Confidential Communication Attorney/Client/Privileged Work Product Prepared for Counsel



April 23, 2018

Stora Enso C/O John T. Kolaga, Esq. Rupp Baase Pfalzgraf Cunningham, LLC 1600 Liberty Building 424 Main Street Buffalo, New York 14202

RE: SUB-SLAB VAPOR INTRUSION SAMPLING AND ANALYSIS REPORT FOR THE 2017/2018 HEATING SEASON AT THE VAILS GATE BUSINESS CENTER, VAILS GATE, NEW YORK, NYSDEC SITE NO. 336065

Dear Mr. Kolaga:

Leader Consulting Services, Inc. ("Leader") is pleased to provide Rupp Baase Pfalzgraf Cunningham, LLC ("Rupp Baase"), on behalf of Stora Enso, with this report summarizing the sampling effort and associated laboratory results from the 2017/2018 Heating Season Sub-Slab Vapor Intrusion ("SSVI") assessment of select Rental Spaces ("RS") within the former Vails Gate Manufacturing facility ("VGM") at 1073 Route 94 in Vails Gate, New York (hereafter referred to as "the Site"). The Site is currently identified as the Vails Gate Business Center ("VGBC").

1.0 BACKGROUND AND PURPOSE

Leader was retained by Rupp Baase to implement the January 8, 2018 New York State Department of Environmental Conservation ("NYSDEC")-approved 2017/2018 Heating Season Vapor Intrusion Investigation Work Plan for the former Vails Gate Manufacturing Facility, Vails Gate, New York (i.e., the "Work Plan"). The Work Plan had been developed and investigation activities have been implemented in accordance with the New York State Department of Health ("NYSDOH") Guidance Document "*Guidance for Evaluating Soil Vapor Intrusion in the State of New York*". Existing SSVI sample probes within RS's # 6 (currently Polyworks); #A1 (Solar City); and #A2 (24 Seven) were originally identified as the locations to be sampled during this investigation.

2.0 SCOPE-OF-WORK

The scope of work for the SSVI investigation is identified in the January 8, 2018 Work Plan, the Interim Site Management Plan ("ISMP") and the ISMP Field Sampling Plan developed for the Site. This section summarizes the investigation activities completed to meet the objectives of the ISMP and the Work Plan. This report includes a narrative description of: 1) pre-sampling activities; 2) sampling activities completed on February 12, 2018 and February 13, 2018; 3) laboratory analysis and data interpretation through data comparison following the NYSDOH Guidance Document; and 4) recommendations concerning the need for further investigations and/or mitigation, if any, based on the analytical data. In addition, the report includes Analytical

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Laboratory Results and Summary Tables (Attachment A), Data Validation Summary (Attachment B), Photograph Log of the February 12th and 13th sampling event (Attachment C) and Figures (Attachment D).

2.1 PRE-SAMPLING ACTIVITIES - SSDS SHUTDOWN AND AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY

VGBC Rental Space # 15 SSDS Shutdown and Inspection

Leader retained Alpine Environmental Services to complete Sub Slab Depressurization System ("SSDS") shutdown and inspection services of the SSDS system operating within Rental Space ("RS") # 15 at the Vails Gate Business Center. RS #15 is currently leased to the US Mint. On February 5, 2018, eight (8) days before SSVI sampling, Alpine completed a preliminary inspection of the SSDS, and shutdown the system. On February 20, 2018, seven (7) days after SSVI sampling, Alpine completed a detailed inspection of the SSDS in Unit 15; made the necessary repairs; and the system was restarted.

Air Quality Questionnaire and Building Inventory

Mr. Keith Keller arrived at the Site on February 12, 2018 and completed the Air Questionnaire and Building Inventories. The Inventories of RS #6, PolyWorks and RS #A1, Solar City, were completed on the afternoon of February 12, 2018. The Inventory of RS #A2, 24 Seven, was initiated on the afternoon of February 12th, and completed the morning of February 13, 2018. The Air Quality Questionnaire and Building Inventories were documented on the NYSDOH 3-page *Soil Vapor Intrusion - Structure Sampling Building Questionnaire* form. As required by NYSDOH and identified in the Work Plan, the completed Questionnaires were transmitted via e-mail on February 16, 2018 to the NYSDOH Project Manager, Ms. Renata Ockerby.

2.2 SSVI SAMPLING ACTIVITIES

On February 12, 2018, Keith Keller, Leader Project Manager, arrived at the Site to observe the availability of the existing SSVI sample ports within the RSs, and to complete the Air Quality Questionnaires prior to SSVI sampling scheduled to occur the following day. Leader retained Centek Laboratories, LLC to complete SSVI sample collection at the Site and to complete sample analysis at the Centek Laboratory in Syracuse, New York. Mr. Russ Pelligrino of Centek Labs arrived at the Site on the afternoon of February 12, 2018 for the purpose of assessing the available sample ports and completing the "short circuiting" helium testing at the sample port locations. The existing sample port CHA-V19 within RS # A1 was located, and helium testing was completed, indicating no air intrusion from the indoor air space into the SSVI sample. Sample port CHA-V22 could not be located within RS# A2, as considerable shelving and storage modifications had been made within the space since the original sampling event of the space. As a result, a new temporary sample port, LCS-1, was drilled through the concrete slab to allow for SSVI sampling of the space. Drilling of the sample port was incomplete at the end of the day, and was scheduled for completion the following day.

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On February 13, 2018, Mr. Keller and Mr. Pelligrino arrived at the Site at 6:45 AM to begin sampling activities at the Site. The existing sample port CHA-V10 within RS #6 was located, and helium testing was completed, indicating no air intrusion from the indoor air space into the SSVI sample. SSVI sampling of sample port CHA-V10 began at 0720 hours. An indoor air sample, IA-6, was initiated within the rental space #6 at 0723 hours. It was centrally located on the ground floor of the space. This sample also served as the matrix spike/matrix spike duplicate ("MS/MSD") sample for analytical quality control purposes. Mr. Keller and Mr. Pelligrino then proceeded to RS # A1 and initiated sampling at port CHA-V19 at 0736 hours. Indoor air sample IA-A1, located on the ground floor within the approximate center of the space, was initiated at 0737 hours.

At 0745 hours, the outdoor air sample, identified as "Outside", was set up on the fence located north and upwind of the main structure of the business park. At 0755, the indoor air sample, and the indoor air duplicate sample (IA Unit 2 and IAD Unit 2, respectively) were initiated within RS# A2. At 0803 hours, Mr. Pelligrino continued drilling at temporary sample port LCS-1 within RS# A2. Drilling continued until sub-slab "breakthrough" occurred at an approximate 12" depth below the sub-slab. At 0815, helium testing was completed at LCS-1, indicating no air intrusion from the indoor air space into the SSVI sample. At 0817 hours, sampling was initiated at LCS-1. At 0900 hours, 1000 hours, and 1450 hours, the sampling devices were checked to determine if they were drawing sub-slab and indoor air samples at an acceptable flow rate. Each of the sampling devices were functioning as designed. At 1518 hours, the RS#6 IA Unit 6 sampling device had drawn indoor air sample to the desired pressure of completion, as did CHA-V10 at 1519 hours. RS#A1 SS sample CHA-V19 was completed at 1519 hours and the associated indoor air sample IA-A1 was shut down at 1525 hours. The outdoor air sample "Outside" was shut down at 1536. The SS sample LCS-1 in RS# A2 was shut down at 1540 hours, and the associate indoor air samples within RS # A2, IA Unit 2 and IAD Unit 2, were shut down at 1545 hours.

Upon completion of sampling activities on February 13, 2018, Mr. Pelligrino placed the sample containers in poly totes within his vehicle and transported the samples to the Centek Laboratories facility in Syracuse, New York. Attachment C provides a photo log summary of the February 13, 2018 sampling event at the VGBC.

2.3 LABORATORY ANALYSIS AND DATA INTERPRETATION

Each of the samples were analyzed for the presence of volatile organic compounds ("VOCs") via USEPA Method TO-15 by Centek Laboratories, a NYSDOH Environmental Laboratory Approval Program ("ELAP") certified laboratory. Sample analyses met the NYSDOH guidance for sub-slab samples, requiring a minimum detection limit of 1ug/m3 for ambient samples (indoor and outdoor air) and a minimum detection limit of 1ug/m3 for sub-slab samples, with the exception of trichloroethene; cis 1,2,dichloroethene; 1,1,-dichloroethene; carbon tetrachloride; and vinyl chloride, which have a reporting limit of 0.20 ug/m3.



2.3.1 NYSDOH Soil Vapor/Indoor Air Data Interpretation

Sub-slab and indoor air sample values from each of the rental spaces were compared to the May 2017 NYSDOH Soil Vapor/Indoor Air Matrices A, B and C to assess if future SSVI monitoring and/or mitigation activities would be necessary within the spaces.

Rental Space 6, PolyWorks - CHA-V10/IA 6

There were no analytes detected within sub-slab sample CHA-V10, and indoor air sample IA 6, above NYSDOH Decision Matrices A, B or C.

Rental Space A1, Solar City – CHA-V19/IA Unit A1

There was one (1) analyte within sub-slab sample CHA-V19, and indoor air sample IA Unit A1, that was above the NYSDOH Decision Matrix A threshold and one (1) analyte that was above the NYSDOH Decision Matrix B threshold.

Parameter	Matrix	Sub-Slab Concentration	Indoor Air Concentration	Application of Matrix
1,1-dichloroethene	А	230	<0.16	Mitigate
1,1,1-trichloroethane	В	18,000	1.3	Mitigate

Rental Space A, 24 Seven – LCS-1/IA Unit A2 and IA Unit A2 Duplicate

There were no analytes detected within sub-slab sample LCS-1, and indoor air sample IA Unit A2, and duplicate indoor air Unit A2 above NYSDOH Decision Matrices A, B or C.

2.3.2 Indoor Air and Outdoor Air Data Interpretation

Indoor air sample values from each of the rental spaces and the outdoor air values from the outdoor air sample "Outside" were compared to the 1997-2003 NYSDOH Summary of Indoor Levels of VOCs from Fuel Oil Heated Homes in NYS (90th percentile) and the 2001 EPA Indoor Air Building Assessment and Survey Evaluation ("BASE") Database (90th percentile) (Table 2 and Table 3, respectively). With the exception of the analyte ethyl acetate, no sample values exceeded the 90th percentile of the referenced standards identified in Tables 2 and 3. Ethyl acetate is the most common ester in wine, being the product of the most common volatile organic acid – acetic acid, and the ethyl alcohol generated during the fermentation process. Rental Space A2, 24 Seven, is a warehouse and distribution center for wine, and this rental space and other rental spaces leased by 24 Seven within the VGBP store wine for distribution to retailers. Ethyl acetate has very low toxicity (OSHA PEL of 1,400,00 ugm³). Given that the chemical is naturally present in many organisms, there is little risk of exposure or toxicity. It appears that the ethyl acetate detected is not related to the original sub-slab VOC source area.



2.4 SUMMARY OF RECOMMENDATIONS

Based on a comparison of the data generated from Rental Space 6, Polyworks, and Rental Space A2, 24 Seven, with NYSDOH matrices A, B, and C; the 1997-2003 NYSDOH Summary of Indoor Levels of VOCs from Fuel Oil Heated Homes in NYS (90th percentile); and the 2001 EPA Indoor Air Building Assessment and Survey Evaluation ("BASE") Database (90th percentile), no further monitoring or SSVI mitigation of the spaces is warranted at this time.

Based on data for Solar City Rental Space A1, mitigation of this space may be necessary when compared to the NYSDOH Decision Matrices A and B thresholds. However, note that indoor air quality within the space has not been impacted by the residual analytes identified within the subslab vapors. Sub-slab vapor concentrations within sample CHA-V19, Solar City Rental Space A1, include 1,1,1 trichloroethane ("1,1,1 TCA") and 1,1, dichloroethene ("1,1 DCE"). Indoor air concentrations within the Solar City rental space are 1.3 ug/m3 of 1,1,1 TCA and <0.16 ug/m3 (or non-detect), of 1,1 DCE. Both indoor air concentrations are below the 90th percentiles thresholds in Tables 2 and 3. In addition, the ground water data generated from the RCRA Facility Investigation and implementation of the quarterly sampling program of the Remedial Action Work Plan ("RAWP") of groundwater samples from monitoring well MW-14, which is located within Rental Space A1, indicate that concentrations of 1,1,1 TCA have been below laboratory detection limits ("non-detect" or "ND") since at least June 2011, and 1,1, DCE concentrations have been below Class GA groundwater quality standards since November 2011. Conditions indicate that the decrease of these analytes is the result of bioremediation activities in Area of Concern #6, near the Solar City rental space.

It is our understanding that NYSDOH and NYSDEC will evaluate the necessity for future activities to be completed within RS A1 (e.g. mitigation, monitoring or no further action) based on the criteria identified in Section 3.2 of the Guidance Document (*Guidance for Evaluating Soil Vapor Intrusion in the State of New York*), including the results of individual soil vapor, sub-slab vapor, indoor air and outdoor air samples, as well as additional factors, which include;

- a. the nature and extent of contamination in all environmental media;
- b. factors that affect vapor migration and intrusion;
- c. completed or proposed remedial actions;
- d. sources of volatile chemicals;
- e. background levels of volatile chemicals in air;
- f. relevant standards, criteria and guidance values; and
- g. past, current and future land uses.

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Given the current indoor air quality conditions within Solar City Rental Space A1, in addition to current Site conditions related to items a - g above, it is recommended that an additional SSVI investigation of Rental Space A1 be completed during the 2018/2019 heating season. If sub-slab and indoor air VOC concentrations remain consistent or demonstrate a decrease in concentrations with the 2017/2018 heating season values, we recommend that future SSVI sampling and analysis of the Solar City space occur once every five (5) years pursuant to the Site Management Plan. If indoor air quality VOC concentrations exceed the concentration thresholds identified in Appendix C of the NYSDOH guidance document, we recommend that Stora Enso have a Sub-Slab Depressurization System ("SSDS") installed within the space by a competent engineering firm, and ensure annual inspection and maintenance of the system, as is currently being completed at Unit 15 in the Vails Gate Business Park.

If you need any additional information, please contact the undersigned at (716) 565-0963.

Very truly yours,

Leader Consulting Services, Inc.

ith D. Heller

Keith D. Keller Project Manager

ith D. Keller oject Manager fley A. Wittlinger

Jeffrey A. Wittlinger, P.E., BCEE Principal

Attachment A

Analytical Laboratory Results and Summary Tables

TABLE 1

Sub Slab Vapor Samplel Results - February 13, 2018 Sampling Event LABORATORY ANALYTICAL DATA SUMMARY - DECTECTED PARAMETERS

				May 2017 Soil Vapor/Indoor Air Matrix A Required Action	May 2017 Soil Vapor/Indoor Air Matrix B Required Action	May 2017 Soil Vapor/Indoor Air Matrix C Required Action
Analyte ⁽¹⁾	RS 6 CHA-V10	RS A1 CHA-V19	RS A2 LCS-1			
	6.2	10.000	420	NEA		
1,1,1-trichloroethane	6.2	18,000	120	NFA	Mitigate - SS>1,000	NFA
1,1 dichloroethane	4.6	3,000	14	NFA	NFA	NFA
1,1 dichloroethene		230	1.9	Mitigate - SS >60	NFA	NFA
1,2,4 trimethylbenzene	1.5	1.3	1.9	NFA	NFA	NFA
1,3,5 trimethylbenzene			1.3	NFA	NFA	NFA
2,2,4 trimethylpentane			13	NFA	NFA	NFA
4-ethyltoluene			0.49 (2)	NFA	NFA	NFA
acetone	54	97	120	NFA	NFA	NFA
benzene	0.99	1.4	15	NFA	NFA	NFA
carbon disulfide	0.5	(-)	4.3	NFA	NFA	NFA
carbon tetrachloride		0.63 ⁽²⁾		NFA	NFA	NFA
chloroethane		3.6		NFA	NFA	NFA
chloroform		8.3	0.88	NFA	NFA	NFA
chloromethane	1.3		1.2	NFA	NFA	NFA
cis-1,2 dichloroethene	16			NFA	NFA	NFA
cyclohexane	1.8		3.1	NFA	NFA	NFA
ethyl acetate	45	2.8		NFA	NFA	NFA
freon 11	2	3.0	1.9	NFA	NFA	NFA
freon 12	13	3.2	3.1	NFA	NFA	NFA
heptane	4.2	4.4	19	NFA	NFA	NFA
hexane	5.1	0.56	34	NFA	NFA	NFA
isopropyl alcohol	25			NFA	NFA	NFA
m&p xylene	1.3	1.2 (2)	2.2	NFA	NFA	NFA
methyl isobutyl ketone	5.2	0.9		NFA	NFA	NFA
methylene chloride	25	64	36	NFA	NFA	NFA
o-xylene	0.61 (2)	0.5 6 ⁽²⁾		NFA	NFA	NFA
tetrachloroethylene	12			NFA	NFA	NFA
toluene	2	2.4	50	NFA	NFA	NFA
trans-1,2-dichloroethene	2.9			NFA	NFA	NFA
trichoroethene	14	10	3.6	NFA	NFA	NFA

Vails Gate Business Park Tarkett Site (336065)

NOTES:

(1) Analysis completed using USEPA Analytical Method TO-15. Analyte concentrations expressed in micrograms per cubic meter (ug/m3)

(2) The analyte was "J" flagged, indicating that it was detected below the laboratory quantification limits, and should be considered estimated

TABLE 2

Indoor Air Sample Results - February 13, 2018 Sampling Event LABORATORY ANALYTICAL DATA SUMMARY - DECTECTED PARAMETERS

Vails Gate Business Park Tarkett Site (336065)

					1997-2003 NYSDOH Summary of Indoor Levels of VOCs from Fuel Oil Heated Homes in NYS (90th percentile)	2001 EPA Indoor Air Building Assessment and Survey Evaluation Database (90th percentile)
Analyte ⁽¹⁾	RS 6 IA-Unit 6	RS A1 IA-Unit A1	RS A2 IA-Unit A2	RS A2 IAD-Unit A2		
1,1,1-trichloroethane		1.3			3.1	20.6
1,2,4 trimethylbenzene		2.5	0.59 ⁽²⁾	0.88	9.5	9.5
1,3,5 trimethylbenzene				0.49 (2)	3.6	3.5
2,2,4 trimethylpentane		2.7			NV ⁽³⁾	NV ⁽³⁾
4-ethyltoluene		0.79			NV ⁽³⁾	3.6
acetone	19	40	19	34	110	98.9
benzene	0.61	2.6	1.1	1.1	15	9.4
carbon tetrachloride	0.31	0.38	0.38		0.8	1.3
chloromethane	0.95	1.1	0.97	1.2	3.3	3.7
cyclohexane		1.6	0.48	0.59	8.1	NV ⁽³⁾
ethyl acetate	6.9	10	2.1	15	NV ⁽³⁾	5.4
ethylbenzene	1.2	1.7	0.48 (2)	0.48 (2)	7.3	5.7
freon 11	1.5	1.5	1.5	1.6	NV ⁽³⁾	NV ⁽³⁾
freon 12	2.7	2.7	2.8	2.8	NV ⁽³⁾	NV ⁽³⁾
heptane		2.6	6.1	6.4	19.0	NV ⁽³⁾
hexane		2.1	0.53	0.49 (2)	18.0	10.2
isopropyl alcohol	4.3	3.4	8.4	4.1	NV ⁽³⁾	NV ⁽³⁾
m&p xylene	1.1 (2)	4.9	1.0 (2)	1.1 (2)	12.0	22.2
methyl isobutyl ketone		0.9 (2)			2.2	NV ⁽³⁾
methylene chloride	0.97	1.7	2.5	2.2	22.0	10.0
o-xylene	0.52 (2)	2.1	0.52 ⁽²⁾	0.56 (2)	7.6	7.9
styrene				0.43 (2)	NV ⁽³⁾	NV ⁽³⁾
tetrahydrofuran		12		0.59	NV ⁽³⁾	NV ⁽³⁾
toluene	7.2	12	11	11.0	58	43

NOTES:

(1) Analysis completed using USEPA Analytical Method TO-15. Analyte concentrations expressed in micrograms per cubic meter (ug/m3)

(2) The analyte was "J" flagged, indicating that it was detected below the laboratory quantification limits, and should be considered estimated.

(3) NV- No value is provided for the analyte within this standard.

TABLE 3

Outdoor Air Sample Results - February 13, 2018 Sampling Event LABORATORY ANALYTICAL DATA SUMMARY - DECTECTED PARAMETERS

Vails Gate Business Park Tarkett Site (336065)

		1997-2003 NYSDOH Summary of Indoor Levels of VOCs from Fuel Oil Heated Homes in NYS (90th percentile)	2001 EPA Indoor Air Building Assessment and Survey Evaluation Database (90th percentile)
Analyte ⁽¹⁾	Outside		
acetone	14	44	43.7
benzene	0.48	4.3	6.6
carbon tetrachloride	0.38	0.8	0.7
chloromethane	0.91	3.2	3.7
freon 11	1.6	NV ⁽³⁾	NV ⁽³⁾
freon 12	3.0	NV ⁽³⁾	NV ⁽³⁾
heptane	0.41 (2)	4.5	NV ⁽³⁾
hexane	0.39 ⁽²⁾	2.6	6.4
isopropyl alcohol	2.8	NV ⁽³⁾	NV ⁽³⁾
methyl ethyl ketone	0.44 (2)	6.3	11.3
methylene chloride	0.94	1.6	6.1
toluene	0.53 ⁽²⁾	5.9	33.7

NOTES:

(1) Analysis completed using USEPA Analytical Method TO-15. Analyte concentrations expressed in micrograms per cubic meter (ug/m3)

(2) The analyte was "J" flagged, indicating that it was detected below the laboratory quantification limits, and should be considered estimated.(3) NV- No value is provided for the analyte within this standard.

Date: 05-Mar-18

CLIENT:Leader Consulting ServicesLab Order:C1802033Project:Vails Gate, NYLab ID:C1802033-001A

Client Sample ID: CHA-V10 (SS) Tag Number: 554,340 Collection Date: 2/13/2018 Matrix:

Analyses	Result	**Limit	Qual Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-	15		Analyst: RJP
1,1,1-Trichloroethane	6.2	0.82	ug/m3	1	2/17/2018 5:22:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	2/17/2018 5:22:00 AM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	2/17/2018 5:22:00 AM
1,1-Dichloroethane	4.6	0.61	ug/m3	1	2/17/2018 5:22:00 AM
1,1-Dichloroethene	< 0.59	0.59	ug/m3	1	2/17/2018 5:22:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	2/17/2018 5:22:00 AM
1,2,4-Trimethylbenzene	1.5	0.74	ug/m3	1	2/17/2018 5:22:00 AM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	2/17/2018 5:22:00 AM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/17/2018 5:22:00 AM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	2/17/2018 5:22:00 AM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	2/17/2018 5:22:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/m3	1	2/17/2018 5:22:00 AM
1,3-butadiene	< 0.33	0.33	ug/m3	1	2/17/2018 5:22:00 AM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/17/2018 5:22:00 AM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/17/2018 5:22:00 AM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	2/17/2018 5:22:00 AM
2,2,4-trimethylpentane	< 0.70	0.70	ug/m3	1	2/17/2018 5:22:00 AM
4-ethyltoluene	< 0.74	0.74	ug/m3	1	2/17/2018 5:22:00 AM
Acetone	54	7.1	ug/m3	10	2/18/2018 5:02:00 AM
Allyl chloride	< 0.47	0.47	ug/m3	1	2/17/2018 5:22:00 AM
Benzene	0.99	0.48	ug/m3	1	2/17/2018 5:22:00 AM
Benzyl chloride	< 0.86	0.86	ug/m3	1	2/17/2018 5:22:00 AM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	2/17/2018 5:22:00 AM
Bromoform	< 1.6	1.6	ug/m3	1	2/17/2018 5:22:00 AM
Bromomethane	< 0.58	0.58	ug/m3	1	2/17/2018 5:22:00 AM
Carbon disulfide	0.50	0.47	ug/m3	1	2/17/2018 5:22:00 AM
Carbon tetrachloride	< 0.94	0.94	ug/m3	1	2/17/2018 5:22:00 AM
Chlorobenzene	< 0.69	0.69	ug/m3	1	2/17/2018 5:22:00 AM
Chloroethane	< 0.40	0.40	ug/m3	1	2/17/2018 5:22:00 AM
Chloroform	< 0.73	0.73	ug/m3	1	2/17/2018 5:22:00 AM
Chloromethane	1.3	0.31	ug/m3	1	2/17/2018 5:22:00 AM
cis-1,2-Dichloroethene	16	5.9	ug/m3	10	2/18/2018 5:02:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	2/17/2018 5:22:00 AM
Cyclohexane	1.8	0.52	ug/m3	1	2/17/2018 5:22:00 AM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	2/17/2018 5:22:00 AM
Ethyl acetate	45	5.4	ug/m3	10	2/18/2018 5:02:00 AM
Ethylbenzene	< 0.65	0.65	ug/m3	1	2/17/2018 5:22:00 AM
Freon 11	2.0	0.84	ug/m3	1	2/17/2018 5:22:00 AM
Freon 113	< 1.1	1.1	ug/m3	1	2/17/2018 5:22:00 AM
Freon 114	< 1.0	1.0	ug/m3	1	2/17/2018 5:22:00 AM

Qualifiers: ** Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

Date: 05-Mar-18

CLIENT:Leader Consulting ServicesLab Order:C1802033Project:Vails Gate, NYLab ID:C1802033-001A

Client Sample ID: CHA-V10 (SS) Tag Number: 554,340 Collection Date: 2/13/2018 Matrix:

Analyses	Result	**Limit (Qual Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15			Analyst: RJP
Freon 12	13	7.4	ug/m3	10	2/18/2018 5:02:00 AM
Heptane	4.2	0.61	ug/m3	1	2/17/2018 5:22:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6	ug/m3	1	2/17/2018 5:22:00 AM
Hexane	5.1	0.53	ug/m3	1	2/17/2018 5:22:00 AM
Isopropyl alcohol	25	3.7	ug/m3	10	2/18/2018 5:02:00 AM
m&p-Xylene	1.3	1.3	ug/m3	1	2/17/2018 5:22:00 AM
Methyl Butyl Ketone	< 1.2	1.2	ug/m3	1	2/17/2018 5:22:00 AM
Methyl Ethyl Ketone	4.5	0.88	ug/m3	1	2/17/2018 5:22:00 AM
Methyl Isobutyl Ketone	5.2	1.2	ug/m3	1	2/17/2018 5:22:00 AM
Methyl tert-butyl ether	< 0.54	0.54	ug/m3	1	2/17/2018 5:22:00 AM
Methylene chloride	25	5.2	ug/m3	10	2/18/2018 5:02:00 AM
o-Xylene	0.61	0.65	J ug/m3	1	2/17/2018 5:22:00 AM
Propylene	< 0.26	0.26	ug/m3	1	2/17/2018 5:22:00 AM
Styrene	< 0.64	0.64	ug/m3	1	2/17/2018 5:22:00 AM
Tetrachloroethylene	12	1.0	ug/m3	1	2/17/2018 5:22:00 AM
Tetrahydrofuran	< 0.44	0.44	ug/m3	1	2/17/2018 5:22:00 AM
Toluene	2.0	0.57	ug/m3	1	2/17/2018 5:22:00 AM
trans-1,2-Dichloroethene	2.9	0.59	ug/m3	1	2/17/2018 5:22:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	2/17/2018 5:22:00 AM
Trichloroethene	14	8.1	ug/m3	10	2/18/2018 5:02:00 AM
Vinyl acetate	< 0.53	0.53	ug/m3	1	2/17/2018 5:22:00 AM
Vinyl Bromide	< 0.66	0.66	ug/m3	1	2/17/2018 5:22:00 AM
Vinyl chloride	< 0.38	0.38	ug/m3	1	2/17/2018 5:22:00 AM

Qualifiers:	**	Quantitation Limit		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D
	S	Spike Recovery outside accepted recovery limits			Page 2 of 1

Date: 05-Mar-18

CLIENT:	Leader Consulting Services	Client Sample ID: IA-UNIT 6
Lab Order:	C1802033	Tag Number: 1208,298
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-002A	Matrix: AIR

Analyses	Result	**Limit Q	ual Units	DF	Date Analyzed
IUG/M3 W/ 0.2UG/M3 CT-TCE-VC	-DCE-1,1DCE	TO-1	5		Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82	ug/m3	1	2/16/2018 4:24:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	2/16/2018 4:24:00 PM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	2/16/2018 4:24:00 PM
1,1-Dichloroethane	< 0.61	0.61	ug/m3	1	2/16/2018 4:24:00 PM
1,1-Dichloroethene	< 0.16	0.16	ug/m3	1	2/16/2018 4:24:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	2/16/2018 4:24:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74	ug/m3	1	2/16/2018 4:24:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	2/16/2018 4:24:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 4:24:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	2/16/2018 4:24:00 PM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	2/16/2018 4:24:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/m3	1	2/16/2018 4:24:00 PM
1,3-butadiene	< 0.33	0.33	ug/m3	1	2/16/2018 4:24:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 4:24:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 4:24:00 PM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	2/16/2018 4:24:00 PM
2,2,4-trimethylpentane	< 0.70	0.70	ug/m3	1	2/16/2018 4:24:00 PM
4-ethyltoluene	< 0.74	0.74	ug/m3	1	2/16/2018 4:24:00 PM
Acetone	19	7.1	ug/m3	10	2/17/2018 3:52:00 PM
Allyl chloride	< 0.47	0.47	ug/m3	1	2/16/2018 4:24:00 PM
Benzene	0.61	0.48	ug/m3	1	2/16/2018 4:24:00 PM
Benzyl chloride	< 0.86	0.86	ug/m3	1	2/16/2018 4:24:00 PM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	2/16/2018 4:24:00 PM
Bromoform	< 1.6	1.6	ug/m3	1	2/16/2018 4:24:00 PM
Bromomethane	< 0.58	0.58	ug/m3	1	2/16/2018 4:24:00 PM
Carbon disulfide	< 0.47	0.47	ug/m3	1	2/16/2018 4:24:00 PM
Carbon tetrachloride	0.31	0.19	ug/m3	1	2/16/2018 4:24:00 PM
Chlorobenzene	< 0.69	0.69	ug/m3	1	2/16/2018 4:24:00 PM
Chloroethane	< 0.40	0.40	ug/m3	1	2/16/2018 4:24:00 PM
Chloroform	< 0.73	0.73	ug/m3	1	2/16/2018 4:24:00 PM
Chloromethane	0.95	0.31	ug/m3	1	2/16/2018 4:24:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16	ug/m3	1	2/16/2018 4:24:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	2/16/2018 4:24:00 PM
Cyclohexane	< 0.52	0.52	ug/m3	1	2/16/2018 4:24:00 PM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	2/16/2018 4:24:00 PM
Ethyl acetate	6.9	0.54	ug/m3	1	2/16/2018 4:24:00 PM
Ethylbenzene	1.2	0.65	ug/m3	1	2/16/2018 4:24:00 PM
Freon 11	1.2	0.84	ug/m3	1	2/16/2018 4:24:00 PM
Freon 113	< 1.1	1.1	ug/m3	1	2/16/2018 4:24:00 PM
Freon 114	< 1.1	1.1	ug/m3	1	2/16/2018 4:24:00 PM

Qualifiers: ** Quantitation Limit

Qualititation Ennit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

Date: 05-Mar-18

CLIENT:	Leader Consulting Services	Client Sample ID: IA-UNIT 6
Lab Order:	C1802033	Tag Number: 1208,298
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-002A	Matrix: AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		то	TO-15			Analyst: RJP
Freon 12	2.7	0.74		ug/m3	1	2/16/2018 4:24:00 PM
Heptane	0.66	0.61		ug/m3	1	2/16/2018 4:24:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/16/2018 4:24:00 PM
Hexane	0.63	0.53		ug/m3	1	2/16/2018 4:24:00 PM
Isopropyl alcohol	4.3	0.37		ug/m3	1	2/16/2018 4:24:00 PM
m&p-Xylene	1.1	1.3	J	ug/m3	1	2/16/2018 4:24:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/16/2018 4:24:00 PM
Methyl Ethyl Ketone	2.3	0.88		ug/m3	1	2/16/2018 4:24:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/16/2018 4:24:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/16/2018 4:24:00 PM
Methylene chloride	0.97	0.52		ug/m3	1	2/16/2018 4:24:00 PM
o-Xylene	0.52	0.65	J	ug/m3	1	2/16/2018 4:24:00 PM
Propylene	< 0.26	0.26		ug/m3	1	2/16/2018 4:24:00 PM
Styrene	< 0.64	0.64		ug/m3	1	2/16/2018 4:24:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	2/16/2018 4:24:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	2/16/2018 4:24:00 PM
Toluene	7.2	5.7		ug/m3	10	2/17/2018 3:52:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/16/2018 4:24:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/16/2018 4:24:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	2/16/2018 4:24:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/16/2018 4:24:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/16/2018 4:24:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	2/16/2018 4:24:00 PM

Qualifiers:	**	Quantitation Limit		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	
	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D	
	S	Spike Recovery outside accepted recovery limits			Page 4 of 18

Date: 05-Mar-18

CLIENT: Leader Consulting Services Lab Order: C1802033 **Project:** Vails Gate, NY C1802033-003A Lab ID:

Client Sample ID: CHA-V19 (SS) **Tag Number: 366,272** Collection Date: 2/13/2018 Matrix: AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		то	-15			Analyst: RJP
1,1,1-Trichloroethane	18000	2000		ug/m3	2430	2/18/2018 11:22:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	2/17/2018 6:02:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	2/17/2018 6:02:00 AM
1,1-Dichloroethane	3000	1500		ug/m3	2430	2/18/2018 11:22:00 PM
1,1-Dichloroethene	230	16		ug/m3	27	2/18/2018 5:42:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	2/17/2018 6:02:00 AM
1,2,4-Trimethylbenzene	1.3	0.74		ug/m3	1	2/17/2018 6:02:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	2/17/2018 6:02:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/17/2018 6:02:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	2/17/2018 6:02:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	2/17/2018 6:02:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/17/2018 6:02:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	2/17/2018 6:02:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/17/2018 6:02:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/17/2018 6:02:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	2/17/2018 6:02:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	2/17/2018 6:02:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	2/17/2018 6:02:00 AM
Acetone	97	19		ug/m3	27	2/18/2018 5:42:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	2/17/2018 6:02:00 AM
Benzene	1.4	0.48		ug/m3	1	2/17/2018 6:02:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	2/17/2018 6:02:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	2/17/2018 6:02:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	2/17/2018 6:02:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	2/17/2018 6:02:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	2/17/2018 6:02:00 AM
Carbon tetrachloride	0.63	0.94		ug/m3	1	2/17/2018 6:02:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	2/17/2018 6:02:00 AM
Chloroethane	3.6	0.40		ug/m3	1	2/17/2018 6:02:00 AM
Chloroform	8.3	0.73		ug/m3	1	2/17/2018 6:02:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	2/17/2018 6:02:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/17/2018 6:02:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/17/2018 6:02:00 AM
Cyclohexane	0.69	0.52		ug/m3	1	2/17/2018 6:02:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	2/17/2018 6:02:00 AM
Ethyl acetate	2.8	0.54		ug/m3	1	2/17/2018 6:02:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	2/17/2018 6:02:00 AM
Freon 11	3.0	0.84		ug/m3 ug/m3	1	2/17/2018 6:02:00 AM
Freon 113	< 1.1	1.1		ug/m3 ug/m3	1	2/17/2018 6:02:00 AM
Freon 114	< 1.1	1.1		ug/m3 ug/m3	1	2/17/2018 6:02:00 AM

Qualifiers: ** Quantitation Limit

В Analyte detected in the associated Method Blank

Н Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits Results reported are not blank corrected

Е Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

Date: 05-Mar-18

CLIENT:Leader Consulting ServicesClient Sample ID: CHA-V19 (SS)Lab Order:C1802033Tag Number: 366,272Project:Vails Gate, NYCollection Date: 2/13/2018Lab ID:C1802033-003AMatrix: AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15	TO-15					Analyst: RJP
Freon 12	3.2	0.74		ug/m3	1	2/17/2018 6:02:00 AM
Heptane	4.4	0.61		ug/m3	1	2/17/2018 6:02:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/17/2018 6:02:00 AM
Hexane	0.56	0.53		ug/m3	1	2/17/2018 6:02:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	2/17/2018 6:02:00 AM
m&p-Xylene	1.2	1.3	J	ug/m3	1	2/17/2018 6:02:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/17/2018 6:02:00 AM
Methyl Ethyl Ketone	3.8	0.88		ug/m3	1	2/17/2018 6:02:00 AM
Methyl Isobutyl Ketone	0.90	1.2	J	ug/m3	1	2/17/2018 6:02:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/17/2018 6:02:00 AM
Methylene chloride	64	14		ug/m3	27	2/18/2018 5:42:00 AM
o-Xylene	0.56	0.65	J	ug/m3	1	2/17/2018 6:02:00 AM
Propylene	< 0.26	0.26		ug/m3	1	2/17/2018 6:02:00 AM
Styrene	< 0.64	0.64		ug/m3	1	2/17/2018 6:02:00 AM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	2/17/2018 6:02:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	2/17/2018 6:02:00 AM
Toluene	2.4	0.57		ug/m3	1	2/17/2018 6:02:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/17/2018 6:02:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/17/2018 6:02:00 AM
Trichloroethene	10	0.81		ug/m3	1	2/17/2018 6:02:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/17/2018 6:02:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/17/2018 6:02:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	2/17/2018 6:02:00 AM

Qualifiers:	**	Quantitation Limit		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D ()
	S	Spike Recovery outside accepted recovery limits			Page 6 of 1

Date: 05-Mar-18

CLIENT:	Leader Consulting Services	Client Sample ID: IA-UNIT A1
Lab Order:	C1802033	Tag Number: 128,1162
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-004A	Matrix: AIR

Analyses	Result	**Limit Qu	al Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC	-DCE-1,1DCE	TO-15			Analyst: RJP
1,1,1-Trichloroethane	1.3	0.82	ug/m3	1	2/16/2018 6:35:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	2/16/2018 6:35:00 PM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	2/16/2018 6:35:00 PM
1,1-Dichloroethane	< 0.61	0.61	ug/m3	1	2/16/2018 6:35:00 PM
1,1-Dichloroethene	< 0.16	0.16	ug/m3	1	2/16/2018 6:35:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	2/16/2018 6:35:00 PM
1,2,4-Trimethylbenzene	2.5	0.74	ug/m3	1	2/16/2018 6:35:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	2/16/2018 6:35:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 6:35:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	2/16/2018 6:35:00 PM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	2/16/2018 6:35:00 PM
1,3,5-Trimethylbenzene	0.84	0.74	ug/m3	1	2/16/2018 6:35:00 PM
1,3-butadiene	< 0.33	0.33	ug/m3	1	2/16/2018 6:35:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 6:35:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 6:35:00 PM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	2/16/2018 6:35:00 PM
2,2,4-trimethylpentane	2.7	0.70	ug/m3	1	2/16/2018 6:35:00 PM
4-ethyltoluene	0.79	0.74	ug/m3	1	2/16/2018 6:35:00 PM
Acetone	40	7.1	ug/m3	10	2/17/2018 4:29:00 PM
Allyl chloride	< 0.47	0.47	ug/m3	1	2/16/2018 6:35:00 PM
Benzene	2.6	0.48	ug/m3	1	2/16/2018 6:35:00 PM
Benzyl chloride	< 0.86	0.86	ug/m3	1	2/16/2018 6:35:00 PM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	2/16/2018 6:35:00 PM
Bromoform	< 1.6	1.6	ug/m3	1	2/16/2018 6:35:00 PM
Bromomethane	< 0.58	0.58	ug/m3	1	2/16/2018 6:35:00 PM
Carbon disulfide	< 0.47	0.47	ug/m3	1	2/16/2018 6:35:00 PM
Carbon tetrachloride	0.38	0.19	ug/m3	1	2/16/2018 6:35:00 PM
Chlorobenzene	< 0.69	0.69	ug/m3	1	2/16/2018 6:35:00 PM
Chloroethane	< 0.40	0.40	ug/m3	1	2/16/2018 6:35:00 PM
Chloroform	< 0.73	0.73	ug/m3	1	2/16/2018 6:35:00 PM
Chloromethane	1.1	0.31	ug/m3	1	2/16/2018 6:35:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16	ug/m3	1	2/16/2018 6:35:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	2/16/2018 6:35:00 PM
Cyclohexane	1.6	0.52	ug/m3	1	2/16/2018 6:35:00 PM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	2/16/2018 6:35:00 PM
Ethyl acetate	10	5.4	ug/m3	10	2/17/2018 4:29:00 PM
Ethylbenzene	1.7	0.65	ug/m3	10	2/16/2018 6:35:00 PM
Freon 11	1.5	0.84	ug/m3	1	2/16/2018 6:35:00 PM
Freon 113	< 1.1	1.1	ug/m3	1	2/16/2018 6:35:00 PM
Freon 114	< 1.0	1.0	ug/m3	1	2/16/2018 6:35:00 PM

Qualifiers: ** Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

Date: 05-Mar-18

CLIENT:	Leader Consulting Services	Client Sample ID: IA-UNIT A1
Lab Order:	C1802033	Tag Number: 128,1162
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-004A	Matrix: AIR

Analyses	Result	**Limit	Qual Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15			Analyst: RJP
Freon 12	2.7	0.74	ug/m3	1	2/16/2018 6:35:00 PM
Heptane	2.6	0.61	ug/m3	1	2/16/2018 6:35:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6	ug/m3	1	2/16/2018 6:35:00 PM
Hexane	2.1	0.53	ug/m3	1	2/16/2018 6:35:00 PM
Isopropyl alcohol	3.4	0.37	ug/m3	1	2/16/2018 6:35:00 PM
m&p-Xylene	4.9	1.3	ug/m3	1	2/16/2018 6:35:00 PM
Methyl Butyl Ketone	< 1.2	1.2	ug/m3	1	2/16/2018 6:35:00 PM
Methyl Ethyl Ketone	11	8.8	ug/m3	10	2/17/2018 4:29:00 PM
Methyl Isobutyl Ketone	0.90	1.2	J ug/m3	1	2/16/2018 6:35:00 PM
Methyl tert-butyl ether	< 0.54	0.54	ug/m3	1	2/16/2018 6:35:00 PM
Methylene chloride	1.7	0.52	ug/m3	1	2/16/2018 6:35:00 PM
o-Xylene	2.1	0.65	ug/m3	1	2/16/2018 6:35:00 PM
Propylene	< 0.26	0.26	ug/m3	1	2/16/2018 6:35:00 PM
Styrene	0.94	0.64	ug/m3	1	2/16/2018 6:35:00 PM
Tetrachloroethylene	< 1.0	1.0	ug/m3	1	2/16/2018 6:35:00 PM
Tetrahydrofuran	12	4.4	ug/m3	10	2/17/2018 4:29:00 PM
Toluene	12	5.7	ug/m3	10	2/17/2018 4:29:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59	ug/m3	1	2/16/2018 6:35:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	2/16/2018 6:35:00 PM
Trichloroethene	< 0.16	0.16	ug/m3	1	2/16/2018 6:35:00 PM
Vinyl acetate	< 0.53	0.53	ug/m3	1	2/16/2018 6:35:00 PM
Vinyl Bromide	< 0.66	0.66	ug/m3	1	2/16/2018 6:35:00 PM
Vinyl chloride	< 0.10	0.10	ug/m3	1	2/16/2018 6:35:00 PM

Qualifiers:	**	Quantitation Limit		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	
	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D	
	S	Spike Recovery outside accepted recovery limits			Page 8 of 18

Date: 05-Mar-18

CLIENT:Leader Consulting ServicesClient SampLab Order:C1802033Tag NutProject:Vails Gate, NYCollectionLab ID:C1802033-005AM

Client Sample ID: LCS-1 (SS) Tag Number: 360,267 Collection Date: 2/13/2018 Matrix: AIR

Analyses	Result	**Limit Qu	al Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15			Analyst: RJP
1,1,1-Trichloroethane	120	76	ug/m3	90	2/18/2018 7:35:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	2/17/2018 6:42:00 AM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	2/17/2018 6:42:00 AM
1,1-Dichloroethane	14	5.7	ug/m3	9	2/18/2018 6:58:00 AM
1,1-Dichloroethene	1.9	0.59	ug/m3	1	2/17/2018 6:42:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	2/17/2018 6:42:00 AM
1,2,4-Trimethylbenzene	1.9	0.74	ug/m3	1	2/17/2018 6:42:00 AM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	2/17/2018 6:42:00 AM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/17/2018 6:42:00 AM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	2/17/2018 6:42:00 AM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	2/17/2018 6:42:00 AM
1,3,5-Trimethylbenzene	1.3	0.74	ug/m3	1	2/17/2018 6:42:00 AM
1,3-butadiene	< 0.33	0.33	ug/m3	1	2/17/2018 6:42:00 AM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/17/2018 6:42:00 AM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/17/2018 6:42:00 AM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	2/17/2018 6:42:00 AM
2,2,4-trimethylpentane	13	6.5	ug/m3	9	2/18/2018 6:58:00 AM
4-ethyltoluene	0.49	0.74 J	ug/m3	1	2/17/2018 6:42:00 AM
Acetone	120	64	ug/m3	90	2/18/2018 7:35:00 AM
Allyl chloride	< 0.47	0.47	ug/m3	1	2/17/2018 6:42:00 AM
Benzene	15	4.5	ug/m3	9	2/18/2018 6:58:00 AM
Benzyl chloride	< 0.86	0.86	ug/m3	1	2/17/2018 6:42:00 AM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	2/17/2018 6:42:00 AM
Bromoform	< 1.6	1.6	ug/m3	1	2/17/2018 6:42:00 AM
Bromomethane	< 0.58	0.58	ug/m3	1	2/17/2018 6:42:00 AM
Carbon disulfide	4.3	0.47	ug/m3	1	2/17/2018 6:42:00 AM
Carbon tetrachloride	< 0.94	0.94	ug/m3	1	2/17/2018 6:42:00 AM
Chlorobenzene	< 0.69	0.69	ug/m3	1	2/17/2018 6:42:00 AM
Chloroethane	< 0.40	0.40	ug/m3	1	2/17/2018 6:42:00 AM
Chloroform	0.88	0.73	ug/m3	1	2/17/2018 6:42:00 AM
Chloromethane	1.2	0.31	ug/m3	1	2/17/2018 6:42:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59	ug/m3	1	2/17/2018 6:42:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	2/17/2018 6:42:00 AM
Cyclohexane	3.1	0.52	ug/m3	1	2/17/2018 6:42:00 AM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	2/17/2018 6:42:00 AM
Ethyl acetate	< 0.54	0.54	ug/m3	1	2/17/2018 6:42:00 AM
Ethylbenzene	0.69	0.65	ug/m3	1	2/17/2018 6:42:00 AM
Freon 11	1.9	0.84	ug/m3	1	2/17/2018 6:42:00 AM
Freon 113	< 1.1	1.1	ug/m3	1	2/17/2018 6:42:00 AM
Freon 114	< 1.0	1.0	ug/m3	1	2/17/2018 6:42:00 AM

Qualifiers: ** Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

Date: 05-Mar-18

18

CLIENT:	Leader Consulting Services
Lab Order:	C1802033
Project:	Vails Gate, NY
Lab ID:	C1802033-005A

Client Sample ID: LCS-1 (SS) Tag Number: 360,267 Collection Date: 2/13/2018 Matrix: AIR

Analyses	Result	**Limit Qu	ual Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15		Analyst: RJP	
Freon 12	3.1	0.74	ug/m3	1	2/17/2018 6:42:00 AM
Heptane	19	5.7	ug/m3	9	2/18/2018 6:58:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6	ug/m3	1	2/17/2018 6:42:00 AM
Hexane	34	4.9	ug/m3	9	2/18/2018 6:58:00 AM
Isopropyl alcohol	< 0.37	0.37	ug/m3	1	2/17/2018 6:42:00 AM
m&p-Xylene	2.2	1.3	ug/m3	1	2/17/2018 6:42:00 AM
Methyl Butyl Ketone	< 1.2	1.2	ug/m3	1	2/17/2018 6:42:00 AM
Methyl Ethyl Ketone	9.3	8.0	ug/m3	9	2/18/2018 6:58:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2	ug/m3	1	2/17/2018 6:42:00 AM
Methyl tert-butyl ether	< 0.54	0.54	ug/m3	1	2/17/2018 6:42:00 AM
Methylene chloride	36	4.9	ug/m3	9	2/18/2018 6:58:00 AM
o-Xylene	0.91	0.65	ug/m3	1	2/17/2018 6:42:00 AM
Propylene	< 0.26	0.26	ug/m3	1	2/17/2018 6:42:00 AM
Styrene	< 0.64	0.64	ug/m3	1	2/17/2018 6:42:00 AM
Tetrachloroethylene	< 1.0	1.0	ug/m3	1	2/17/2018 6:42:00 AM
Tetrahydrofuran	< 0.44	0.44	ug/m3	1	2/17/2018 6:42:00 AM
Toluene	5.0	0.57	ug/m3	1	2/17/2018 6:42:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59	ug/m3	1	2/17/2018 6:42:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	2/17/2018 6:42:00 AM
Trichloroethene	3.6	0.81	ug/m3	1	2/17/2018 6:42:00 AM
Vinyl acetate	< 0.53	0.53	ug/m3	1	2/17/2018 6:42:00 AM
Vinyl Bromide	< 0.66	0.66	ug/m3	1	2/17/2018 6:42:00 AM
Vinyl chloride	< 0.38	0.38	ug/m3	1	2/17/2018 6:42:00 AM

Qualifiers:	**	Quantitation Limit		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	•
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	
JN Non-routine analyte. Quantitation estimated.		Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D 10 0
S		Spike Recovery outside accepted recovery limits			Page 10 of

Date: 05-Mar-18

CLIENT:	Leader Consulting Services	Client Sample ID: IA-UNIT A2
Lab Order:	C1802033	Tag Number: 83,293
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-006A	Matrix: AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-E	DCE-1,1DCE	то	-15			Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	2/16/2018 7:15:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	2/16/2018 7:15:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	2/16/2018 7:15:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	2/16/2018 7:15:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	2/16/2018 7:15:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	2/16/2018 7:15:00 PM
1,2,4-Trimethylbenzene	0.59	0.74	J	ug/m3	1	2/16/2018 7:15:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	2/16/2018 7:15:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/16/2018 7:15:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	2/16/2018 7:15:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	2/16/2018 7:15:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/16/2018 7:15:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	2/16/2018 7:15:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/16/2018 7:15:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/16/2018 7:15:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	2/16/2018 7:15:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	2/16/2018 7:15:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	2/16/2018 7:15:00 PM
Acetone	19	7.1		ug/m3	10	2/17/2018 5:06:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	2/16/2018 7:15:00 PM
Benzene	1.1	0.48		ug/m3	1	2/16/2018 7:15:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	2/16/2018 7:15:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	2/16/2018 7:15:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	2/16/2018 7:15:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	2/16/2018 7:15:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	2/16/2018 7:15:00 PM
Carbon tetrachloride	0.38	0.19		ug/m3	1	2/16/2018 7:15:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	2/16/2018 7:15:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	2/16/2018 7:15:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	2/16/2018 7:15:00 PM
Chloromethane	0.97	0.31		ug/m3	1	2/16/2018 7:15:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	2/16/2018 7:15:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/16/2018 7:15:00 PM
Cyclohexane	0.48	0.52	J	ug/m3	1	2/16/2018 7:15:00 PM
Dibromochloromethane	< 1.3	1.3	Ũ	ug/m3	1	2/16/2018 7:15:00 PM
Ethyl acetate	2.1	0.54		ug/m3	1	2/16/2018 7:15:00 PM
Ethylbenzene	0.48	0.65	J	ug/m3	1	2/16/2018 7:15:00 PM
Freon 11	1.5	0.84	0	ug/m3	1	2/16/2018 7:15:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	2/16/2018 7:15:00 PM
Freon 114	< 1.1 < 1.0	1.1		ug/m3	1	2/16/2018 7:15:00 PM

Qualifiers: ** Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

Date: 05-Mar-18

CLIENT:	Leader Consulting Services	Client Sample ID: IA-UNIT A2
Lab Order:	C1802033	Tag Number: 83,293
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-006A	Matrix: AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
IUG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		TO-15				Analyst: RJP
Freon 12	2.8	0.74		ug/m3	1	2/16/2018 7:15:00 PM
Heptane	6.1	0.61		ug/m3	1	2/16/2018 7:15:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/16/2018 7:15:00 PM
Hexane	0.53	0.53		ug/m3	1	2/16/2018 7:15:00 PM
Isopropyl alcohol	8.4	3.7		ug/m3	10	2/17/2018 5:06:00 PM
m&p-Xylene	1.0	1.3	J	ug/m3	1	2/16/2018 7:15:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/16/2018 7:15:00 PM
Methyl Ethyl Ketone	0.32	0.88	J	ug/m3	1	2/16/2018 7:15:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/16/2018 7:15:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/16/2018 7:15:00 PM
Methylene chloride	2.5	0.52		ug/m3	1	2/16/2018 7:15:00 PM
o-Xylene	0.52	0.65	J	ug/m3	1	2/16/2018 7:15:00 PM
Propylene	< 0.26	0.26		ug/m3	1	2/16/2018 7:15:00 PM
Styrene	< 0.64	0.64		ug/m3	1	2/16/2018 7:15:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	2/16/2018 7:15:00 PM
Tetrahydrofuran	0.50	0.44		ug/m3	1	2/16/2018 7:15:00 PM
Toluene	11	5.7		ug/m3	10	2/17/2018 5:06:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/16/2018 7:15:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/16/2018 7:15:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	2/16/2018 7:15:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/16/2018 7:15:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/16/2018 7:15:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	2/16/2018 7:15:00 PM

Qualifiers:	**	Quantitation Limit		Results reported are not blank corrected
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		Page 12 of 1

Date: 05-Mar-18

CLIENT:	Leader Consulting Services	Client Sample ID: IAD-UNIT A2
Lab Order:	C1802033	Tag Number: 1187,300
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-007A	Matrix: AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC	-DCE-1,1DCE	ТО	-15			Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	2/16/2018 7:55:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	2/16/2018 7:55:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	2/16/2018 7:55:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	2/16/2018 7:55:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	2/16/2018 7:55:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	2/16/2018 7:55:00 PM
1,2,4-Trimethylbenzene	0.88	0.74		ug/m3	1	2/16/2018 7:55:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	2/16/2018 7:55:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/16/2018 7:55:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	2/16/2018 7:55:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	2/16/2018 7:55:00 PM
1,3,5-Trimethylbenzene	0.49	0.74	J	ug/m3	1	2/16/2018 7:55:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	2/16/2018 7:55:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/16/2018 7:55:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/16/2018 7:55:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	2/16/2018 7:55:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	2/16/2018 7:55:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	2/16/2018 7:55:00 PM
Acetone	34	7.1		ug/m3	10	2/17/2018 5:43:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	2/16/2018 7:55:00 PM
Benzene	1.1	0.48		ug/m3	1	2/16/2018 7:55:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	2/16/2018 7:55:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	2/16/2018 7:55:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	2/16/2018 7:55:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	2/16/2018 7:55:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	2/16/2018 7:55:00 PM
Carbon tetrachloride	0.38	0.19		ug/m3	1	2/16/2018 7:55:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	2/16/2018 7:55:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	2/16/2018 7:55:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	2/16/2018 7:55:00 PM
Chloromethane	1.2	0.31		ug/m3	1	2/16/2018 7:55:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	2/16/2018 7:55:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/16/2018 7:55:00 PM
Cyclohexane	0.59	0.52		ug/m3	1	2/16/2018 7:55:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	2/16/2018 7:55:00 PM
Ethyl acetate	15	5.4		ug/m3	10	2/17/2018 5:43:00 PM
Ethylbenzene	0.48	0.65	J	ug/m3	1	2/16/2018 7:55:00 PM
Freon 11	1.6	0.84		ug/m3	1	2/16/2018 7:55:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	2/16/2018 7:55:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	2/16/2018 7:55:00 PM

Qualifiers: ** Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

Date: 05-Mar-18

CLIENT:	Leader Consulting Services	Client Sample ID: IAD-UNIT A2
Lab Order:	C1802033	Tag Number: 1187,300
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-007A	Matrix: AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC	-DCE-1,1DCE	то	-15			Analyst: RJP
Freon 12	2.8	0.74		ug/m3	1	2/16/2018 7:55:00 PM
Heptane	6.4	0.61		ug/m3	1	2/16/2018 7:55:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/16/2018 7:55:00 PM
Hexane	0.49	0.53	J	ug/m3	1	2/16/2018 7:55:00 PM
Isopropyl alcohol	4.1	0.37		ug/m3	1	2/16/2018 7:55:00 PM
m&p-Xylene	1.1	1.3	J	ug/m3	1	2/16/2018 7:55:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/16/2018 7:55:00 PM
Methyl Ethyl Ketone	1.8	0.88		ug/m3	1	2/16/2018 7:55:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/16/2018 7:55:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/16/2018 7:55:00 PM
Methylene chloride	2.2	0.52		ug/m3	1	2/16/2018 7:55:00 PM
o-Xylene	0.56	0.65	J	ug/m3	1	2/16/2018 7:55:00 PM
Propylene	< 0.26	0.26		ug/m3	1	2/16/2018 7:55:00 PM
Styrene	0.43	0.64	J	ug/m3	1	2/16/2018 7:55:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	2/16/2018 7:55:00 PM
Tetrahydrofuran	0.59	0.44		ug/m3	1	2/16/2018 7:55:00 PM
Toluene	11	5.7		ug/m3	10	2/17/2018 5:43:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/16/2018 7:55:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/16/2018 7:55:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	2/16/2018 7:55:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/16/2018 7:55:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/16/2018 7:55:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	2/16/2018 7:55:00 PM

Qualifiers:	**	Quantitation Limit		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	
	JN	Non-routine analyte. Quantitation estimated.	ND		D
	S	Spike Recovery outside accepted recovery limits			Page 14 of 18

Date: 05-Mar-18

CLIENT:	Leader Consulting Services	Client Sample ID: OUTSIDE
Lab Order:	C1802033	Tag Number: 357,310
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-008A	Matrix: AIR

Analyses	Result	**Limit (Qual Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC	-DCE-1,1DCE	TO-1	5		Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82	ug/m3	1	2/16/2018 8:35:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	2/16/2018 8:35:00 PM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	2/16/2018 8:35:00 PM
1,1-Dichloroethane	< 0.61	0.61	ug/m3	1	2/16/2018 8:35:00 PM
1,1-Dichloroethene	< 0.16	0.16	ug/m3	1	2/16/2018 8:35:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	2/16/2018 8:35:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74	ug/m3	1	2/16/2018 8:35:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	2/16/2018 8:35:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 8:35:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	2/16/2018 8:35:00 PM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	2/16/2018 8:35:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/m3	1	2/16/2018 8:35:00 PM
1,3-butadiene	< 0.33	0.33	ug/m3	1	2/16/2018 8:35:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 8:35:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 8:35:00 PM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	2/16/2018 8:35:00 PM
2,2,4-trimethylpentane	< 0.70	0.70	ug/m3	1	2/16/2018 8:35:00 PM
4-ethyltoluene	< 0.74	0.74	ug/m3	1	2/16/2018 8:35:00 PM
Acetone	14	7.1	ug/m3	10	2/17/2018 6:20:00 PM
Allyl chloride	< 0.47	0.47	ug/m3	1	2/16/2018 8:35:00 PM
Benzene	0.48	0.48	ug/m3	1	2/16/2018 8:35:00 PM
Benzyl chloride	< 0.86	0.86	ug/m3	1	2/16/2018 8:35:00 PM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	2/16/2018 8:35:00 PM
Bromoform	< 1.6	1.6	ug/m3	1	2/16/2018 8:35:00 PM
Bromomethane	< 0.58	0.58	ug/m3	1	2/16/2018 8:35:00 PM
Carbon disulfide	< 0.47	0.47	ug/m3	1	2/16/2018 8:35:00 PM
Carbon tetrachloride	0.38	0.19	ug/m3	1	2/16/2018 8:35:00 PM
Chlorobenzene	< 0.69	0.69	ug/m3	1	2/16/2018 8:35:00 PM
Chloroethane	< 0.40	0.40	ug/m3	1	2/16/2018 8:35:00 PM
Chloroform	< 0.73	0.73	ug/m3	1	2/16/2018 8:35:00 PM
Chloromethane	0.91	0.31	ug/m3	1	2/16/2018 8:35:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16	ug/m3	1	2/16/2018 8:35:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	2/16/2018 8:35:00 PM
Cyclohexane	< 0.52	0.52	ug/m3	1	2/16/2018 8:35:00 PM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	2/16/2018 8:35:00 PM
Ethyl acetate	< 0.54	0.54	ug/m3	1	2/16/2018 8:35:00 PM
Ethylbenzene	< 0.65	0.65	ug/m3	1	2/16/2018 8:35:00 PM
Freon 11	1.6	0.84	ug/m3	1	2/16/2018 8:35:00 PM
Freon 113	< 1.1	1.1	ug/m3	1	2/16/2018 8:35:00 PM
Freon 114	< 1.0	1.0	ug/m3	1	2/16/2018 8:35:00 PM

Qualifiers: ** Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

Date: 05-Mar-18

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CLIENT:	Leader Consulting Services	Client Sample ID: OUTSIDE
Lab Order:	C1802033	Tag Number: 357,310
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-008A	Matrix: AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
IUG/M3 W/ 0.2UG/M3 CT-TCE-VC	-DCE-1,1DCE	то	-15			Analyst: RJP
Freon 12	3.0	0.74		ug/m3	1	2/16/2018 8:35:00 PM
Heptane	0.41	0.61	J	ug/m3	1	2/16/2018 8:35:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/16/2018 8:35:00 PM
Hexane	0.39	0.53	J	ug/m3	1	2/16/2018 8:35:00 PM
Isopropyl alcohol	2.8	0.37		ug/m3	1	2/16/2018 8:35:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	2/16/2018 8:35:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/16/2018 8:35:00 PM
Methyl Ethyl Ketone	0.44	0.88	J	ug/m3	1	2/16/2018 8:35:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/16/2018 8:35:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/16/2018 8:35:00 PM
Methylene chloride	0.94	0.52		ug/m3	1	2/16/2018 8:35:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	2/16/2018 8:35:00 PM
Propylene	< 0.26	0.26		ug/m3	1	2/16/2018 8:35:00 PM
Styrene	< 0.64	0.64		ug/m3	1	2/16/2018 8:35:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	2/16/2018 8:35:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	2/16/2018 8:35:00 PM
Toluene	0.53	0.57	J	ug/m3	1	2/16/2018 8:35:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/16/2018 8:35:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/16/2018 8:35:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	2/16/2018 8:35:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/16/2018 8:35:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/16/2018 8:35:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	2/16/2018 8:35:00 PM

Qualifiers:	**	Quantitation Limit		Results reported are not blank corrected	
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit	
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection	D 16 616
	S	Spike Recovery outside accepted recovery limits			Page 16 of 18

CLIENT:	Leader Consulting Services	Client Sample ID: TRIP BLANK
Lab Order:	C1802033	Tag Number: 556
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-009A	Matrix: AIR

Analyses	Result	**Limit Qu	al Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC	-DCE-1,1DCE	TO-15			Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82	ug/m3	1	2/16/2018 3:45:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	2/16/2018 3:45:00 PM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	2/16/2018 3:45:00 PM
1,1-Dichloroethane	< 0.61	0.61	ug/m3	1	2/16/2018 3:45:00 PM
1,1-Dichloroethene	< 0.16	0.16	ug/m3	1	2/16/2018 3:45:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	2/16/2018 3:45:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74	ug/m3	1	2/16/2018 3:45:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	2/16/2018 3:45:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 3:45:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	2/16/2018 3:45:00 PM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	2/16/2018 3:45:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/m3	1	2/16/2018 3:45:00 PM
1,3-butadiene	< 0.33	0.33	ug/m3	1	2/16/2018 3:45:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 3:45:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	2/16/2018 3:45:00 PM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	2/16/2018 3:45:00 PM
2,2,4-trimethylpentane	< 0.70	0.70	ug/m3	1	2/16/2018 3:45:00 PM
4-ethyltoluene	< 0.74	0.74	ug/m3	1	2/16/2018 3:45:00 PM
Acetone	< 0.71	0.71	ug/m3	1	2/16/2018 3:45:00 PM
Allyl chloride	< 0.47	0.47	ug/m3	1	2/16/2018 3:45:00 PM
Benzene	< 0.48	0.48	ug/m3	1	2/16/2018 3:45:00 PM
Benzyl chloride	< 0.86	0.86	ug/m3	1	2/16/2018 3:45:00 PM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	2/16/2018 3:45:00 PM
Bromoform	< 1.6	1.6	ug/m3	1	2/16/2018 3:45:00 PM
Bromomethane	< 0.58	0.58	ug/m3	1	2/16/2018 3:45:00 PM
Carbon disulfide	< 0.47	0.47	ug/m3	1	2/16/2018 3:45:00 PM
Carbon tetrachloride	< 0.19	0.19	ug/m3	1	2/16/2018 3:45:00 PM
Chlorobenzene	< 0.69	0.69	ug/m3	1	2/16/2018 3:45:00 PM
Chloroethane	< 0.40	0.40	ug/m3	1	2/16/2018 3:45:00 PM
Chloroform	< 0.73	0.73	ug/m3	1	2/16/2018 3:45:00 PM
Chloromethane	< 0.31	0.31	ug/m3	1	2/16/2018 3:45:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16	ug/m3	1	2/16/2018 3:45:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	2/16/2018 3:45:00 PM
Cyclohexane	< 0.52	0.52	ug/m3	1	2/16/2018 3:45:00 PM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	2/16/2018 3:45:00 PM
Ethyl acetate	< 0.54	0.54	ug/m3	1	2/16/2018 3:45:00 PM
Ethylbenzene	< 0.65	0.65	ug/m3	1	2/16/2018 3:45:00 PM
Freon 11	< 0.84	0.84	ug/m3	1	2/16/2018 3:45:00 PM
Freon 113	< 1.1	1.1	ug/m3	1	2/16/2018 3:45:00 PM
Freon 114	< 1.0	1.0	ug/m3	1	2/16/2018 3:45:00 PM

Qualifiers: ** Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte. Quantitation estimated.

S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

Date: 05-Mar-18

CLIENT:	Leader Consulting Services	Client Sample ID: TRIP BLANK
Lab Order:	C1802033	Tag Number: 556
Project:	Vails Gate, NY	Collection Date: 2/13/2018
Lab ID:	C1802033-009A	Matrix: AIR

Analyses	Result	**Limit Qu	ual Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC	-DCE-1,1DCE	TO-15			Analyst: RJP
Freon 12	< 0.74	0.74	ug/m3	1	2/16/2018 3:45:00 PM
Heptane	< 0.61	0.61	ug/m3	1	2/16/2018 3:45:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6	ug/m3	1	2/16/2018 3:45:00 PM
Hexane	< 0.53	0.53	ug/m3	1	2/16/2018 3:45:00 PM
Isopropyl alcohol	< 0.37	0.37	ug/m3	1	2/16/2018 3:45:00 PM
m&p-Xylene	< 1.3	1.3	ug/m3	1	2/16/2018 3:45:00 PM
Methyl Butyl Ketone	< 1.2	1.2	ug/m3	1	2/16/2018 3:45:00 PM
Methyl Ethyl Ketone	< 0.88	0.88	ug/m3	1	2/16/2018 3:45:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2	ug/m3	1	2/16/2018 3:45:00 PM
Methyl tert-butyl ether	< 0.54	0.54	ug/m3	1	2/16/2018 3:45:00 PM
Methylene chloride	< 0.52	0.52	ug/m3	1	2/16/2018 3:45:00 PM
o-Xylene	< 0.65	0.65	ug/m3	1	2/16/2018 3:45:00 PM
Propylene	< 0.26	0.26	ug/m3	1	2/16/2018 3:45:00 PM
Styrene	< 0.64	0.64	ug/m3	1	2/16/2018 3:45:00 PM
Tetrachloroethylene	< 1.0	1.0	ug/m3	1	2/16/2018 3:45:00 PM
Tetrahydrofuran	< 0.44	0.44	ug/m3	1	2/16/2018 3:45:00 PM
Toluene	< 0.57	0.57	ug/m3	1	2/16/2018 3:45:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59	ug/m3	1	2/16/2018 3:45:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	2/16/2018 3:45:00 PM
Trichloroethene	< 0.16	0.16	ug/m3	1	2/16/2018 3:45:00 PM
Vinyl acetate	< 0.53	0.53	ug/m3	1	2/16/2018 3:45:00 PM
Vinyl Bromide	< 0.66	0.66	ug/m3	1	2/16/2018 3:45:00 PM
Vinyl chloride	< 0.10	0.10	ug/m3	1	2/16/2018 3:45:00 PM

Qualifiers:	**	Quantitation Limit		Results reported are not blank corrected
	В	Analyte detected in the associated Method Blank	Е	Estimated Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
	S	Spike Recovery outside accepted recovery limits		Page 18 of 1

Attachment B

Data Validation Summary



Data Usability Summary Report March 2018 Vails Gate - SSVI 737.005

Executive Summary

This Data Usability Summary Report is for the Soil Vapor Intrusion Study at the Vails Gate Site. The sampling event included sub-slab sampling and indoor air sampling using stainless steel canisters.

The review of the data was evaluated for the following levels of uncertainty:

- **Critical** Results have an unacceptable level of uncertainty and should not be used for making decisions. Data have been qualified "R" rejected.
- **Major** A level of uncertainty exists that may not meet the data quality objectives for the project. A bias is likely to be present I the results. Data have been qualified "J" estimated.
- Minor The level of uncertainty is acceptable. No significant bias in the data was observed.

Critical Findings: None Major Findings: None Minor Findings: None

The data meets all quality control and quality assurance objectives.

Data Usability

The Quality Assurance Project Plan ("QAPP") was prepared for this project by Clough Harbor & Associates, LLP. The QAPP presents the policies, organization, objectives, functional activities, and specific Quality Assurance ("QA") and Quality Control ("QC") measures designed to achieve the data quality goals associated with this investigation. The QAPP identifies procedures for sample preparation and handling, sample chain-of-custody, laboratory analyses, and reporting that were implemented during this investigation to ensure the accuracy and integrity of the data generated during the investigation.

Leader Consulting Services, Inc. ("LCS") conducted the Site Investigation and Remedial Activities of the Vails Gate site. The Soil Vapor Sampling was conducted by Centek Laboratories and LCS.

Sample Summary

The Data Usability Review and Data Validation Compliance Chart has been completed for the laboratory deliverable packages generated by Centek Laboratories, Inc. ("Centek"), pertaining to samples collected at the Vails Gate Site on February 13, 2018. A total of seven (7) samples were collected during the February 2017 sampling event and analyzed for Volatile Organic Compounds - Total Toxic Organics ("VOCs")

The following USEPA Methodologies were used to analyze these samples for the following analytes:

Volatiles (VOCs) – Total Toxic Organics USEPA Method TO-15 SDG No. C1802033

Trip blank, field duplicate, surrogates, internal standards, reference samples, matrix spikes, and matrix spike duplicates were included and processed.

Samples were collected and received on the following schedule:

Sample Package ID	Date Collected	Date Received by Centek	Sample Matrix	Requested Analyses	Sample (Post) Vacuum (in Hg)
C18020333	02/13/2018	02-14-2018	Air	USEPA TO-15	-4, -5, and -6

Data usability and validation was performed with guidance from the most current editions of the USEPA Hazardous Waste Support Section SOP No. SW-31, Revision 6. The following items were reviewed:

- Data Completeness;
- Custody Documentation;
- Holding Times;
- Sample Blanks Review;
- Field Duplicate Samples;
- Matrix Spike Samples and Duplicates; and
- Control Spike/Laboratory Control Samples.

Those items showing deficiencies, if any, are discussed in the attached Data Validation Compliance Chart. All of the reviewed data was found to be acceptable as outlined in the abovementioned usability procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the reported data and generated in compliance with protocol requirements.

In summary, sample processing was conducted with compliance to protocol requirements and with adherence to quality criteria and the reported results are considered "usable".

The Data Validation Compliance Chart is also included with this report.

Sampling Information and Sample Custody Documentation

Chain of Custody (COC) forms are used to document the history of sample possession from the time the sample containers leave their point of origin (usually the laboratory performing the analyses) to the time the samples are received by the laboratory. COCs are considered legal documents.

The complete list of sample information was provided:

a.	Sample Locations:	Vails Gates
b.	Sample Matrix:	Air
c.	Trip Blanks:	C1802033-008A
d.	Field Duplicate:	IAD Unit A2 (C1802033-007)
e.	QC Audit Samples:	IA Unit 6 (MS/MSD)
f.	Shipping Date:	February 13, 2018 (Drop Off)
g.	Laboratories:	Centek Labs
h.	Initial/Final Canister Pressure:	+30 to -4, -5, or -6
i.	Initial/Final Canister Temperature:	In Compliance

The Chain of Custody accurately documents the sample collection.

Accuracy, Precision, and Sensitivity of Analyses

The fundamental QA objective with respect to the accuracy, precision, and sensitivity of analytical data is to achieve the QC acceptance of each analytical protocol. Accuracy and precision are determined using matrix spike ("MS") and matrix spike duplicate ("MSD") samples.

Accuracy is a measure of the difference of a set of analytical results to the accepted or expected values. Accuracy was assessed by using the MS/MSD and surrogate spike recovery data. Recovery values were reported within the QC limits for each analytical parameter group. Precision is a measure of the mutual agreement between measurements of the same parameter.

The sample results for the Vails Gate Project are considered "usable".

Completeness, Representativeness, and Comparability of Data

Completeness is the measure of the amount of valid data obtained from a measurement system compared with the amount expected to be obtained under normal conditions. Review of the analytical data package provided by Centek indicates that the requested parameters were analyzed for and reported by the laboratory for each sample submitted under proper chain-of-custody procedures. Based upon MEHC's review of the laboratory data, a usable data level was achieved.

Representativeness of the data is obtained through the design of the sampling program and the adherence to established sample collection procedures, sample-handling SOPs, and analytical procedures. The sampling program outlined in the Work Plan was designed to provide for data representative of site conditions taking into consideration past disposal practices, existing data from past studies, and the physical site setting.

The sub-slab and indoor air samples were collected in general compliance with NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006).

The laboratory maintained all holding times for the specific analytical protocols.

Comparability of the data is derived from the evaluation of field duplicate samples and the adherence to established sampling and analytical procedures. A field duplicate is an independent sample collected as close as possible to the original sample from the same sampling point. All of the air samples were analyzed utilizing standardized USEPA methodologies performed in accordance with the latest version of the NYSDEC ASP protocols.

Quality Control Checks

Trip Blanks

A trip blank is provided with each shipping container of samples to be analyzed for volatile organic compounds (VOCs). Analysis of trip blanks determines whether sample canister was contaminated during shipment from the laboratory, while in storage, in shipment to the laboratory, or during analysis at a laboratory. Trip blanks consist of clean canister prepared by the analytical laboratory prior to transportation the sample bottles. A Trip blank was included with the shipment of air samples for VOC analysis.

For this investigation, a trip blank was submitted with the VOC sub-slab and indoor air samples collected on February 13, 2018. No VOC compounds were detected in the trip blank analyzed during this investigation.

Field Blanks

Given that dedicated sampling equipment was utilized for the collection of each sample. Field blanks were not collected or analyzed during this sampling event.

Method Blanks

A method blank is a sample of air, which is carried through the analytical procedure alongside the project samples to determine the level of laboratory background contamination.

For this investigation, a method blank was analyzed with the VOC samples collected on February 13, 2018. No VOC compounds were detected in the method blank analyzed during this investigation.

Matrix Spike/Matrix Spike Duplicate Samples

For the Vails Gate project, one (1) MS/MSD was analyzed. The following sample results are acceptable:

- Sample C1802033-002A (1A-Unit 6) was submitted for matrix spike/ matrix spike duplicate (MS/MSD) analysis.
- > Matrix spike recovery were within QC limits for all compounds.

These results are detailed in the Data Validation Compliance Chart.

Surrogate Analyses

Surrogates are compounds added directly to every standard, blank, MS/MSD, and sample at a known concentration, prior to extraction or analysis; and used to evaluate the analytical efficiency by measuring percent recovery of those compounds upon analysis. The laboratory reported surrogate recoveries were within established QC limits for the surrogates in each analyzed sample.

The sample results for the Vails Gate Project are considered "usable".

Data Validation Compliance Chart Vails Gate

February 13, 2018 Sampling Event

Sample ID		C1802033				
Matrix	Air					
Analysis	USEPA TO-15 – Whole Air Samples					
Holding Times	Samples were analyzed within USEPA holding times.					
Field Parameters	Sample IDVacuum In (in Hg)Vacuum Out (in Hg)					
Field Parameters	C1802033-001A (CHA-V10)	-5	-30			
	C1802033-002A (IA-Unit 6)	-4	-30			
	C1802033-003A (CHA-V19)	-6	-30			
	C1802033-004A (IA-Unit 1A)	-5	-30			
	C1802033-005A (LCS-1)	-5	-30			
	C1802033-006A (IA-Unit A2)	-5	-30			
	C1802033-007A (IA-Unit A2) Dup	-6	-30			
	C1802033-008A (Outside)	-4	-30			
	C1802033-009A (Trip Blank)	+30	+30			
	In the initial calibrations, all criteria were within method requirements.					
Calibration	In the continuing calibration for all compou	nds are within of method control limits				
	All data quality objectives were satisfied.					
Method Blanks	All quality assurance parameters were met f	All quality assurance parameters were met for these analyses.				

Data Validation Compliance Chart Vails Gate

Sample ID	C1802033
Matrix	Air
Analysis	USEPA TO-15 – Whole Air Samples
Matrix Spike/Matrix Spike Duplicate	Matrix spike recovery and/or matrix spike duplicate recovery were within laboratory control limits All data quality objectives were satisfied.
Surrogates	All data quality objectives were satisfied.
Internal Standards	All data quality objectives were satisfied.
Reference Sample	All laboratory internal quality control samples were within acceptable ranges.
Data Usability	Data is acceptable.

Attachment C

Photograph Log



Photo No. 1: Existing SSVI sample port CHA-V10 in Rental Space #6, Polyworks.



Photo No. 2: Helium testing at CHA-V10 prior to sample collection.





Photo No. 4: Indoor Air sample canister IA-6 in Rental Space #6.



Photo No. 5: Existing SSVI sample port CHA-V19 in Rental Space A1, Solar City.

from port CHA-V10.



Photo No. 6: Indoor Air sample canister IA-A1 in Rental Space A1.



Photo No. 7: Creating SSVI sample Port LCS-1 in Rental Space A2, 24 Seven.



Photo No. 8: Conducting helium testing at sample port LCS-1 in Rental Space A2.



Photo No. 9: Indoor Air sample canisters IA-A2 and IA-A2 duplicate in Rental Space A2.



Photo No. 10: Outdoor Air sample canister OA-outside on fence north of warehouse.

Attachment D

Figures



