

January 8, 2020

Kimberly Baptiste
Bergmann Architects, Engineers, Planners
280 East Broad Street
Rochester, NY 14604

Subject: Soil Vapor Intrusion Sampling Results

201-211 West Dominick Street

Lu Project #50378

Dear Ms. Baptiste,

This letter provides a summary of the soil vapor intrusion (SVI) evaluation completed on December 11, 2019 at the above-referenced Site. This evaluation was completed as specified by request from the City of Rome.

Soil Vapor Intrusion Sampling

Sampling was conducted in accordance with New York State Department of Health (NYSDOH) *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006, revised May 2017) Section 2.7.3. Three (3) samples were collected over an 8-hour period on December 11, 2019. The following samples were collected:

- Sub-slab sample in the basement (SS-01)
- Indoor ambient air sample in the basement (IA-01)
- Outdoor ambient air sample (OA-01)

The outdoor ambient air sample was collected from an upwind location to evaluate background conditions. Sample locations are shown on the NYSDOH Indoor Air Quality Questionnaire and Building Inventory form provided as Attachment A.

Prior to sampling, a NYSDOH Indoor Air Quality Questionnaire and inventory form were completed. Background readings were collected with a ppb RAE photoionization detector (PID) capable of detecting volatile organic compounds (VOCs) in the part per billion (ppb) range, expressed herein as micrograms per cubic meter (ug/m³). Background readings were recorded on the SUMMA Canister Field Data Sheet (Attachment A) and are detailed in the following table.

Location	PID Reading (ppb)
Basement	Not Detected
First floor	Not Detected
Outside	Not Detected

Soil vapor and indoor air samples were collected in one-liter stainless steel SUMMA[®] canisters equipped with low-flow regulators. The canisters were certified pre-cleaned by Centek Laboratories, LLC, an ELAP-certified analytical laboratory. Samples were analyzed for VOCs by EPA Method TO-15. Results of the SVI sampling are discussed below.

Results

A total of three (3) samples were collected during this investigation and submitted to Centek Laboratories, LLC for analysis. Laboratory reports are provided in Attachment C. The results were compared to applicable NYSDOH decision matrices.

Four (4) of the eight (8) compounds listed in the NYSDOH Soil Vapor/Indoor Air Matrix A, B, and C (NYSDOH *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* decision matrices revised May 2017) were detected in sub-slab soil vapor and indoor air samples:

- 1,1,1-Trichloroethance- detected in SS-01 (3.8 ug/m³) and was not detected in IA-01. According to Matrix B, no further action is needed.
- Carbon tetrachloride-detected in SS-01 (7.6 ug/m³) and was not detected in IA-01. According to Matrix A, no further action is needed.
- Methylene chloride- detected in SS-01 (1.1 ug/m³), IA-01 (30.74 ug/m³) and the outdoor sample (0.52 ug/m³). Methylene chloride is predominantly used as a solvent in paint strippers and removers and as a propellant in aerosols for products such as paint, automotive products and insect sprays. It is a common laboratory artifact, and is also used in general cleaning products. According to Matrix B, no further action is required.
- Tetrachloroethene- detected in the SS-01 (1.7 ug/m³) and the outdoor sample (1.6 ug/m³). It was not detected in IA-01. According to Matrix B, no further action is required.
- The remaining four (4) compounds identified on the NYSDOH Soil Vapor/Indoor Air Matrix A, B, and C (1,1-dichloroethene, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride) were not detected in any of the samples.

Petroleum and non-petroleum related compounds were detected, as shown in the attached table. Since there are no NYSDOH guidance values for these compounds in indoor air, the detections are compared to estimates of background levels from comprehensive studies where air samples were collected in homes, offices, and outdoor areas. The background databases that are used for evaluating indoor and outdoor air data are:

- Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes, NYSDOH 2003. Indoor and outdoor air data collected from 104 single-family fuel oil heated homes across New York State.
- Building Assessment and Survey Evaluation (BASE) Database, EPA 2001. Study data from 100 randomly selected public and commercial office buildings.

The values published in the databases are representative of fuel-oil heated homes and conventional office buildings. The databases provide a method to evaluate sample data since there are no petroleum-related VOC guidance values applicable to occupied buildings provided by NYSDOH.

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The following table summarizes compounds detected in samples, collected on December 11, 2019.

	Sample ID	NYSDOH	NYSDOH		
	and	Range for	Range for		
Compound	Detected	Indoor Air	Outdoor Air	Concern	Characteristics and/or Common
	Value	Quality	Quality		Uses
	(ug/m³)	(ug/m³)	(ug/m³)		
Petroleum-related	•	•			
1,2,4-	SS-01: 3.9	0.7 - 4.3	< 0.25 - 0.8	None; SS-01 is	Colorless aromatic hydrocarbon;
trimethylbenzene	OA-1: 1.8			within the indoor air	used in paint and coating
				quality range and	additives
				not detected in the	
				IA sample	
1,3,5-	SS-01:1.5	0.3 - 1.7	< 0.25 - 0.3	None; SS-01 is	Aromatic hydrocarbon and
trimethylbenzene	OA-1: 0.54			within the indoor air	volatile organic carbon; used in
				quality range and	solvents and thinners
				not detected in the	
				IA sample	
2,2,4-	SS-01: 31.7	Not	Not	None; there are no	Manufacture, use and disposal
trimethylpentane	OA-1: 0.61	Applicable	Applicable	guidance values for	of products associated with the
				this compound	petroleum and gasoline industry
4-ethyltoluene	SS-01: 0.93	Not	Not	None; there are no	Colorless liquid used for the
	OA-1: 0.49	Applicable	Applicable	guidance values for	production of specialty
				this compound	polystyrenes
Benzene	SS-01: 41	1.1 - 5.9	0.6 - 2.2	None; SS-01	Industrial solvent in paints,
	IA-01: 0.54			exceeds the indoor	varnishes, lacquer thinners;
	OA-1: 1.4			air quality range;	component of gasoline
				however the IA-01	
				and OA-01 are	
				within the indoor	
				and outdoor air	
				quality ranges	
Cyclohexane	SS-01: 91.0	< 0.25 - 2.6	< 0.25 - 0.4	None; SS-01	Colorless liquid with a sweet
	OA-01: 1			exceeds the indoor	odor; used in adhesives and
				air quality range	sealant chemicals
				however, the	
				compound was not	
				detected in the IA	
Ethodb co	CC 04: 44 C	0.4.3.0	1035.05	sample	Coloniasa fisaaraa la l
Ethylbenzene	SS-01: 11.0	0.4 - 2.8	< 0.25 - 0.5	None; SS-01	Colorless, flammable liquid
	OA-01: 9.1			exceeds the indoor	found in coal tar and petroleum;
				air quality range	found in manufactured products
				however, the	such as inks, insecticides, and
				compound was not detected in the IA	paints
]		sample	

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Compound	Sample ID and Detected Value (ug/m³)	NYSDOH Range for Indoor Air Quality (ug/m³)	NYSDOH Range for Outdoor Air Quality (ug/m³)	Concern	Characteristics and/or Common Uses
Heptane	SS-01: 93 OA-01: 1.2	1 - 7.6	< 0.25 - 1.9	None; SS-01 exceeds the indoor air quality range however, the compound was not detected in the IA sample	Clear liquid with a gasoline-like odor; used as a paint and coating additive, solvent, and in adhesives and sealants
Hexane	SS-01: 150 IA-01: 0.42 OA-1: 2	0.6 - 5.9	< 0.25 - 1	None; SS-01 exceeds the indoor air quality range; however the IA-01 and OA-01 are within the indoor and outdoor air quality ranges	Colorless liquid used as a solvent, paint thinner and chemical reaction medium
m,p Xylene	SS-01: 17 OA-1: 13	0.5 - 4.6	< 0.25 - 0.5	None; SS-01 exceeds the indoor air quality range however, the compound was not detected in the IA sample	Used as solvents in products such as paints and coatings
o-Xylene	SS-01: 7.6 OA-1: 4.9	0.4 - 3.1	< 0.25 - 0.6	None; SS-01 exceeds the indoor air quality range however, the compound was not detected in the IA sample	
Styrene	SS-01: 12 OA-1: 8.7	< 0.25 - 0.6	< 0.25	None; SS-01 exceeds the indoor air quality range however, the compound was not detected in the IA sample	Used in the production of polystyrene plastics and resins

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Compound	Sample ID and Detected Value (ug/m³)	NYSDOH Range for Indoor Air Quality (ug/m³)	NYSDOH Range for Outdoor Air Quality (ug/m³)	Concern	Characteristics and/or Common Uses
Toluene	SS-01: 78 IA-01: 1.2 OA-1: 2.6	3.5 - 25	0.6 - 2.4	None; SS-01 exceeds the indoor air quality range; however the IA-01 and OA-01 are within the indoor and outdoor air quality ranges	Component in several paints, primers, and adhesive products
Non-petroleum-relat	ed				
Trans-1,2- dichloroethene	SS-01: 1.1 IA-01: 3	Not Applicable	Not Applicable	None; there are no guidance values for this compound	Highly flammable, colorless liquid with a sharp, harsh odor; by-product of vinyl chloride manufacturing with few industrial applications
1,4-dioxane	SS-01: 1.9 OA-01: 2.6	Not Applicable	Not Applicable	None; there are no guidance values for this compound	Clear liquid used as a stabilizer for chlorinated solvents
Acetone	SS-01: 170 IA-01: 0.78 OA-01: 1.3	9.9 - 52	3.4 - 14	None; SS-01 exceeds the indoor air quality range; however the IA-01 and OA-01 are within the indoor and outdoor air quality ranges	Colorless liquid volatile organic compound used in the manufacture of industrial products and/or plastic; degreaser for textiles; biodegradation product in the environment
Carbon disulfide	SS-01:21	Not Applicable	Not Applicable	None; there are no guidance values for this compound	Colorless liquid used in some pesticides; to make rayon and cellophane; associated with tire production and dissolving rubber
Chloroform	SS-01:46 IA-01:0.78	< 0.255	< 0.25-< 0.25	SS-01 and IA-01 exceed the indoor and outdoor air ranges	Clear colorless liquid used as a solvent to make other chemicals; used as a fumigant
Chloromethane	IA-01:0.99 OA-01:1.2	< 0.25 – 1.8	< 0.25 – 1.8	None, IA-01 and OA-01 are within the indoor and outdoor air ranges	Local anesthetic; historically used as refrigerants and aerosol can propellants

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Compound	Sample ID and Detected Value (ug/m³)	NYSDOH Range for Indoor Air Quality (ug/m³)	NYSDOH Range for Outdoor Air Quality (ug/m³)	Concern	Characteristics and/or Common Uses
Ethyl acetate	SS-01: 1.1	Not Applicable	Not Applicable	None; there are no guidance values for this compound	Used as an industrial solvent.
Freon 11	SS-01:22 IA-01:2.5 OA-01:1.5	1.1 – 5.4	< 0.25 – 2.2	None, SS-01 exceeds the indoor air range, however	Chlorofluorocarbons (CFCs) historically used as refrigerants and aerosol can propellants
Freon 12	SS-01:35 IA-01:3 OA-01:2.9	< 0.25 - 4.1	< 0.25 – 4.2	the IA-01 and OA-01 are within the indoor and outdoor air ranges	Chlorofluorocarbons (CFCs) historically used as refrigerants and aerosol can propellants
Isopropyl alcohol	SS-01:21 IA-01:1.3 OA-01:2.1	Not Applicable	Not Applicable	None; there are no guidance values for this compound	Common antiseptic used in soaps and lotions
Methyl ethyl ketone (MEK or 2- butanone)	SS-01: 9.1 IA-01:0.74 OA-01: 1.4	1.4 - 7.3	0.8 - 2.6	None, SS-01 exceeds the indoor air range, however the IA-01 and OA-01 are within the indoor and outdoor air ranges	Occurs in nature as a biodegradation product and used as a solvent

Conclusions & Recommendations

Chloroform was the only compound detected in the indoor air sample (1.8 ug/m³) that exceeded the NYSDOH indoor air range (<.25-.5 ug/m³). The majority of the compounds detected in SS-01 exceeding the NYSDOH indoor air range are petroleum related. Several of these compounds were detected in the outdoor sample as well but were not detected above guidance values in IA-01.

According to the NYSDOH SVI Matrix A and B, the compounds detected indicate that no further action is needed at the Site at this time.

The project site is free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances which could affect the health and safety of occupants or users or conflict with the intended utilization of the property. I, Janet M. Bissi, certify that I am an environmental professional as per ASTM 1527." to the conclusion of your Soil Vapor Intrusion Sampling Results Report I would greatly appreciate it.

If you have any questions or comments, please contact Lu Engineers.

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Sincerely,

Janet M. Bissi

Environmental Scientist

Sal

Gregory Andrus

Investigation and Remediation Group Leader

Enclosure(s): Table 1 – Summary of Air Sampling Results

Attachment A – Field Logs & NYSDOH Questionnaire

Attachment B – Analytical Reports



SVI Sample Results 201-211 West Dominick Street **City of Rome**

	NYSDOH B	Background ¹	NYSDOH Matrix A, Sub-slab Soil Var		Lada (14, 04)	0 11 (01.1)
	Indoor ²	Outdoor ²	B, C ³	(SS-01)	Indoor (IA-01)	Outdoor (OA-1)
Petroleum Related			•	•		•
1,2,4-Trimethylbenzene	0.7 - 4.3	< 0.25 - 0.8	NA	3.9	ND	1.8
1,3,5-Trimethylbenzene	0.3 - 1.7	< 0.25 - 0.3	NA	1.5	ND	0.54
2,2,4-Trimethylpentane	NA	NA	NA	1.7	ND	0.61
4-ethyltoluene	NA	NA	NA	0.93	ND	0.49
Benzene	1.1 - 5.9	0.6 - 2.2	NA	41	0.54	1.4
Cyclohexane	< 0.25 - 2.6	< 0.25 - 0.4	NA	91.0	ND	1
Ethylbenzene	0.4 - 2.8	< 0.25 - 0.5	NA	11.0	ND	9.1
Heptane	1 - 7.6	< 0.25 - 1.9	NA	93	ND	1.2
Hexane	0.6 - 5.9	< 0.25 - 1	NA	150	0.42	2
m&p-Xylene	0.5 - 4.6	< 0.25 - 0.5	NA	17	ND	13
o-Xylene	0.4 - 3.1	< 0.25 - 0.6	NA	7.6	ND	4.9
Styrene	< 0.25 - 0.6	< 0.25	NA	12	ND	8.7
Toluene	3.5 - 25	0.6 - 2.4	NA	78	1.2	2.6
Non-petroleum Related			•	•		•
1,1-Dichloroethene	< 0.25	< 0.25	No Further Action	ND	ND	ND
1,1,1-Trichloroethane	< 0.25-1.1	< 0.25-0.3	No Further Action	3.8	ND	ND
cis-1,2-Dichloroethene	< 0.25	< 0.25	No Further Action	ND	ND	ND
trans-1,2-Dichloroethene	NA	NA	NA	1.1	3	ND
1,4 Dioxane	NA	NA	NA	1.9	ND	2.6
Acetone	9.9 - 52	3.4 - 14	NA	170	0.78	1.3
Carbon Disulfide	NA	NA	NA	21	ND	ND
Carbon Tetrachloride	< 0.25 - 0.6	< 0.25 - 0.6	No Further Action	7.6	ND	ND
Chloroform	< 0.255	< 0.25-< 0.25	NA	46	1.8	ND
Chloroethane	< 0.25-< 0.25	< 0.25-< 0.25	NA	ND	ND	ND
Chloromethane	< 0.25 – 1.8	< 0.25 – 1.8	NA	ND	0.99	1.2
Ethyl acetate	NA	NA	NA	1.1	ND	ND
Freon 11	1.1 – 5.4	< 0.25 – 2.2	NA	22	2.5	1.5
Freon 114	NA	NA	NA	ND	ND	ND
Freon 12	< 0.25 - 4.1	< 0.25 - 4.2	NA	35	3	2.9
Isopropyl alcohol	NA	NA	NA	21	1.3	2.1
Methylene Chloride	0.3 - 6.6	< 0.25 - 0.7	No Further Action	1.1	0.5	0.52
Methyl Butyl Ketone	NA	NA	NA	ND	ND	ND
Methyl Ethyl Ketone	1.4 - 7.3	0.8 - 2.6	NA	9.1	0.74	1.4
Methyl Isobutyl Ketone	< 0.25-0.9	< 0.25-0.9	NA	ND	ND	0.82
Tetrahydrofuran	< 0.25 - 0.4	<0.25	NA	ND	ND	ND
Tetrachloroethene	< 0.25-1.1	< 0.25-0.3	No Further Action	1.7	ND	1.6
Trichloroethene	< 0.25	< 0.25	No Further Action	ND	ND	ND
Vinyl chloride	< 0.25	< 0.25	No Further Action	ND	ND	ND

¹Summary of Indoor and Outdoor Levels of Volatile Organic Compounds From Fuel Oil Heated Homes in NYS, 1997 to 2003. Unpublished. New York State Department of Health, $Bureau\ of\ Toxic\ Substance\ Assessment.\ http://www.nyhealth.gov/environmental/indoors/air/fuel_oil.htm$

Note: all values presented in ug/m³

ND – Not Detected

NA – Not Available

BOLD- Matix

J-Estimate

Exceeedence < Means "less than." The number following a "less than sign" (<) is the lowest level the laboratory test can reliably measure (reporting limit).



²The ranges provided in the table represent the 25th percentile to 75th percentile, (middle half), of the results and are labeled as background. A single value is the minimum reporting limit for that compound, and indicates that more than 75% of the data are below the detection limit. This database is comprised of air testing results from homes where there were no known sources of chemicals or chemical spills.

³ NYSDOH Soil Vapor/Indoor Air Matrix A, B, and C revised May 2017

Appendix A- Field Logs and NYSDOH Questionnaire



SUMMA Canister Field Data Sheet

Project Name:	201-211 West Dec	ominick Street	Date:	12/11/19		
Project #:	50378-05			Sampler(s):	GLA and BGS	
Sampling Location:	Basement			_		
Sub-Slab Vap	Sub-Slab Vapor Sample Indoor Air Sample			Indoor Air	^r Sample	
Sample ID:	SS-01	Sample ID:	IA-01	Sample ID:	IA-02	
Can #:	188	Can #:	237	Can #:	360	
Regulator #:	250	Regulator #:	172	Regulator #:	292	
Start Date/Time:	12/11/19 9:25am	Start Date/Time:	12/11/19 9:26am	Start Date/Time:	12/11/19 9:29am	
Start Pressure:	30	Start Pressure:	30	Start Pressure:	30	
Stop Date/Time:	12/11/19 5:15pm	Stop Date/Time:	12/11/19 5:17pm	Stop Date/Time:	12/11/19 5:20pm	
Stop Pressure:	0	Stop Pressure:	-1	Stop Pressure:	0	
Slab Thickness:	2in	Location:	Basement	Location:	outside	
Floor Surface:	concrete	Indoor Air Temp:		Indoor Air Temp:		
Odors?:		Odors?:		Odors?:		
PID Reading (ppb):	0	PID Reading (ppb):	0	PID Reading (ppb):	0	
Comments/Location Sketch:						

NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Sen	Seile 4		_ Date/Time Prepared	12/11/19	_09:35
Preparer's Affiliation	Engineers		Phone No. (585) 3	85-7417	_
Purpose of Investigation			V-W-A		
1. OCCUPANT:					
Interviewed: Y/N					
Last Name:	AND THE LOCAL PROPERTY OF THE PARTY OF THE P	First Name:			
Address:	- T-Shirk			****	
County:					
Home Phone:	Offic	ce Phone:			
Number of Occupants/persons	s at this locatio	on Age	e of Occupants		
2. OWNER OR LANDLOR	D: (Check if s	same as occupant)		
Interviewed: Y/N					
Last Name:	F	First Name:		<u> </u>	
Address:		77.72			
County:					
Home Phone:	Off	ice Phone:			
3. BUILDING CHARACTE	RISTICS				
Type of Building: (Circle app	propriate respo	onse)			
Residential Industrial	School Church	Commercial Other:	/Multi-us		

If the property is resident	ial, type? (Circle appropria	te response)	
Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home	3-Family Colonial Mobile Home Townhouses/Condos Other:	
If multiple units, how man	ıy?		
If the property is commer	cial, type?		
Business Type(s)	Fier		
Does it include residen	ces (i.e., multi-use)? Y	If yes, how many?	
Other characteristics:			
Number of floors 2	Build	ing age 66	
Is the building insulated	1? Y / N How	air tight? Tight / Average / Not Tight	
4. AIRFLOW			
Use air current tubes or ti	cacer smoke to evaluate a	irflow patterns and qualitatively describe:	
Airflow between floors			
			_
Airflow near source			
	-		_
(AN)			
Outdoor air infiltration			
	A10 (187)		_
			_
Infiltration into air ducts			
			-
404			

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

a. Above grade construction	wood frame	concrete	stone	brick	
b. Basement type:	full	crawlspac	e slab	other (split - level)	
c. Basement floor:	concrete	dirt	stone	other	
d. Basement floor:	uncovered	covered	covered with		
e. Concrete floor:	unsealed	sealed	sealed with		
f. Foundation walls:	poured	block	stone	other	
g. Foundation walls:	unsealed	sealed	sealed with _		
h. The basement is:	wet	damp	dry	moldy	
i. The basement is:	finished	unfinished	partially finisl	ned	
j. Sump present?	Ø/N				
k. Water in sump?	not applicable	e			
Basement/Lowest level depth be	elow grade:	(feet)			
Identify potential soil vapor ent	ry points and appr	oximate size	(e.g., cracks, utility	ports, drains)	
Trenches have been cut into the Floor to Slabs removed ~ 4' x 4'. Absorbed beings observed 6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply) Type of heating system(s) used in this building: (circle all that apply – note primary)					
Hot air circulation	Heat pump		ot water baseboard		
Space Heaters Electric baseboard	Stream radia Wood stove		adiant floor outdoor wood boiler	Other	
The primary type of fuel used is:					
Natural Gas Electric Wood	Fuel Oil Propane Coal		erosene olar		
Domestic hot water tank fueled by:					
Boiler/furnace located in:	Basement Outo	loors M	fain Floor	Other	
Air conditioning:	Central Air Win	dow units O	pen Windows	None	

	4			
Are there air distribution ducts present? Y/N				
Describe the su there is a cold a diagram.	apply and cold air return ductwork, and its coair return and the tightness of duct joints. In	ondition dicate th	where visible, including whether te locations on the floor plan	
2				
7. OCCUPAN	NCY			
Is basement/lov	west level occupied? Full-time Occas	ionally	Seldom Almost Never	
Level	General Use of Each Floor (e.g., familyroon	m, bedro	om, laundry, workshop, storage)	
Basement	unocupied			
1 st Floor	offices		· · · · · · · · · · · · · · · · · · ·	
2 nd Floor	offices			
3 rd Floor	***************************************			
4 th Floor				
a Biomone			_	
	THAT MAY INFLUENCE INDOOR AIR Q	UALITY		
	attached garage?		Y/(N)	
b. Does the g	arage have a separate heating unit?		Y/N/(NA)	
	eum-powered machines or vehicles he garage (e.g., lawnmower, atv, car)		Y / N /NA Please specify	
d. Has the bu	uilding ever had a fire?		Y/N When?	
e. Is a kerose	ne or unvented gas space heater present?		Y N Where?	
f. Is there a v	workshop or hobby/craft area?	Y/N	Where & Type?	
g. Is there sn	ooking in the building?	Y ./\doc_	How frequently?	

Y (N) When & Type? _______
Y (N) When & Type? ______

h. Have cleaning products been used recently?

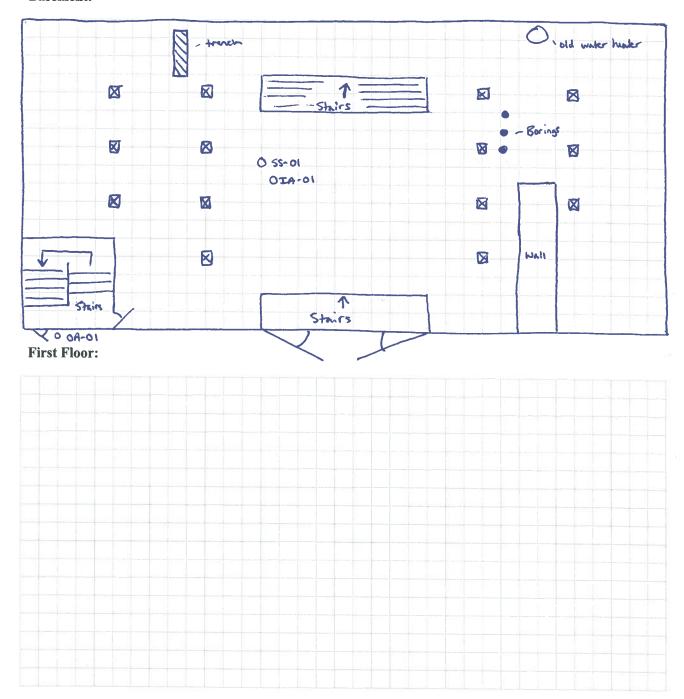
i. Have cosmetic products been used recently?

j. Has painting/sta	ining been done in the last 6 mont	hs? Y/(N)	Where & Whe	en?
k. Is there new car	pet, drapes or other textiles?	Y/N	Where & Whe	en?
l. Have air freshen	ers been used recently?	YN	When & Type	?
m. Is there a kitch	en exhaust fan?	YN	If yes, where	vented?
n. Is there a bathı	room exhaust fan?	Y/N	If yes, where	vented?
o. Is there a clothe	s dryer?	Y /(Ñ)	If yes, is it ver	nted outside? Y / N
p. Has there been	a pesticide application?	Y / (N)	When & Type	e?
Are there odors in If yes, please desc		Y/N		
(e.g., chemical manuf	ng occupants use solvents at works acturing or laboratory, auto mechanicide application, cosmetologist		shop, painting	, fuel oil delivery,
If yes, what types o	of solvents are used?			
If yes, are their clot	thes washed at work?	Y/N		
Do any of the building response)	ng occupants regularly use or wor	k at a dry-clea	nning service?	(Circle appropriate
Yes, use dry-	cleaning regularly (weekly) cleaning infrequently (monthly or le a dry-cleaning service	ess) (No Unknown	
Is there a radon miti Is the system active (igation system for the building/str or passive? Active/Passive	ucture? Y/N	Date of Instal	llation:
9. WATER AND SE	WAGE			
Water Supply:	Public Water Drilled Well	Driven Well	Dug Well	Other:
Sewage Disposal:	Public Sewer Septic Tank	Leach Field	Dry Well	Other:
10. RELOCATION	INFORMATION (for oil spill resi	idential emerg	gency)	
a. Provide reaso	ns why relocation is recommended	d:		,
b. Residents cho	ose to: remain in homerelocate	e to friends/fam	nily reloc	ate to hotel/motel
c. Responsibility	for costs associated with reimbur	rsement explai	ned? Y/N	1
d. Relocation pa	ckage provided and explained to 1	residents?	Y/N	1

11. FLOOR PLANS

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

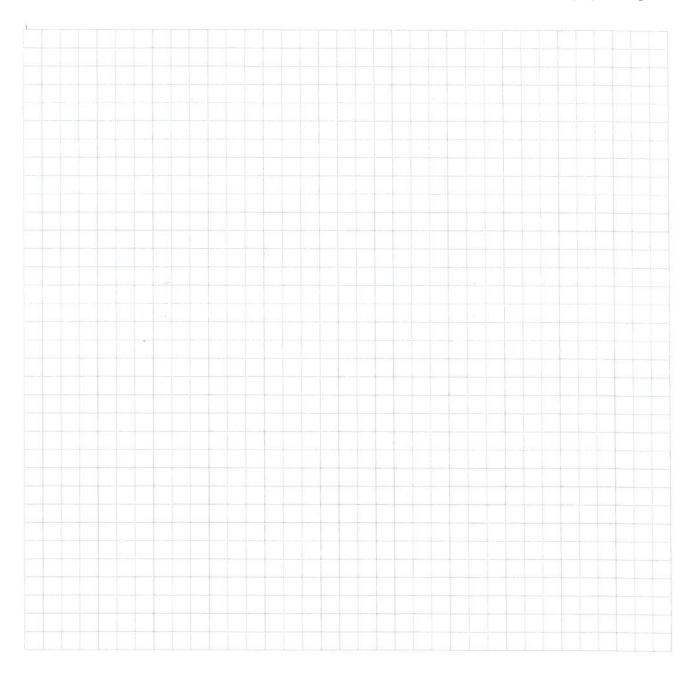
Basement:



12. OUTDOOR PLOT

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

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



13. PRODUCT INVENTORY FO

Make & Model of field instrument used:
List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y/N
Basement	None					-

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

^{**} Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Appendix B- Analytical Results



CLIENT:Lu EngineersClient Sample ID: SS-01Lab Order:C1912035Tag Number: 188,250Project:Rome BOA SVICollection Date: 12/11/2019

Lab ID: C1912035-001A **Matrix:** AIR

Analyses	Result	DL (Qual Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-1	15		Analyst: RJP
1,1,1-Trichloroethane	3.8	0.82	ug/m3	1	12/18/2019 4:11:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	12/18/2019 4:11:00 PM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	12/18/2019 4:11:00 PM
1,1-Dichloroethane	< 0.61	0.61	ug/m3	1	12/18/2019 4:11:00 PM
1,1-Dichloroethene	< 0.59	0.59	ug/m3	1	12/18/2019 4:11:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	12/18/2019 4:11:00 PM
1,2,4-Trimethylbenzene	3.9	0.74	ug/m3	1	12/18/2019 4:11:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	12/18/2019 4:11:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	12/18/2019 4:11:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	12/18/2019 4:11:00 PM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	12/18/2019 4:11:00 PM
1,3,5-Trimethylbenzene	1.5	0.74	ug/m3	1	12/18/2019 4:11:00 PM
1,3-butadiene	< 0.33	0.33	ug/m3	1	12/18/2019 4:11:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	12/18/2019 4:11:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	12/18/2019 4:11:00 PM
1,4-Dioxane	1.9	1.1	ug/m3	1	12/18/2019 4:11:00 PM
2,2,4-trimethylpentane	1.7	0.70	ug/m3	1	12/18/2019 4:11:00 PM
4-ethyltoluene	0.93	0.74	ug/m3	1	12/18/2019 4:11:00 PM
Acetone	170	28	ug/m3	40	12/18/2019 8:44:00 PM
Allyl chloride	< 0.47	0.47	ug/m3	1	12/18/2019 4:11:00 PM
Benzene	41	4.8	ug/m3	10	12/18/2019 7:59:00 PM
Benzyl chloride	< 0.86	0.86	ug/m3	1	12/18/2019 4:11:00 PM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	12/18/2019 4:11:00 PM
Bromoform	< 1.6	1.6	ug/m3	1	12/18/2019 4:11:00 PM
Bromomethane	< 0.58	0.58	ug/m3	1	12/18/2019 4:11:00 PM
Carbon disulfide	21	4.7	ug/m3	10	12/18/2019 7:59:00 PM
Carbon tetrachloride	7.6	0.94	ug/m3	1	12/18/2019 4:11:00 PM
Chlorobenzene	< 0.69	0.69	ug/m3	1	12/18/2019 4:11:00 PM
Chloroethane	< 0.40	0.40	ug/m3	1	12/18/2019 4:11:00 PM
Chloroform	46	7.3	ug/m3	10	12/18/2019 7:59:00 PM
Chloromethane	< 0.31	0.31	ug/m3	1	12/18/2019 4:11:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59	ug/m3	1	12/18/2019 4:11:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	12/18/2019 4:11:00 PM
Cyclohexane	91	21	ug/m3	40	12/18/2019 8:44:00 PM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	12/18/2019 4:11:00 PM
Ethyl acetate	1.1	0.54	ug/m3	1	12/18/2019 4:11:00 PM
Ethylbenzene	11	6.5	ug/m3	10	12/18/2019 7:59:00 PM
Freon 11	22	8.4	ug/m3	10	12/18/2019 7:59:00 PM
Freon 113	< 1.1	1.1	ug/m3	1	12/18/2019 4:11:00 PM
Freon 114	< 1.0	1.0	ug/m3	1	12/18/2019 4:11:00 PM

Qualifiers: SC Sub-Contracted

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: 23-Dec-19

CLIENT:Lu EngineersClient Sample ID: SS-01Lab Order:C1912035Tag Number: 188,250Project:Rome BOA SVICollection Date: 12/11/2019

Lab ID: C1912035-001A **Matrix:** AIR

Analyses	Result	DL Q	ual Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-1		Analyst: RJP	
Freon 12	35	7.4	ug/m3	10	12/18/2019 7:59:00 PM
Heptane	93	25	ug/m3	40	12/18/2019 8:44:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6	ug/m3	1	12/18/2019 4:11:00 PM
Hexane	150	21	ug/m3	40	12/18/2019 8:44:00 PM
Isopropyl alcohol	21	3.7	ug/m3	10	12/18/2019 7:59:00 PM
m&p-Xylene	17	13	ug/m3	10	12/18/2019 7:59:00 PM
Methyl Butyl Ketone	< 1.2	1.2	ug/m3	1	12/18/2019 4:11:00 PM
Methyl Ethyl Ketone	9.1	8.8	ug/m3	10	12/18/2019 7:59:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2	ug/m3	1	12/18/2019 4:11:00 PM
Methyl tert-butyl ether	< 0.54	0.54	ug/m3	1	12/18/2019 4:11:00 PM
Methylene chloride	1.1	0.52	ug/m3	1	12/18/2019 4:11:00 PM
o-Xylene	7.6	0.65	ug/m3	1	12/18/2019 4:11:00 PM
Propylene	< 0.26	0.26	ug/m3	1	12/18/2019 4:11:00 PM
Styrene	12	6.4	ug/m3	10	12/18/2019 7:59:00 PM
Tetrachloroethylene	1.7	1.0	ug/m3	1	12/18/2019 4:11:00 PM
Tetrahydrofuran	< 0.44	0.44	ug/m3	1	12/18/2019 4:11:00 PM
Toluene	78	23	ug/m3	40	12/18/2019 8:44:00 PM
trans-1,2-Dichloroethene	1.1	0.59	ug/m3	1	12/18/2019 4:11:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	12/18/2019 4:11:00 PM
Trichloroethene	< 0.81	0.81	ug/m3	1	12/18/2019 4:11:00 PM
Vinyl acetate	< 0.53	0.53	ug/m3	1	12/18/2019 4:11:00 PM
Vinyl Bromide	< 0.66	0.66	ug/m3	1	12/18/2019 4:11:00 PM
Vinyl chloride	< 0.38	0.38	ug/m3	1	12/18/2019 4:11:00 PM

Qualifiers: SC Sub-Contracted

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: 23-Dec-19

CLIENT:Lu EngineersClient Sample ID: IA-01Lab Order:C1912035Tag Number: 237,172Project:Rome BOA SVICollection Date: 12/11/2019

Lab ID: C1912035-002A **Matrix:** AIR

Analyses	Result	DL	Qual Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-V0	C-DCE-1,1DCE	то	-15		Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82	ug/m3	1	12/18/2019 2:37:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0	ug/m3	1	12/18/2019 2:37:00 PM
1,1,2-Trichloroethane	< 0.82	0.82	ug/m3	1	12/18/2019 2:37:00 PM
1,1-Dichloroethane	< 0.61	0.61	ug/m3	1	12/18/2019 2:37:00 PM
1,1-Dichloroethene	< 0.16	0.16	ug/m3	1	12/18/2019 2:37:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1	ug/m3	1	12/18/2019 2:37:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74	ug/m3	1	12/18/2019 2:37:00 PM
1,2-Dibromoethane	< 1.2	1.2	ug/m3	1	12/18/2019 2:37:00 PM
1,2-Dichlorobenzene	< 0.90	0.90	ug/m3	1	12/18/2019 2:37:00 PM
1,2-Dichloroethane	< 0.61	0.61	ug/m3	1	12/18/2019 2:37:00 PM
1,2-Dichloropropane	< 0.69	0.69	ug/m3	1	12/18/2019 2:37:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74	ug/m3	1	12/18/2019 2:37:00 PM
1,3-butadiene	< 0.33	0.33	ug/m3	1	12/18/2019 2:37:00 PM
1,3-Dichlorobenzene	< 0.90	0.90	ug/m3	1	12/18/2019 2:37:00 PM
1,4-Dichlorobenzene	< 0.90	0.90	ug/m3	1	12/18/2019 2:37:00 PM
1,4-Dioxane	< 1.1	1.1	ug/m3	1	12/18/2019 2:37:00 PM
2,2,4-trimethylpentane	< 0.70	0.70	ug/m3	1	12/18/2019 2:37:00 PM
4-ethyltoluene	< 0.74	0.74	ug/m3	1	12/18/2019 2:37:00 PM
Acetone	0.78	0.71	ug/m3	1	12/18/2019 6:29:00 PM
Allyl chloride	< 0.47	0.47	ug/m3	1	12/18/2019 2:37:00 PM
Benzene	0.54	0.48	ug/m3	1	12/18/2019 2:37:00 PM
Benzyl chloride	< 0.86	0.86	ug/m3	1	12/18/2019 2:37:00 PM
Bromodichloromethane	< 1.0	1.0	ug/m3	1	12/18/2019 2:37:00 PM
Bromoform	< 1.6	1.6	ug/m3	1	12/18/2019 2:37:00 PM
Bromomethane	< 0.58	0.58	ug/m3	1	12/18/2019 2:37:00 PM
Carbon disulfide	< 0.47	0.47	ug/m3	1	12/18/2019 2:37:00 PM
Carbon tetrachloride	< 0.19	0.19	ug/m3	1	12/18/2019 2:37:00 PM
Chlorobenzene	< 0.69	0.69	ug/m3	1	12/18/2019 2:37:00 PM
Chloroethane	< 0.40	0.40	ug/m3	1	12/18/2019 2:37:00 PM
Chloroform	1.8	0.73	ug/m3	1	12/18/2019 2:37:00 PM
Chloromethane	0.99	0.31	ug/m3	1	12/18/2019 2:37:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16	ug/m3	1	12/18/2019 2:37:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68	ug/m3	1	12/18/2019 2:37:00 PM
Cyclohexane	< 0.52	0.52	ug/m3	1	12/18/2019 2:37:00 PM
Dibromochloromethane	< 1.3	1.3	ug/m3	1	12/18/2019 2:37:00 PM
Ethyl acetate	< 0.54	0.54	ug/m3	1	12/18/2019 2:37:00 PM
Ethylbenzene	< 0.65	0.65	ug/m3	1	12/18/2019 2:37:00 PM
Freon 11	2.5	0.84	ug/m3	1	12/18/2019 2:37:00 PM
Freon 113	< 1.1	1.1	ug/m3	1	12/18/2019 2:37:00 PM
Freon 114	< 1.0	1.0	ug/m3	1	12/18/2019 2:37:00 PM

Qualifiers: SC Sub-Contracted

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
Estimated Value above quantitation range
Analyte detected below quantitation limit
Not Detected at the Limit of Detection

Date: 23-Dec-19

CLIENT:Lu EngineersClient Sample ID: IA-01Lab Order:C1912035Tag Number: 237,172Project:Rome BOA SVICollection Date: 12/11/2019

Lab ID: C1912035-002A **Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC	C-DCE-1,1DCE	TC)-15			Analyst: RJP
Freon 12	3.0	0.74		ug/m3	1	12/18/2019 2:37:00 PM
Heptane	< 0.61	0.61		ug/m3	1	12/18/2019 2:37:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/18/2019 2:37:00 PM
Hexane	0.42	0.53	J	ug/m3	1	12/18/2019 2:37:00 PM
Isopropyl alcohol	1.3	0.37		ug/m3	1	12/18/2019 6:29:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/18/2019 2:37:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/18/2019 2:37:00 PM
Methyl Ethyl Ketone	0.74	0.88	J	ug/m3	1	12/18/2019 2:37:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/18/2019 2:37:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/18/2019 2:37:00 PM
Methylene chloride	0.49	0.52	J	ug/m3	1	12/18/2019 2:37:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	12/18/2019 2:37:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/18/2019 2:37:00 PM
Styrene	< 0.64	0.64		ug/m3	1	12/18/2019 2:37:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/18/2019 2:37:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/18/2019 2:37:00 PM
Toluene	1.2	0.57		ug/m3	1	12/18/2019 2:37:00 PM
trans-1,2-Dichloroethene	3.0	0.59		ug/m3	1	12/18/2019 2:37:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/18/2019 2:37:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/18/2019 2:37:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/18/2019 2:37:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/18/2019 2:37:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/18/2019 2:37:00 PM

Qualifiers: SC Sub-Contracted

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: 23-Dec-19

CLIENT:Lu EngineersClient Sample ID: OA-01Lab Order:C1912035Tag Number: 360,292Project:Rome BOA SVICollection Date: 12/11/2019

Lab ID: C1912035-003A **Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-V(C-DCE-1,1DCE	TC	-15			Analyst: RJP
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	12/18/2019 3:24:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/18/2019 3:24:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	12/18/2019 3:24:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	12/18/2019 3:24:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	12/18/2019 3:24:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/18/2019 3:24:00 PM
1,2,4-Trimethylbenzene	1.8	0.74		ug/m3	1	12/18/2019 3:24:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/18/2019 3:24:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/18/2019 3:24:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	12/18/2019 3:24:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	12/18/2019 3:24:00 PM
1,3,5-Trimethylbenzene	0.54	0.74	J	ug/m3	1	12/18/2019 3:24:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	12/18/2019 3:24:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/18/2019 3:24:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	12/18/2019 3:24:00 PM
1,4-Dioxane	2.6	1.1		ug/m3	1	12/18/2019 3:24:00 PM
2,2,4-trimethylpentane	0.61	0.70	J	ug/m3	1	12/18/2019 3:24:00 PM
4-ethyltoluene	0.49	0.74	J	ug/m3	1	12/18/2019 3:24:00 PM
Acetone	1.3	0.71		ug/m3	1	12/18/2019 7:14:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	12/18/2019 3:24:00 PM
Benzene	1.4	0.48		ug/m3	1	12/18/2019 3:24:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	12/18/2019 3:24:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/18/2019 3:24:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	12/18/2019 3:24:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	12/18/2019 3:24:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/18/2019 3:24:00 PM
Carbon tetrachloride	< 0.19	0.19		ug/m3	1	12/18/2019 3:24:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	12/18/2019 3:24:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	12/18/2019 3:24:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	12/18/2019 3:24:00 PM
Chloromethane	1.2	0.31		ug/m3	1	12/18/2019 3:24:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	12/18/2019 3:24:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/18/2019 3:24:00 PM
Cyclohexane	1.0	0.52		ug/m3	1	12/18/2019 3:24:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/18/2019 3:24:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	12/18/2019 3:24:00 PM
Ethylbenzene	9.1	0.65		ug/m3	1	12/18/2019 3:24:00 PM
Freon 11	1.5	0.84		ug/m3	1	12/18/2019 3:24:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	12/18/2019 3:24:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	12/18/2019 3:24:00 PM

Qualifiers: SC Sub-Contracted

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

Estimated Value above quantitation range
Analyte detected below quantitation limit
Not Detected at the Limit of Detection

Date: 23-Dec-19

CLIENT:Lu EngineersClient Sample ID: OA-01Lab Order:C1912035Tag Number: 360,292Project:Rome BOA SVICollection Date: 12/11/2019

Lab ID: C1912035-003A **Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC	-DCE-1,1DCE	TC)-15			Analyst: RJP
Freon 12	2.9	0.74		ug/m3	1	12/18/2019 3:24:00 PM
Heptane	1.2	0.61		ug/m3	1	12/18/2019 3:24:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/18/2019 3:24:00 PM
Hexane	2.0	0.53		ug/m3	1	12/18/2019 3:24:00 PM
Isopropyl alcohol	2.1	0.37		ug/m3	1	12/18/2019 3:24:00 PM
m&p-Xylene	13	1.3		ug/m3	1	12/18/2019 3:24:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/18/2019 3:24:00 PM
Methyl Ethyl Ketone	1.4	0.88		ug/m3	1	12/18/2019 3:24:00 PM
Methyl Isobutyl Ketone	0.82	1.2	J	ug/m3	1	12/18/2019 3:24:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	12/18/2019 3:24:00 PM
Methylene chloride	0.52	0.52		ug/m3	1	12/18/2019 3:24:00 PM
o-Xylene	4.9	0.65		ug/m3	1	12/18/2019 3:24:00 PM
Propylene	< 0.26	0.26		ug/m3	1	12/18/2019 3:24:00 PM
Styrene	8.7	0.64		ug/m3	1	12/18/2019 3:24:00 PM
Tetrachloroethylene	1.6	1.0		ug/m3	1	12/18/2019 3:24:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	12/18/2019 3:24:00 PM
Toluene	2.6	0.57		ug/m3	1	12/18/2019 7:14:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	12/18/2019 3:24:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	12/18/2019 3:24:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	12/18/2019 3:24:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	12/18/2019 3:24:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	12/18/2019 3:24:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/18/2019 3:24:00 PM

Qualifiers: SC Sub-Contracted

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

IN 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: 23-Dec-19