Volatile Organic Compounds (ug/m3)														
m,p-Xylenes	NA	NA	12.2	7.3	1.74 U	1.74 U	**2.39**	**3.84**	1.74 U	**4.3**	**1.95**	**4.16**	1.74 U	**9.08**
Methyl Tert Butyl Ether	NA	NA	<6.4	<5.4	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U	0.721 U
Methylene chloride	3 - 10	100 - 1000	5	3	1.74 U	1.74 U	1.74 U	**2.67**	1.74 U	1.74 U	1.74 U	**2.49**	1.74 U	1.74 U
N-Heptane	NA	NA	NA	NA	0.82 U	0.82 U	**0.848**	**3.9**	0.82 U	**2.3**	0.82 U	**3.62**	0.82 U	**3.53**
o-Xylene	NA	NA	4.4	2.6	0.869 U	0.869 U	0.869 U	**1.22**	0.869 U	**1.45**	0.869 U	**1.76**	0.869 U	**2.81**
Styrene	NA	NA	<2.3	<2.0	0.852 U	0.852 U	**1.01**	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U	0.852 U
Tert-Butyl Alcohol (tert-Butanol)	NA	NA	NA	NA	1.52 U	1.52 U	1.52 U	**7.97**	1.52 U	**7.06**	1.52 U	**4.76**	1.52 U	**6.21**
Tetrachloroethene	3 - 10	100 - 1000	5.9	3	0.136 U	0.136 U	**0.197**	1.36 U	0.136 U	1.36 U	0.136 U	1.36 U	**0.325**	1.36 U
Tetrahydrofuran	NA	NA	NA	NA	1.47 U	1.47 U	**2.72**	1.47 U	1.47 U	1.47 U	1.47 U	**10.7**	1.47 U	**1.54**
Toluene	NA	NA	25.9	16.3	0.754 U	0.754 U	**6.03**	**1.33**	**1.42**	**1.32**	**1.46**	**2.8**	**3**	**2.06**
trans-1,2-Dichloroethene	NA	NA	NA	NA	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U	0.793 U
trans-1,3-Dichloropropene	NA	NA	<1.2	<1.2	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U	0.908 U
Trichloroethene	0.2 - 1	6 - 60	1.2	<1.6	0.107 U	0.107 U	0.107 U	1.07 U	0.107 U	1.07 U	0.107 U	1.07 U	0.107 U	1.07 U
Trichlorofluoromethane (CFC-11)	NA	NA	6.7	2.8	**1.44**	**1.43**	**1.46**	**1.46**	**1.48**	**1.53**	**1.46**	**1.5**	**1.46**	**1.49**
Trifluorotrichloroethane (Freon 113)	NA	NA	<3.0	<2.0	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U	1.53 U
Vinyl Bromide (Bromoethene)	NA	NA	NA	NA	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U	0.874 U
Vinyl chloride	0.2	6	<1.0	<1.0	0.051 U	0.051 U	0.051 U	0.511 U	0.051 U	0.511 U	0.051 U	0.511 U	0.051 U	0.511 U

Abbreviations:
- BASE: Building Assessment Survey Evaluation
- IA: Indoor Air
- AA: Ambient Air
- GS: Soil Gas (Sub-Slab)
- ug/m3: microgram per cubic meter
- U: compound not detected, number value is laboratory reporting limit

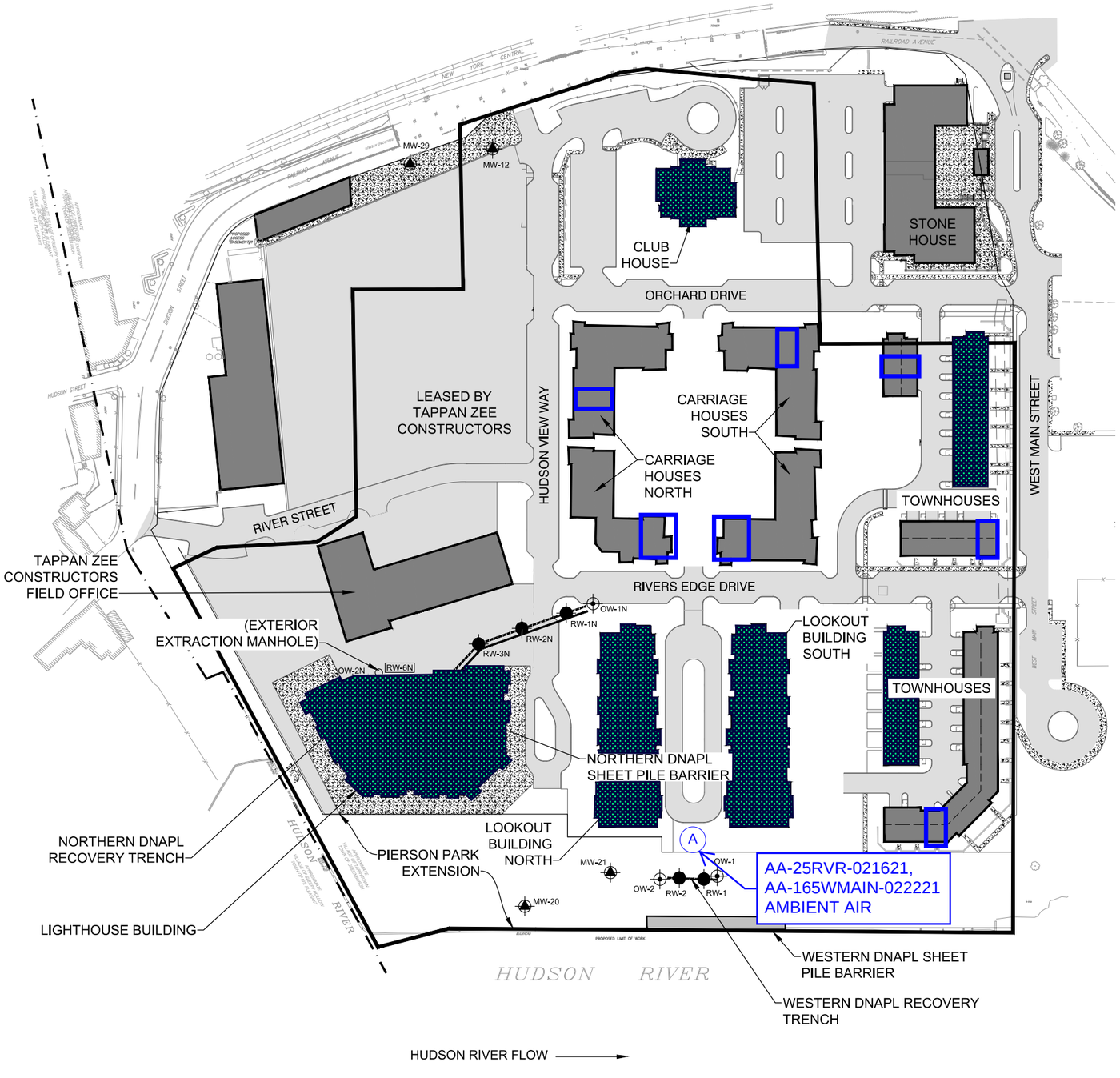
Notes Regarding Comparison Criteria and Results

1. No Further Action (NFA) Level – No further action is required when the detected concentration of the target compounds in both the Indoor Air (IA) and Sub Slab (GS) soil vapor samples are below the applicable concentration range provided by the May 2017 NYSDOH Decision Matrices (A or B) where "No Further Action" is recommended.
2. Results above that are in **BOLD** font are compounds detected at concentrations greater than the laboratory reporting limit. They do not exceed regulatory criteria unless they are also highlighted - see the notes below.
3. Target compounds detected at concentrations greater than the May 2017 NYSDOH Decision Matrix No Further Action levels for both the IA and SS samples are highlighted yellow.
4. Target compounds in Indoor Air and Ambient Air detected at concentrations greater than the USEPA 2001 BASE 75th Percentage comparison criteria are highlighted blue. This can be caused by emissions from nearby businesses, consumer products in the air space sampled or other similar common sources.
5. See the attached report for further details.

FIGURE SET

Overall Site Plan and Individual Unit Sample Locations, updated April 2021

HALEY ALDRICH



LEGEND

- (A) AMBIENT AIR SAMPLE LOCATION, SAME LOCATION EACH WEEK
- SUB-SLAB AND INDOOR AIR SAMPLE COLLECTED IN THE SAME UNIT
- MARCH 2020 SAMPLING COMPLETED
- APPROXIMATE AREA ENCOMPASSED BY THE BROWNFIELD CLEAN-UP AGREEMENT #C36OO64
- LANDSCAPED AREAS (THESE AREAS CONTAIN DEMARCATION LAYER BELOW CLEAN FILL AND LANDSCAPING)
- PAVED WALKS, PATIOS, OR COURTYARDS
- EXISTING BUILDINGS
- ROADS AND PARKING AREAS

NOTES

1. BASE MAP IS BASED ON CAD DRAWING ENTTILED "PH1_10399-08_PHASE.DWG," DATED 1 JULY 2009 FROM CHAZEN COMPANIES OF GLENN FALLS, NEW YORK AND "PARKING ALLOCATION DIAGRAM," DATED 7 MARCH 2013 FROM LESSARD GROUP, INC., VIENNA, VIRGINIA.

N

0 80 160 240 320
SCALE IN FEET

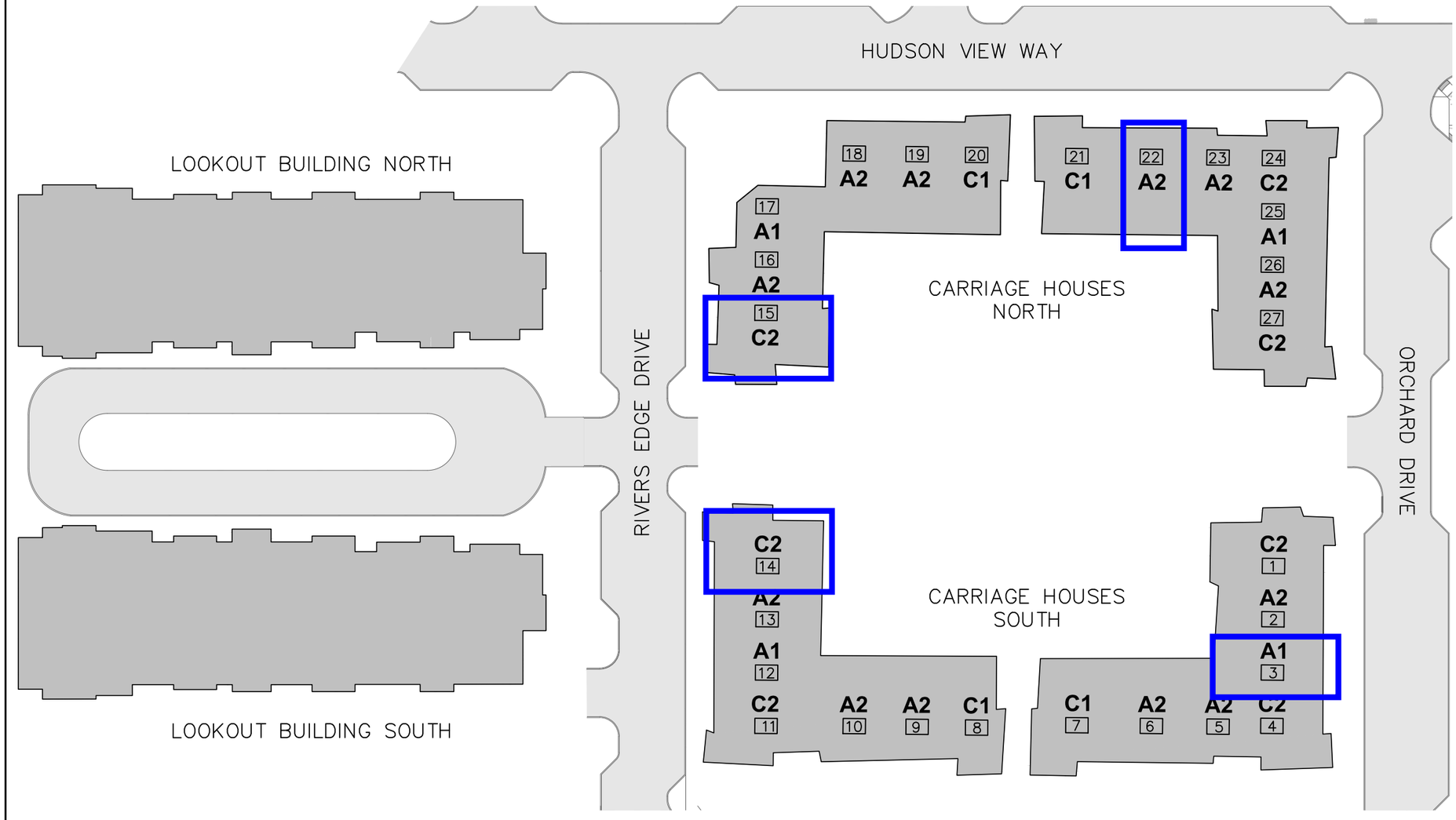
HALEY ALDRICH

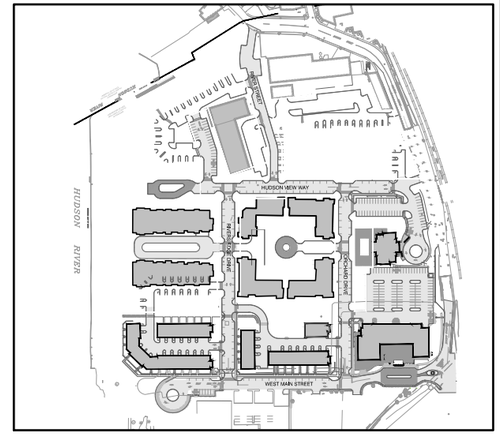
TARRYTOWN FORMER MGP SITE
TARRYTOWN, NEW YORK
FERRY LANDINGS, LLC
NYSDEC SITE NO. C360064

INDOOR AIR QUALITY ASSESSMENT - SITE OVERVIEW

SCALE: AS SHOWN
APRIL 2021

FIGURE 1





KEYMAP
SCALE 1" = 500'

LEGEND

23 UNIT NUMBER

□□ UNIT FLOOR PLAN TYPE

NOTES

1. THIS PLAN IS ADAPTED FROM CHAZEN COMPANIES DRAWING FILE "XLAYOUT_10399-00.DWG".

HALEY ALDRICH

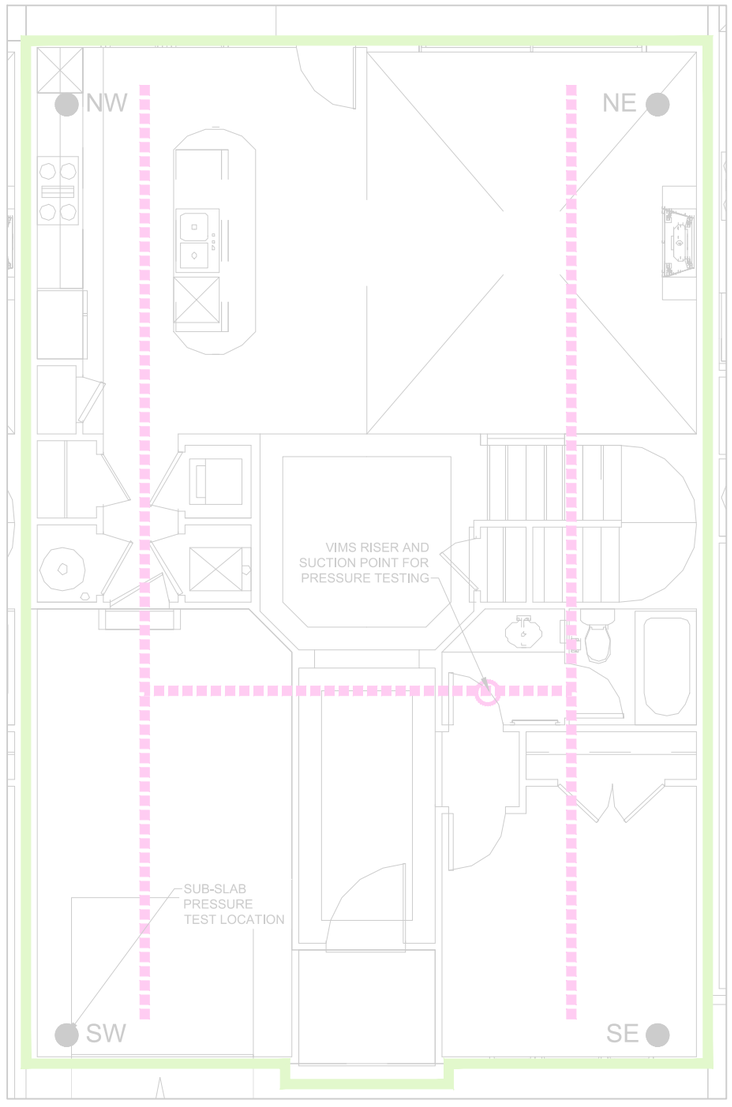
TARRYTOWN FORMER MGP SITE
TARRYTOWN, NEW YORK
FERRY LANDINGS, LLC
NYSDEC SITE No. C360064

UNIT LAYOUT WITH FLOOR PLAN TYPES - CARRIAGE HOUSES

SCALE: AS SHOWN
APRIL 2021

FIGURE 2

G:\28590\GLOBAL\CAD\DRAWINGS\28590-000-0014 CARRIAGE HOUSE SOIL VAPOR SYSTEM R3.DWG

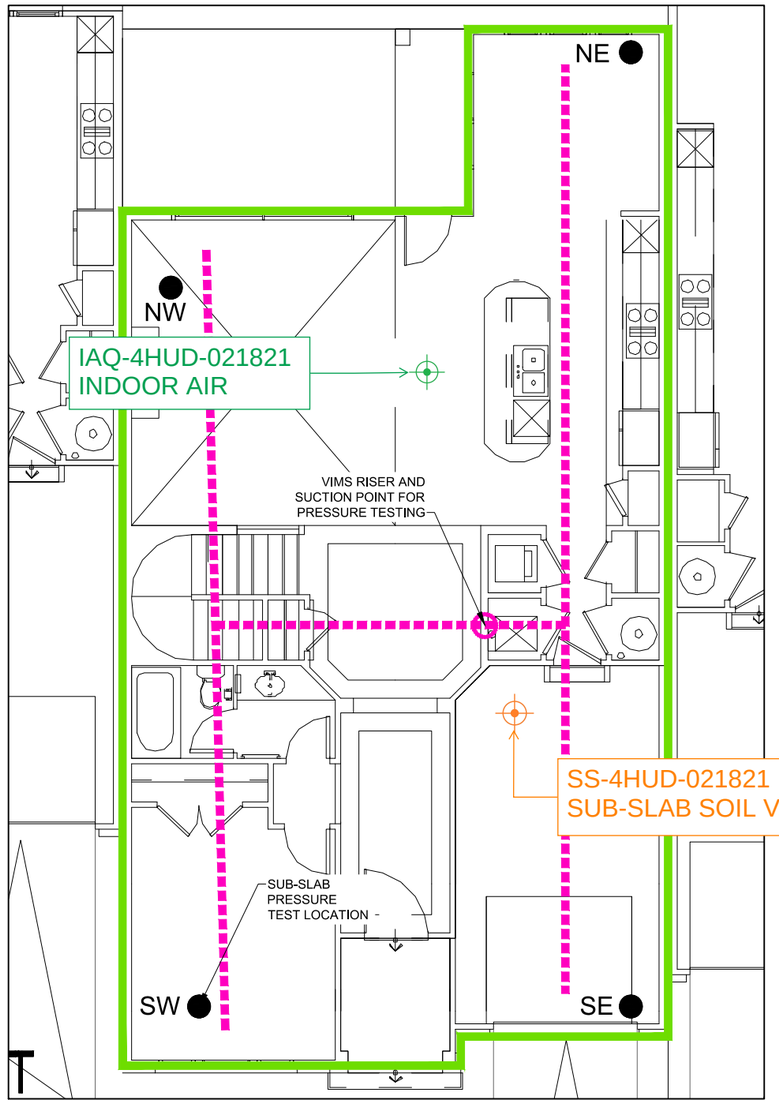


UNIT A1 - GROUND FLOOR

0 4 8

SCALE IN FEET

POST CONSTRUCTION
APPROXIMATE VIMS TEST LOCATIONS



UNIT A2 - GROUND FLOOR

0 5 10

SCALE IN FEET

POST CONSTRUCTION
APPROXIMATE VIMS TEST LOCATIONS

LEGEND:

- SUB-SLAB PRESSURE TEST LOCATION
- VIMS RISER
- NW — TEST LOCATION IDENTIFICATION
- 4" DIA PERFORATED PIPE
- OUTER BUILDING WALL

NOTES:

1. VIMS = VAPOR INTRUSION MANAGEMENT SYSTEM
2. GROUND FLOOR PLANS SHOWN WERE TAKEN FROM DWGS. PA-200 THRU PE-200, PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07. VIMS PROFILE TAKEN FROM DWG. P-701 PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07.

HALEY ALDRICH

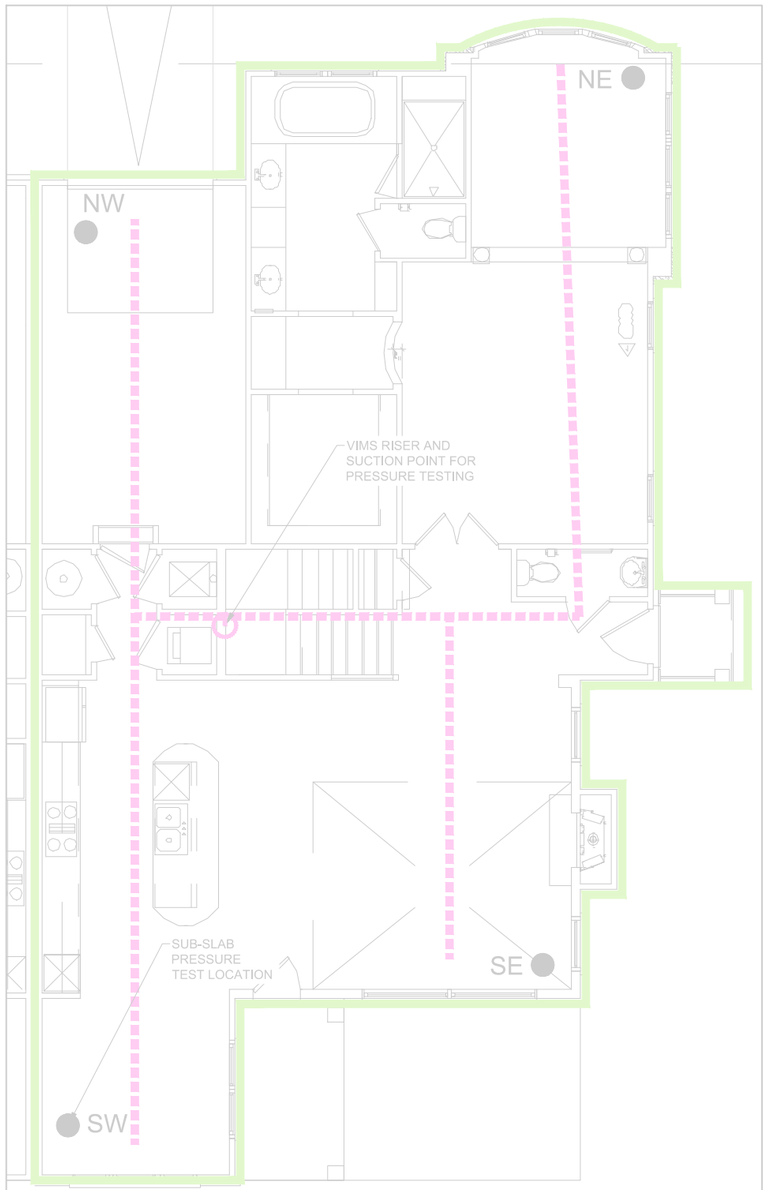
TARRYTOWN FORMER MGP SITE
TARRYTOWN, NEW YORK
FERRY LANDINGS, LLC
NYSDEC SITE No. C360064

CARRIAGE HOUSE - NORTHEAST:
TYPICAL FLOORPLAN

SCALE: NOT TO SCALE
APRIL 2021

FIGURE 3

G:\28590\GLOBAL\CAD\DRAWINGS\28590-000-0012 UNITS A-E SOIL VAPOR SYSTEM.DWG

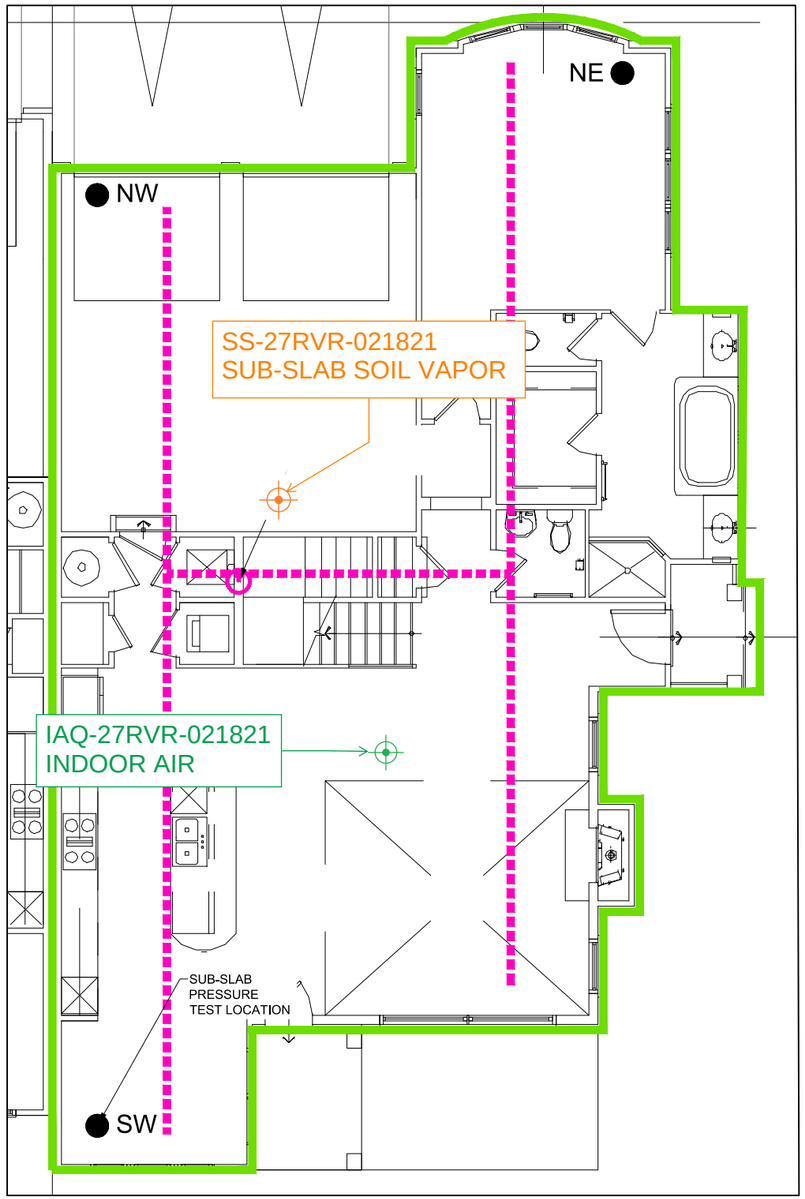


UNIT C1 - GROUND FLOOR

0 5 10

SCALE IN FEET

POST CONSTRUCTION
APPROXIMATE VIMS TEST LOCATIONS



UNIT C2 - GROUND FLOOR

0 5 10

SCALE IN FEET

POST CONSTRUCTION
APPROXIMATE VIMS TEST LOCATIONS

LEGEND:

- SUB-SLAB PRESSURE TEST LOCATION
- VIMS RISER
- NW — TEST LOCATION IDENTIFICATION
- 4" DIA PERFORATED PIPE
- OUTER BUILDING WALL

NOTES:

1. VIMS = VAPOR INTRUSION MANAGEMENT SYSTEM
2. GROUND FLOOR PLANS SHOWN WERE TAKEN FROM DWGS. PA-200 THRU PE-200, PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07. VIMS PROFILE TAKEN FROM DWG. P-701 PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07.

HALEY ALDRICH

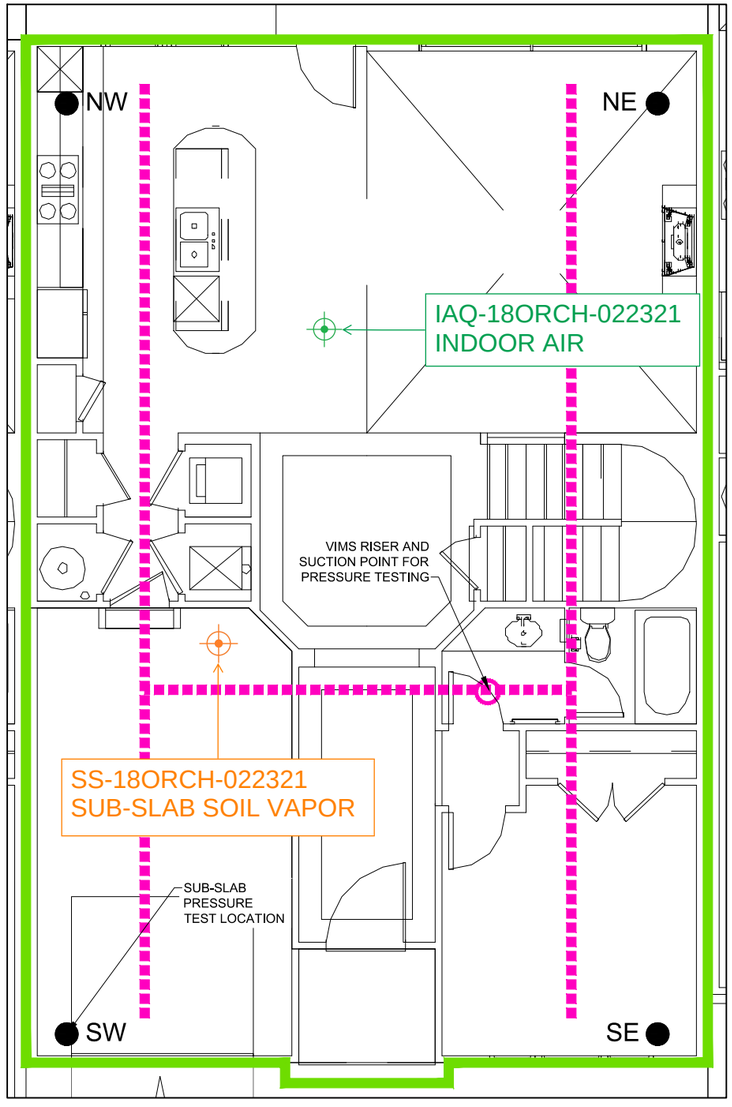
TARRYTOWN FORMER MGP SITE
TARRYTOWN, NEW YORK
FERRY LANDINGS, LLC
NYSDEC SITE No. C360064

CARRIAGE HOUSE - NORTHWEST: TYPICAL FLOORPLAN

SCALE: NOT TO SCALE
APRIL 2021

FIGURE 4

G:\28590\GLOBAL\CAD\DRAWINGS\28590-000-0012 UNITS A-E SOIL VAPOR SYSTEM.DWG

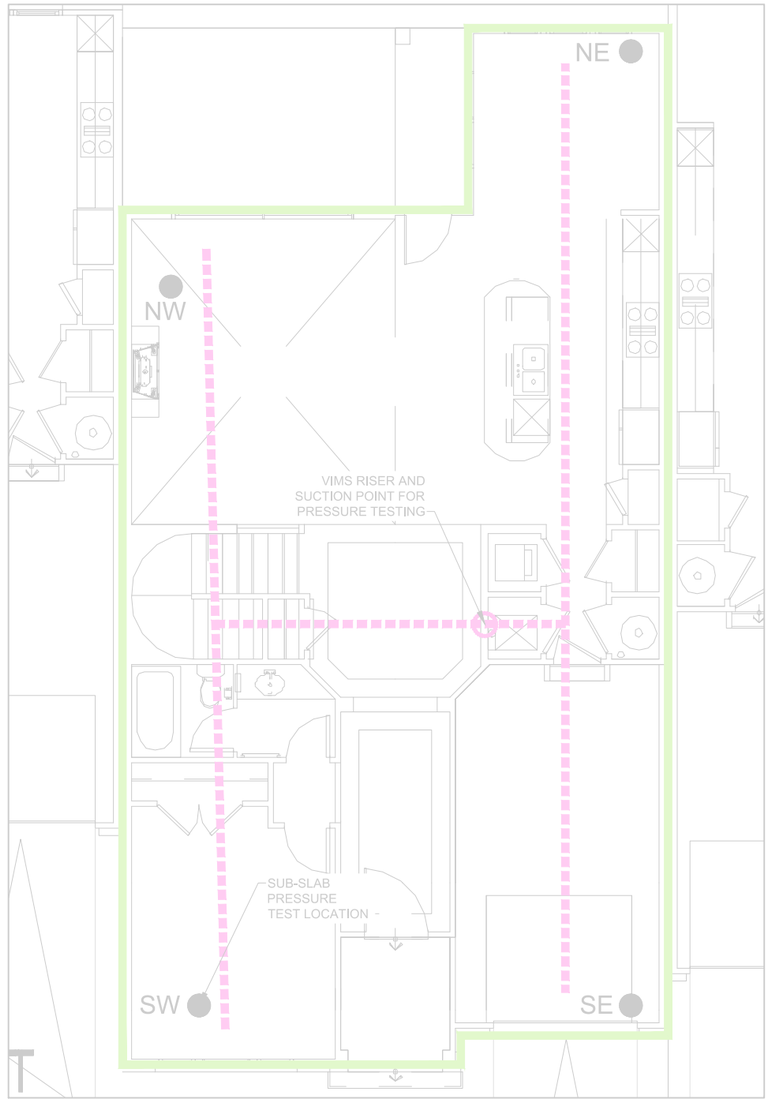


UNIT A1 - GROUND FLOOR

0 4 8

SCALE IN FEET

POST CONSTRUCTION
APPROXIMATE VIMS TEST LOCATIONS



UNIT A2 - GROUND FLOOR

0 5 10

SCALE IN FEET

POST CONSTRUCTION
APPROXIMATE VIMS TEST LOCATIONS

LEGEND:

- SUB-SLAB PRESSURE TEST LOCATION
- VIMS RISER
- NW — TEST LOCATION IDENTIFICATION
- 4" DIA PERFORATED PIPE
- OUTER BUILDING WALL

NOTES:

1. VIMS = VAPOR INTRUSION MANAGEMENT SYSTEM
2. GROUND FLOOR PLANS SHOWN WERE TAKEN FROM DWGS. PA-200 THRU PE-200, PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07. VIMS PROFILE TAKEN FROM DWG. P-701 PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07.

HALEY ALDRICH

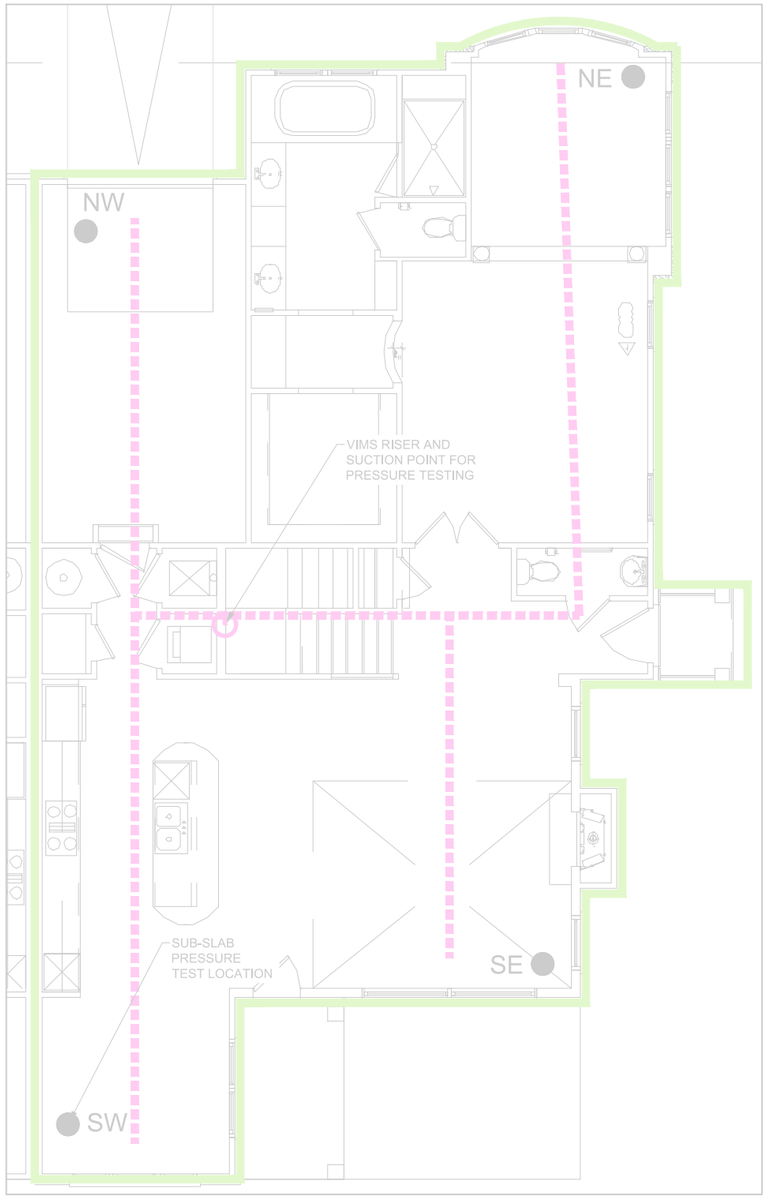
TARRYTOWN FORMER MGP SITE
TARRYTOWN, NEW YORK
FERRY LANDINGS, LLC
NYSDEC SITE No. C360064

CARRIAGE HOUSE - SOUTHEAST: TYPICAL FLOORPLAN

SCALE: NOT TO SCALE
APRIL 2021

FIGURE 5

G:\28590\GLOBAL\CAD\DRAWINGS\28590-000-0012 UNITS A-E SOIL VAPOR SYSTEM.DWG

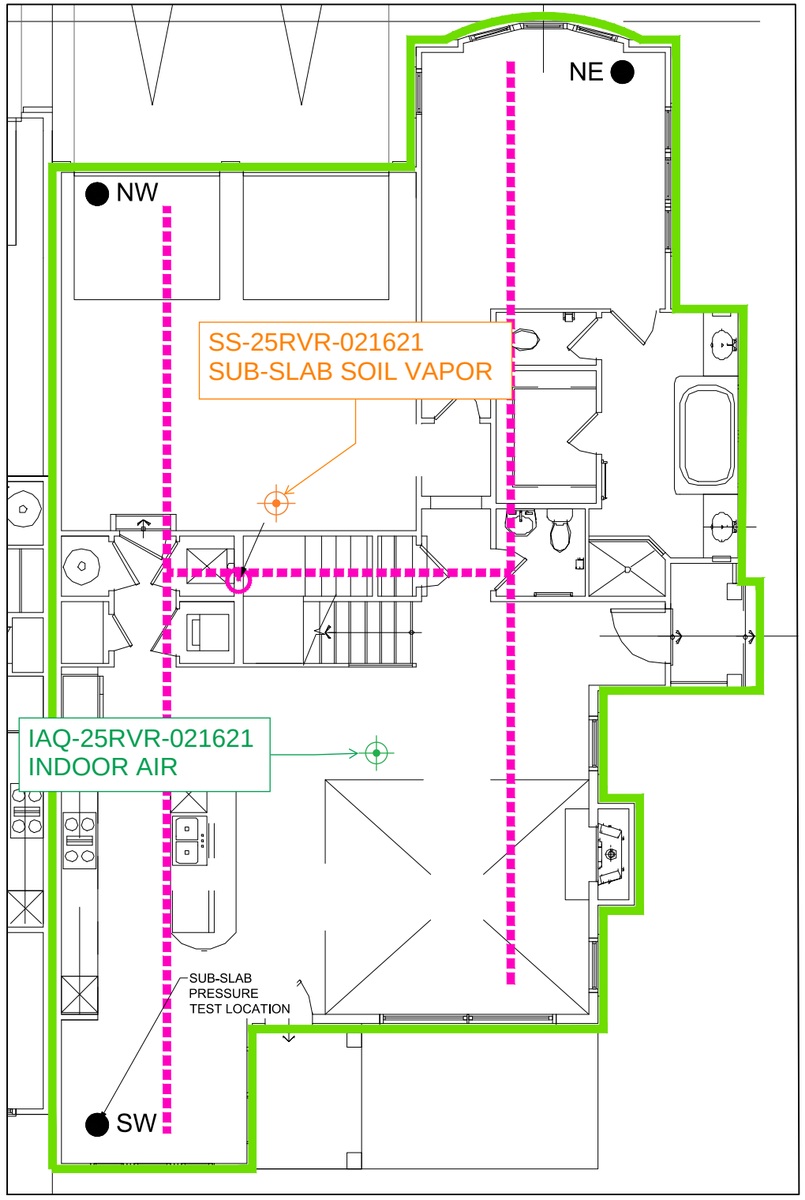


UNIT C1 - GROUND FLOOR

0 5 10

SCALE IN FEET

POST CONSTRUCTION
APPROXIMATE VIMS TEST LOCATIONS



UNIT C2 - GROUND FLOOR

0 5 10

SCALE IN FEET

POST CONSTRUCTION
APPROXIMATE VIMS TEST LOCATIONS

LEGEND:

- SUB-SLAB PRESSURE TEST LOCATION
- VIMS RISER
- NW — TEST LOCATION IDENTIFICATION
- 4" DIA PERFORATED PIPE
- OUTER BUILDING WALL

NOTES:

1. VIMS = VAPOR INTRUSION MANAGEMENT SYSTEM
2. GROUND FLOOR PLANS SHOWN WERE TAKEN FROM DWGS. PA-200 THRU PE-200, PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07. VIMS PROFILE TAKEN FROM DWG. P-701 PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07.

HALEY ALDRICH

TARRYTOWN FORMER MGP SITE
TARRYTOWN, NEW YORK
FERRY LANDINGS, LLC
NYSDEC SITE No. C360064

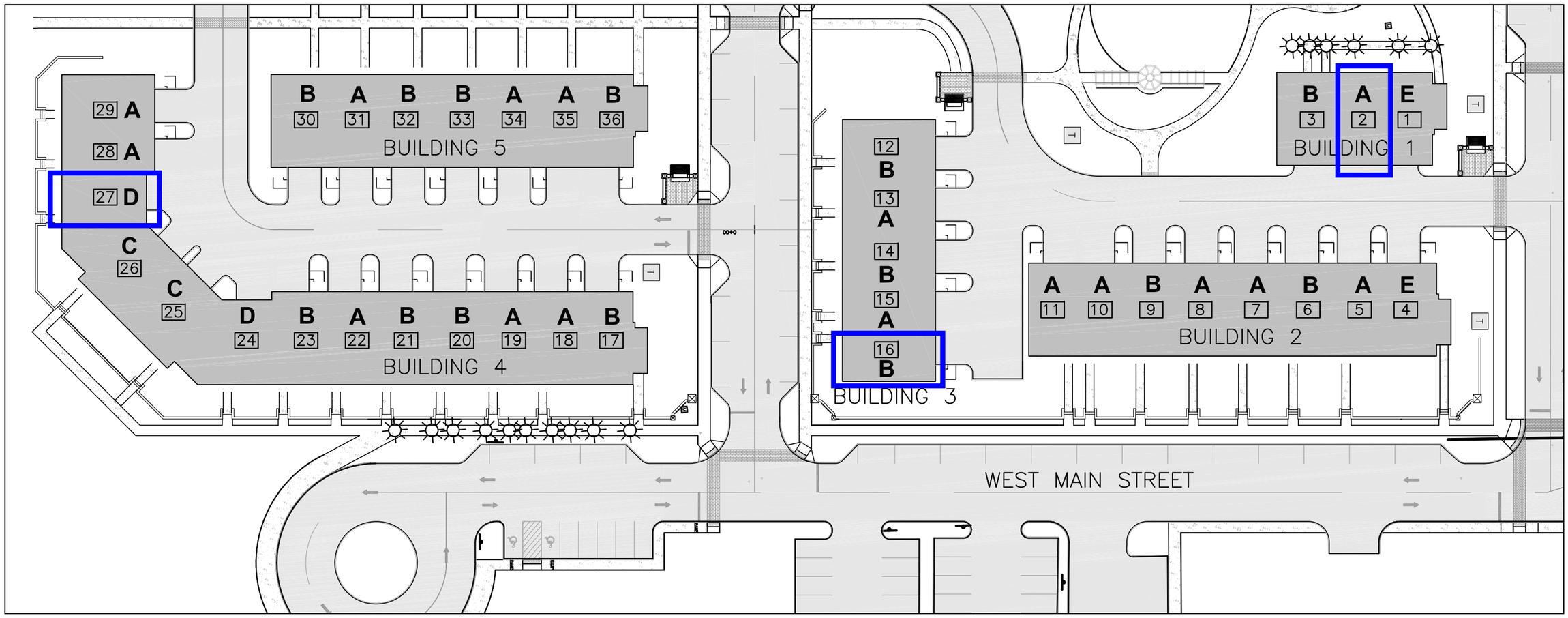
CARRIAGE HOUSE - SOUTHWEST: TYPICAL FLOORPLAN

SCALE: NOT TO SCALE
APRIL 2021

FIGURE 6

G:\28590\GLOBAL\CAD\DRAWINGS\28590-000-0012 UNITS A-E SOIL VAPOR SYSTEM.DWG

Return to Table of Contents

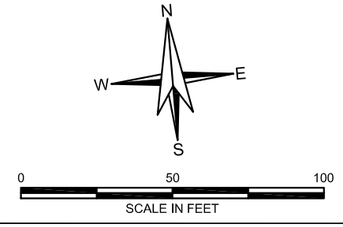


LEGEND:

23	UNIT NUMBER
A	UNIT FLOOR PLAN TYPE

NOTES:

1. THIS PLAN IS ADAPTED FROM CHAZEN COMPANIES DRAWING FILE "XLAYOUT_10399-00.DWG".
2. GEOTHERMAL SYSTEM INSTALLATION LOCATIONS ARE APPROXIMATE.
3. FOR SPECIFIC SAMPLE LOCATIONS WITHIN UNITS, SEE FIGURES 7 AND 8.



HALEY ALDRICH

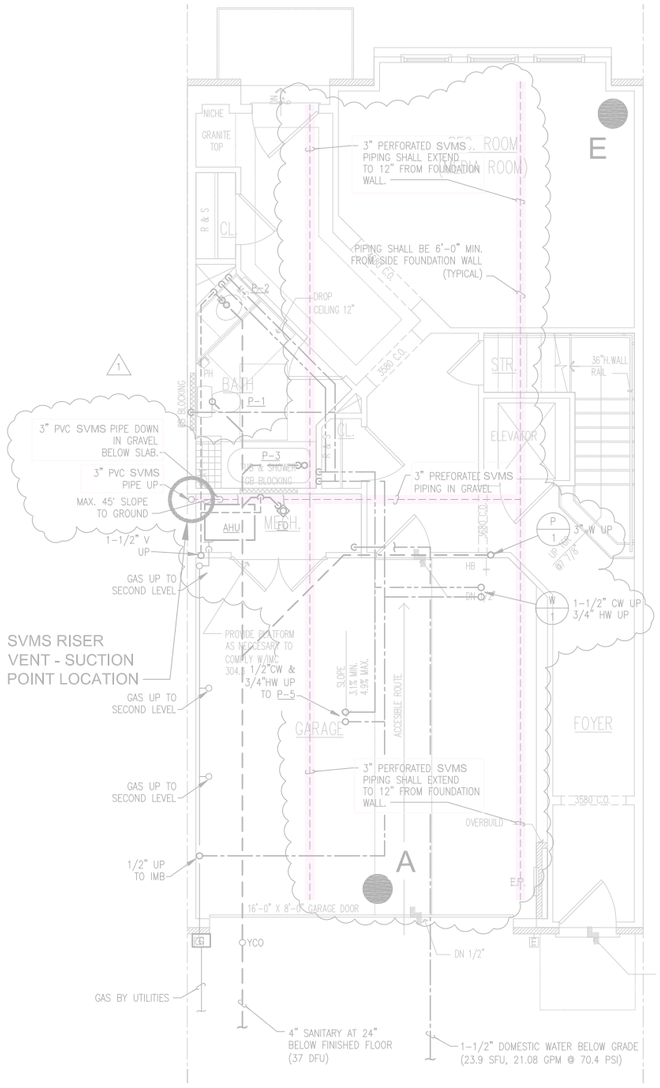
TARRYTOWN FORMER MGP SITE
TARRYTOWN, NY
FERRY LANDINGS, LLC
NYSDEC SITE NO. C360064

TOWNHOUSE BUILDING LAYOUT

SCALE: AS SHOWN
APRIL 2021

FIGURE 7

G:\PROJECTS\28590\017 SITE DEVELOPMENT SERVICES\CORRESPONDENCE\2011\SSD DEC DOCUMENTATION\FIGURE 4_2011-0720.DWG

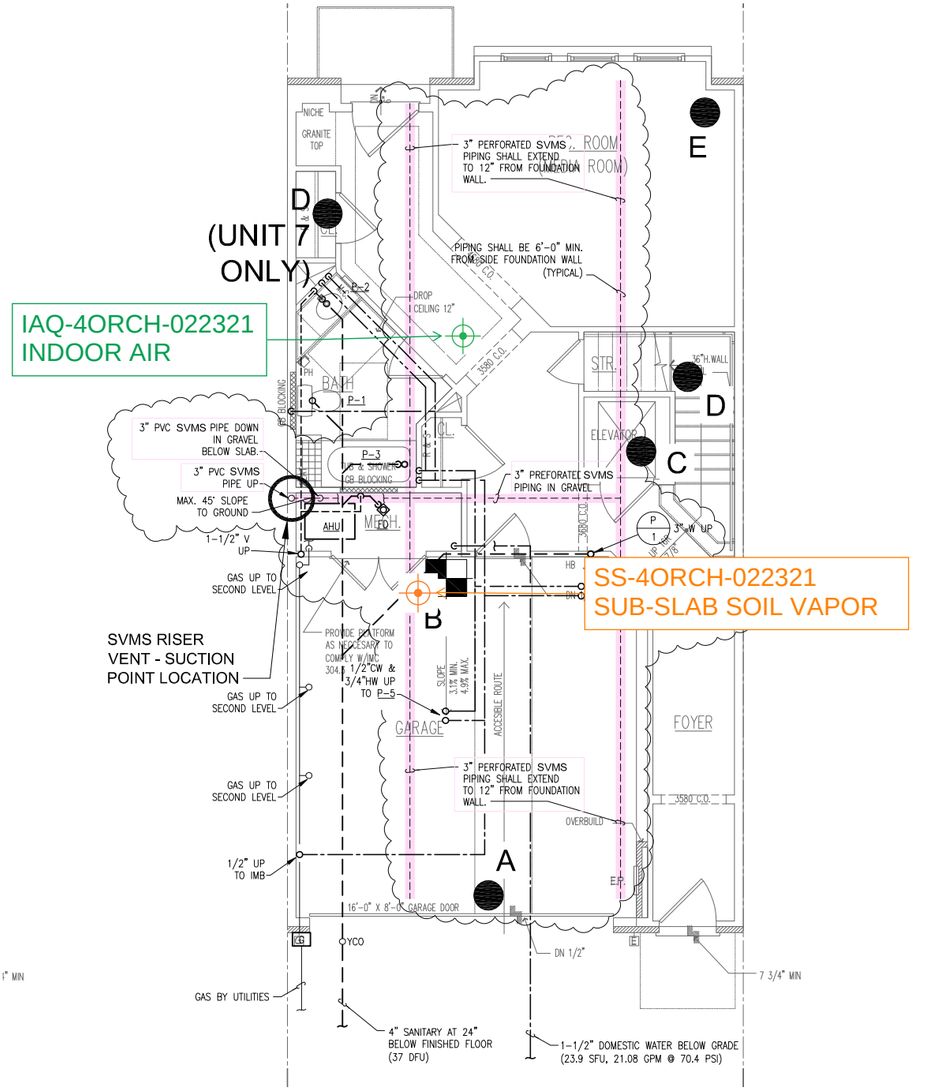


UNIT A - GROUND FLOOR
SCALE: 1/4" = 1'-0"

0 4 8
SCALE IN FEET

POST CONSTRUCTION APPROXIMATE SVMS TEST LOCATIONS

(TYP - UNIT A, EXCEPT CENTER UNIT)

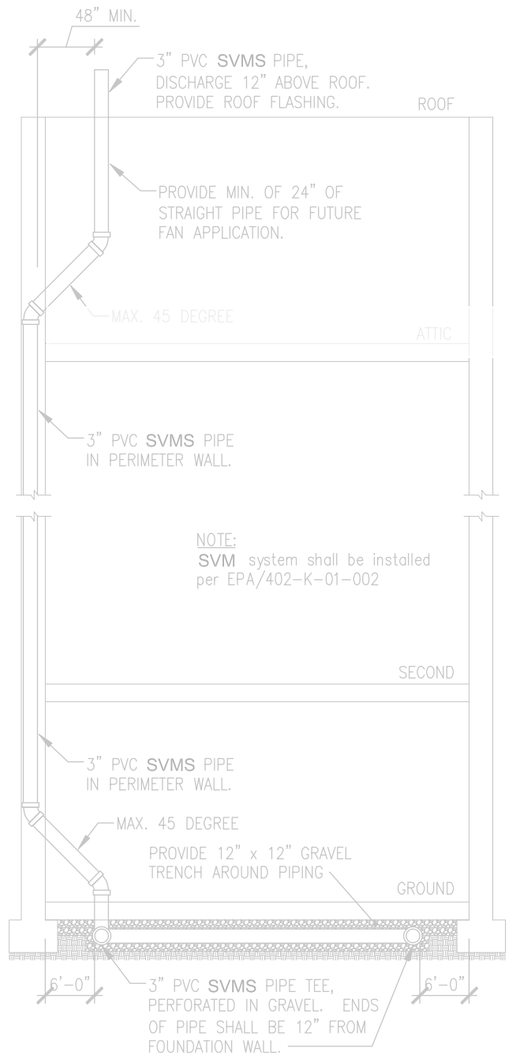


UNIT A - GROUND FLOOR
SCALE: 1/4" = 1'-0"

0 4 8
SCALE IN FEET

POST CONSTRUCTION APPROXIMATE SVMS TEST LOCATIONS

(TYP. - CENTER UNIT A)



SVSM PROFILE (TYP - ALL UNITS)

N.T.S.

LEGEND:

- SUB-SLAB VACUUM TEST
- SOIL VAPOR SAMPLE AND SUB-SLAB PRESSURE TEST
- A — TEST LOCATION IDENTIFICATION

NOTES:

1. SVMS = SOIL VAPOR MANAGEMENT SYSTEM
2. GROUND FLOOR PLANS SHOWN WERE TAKEN FROM DWGS. PA-200 THRU PE-200, PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07. SVMS PROFILE TAKEN FROM DWG. P-701 PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07.

HALEY ALDRICH

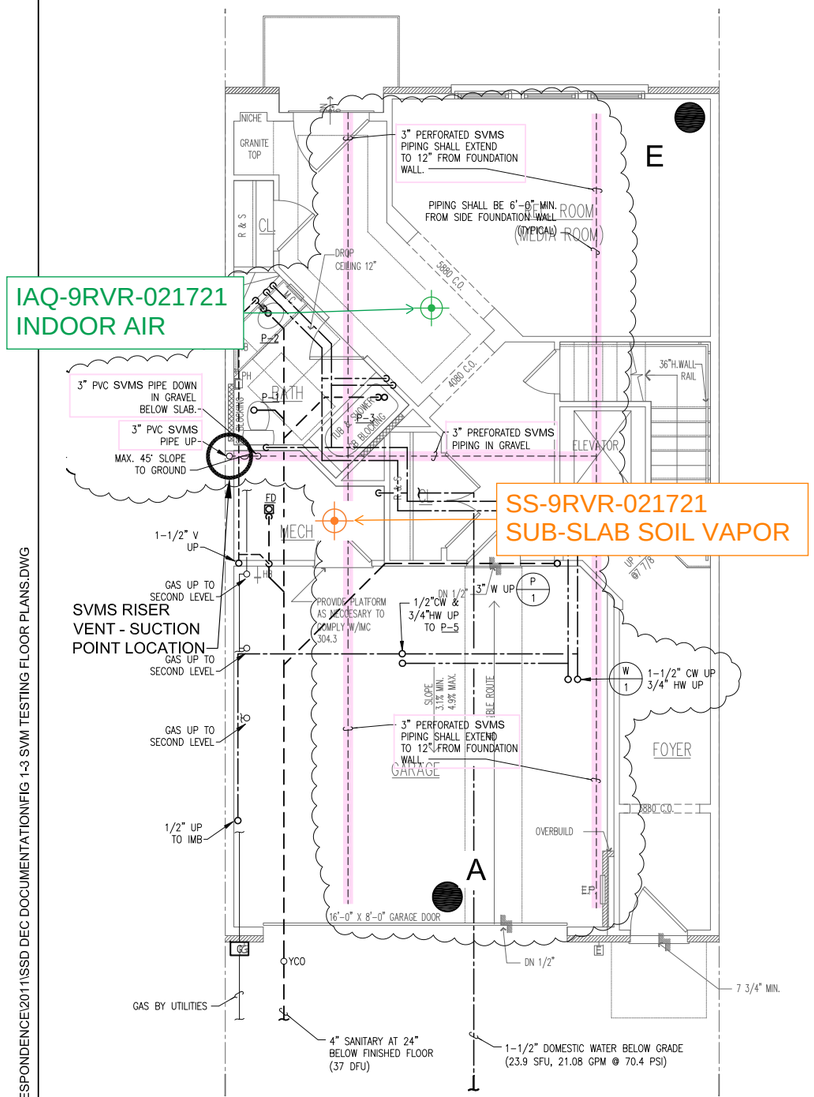
TARRYTOWN PROPERTY DEVELOPMENT
FERRY LANDINGS, LLC
SITE NO. C360064
BROWNFIELD CLEANUP INDEX NO. W3-1007-04-06

TOWNHOUSE UNIT A:
TYPICAL FLOORPLAN

SCALE: NOT TO SCALE
APRIL 2021

FIGURE 8

G:\PROJECTS\28590\017 SITE DEVELOPMENT SERVICES\CORRESPONDENCE\2011\SSD DEC DOCUMENTATION\FIG 2-4 SVM TESTING FLOOR PLANS.DWG



UNIT B - GROUND FLOOR

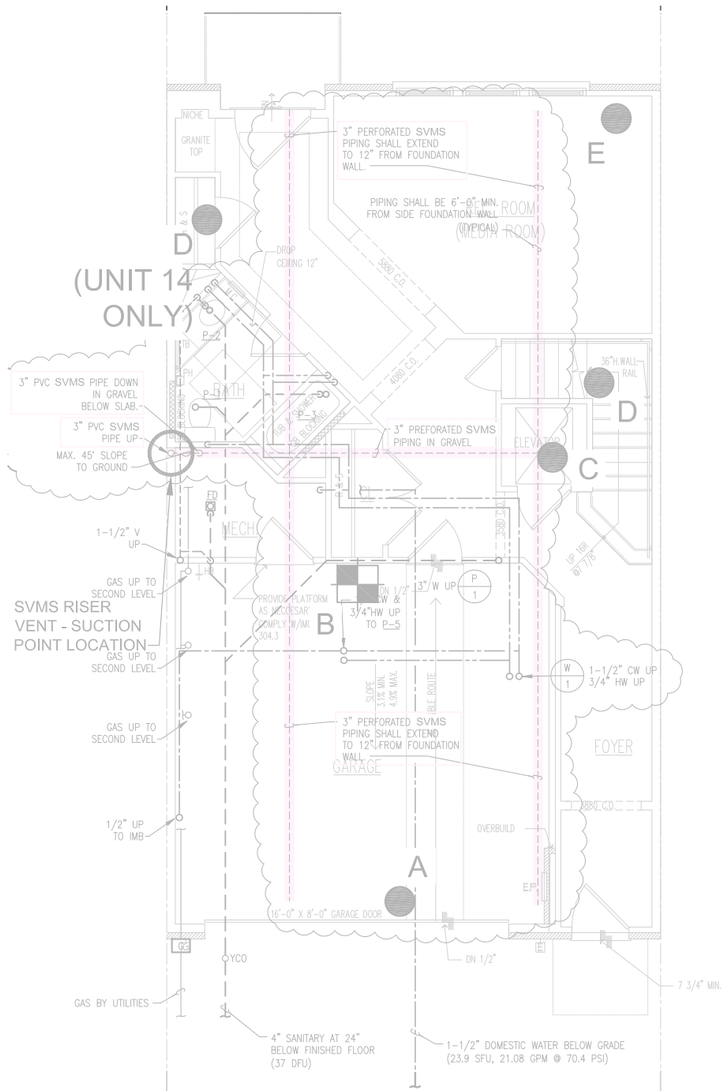
SCALE: 1/4" = 1'-0"

0 4 8

SCALE IN FEET

POST CONSTRUCTION APPROXIMATE SVMS TEST LOCATIONS

(TYP -UNIT B, EXCEPT CENTER UNIT)



UNIT B - GROUND FLOOR

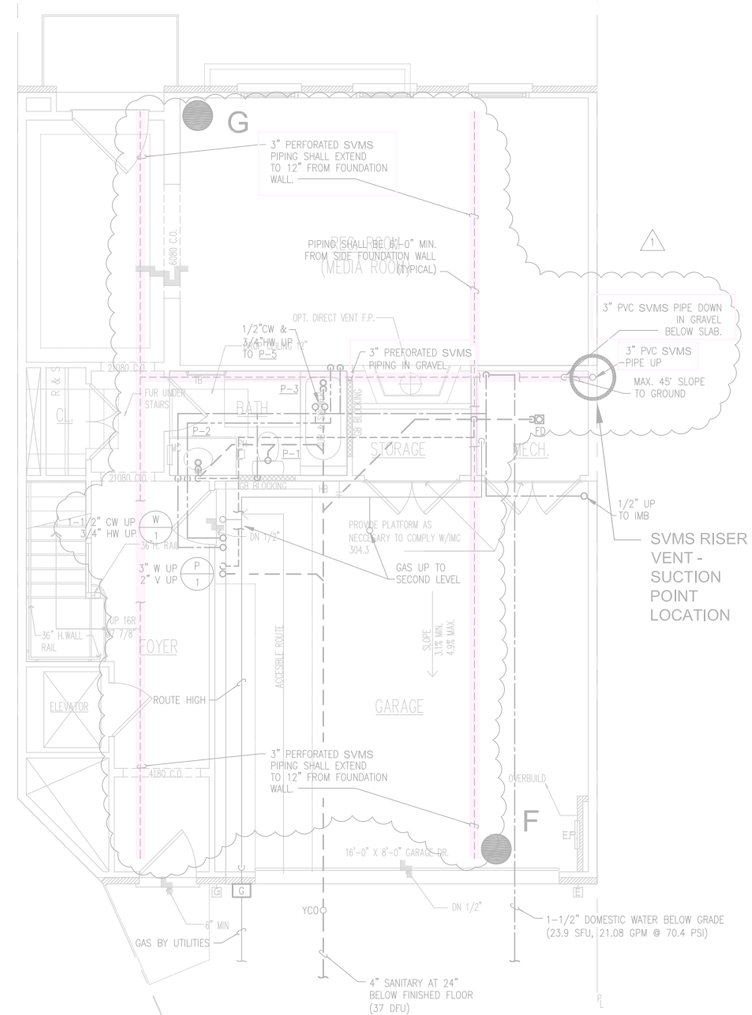
SCALE: 1/4" = 1'-0"

0 4 8

SCALE IN FEET

POST CONSTRUCTION APPROXIMATE SVMS TEST LOCATIONS

(TYP. - CENTER UNIT B)



UNIT C - GROUND FLOOR

SCALE: 1/4" = 1'-0"

0 4 8

SCALE IN FEET

POST CONSTRUCTION APPROXIMATE SVMS TEST LOCATIONS

(TYP. - ALL UNIT C)

LEGEND:

- ● SUB-SLAB VACUUM TEST
- ◪ SOIL VAPOR SAMPLE AND SUB-SLAB PRESSURE TEST
- A TEST LOCATION IDENTIFICATION

NOTES:

1. SVMS = SOIL VAPOR MANAGEMENT SYSTEM
2. GROUND FLOOR PLANS SHOWN WERE TAKEN FROM DWGS. PA-200 THRU PE-200, PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07. SVMS PROFILE TAKEN FROM DWG. P-701 PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07.

HALEY ALDRICH

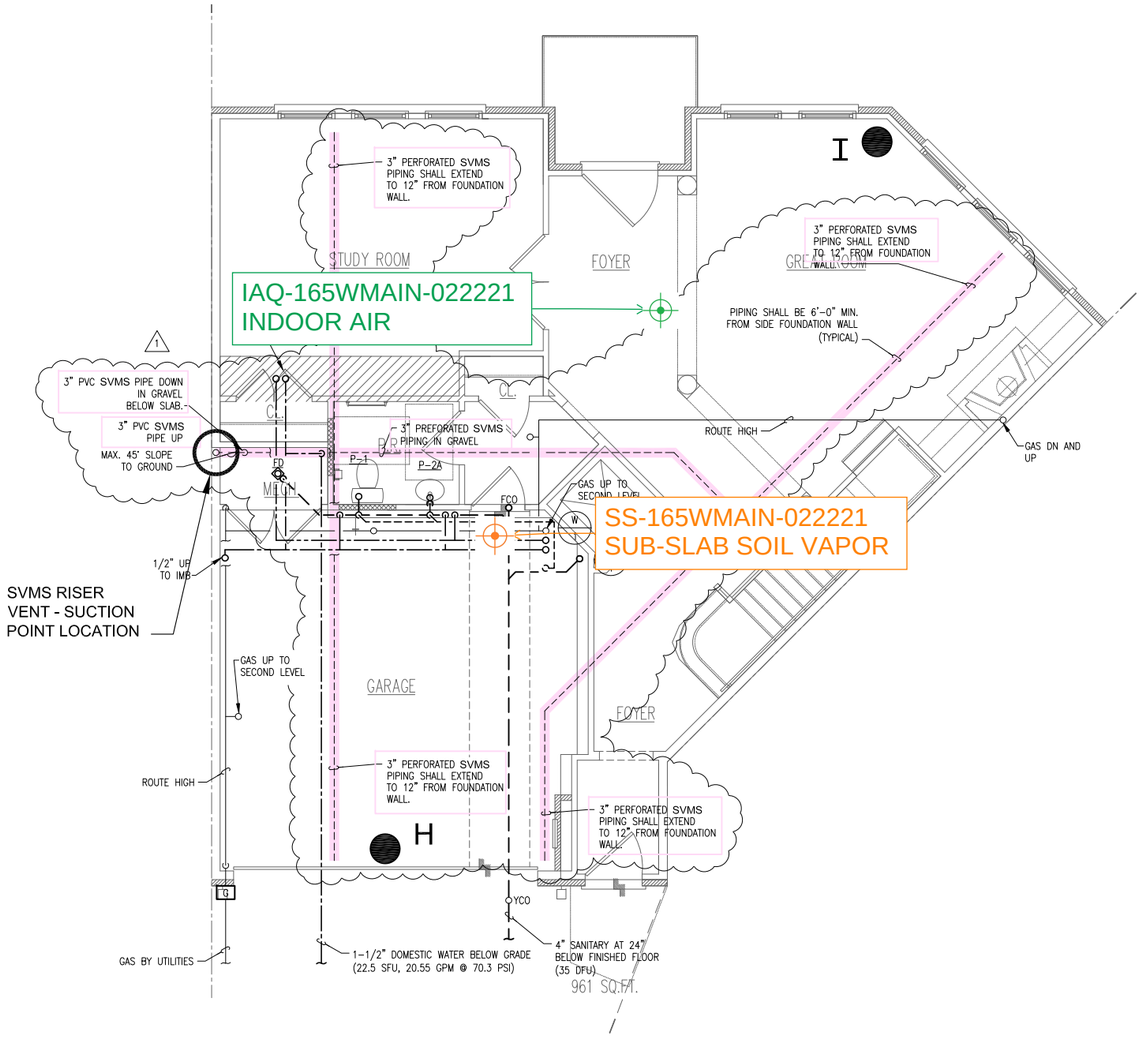
TARRYTOWN PROPERTY DEVELOPMENT
FERRY LANDINGS, LLC
SITE NO. C360064
BROWNFIELD CLEANUP INDEX NO. W3-1007-04-06

TOWNHOUSE UNIT B:
TYPICAL FLOORPLAN

SCALE: NOT TO SCALE
APRIL 2021

FIGURE 9

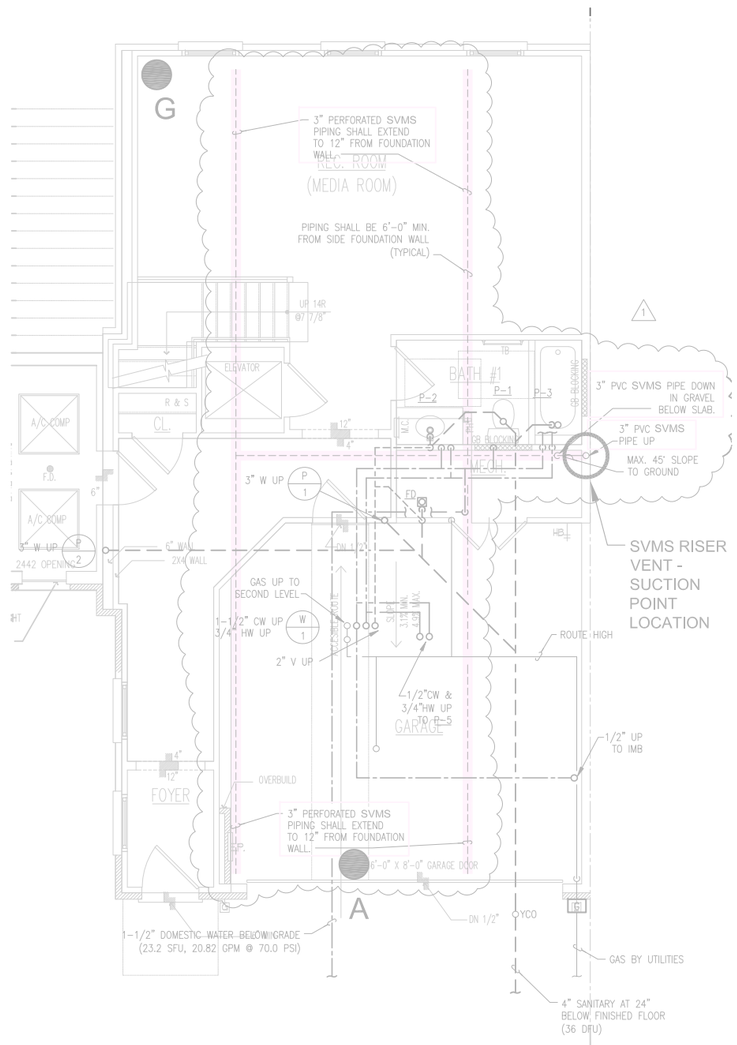
G:\PROJECTS\285900\017 SITE DEVELOPMENT SERVICES\CORRESPONDENCE\2011\SSD DEC DOCUMENTATION\FIG 1-3 SVM TESTING FLOOR PLANS.DWG



UNIT D - GROUND FLOOR
SCALE: 1/4" = 1'-0"

0 4 8
SCALE IN FEET

POST CONSTRUCTION
APPROXIMATE SVMS TEST LOCATIONS
(TYP - ALL UNIT D)



UNIT E - GROUND FLOOR
SCALE: 1/4" = 1'-0"

0 4 8
SCALE IN FEET

POST CONSTRUCTION
APPROXIMATE SVMS TEST LOCATIONS
(TYP. - ALL UNIT E)

LEGEND:

- ● SUB-SLAB VACUUM TEST
- ◧ SOIL VAPOR SAMPLE AND SUB-SLAB PRESSURE TEST
- A TEST LOCATION IDENTIFICATION

NOTES:

1. SVMS = SOIL VAPOR MANAGEMENT SYSTEM
2. GROUND FLOOR PLANS SHOWN WERE TAKEN FROM DWGS. PA-200 THRU PE-200, PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07. SVMS PROFILE TAKEN FROM DWG. P-701 PREPARED BY LESSARD ARCHITECTURAL GROUP, DATED 11-08-07.

HALEY ALDRICH

TARRYTOWN PROPERTY DEVELOPMENT
FERRY LANDINGS, LLC
SITE NO. C360064
BROWNFIELD CLEANUP INDEX NO. W3-1007-04-06

TOWNHOUSE UNIT D:
TYPICAL FLOORPLAN

SCALE: NOT TO SCALE
APRIL 2021

FIGURE 10

G:\PROJECTS\26590\017 SITE DEVELOPMENT SERVICES\CORRESPONDENCE\2011\SSD DEC DOCUMENTATION\FIG 1-3 SVM TESTING FLOOR PLANS.DWG

APPENDIX A

Data Usability Summary Reports and Laboratory Data Report

HALEY ALDRICH

Haley & Aldrich, Inc.
600 South Meyer Ave
Suite 100
Tucson, AZ 85701
520.289.8621

Data Usability Summary Report

Project Name: Tarrytown Former MGP Site

Project Description: Ambient Air and Soil Vapor Samples

Sample Date(s): 16-23 February 2021

Analytical Laboratory: Alpha Analytical – Mansfield, MA

Validation Performed by: Vanessa Godard

Validation Reviewed by: Katherine Miller

Validation Date: 9 March 2021

Haley & Aldrich, Inc. prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the samples described above. The analytical results for Sample Delivery Group(s) (SDG) listed below were reviewed to determine the data's usability:

1. Sample Delivery Group Number L2108837

This data validation and usability assessment was performed per the guidance and requirements established by the U.S. Environmental Protection Agency's (USEPA) *National Functional Guidelines (NFG) for Organic Data Review* and *Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15* and the project-specific Quality Assurance Project Plan (QAPP), herein referred to as the specified limits (see references section). Written in 2010, the QAPP referenced the NFG written at the time. Data in this report has been reviewed against the most recent NFG.

Data reported in this sampling event were reported to the laboratory reporting limit (RL).

Sample data were qualified in accordance with laboratory's standard operating procedures (SOP). The results presented in each laboratory report were found to be compliant with the data quality objectives for the project and therefore usable; any exceptions are noted in the following pages.

For more detailed quality control (QC) information see Explanations section.

1. Sample Delivery Group Number L2108837

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number L2108837, dated 2 March 2021. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol. Samples were also received appropriately, identified correctly, and analyzed according to the COC. Issues noted with sample management are listed below:

- The flow controller ID number for the sample designated SS-18ORCH-022321 (L2108837-16) was listed on the COC as 0216 but should be 02106.
- The canister ID number for the sample designated IAQ-18ORCH-022321 (L2108837-15) was listed on the COC as 14713 but should be 147B.
- Canister ID 2006 was labeled in the laboratory prior to shipment with a media tag that indicated the canister ID number was 2033. The canister ID number for the sample designated AA-165WMAIN-022221 (L2108837-10) is listed on the COC as 2033 due to the ID error on the canister tag but should be 2006.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Methods
IAQ-25RVR-021621	N	L2108837-01	2/16/2021	Indoor Air	A, B
SS-25RVR-021621	N	L2108837-02	2/16/2021	Soil Gas	A
AA-25RVR-021621	N	L2108837-03	2/16/2021	Ambient Air	A, B
IAQ-9RVR-021721	N	L2108837-04	2/17/2021	Indoor Air	A, B
SS-9RVR-021721	N	L2108837-05	2/17/2021	Soil Gas	A
IAQ-27RVR-021721	N	L2108837-06	2/17/2021	Indoor Air	A, B
SS-27RVR-021721	N	L2108837-07	2/17/2021	Soil Gas	A
IAQ-4HUD-021821	N	L2108837-08	2/18/2021	Indoor Air	A, B
SS-4HUD-021821	N	L2108837-09	2/18/2021	Soil Gas	A
AA-165WMAIN-022221	N	L2108837-10	2/22/2021	Ambient Air	A, B
IAQ-165WMAIN-022221	N	L2108837-11	2/22/2021	Indoor Air	A, B
SS-165WMAIN-022221	N	L2108837-12	2/22/2021	Soil Gas	A
IAQ-4ORCH-022321	N	L2108837-13	2/23/2021	Indoor Air	A, B
SS-4ORCH-022321	N	L2108837-14	2/23/2021	Soil Gas	A
IAQ-18ORCH-022321	N	L2108837-15	2/23/2021	Indoor Air	A, B
SS-18ORCH-022321	N	L2108837-16	2/23/2021	Soil Gas	A

Method Holding Time			
A.	TO-15	Volatile Organic Compounds (VOCs)	30 days
B.	TO-15 SIM	Volatile Organic Compounds (VOCs) Low Level – Select List	30 days

1.2 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

1.3 REPORTING LIMITS AND SAMPLE DILUTIONS

The project specific QAPP only lists MDL/RL requirements for soil and groundwater samples. Review of gaseous sample limits was not possible.

All dilutions were reviewed and found to be justified. Any non-detects with elevated reported limits are noted and explained below. Samples collected in summa canisters are pressurized by the laboratory, usually resulting in a ~2x dilution. In cases when multiple dilutions were reported per sample, the reviewer chose the lowest dilution with results still within the calibration range and rejected the alternative result.

Sample ID	Lab ID	Analyte/ Method	Dilution Factor	Issue/Explanation
SS-27RVR-021721	L2108837-07	VOCs by TO-15	1.563x	Dilution required due to elevated concentrations of target compounds.

1.4 SURROGATE RECOVERY COMPLIANCE

Refer to section E 1.2. The percent recovery (%R) for each surrogate compound added to each project sample were determined to be within the laboratory specified QC limits.

1.5 LABORATORY CONTROL SAMPLES

Refer to section E 1.3. Compounds associated with the laboratory control samples/laboratory control sample duplicates (LCS) analyses exhibited recoveries within the specified limits with the following exceptions:

Sample Type	Method	Batch ID	Analyte	%R	Qualifier	Affected Samples
LCS	TO-15	WG-1469435	Trichlorotrifluoroethane	131%	NA	None, samples all ND.
LCS			1,2,4Trichlorobenzene	133%	NA	None, samples all ND.

1.6 BLANK SAMPLE ANALYSIS

Refer to section E 1.5. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred.

1.7 DUPLICATE SAMPLE ANALYSIS

Refer to section E 1.6. The following sample(s) were used for laboratory duplicate analysis and the RPDs were all below 20 percent:

Lab Sample Number	Laboratory Duplicate Sample Client ID	Method(s)
L2108837-06	IAQ-27RVR-021721	VOCs by TO-15 & TO-15 SIM

1.8 PRECISION AND ACCURACY

Refer to section E 1.7. Some measurement of analytical accuracy and precision was reported for each method with the site samples.

1.9 CLEAN CANISTER CERTIFICATION

The canisters used for the TO-15 and TO-15 SIM sample collection were certified clean by batch can analysis prior to sampling to ensure that no target analytes were present. These analysis sheets were reviewed, and no target analytes were detected in the laboratory-provided canisters.

1.10 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the data quality objectives for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable, except for rejected data noted below. A summary of qualifiers applied to this SDG are shown below.

Sample ID	Analyte	Reported Result	Validated Result	Reason for Qualifier
IAQ-25RVR-021621	Ethanol	1040 E	1040 R	Exceeded Calibration Range. Another Result Available.
SS-4HUD-021821	Isopropyl Alcohol	2880 E	2880 R	

Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.2 Surrogate Recovery Compliance
  - Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to sample preparation to determining the efficiency of the extraction procedure by evaluating the percent recovery (%R) of the compounds.
- E 1.3 Laboratory Control Samples
  - The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.5 Blank Sample Analysis
  - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
  - Field blanks are prepared to identify contamination that may have been introduced during field activity. Equipment blanks are prepared to identify contamination that may have been introduced while decontaminating sampling equipment. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport.
- E 1.6 Laboratory and Field Duplicate Sample Analysis
  - The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision.
  - The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method.
- E 1.7 Precision and Accuracy
  - Precision measures the reproducibility of repetitive measurements. In a laboratory environment, this will be measured by determining the relative percent difference (%RPD) found between a primary and a duplicate sample. This can be an LCS/LCSD pair, a MS/MSD pair, a laboratory duplicate performed on a site sample, or a field duplicate collected and analyzed concurrently with a site sample.
  - Accuracy is a statistical measurement of the correctness of a measured value and includes components of random error (variability caused by imprecision) and systematic error. In a laboratory environment, this will be measured by determining the percent recovery (%Rec) of certain spiked compounds. This can be assessed using LCS, BS, MS, and/or surrogate recoveries.

Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

- Sample Types:
  - EB Equipment Blank Sample
  - FB Field Blank Sample
  - FD Field Duplicate Sample
  - N Primary Sample
  - TB Trip Blank Sample
- Units:
  - µg/kg microgram per kilogram
  - µg/L microgram per liter
  - µg/cm3 microgram per centimeter cubed
  - mg/kg milligram per kilogram
  - mg/L milligram per liter
  - ppb v/v parts per billion volume/volume
- Matrices:
  - AA Ambient Air
  - GS Soil Gas
  - GW Groundwater
  - IA Indoor Air
  - SE Sediment
  - SO Soil
- Table Footnotes
  - NA Not applicable
  - ND Non-detect
  - NR Not reported
- Abbreviations
  - %D Percent Difference
  - %R Percent Recovery
  - %RSD Percent Relative Standard Deviation
  - Abs Diff Absolute Difference
  - BPJ Best Professional Judgement
  - CCB Continuing Calibration Blank
  - CCV Continuing Calibration Verification
  - CCVL Continuing Calibration Verification Low
  - COC Chain of Custody
  - CRI Collision Reaction Interface
  - DUSR Data Usability Summary Report
  - EMPC Estimated Maximum Possible Concentration
  - GC Gas Chromatograph
  - GPC Gel Permeation Chromatography
  - ICAL Initial Calibration
  - ICB Initial Calibration Blank
  - ICP/MS Inductively Coupled Plasma/ Mass Spectrometry
  - ICV Initial Calibration Verification

- ICVL Initial Calibration Verification Low
- IPA Isopropyl Alcohol
- LCS/LCSD Laboratory Control Sample/Laboratory Control Sample Duplicate
- MDL Laboratory Method Detection Limit
- MS/MSD Matrix Spike/Matrix Spike Duplicate
- ND Non-Detect
- NFG National Functional Guidelines
- PCB Polychlorinated Biphenyl
- PDS Post Digestion Spike
- PEM Performance Evaluation Mixture
- PFAS Per- and Polyfluoroalkyl Substances
- QAPP Quality Assurance Project Plan
- QC Quality Control
- RL Laboratory Reporting Limit
- RPD Relative Percent Difference
- RT Retention Time
- RRF Relative Response Factors
- SDG Sample Delivery Group
- SOP Laboratory Standard Operating Procedures
- SPE Solid Phase Extraction
- USEPA U.S. Environmental Protection Agency

Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

- Concentration (C) Qualifiers:
  - U The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".
  - B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers:
  - E The compound was quantitated above the calibration range.
  - D The concentration is based on a diluted sample analysis.
- Validation Qualifiers:
  - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
  - J+ The result is an estimated quantity, but the result may be biased high.
  - J- The result is an estimated quantity, but the result may be biased low.
  - UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.
  - NJ The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is an estimated concentration only.
  - R The sample results were rejected as unusable; the compound may or may not be present in the sample.

References

1. United States Environmental Protection Agency, 2014a. Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15, SOP NO. HW-31, Revision 6. June.
2. United States Environmental Protection Agency, 2017c. National Functional Guidelines for Organic Superfund Methods Data Review. EPA-540-R-2017-002. January.
3. Haley & Aldrich, Inc., 2010. Quality Assurance Project Plan with Field Sampling Plan. Site Management Plan – Tarrytown. Revision 1. June.

ANALYTICAL REPORT

Lab Number:	L2108837
Client:	Haley & Aldrich 200 Town Centre Drive Suite 2 Rochester, NY 14623-4264
ATTN:	Vince Dick
Phone:	(585) 321-4207
Project Name:	TARRYTOWN FORMER MGP SITE
Project Number:	0134976-002
Report Date:	03/02/21

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

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

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002

Lab Number: L2108837
Report Date: 03/02/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2108837-01	IAQ-25RVR-021621	AIR	TARRYTOWN, NY	02/16/21 14:30	02/23/21
L2108837-02	SS-25RVR-021621	SOIL_VAPOR	TARRYTOWN, NY	02/16/21 14:40	02/23/21
L2108837-03	AA-25RVR-021621	AIR	TARRYTOWN, NY	02/16/21 15:53	02/23/21
L2108837-04	IAQ-9RVR-021721	AIR	TARRYTOWN, NY	02/17/21 10:31	02/23/21
L2108837-05	SS-9RVR-021721	SOIL_VAPOR	TARRYTOWN, NY	02/17/21 10:22	02/23/21
L2108837-06	IAQ-27RVR-021721	AIR	TARRYTOWN, NY	02/17/21 14:18	02/23/21
L2108837-07	SS-27RVR-021721	SOIL_VAPOR	TARRYTOWN, NY	02/17/21 14:24	02/23/21
L2108837-08	IAQ-4HUD-021821	AIR	TARRYTOWN, NY	02/18/21 10:06	02/23/21
L2108837-09	SS-4HUD-021821	SOIL_VAPOR	TARRYTOWN, NY	02/18/21 10:05	02/23/21
L2108837-10	AA-165WMAIN-022221	AIR	TARRYTOWN, NY	02/22/21 09:47	02/23/21
L2108837-11	IAQ-165WMAIN-022221	AIR	TARRYTOWN, NY	02/22/21 14:15	02/23/21
L2108837-12	SS-165WMAIN-022221	SOIL_VAPOR	TARRYTOWN, NY	02/22/21 14:16	02/23/21
L2108837-13	IAQ-4ORCH-022321	AIR	TARRYTOWN, NY	02/23/21 11:01	02/23/21
L2108837-14	SS-4ORCH-022321	SOIL_VAPOR	TARRYTOWN, NY	02/23/21 10:56	02/23/21
L2108837-15	IAQ-18ORCH-022321	AIR	TARRYTOWN, NY	02/23/21 16:15	02/23/21
L2108837-16	SS-18ORCH-022321	SOIL_VAPOR	TARRYTOWN, NY	02/23/21 16:16	02/23/21
L2108837-17	UNUSED CAN#2242	AIR	TARRYTOWN, NY		02/23/21
L2108837-18	UNUSED CAN#132	AIR	TARRYTOWN, NY		02/23/21

Project Name:	TARRYTOWN FORMER MGP SITE	**Lab Number:**	L2108837
Project Number:	0134976-002	**Report Date:**	03/02/21

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:	TARRYTOWN FORMER MGP SITE	**Lab Number:**	L2108837
Project Number:	0134976-002	**Report Date:**	03/02/21

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on February 15, 2021. The canister certification results are provided as an addendum.

L2108837-01D: The sample was re-analyzed on dilution in order to quantiitate 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.

L2108837-07D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2108837-09D: The sample was re-analyzed on dilution in order to quantiitate 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 WG1469435-3 LCS recoveries for 1,1,2-trichloro-1,2,2-trifluoroethane (131%) and 1,2,4-trichlorobenzene (133%) are above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of these analytes.

Sample Receipt

The flow controller ID number for the sample designated SS-18ORCH-022321 (L2108837-16) is listed on the CoC as 0216 but should be 02106.

The canister ID number for the sample designated IAQ-18ORCH-022321 (L2108837-15) is listed on the CoC as 14713 but should be 147B.

Project Name:	TARRYTOWN FORMER MGP SITE	**Lab Number:**	L2108837
Project Number:	0134976-002	**Report Date:**	03/02/21

Case Narrative (continued)

Canister ID 2006 was labeled in the laboratory prior to shipment with a media tag that indicated the canister ID number was 2033. The canister ID number for the sample designated AA-165WMAIN-022221 (L2108837-10) is listed on the CoC as 2033 due to the ID error on the canister tag but should actually be 2006.

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: 03/02/21

AIR

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-01
Client ID: IAQ-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 14:30
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/01/21 19:15
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.477	0.200	--	2.36	0.989	--		1
Chloromethane	0.711	0.200	--	1.47	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	550	5.00	--	1040	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	12.2	1.00	--	29.0	2.38	--		1
Trichlorofluoromethane	0.260	0.200	--	1.46	1.12	--		1
Isopropanol	68.0	0.500	--	167	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	0.543	0.500	--	1.60	1.47	--		1
Ethyl Acetate	1.17	0.500	--	4.22	1.80	--		1
Chloroform	0.314	0.200	--	1.53	0.977	--		1
Tetrahydrofuran	0.923	0.500	--	2.72	1.47	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-01
Client ID: IAQ-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 14:30
Date Received: 02/23/21
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	0.477	0.200	--	1.93	0.809	--		1
n-Hexane	0.331	0.200	--	1.17	0.705	--		1
Benzene	0.997	0.200	--	3.19	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	0.283	0.200	--	1.32	0.934	--		1
Heptane	0.207	0.200	--	0.848	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.60	0.200	--	6.03	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
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.551	0.400	--	2.39	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.238	0.200	--	1.01	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-01
Client ID: IAQ-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 14:30
Date Received: 02/23/21
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	93		60-140
chlorobenzene-d5	97		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-01
Client ID: IAQ-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 14:30
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/01/21 19:15
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.029	0.020	--	0.197	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	97		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	98		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-01 D
Client ID: IAQ-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 14:30
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 05:49
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Ethanol	613	10.0	--	1160	18.8	--		2

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	96		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	98		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-02
Client ID: SS-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 14:40
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 00:34
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.499	0.200	--	2.47	0.989	--		1
Chloromethane	0.278	0.200	--	0.574	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	120	5.00	--	226	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	19.4	1.00	--	46.1	2.38	--		1
Trichlorofluoromethane	0.259	0.200	--	1.46	1.12	--		1
Isopropanol	6.33	0.500	--	15.6	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.63	0.500	--	7.97	1.52	--		1
Methylene chloride	0.769	0.500	--	2.67	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.336	0.200	--	1.05	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	0.656	0.500	--	1.93	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-02
Client ID: SS-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 14:40
Date Received: 02/23/21
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	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.232	0.200	--	0.818	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.255	0.200	--	0.815	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	0.951	0.200	--	3.90	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	0.354	0.200	--	1.33	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	0.253	0.200	--	1.10	0.869	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-02
Client ID: SS-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 14:40
Date Received: 02/23/21
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	0.885	0.400	--	3.84	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	0.281	0.200	--	1.22	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	0.402	0.200	--	1.98	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	98		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-03
Client ID: AA-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 15:53
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/01/21 17:55
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.485	0.200	--	2.40	0.989	--		1
Chloromethane	0.613	0.200	--	1.27	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.68	1.00	--	6.37	2.38	--		1
Trichlorofluoromethane	0.257	0.200	--	1.44	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-03
Client ID: AA-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 15:53
Date Received: 02/23/21
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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-03
Client ID: AA-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 15:53
Date Received: 02/23/21
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	91		60-140
chlorobenzene-d5	95		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-03
Client ID: AA-25RVR-021621
Sample Location: TARRYTOWN, NY

Date Collected: 02/16/21 15:53
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/01/21 17:55
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.079	0.020	--	0.497	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	94		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	96		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-04
Client ID: IAQ-9RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 10:31
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/01/21 19:54
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.486	0.200	--	2.40	0.989	--		1
Chloromethane	0.632	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	63.3	5.00	--	119	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.73	1.00	--	13.6	2.38	--		1
Trichlorofluoromethane	0.260	0.200	--	1.46	1.12	--		1
Isopropanol	1.06	0.500	--	2.61	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.32	0.500	--	3.89	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-04
Client ID: IAQ-9RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 10:31
Date Received: 02/23/21
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	0.201	0.200	--	0.642	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	0.388	0.200	--	1.46	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	0.450	0.400	--	1.95	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-04
Client ID: IAQ-9RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 10:31
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	98		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-04
Client ID: IAQ-9RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 10:31
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/01/21 19:54
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.069	0.020	--	0.434	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	97		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	100		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-05
Client ID: SS-9RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 10:22
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 01:13
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.498	0.200	--	2.46	0.989	--		1
Chloromethane	0.685	0.200	--	1.41	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	136	5.00	--	256	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	88.0	1.00	--	209	2.38	--		1
Trichlorofluoromethane	0.267	0.200	--	1.50	1.12	--		1
Isopropanol	7.99	0.500	--	19.6	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	1.57	0.500	--	4.76	1.52	--		1
Methylene chloride	0.717	0.500	--	2.49	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	3.16	0.500	--	9.32	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-05
Client ID: SS-9RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 10:22
Date Received: 02/23/21
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	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	3.63	0.500	--	10.7	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.381	0.200	--	1.34	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.278	0.200	--	0.888	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	0.357	0.200	--	1.29	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.883	0.200	--	3.62	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	0.743	0.200	--	2.80	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.283	0.200	--	1.23	0.869	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-05
Client ID: SS-9RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 10:22
Date Received: 02/23/21
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	0.957	0.400	--	4.16	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	0.405	0.200	--	1.76	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	98		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-06
Client ID: IAQ-27RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 14:18
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/01/21 20:34
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.494	0.200	--	2.44	0.989	--		1
Chloromethane	0.649	0.200	--	1.34	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	218	5.00	--	411	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.56	1.00	--	15.6	2.38	--		1
Trichlorofluoromethane	0.264	0.200	--	1.48	1.12	--		1
Isopropanol	12.5	0.500	--	30.7	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	2.07	0.500	--	7.19	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	0.733	0.500	--	2.64	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-06
Client ID: IAQ-27RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 14:18
Date Received: 02/23/21
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	0.213	0.200	--	0.751	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	0.489	0.200	--	1.84	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-06
Client ID: IAQ-27RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 14:18
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	97		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-06
Client ID: IAQ-27RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 14:18
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/01/21 20:34
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.078	0.020	--	0.491	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.034	0.020	--	0.231	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	97		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	98		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-07 D
Client ID: SS-27RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 14:24
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 01:51
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.487	0.312	--	2.41	1.54	--		1.563
Chloromethane	0.422	0.312	--	0.871	0.644	--		1.563
Freon-114	ND	0.312	--	ND	2.18	--		1.563
Vinyl chloride	ND	0.312	--	ND	0.798	--		1.563
1,3-Butadiene	ND	0.312	--	ND	0.690	--		1.563
Bromomethane	ND	0.312	--	ND	1.21	--		1.563
Chloroethane	ND	0.312	--	ND	0.823	--		1.563
Ethanol	657	7.81	--	1240	14.7	--		1.563
Vinyl bromide	ND	0.312	--	ND	1.36	--		1.563
Acetone	29.7	1.56	--	70.6	3.71	--		1.563
Trichlorofluoromethane	ND	0.312	--	ND	1.75	--		1.563
Isopropanol	68.9	0.781	--	169	1.92	--		1.563
1,1-Dichloroethene	ND	0.312	--	ND	1.24	--		1.563
Tertiary butyl Alcohol	2.54	0.781	--	7.70	2.37	--		1.563
Methylene chloride	ND	0.781	--	ND	2.71	--		1.563
3-Chloropropene	ND	0.312	--	ND	0.977	--		1.563
Carbon disulfide	0.409	0.312	--	1.27	0.972	--		1.563
Freon-113	ND	0.312	--	ND	2.39	--		1.563
trans-1,2-Dichloroethene	ND	0.312	--	ND	1.24	--		1.563
1,1-Dichloroethane	ND	0.312	--	ND	1.26	--		1.563
Methyl tert butyl ether	ND	0.312	--	ND	1.12	--		1.563
2-Butanone	1.39	0.781	--	4.10	2.30	--		1.563
cis-1,2-Dichloroethene	ND	0.312	--	ND	1.24	--		1.563

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-07 D
Client ID: SS-27RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 14:24
Date Received: 02/23/21
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	1.65	0.781	--	5.95	2.81	--		1.563
Chloroform	ND	0.312	--	ND	1.52	--		1.563
Tetrahydrofuran	6.82	0.781	--	20.1	2.30	--		1.563
1,2-Dichloroethane	ND	0.312	--	ND	1.26	--		1.563
n-Hexane	0.367	0.312	--	1.29	1.10	--		1.563
1,1,1-Trichloroethane	ND	0.312	--	ND	1.70	--		1.563
Benzene	ND	0.312	--	ND	0.997	--		1.563
Carbon tetrachloride	ND	0.312	--	ND	1.96	--		1.563
Cyclohexane	ND	0.312	--	ND	1.07	--		1.563
1,2-Dichloropropane	ND	0.312	--	ND	1.44	--		1.563
Bromodichloromethane	ND	0.312	--	ND	2.09	--		1.563
1,4-Dioxane	4.00	0.312	--	14.4	1.12	--		1.563
Trichloroethene	ND	0.312	--	ND	1.68	--		1.563
2,2,4-Trimethylpentane	ND	0.312	--	ND	1.46	--		1.563
Heptane	0.831	0.312	--	3.41	1.28	--		1.563
cis-1,3-Dichloropropene	ND	0.312	--	ND	1.42	--		1.563
4-Methyl-2-pentanone	ND	0.781	--	ND	3.20	--		1.563
trans-1,3-Dichloropropene	ND	0.312	--	ND	1.42	--		1.563
1,1,2-Trichloroethane	ND	0.312	--	ND	1.70	--		1.563
Toluene	0.581	0.312	--	2.19	1.18	--		1.563
2-Hexanone	ND	0.312	--	ND	1.28	--		1.563
Dibromochloromethane	ND	0.312	--	ND	2.66	--		1.563
1,2-Dibromoethane	ND	0.312	--	ND	2.40	--		1.563
Tetrachloroethene	ND	0.312	--	ND	2.12	--		1.563
Chlorobenzene	ND	0.312	--	ND	1.44	--		1.563
Ethylbenzene	0.378	0.312	--	1.64	1.36	--		1.563

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-07 D
Client ID: SS-27RVR-021721
Sample Location: TARRYTOWN, NY

Date Collected: 02/17/21 14:24
Date Received: 02/23/21
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	1.33	0.625	--	5.78	2.71	--		1.563
Bromoform	ND	0.312	--	ND	3.23	--		1.563
Styrene	ND	0.312	--	ND	1.33	--		1.563
1,1,2,2-Tetrachloroethane	ND	0.312	--	ND	2.14	--		1.563
o-Xylene	0.514	0.312	--	2.23	1.36	--		1.563
4-Ethyltoluene	ND	0.312	--	ND	1.53	--		1.563
1,3,5-Trimethylbenzene	ND	0.312	--	ND	1.53	--		1.563
1,2,4-Trimethylbenzene	0.330	0.312	--	1.62	1.53	--		1.563
Benzyl chloride	ND	0.312	--	ND	1.62	--		1.563
1,3-Dichlorobenzene	ND	0.312	--	ND	1.88	--		1.563
1,4-Dichlorobenzene	ND	0.312	--	ND	1.88	--		1.563
1,2-Dichlorobenzene	ND	0.312	--	ND	1.88	--		1.563
1,2,4-Trichlorobenzene	ND	0.312	--	ND	2.32	--		1.563
Hexachlorobutadiene	ND	0.312	--	ND	3.33	--		1.563

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	100		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-08
Client ID: IAQ-4HUD-021821
Sample Location: TARRYTOWN, NY

Date Collected: 02/18/21 10:06
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/01/21 21:55
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.492	0.200	--	2.43	0.989	--		1
Chloromethane	0.635	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	20.6	5.00	--	38.8	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	6.59	1.00	--	15.7	2.38	--		1
Trichlorofluoromethane	0.256	0.200	--	1.44	1.12	--		1
Isopropanol	1.13	0.500	--	2.78	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	ND	0.500	--	ND	1.47	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-08
Client ID: IAQ-4HUD-021821
Sample Location: TARRYTOWN, NY

Date Collected: 02/18/21 10:06
Date Received: 02/23/21
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	0.416	0.200	--	1.57	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.216	0.200	--	0.920	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-08
Client ID: IAQ-4HUD-021821
Sample Location: TARRYTOWN, NY

Date Collected: 02/18/21 10:06
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	96		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-08
Client ID: IAQ-4HUD-021821
Sample Location: TARRYTOWN, NY

Date Collected: 02/18/21 10:06
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/01/21 21:55
Analyst: RY

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								
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	0.076	0.020	--	0.478	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-09
Client ID: SS-4HUD-021821
Sample Location: TARRYTOWN, NY

Date Collected: 02/18/21 10:05
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 02:30
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.496	0.200	--	2.45	0.989	--		1
Chloromethane	0.271	0.200	--	0.560	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	165	5.00	--	311	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	104	1.00	--	247	2.38	--		1
Trichlorofluoromethane	0.258	0.200	--	1.45	1.12	--		1
Isopropanol	1170	0.500	--	2880	1.23	--	E	1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	4.74	0.500	--	14.4	1.52	--		1
Methylene chloride	0.816	0.500	--	2.83	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.202	0.200	--	0.629	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	2.05	0.500	--	6.05	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-09
Client ID: SS-4HUD-021821
Sample Location: TARRYTOWN, NY

Date Collected: 02/18/21 10:05
Date Received: 02/23/21
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	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	1.76	0.200	--	6.34	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.944	0.200	--	3.87	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	0.427	0.200	--	1.61	0.754	--		1
2-Hexanone	0.217	0.200	--	0.889	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	0.308	0.200	--	1.34	0.869	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-09
Client ID: SS-4HUD-021821
Sample Location: TARRYTOWN, NY

Date Collected: 02/18/21 10:05
Date Received: 02/23/21
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	1.08	0.400	--	4.69	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	0.442	0.200	--	1.92	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	100		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	102		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-09 D
Client ID: SS-4HUD-021821
Sample Location: TARRYTOWN, NY

Date Collected: 02/18/21 10:05
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 06:25
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Isopropanol	2200	8.34	--	5410	20.5	--		16.67

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	95		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	96		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-10
Client ID: AA-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 09:47
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/01/21 18:34
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.475	0.200	--	2.35	0.989	--		1
Chloromethane	0.578	0.200	--	1.19	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.07	1.00	--	4.92	2.38	--		1
Trichlorofluoromethane	0.254	0.200	--	1.43	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-10
Client ID: AA-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 09:47
Date Received: 02/23/21
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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-10
Client ID: AA-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 09:47
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	97		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-10
Client ID: AA-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 09:47
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/01/21 18:34
Analyst: RY

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								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.070	0.020	--	0.440	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	97		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-11
Client ID: IAQ-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 14:15
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/01/21 22:35
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.494	0.200	--	2.44	0.989	--		1
Chloromethane	0.689	0.200	--	1.42	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	415	5.00	--	782	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	5.80	1.00	--	13.8	2.38	--		1
Trichlorofluoromethane	0.260	0.200	--	1.46	1.12	--		1
Isopropanol	1.39	0.500	--	3.42	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	0.526	0.500	--	1.55	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-11
Client ID: IAQ-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 14:15
Date Received: 02/23/21
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	0.228	0.200	--	0.728	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	0.797	0.200	--	3.00	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-11
Client ID: IAQ-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 14:15
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:

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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	96		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-11
Client ID: IAQ-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 14:15
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/01/21 22:35
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.075	0.020	--	0.472	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.048	0.020	--	0.325	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	98		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	97		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-12
Client ID: SS-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 14:16
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 03:10
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.485	0.200	--	2.40	0.989	--		1
Chloromethane	0.254	0.200	--	0.525	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	117	5.00	--	220	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	55.3	1.00	--	131	2.38	--		1
Trichlorofluoromethane	0.265	0.200	--	1.49	1.12	--		1
Isopropanol	5.60	0.500	--	13.8	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.05	0.500	--	6.21	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	4.87	0.500	--	14.4	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-12
Client ID: SS-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 14:16
Date Received: 02/23/21
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	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	0.522	0.500	--	1.54	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.262	0.200	--	0.923	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.245	0.200	--	0.783	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	0.862	0.200	--	3.53	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	0.547	0.200	--	2.06	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	0.637	0.200	--	2.77	0.869	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-12
Client ID: SS-165WMAIN-022221
Sample Location: TARRYTOWN, NY

Date Collected: 02/22/21 14:16
Date Received: 02/23/21
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	2.09	0.400	--	9.08	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	0.648	0.200	--	2.81	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	0.269	0.200	--	1.32	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	98		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	100		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-13
Client ID: IAQ-4ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 11:01
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/01/21 23:15
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.487	0.200	--	2.41	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	55.6	5.00	--	105	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.88	1.00	--	11.6	2.38	--		1
Trichlorofluoromethane	0.264	0.200	--	1.48	1.12	--		1
Isopropanol	8.48	0.500	--	20.8	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-13
Client ID: IAQ-4ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 11:01
Date Received: 02/23/21
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	0.377	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-13
Client ID: IAQ-4ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 11:01
Date Received: 02/23/21
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	94		60-140
chlorobenzene-d5	95		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-13
Client ID: IAQ-4ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 11:01
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/01/21 23:15
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.067	0.020	--	0.421	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	96		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	96		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-14
Client ID: SS-4ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 10:56
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 03:50
Analyst: RY

	ppbV			ug/m3				
Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.499	0.200	--	2.47	0.989	--		1
Chloromethane	0.240	0.200	--	0.496	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	114	5.00	--	215	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	26.7	1.00	--	63.4	2.38	--		1
Trichlorofluoromethane	0.273	0.200	--	1.53	1.12	--		1
Isopropanol	4.08	0.500	--	10.0	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.33	0.500	--	7.06	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	1.57	0.500	--	4.63	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-14
Client ID: SS-4ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 10:56
Date Received: 02/23/21
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	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.561	0.200	--	2.30	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	0.351	0.200	--	1.32	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	0.300	0.200	--	1.30	0.869	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-14
Client ID: SS-4ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 10:56
Date Received: 02/23/21
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	0.989	0.400	--	4.30	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	0.333	0.200	--	1.45	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	98		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	99		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-15
Client ID: IAQ-18ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 16:15
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 03/01/21 23:55
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.513	0.200	--	2.54	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	47.3	5.00	--	89.1	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.74	1.00	--	18.4	2.38	--		1
Trichlorofluoromethane	0.273	0.200	--	1.53	1.12	--		1
Isopropanol	2.10	0.500	--	5.16	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-15
Client ID: IAQ-18ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 16:15
Date Received: 02/23/21
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	0.578	0.200	--	2.04	0.705	--		1
Benzene	0.725	0.200	--	2.32	0.639	--		1
Cyclohexane	0.211	0.200	--	0.726	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	0.273	0.200	--	1.28	0.934	--		1
Heptane	0.377	0.200	--	1.55	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.34	0.200	--	5.05	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	0.539	0.400	--	2.34	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	0.208	0.200	--	0.903	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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-15
Client ID: IAQ-18ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 16:15
Date Received: 02/23/21
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	94		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	95		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-15
Client ID: IAQ-18ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 16:15
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 03/01/21 23:55
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.081	0.020	--	0.510	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.020	0.020	--	0.136	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	96		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	97		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-16
Client ID: SS-18ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 16:16
Date Received: 02/23/21
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 03/02/21 04:29
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.504	0.200	--	2.49	0.989	--		1
Chloromethane	0.204	0.200	--	0.421	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	194	5.00	--	366	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	43.0	1.00	--	102	2.38	--		1
Trichlorofluoromethane	0.259	0.200	--	1.46	1.12	--		1
Isopropanol	3.24	0.500	--	7.96	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	2.40	0.500	--	7.28	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.269	0.200	--	0.838	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

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-16
Client ID: SS-18ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 16:16
Date Received: 02/23/21
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	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.224	0.200	--	0.789	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	0.309	0.200	--	0.987	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	0.616	0.200	--	2.52	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	0.436	0.200	--	1.64	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	0.381	0.200	--	1.65	0.869	--		1

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

SAMPLE RESULTS

Lab ID: L2108837-16
Client ID: SS-18ORCH-022321
Sample Location: TARRYTOWN, NY

Date Collected: 02/23/21 16:16
Date Received: 02/23/21
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	1.18	0.400	--	5.13	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	0.373	0.200	--	1.62	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	98		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/01/21 15:06

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-16 Batch: WG1469435-4								
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: TARRYTOWN FORMER MGP SITE **Lab Number:** L2108837

Project Number: 0134976-002 **Report Date:** 03/02/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/01/21 15:06

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-16 Batch: WG1469435-4								
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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 03/01/21 15:06

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-16 Batch: WG1469435-4								
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: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002
Lab Number: L2108837
Report Date: 03/02/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 03/01/21 15:45

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01,03-04,06,08,10-11,13,15 Batch: WG1469436-4								
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: TARRYTOWN FORMER MGP SITE

Project Number: 0134976-002

Lab Number: L2108837

Report Date: 03/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 Batch: WG1469435-3								
Dichlorodifluoromethane	101		-		70-130	-		
Chloromethane	115		-		70-130	-		
Freon-114	105		-		70-130	-		
Vinyl chloride	116		-		70-130	-		
1,3-Butadiene	116		-		70-130	-		
Bromomethane	120		-		70-130	-		
Chloroethane	127		-		70-130	-		
Ethanol	89		-		40-160	-		
Vinyl bromide	120		-		70-130	-		
Acetone	93		-		40-160	-		
Trichlorofluoromethane	122		-		70-130	-		
Isopropanol	106		-		40-160	-		
1,1-Dichloroethene	116		-		70-130	-		
Tertiary butyl Alcohol	92		-		70-130	-		
Methylene chloride	122		-		70-130	-		
3-Chloropropene	130		-		70-130	-		
Carbon disulfide	113		-		70-130	-		
Freon-113	**131**	Q	-		70-130	-		
trans-1,2-Dichloroethene	111		-		70-130	-		
1,1-Dichloroethane	115		-		70-130	-		
Methyl tert butyl ether	101		-		70-130	-		
2-Butanone	118		-		70-130	-		
cis-1,2-Dichloroethene	114		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: TARRYTOWN FORMER MGP SITE

Project Number: 0134976-002

Lab Number: L2108837

Report Date: 03/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 Batch: WG1469435-3								
Ethyl Acetate	116		-		70-130	-		
Chloroform	100		-		70-130	-		
Tetrahydrofuran	117		-		70-130	-		
1,2-Dichloroethane	110		-		70-130	-		
n-Hexane	112		-		70-130	-		
1,1,1-Trichloroethane	124		-		70-130	-		
Benzene	98		-		70-130	-		
Carbon tetrachloride	106		-		70-130	-		
Cyclohexane	110		-		70-130	-		
1,2-Dichloropropane	127		-		70-130	-		
Bromodichloromethane	106		-		70-130	-		
1,4-Dioxane	120		-		70-130	-		
Trichloroethene	115		-		70-130	-		
2,2,4-Trimethylpentane	117		-		70-130	-		
Heptane	126		-		70-130	-		
cis-1,3-Dichloropropene	110		-		70-130	-		
4-Methyl-2-pentanone	130		-		70-130	-		
trans-1,3-Dichloropropene	94		-		70-130	-		
1,1,2-Trichloroethane	119		-		70-130	-		
Toluene	112		-		70-130	-		
2-Hexanone	124		-		70-130	-		
Dibromochloromethane	119		-		70-130	-		
1,2-Dibromoethane	100		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: TARRYTOWN FORMER MGP SITE

Project Number: 0134976-002

Lab Number: L2108837

Report Date: 03/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 Batch: WG1469435-3								
Tetrachloroethene	108		-		70-130	-		
Chlorobenzene	101		-		70-130	-		
Ethylbenzene	113		-		70-130	-		
p/m-Xylene	114		-		70-130	-		
Bromoform	114		-		70-130	-		
Styrene	100		-		70-130	-		
1,1,2,2-Tetrachloroethane	117		-		70-130	-		
o-Xylene	118		-		70-130	-		
4-Ethyltoluene	100		-		70-130	-		
1,3,5-Trimethylbenzene	115		-		70-130	-		
1,2,4-Trimethylbenzene	110		-		70-130	-		
Benzyl chloride	124		-		70-130	-		
1,3-Dichlorobenzene	110		-		70-130	-		
1,4-Dichlorobenzene	112		-		70-130	-		
1,2-Dichlorobenzene	110		-		70-130	-		
1,2,4-Trichlorobenzene	**133**	Q	-		70-130	-		
Hexachlorobutadiene	119		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: TARRYTOWN FORMER MGP SITE

Project Number: 0134976-002

Lab Number: L2108837

Report Date: 03/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01,03-04,06,08,10-11,13,15 Batch: WG1469436-3								
Vinyl chloride	111		-		70-130	-		25
1,1-Dichloroethene	113		-		70-130	-		25
cis-1,2-Dichloroethene	108		-		70-130	-		25
1,1,1-Trichloroethane	119		-		70-130	-		25
Carbon tetrachloride	102		-		70-130	-		25
Trichloroethene	108		-		70-130	-		25
Tetrachloroethene	101		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002

Lab Number: L2108837
Report Date: 03/02/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 QC Batch ID: WG1469435-5 QC Sample: L2108837-06 Client ID: IAQ-27RVR-021721						
Dichlorodifluoromethane	0.494	0.496	ppbV	0		25
Chloromethane	0.649	0.652	ppbV	0		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	218	216	ppbV	1		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	6.56	6.55	ppbV	0		25
Trichlorofluoromethane	0.264	0.257	ppbV	3		25
Isopropanol	12.5	12.4	ppbV	1		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	2.07	2.04	ppbV	1		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	0.733	0.714	ppbV	3		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002

Lab Number: L2108837
Report Date: 03/02/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 QC Batch ID: WG1469435-5 QC Sample: L2108837-06 Client ID: IAQ-27RVR-021721						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	ND	ND	ppbV	NC		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.213	0.213	ppbV	0		25
Benzene	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.489	0.478	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002

Lab Number: L2108837
Report Date: 03/02/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-16 QC Batch ID: WG1469435-5 QC Sample: L2108837-06 Client ID: IAQ-27RVR-021721						
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

Lab Duplicate Analysis
Batch Quality Control

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002

Lab Number: L2108837
Report Date: 03/02/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01,03-04,06,08,10-11,13,15 QC Batch ID: WG1469436-5 QC Sample: L2108837-06 Client ID: IAQ-27RVR-021721						
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	0.078	0.078	ppbV	0		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	0.034	0.036	ppbV	6		25

Project Name: TARRYTOWN FORMER MGP SITE

Lab Number: L2108837

Project Number: 0134976-002

Report Date: 03/02/21

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
L2108837-01	IAQ-25RVR-021621	01920	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	42.8	17
L2108837-01	IAQ-25RVR-021621	2204	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.1	-7.5	-	-	-	-
L2108837-02	SS-25RVR-021621	0365	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	37.4	4
L2108837-02	SS-25RVR-021621	2425	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.6	-5.5	-	-	-	-
L2108837-03	AA-25RVR-021621	01924	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	35.5	1
L2108837-03	AA-25RVR-021621	2310	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.1	-5.2	-	-	-	-
L2108837-04	IAQ-9RVR-021721	0806	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	38.3	6
L2108837-04	IAQ-9RVR-021721	234	2.7L Can	02/15/21	342834	L2106543-06	Pass	-28.5	-5.6	-	-	-	-
L2108837-05	SS-9RVR-021721	02104	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	35.6	1
L2108837-05	SS-9RVR-021721	2212	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.5	-2.9	-	-	-	-
L2108837-06	IAQ-27RVR-021721	01923	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	41.2	13
L2108837-06	IAQ-27RVR-021721	197	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.4	-5.8	-	-	-	-
L2108837-07	SS-27RVR-021721	01926	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	36.0	0
L2108837-07	SS-27RVR-021721	377	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.4	-3.8	-	-	-	-
L2108837-08	IAQ-4HUD-021821	01518	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	35.6	1

Project Name: TARRYTOWN FORMER MGP SITE

Lab Number: L2108837

Project Number: 0134976-002

Report Date: 03/02/21

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
L2108837-08	IAQ-4HUD-021821	2176	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.3	-5.7	-	-	-	-
L2108837-09	SS-4HUD-021821	0768	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	36.6	2
L2108837-09	SS-4HUD-021821	2298	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.5	-5.0	-	-	-	-
L2108837-10	AA-165WMAIN-022221	01690	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	36.9	2
L2108837-10	AA-165WMAIN-022221	2006	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.5	-4.5	-	-	-	-
L2108837-11	IAQ-165WMAIN-022221	0735	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	38.1	6
L2108837-11	IAQ-165WMAIN-022221	473	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.5	-6.2	-	-	-	-
L2108837-12	SS-165WMAIN-022221	0976	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	38.5	7
L2108837-12	SS-165WMAIN-022221	187	2.7L Can	02/15/21	342834	L2105926-01	Pass	-29.5	-5.5	-	-	-	-
L2108837-13	IAQ-4ORCH-022321	01730	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	35.8	1
L2108837-13	IAQ-4ORCH-022321	2033	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.5	-6.7	-	-	-	-
L2108837-14	SS-4ORCH-022321	0770	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	37.0	3
L2108837-14	SS-4ORCH-022321	2186	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.4	-5.4	-	-	-	-
L2108837-15	IAQ-18ORCH-022321	0647	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	37.3	4
L2108837-15	IAQ-18ORCH-022321	147B	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.5	-7.0	-	-	-	-

Project Name: TARRYTOWN FORMER MGP SITE

Lab Number: L2108837

Project Number: 0134976-002

Report Date: 03/02/21

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
L2108837-16	SS-18ORCH-022321	02106	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	37.2	3
L2108837-16	SS-18ORCH-022321	205	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.5	-5.7	-	-	-	-
L2108837-17	UNUSED CAN#2242	02110	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	38.5	7
L2108837-17	UNUSED CAN#2242	2242	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.5	0.0	-	-	-	-
L2108837-18	UNUSED CAN#132	01821	Flow 2	02/15/21	342834		-	-	-	Pass	36.0	37.9	5
L2108837-18	UNUSED CAN#132	132	2.7L Can	02/15/21	342834	L2106543-06	Pass	-29.7	-29.2	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2105926
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2105926-01
Client ID: CAN 354 SHELF 19
Sample Location:

Date Collected: 02/06/21 16:00
Date Received: 02/08/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/08/21 16:55
Analyst: RY

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2105926
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2105926-01
Client ID: CAN 354 SHELF 19
Sample Location:

Date Collected: 02/06/21 16:00
Date Received: 02/08/21
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: L2105926
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2105926-01
Client ID: CAN 354 SHELF 19
Sample Location:

Date Collected: 02/06/21 16:00
Date Received: 02/08/21
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: L2105926
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2105926-01
Client ID: CAN 354 SHELF 19
Sample Location:

Date Collected: 02/06/21 16:00
Date Received: 02/08/21
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: L2105926
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2105926-01
Client ID: CAN 354 SHELF 19
Sample Location:

Date Collected: 02/06/21 16:00
Date Received: 02/08/21
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	96		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2105926
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2105926-01
Client ID: CAN 354 SHELF 19
Sample Location:

Date Collected: 02/06/21 16:00
Date Received: 02/08/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/08/21 16:55
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
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:** L2105926

Project Number: CANISTER QC BAT **Report Date:** 03/02/21

Air Canister Certification Results

Lab ID: L2105926-01
Client ID: CAN 354 SHELF 19
Sample Location:

Date Collected: 02/06/21 16:00
Date Received: 02/08/21
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2105926
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2105926-01
Client ID: CAN 354 SHELF 19
Sample Location:

Date Collected: 02/06/21 16:00
Date Received: 02/08/21
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	96		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140

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

Lab Number: L2106543
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2106543-06
Client ID: CAN 2227 SHELF 3
Sample Location:

Date Collected: 02/11/21 09:00
Date Received: 02/11/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/11/21 20:21
Analyst: EW

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

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2106543
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2106543-06
Client ID: CAN 2227 SHELF 3
Sample Location:

Date Collected: 02/11/21 09:00
Date Received: 02/11/21
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: L2106543
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2106543-06
Client ID: CAN 2227 SHELF 3
Sample Location:

Date Collected: 02/11/21 09:00
Date Received: 02/11/21
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: L2106543
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2106543-06
Client ID: CAN 2227 SHELF 3
Sample Location:

Date Collected: 02/11/21 09:00
Date Received: 02/11/21
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: L2106543
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2106543-06
Client ID: CAN 2227 SHELF 3
Sample Location:

Date Collected: 02/11/21 09:00
Date Received: 02/11/21
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	94		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	90		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2106543
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2106543-06
Client ID: CAN 2227 SHELF 3
Sample Location:

Date Collected: 02/11/21 09:00
Date Received: 02/11/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/11/21 20:21
Analyst: EW

	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: L2106543
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2106543-06
Client ID: CAN 2227 SHELF 3
Sample Location:

Date Collected: 02/11/21 09:00
Date Received: 02/11/21
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	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2106543
Report Date: 03/02/21

Air Canister Certification Results

Lab ID: L2106543-06
Client ID: CAN 2227 SHELF 3
Sample Location:

Date Collected: 02/11/21 09:00
Date Received: 02/11/21
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	93		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	90		60-140

Project Name: TARRYTOWN FORMER MGP SITE
Project Number: 0134976-002

Lab Number: L2108837
Report Date: 03/02/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
N/A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2108837-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2108837-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2108837-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2108837-04A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2108837-05A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2108837-06A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2108837-07A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2108837-08A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2108837-09A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2108837-10A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2108837-11A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2108837-12A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2108837-13A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2108837-14A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2108837-15A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2108837-16A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30)
L2108837-17A	Canister - 2.7 Liter	N/A	NA			Y	Absent		CLEAN-FEE()
L2108837-18A	Canister - 2.7 Liter	N/A	NA			Y	Absent		CLEAN-FEE()

*Values in parentheses indicate holding time in days

Project Name:	TARRYTOWN FORMER MGP SITE	**Lab Number:**	L2108837
Project Number:	0134976-002	**Report Date:**	03/02/21

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:	TARRYTOWN FORMER MGP SITE	**Lab Number:**	L2108837
Project Number:	0134976-002	**Report Date:**	03/02/21

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.

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'.

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 at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a 'Total' result is requested, the results of its individual components will also be reported.

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.)

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.

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

Report Format: Data Usability Report

Project Name:	TARRYTOWN FORMER MGP SITE	**Lab Number:**	L2108837
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Data Qualifiers

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.

Report Format: Data Usability Report

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

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

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

Westborough Facility:

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

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

Mansfield Facility:

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

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

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

AIR ANALYSIS

ALPHA ANALYTICAL — CHAIN OF CUSTODY

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

Date Rec'd in Lab: 2/24/21

ALPHA Job #: L2108837

Client Information

Client: HALEY AND ALDRICH
Address: 200 TOWN CENTRE DR. STE2
ROCHESTER, NY 14623-4264
Phone: 585-370-9792
Fax: 585-359-4650
Email: VDICK@HALEYALDRICH.COM

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: TARRYTOWN FORMER MGP SITE
Project Location: TARRYTOWN, NY
Project #: 0134976-002
Project Manager: VINCE DICK.
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: ☐

ANALYSIS

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)
-01	IAQ-25RVR-021621	2/16/21	1352	1430	-29.02	-8.64	AA	DM/PF	2.7L	2204	01920	X					
-02	SS-25RVR-021621	2/16/21	1350	1440	-29.57	-6.98	SV	DM/PF	2.7L	2425	0365	X					
-03	AA-25RVR-021621	2/16/21	1501	1553	-29.71	-6.91	AA	DM/PF	2.7L	2310	01924	X					
-04	IAQ-9RVR-021721	2/17/21	0939	1031	-30.40	-7.15	AA	DM/PF	2.7L	234	0806	X					
-05	SS-9RVR-021721	2/17/21	0938	1022	-24.80	-6.22	SV	DM/PF	2.7L	2212	02404	X					
-06	IAQ-27RVR-021721	2/17/21	1333	1418	-30.02	-7.08	AA	DM/PF	2.7L	197	01923	X					
-07	SS-27RVR-021721	2/17/21	1332	1424	-30.28	-6.79	SV	DM/PF	2.7L	377	01926	X					
-08	IAQ-4HUD-021821	2/18/21	0912	1006	-30.68	-6.98	AA	DM/PF	2.7L	2176	01518	X					
-09	SS-4HUD-021821	2/18/21	0911	1005	-30.42	-6.95	SV	DM/PF	2.7L	2298	0768	X					
-10	AA-165WMAIN-022221	2/22/21	0855	0947	-30.22	-6.94	AA	DM/PF	2.7L	2033	01690	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:
	2/23/21 1750		2/23/21 17:50
	2/23/21		2/24/21 11:30

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)

AIR ANALYSIS

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Project Information

Project Name: TARRYTOWN FORMER MGP SITE
Project Location: TARRYTOWN, NY
Project #: 0134976-502
Project Manager: VINCE DICK
ALPHA Quote #:

Turn-Around Time

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

Date Due: Time:

Report Information - Data Deliverables

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Criteria Checker:
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-11	IAQ-165WMAIN-022221	2/22/21	1323	1415	-29.87	-6.80	AA	DH/PF	2.7L	473	0735	X						
-12	SS-165WMAIN-022221	2/22/21	1322	1416	-29.90	-6.98	SV	DH/PF	2.7L	187	0976	X						
-13	IAQ-40RCH-022321	2/23/21	1007	1101	-29.73	[redacted]	AA	PF	2.7L	2033	01730	X						
-14	SS-40RCH-022321	2/23/21	1003	1056	-29.70	-6.93	SV	PF	2.7L	2186	0770	X						
-15	IAQ [redacted]-180RCH-022321	2/23/21	1522	1615	-29.55	-7.48	SV	PF	2.7L	14713	0647	X						
-16	SS-180RCH-022321	2/23/21	1519	1616	-29.52	-6.91	AA	PF	2.7L	205	0216	X						

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
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Other = Please Specify

Container Type

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Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	2/23/21 1750	[signature]	2/23/21 17:50
[signature]	2/24 0120	[signature]	2/24/21 01:30

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