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March 29, 2022

Benjamin McPherson  
Project Manager  
NYSDEC  
Division of Environmental Remediation, Region 9  
270 Michigan Avenue  
Buffalo, New York 14203  
Benjamin.mcpherson@dec.ny.gov

**Re: 1200 Jefferson Avenue Site, No. C915346  
Soil Vapor Intrusion Sampling Results**

Dear Ben:

C&S Engineers, Inc. (C&S) has performed soil vapor intrusion (SVI) sampling at the structure located at 1200 Jefferson Avenue, Buffalo, New York 14203 (The Site). The Site currently consists of one (1) commercial mixed-use building that presently serves as a general repair shop for a property management company. The general repair shop is shown on **Figure 1** and is labeled as SCRE Shop. The remainder of the building is currently vacant and contains former offices, a storage space, and a religious center. The exterior of the property includes an asphalt paved alleyway on the west side and vacant grass covered area to the north.

The shop comprises 8,900 sq. ft. of the total building space. All other areas of the building, including the former Zee's property services (10,800 sq. ft. over two floors), a former taxi company (3,300 sq. ft.), and religious space (1,850 sq. ft.), are currently vacant. The property management company operates 5 days of a week, up to 8 hours per day, generally during normal business hours.

The SVI sampling was conducted consistent with the approved November 2021 Remedial Investigation Work Plan (RIWP) for 1200 Jefferson Avenue Site, BCP Site No. C915346. The purpose of the sampling was to evaluate the potential for vapor intrusion into the existing building caused by chlorinated volatile organic compounds (CVOCs) detected in soil and groundwater at the Site. Per the RIWP, C&S collected and subcontracted for the analysis of sub-slab, indoor, and outdoor air samples, performed a limited building assessment, and inventoried chemical and petroleum containers in the sampling area. This letter describes the scope, methods, and findings / results of our SVI assessment.

**METHODS**

The SVI assessment was performed consistent with the NYSDOH document: *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006 (as amended).

C&S' sampling protocols are consistent with NYSDOH guidance, and have been fully detailed in the previously approved RIWP. These sampling protocols were strictly adhered to at the time of sampling.

C&S collected the following samples:

<i>Sample ID</i>	<i>Location</i>	<i>Date Sampled</i>
SSV-1	Former FFG Enterprises (Taxi) Building	3/5/2022
IA-1	Former FFG Enterprises (Taxi) Building	3/5/2022
SSV-2	SCRE Shop – Rear	3/5/2022
IA-2	SCRE Shop – Rear	3/5/2022
SSV-3	SCRE Shop – Front	3/5/2022
IA-3	SCRE Shop – Front	3/5/2022
OA-1	West Exterior of Building	3/5/2022
IA-DUP	SCRE Shop - Rear	3/5/2022

SSV = Sub Slab, IA = Indoor Air, OA = Outdoor Air

Sample locations were selected by C&S based on the locations called out in the previously approved RIWP.

The sample locations are shown on **Figure 1**.

The air samples were analyzed by Centek Labs of Syracuse, New York. The samples were analyzed via USEPA Method TO-15 for VOCs. Centek's analytical methods are consistent with USEPA protocols for collecting air samples using TO-15 Summa™ canisters [(Compendium of Methods for the Determination of Compounds in Ambient Air, Second Edition, Compendium Method TO-15, Determination of Volatile Organic Compounds in Air Collected in Specially-prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GCMS)]. Each batch of canisters is certified clean by the laboratory according to USEPA Method TO-15.

## FINDINGS / RESULTS

The NYSDOH document: *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006 (as amended), states that soil vapor sampling results should be reviewed as a whole, in combination with the results of other environmental sampling, to identify trends and variations in the data. It also indicates that, to put perspective on the data, soil vapor results should be compared to background outdoor air levels, site-related outdoor and indoor air sampling results, and the NYSDOH's guidelines for VOCs in air. NYSDOH has a very limited list of compounds with air guideline values (AGV):

<i>Compound</i>	<i>AGV (<math>\mu\text{g}/\text{M}^3</math>)</i>
Methylene Chloride	60
PCBs	1
tetrachlorodibenzo-p-dioxin	0.00001
Tetrachloroethene (PCE)	30
Trichloroethene (TCE)	2

In addition, the NYSDOH has developed decision matrices to be used as a risk management tool for data assessment. They are designed to be applied on a case-by-case basis regarding actions that should be taken to address current and potential exposures related to SVI. The decision matrices are as follows:

*Matrix A* – carbon tetrachloride, 1,1-dichloroethene, cis-1,2-dichloroethene (DCE), and trichloroethene (TCE).

<b>Sub-Slab Vapor Concentration of Compound (<math>\mu\text{g}/\text{M}^3</math>)</b>	<b>Indoor Air Concentration of Compounds (<math>\mu\text{g}/\text{M}^3</math>)</b>		
	< 0.2	0.2 to < 1	1+
< 6	No further action	No further action	Identify source(s) and resample or mitigate
6 to < 60	No further action	Monitor	Mitigate
60+	Mitigate	Mitigate	Mitigate

Matrix B – methylene chloride, tetrachloroethene (PCE), and 1,1,1-trichloroethane.

Sub-Slab Vapor Concentration of Compound ( $\mu\text{g}/\text{M}^3$ )	Indoor Air Concentration of Compounds ( $\mu\text{g}/\text{M}^3$ )		
	< 3	3 to 10	10+
< 100	No further action	No further action	Identify source(s) and resample or mitigate
100 to < 1,000	No further action	Monitor	Mitigate
1,000+	Mitigate	Mitigate	Mitigate

Matrix C – vinyl chloride

Sub-Slab Vapor Concentration of Compound ( $\mu\text{g}/\text{M}^3$ )	Indoor Air Concentration of Compounds ( $\mu\text{g}/\text{M}^3$ )	
	< 0.2	0.2+
< 6	No further action	Identify source(s) and resample or mitigate
6 to < 60	Monitor	Mitigate
60+	Mitigate	Mitigate

NYSDOH explains No Further Action, Identify Source(s) and Resample or Mitigate, Monitor, and Mitigate as follows:

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: DOH recommends that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, DOH recommends the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: DOH recommends monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

*Mitigate:* DOH recommends mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building -specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

The air sampling results were compared to applicable guidance to provide some measure of evaluation to the findings. The following observations regarding the data are provided:

- CVOCs were detected in all of the samples collected at the Site. The detected compounds of include: TCE, PCE, methylene chloride, vinyl chloride, cis-1,2-dichloroethene (DCE), carbon tetrachloride, and 1,1,1,-trichloroethane.
- Concentrations of CVOCs detected in sub-slab air samples appear to generally increase moving from north to south across the Site, with the highest detections of CVOCs found within sample SSV-3.
- TCE was detected at each sample location.
  - Indoor air appeared to be minimally impacted with concentrations ranging from non-detect to 0.27  $\mu\text{g}/\text{m}^3$ .
  - The concentrations in the sub-slab air samples were detected at 24  $\mu\text{g}/\text{m}^3$  at SSV-1, 29  $\mu\text{g}/\text{m}^3$  at SSV-2, and 79  $\mu\text{g}/\text{m}^3$  at SSV-3.
  - Based upon the NYSDOH Decision Matrix A, the air concentrations detected indicate an action level of Monitor in the area of IA-2/SSV-2 and an action level of Mitigate in the area of IA-3/SSV-3. Both of these locations are associated with the SCRE Shop.
- PCE was detected at each sample location.
  - Indoor air appeared to be marginally impacted with PCE. Concentrations detected in each indoor air sample ranged from 1.9 to 4.5  $\mu\text{g}/\text{m}^3$ .
  - Concentrations of PCE in sub-slab air were detected at much higher values. PCE was detected in sub-slab air samples SSV-2 and SSV-3 at 1300  $\mu\text{g}/\text{m}^3$  and 6100  $\mu\text{g}/\text{m}^3$ , respectively.
  - Based upon the NYSDOH Decision Matrix B, the sub-slab air concentrations detected for PCE indicate an action level of Mitigate for both sample locations SSV-2 and SSV-3. Both of these locations are associated with the SCRE Shop.
- Methylene chloride was detected at each sample location.
  - Indoor air samples appeared to be minimally impacted with methylene chloride. Concentrations detected in each indoor air sample ranged from 1.6 to 3.5  $\mu\text{g}/\text{m}^3$ .

- Sub-slab air samples also appeared to be minimally impacted with methylene chloride. Concentrations detected in each sub-slab air sample ranged from 2.2 to 6.6  $\mu\text{g}/\text{m}^3$ .
- Vinyl chloride was detected in one sub-slab sample, SSV-1, at a concentration of 10  $\mu\text{g}/\text{m}^3$ .
- DCE was detected at each sample location.
  - Indoor air samples appeared to be minimally impacted with. Concentrations detected in each indoor air sample ranged from 0.36 to 0.87  $\mu\text{g}/\text{m}^3$ .
  - Sub-slab air concentrations were detected in each sample at concentrations ranging from 1.6 to 11  $\mu\text{g}/\text{m}^3$ .
- 1,1,1,-trichloroethane was detected in one sub-slab air sample, SSV-3, at a concentration of 3.1  $\mu\text{g}/\text{m}^3$ .
- Carbon tetrachloride was detected at low levels in each indoor air sample. Concentrations were detected at values ranging from 0.38 to 0.44  $\mu\text{g}/\text{m}^3$ .

A summary of the sampling data as well as the laboratory analytical data report are attached.

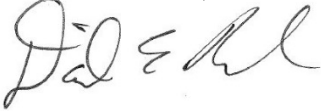
## CONCLUSION

Based on the results of this SVI assessment, the data indicates that there are impacts to indoor air quality. The concentrations of TCE, PCE, and DCE in the indoor air samples did not exceed NYSDOH's AGV's; however, sub-slab air concentrations have been detected at levels that raise concern for future indoor air contamination. The concentrations of TCE, PCE, and DCE when applied to the applicable NYSDOH Decision Matrix, indicates an action level of Monitor is recommended for TCE and DCE (Matrix A), as well as a recommended action level of Mitigate for PCE (Matrix B). Therefore, it is our recommendation that as a part of reuse construction, the building be modified to prevent SVI. Mitigation measures may include sealing preferential pathways (floor cracks, pipe penetrations, etc.) in combination with a sub-slab depressurization system (SSDS), and changing the pressurization of the building. The type of mitigation or combination of types must be specific to the building taking into account the building construction and operating conditions. It should be noted that mitigation is considered an interim measure until remediation of the source has occurred.

Should you have any questions regarding this letter or require additional information, please feel free to contact the undersigned.

Sincerely,

**C&S ENGINEERS, INC.**



Daniel E. Riker, P.G.  
Department Manager, Environmental Services










Alex Brennen  
Environmental Engineer

Attachments: Sample Location Map  
Data Summary  
Laboratory Analytical Report

# Sample Location Map



**LEGEND:**

-  BCP SITE BOUNDARY
-  PARCEL BOUNDARY
-  SSV-1/IA-1 RI SUBSLAB VAPOR/INDOOR AIR SAMPLE
-  OA-1 RI OUTDOOR AIR SAMPLE
-  APPROXIMATE LOCATION OF 8,000-GALLON CLOSED-IN-PLACE UST
-  BUILDING PARTITIONS
-  BUILDING PARTITIONS TO BE DEMOLISHED



SCALE: 1 INCH = 40 FEET  
SCALE IN FEET  
(approximate)



**RI SAMPLE LOCATIONS -AIR**

REMEDIAL INVESTIGATION WORK PLAN  
1200 JEFFERSON AVENUE SITE  
BUFFALO, NEW YORK

PREPARED FOR  
1200 JEFFERSON PROPERTIES, LLC

**FIGURE 1**

C&S Engineers, Inc.

141 Elm Street  
Buffalo, New York 14203  
Phone: 716-847-1630  
Fax: 716-847-1454  
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# Data Summary

Table 1

**SOIL VAPOR SAMPLING RESULTS  
PRELIMINARY  
1200 JEFFERSON AVENUE**



Location ID	IA-1	SSV-1	IA-2	SSV-2	IA-3	SSV-3	IA-DUP	OA-1
Date Sampled	3/5/2022	3/5/2022	3/5/2022	3/5/2022	3/5/2022	3/5/2022	3/5/2022	3/5/2022
Sample Matrix	Indoor Air	Sub-Slab Air	Indoor Air	Sub-Slab Air	Indoor Air	Sub-Slab Air	Indoor Air	Outdoor Air
Location	Former Taxi Building TO-15	Former Taxi Building TO-15	SCRE Shop - Front TO-15	SCRE Shop - Front TO-15	SCRE Shop - Rear TO-15	SCRE Shop - Rear TO-15	SCRE Shop - Rear TO-15	West Side of Building TO-15
Analysis Units	ug/M <sup>3</sup>	ug/M <sup>3</sup>	ug/M <sup>3</sup>	ug/M <sup>3</sup>	ug/M <sup>3</sup>	ug/M <sup>3</sup>	ug/M <sup>3</sup>	ug/M <sup>3</sup>
NYSDOH Guidance Value								
<b>Volatile Organics</b>								
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	3.1	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	J	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	1.9	ND	2.3	ND	2.2	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	0.59	J	0.69	J	0.84	ND
1,3-butadiene	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND
2,2,4-trimethylpentane	1.4	ND	2.6	ND	6.0	ND	6.7	ND
4-ethyltoluene	ND	ND	0.59	J	0.69	J	0.69	J
Acetone	8.8	79	23	68	21	29	26	9.5
Allyl chloride	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.3	1.4	1.1	3.3	1.5	33	1.5	0.42
Benzyl chloride	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	38	ND	2.6	ND	3.1	0.34	J
Carbon tetrachloride	0.44	ND	0.44	ND	0.44	ND	0.38	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	4.0	0.63	J	71	0.83	400	0.78
Chloromethane	0.83	ND	0.93	ND	0.93	ND	0.93	0.74
cis-1,2-Dichloroethene	0.87	11	0.36	4.2	0.36	1.6	0.36	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	1.5	20	1.4	24	2.6	65	2.6	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl acetate	ND	ND	ND	ND	ND	0.83	ND	ND
Ethylbenzene	0.56	J	ND	1.1	ND	1.6	0.52	J
Freon 11	1.1	0.96	1.2	1.1	1.2	1.1	1.2	1.1
Freon 113	ND	ND	ND	ND	ND	ND	ND	ND
Freon 114	ND	ND	ND	ND	ND	ND	ND	ND
Freon 12	2.3	2.1	2.2	2.2	2.2	2.1	2.1	2.2
Heptane	1.2	38	1.1	35	2.0	110	2.3	ND
Hexachloro-1,3-butadiene	ND	ND	ND	ND	ND	ND	ND	ND
Hexane	3.7	47	2.9	33	5.0	100	6.1	ND
Isopropyl alcohol	0.93	6.4	1.7	2.6	1.7	3.3	2.6	0.76
m&p-Xylene	1.9	ND	4.9	1.0	J	7.4	0.69	J
Methyl Butyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Ethyl Ketone	1.5	J	48	3.0	64	J	3.8	130
Methyl Isobutyl Ketone	ND	ND	ND	1.4	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	60	3.5	6.6	1.9	2.2	1.8	4.3	1.6
o-Xylene	0.52	ND	1.6	ND	2.3	ND	2.1	ND
Propylene	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	0.68	ND	1.0	ND	ND
Tetrachloroethylene	30	1.9	1.8	3.4	1300	4.5	6100	3.9
Tetrahydrofuran	ND	ND	4.6	ND	5.6	ND	7.4	ND
Toluene	5.2	3.1	5.2	11	7.8	29	6.4	ND
trans-1,2-Dichloroethene	ND	8.7	ND	ND	ND	1.8	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	2	ND	24	0.27	29	0.21	79	ND
Vinyl acetate	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Bromide	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	10	ND	ND	ND	ND	ND	ND

- Analytical results compared to NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.

- Results and guidance in ug/m<sup>3</sup>

- Blank space indicates that a NYSDOH Guidance Value does not exist

- ND indicates analyte was not detected above laboratory detection limits.

- "J" indicates the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

# Laboratory Analytical Report



# Centek/SanAir Technologies Laboratory

Date: 08-Mar-22

**CLIENT:** C & S Engineers, Inc.  
**Lab Order:** C2203014  
**Project:** 1200 Jefferson Ave BCP  
**Lab ID:** C2203014-001A

**Client Sample ID:** SSV-1  
**Tag Number:** 107,1168  
**Collection Date:** 3/1/2022  
**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
UGM ME D 5			5			A R
Fr						AM
H						AM
H						AM
H						AM
I						AM
						AM
M						AM
M						AM
M						AM
M						AM
M						AM
						AM
						AM
						AM
T						AM
T						AM
T						AM
						AM
						AM
Tr						AM
V						AM
V						AM
V						AM

**Qualifiers:** SC Sub-Contracted . Results reported are not blank corrected  
 B Analyte detected in the associated Method Blank E Estimated Value above quantitation range  
 H 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 DL Detection Limit



# Centek/SanAir Technologies Laboratory

Date: 08-Mar-22

**CLIENT:** C & S Engineers, Inc.  
**Lab Order:** C2203014  
**Project:** 1200 Jefferson Ave BCP  
**Lab ID:** C2203014-002A

**Client Sample ID:** IA-1  
**Tag Number:** 128,260  
**Collection Date:** 3/1/2022  
**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
UG M	UG M	E	D	E	D	E
Fr			5			A
H						R
H						
H						
I						
M						
M						
M						
M						
M						
T						
T						
T						
Tr						
V						
V						
V						

**Qualifiers:** SC Sub-Contracted . Results reported are not blank corrected  
 B Analyte detected in the associated Method Blank E Estimated Value above quantitation range  
 H 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 DL Detection Limit





**Centek/SanAir Technologies Laboratory**

Date: 08-Mar-22

**CLIENT:** C & S Engineers, Inc.  
**Lab Order:** C2203014  
**Project:** 1200 Jefferson Ave BCP  
**Lab ID:** C2203014-003A

**Client Sample ID:** SSV-2  
**Tag Number:** 357,269  
**Collection Date:** 3/1/2022  
**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
UGM ME D 5			5			AR
Fr						AM
H						CM
H						AM
H						CM
I						AM
						AM
M						AM
M						CM
M						AM
M						AM
M						AM
						AM
						AM
						AM
						AM
T						CM
T						AM
T						CM
						AM
						AM
Tr						CM
V						AM
V						AM
V						AM

**Qualifiers:** SC Sub-Contracted . Results reported are not blank corrected  
 B Analyte detected in the associated Method Blank E Estimated Value above quantitation range  
 H 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 DL Detection Limit







**Centek/SanAir Technologies Laboratory**

Date: 08-Mar-22

**CLIENT:** C & S Engineers, Inc.  
**Lab Order:** C2203014  
**Project:** 1200 Jefferson Ave BCP  
**Lab ID:** C2203014-005A

**Client Sample ID:** SSV-3  
**Tag Number:** 367,258  
**Collection Date:** 3/1/2022  
**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
UGM ME D 5			5			AR
Fr						AM
H						AM
H						AM
H						AM
I						AM
						AM
M						AM
M						AM
M						AM
M						AM
M						AM
						AM
						AM
						AM
T						AM
T						AM
T						AM
						AM
						AM
Tr						AM
V						AM
V						AM
V						AM

**Qualifiers:** SC Sub-Contracted . Results reported are not blank corrected  
 B Analyte detected in the associated Method Blank E Estimated Value above quantitation range  
 H 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 DL Detection Limit









**Centek/SanAir Technologies Laboratory**

Date: 08-Mar-22

**CLIENT:** C & S Engineers, Inc.  
**Lab Order:** C2203014  
**Project:** 1200 Jefferson Ave BCP  
**Lab ID:** C2203014-007A

**Client Sample ID:** IA-DUP  
**Tag Number:** 1545,253  
**Collection Date:** 3/1/2022  
**Matrix:** AIR

Analyses	Result	DL	Qual	Units	DF	Date Analyzed
UGM	UGM	E	D	E	D	E
Fr			5			A
H						R
H						
H						
I						
M						
M						
M						
M						
M						
T						
T						
T						
Tr						
V						
V						
V						

**Qualifiers:** SC Sub-Contracted . Results reported are not blank corrected  
 B Analyte detected in the associated Method Blank E Estimated Value above quantitation range  
 H 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 DL Detection Limit



