Prepared For

JCI JONES CHEMICALS, INC.

SOIL VAPOR INTRUSION REPORT

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1. Introduction

On behalf of JCI Jones Chemicals, Inc. (JCI), Beech and Bonaparte, P.C., a Geosyntec Consultants, Inc. Company (Geosyntec) has prepared this Soil Vapor Intrusion Monitoring Report to present the results of the recent indoor air (IA) and sub-slab (SS) monitoring conducted at the JCI Superfund site located in Caledonia, New York (herein referred to as "Site"). The air monitoring samples were collected at locations recommended in the 2017 Soil Vapor Intrusion Investigation Report (Geosyntec 2017) and in subsequent discussions and comments from the United States Environmental Protection Agency (USEPA) outlined in their 19 January 2018 electronic mail. The February 2018 monitoring included collection of IA samples at four previously sampled locations (JCI-3, JCI-3A, JCI-4 and JCI-4A). In addition, as requested by USEPA, paired IA and SS air samples were also collected at JCI-1A as they could not be sampled during last annual monitoring in February 2017 due to construction activities. The Site layout and the sampling locations are illustrated on **Figure 1**.

2. Background

Between 2009 and 2017, soil vapor intrusion (SVI) sampling, consisting of paired indoor and sub-slab air samples, was conducted at numerous on- and off-Site residential and commercial/industrial locations as shown on **Figure 1**. The SVI sampling was conducted in consultation with the USEPA, New York State Department of Environmental Conservation (NYSDEC), and New York State Department of Health (NYSDOH), which are collectively referred to herein as "the Agencies."

Results of the 2009 to 2017 sampling were evaluated against USEPA and NYSDOH conservative screening values. Data from paired IA/SS samples were compared to NYSDOH guidelines/matrices for all contaminants of interest (COIs; chlorinated ethenes) to determine future actions at each sampling location; the initial screening of data against USEPA screening levels was a necessary step used to identify background sources and COI exceedances, as NYSDOH guidance values have a limited number of analytes. Sample location details and historic/current results are presented in **Table 1** and **Table 2**, respectively.

Based on the above screening and evaluation against the NYSDOH matrices, a number of off-Site sampling locations either required No Further Action or had detections unrelated to the Site. However, some of the sampling locations at the Site required additional monitoring and/or mitigation according to NYSDOH matrices. In December 2012, a sub-slab depressurization system (SSDS) was installed in the office locations of JCI facility (at the JCI-1 sample location; **Figure 1**).

In April 2014, another round of paired indoor and sub-slab air sampling (JCI-1A, JCI-1B, JCI-1C, JCI-2, JCI-3, JCI-3A, JCI-4, and JCI-4A) was conducted at the Site to monitor potential vapor intrusion (Arcadis 2014). The 2014 sample results did not indicate exceedances of Site-related COIs (i.e., chlorinated ethenes) above USEPA Regional Screening Levels (RSLs) in the indoor air samples. In

the sub-slab samples collected from the JCI warehouses, COI exceedances were noted in a few samples (JCI-1A, JCI-3, JCI-3A and JCI-4)). Per the NYSDOH matrices, these locations required additional monitoring or mitigation.

In October 2014, the Agencies, taking into account the industrial nature of the Site (since 1938) and well-aerated large-sized warehouses and production buildings that are minimally occupied, approved a sampling plan for the Site to monitor indoor air quality over time. Accordingly, indoor air monitoring for volatile organic compounds (VOCs) was to be conducted annually for a period of three years at five previously sampled locations (JCI-1A, JCI-3, JCI-3A, JCI-4, and JCI-4A). During the first (2015) and second (2016) years, only indoor air samples were to be collected at these locations. In the third year (2017) of the sampling, paired indoor and sub-slab air samples were to be collected at these locations. At the end of the third year, the comprehensive results were to be evaluated to determine future actions. The results of the 2015, 2016 and 2017 sampling are summarized in Arcadis (2015 and 2016) reports and Geosyntec (2017); the analytical data are present in **Table 2**.

Based on the 2017 IA/SS sampling results (Geosyntec 2017), annual indoor air quality monitoring was recommended at JCI-3, JCI-3A and JCI-4 due to exceedance of the COI criteria. In January 2018, the Agencies requested indoor air sampling at JCI-4A location and paired IA/SS sampling at JCI-1A be added to the 2018 monitoring list due to low COI detections and because JCI-1A location could not be sampled during 2017 monitoring due construction activities.

The February 2018 monitoring is discussed below.

3. February 2018 Vapor Intrusion Monitoring

The annual air monitoring was conducted on 22 February 2018. As discussed above, IA samples were collected at JCI-3, JCI-3A, JCI-4 and JCI-4A locations and a paired IA/SS sample at JCI-1A locations (Figure 1). An ambient sample was also collected north of the warehouse. The sub-slab sample JCI-1A SS was collected from the previous permanent sampling port with threaded caps installed in 2014 (Arcadis 2014). However, this sampling port had to be modified in 2018 by adding a section of tubing to the sampling port to bring it up to the concrete floor. All sampling was performed in general accordance with NYSDOH (2006; 2017) and USEPA (2015; 2018) guidance.

Pre-Sampling Questionnaire and Building Inventory

A pre-sampling questionnaire and building inventory survey was conducted prior to sampling. A product inventory was also conducted in the vicinity of each sampling location to identify and potentially mitigate conditions that might interfere with and/or compromise analytical results. In addition to taking an inventory of chemical products, a semi-quantitative assessment of indoor air VOCs was made using a photoionization detector (PID) with a detection limit in the part per billion

range. Numerous chemical products (various oils, spray paint, fuel containers, etc.) typically used at an industrial setting were identified at the Site. PID readings taken near product-storage locations ranged up to 10 parts per million. Many of these products could potentially influence indoor air quality. The questionnaire and product inventory is included in **Attachment A**.

Canister Handling

Laboratory-provided, batch-certified-clean, 1-liter SUMMA® canisters with flow regulators were used to collect the samples. A 2-micron filter was affixed to the flow regulators to prevent particulates from entering the canisters during sample collection. The SUMMA® canisters had an initial vacuum of at least 28 inches of mercury (in. of Hg). Flow regulators were pre-set to collect a sample over an 8-hour interval, as the Site is an industrial facility. Upon completion of sampling, the canister was closed, leaving a vacuum in the canister as a means for the laboratory to verify the canister did not leak while in transit.

The following canister vacuum readings were obtained in connection with sampling and analysis: (1) following canister cleaning for shipping to the field; (2) prior to sampling, with all the connections and leak checks completed; (3) at the end of sampling; and (4) prior to analysis in the laboratory. In addition, vacuum readings were checked periodically after commencement of sampling in order to confirm continuation of appropriate sample flow rates.

Documentation

Documentation of field activities (e.g., sampling techniques, product inventory) are presented in **Attachment A**. In addition, the field sampling team noted the following details for each sample collected:

- Sample identification
- Date and time of sample collection
- Identification of each SUMMA® canister
- Sampling methods and devices
- Vacuum of canister before and after sampling
- Photographs of the sampling location
- Any other pertinent information, such as spills, floor stains, chemicals stored, odor, and reading from field instrumentation (e.g., PID)
- Chain-of-custody

Laboratory Analyses

All samples were analyzed at Centek Laboratories, LLC, Syracuse, New York, an air quality testing laboratory with National Environmental Laboratory Accreditation Conference certification. Upon collection, samples were hand-delivered to Centek under routine chain of custody for the analysis of VOCs using USEPA Method TO-15. Analytical results are attached in **Appendix B**.

4. Discussion of Sampling Results and Recommendations

The sub-slab soil vapor, indoor air, and ambient air data collected from each location were evaluated considering several factors:

- Whether the constituent is site-related
- Potential presence of background sources
- Comparison to both USEPA Vapor Intrusion Screening Levels (VISL; March 2018) and NYSDOH guidelines/matrices (2017) were used for all COIs to determine future actions at each sample location.
- Comparison to previous data results
- Comparison of sub-slab soil vapor to indoor air results (i.e., NYSDOH matrices)

The collected data is considered together in a weight of evidence to make a determination regarding vapor intrusion at the Site. USEPA guidelines are used as an initial comparison to identify exceedances overall for Site-related and non-Site related COIs. However, the NYSDOH matrices (2017) are used to determine what, if any, actions are required.

Known COIs related to the Site include chlorinated ethenes such as tetrachloroethene (PCE), trichloroethene (TCE) and degradation products. VOC detections not included in this list of site-related COIs are assumed to be related to off-site sources in the area and/or products found within the buildings that were sampled.

Detections of Site-related COIs, and other VOCs, were compared to USEPA VISLs using the current calculator (March 2018). Target indoor air concentrations were based on commercial exposure reflecting a cancer risk of 1×10^{-6} and target hazard quotient of 1.

The analytical results are presented in **Table 1** and **Table 2**. **Figures 2** illustrates the exceedances of USEPA VISL in indoor air for recent and historic samples. Laboratory analytical data are included in **Appendix B**.

In addition to the USEPA VISLs, analytical results were compared to the NYSDOH air guidelines for PCE (30 µg/m^3) and TCE (2 µg/m^3). The NYSDOH air guidelines are protective of an individual who is present at that location for 30 years, 24 hours a day. In the 2018 indoor air samples, PCE in JCI-3A-IA was detected at 30 µg/m^3; in 2017, PCE was 47 µg/m^3 at this location. TCE (2.1 µg/m^3) slightly exceeded the NYSDOH air guidelines in 2018; but in 2015 and 2016 TCE at location was well below the NYSDOH guideline at 0.75 µg/m^3 and 0.59 µg/m^3, respectively.

Finally, the indoor air and sub-slab soil vapor data were compared to the NYSDOH Guidance Matrices (May 2017; Appendix C). The VOCs included in the matrices are as follows:

- Matrix A – TCE, cis-1,2-Dichloroethene, 1,1-Dichlorothene and carbon tetrachloride
- Matrix B – PCE, 1,1,1-trichloroethane, and methylene chloride
- Matrix C – Vinyl chloride

4.1 JCI-1A – JCI Bleach Storage and Tanker Truck Loading Area

A paired IA/SS was collected at JCI-1A location in February 2018. Due to construction activities in this warehouse, indoor and sub-slab air samples at JCI-1A were not collected during the February 2017 monitoring (**Figure 1**). The warehouse was being converted to a bleach manufacturing, storage and tanker truck loading bay area. Prior to 2017, the warehouse was used primarily to park trucks in the winter season. JCI-1A is located in the bleach storage and tanker truck loading bay area.

In the 2018, IA sample JCI-1A, PCE, TCE and other VOCs were detected (**Table 2**). Benzene (2.0 µg/m^3), bromodichloromethane (2.1 µg/m^3), carbon tetrachloride (15 µg/m^3) and chloroform (130 µg/m^3) exceeded their respective IA VISLs. In the SS sample, chloroform (110 µg/m^3) was detected above the SS VISL. With the exception of chloroform, the detections appear low and consistent with past sampling results. Chloroform, however, was elevated and likely a recent occurrence as pre-2018 samples here did not detect such high levels. Chloroform (and carbon tetrachloride) are common by-products of bleach production and given that this sample location is located within just a few feet of where bleach is stored and bleach tanker trucks are loaded, the source of these detections is likely related to the bleach that is stored and handled in this loading bay area. Bleach and other chemicals inventoried in this area are present in **Appendix A**. The OVA screening values of the background air appear typical of an industrial setting.

The elevated chloroform levels detected in the SS sample at this location does not appear to be representative of sub-slab vapor conditions as previous results did not detect chloroform at such high concentrations. The source of chloroform in the SS may likely be due to vapor leaking from above ground due to a compromised sampling port (a section of tubing was added in 2018 to bring the sampling port to the surface). A new SS sampling port may be required at this location to confirm the elevated chloroform levels detected.

According to the NYSDOH matrices (**Appendix C**), this location falls into the identify sources and resample (for TCE) and mitigate (for carbon tetrachloride).

4.2 JCI-3 and JCI-3A – JCI Production Area

Indoor air samples were collected in this production area at the JCI site, where chlorine and sulfur dioxide are handled (**Figure 1**).

JCI-3

JCI-3 is located in the maintenance room (where maintenance equipment and supplies are stored) of the production area (**Figure 1**). Several small containers of paints, cutting oils, and other miscellaneous chemicals common to a maintenance area stored in this room during the IA sampling. Reportedly, there is one employee who is in this room for approximately 2 hours on and off each day (Monday – Friday). The maintenance room has two overhead doors on the east side and one overhead and entry door on the south side of the room.

In the 2018 indoor air sample collected at JCI-3, PCE, TCE and other VOCs were below the VISLs (**Table 2**). The results are consistent with previous indoor air sampling data.

JCI-3A

JCI-3A is located in the chlorine and sulfur dioxide repackaging room, where chlorine and sulfur dioxide containers are processed and filled (**Figure 1**). Several small containers of paints, paint thinners, and stenciling inks were observed in the chlorine and sulfur dioxide repackaging room during the IA sampling. There are two employees who are present in this room for approximately 8 hours each day. There are three overhead doors on both the east and west sides of the room and two entry doors on the south side of the room. The north side of the room opens up into another room that also has overhead doors on the east and west sides.

In indoor air sample JCI-3A, there were no detections above the indoor air VISLs. The result is consistent with previous indoor air sampling data.

4.3 JCI-4 and JCI-4A – JCI Bleach Warehouse

Indoor air samples were collected in this warehouse at the JCI site (**Figure 1**).

JCI-4

JCI-4 is the location of the sodium hypochlorite (bleach) batch manufacturing room (**Figure 1**). There are between one and two employees who are is this room for approximately 2 hours on and off each day (Monday – Friday). There is one overhead door on both the south and east sides and one entry door on both the north and south sides of the room.

In the indoor air sample at JCI-4, carbon tetrachloride (37 µg/m^3) and chloroform (9 µg/m^3) exceeded the VISLs (**Table 2**; **Figure 2**). Other VOCs were detected at concentrations below the VISLs.

JCI-4A

JCI-4A is located in the container hydrostatic testing area of this warehouse (**Figure 1**). There are two to three employees who are in this room for approximately 8 hours each day (Monday – Friday). Several small containers of paints, oils, adhesives and other miscellaneous petroleum distillates common to these operations were observed in this area during the IA sampling. There is one overhead door on the south side of the room, one entry door on both the south and west sides of the room, and a number of large windows that open on the west and north sides of the room.

In the indoor sample JCI-4A, carbon tetrachloride (3.3 µg/m^3) and chloroform (2.7 µg/m^3) exceeded the indoor air VISL. There are other VOCs (Table 2) detected but concentrations are the below indoor VISL.

VOC detections in the indoor samples in both JCI-4 and JCI-4A are consistent with previous IA sample results (**Tables 2**).

4.4 Ambient Sample

One ambient air sample was collected concurrently with the sampling conducted on 22 February 2018 (**Figure 1**); analytical results are presented in **Appendix B**. Acetone, freons, ketone and methylene chloride were detected in the ambient air sample. These VOCs are unrelated to the COIs (chlorinated ethenes) and appear to be consistent with the industrial setting of the Site.

5. Summary and Conclusions

The annual IA sampling at the Site was conducted on 22 February 2018. As recommended in Geosyntec (2017), samples were collected at JCI-1A, JCI-3, JCI-3A, JCI-4 and JCI-4A (**Figure 1**). Additionally, as recommended by the Agencies, a paired IA/SS sample was collected at JCI-1A (this location could not be sampled in 2017 due construction activities).

Low levels of PCE, TCE and other VOCs were detected in the 2018 samples; the concentrations appear consistent with previous sampling results. In the IA sample JCI-1A, benzene, bromodichloroemethane, carbon tetrachloride and chloroform exceeded the VISLs; in the SS sample, chloroform was detected above the VISL. Chloroform detection in the SS sample may likely be due to leakage from above ground due to a compromised sampling port – in 2018, a section of tubing was added to raise the sampling port to surface. Chloroform was detected at relatively low levels in the previous SS sample at this location.

In IA samples JCI-4 and JCI-4A; carbon tetrachloride and chloroform were detected above the VISLs. . Chloroform and carbon tetrachloride detections appear to be related to the bleach handling and loading processes at the Site; both are common by-products of bleach production.

6. Recommendations

Taking into account the industrial nature of the Site (since 1938) and well-aerated large-sized warehouses and production buildings that are minimally occupied, continued indoor air quality sampling is recommended to monitor potential vapor intrusion. Geosyntec recommends continuing annual indoor air monitoring for VOCs at JCI-1A, JCI-4 and JCI-4A locations. If concentrations decline and are below VISL, vapor intrusion monitoring should be discontinued.

It is recommended that JCI evaluate bleach handling and loading processes to mitigate chloroform and carbon tetrachloride detections.

It is also recommended that good air circulation and change rate be maintained at these locations, through cross-ventilation, by keeping overhead doors and windows open when practical. During times when the overhead doors and windows cannot be opened (i.e., winter season), some type of mechanical ventilation such as using industrial size fans should be considered at these locations.

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TABLES

Table 1
Sample Summary Table
JCI Jones Chemical, Inc. - Superfund Site
Calendonia, New York

Sample ID	Location	Property Use	Previous USEPA ID	Indoor Air	Sub-Slab	Comments
JCI-1	JCI – Office Area	Industrial	B5J59	--	--	Sub-slab depressurization system installed December 2012
JCI-1A	JCI - Bleachc Storage and Truck Loading Area	Industrial	None	X	X	IA to be sampled annually
JCI-1B	JCI - Warehouse Area	Industrial	None	--	--	No monitoring recommended; sample if required based on annual IA sampling data
JCI-1C	JCI - Warehouse Area	Industrial	None	--	--	No monitoring recommended; sample if required based on annual IA sampling data
JCI-2	JCI - Warehouse Area	Industrial	B5J60	--	--	No monitoring recommended; sample if required based on annual IA sampling data
JCI-3	JCI - Production Area	Industrial	B5J61	X	X	IA to sampled annually
JCI-3A	JCI - Production Area	Industrial	None	X	X	No monitoring recommended; sample if required based on annual IA sampling data
JCI-4	JCI - Bleach Warehouse	Industrial	B5J62	X	X	IA to sampled annually
JCI-4A	JCI - Bleach Warehouse	Industrial	None	X	X	IA to sampled annually
JCI-5	210 Hardwood Avenue	Mixed Residential/Commercial	B5J68	--	--	JCI purchased this property and demolished the home/structures due to their age.
JCI-6	218 Hardwood Avenue	Mixed Residential/Commercial	B5J57	--	--	Agency to send the correspondence summarizing results and recommendations
JCI-7	3249 Iroquois Road	Residential		--	--	Agency to send the correspondence summarizing results and recommendations
JCI-8	3212 Lehigh Street	Mixed Residential/Commercial		--	--	Agency to send the correspondence summarizing results and recommendations
JCI-9	219 Hardwood Avenue	Residential	B5J66	--	--	Agency to send the correspondence summarizing results and recommendations
JCI-10	3255 Iroquois Road	Residential	None	--	--	Agency to send the correspondence summarizing results and recommendations
JCI-11	3259 Iroquois Road	Residential	None	--	--	Site access not granted; documentation provided to USEPA
JCI-12	3271 Iroquois Road	Residential	None	--	--	Site access not granted; documentation provided to USEPA
JCI-13	3275 Iroquois Road	Residential	B5J63	--	--	Site access not granted; documentation provided to USEPA
JCI-14	3293 Iroquois Road	Residential	None	--	--	Agency to send the correspondence summarizing results and recommendations
JCI-15	3333 Iroquois Road	Residential	None	--	--	Site access not granted; documentation provided to USEPA

Notes:

Table lists Sub-slab (SS) and indoor air (IA) samples from off-site and on-Site locations. Residential samples were collected over a 24-hour period; samples from industrial locations were collected over an 8-hour period
X = sample collected for indoor air/sub-slab during annual monitoring in Feb 2018 (also highlighted)
-- = no sample collected for either indoor air or sub-slab during current monitoring event

Table 2
Volatile Organic Compounds in Industrial Indoor Air and Sub-Slab Soil Vapor
JCI Jones Chemical, Inc. - Superfund Site
Calendonia, New York

Sample Location			JCI Office Area / Warehouse			JCI Bleach Storage and Tanker Truck Loading Area						JCI Warehouse			
Location ID:	Industrial Indoor Air Screening Levels	Industrial Sub-Slab Soil Vapor Screening Levels (AF = 0.03)	JCI-1			JCI-1A						JCI-1B			
Date Collected:			03/22/11	03/22/11	03/12/13	04/03/14	04/03/14	03/18/15	02/11/16	02/22/18	02/22/18	04/03/14	04/03/14	02/01/17	02/01/17
Sample Name:			JCI-1-IA	JCI-1-SS	JCI-1-IA	JCI-1A-IA	JCI-1A-SS	JCI-1A-IA	JCI-1A-IA	JCI-1A-IA	JCI-1A-SS	JCI-1B-IA	JCI-1B-SS	JCI-1B-IA	JCI-1B-SS
Volatile Organics															
1,1,1-Trichloroethane	21,900	730,000	**1**	**220**	**0.12 J**	0.55 U	**230**	1.09 U	0.82 U	**7.6**	**6.3**	0.55 U	**95.9**	0.82 U	**55**
1,1,2,2-Tetrachloroethane	1.66	55	0.23 U	1.6 U	0.23 U	NA	NA	0.69 U	1.0 U	1.0 U	1.0 U	NA	NA	1.0 U	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	21900	730,000	**0.57**	**0.77 J**	**0.64**	**0.61**	**1.46**	1.53 U	NA	NA	NA	**0.61**	**1.76**	NA	NA
1,1,2-Trichloroethane	0.77	26	0.92 U	6.2 U	0.93 U	0.55 U	0.55 U	0.55 U	0.82 U	0.82 U	0.82 U	0.55 U	0.55 U	0.82 U	0.82 U
1,1-Dichloroethane	7.67	256	0.69 U	4.7 U	0.70 U	0.40 U	**1.09**	0.40 U	0.61 U	0.61 U	0.61 U	0.40 U	0.40 U	0.61 U	0.61 U
1,1-Dichloroethene	876	29,200	0.67 U	4.6 U	0.68 U	0.40 U	0.40 U	0.40 U	0.59 U	0.16 U	0.59 U	0.40 U	0.40 U	0.59 U	0.59 U
1,2-Dibromoethane	0.02	1	0.26 U	1.8 U	0.26 U	0.19 U	0.19 U	0.19 U	1.2 U	1.2 U	1.2 U	0.19 U	0.19 U	1.2 U	1.2 U
1,2-Dichlorobenzene	876	29,200	2 U	14 U	2.0 U	NA	NA	NA	0.90 U	0.90 U	0.90 U	NA	NA	0.90 U	0.90 U
1,2-Dichloroethane	0.47	16	**0.12 J**	4.7 U	**0.11 J**	0.40 U	0.40 U	0.40 U	0.61 U	0.61 U	0.61 U	0.40 U	0.40 U	0.61 U	0.61 U
1,2-Dichloropropane	3.31	110	0.78 U	5.3 U	**0.046 J**	0.46 U	0.46 U	0.46 U	0.69 U	0.69 U	0.69 U	0.46 U	0.46 U	0.69 U	0.69 U
1,3-Dichlorobenzene	- -	- -	2 U	14 U	2.0 U	NA	NA	NA	0.90 U	0.90 U	0.90 U	NA	NA	0.90 U	0.90 U
1,4-Dichlorobenzene	1.11	37	**0.063 J**	14 U	**0.032 BJ**	NA	NA	NA	0.90 U	0.90 U	0.90 U	NA	NA	0.90U	0.90 U
2-Butanone (Methyl Ethyl Ketone)	21,900	730,000	**1.1**	**0.38 BJ**		**1.80**	**2.92**	**2.12**	**0.50 J**	**1.4**	**0.86**	**0.71**	**0.80**	**1.2**	**1.5**
2-Hexanone (Methyl Butyl Ketone)	131	4,367	**0.085 BJ**	4.7 U	**0.090 J**	0.41 U	0.41 U	0.41 U	1.2 U	1.2 U	1.2 U	0.41 U	0.41 U	1.2 U	1.2 U
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	13,100	436,667	**0.17 J**	9.4 U	**0.17 J**	**0.61**	0.10 U	0.10 U	1.2 U	1.2 U	1.2 U	0.10 U	0.10 U	1.2 U	1.2 U
Acetone	135,000	4,500,000	**12**	**3.2 BJ**	**12**	0.24 U	0.24 U	0.24 U	**11**	**15**	**7.6**	**5.11**	**5.04**	**14**	**27**
Benzene	1.57	52	**0.67**	**0.29 J**	**0.65**	**1.92**	**5.49**	**0.89**	**1.1**	**2.0**	**1.3**	**0.38**	**0.89**	**0.54**	**0.35**
Bromodichloromethane	0.33	11	**0.099 J**	1.6 U	0.23 U	0.17 U	0.17 U	0.17 U	1.0 U	**2.1**	**1.4**	0.17 U	0.17 U	1.0 U	1.0 U
Bromoform	11.1	370	1.7 U	12 U	1.8 U	NA	NA	NA	1.6 U	1.6 U	1.6 U	NA	NA	1.6 U	1.6 U
Bromomethane	21.9	730	0.66 U	4.5 U	0.67 U	0.39 U	0.39 U	0.39 U	1.6 U	0.58 U	0.58 U	0.39 U	0.39 U	0.58 U	0.58 U
Carbon Disulfide	3,070	102,333	**0.064 J**	3.5 U	**0.063 BJ**	0.31 U	**2.65**	0.31 U	0.47 U	0.47 U	0.47 U	0.31 U	**4.45**	0.47 U	**0.34**
Carbon Tetrachloride	2.04	68	**0.48**	**0.67 J**	**0.68**	**0.57**	**0.57**	**0.57 cS**	**0.69**	**15**	**12**	**0.50**	**0.82**	**0.57**	**0.82**
Chlorobenzene	219	7,300	0.78 U	5.3 U	0.79 U	0.46 U	0.46 U	0.46 U	0.69 U	0.69 U	0.69 U	0.46 U	0.46 U	0.69 U	0.69 U
Chloroethane	--	--	0.89 U	6 U	0.90 U	0.26 U	0.26 U	0.26 U	0.40 U	0.40 U	0.40 U	0.26 U	0.26 U	0.40 U	0.40 U
Chloroform	0.53	18	**0.75 J**	5.6 U	**0.45 J**	0.49 U	**21.0**	0.49 U	0.73 U	**130**	**110**	0.49 U	**1.66**	0.73 U	**6.2**
Chloromethane	394	13,133	**1.2**	**0.55 J**	**1.1**	**1.49**	**0.87**	**1.01**	**1.3**	**1.4**	**1.5**	**1.47**	0.21 U	**1.4**	0.31 U
cis-1,2-Dichloroethene	- -	- -	0.67 U	4.6 U	0.68 U	0.40 U	**5.87**	**0.40**	0.59 U	**0.40**	**0.44**	0.40 U	0.40 U	0.59 U	0.59 U
cis-1,3-Dichloropropene	3.07	102	1.5 U	10 U	1.6 U	0.45 U	0.45 U	0.45 U	0.68 U	0.68 U	0.68 U	0.45 U	0.45 U	0.68 U	0.68 U
Dibromochloromethane	--	--	0.29 U	2 U	0.29 U	0.21 U	0.21 U	0.21 U	1.3 U	1.3 U	1.3 U	0.21 U	0.21 U	1.3 U	1.3 U
Ethylbenzene	4.91	164	**0.33 J**	9.9 U	**0.14 J**	**1.22**	**3.43**	0.43 U	0.65 U	**0.43**	0.65 U	0.43 U	**0.48**	0.65 U	0.65 U
m&p-Xylene	438	14,600	**1 J**	**0.38 J**	**0.47 J**	**3.95**	**9.43**	**0.83**	**1.1 J**	**1.5**	**0.87**	0.43 U	**1.78**	0.43	**0.96**
Methyl tert-butyl ether	47.2	1,573	1.2 U	8.2 U	1.2 U	0.36 U	0.36 U	0.36 U	0.54 U	0.54 U	0.54 U	0.36 U	0.36 U	0.54 U	0.54 U
Methylene Chloride	1,230	41,000	**0.3 J**	**29**	**0.27 J**	**1.36**	**1.48**	**0.82**	**0.45 J**	**2.2**	**1.9**	**1.40**	**0.82**	**0.83**	**0.56**
o-Xylene	438	14,600	**0.3 J**	9.9 U	**0.22 J**	NA	NA	NA	0.65 U	**0.61**	0.65 U	NA	NA	0.65 U	0.65 U
Styrene	4,380	146,000	**0.11 J**	9.8 U	**0.089 J**	NA	NA	0.43 U	0.64 U	0.64 U	0.64 U	NA	NA	0.64 U	0.64 U
Tetrachloroethene	47.2	1,573	**3.4**	**610**	**0.68**	**2.03**	**1,140**	**9.22**	**6.6**	**6.8**	**9.2**	**0.27**	**158**	1.0 U	**3**
Toluene	21,900	730,000	**2.7**	**0.65 J**	**0.85**	**7.23**	**17.1**	**2.18**	**1.4**	**3.1**	**1.8**	**0.41**	**2.67**	**1.0**	**1.4**
trans-1,2-Dichloroethene	--	--	0.67 U	4.6 U	0.68 U	0.40 U	**0.71**	0.40 U	0.59 U	0.59 U	0.59 U	0.40 U	0.40 U	0.59 U	0.59 U
trans-1,3-Dichloropropene	- -	- -	0.77 U	5.2 U	0.78 U	0.45 U	0.45 U	0.45 U	0.68 U	0.68 U	0.68 U	0.45 U	0.45 U	0.68 U	0.68 U
Trichloroethene	2.99	100	**0.64**	**13**	**0.086 J**	0.13 U	**151**	**0.75**	**0.59**	**2.1**	**2.4**	0.13 U	**31.6**	0.21 U	**9.2**
Trichlorofluoromethane	--	--	**1.4**	**1.2 J**	**1.6**	**2.87**	**1.52**	**2.14**	NA	NA	NA	**1.63**	**1.46**	NA	NA
Vinyl Acetate	876	29,200	7.7 U	52 U	7.7 U	0.35 U	0.35 U	0.35 U	0.53 U	0.53 U	0.53 U	0.35 U	0.35 U	0.53 U	0.53 U
Vinyl Chloride	2.79	93	0.092 U	0.62 U	0.093 U	0.06 U	0.06 U	0.06 U	0.10 U	0.10 U	0.38 U	0.06 U	0.06 U	0.1 U	0.38 U

Notes:
Concentrations presented in micrograms per cubic meter ($\mu g/m^3$)
Highlighted cells indicate samples collected in February 2018
Bracketed results represent duplicate samples
Bold results are detections.
Sample results exceeding VISLs are shaded gray. Results were compared to criteria as follows:
- Indoor Air Samples were compared to Vapor Intrusion Screening Levels (VISLs) generated via the USEPA calculator on 28 March 2018 for commerical exposure scenario with a Target Risk of 1E-06 and Target Hazard Quotient of 1.

- Subslab Soil Vapor Samples were compared to commerical Subslab Soil VISLs {a calculated value based on subslab attenuation factor (AF) of 0.03).

IA = Indoor Air Sample.
SS = Subslab Soil Vapor Sample.
NA = Not Available/Applicable.

Lab Qualifiers:
D = sample repeated at a dilution
B = data flagged due to low-level detections in method blanks
c = calibration acceptability criteria exceeded for this analyte
J = indicates an estimated value
S = recovery exceeded control limits for this analyte

U = compound was analyzed for but not detected; the associated value is the compound quantitation limit

Table 2
Volatile Organic Compounds in Industrial Indoor Air and Sub-Slab Soil Vapor
JCI Jones Chemical, Inc. - Superfund Site
Calendonia, New York

Sample Location			JCI Warehouse				JCI Warehouse						
Location ID:	Industrial Indoor Air Screening Levels	Industrial Sub-Slab Soil Vapor Screening Levels (AF = 0.03)	JCI-1C				JCI-2						
Date Collected:			04/03/14	04/03/14	02/01/17	02/01/17	03/22/11	03/22/11	04/03/14	04/03/14	02/01/17	02/01/17	02/01/17
Sample Name:			JCI-1C-IA	JCI-IC-SS	JCI-1C-IA	JCI-1C-SS	JCI-2-IA	JCI-2-SS	JCI-2-IA	JCI-2-SS	JCI-2-IA	DUP	JCI-2-SS
Volatile Organics													
1,1,1-Trichloroethane	21,900	730,000	0.55 U	**56.5**	0.82 U	**29**	**0.068 J**	**33**	0.55 U	**60.7**	0.82 U	0.82 U	**23**
1,1,2,2-Tetrachloroethane	1.66	55	NA	NA	1.0 U	1.0 U	0.22 U	7.2 U	NA	NA	1.0 U	1.0 U	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	21900	730,000	**0.61**	**1.30**	NA	NA	**0.58**	8.2 U	**0.61**	**0.92**	NA	NA	NA
1,1,2-Trichloroethane	0.77	26	0.55 U	0.55 U	0.82 U	0.82 U	0.86 U	29 U	0.55 U	0.55 U	0.82 U	0.82 U	0.82 U
1,1-Dichloroethane	7.67	256	0.40 U	0.40 U	0.61 U	0.61 U	0.65 U	22 U	0.40 U	0.40 U	0.61 U	0.61 U	0.61 U
1,1-Dichloroethene	876	29,200	0.40 U	0.40 U	0.59 U	0.59 U	0.63 U	21 U	0.40 U	0.40 U	0.59 U	0.59 U	0.59U
1,2-Dibromoethane	0.02	1	0.19 U	0.19 U	1.2 U	1.2 U	0.24 U	8.2 U	0.19 U	0.19 U	1.2 U	1.2 U	1.2 U
1,2-Dichlorobenzene	876	29,200	NA	NA	0.90 U	0.90 U	1.9 U	63 U	NA	NA	0.90 U	0.90 U	0.90 U
1,2-Dichloroethane	0.47	16	0.40 U	0.40 U	0.61 U	0.61 U	**0.069 J**	22 U	0.40 U	0.40 U	0.61 U	0.61 U	0.61 U
1,2-Dichloropropane	3.31	110	0.46 U	0.46 U	0.69 U	0.69 U	0.73 U	24 U	0.46 U	0.46 U	0.69 U	0.69 U	0.69 U
1,3-Dichlorobenzene	- -	- -	NA	NA	0.90 U	0.90 U	1.9 U	63 U	NA	NA	0.90 U	0.90 U	0.90 U
1,4-Dichlorobenzene	1.11	37	NA	NA	0.90 U	0.90 U	1.9 U	63 U	NA	NA	0.90 U	0.90 U	0.90 U
2-Butanone (Methyl Ethyl Ketone)	21,900	730,000	**0.59**	**1.80**	**0.41**	**1.0**	**0.79 J**	31 U	**0.77**	**0.41**	0.88 U	0.38	**1.1**
2-Hexanone (Methyl Butyl Ketone)	131	4,367	0.41 U	0.41 U	1.2 U	1.2 U	**0.071 BJ**	22 U	0.41 U	0.41 U	1.2 U	1.2 U	1.2 U
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	13,100	436,667	0.10 U	0.10 U	1.2 U	1.2 U	**0.057 J**	43 U	0.10 U	0.10 U	1.2 U	1.2 U	1.2 U
Acetone	135,000	4,500,000	**4.61**	**15.1**	**6.3**	**15**	**4.7 BJ**	**500**	**4.28**	**2.99**	**6.5**	**5.7**	**17**
Benzene	1.57	52	**0.35**	**3.23**	**0.45**	0.48 U	**0.45 J**	17 U	**0.35**	0.32 U	**0.45**	**0.42**	0.35
Bromodichloromethane	0.33	11	0.17 U	0.17 U	1.0 U	1.0 U	0.22 U	7.2 U	0.17 U	0.17 U	1.0 U	1.0 U	1.0 U
Bromoform	11.1	370	NA	NA	1,6 U	1.6 U	1.6 U	55 U	NA	NA	1.6 U	1.6 U	1.6 U
Bromomethane	21.9	730	0.39 U	0.39 U	0.58 U	0.58 U	0.62 U	21 U	0.39 U	0.39 U	0.58 U	0.58 U	0.58 U
Carbon Disulfide	3,070	102,333	0.31 U	**5.51**	0.47 U	0.47 U	0.49 U	16 U	0.31 U	0.31 U	0.47 U	0.47 U	0.47 U
Carbon Tetrachloride	2.04	68	**0.50**	**0.76**	**0.57**	0.94 U	**0.54**	3.4 U	**0.50**	**0.50**	**0.57**	**0.63**	0.94 U
Chlorobenzene	219	7,300	0.46 U	0.46 U	0.69 U	0.69 U	0.73 U	24 U	0.46 U	0.46 U	0.69 U	0.69 U	0.69 U
Chloroethane	--	--	0.26 U	0.26 U	0.40 U	0.40 U	0.84 U	28 U	0.26 U	0.26 U	0.40 U	0.40 U	0.40 U
Chloroform	0.53	18	**2.39**	**1.32**	**1.5**	**0.49**	**0.089 J**	**3.1 J**	0.49 U	**0.63**	0.73 U	0.73 U	0.73 U
Chloromethane	394	13,133	**1.47**	0.21 U	**1.3**	0.31 U	**1.1**	22 U	**1.40**	0.21 U	**1.5**	**1.7**	0.31 U
cis-1,2-Dichloroethene	- -	- -	0.40 U	0.40 U	0.59 U	0.59 U	0.63 U	21 U	0.40 U	0.40 U	0.59 U	0.59 U	0.59 U
cis-1,3-Dichloropropene	3.07	102	0.45 U	0.45 U	0.68 U	0.68 U	1.4 U	48 U	0.45 U	0.45 U	0.68 U	0.68 U	0.68 U
Dibromochloromethane	--	--	0.21 U	0.21 U	0.65 U	1.3 U	0.27 U	9.1 U	0.21 U	0.21 U	1.3 U	1.3 U	1.3 U
Ethylbenzene	4.91	164	0.43 U	**4.04**	0.65 U	0.65 U	**0.033 J**	46 U	0.43 U	**0.48**	0.65 U	0.65 U	0.65 U
m&p-Xylene	438	14,600	0.43 U	**14.5**	1.3 U	**0.82**	**0.09 J**	**1.7 J**	0.43 U	**1.91**	1.3 U	1.3 U	**0.82**
Methyl tert-butyl ether	47.2	1,573	0.36 U	0.36 U	0.54 U	0.54 U	1.1 U	38 U	0.36 U	0.36 U	0.54 U	0.54 U	0.54 U
Methylene Chloride	1,230	41,000	**21.8**	**0.93**	**0.73**	**1.1**	**0.2 J**	**13 J**	**1.28**	**0.97**	**0.90**	**0.56**	**0.63**
o-Xylene	438	14,600	NA	NA	0.65 U	0.65 U	**0.032 J**	**2.4 J**	NA	NA	0.65 U	0.65 U	0.65 U
Styrene	4,380	146,000	NA	NA	0.64 U	0.64 U	1.4 U	45 U	NA	NA	0.64 U	0.64 U	0.64 U
Tetrachloroethene	47.2	1,573	**0.34**	**259**	1.0 U	**6.4**	**0.22**	**190**	**0.27**	**111**	1.0 U	1.0 U	**1.8**
Toluene	21,900	730,000	**0.45**	**14.1**	**0.45**	**1.4**	**0.25 J**	**31**	**0.49**	**3.54**	0.57 U	0.57 U	**1.4**
trans-1,2-Dichloroethene	--	--	0.40 U	0.40 U	0.59 U	0.59 U	0.63 U	21 U	0.40 U	0.40 U	0.59 U	0.59 U	0.59 U
trans-1,3-Dichloropropene	- -	- -	0.45 U	0.45 U	0.68 U	0.68 U	0.72 U	24 U	0.45 U	0.45 U	0.68 U	0.68 U	0.68 U
Trichloroethene	2.99	100	0.13 U	**23.0**	0.43 U	**5.4**	**0.041 J**	**55**	0.13 U	**27.4**	0.21 U	0.21 U	**6.4**
Trichlorofluoromethane	--	--	**1.91**	**1.40**	NA	NA	**1.3**	**1.2 J**	**1.57**	**1.63**	NA	NA	NA
Vinyl Acetate	876	29,200	0.35 U	0.35 U	0.53 U	0.53 U	7.2 U	240 U	0.35 U	0.35 U	0.53	0.53	0.53 U
Vinyl Chloride	2.79	93	0.06 U	0.06 U	0.1 U	0.38 U	0.086 U	2.9 U	0.06 U	0.06 U	0.10	0.10	0.38 U

Notes:
Concentrations presented in micrograms per cubic meter ($\mu g/m^3$)
Highlighted cells indicate samples collected in February 2018
Bracketed results represent duplicate samples
Bold results are detections.
Sample results exceeding VISLs are shaded gray. Results were compared to criteria as follows:
- Indoor Air Samples were compared to Vapor Intrusion Screening Levels (VISLs) generated via the USEPA calculator on 28 March 2018 for commerical exposure scenario with a Target Risk of 1E-06 and Target Hazard Quotient of 1.

- Subslab Soil Vapor Samples were compared to commerical Subslab Soil VISLs {a calculated value based on subslab attenuation factor (AF) of 0.03).

IA = Indoor Air Sample.
SS = Subslab Soil Vapor Sample.
NA = Not Available/Applicable.

Lab Qualifiers:
D = sample repeated at a dilution
B = data flagged due to low-level detections in method blanks
c = calibration acceptability criteria exceeded for this analyte
J = indicates an estimated value
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U = compound was analyzed for but not detected; the associated value is the compound quantitation limit

Table 2
Volatile Organic Compounds in Industrial Indoor Air and Sub-Slab Soil Vapor
JCI Jones Chemical, Inc. - Superfund Site
Calendonia, New York

Sample Location			JCI Production Area									JCI Production Area						
Location ID:	Industrial Indoor Air Screening Levels	Industrial Sub-Slab Soil Vapor Screening Levels (AF = 0.03)	JCI-3									JCI-3A						
Date Collected:			03/24/11	03/24/11	04/03/14	04/03/14	03/18/15	02/11/16	02/01/17	02/01/17	02/22/18	04/03/14	04/03/14	03/18/15	02/11/16	02/01/17	02/01/17	02/22/18
Sample Name:			JCI-3IA	JCI-3SS	JCI-3-IA	JCI-3-SS	JCI-3-IA	JCI-3-IA	JCI-3-IA	JCI-3-SS	JCI-3-IA	JCI-3A-IA	JCI-3A-SS	JCI-3A-IA	JCI-3A-IA	JCI-3A-IA	JCI-3A-SS	JCI-3A-IA
Volatile Organics																		
1,1,1-Trichloroethane	21,900	730,000	**0.34 J**	**36 J**	0.55 U	**103**	1.09 U	**1.1**	**0.93**	**68**	0.82 U	0.55 U	**73.8**	1.09 U	0.82 U	0.82 U	**98**	0.82 U
1,1,2,2-Tetrachloroethane	1.66	55	0.23 U	17 U	NA	NA	0.69 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	0.69 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	21900	730,000	**0.57**	20 U	**0.61**	**1.69**	1.53 U	NA	NA	NA	NA	**0.61**	**2.76**	1.53 U	NA	NA	NA	NA
1,1,2-Trichloroethane	0.77	26	0.91 U	70 U	0.55 U	0.55 U	0.55 U	0.82 U	0.82 U	0.82 U	0.82U	0.55 U	0.55 U	0.55 U	0.82 U	0.82 U	0.82 U	0.82 U
1,1-Dichloroethane	7.67	256	0.68 U	52 U	0.40 U	0.40 U	0.40 U	0.61 U	0.61 U	0.61 U	0.61 U	0.40 U	**2.43**	0.40 U	0.61 U	0.61 U	**6.6**	0.61 U
1,1-Dichloroethene	876	29,200	0.67 U	51 U	0.40 U	0.40 U	0.40 U	0.59 U	0.59 U	0.59 U	0.16 U	0.40 U	0.40 U	0.40 U	0.59 U	0.59 U	0.59 U	0.16 U
1,2-Dibromoethane	0.02	1	0.26 U	20 U	0.19 U	0.19 U	0.19 U	1.2 U	1.2 U	1.2 U	1.2 U	0.19 U	0.19 U	0.19 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichlorobenzene	876	29,200	2 U	150 U	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U
1,2-Dichloroethane	0.47	16	0.68 U	52 U	0.40 U	0.40 U	0.40 U	0.61 U	0.61 U	0.61 U	0.61 U	0.40 U	0.40 U	0.40 U	0.61 U	0.61 U	0.61 U	0.61 U
1,2-Dichloropropane	3.31	110	0.78 U	59 U	0.46 U	0.46 U	0.46 U	0.69 U	0.69 U	0.69 U	0.69 U	0.46 U	0.46 U	0.46 U	0.69 U	0.69 U	0.69 U	0.69 U
1,3-Dichlorobenzene	- -	- -	2 U	150 U	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U
1,4-Dichlorobenzene	1.11	37	2 U	150 U	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U	NA	NA	NA	0.90 U	0.90 u	0.90 U	0.90 U
2-Butanone (Methyl Ethyl Ketone)	21,900	730,000	**6.3**	**11 J**	**8.29**	**0.47**	**1.50**	**5.1**	**4.1**	**4.3**	**3.2**	**5.22**	**0.56**	**1.00**	**1.4**	**1.6**	**1.2**	**0.59**
2-Hexanone (Methyl Butyl Ketone)	131	4,367	**0.18 J**	52 U	0.41 U	0.41 U	0.41 U	1.2 U	1.2 U	1.2 U	1.2 U	0.41 U	0.41 U	0.41 U	1.2 U	1.2 U	1.2 U	1.2 U
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	13,100	436,667	**0.49 J**	100 U	**0.16**	0.10 U	0.10 U	1.2 U	1.2 U	**0.78**	1.2 U	**0.20**	0.10 U	0.10 U	1.2 U	1.2 U	1.2 U	1.2 U
Acetone	135,000	4,500,000	**170 D**	**2,300**	**20.6**	**2.92**	**7.48 B**	**33**	**57**	**92**	**56**	**42.3**	**5.08**	**6.56 B**	**37**	**45**	**37**	**50**
Benzene	1.57	52	**2.7**	**3.4 J**	**0.89**	**0.61**	**0.70**	**0.80**	**0.51**	**0.73**	**0.57**	**1.53**	**0.42**	**0.48**	**0.93**	**0.45**	**0.42**	**0.45**
Bromodichloromethane	0.33	11	0.23 U	17 U	0.17 U	0.17 U	0.17 U	1.0 U	1.0 U	1.0 U	1.0 U	0.17 U	**0.74**	0.17 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	11.1	370	1.7 U	130 U	NA	NA	NA	1.6 U	1.6 U	1.6 U	1.6 U	NA	NA	NA	1.6 U	1.6 U	1.6 U	1.6 U
Bromomethane	21.9	730	0.65 U	50 U	0.39 U	0.39 U	0.39 U	1.6 U	0.58 U	0.58 U	0.58 U	0.39 U	0.39 U	0.39 U	1.6 U	0.58 U	0.58 U	0.58 U
Carbon Disulfide	3,070	102,333	**0.031 J**	**2.2 J**	0.31 U	0.31 U	0.31 U	0.47 U	0.47 U	0.78	0.47 U	0.31 U	**0.34**	0.31 U	0.47 U	0.47 U	0.47 U	0.47 U
Carbon Tetrachloride	2.04	68	**0.22**	8.1 U	**0.50**	**1.13**	**0.69 cS**	**0.82**	**0.63**	**1.1**	0.50	**0.50**	**2.01**	**0.57 cS**	**0.75**	**0.57**	**4.6**	**0.63**
Chlorobenzene	219	7,300	0.78 U	59 U	0.46 U	0.46 U	0.46 U	0.69 U	0.69 U	0.69 U	0.69 U	0.46 U	0.46 U	0.46 U	0.69 U	0.69 U	0.69 U	0.69 U
Chloroethane	--	--	**0.058 J**	67 U	0.26 U	0.26 U	0.26 U	0.40 U	0.40 U	0.40 U	0.40 U	0.26 U	0.26 U	0.26 U	0.40 U	0.40 U	0.40 U	0.40 U
Chloroform	0.53	18	**0.58 J**	**6.8 J**	0.49 U	**21.8**	**0.68**	**0.59 J**	**0.54**	**7.7**	0.73 U	**0.54**	**25.4**	0.49 U	0.73 U	0.73 U	**86**	0.73 U
Chloromethane	394	13,133	**1.2**	**4.1 J**	**1.51**	0.21 U	**1.07**	**1.2**	**1.6**	**1.1**	**0.78**	**1.61**	0.21 U	**0.95**	**1.0**	**1.4**	0.31 U	**1.1**
cis-1,2-Dichloroethene	- -	- -	**4.1**	51 U	0.40 U	**1.39**	**1.63**	**0.71**	**0.55**	0.59 U	**0.24**	**0.40**	**3.05**	**1.19**	**0.48 J**	0.59 U	**22**	0.16 U
cis-1,3-Dichloropropene	3.07	102	1.5 U	120 U	0.45 U	0.45 U	0.45 U	0.68 U	0.68 U	0.68 U	0.68 U	0.45 U	0.45 U	0.45 U	0.68 U	0.68 U	0.68 U	0.68 U
Dibromochloromethane	--	--	0.29 U	22 U	0.21 U	0.21 U	0.21 U	1.3 U	1.3 U	1.3 U	1.3 U	0.21 U	0.21 U	0.21 U	1.3 U	1.3 U	1.3 U	1.3 U
Ethylbenzene	4.91	164	**2.3**	**39 J**	0.43 U	0.43 U	0.43 U	0.65 U	0.91	**0.78**	**0.52**	0.43 U	0.43 U	0.43 U	0.65 U	1.2	0.65 U	0.65 U
m&p-Xylene	438	14,600	**5.5**	**160 J**	**0.48**	**1.52**	0.43 U	**0.69 J**	**0.91**	**2.8**	**2.0**	**1.09**	**0.78**	0.43 U	**1.2 J**	**3.8**	1.3 U	1.3 U
Methyl tert-butyl ether	47.2	1,573	1.2 U	92 U	0.36 U	0.36 U	0.36 U	0.54 U	0.54	0.54 U	0.54 U	0.36 U	0.36 U	0.36 U	0.54 U	0.54 U	0.54 U	0.54 U
Methylene Chloride	1,230	41,000	**0.25 J**	**55**	**1.55**	**0.93**	**0.70**	**0.63**	**1.2**	**1.0**	**1.7**	**1.40**	**1.13**	**0.54**	**1.2**	**1.5**	**0.38**	**1.3**
o-Xylene	438	14,600	**1.1 J**	**53 J**	NA	NA	NA	0.65 U	**0.82**	**1.1**	**0.82**	NA	NA	NA	**0.61 J**	**1.1**	0.65 U	0.65 U
Styrene	4,380	146,000	1.4 U	110 U	NA	NA	0.43 U	0.64 U	0.64 U	0.64 U	0.64 U	NA	NA	0.43 U	0.64 U	0.64 U	0.64 U	0.64 U
Tetrachloroethene	47.2	1,573	**29**	**1,300**	**14.0**	**1,410**	**33.8**	**45**	**47**	**180**	**30**	**4.34**	**838**	**11.4**	**8.5**	**4.3**	**1600**	**1.4**
Toluene	21,900	730,000	**0.91**	**160**	**0.90**	**1.39**	**1.13**	**1.5**	**1.5**	**3.8**	1.9	**0.90**	**1.21**	**0.64**	**3.1**	**1.0**	0.57 U	0.57 U
trans-1,2-Dichloroethene	--	--	**0.049 J**	51 U	0.40 U	0.40 U	0.40 U	0.59 U	0.59 U	0.59 U	0.59 U	0.40 U	**0.71**	0.40 U	0.59 U	0.59 U	**2.2**	0.59 U
trans-1,3-Dichloropropene	- -	- -	0.76 U	58 U	0.45 U	0.45 U	0.45 U	0.68 U	0.68 U	0.68 U	0.68 U	0.45 U	0.45 U	0.45 U	0.68 U	0.68 U	0.68 U	0.68 U
Trichloroethene	2.99	100	**3.4**	**230**	**1.18**	**236**	**3.76**	**7.2**	**3.9**	**160**	**1.3**	**0.70**	**314**	**1.99**	**1.5**	**0.75**	**570**	0.16 U
Trichlorofluoromethane	--	--	**2**	72 U	**1.85**	**1.57**	**2.64**	NA	NA	NA	NA	**3.20**	**1.35**	**3.99**	NA	NA	NA	NA
Vinyl Acetate	876	29,200	7.6 U	580 U	0.35 U	0.35 U	0.35 U	0.53 U	0.53 U	0.53 U	0.53 U	0.35 U	0.35 U	0.35 U	0.53 U	0.53 U	0.53 U	0.53 U
Vinyl Chloride	2.79	93	0.091 U	7 U	0.06 U	0.06 U	0.06 U	0.10 U	0.10 U	0.38 U	0.10 U	0.06 U	0.06 U	0.06 U	0.10 U	0.10 U	0.38 U	0.10 U

Notes:
Concentrations presented in micrograms per cubic meter ($\mu g/m^3$)
Highlighted cells indicate samples collected in February 2018
Bracketed results represent duplicate samples
Bold results are detections.
Sample results exceeding VISLs are shaded gray. Results were compared to criteria as follows:
- Indoor Air Samples were compared to Vapor Intrusion Screening Levels (VISLs) generated via the USEPA calculator on 28 March 2018 for commerical exposure scenario with a Target Risk of 1E-06 and Target Hazard Quotient of 1.

- Subslab Soil Vapor Samples were compared to commerical Subslab Soil VISLs {a calculated value based on subslab attenuation factor (AF) of 0.03).

IA = Indoor Air Sample.
SS = Subslab Soil Vapor Sample.
NA = Not Available/Applicable.

Lab Qualifiers:
D = sample repeated at a dilution
B = data flagged due to low-level detections in method blanks
c = calibration acceptability criteria exceeded for this analyte
J = indicates an estimated value
S = recovery exceeded control limits for this analyte

U = compound was analyzed for but not detected; the associated value is the compound quantitation limit

Table 2
Volatile Organic Compounds in Industrial Indoor Air and Sub-Slab Soil Vapor
JCI Jones Chemical, Inc. - Superfund Site
Calendonia, New York

Sample Location			JCI Bleach Warehouse								
Location ID:	Industrial Indoor Air Screening Levels	Industrial Sub-Slab Soil Vapor Screening Levels (AF = 0.03)	JCI-4								
Date Collected:			03/24/11	03/24/11	04/03/14	04/03/14	03/18/15	02/11/16	02/01/17	02/01/17	02/22/18
Sample Name:			JCI-4-IA	JCI-4SS	JCI-4-IA	JCI-4-SS	JCI-4-IA	JCI-4-IA	JCI-4-IA	JCI-4-SS	JCI-4-IA
Volatile Organics											
1,1,1-Trichloroethane	21,900	730,000	**2.4 U [0.21 J]**	**44 J [45 J]**	0.55 U	**45.0 [44.0]**	1.09 U	0.82 U	0.82 U	**45**	0.82 U
1,1,2,2-Tetrachloroethane	1.66	55	0.59 U [0.21 U]	32 U [29 U]	NA	NA	0.69 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	21900	730,000	**0.56 J [0.6]**	36 U [33 U]	**0.61**	**1.84 [1.76]**	1.53 U	NA	NA	NA	NA
1,1,2-Trichloroethane	0.77	26	2.4 U [0.83 U]	130 U [120 U]	0.55 U	0.55 U [0.55 U]	0.55 U	0.82 U	0.82 U	0.82 U	0.82 U
1,1-Dichloroethane	7.67	256	**1.8 U [0.025 J]**	**3.7 J [3.3 J]**	0.40 U	**4.69 [4.61]**	0.40 U	0.61 U	0.61 U	**4.5**	0.61 U
1,1-Dichloroethene	876	29,200	1.7 U [0.61 U]	94 U [85 U]	0.40 U	**1.90 [1.82]**	0.40 U	0.59 U	0.59 U	0.59 U	0.16 U
1,2-Dibromoethane	0.02	1	0.67 U [0.23 U]	36 U [33 U]	0.19 U	0.19 U [0.19 U]	0.19 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichlorobenzene	876	29,200	5.2 U [1.8 U]	280 U [260 U]	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U
1,2-Dichloroethane	0.47	16	1.8 U [0.62 U]	96 U [87 U]	0.40 U	**0.69 [0.65]**	0.40 U	0.61 U	0.61 U	0.61 U	0.61 U
1,2-Dichloropropane	3.31	110	**2 U [0.028 J]**	110 U [99 U]	0.46 U	**0.97 [0.97]**	0.46 U	0.69 U	0.69 U	**0.65**	0.69 U
1,3-Dichlorobenzene	- -	- -	5.2 U [1.8 U]	280 U [260 U]	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U
1,4-Dichlorobenzene	1.11	37	5.2 U [1.8 U]	280 U [260 U]	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U
2-Butanone (Methyl Ethyl Ketone)	21,900	730,000	**4 [3.1]**	**49 J [53 J]**	**3.66**	**2.77 [2.54]**	**0.59**	**0.65 J**	**1.1**	**5.6**	0.88 U
2-Hexanone (Methyl Butyl Ketone)	131	4,367	**0.2 J [0.073 BJ]**	96 U [87 U]	0.41 U	0.41 U [0.41 U]	0.41 U	1.2 U	1.2 U	1.2 U	1.2 U
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	13,100	436,667	**0.91 J [0.47 J]**	190 U [170 U]	**1.15**	0.10 U [0.10 U]	0.10 U	1.2 U	1.2 U	1.2 U	1.2 U
Acetone	135,000	4,500,000	**12 J [8.3]**	**290 J [330 J]**	**64.4**	0.24 U [0.24 U]	**4.04 B**	**8.8**	**83**	**46**	**37**
Benzene	1.57	52	**0.93 J [0.87]**	**5.1 J [5.4 J]**	**0.38**	**0.99 [0.96]**	**0.42**	**0.67**	**0.45**	**1.3**	0.48 U
Bromodichloromethane	0.33	11	**0.59 U [0.63]**	**45 [44]**	0.17 U	**16.6 [16.3]**	0.17 U	1.0 U	1.0 U	**14**	1.0 U
Bromoform	11.1	370	4.5 U [1.6 U]	240 U [220 U]	NA	NA	NA	1.6 U	1.6 U	1.6 U	1.6 U
Bromomethane	21.9	730	1.7 U [0.59 U]	92 U [84 U]	0.39 U	0.39 U [0.39 U]	0.39 U	1.6 U	0.58 U	0.58 U	0.58 U
Carbon Disulfide	3,070	102,333	**1.3 U [0.044 J]**	73 U [66 U]	0.31 U	**2.52 [2.52]**	0.31 U	0.47 U	0.47 U	**95**	0.47 U
Carbon Tetrachloride	2.04	68	**0.28 U [1.7]**	**45 [46]**	**5.47**	**22.1 [21.7]**	**0.76 cS**	**1.0**	**0.88**	**25**	**37**
Chlorobenzene	219	7,300	**0.22 J [0.39 J]**	110 U [99 U]	0.46 U	**0.60 [0.55]**	0.46 U	0.69 U	0.69 U	0.69 U	0.69 U
Chloroethane	--	--	**2.3 U [0.034 J]**	120 U [110 U]	0.26 U	**2.64 [2.56]**	0.26 U	0.40 U	0.40 U	**3.0**	**0.26**
Chloroform	0.53	18	**24 [30]**	**4,600 [4,700]**	**11.5**	**2,110 [2,150]**	**8.15**	**9.0**	**4.6**	**2500**	**9**
Chloromethane	394	13,133	**1.2 J [1.2]**	**96 U [3.7 J]**	**1.86**	**0.41 [0.35]**	**1.01**	**1.3**	**1.5**	0.31 U	0.31 U
cis-1,2-Dichloroethene	- -	- -	**2.1 [1.9]**	**140 [150]**	0.40 U	**49.0 [46.7]**	**0.83**	**0.91**	0.59 U	**27**	**0.24**
cis-1,3-Dichloropropene	3.07	102	4 U [1.4 U]	210 U [190 U]	0.45 U	0.45 U [0.45 U]	0.45 U	0.68 U	0.68 U	0.68 U	0.68 U
Dibromochloromethane	--	--	**0.75 U [0.14 J]**	**15 J [14 J]**	0.21 U	**4.69 [4.51]**	0.21 U	1.3 U	1.3 U	**1.0**	1.3 U
Ethylbenzene	4.91	164	**0.74 J [1.1 J]**	**4 J [4.6 J]**	**4.30**	0.43 U [0.43 U]	**0.61**	0.65 U	0.65 U	**0.65**	0.65 U
m&p-Xylene	438	14,600	**2.8 J [4.2]**	**6.8 J [6.4 J]**	**16.5**	**1.35 [1.43]**	**2.17**	**0.52 J**	**1.2**	**2.3**	0.48
Methyl tert-butyl ether	47.2	1,573	3.1 U [1.1 U]	170 U [150 U]	0.36 U	0.36 U [0.36 U]	0.36 U	0.54 U	0.54 U	0.54 U	0.54 U
Methylene Chloride	1,230	41,000	**0.31 J [0.32 J]**	**25 J [26 J]**	**1.71**	**5.48 [5.01]**	**0.62**	**0.69**	**1.4**	**7.2**	**2.8**
o-Xylene	438	14,600	**0.57 J [0.6 J]**	**4.8 J [5.4 J]**	NA	NA	NA	0.65 U	**0.48**	**0.82**	0.65 U
Styrene	4,380	146,000	**0.66 J [0.72 J]**	**340 [360]**	NA	NA	0.43 U	0.64 U	**0.68**	0.64 U	0.64 U
Tetrachloroethene	47.2	1,573	**26 [28]**	**9,800 [9,800]**	**13.3**	**2,250 [2,510]**	**28.6**	**36**	**12**	**230**	**12**
Toluene	21,900	730,000	**5.9 [9.3]**	**9.9 J [10 J]**	**0.72**	**1.51 [1.66]**	**0.45**	**0.87**	**35**	**3.2**	**5.8**
trans-1,2-Dichloroethene	--	--	**1.7 U [0.022 J]**	94 U [85 U]	0.40 U	**1.27 [1.19]**	0.40 U	0.59 U	0.59 U	**0.99**	0.59 U
trans-1,3-Dichloropropene	- -	- -	2 U [0.69 U]	110 U [97 U]	0.45 U	0.45 U [0.45 U]	0.45 U	0.68 U	0.68 U	0.68 U	0.68 U
Trichloroethene	2.99	100	**3.4 [5.1]**	**3,000 [3,100]**	**0.97**	**1,110 [1,040]**	**2.96**	**5.8**	**2.5**	**660**	**1.1**
Trichlorofluoromethane	--	--	**3.9 [3.6]**	130 U [120 U]	**6.07**	**0.35 U [1.80]**	**5.23**	NA	NA	NA	NA
Vinyl Acetate	876	29,200	20 U [6.9 U]	1,100 U [970 U]	0.35 U	0.35 U [0.35 U]	0.35 U	0.53 U	0.53 U	0.53 U	0.53 U
Vinyl Chloride	2.79	93	0.24 U [0.083 U]	13 U [12 U]	0.06 U	0.06 U [0.06 U]	0.06 U	0.10 U	0.10 U	0.38 U	0.10 U

Notes:
Concentrations presented in micrograms per cubic meter ($\mu g/m^3$)
Highlighted cells indicate samples collected in February 2018
Bracketed results represent duplicate samples
Bold results are detections.
Sample results exceeding VISLs are shaded gray. Results were compared to criteria as follows:
- Indoor Air Samples were compared to Vapor Intrusion Screening Levels (VISLs) generated via the USEPA calculator on 28 March 2018 for commerical exposure scenario with a Target Risk of 1E-06 and Target Hazard Quotient of 1.

- Subslab Soil Vapor Samples were compared to commerical Subslab Soil VISLs {a calculated value based on subslab attenuation factor (AF) of 0.03).

IA = Indoor Air Sample.
SS = Subslab Soil Vapor Sample.
NA = Not Available/Applicable.

Lab Qualifiers:
D = sample repeated at a dilution
B = data flagged due to low-level detections in method blanks
c = calibration acceptability criteria exceeded for this analyte
J = indicates an estimated value
S = recovery exceeded control limits for this analyte

U = compound was analyzed for but not detected; the associated value is the compound quantitation limit

Table 2
Volatile Organic Compounds in Industrial Indoor Air and Sub-Slab Soil Vapor
JCI Jones Chemical, Inc. - Superfund Site
Calendonia, New York

Sample Location			JCI Bleach Warehouse						
Location ID:	Industrial Indoor Air Screening Levels	Industrial Sub-Slab Soil Vapor Screening Levels (AF = 0.03)	JCI-4A						
Date Collected:			04/03/14	04/03/14	03/18/15	02/11/16	02/01/17	02/01/17	02/22/18
Sample Name:			JCI-4A-IA	JCI-4A-SS	JCI-4A-IA	JCI-4A-IA	JCI-4A-IA	JCI-4A-SS	JCI-4A-IA
Volatile Organics									
1,1,1-Trichloroethane	21,900	730,000	0.55 U	0.55 U	1.09 U	0.82 U	0.82 U	0.55	0.82 U
1,1,2,2-Tetrachloroethane	1.66	55	NA	NA	0.69 U	1.0 U	1.0 U	1.0 U	0.10 U
1,1,2-trichloro-1,2,2-trifluoroethane	21900	730,000	0.61	**0.54**	1.53 U	NA	NA	NA	NA
1,1,2-Trichloroethane	0.77	26	0.55 U	0.55 U	0.55 U	0.82 U	0.82 U	0.82 U	0.82 U
1,1-Dichloroethane	7.67	256	0.40 U	0.40 U	0.40 U	0.61 U	0.61 U	0.61 U	0.61 U
1,1-Dichloroethene	876	29,200	0.40 U	0.40 U	0.40 U	0.59 U	0.59 U	0.59 U	0.16 U
1,2-Dibromoethane	0.02	1	0.19 U	0.19 U	0.19 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichlorobenzene	876	29,200	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U
1,2-Dichloroethane	0.47	16	0.40 U	0.40 U	0.40 U	0.61 U	0.61 U	0.61 U	0.61 U
1,2-Dichloropropane	3.31	110	0.46 U	0.46 U	0.46 U	0.69 U	0.69 U	0.69 U	0.69 U
1,3-Dichlorobenzene	- -	- -	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U
1,4-Dichlorobenzene	1.11	37	NA	NA	NA	0.90 U	0.90 U	0.90 U	0.90 U
2-Butanone (Methyl Ethyl Ketone)	21,900	730,000	**2.51**	**2.62**	**0.56**	**0.50 J**	**0.74**	**2.1**	**0.62**
2-Hexanone (Methyl Butyl Ketone)	131	4,367	0.41 U	0.41 U	0.41 U	1.2 U	1.2 U	1.2 U	1.2 U
4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	13,100	436,667	**0.45**	0.10 U	0.10 U	1.2 U	1.2 U	1.2 U	1.2 U
Acetone	135,000	4,500,000	**60.2**	**25.2**	**8.39 B**	**8.3**	**54**	**27**	**53**
Benzene	1.57	52	**0.42**	**1.88**	**0.38**	**0.61**	**0.48**	**0.45**	**0.48**
Bromodichloromethane	0.33	11	**0.47**	0.17 U	0.17 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	11.1	370	NA	NA	NA	1.6 U	1.6 U	1.6 U	1.6 U
Bromomethane	21.9	730	0.39 U	0.39 U	0.39 U	1.6 U	0.58 U	0.58 U	0.58 U
Carbon Disulfide	3,070	102,333	0.31 U	**0.87**	0.31 U	0.47 U	0.47 U	0.47 U	0.47 U
Carbon Tetrachloride	2.04	68	**4.72**	**0.69**	**0.69 cS**	**0.82**	**0.75**	**0.82**	**3.3**
Chlorobenzene	219	7,300	0.46 U	0.46 U	0.46 U	0.69 U	0.69 U	0.69 U	0.69 U
Chloroethane	--	--	0.26 U	0.26 U	0.26 U	0.40 U	0.40 U	0.40 U	0.40 U
Chloroform	0.53	18	**9.52**	**3.32**	**0.83**	0.73 U	**2.7**	**1.6**	**1.3**
Chloromethane	394	13,133	**1.73**	**0.21**	**0.99**	**1.2**	**1.7**	**0.27**	**1.5**
cis-1,2-Dichloroethene	- -	- -	0.45 U	0.40 U	0.40 U	0.59 U	0.59 U	0.59 U	0.16 U
cis-1,3-Dichloropropene	3.07	102	0.45 U	0.45 U	0.45 U	0.68 U	0.68 U	0.68 U	0.68 U
Dibromochloromethane	--	--	0.21 U	0.21 U	0.21 U	1.3 U	1.3 U	1.3 U	1.3 U
Ethylbenzene	4.91	164	**1.35**	**1.78**	**0.69**	0.65 U	0.65 U	**0.61**	0.65 U
m&p-Xylene	438	14,600	**5.43**	**10.3**	**2.56**	1.3 U	0.56	**2.3**	0.61
Methyl tert-butyl ether	47.2	1,573	0.36 U	0.36 U	0.36 U	0.54 U	0.54 U	0.54 U	0.54 U
Methylene Chloride	1,230	41,000	**2.60**	**1.32**	**0.62**	**0.90**	**0.83**	**0.83**	**1.7**
o-Xylene	438	14,600	NA	NA	NA	0.65 U	0.65 U	**0.82**	0.65 U
Styrene	4,380	146,000	NA	NA	0.43 U	0.64 U	0.64 U	0.64 U	0.64 U
Tetrachloroethene	47.2	1,573	**12.7**	**290**	**8.75**	**12**	**6.8**	**52**	**11**
Toluene	21,900	730,000	**0.83**	**7.99**	**0.72**	**0.75**	**29**	**2.4**	**20**
trans-1,2-Dichloroethene	--	--	NA	0.40 U	0.40 U	0.59 U	0.59 U	0.59 U	0.59 U
trans-1,3-Dichloropropene	- -	- -	NA	0.45 U	0.45 U	0.68 U	0.68 U	0.68 U	0.68U
Trichloroethene	2.99	100	**0.64**	**84.0**	**0.70**	**0.59**	**0.97**	**69**	**0.64**
Trichlorofluoromethane	--	--	**3.60**	**1.63**	**1.80**	NA	NA	NA	NA
Vinyl Acetate	876	29,200	0.35 U	0.35 U	0.35 U	0.53 U	0.53 U	0.53 U	0.53 U
Vinyl Chloride	2.79	93	0.06 U	0.06 U	0.06 U	0.10 U	0.10 U	0.38 U	0.10 U

Notes:
Concentrations presented in micrograms per cubic meter ($\mu g/m^3$)
Highlighted cells indicate samples collected in February 2018
Bracketed results represent duplicate samples
Bold results are detections.
Sample results exceeding VISLs are shaded gray. Results were compared to criteria as follows:
- Indoor Air Samples were compared to Vapor Intrusion Screening Levels (VISLs) generated via the USEPA calculator on 28 March 2018 for commerical exposure scenario with a Target Risk of 1E-06 and Target Hazard Quotient of 1.

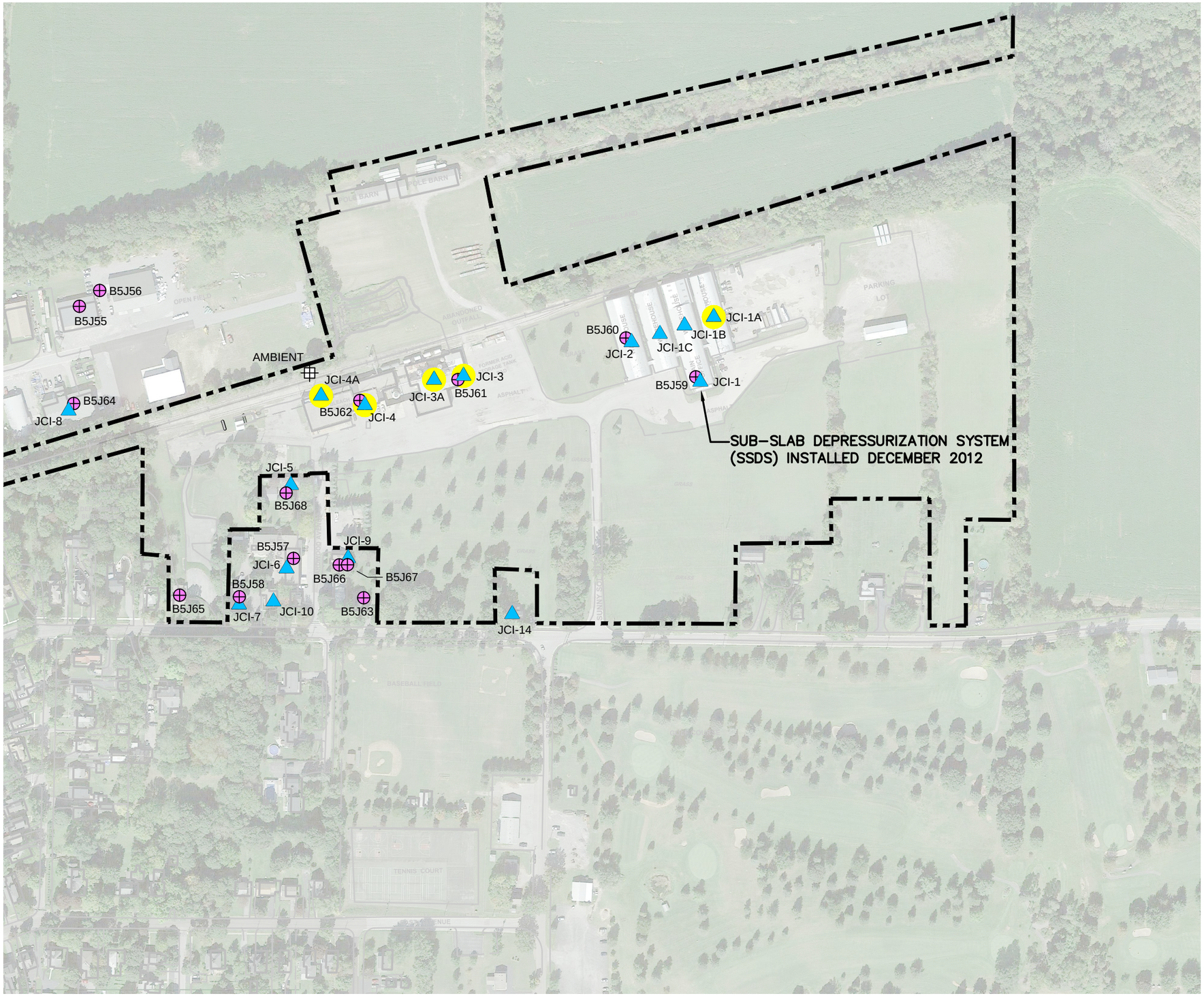
- Subslab Soil Vapor Samples were compared to commerical Subslab Soil VISLs {a calculated value based on subslab attenuation factor (AF) of 0.03).

IA = Indoor Air Sample.
SS = Subslab Soil Vapor Sample.
NA = Not Available/Applicable.

Lab Qualifiers:
D = sample repeated at a dilution
B = data flagged due to low-level detections in method blanks
c = calibration acceptability criteria exceeded for this analyte
J = indicates an estimated value
S = recovery exceeded control limits for this analyte

U = compound was analyzed for but not detected; the associated value is the compound quantitation limit

FIGURES



LEGEND:

- SITE BOUNDARY - JCI JONES CHEMICALS, INC.
- PAIRED SUB-SLAB / INDOOR AIR SAMPLE PREVIOUSLY SAMPLED BY JCI JONES
- 2018 AMBIENT AIR SAMPLE
- 2018 SAMPLING LOCATION
- USEPA SUB-SLAB SAMPLES (FEBRUARY 2009)

NOTES:

1. ALL LOCATIONS ARE APPROXIMATE.

REFERENCE:

1. AERIAL PHOTOGRAPH OBTAINED FROM NEW YORK STATE GEOGRAPHIC INFORMATION SYSTEMS (NYS GIS) WEB SITE, DATED 2009.

N

0 250' 500'

SCALE IN FEET

PAIRED SUB-SLAB/INDOOR AIR RESAMPLING LOCATIONS

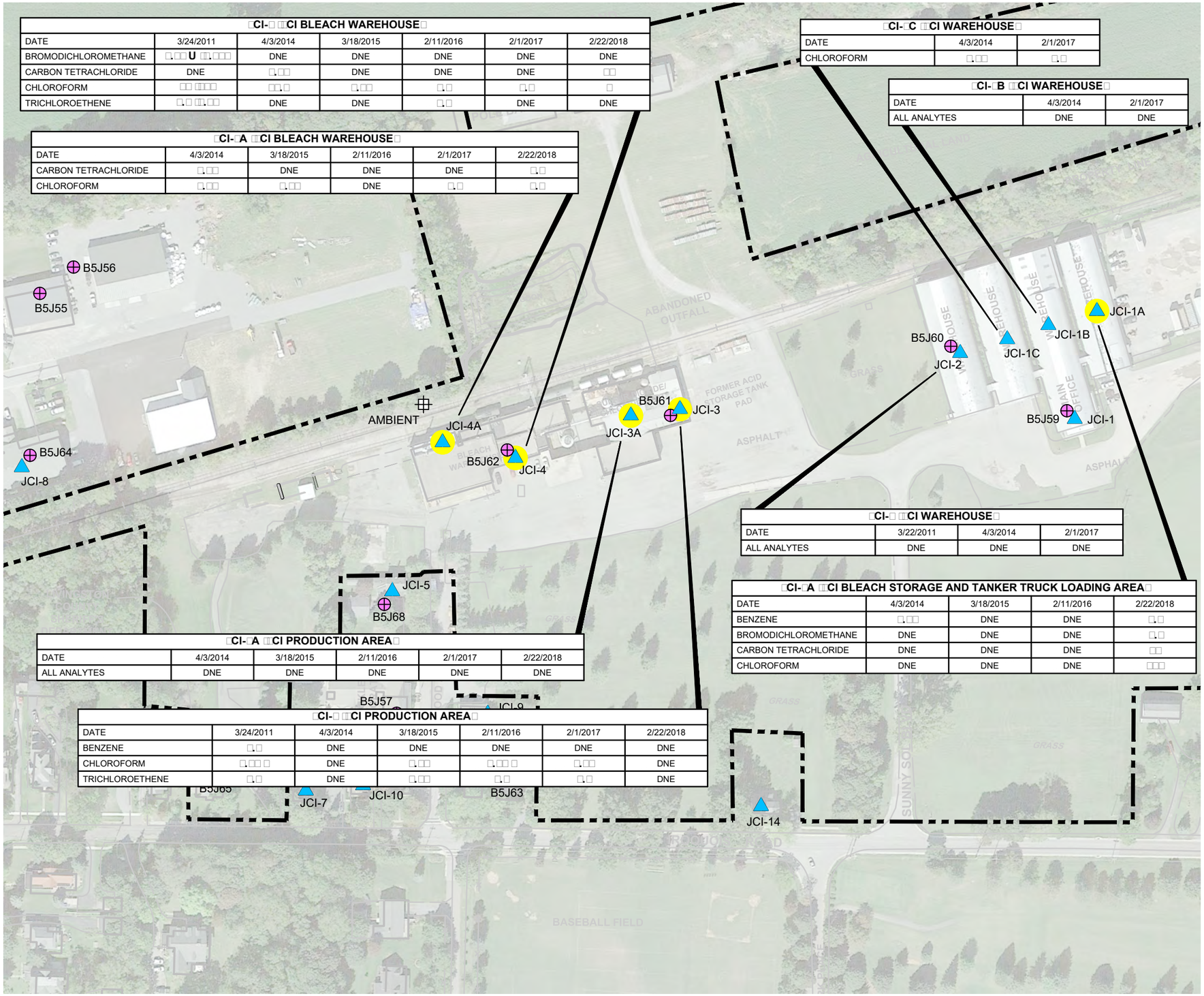
JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

Geosyntec consultants

TALLAHASSEE, FL | MARCH 2018

Figure: 1

F:\JCI JONES CHEMICALS\CALEDONIA NY\SAMPLING EVENTS - FR2872A\2018 02\FIGURES\FR2872B-C101.DWG (23 March 2018) rick muise



CI-□ □CI BLEACH WAREHOUSE□

DATE	3/24/2011	4/3/2014	3/18/2015	2/11/2016	2/1/2017	2/22/2018
BROMODICHLOROMETHANE	□.□□ U	DNE	DNE	DNE	DNE	DNE
CARBON TETRACHLORIDE	DNE	□.□□	DNE	DNE	DNE	□□
CHLOROFORM	□□	□□.□	□.□□	□.□	□.□	□
TRICHLOROETHENE	□.□	□.□□	DNE	DNE	□.□	DNE	DNE

CI-□A □CI BLEACH WAREHOUSE□

DATE	4/3/2014	3/18/2015	2/11/2016	2/1/2017	2/22/2018
CARBON TETRACHLORIDE	□.□□	DNE	DNE	DNE	□.□
CHLOROFORM	□.□□	□.□□	DNE	□.□	□.□

CI-□A □CI PRODUCTION AREA□

DATE	4/3/2014	3/18/2015	2/11/2016	2/1/2017	2/22/2018
ALL ANALYTES	DNE	DNE	DNE	DNE	DNE

CI-□ □CI PRODUCTION AREA□

DATE	3/24/2011	4/3/2014	3/18/2015	2/11/2016	2/1/2017	2/22/2018
BENZENE	□.□	DNE	DNE	DNE	DNE	DNE
CHLOROFORM	□.□□ □	DNE	□.□□	□.□□ □	□.□□	DNE
TRICHLOROETHENE	□.□	DNE	□.□□	□.□	□.□	DNE

CI-□C □CI WAREHOUSE□

DATE	4/3/2014	2/1/2017
CHLOROFORM	□.□□	□.□

CI-□B □CI WAREHOUSE□

DATE	4/3/2014	2/1/2017
ALL ANALYTES	DNE	DNE

CI-□ □CI WAREHOUSE□

DATE	3/22/2011	4/3/2014	2/1/2017
ALL ANALYTES	DNE	DNE	DNE

CI-□A □CI BLEACH STORAGE AND TANKER TRUCK LOADING AREA□

DATE	4/3/2014	3/18/2015	2/11/2016	2/22/2018
BENZENE	□.□□	DNE	DNE	□.□
BROMODICHLOROMETHANE	DNE	DNE	DNE	□.□
CARBON TETRACHLORIDE	DNE	DNE	DNE	□□
CHLOROFORM	DNE	DNE	DNE	□□□

LEGEND:

- SITE BOUNDARY - JCI JONES CHEMICALS, INC.
- PAIRED SUB-SLAB / INDOOR AIR SAMPLE PREVIOUSLY SAMPLED BY JCI JONES
- 2018 AMBIENT AIR SAMPLE
- 2018 SAMPLING LOCATION
- USEPA SUB-SLAB SAMPLES (FEBRUARY 2009)

NOTES:

1. ALL LOCATIONS ARE APPROXIMATE.
2. RESULTS SHOWN ARE EXCEEDANCES OF USEPA VAPOR INTRUSION FRAMEWORK CRITERIA (JUNE 2009).
3. J INDICATES ESTIMATED VALUE.
4. DNE INDICATES DID NOT EXCEED.
5. U INDICATES ANALYTE NOT DETECTED ABOVE METHOD DETECTION LIMIT.
6. CONCENTRATIONS IN MICROGRAMS PER CUBIC METER (µg/m³).

REFERENCE:

1. AERIAL PHOTOGRAPH OBTAINED FROM NEW YORK STATE GEOGRAPHIC INFORMATION SYSTEMS (NYS GIS) WEB SITE, DATED 2009.

N

0 150' 300'

SCALE IN FEET

SAMPLING LOCATIONS ANDEXCEEDANCES IN INDOOR AIR

JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

Geosyntec consultants

TALLAHASSEE, FL | MARCH 2018

Figure: 2

P:\JAX-CAD\JCI JONES CHEMICALS\CALEDONIA NY\SAMPLING EVENTS - FR2872A\2018 02\FIGURES\FR2872B-C101.DWG (24 April 2018) rmuise

APPENDIX A

DOCUMENTATION
(INDOOR AIR QUALITY QUESTIONNAIRE, BUILDING INVENTORY FORMS AND SAMPLING LOGS)

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 Eric Hagerman Date/Time Prepared 22-Feb-2018

Preparer's Affiliation Geosyntec / Vortex Phone No. 850-491-5794

Purpose of Investigation Indoor Air Sampling

1. OCCUPANT:

Interviewed: (Y) / N

Last Name: Gaffney First Name: Tim

Address: 100 Sunny Sol Blvd. Caledonia, NY

County: Livingston

Home Phone: 585-538-2314 Office Phone: same

Number of Occupants/persons at this location 15 Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___) N/A

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	Commercial/Multi-use
(Industrial)	Church	Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: office / warehouse

If multiple units, how many? 3

If the property is commercial, type?

Business Type(s) warehouse / office

Does it include residences (i.e., multi-use)? Y / (N) If yes, how many? _____

Other characteristics:

Number of floors 1 - 1.5 Building age 79

Is the building insulated? Y (N) How air tight? Tight / Average / (Not Tight)

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

not really a 2nd floor, occasional step-up 4-5 steps to 2nd "level" — all basically in the same rooms

Airflow near source

heat (gas space heaters) in all areas ~~exp~~ except JC1-1A

Outdoor air infiltration

large doors occasionally open with airflow

Infiltration into air ducts

N/A

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS** (Circle all that apply) N/A

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type:	full	crawlspace	slab	other _____
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 finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

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	Hot water baseboard	
(Space Heaters)	Steam radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

(Natural Gas)	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: electric

Boiler/furnace located in: Basement Outdoors (Main Floor) Other _____

Air conditioning: Central Air Window units Open Windows (None)

Are there air distribution ducts present? Y (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY N/A

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	
1st Floor	
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage have a separate heating unit? Y / N (NA)

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) (Y) / N / NA
Please specify fork lifts, various

d. Has the building ever had a fire? Y (N) When?

e. Is a kerosene or unvented gas space heater present? (Y) / N Where? various

f. Is there a workshop or hobby/craft area? (Y) / N Where & Type? near or at most location

g. Is there smoking in the building? Y / (N) How frequently?

h. Have cleaning products been used recently? (Y) / N When & Type? on-going / household type cleaners

i. Have cosmetic products been used recently? Y (N) When & Type?

j. Has painting/staining been done in the last 6 months? (Y) / N Where & When? most areas on-going

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? N/A

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? N/A

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / (N)

p. Has there been a pesticide application? Y / N When & Type? _____

Are there odors in the building? (Y) / N
If yes, please describe: paint type

Do any of the building occupants use solvents at work? (Y) N
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? various petro-distillates

If yes, are their clothes washed at work? Y / (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service
uniforms cleaned off-site

Is there a radon mitigation system for the building/structure? (Y) N Date of Installation: _____
Is the system active or passive? Active/Passive
In office area (not sample locations)

9. WATER AND SEWAGE

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 residential emergency) N/A

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

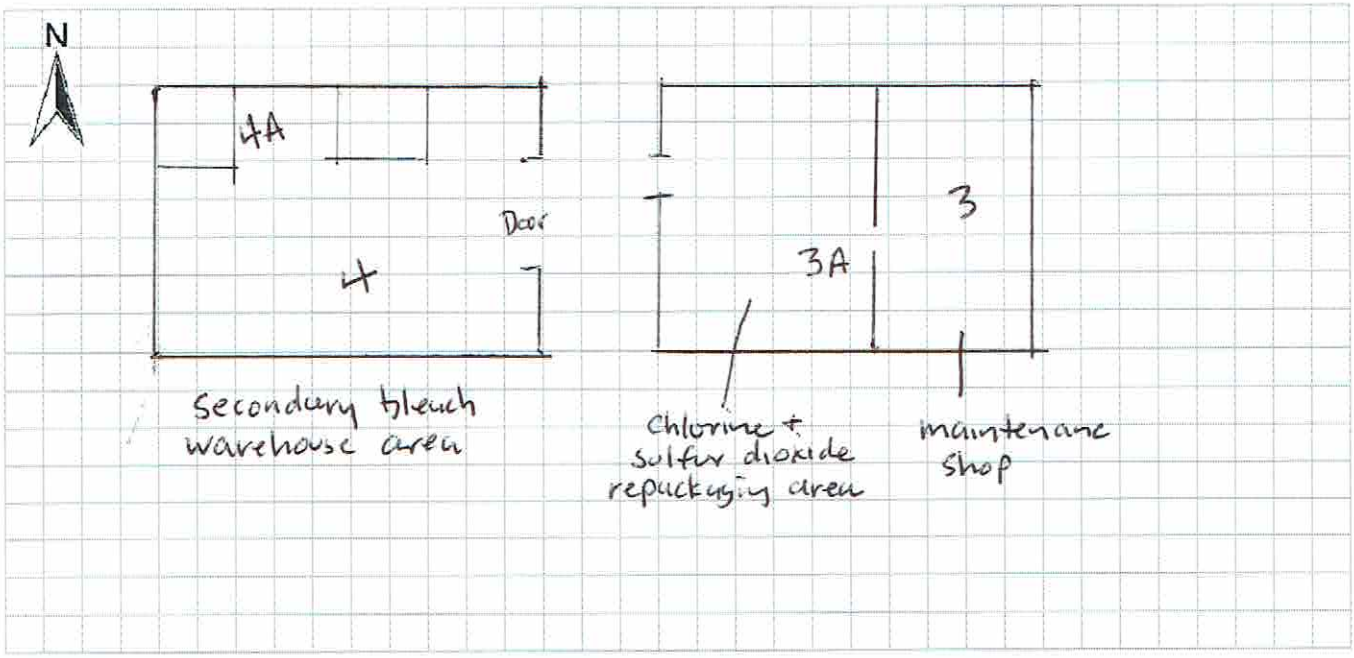
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

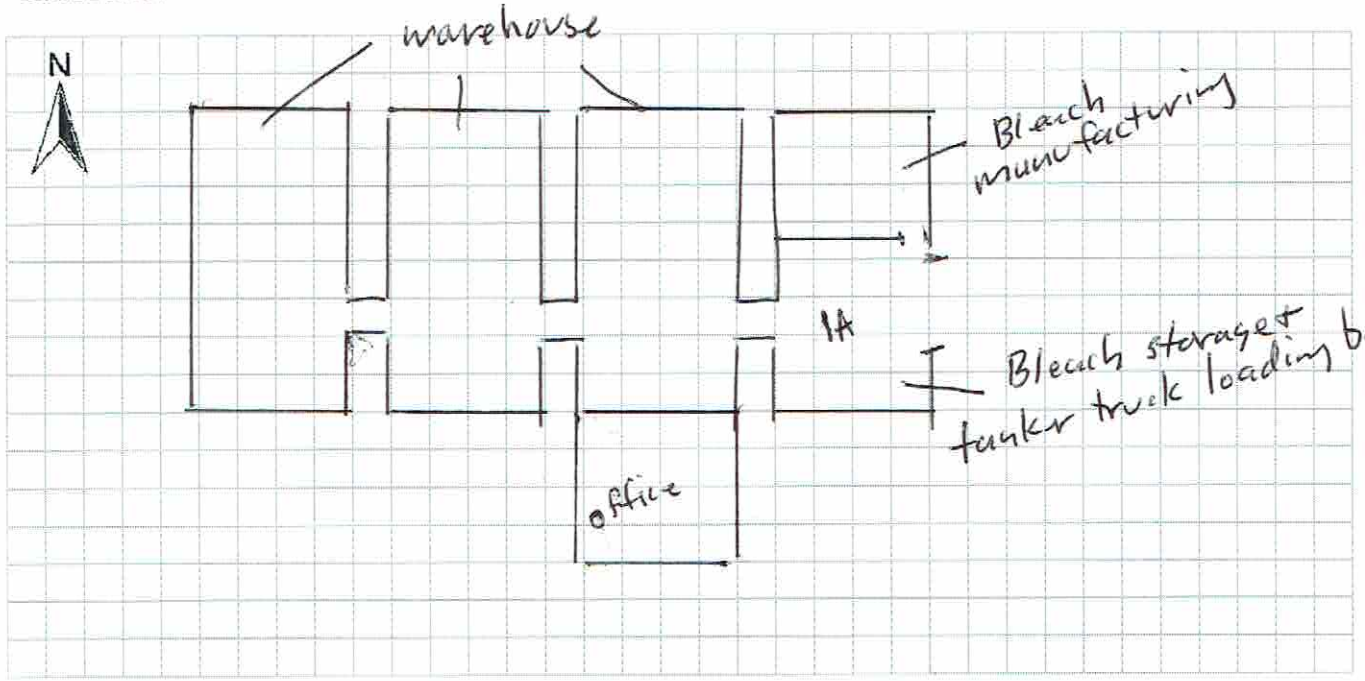
11. FLOOR PLANS

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:



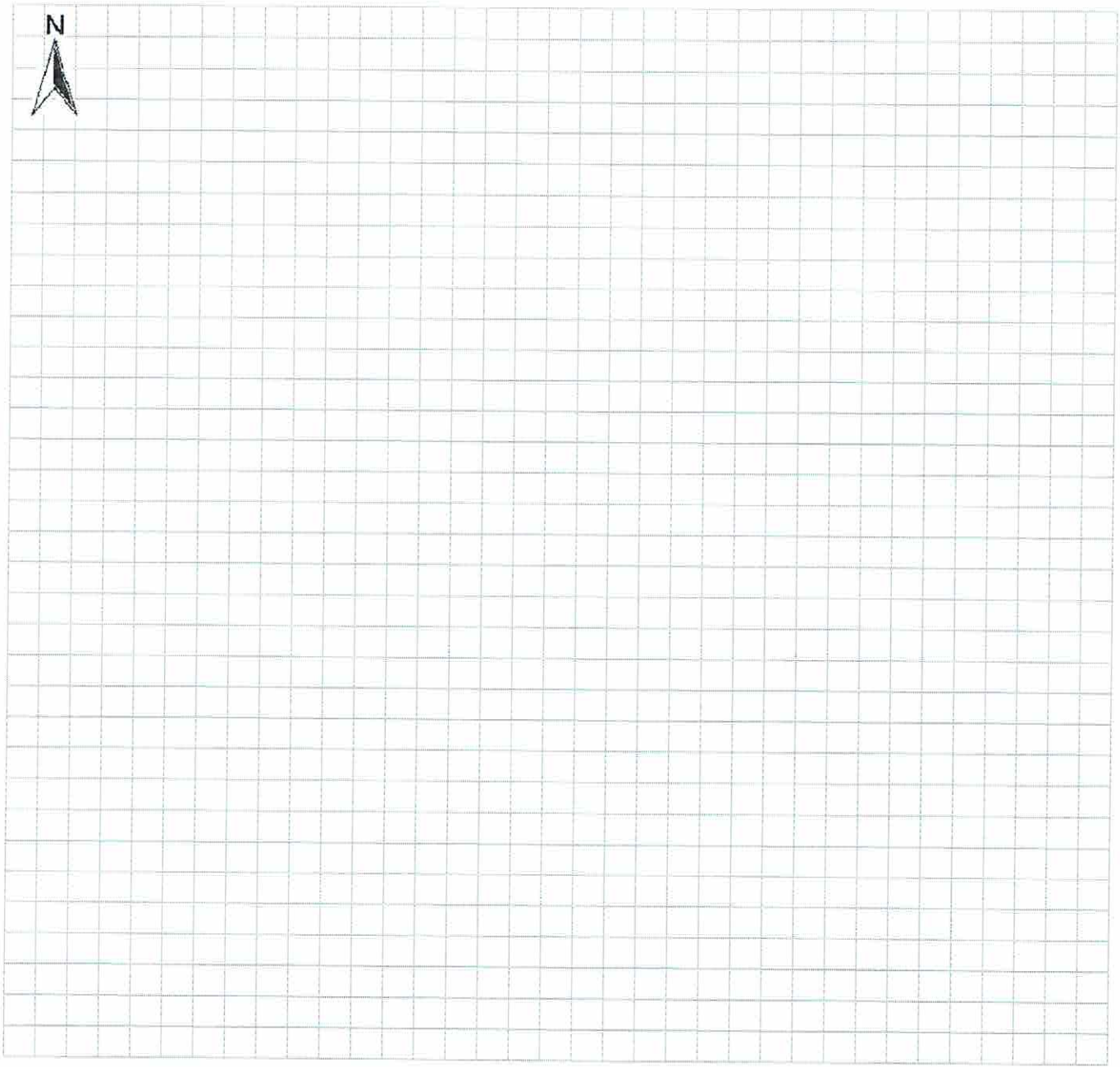
First Floor:



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 FORM

Make & Model of field instrument used: Mini Rae Lite PGM 7300

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) PPB	Photo ** Y / N
JCI – 4A	tanks	various	mostly empty	various - empty	500	4A-1
JCI – 4A	oil sump/parts clean	10 x 5 x 5	1/2 full	oil	600	4A-2
JCI "	fork-lift	N/A	off	LP powered	400	4A-3
JCI 4	large tanks	+1000 gals	mostly empty	sodium hypochorite	300	4-1
"	large tanks	+1000 gals	"	sodium bisulfite	650	4-2
JCI 3A	open paints	x 2 5 gal	1/2 full	paint no lable	700	3A-1
"	various chemicals on bench	1 gal 2 qts	mostly full	amonium hydroxide, pent. oil, spray paint	800	3A-2
"	various tank	?	mostly empty	? / NA	500	3A-3
"	36 tanks	?	mostly full	sulfur dioxide	800	3A-4
JCI – 3	various tanks	-	1/2 full?	sulfur dioxide chorine	1250	3-1
"	cutting oil	NA	open	cuting oil from threads machine	700	3-2
"	flamable cabinet		closed	N/A	900	3-3
"	various volitiles in flam. cabinet	various	open for inspection	pet. distilate product, paint, glue, oil, etc...	2700	3-4
JCI – 1A	chorine stage area	N/A	N/A	sodium hypochorite	1300	1A-1
"	chorine stage tank	+1000 gals	mostly empty	sodium hypochorite	1350	1A-2
"	waste oil	55 gal	8 inches product	oil	1500	1A-3
"	pick-up truck	N/A	N/A off	N/A	1050	1A-4
"	fuel containers	5x 5gal	some open/closed	x 3 gasoline x 2 kerosene	4700	1A-5
"	flamable cabinet	various	mostly closed	1 small can gasoline, mostly various motor oil ect..	3200	1A-6

* 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.

JCI Jone VI sampling notes

21-Feb-2018

7:00 depart/mob Beacon to Utica, pick-up supplies
Utica to lab in syracuse to pick-up sampling supplies
Syracuse to Caledonia NY
on-site @ JCI Jones Caledonia
meet with Tim Gaffney, review sampling locations
inventory supplies
stage out canisters and flow regulators at locations
record IDs on sampling form
off-site
19:10 arrive hotel in Rochester

22-Feb-2018

mob from hotel to site
4:35
on-site
start ambient and other canisters as per sampling forms
calibrate PID 0/0.1 — 10/9.96 ppm - OK
begin inventory of chemicals ect.. at sampling locations
including pictures etc....
conduct interview w Tim Gaffney
complete all paperwork - COC
last sample stopped @ 1430
update COC, pack samples - supplies
mob to lab in syracuse NY - deliver samples
mob to Utica NY, drop-off supplies
1940 mob to Beacon, de-mob etc....

22-Feb-2018
EBA

Ambient Air Collection Log

Client:	JC1 Jones	Sample ID:	JC1 - Ambient
Project:		Equipment:	N/A
Location:	Caledonia, NY	Tubing Information:	N/A
Samplers:	Eric Hagerman	Miscellaneous Equipment:	—
		Subcontractor:	NA
Sampling Depth:	N/A	Equipment:	NA
Time and Date of Installation:	N/A	Moisture Content of Sampling Zone):	Humidity
		Approximate Purge Volume:	N/A

Instrument Readings:

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
22-Feb-18	5:50	29.5	29	75	5	NM	0
"	14:30	4	34	80	NM	NM	0

SUMMA Canister Information:

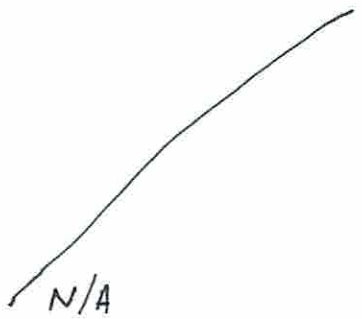
Size (circle one):	(1 L) 6 L			
Canister ID:	1191			
Flow Controller ID:	340			
Notes:			Notes:	

General Observations/Notes:

* snow beginning ≈ 1130

Indoor Air Sample Collection Log

Client:	JCI Jones
Project:	
Location:	Caledonia, NY
Samplers:	Eric Hagerman
Sampling Depth:	N/A
Time and Date of Installation:	N/A

Sample ID:	JCI - 4A IA
Equipment:	
Tubing Information:	
Miscellaneous Equipment:	
Subcontractor:	
Equipment:	N/A
Moisture Content of Sampling Zone):	
Approximate Purge Volume:	N/A

Instrument Readings:

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
22-Feb-2018	0555	29	69	25	N/A	NM	600
"	1350	6	71	20	"	"	NM

SUMMA Canister Information:

Size (circle one):	(1 L) 6 L			
Canister ID:	318			
Flow Controller ID:	298			
Notes:			Notes:	

General Observations/Notes:

Ambient Air Collection Log

Client:	~~JF~~ JCI Jones	Sample ID:	JCI- 4 IA
Project:		Equipment:	
Location:	Caledonia, NY	Tubing Information:	N/A
Samplers:	Eric Hagerman	Miscellaneous Equipment:	
		Subcontractor:	
Sampling Depth:	N/A	Equipment:	
Time and Date of Installation:	N/A	Moisture Content of Sampling Zone):	
		Approximate Purge Volume:	N/A

Instrument Readings:

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
22-Feb-2018	0605	30	58	40	N/A	NM	500
"	1355	6	64	43	"	"	
sample collected							

SUMMA Canister Information:

Size (circle one):	(1 L)	6 L			
Canister ID:	320				
Flow Controller ID:	338				
Notes:				Notes:	

General Observations/Notes:

Indoor Air Sample Collection Log

Client:	JCI Jones
Project:	
Location:	Caledonia, NY
Samplers:	Eric Hagerman
Sampling Depth:	N/A
Time and Date of Installation:	N/A

Sample ID:	JCI - 3A IA
Equipment:	
Tubing Information:	N/A
Miscellaneous Equipment:	
Subcontractor:	
Equipment:	
Moisture Content of Sampling Zone):	
Approximate Purge Volume:	N/A

Instrument Readings:

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
22-Feb-2018	0610	29	62	30	N/A	N/A	600
	1358	5	65	30	"	"	

SUMMA Canister Information:

Size (circle one):	(1 L) 6 L			
Canister ID:	207			
Flow Controller ID:	272			
Notes:			Notes:	

General Observations/Notes:

Indoor Air Sample Collection Log

Client:	JC1 Jones
Project:	
Location:	Caledonia, NY
Samplers:	Eric Hagermann
Sampling Depth:	N/A
Time and Date of Installation:	N/A

Sample ID:	JC1 - 3 IA
Equipment:	
Tubing Information:	
Miscellaneous Equipment:	N/A
Subcontractor:	
Equipment:	
Moisture Content of Sampling Zone):	
Approximate Purge Volume:	N/A

Instrument Readings:

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
22-Feb-18	0610	29.5	40	28	N/A	NM	700
"	1415	12	45	25	"	"	
sample	collect						

SUMMA Canister Information:

Size (circle one):	(1 L)	6 L			
Canister ID:	226				
Flow Controller ID:	253				
Notes:				Notes:	

General Observations/Notes:

Indoor Air Sample Collection Log

Client:	JCI Jones	Sample ID:	JCI - 1A IA
Project:		Equipment:	
Location:	Caledonia, NY	Tubing Information:	N/A
		Miscellaneous Equipment:	
Samplers:	Eric Hagerman	Subcontractor:	
		Equipment:	
Sampling Depth:	N/A	Moisture Content of Sampling Zone):	
Time and Date of Installation:	N/A	Approximate Purge Volume:	N/A

Instrument Readings:

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
22-Feb-18	0620	28.5	48	55	N/A	NM	1000
"	1425	5	51	50	"	"	NM
Sample collected							

SUMMA Canister Information:

Size (circle one):	(1 L) 6 L			
Canister ID:	188			
Flow Controller ID:	293			
Notes:			Notes:	

General Observations/Notes:

Sub-slab Soil Vapor Sample Collection Log

Client:	JCI Jones	Sample ID:	JCI 1A - SJ
Project:		Equipment:	
Location:	Caledonia, NY	Sealant:	concrete
Samplers:	Eric Hagerman	Tubing Information:	1/8 . 1/4
Sampling Depth:	1 - 2 ft.	Miscellaneous Equipment:	—
Time and Date of Installation:	2014, 2017 extension	Subcontractor:	—
		Equipment:	—
		Moisture Content of Sampling Zone):	
		Approximate Purge Volume:	30 mins via PID

Instrument Readings:

Date	Time	Canister Vacuum (a) (inches of Hg)	Temperature (°F)	Relative Humidity (%)	Air Speed (mph)	Barometric Pressure (inches of Hg)	PID (ppb)
22. Feb. 18	~~14~~ 0630	30	51	45	N/A	NM	1000
"	1425 sample collected	5	55	50	"	"	1200

SUMMA Canister Information:

Size (circle one):	(1 L) 6 L			
Canister ID:	131			
Flow Controller ID:	256			
Notes:			Notes:	

General Observations/Notes:

APPENDIX B

LABORATORY ANALYTICAL REPORT

CENTEK LABORATORIES, LLC

143 Midler Park Drive * Syracuse, NY 13206
Phone (315) 431-9730 * Emergency 24/7 (315) 416-2752
NYSDOH ELAP Certificate No. 11830

Analytical Report

Shekhar Melkote
Geosyntec - Moosic
9 Steinbeck Drive
Moosic, PA 18507

TEL: (570) 575-2631
FAX
RE: JCI Caledonia

Tuesday, February 27, 2018
Order No.: C1802064

Dear Shekhar Melkote:

Centek Laboratories, LLC received 7 sample(s) on 2/23/2018 for the analyses presented in the following report.

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness. Release of the data contained in this hardcopy data package and/or in the computer readable data submitted has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Centek Laboratories performs all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services. Please contact your client service representative at (315) 431-9730 or myself, if you would like any additional information regarding this report.

Thank you for using Centek Laboratories. This report can not be reproduced except in its entirety, without prior written authorization.

Sincerely,

William Dobbin
Lead Technical Director

Disclaimer: The test results and procedures utilized, and laboratory interpretations of the data obtained by Centek as contained in this report are believed by Centek to be accurate and reliable

for sample(s) tested. In accepting this report, the customer agrees that the full extent of any and all liability for actual and consequential damages of Centek for the services performed shall be equal to the fee charged to the customer for the services as liquidated damages. ELAP does not offer certification for the following parameters by this method at present time, they are: 4-ethyltoluene, ethyl acetate, propylene, tetrahydrofuran, 4-PCH, sulfur derived and silcon series compounds.

Centek Laboratories, LLC Terms and Conditions

Sample Submission

All samples sent to Centek Laboratories should be accompanied by our Request for Analysis Form or Chain of Custody Form. A Chain of Custody will be provided with each order shipped for all sampling events, or if needed, one is available at our website www.CentekLabs.com. Samples received after 3:00pm are considered to be a part of the next day's business.

Sample Media

Samples can be collected in an canister or a Tedlar bag. Depending on your analytical needs, Centek Laboratories may receive a bulk, liquid, soil or other matrix sample for headspace analysis.

Blanks

Every sample is run with a surrogate or tracer compound at a pre-established concentration. The surrogate compound run with each sample is used as a standard to measure the performance of each run of the instrument. If required, a Minican can be provided containing nitrogen to be run as a trip blank with your samples.

Sampling Equipment

Centek Laboratories will be happy to provide the canisters to carry-out your sampling event at no charge. The necessary accessories, such as regulators, tubing or personal sampling belts, are also provided to meet your sampling needs. The customer is responsible for all shipping charges to the client's destination and return shipping to the laboratory. Client assumes all responsibility for lost, stolen and any damages of equipment.

Turn Around time (TAT)

Centek Laboratories will provide results to its clients in one business-week by 6:00pm EST after receipt of samples. For example, if samples are received on a Monday they are due on the following Monday by 6:00pm EST. Results are faxed or emailed to the requested location indicated on the Chain of Custody. Non-routine analysis may require more than the one business-week turnaround time. Please confirm non-routine sample turnaround times.

Reporting

Results are emailed or faxed at no additional charge. A hard copy of the result report is mailed within 24 hours of the faxing or emailing of your results. Cat "B" like packages are within 3-4 weeks from time of analysis. Standard Electronic Disk Deliverables (EDD) is also available at no additional charge.

Payment Terms

Payment for all purchases shall be due within 30 days from date of invoice. The client agrees to pay a finance charge of 1.5% per month on the overdue balance and cost of collection, including attorney fees, if collection proceedings are necessary. You must have a completed credit

application on file to extend credit. Purchase orders or checks information must be submitted for us to release results

Rush Turnaround Samples

Expedited turn around times is available. Please confirm rush turnaround times with Client Services before submitting samples.

Applicable Surcharges for Rush Turnaround Samples:
Same day TAT = 200%
Next business day TAT by Noon = 150%
Next business day TAT by 6:00pm = 100%
Second business day TAT by 6:00pm = 75%
Third business day TAT by 6:00pm = 50%
Fourth business day TAT by 6:00pm = 35%
Fifth business day = Standard

Statement of Confidentiality

Centek Laboratories, LLC is aware of the importance of the confidentiality of results to many of our clients. Your name and data will be held in the strictest of confidence. We will not accept business that may constitute a conflict of interest. We commonly sign Confidential Nondisclosure Agreements with clients prior to beginning work. All research, results and reports will be kept strictly confidential. Secrecy Agreements and Disclosure Statements will be signed for the client if so specified. Results will be provided only to the addressee specified on the Chain of Custody Form submitted with the samples unless law requires release. Written permission is required from the addressee to release results to any other party.

Limitation on Liability

Centek Laboratories, LLC warrants the test results to be accurate to the methodology and sample type for each sample submitted to Centek Laboratories, LLC. In no event shall Centek Laboratories, LLC be liable for direct, indirect, special, punitive, incidental, exemplary or consequential damages, or any damages whatsoever, even if Centek Laboratories, LLC has been previously advised of the possibility of such damages whether in an action under contract, negligence, or any other theory, arising out of or in connection with the use, inability to use or performance of the information, services, products and materials available from the laboratory or this site. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. This is a comprehensive limitation of liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect or consequential damages, loss of data, income or profit and or loss of or damage to property and claims of third parties.

CENTEK LABORATORIES, LLC

Date: *28-Feb-18*

CLIENT: Geosyntec - Moosic
Project: JCI Caledonia
Lab Order: C1802064

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Centek Laboratories, LLC SOP TS-80
Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the corrective action report(s). All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

NYSDEC ASP samples:
Canisters should be evacuated to a reading of less than or equal to 50 millitorr prior to shipment to sampling personnel. The vacuum in the canister will be field checked prior to sampling, and must read 28" of Hg (±2", vacuum, absolute) before a sample can be collected. After the sample has been collected, the pressure of the canister will be read and recorded again, and must be 5" of Hg (±1", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg,±1". Please record and report the pressure/vacuum of received canisters on the sample receipt paperwork. A pressure/vacuum reading should also be taken just prior to the withdrawal of sample from the canister, and recorded on the sample preparation log sheet. All regulators are calibrated to meet these requirements before they leave the laboratory. However, due to environmental conditions and use of the equipment Centek can not guarantee that this criteria can always be achieved.

Centek Labs - Chain of Custody

Centek Laboratories
143 Midler Park Drive
Syracuse, NY 13206
315-431-9730
www.CentekLabs.com
Vapor Intrusion & IAQ

Site Name: JC1 Caledonia
Project: ii
PO#: FR2872
Quote # 9-5F
Canister Order #: 7036

Detection Limit: ☐ 5ppbv ☒ 1ug/M3 ☐ 1ug/M3 + 0.2 NYS

Report Level: ☒ Level I ☐ Level II ☐ Cat "B" Like

TAT Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	☒	0%	
4 Business Days	☐	25%	
3 Business Days	☐	50%	
2 Business Days	☐	75%	
*Next Day by 5pm	☐	100%	
*Next Day by Noon	☐	150%	
*Same Day	☐	200%	

MP

Company: GEOSYNTEC - MOOSIC

Report to:
Address: Shekhar Melkote
City, State, Zip 9 Steinbeck Dr Moosic PA
Email: on-file SMELKOTE@GEOSYNTEC.COM
Phone: on-file

Company: Check Here If Same: ☐

Invoice to:
Address: Geosyntec
City, State, Zip
Email:
Phone:

*For Same and Next Day TAT Please Notify Lab

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Field Vacuum Start / Stop	Labs Vacuum** RecV/Analysis	Comments
Ambient	22-Feb-2018	1191	340		29.5 / 4	-2 / -3	
JC1-4A IA	"	318	298		29 / 6	-6 / -6	
JC1-4 IA	"	(2)320	338		30 / 6	-6 / -6	
JC1-3A IA	"	307	272		29 / [redacted]5	-5 / -5	
JC1-3 IA	"	226	253		29.5 / 12	-11 / -11	note vac
JC1-1A IA	"	188	293		28.5 / 5	-4 / -4	
JC1-1ASS	"	131	256		30 / 5	-4 / -4	
					/	/	
					/	/	
					/	/	
					/	/	
					/	/	
					/	/	
					/	/	
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					/	/	
					/	/	
					/	/	

Chain of Custody	Print Name	Signature	Date/Time	Courier: CIRCLE ONE
Sampled by:	Eric Hagemann		22-Feb 1645	FedEx UPS Pickup/Dropoff
Relinquished by:	"		"	**For LAB USE ONLY
Received at Lab by:	MICK SCALA		"	Work Order # C1802067

*** By signing Centek Labs Chain of Custody, you are accepting Centek Labs Terms and Conditions listed on the reverse side.

CENTEK LABORATORIES, LLC

Sample Receipt Checklist

Client Name: GEOSYNTEC - MOOSIC

Date and Time Received 2/23/2018

Work Order Number C1802064

Received by: RJP

Checklist completed by [signature] 2/23/18 (Signature / Date)

Reviewed by WD 2/23/18 (Initials / Date)

Matrix:

Carrier name: UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☑	

Adjusted? _____ Checked by _____

Any No and/or NA (not applicable) response must be detailed in the comments section be

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

CENTEK LABORATORIES, LLC

Date: *28-Feb-18*

CLIENT: Geosyntec - Moosic
Project: JCI Caledonia
Lab Order: C1802064

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C1802064-001A	Ambient	1191 340	2/22/2018	2/23/2018
C1802064-002A	JCI - 4A IA	318 298	2/22/2018	2/23/2018
C1802064-003A	JCI - 4 IA	320 338	2/22/2018	2/23/2018
C1802064-004A	JCI - 3A IA	207 272	2/22/2018	2/23/2018
C1802064-005A	JCI - 3 IA	226 253	2/22/2018	2/23/2018
C1802064-006A	JCI - 1A IA	188 293	2/22/2018	2/23/2018
C1802064-007A	JCI - 1A SS	131 256	2/22/2018	2/23/2018

Centek Laboratories, LLC

28-Feb-18

Lab Order: C1802064
Client: Geosyntec - Moosic
Project: JCI Caledonia

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
C1802064-001A	Ambient	2/22/2018	Air	1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/24/2018
				1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/23/2018
C1802064-002A	JCI - 4A IA			1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/24/2018
				1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/23/2018
C1802064-003A	JCI - 4 IA			1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/24/2018
				1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/23/2018
C1802064-004A	JCI - 3A IA			1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/24/2018
				1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/23/2018
C1802064-005A	JCI - 3 IA			1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/24/2018
				1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/23/2018
C1802064-006A	JCI - 1A IA			1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/26/2018
				1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE			2/23/2018
C1802064-007A	JCI - 1A SS			1ug/M3 by Method TO15			2/26/2018
				1ug/M3 by Method TO15			2/24/2018

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	Ambient
Lab Order:	C1802064	**Tag Number:**	1191 340
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-3			"Hg		2/23/2018
Lab Vacuum Out	-30			"Hg		2/23/2018
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	2/23/2018 6:31:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	2/23/2018 6:31:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Acetone	8.5	3.0		ppbV	10	2/24/2018 7:49:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Benzene	0.13	0.15	J	ppbV	1	2/23/2018 6:31:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Bromoform	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Carbon tetrachloride	0.090	0.030		ppbV	1	2/23/2018 6:31:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Chloroform	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Chloromethane	0.45	0.15		ppbV	1	2/23/2018 6:31:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	2/23/2018 6:31:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	Ambient
Lab Order:	C1802064	**Tag Number:**	1191 340
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-001A	**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**
Ethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Freon 11	0.30	0.15		ppbV	1	2/23/2018 6:31:00 PM
Freon 113	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Freon 114	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Freon 12	0.57	0.15		ppbV	1	2/23/2018 6:31:00 PM
Heptane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Hexane	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	2/23/2018 6:31:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 6:31:00 PM
Methyl Ethyl Ketone	0.15	0.30	J	ppbV	1	2/23/2018 6:31:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 6:31:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Methylene chloride	0.27	0.15		ppbV	1	2/23/2018 6:31:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Propylene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Styrene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Toluene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	2/23/2018 6:31:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	2/23/2018 6:31:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	2/23/2018 6:31:00 PM
Surr: Bromofluorobenzene	93.0	70-130		%REC	1	2/23/2018 6:31:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 4A IA
Lab Order:	C1802064	**Tag Number:**	318 298
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-6			"Hg		2/23/2018
Lab Vacuum Out	-30			"Hg		2/23/2018
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	2/23/2018 7:12:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	2/23/2018 7:12:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Acetone	22	3.0		ppbV	10	2/24/2018 8:26:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Benzene	0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Bromoform	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Carbon tetrachloride	0.53	0.030		ppbV	1	2/23/2018 7:12:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Chloroform	0.27	0.15		ppbV	1	2/23/2018 7:12:00 PM
Chloromethane	0.72	0.15		ppbV	1	2/23/2018 7:12:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	2/23/2018 7:12:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 4A IA
Lab Order:	C1802064	**Tag Number:**	318 298
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-002A	**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**
Ethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Freon 11	0.40	0.15		ppbV	1	2/23/2018 7:12:00 PM
Freon 113	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Freon 114	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Freon 12	0.59	0.15		ppbV	1	2/23/2018 7:12:00 PM
Heptane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Hexane	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Isopropyl alcohol	5.3	1.5		ppbV	10	2/24/2018 8:26:00 PM
m&p-Xylene	0.14	0.30	J	ppbV	1	2/23/2018 7:12:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 7:12:00 PM
Methyl Ethyl Ketone	0.21	0.30	J	ppbV	1	2/23/2018 7:12:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 7:12:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Methylene chloride	0.50	0.15		ppbV	1	2/23/2018 7:12:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Propylene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Styrene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Tetrachloroethylene	1.7	0.15		ppbV	1	2/23/2018 7:12:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Toluene	5.2	1.5		ppbV	10	2/24/2018 8:26:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Trichloroethene	0.12	0.030		ppbV	1	2/23/2018 7:12:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	2/23/2018 7:12:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	2/23/2018 7:12:00 PM
Surr: Bromofluorobenzene	94.0	70-130		%REC	1	2/23/2018 7:12:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 4 IA
Lab Order:	C1802064	**Tag Number:**	320 338
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-6			"Hg		2/23/2018
Lab Vacuum Out	-30			"Hg		2/23/2018
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	2/23/2018 7:53:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	2/23/2018 7:53:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Acetone	16	3.0		ppbV	10	2/24/2018 9:03:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Benzene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Bromoform	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Carbon tetrachloride	5.9	0.30		ppbV	10	2/24/2018 9:03:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Chloroethane	0.10	0.15	J	ppbV	1	2/23/2018 7:53:00 PM
Chloroform	1.8	0.15		ppbV	1	2/23/2018 7:53:00 PM
Chloromethane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
cis-1,2-Dichloroethene	0.060	0.040		ppbV	1	2/23/2018 7:53:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 4 IA
Lab Order:	C1802064	**Tag Number:**	320 338
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-003A	**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**
Ethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Freon 11	0.69	0.15		ppbV	1	2/23/2018 7:53:00 PM
Freon 113	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Freon 114	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Freon 12	0.58	0.15		ppbV	1	2/23/2018 7:53:00 PM
Heptane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Hexane	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
m&p-Xylene	0.11	0.30	J	ppbV	1	2/23/2018 7:53:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 7:53:00 PM
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 7:53:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 7:53:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Methylene chloride	0.81	0.15		ppbV	1	2/23/2018 7:53:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Propylene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Styrene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Tetrachloroethylene	1.8	0.15		ppbV	1	2/23/2018 7:53:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Toluene	1.6	0.15		ppbV	1	2/23/2018 7:53:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Trichloroethene	0.21	0.030		ppbV	1	2/23/2018 7:53:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	2/23/2018 7:53:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	2/23/2018 7:53:00 PM
Surr: Bromofluorobenzene	89.0	70-130		%REC	1	2/23/2018 7:53:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 3A IA
Lab Order:	C1802064	**Tag Number:**	207 272
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-5			"Hg		2/23/2018
Lab Vacuum Out	-30			"Hg		2/23/2018
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	2/23/2018 8:33:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	2/23/2018 8:33:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Acetone	21	3.0		ppbV	10	2/24/2018 9:40:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Benzene	0.14	0.15	J	ppbV	1	2/23/2018 8:33:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Bromoform	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Carbon tetrachloride	0.10	0.030		ppbV	1	2/23/2018 8:33:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Chloroform	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Chloromethane	0.51	0.15		ppbV	1	2/23/2018 8:33:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040		ppbV	1	2/23/2018 8:33:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 3A IA
Lab Order:	C1802064	**Tag Number:**	207 272
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-004A	**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**
Ethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Freon 11	0.37	0.15		ppbV	1	2/23/2018 8:33:00 PM
Freon 113	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Freon 114	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Freon 12	0.64	0.15		ppbV	1	2/23/2018 8:33:00 PM
Heptane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Hexane	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Isopropyl alcohol	22	1.5		ppbV	10	2/24/2018 9:40:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	2/23/2018 8:33:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 8:33:00 PM
Methyl Ethyl Ketone	0.20	0.30	J	ppbV	1	2/23/2018 8:33:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 8:33:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Methylene chloride	0.36	0.15		ppbV	1	2/23/2018 8:33:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Propylene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Styrene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Tetrachloroethylene	0.21	0.15		ppbV	1	2/23/2018 8:33:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Toluene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Trichloroethene	< 0.030	0.030		ppbV	1	2/23/2018 8:33:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	2/23/2018 8:33:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	2/23/2018 8:33:00 PM
Surr: Bromofluorobenzene	95.0	70-130		%REC	1	2/23/2018 8:33:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 3 IA
Lab Order:	C1802064	**Tag Number:**	226 253
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-11			"Hg		2/23/2018
Lab Vacuum Out	-30			"Hg		2/23/2018
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	2/23/2018 9:16:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,2,4-Trimethylbenzene	0.17	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	2/23/2018 9:16:00 PM
2,2,4-trimethylpentane	0.13	0.15	J	ppbV	1	2/23/2018 9:16:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Acetone	24	3.0		ppbV	10	2/24/2018 10:18:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Benzene	0.18	0.15		ppbV	1	2/23/2018 9:16:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Bromoform	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Carbon tetrachloride	0.080	0.030		ppbV	1	2/23/2018 9:16:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Chloroform	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Chloromethane	0.38	0.15		ppbV	1	2/23/2018 9:16:00 PM
cis-1,2-Dichloroethene	0.060	0.040		ppbV	1	2/23/2018 9:16:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 3 IA
Lab Order:	C1802064	**Tag Number:**	226 253
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-005A	**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**
Ethylbenzene	0.12	0.15	J	ppbV	1	2/23/2018 9:16:00 PM
Freon 11	0.28	0.15		ppbV	1	2/23/2018 9:16:00 PM
Freon 113	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Freon 114	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Freon 12	0.54	0.15		ppbV	1	2/23/2018 9:16:00 PM
Heptane	0.19	0.15		ppbV	1	2/23/2018 9:16:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Hexane	0.24	0.15		ppbV	1	2/23/2018 9:16:00 PM
Isopropyl alcohol	20	1.5		ppbV	10	2/24/2018 10:18:00 PM
m&p-Xylene	0.45	0.30		ppbV	1	2/23/2018 9:16:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 9:16:00 PM
Methyl Ethyl Ketone	1.1	0.30		ppbV	1	2/23/2018 9:16:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 9:16:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Methylene chloride	0.48	0.15		ppbV	1	2/23/2018 9:16:00 PM
o-Xylene	0.19	0.15		ppbV	1	2/23/2018 9:16:00 PM
Propylene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Styrene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Tetrachloroethylene	4.4	1.5		ppbV	10	2/24/2018 10:18:00 PM
Tetrahydrofuran	5.0	1.5		ppbV	10	2/24/2018 10:18:00 PM
Toluene	0.51	0.15		ppbV	1	2/23/2018 9:16:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Trichloroethene	0.25	0.030		ppbV	1	2/23/2018 9:16:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	2/23/2018 9:16:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	2/23/2018 9:16:00 PM
Surr: Bromofluorobenzene	90.0	70-130		%REC	1	2/23/2018 9:16:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 1A IA
Lab Order:	C1802064	**Tag Number:**	188 293
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-4			"Hg		2/23/2018
Lab Vacuum Out	-30			"Hg		2/23/2018
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	1.4	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,1-Dichloroethene	< 0.040	0.040		ppbV	1	2/23/2018 9:57:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,2,4-Trimethylbenzene	0.13	0.15	J	ppbV	1	2/23/2018 9:57:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	2/23/2018 9:57:00 PM
2,2,4-trimethylpentane	0.16	0.15		ppbV	1	2/23/2018 9:57:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Acetone	6.4	6.0		ppbV	20	2/26/2018 8:52:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Benzene	0.62	0.15		ppbV	1	2/23/2018 9:57:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Bromodichloromethane	0.31	0.15		ppbV	1	2/23/2018 9:57:00 PM
Bromoform	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Carbon tetrachloride	2.4	0.60		ppbV	20	2/26/2018 8:52:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Chloroform	27	3.0		ppbV	20	2/26/2018 8:52:00 PM
Chloromethane	0.67	0.15		ppbV	1	2/23/2018 9:57:00 PM
cis-1,2-Dichloroethene	0.10	0.040		ppbV	1	2/23/2018 9:57:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Cyclohexane	0.13	0.15	J	ppbV	1	2/23/2018 9:57:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 1A IA
Lab Order:	C1802064	**Tag Number:**	188 293
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-006A	**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**
Ethylbenzene	0.10	0.15	J	ppbV	1	2/23/2018 9:57:00 PM
Freon 11	0.33	0.15		ppbV	1	2/23/2018 9:57:00 PM
Freon 113	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Freon 114	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Freon 12	0.58	0.15		ppbV	1	2/23/2018 9:57:00 PM
Heptane	0.24	0.15		ppbV	1	2/23/2018 9:57:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Hexane	1.1	0.15		ppbV	1	2/23/2018 9:57:00 PM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
m&p-Xylene	0.34	0.30		ppbV	1	2/23/2018 9:57:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 9:57:00 PM
Methyl Ethyl Ketone	0.49	0.30		ppbV	1	2/23/2018 9:57:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	2/23/2018 9:57:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Methylene chloride	0.62	0.15		ppbV	1	2/23/2018 9:57:00 PM
o-Xylene	0.14	0.15	J	ppbV	1	2/23/2018 9:57:00 PM
Propylene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Styrene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Tetrachloroethylene	1.0	0.15		ppbV	1	2/23/2018 9:57:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Toluene	0.81	0.15		ppbV	1	2/23/2018 9:57:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Trichloroethene	0.40	0.030		ppbV	1	2/23/2018 9:57:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	2/23/2018 9:57:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	2/23/2018 9:57:00 PM
Surr: Bromofluorobenzene	95.0	70-130		%REC	1	2/23/2018 9:57:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 1A SS
Lab Order:	C1802064	**Tag Number:**	131 256
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-4			"Hg		2/23/2018
Lab Vacuum Out	-30			"Hg		2/23/2018
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	1.2	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	2/24/2018 4:34:00 AM
2,2,4-trimethylpentane	0.10	0.15	J	ppbV	1	2/24/2018 4:34:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Acetone	3.2	6.0	J	ppbV	20	2/26/2018 10:06:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Benzene	0.42	0.15		ppbV	1	2/24/2018 4:34:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Bromodichloromethane	0.21	0.15		ppbV	1	2/24/2018 4:34:00 AM
Bromoform	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Carbon disulfide	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Carbon tetrachloride	1.9	0.15		ppbV	1	2/24/2018 4:34:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Chloroform	22	3.0		ppbV	20	2/26/2018 10:06:00 PM
Chloromethane	0.75	0.15		ppbV	1	2/24/2018 4:34:00 AM
cis-1,2-Dichloroethene	0.11	0.15	J	ppbV	1	2/24/2018 4:34:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Cyclohexane	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Ethyl acetate	0.21	0.15		ppbV	1	2/24/2018 4:34:00 AM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 1A SS
Lab Order:	C1802064	**Tag Number:**	131 256
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Freon 11	0.31	0.15		ppbV	1	2/24/2018 4:34:00 AM
Freon 113	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Freon 114	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Freon 12	0.59	0.15		ppbV	1	2/24/2018 4:34:00 AM
Heptane	0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Hexane	0.67	0.15		ppbV	1	2/24/2018 4:34:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
m&p-Xylene	0.20	0.30	J	ppbV	1	2/24/2018 4:34:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	2/24/2018 4:34:00 AM
Methyl Ethyl Ketone	0.29	0.30	J	ppbV	1	2/24/2018 4:34:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	2/24/2018 4:34:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Methylene chloride	0.56	0.15		ppbV	1	2/24/2018 4:34:00 AM
o-Xylene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Propylene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Styrene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Tetrachloroethylene	1.4	0.15		ppbV	1	2/24/2018 4:34:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Toluene	0.49	0.15		ppbV	1	2/24/2018 4:34:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Trichloroethene	0.44	0.15		ppbV	1	2/24/2018 4:34:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	2/24/2018 4:34:00 AM
Surr: Bromofluorobenzene	95.0	70-130		%REC	1	2/24/2018 4:34:00 AM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	Ambient
Lab Order:	C1802064	**Tag Number:**	1191 340
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-001A	**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**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 6:31:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	2/23/2018 6:31:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 6:31:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 6:31:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 6:31:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	2/23/2018 6:31:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/23/2018 6:31:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	2/23/2018 6:31:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 6:31:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 6:31:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	2/23/2018 6:31:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/23/2018 6:31:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	2/23/2018 6:31:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 6:31:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 6:31:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	2/23/2018 6:31:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	2/23/2018 6:31:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	2/23/2018 6:31:00 PM
Acetone	20	7.1		ug/m3	10	2/24/2018 7:49:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	2/23/2018 6:31:00 PM
Benzene	0.42	0.48	J	ug/m3	1	2/23/2018 6:31:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	2/23/2018 6:31:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	2/23/2018 6:31:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	2/23/2018 6:31:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	2/23/2018 6:31:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	2/23/2018 6:31:00 PM
Carbon tetrachloride	0.57	0.19		ug/m3	1	2/23/2018 6:31:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	2/23/2018 6:31:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	2/23/2018 6:31:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	2/23/2018 6:31:00 PM
Chloromethane	0.93	0.31		ug/m3	1	2/23/2018 6:31:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 6:31:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 6:31:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	2/23/2018 6:31:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	2/23/2018 6:31:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	2/23/2018 6:31:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	2/23/2018 6:31:00 PM
Freon 11	1.7	0.84		ug/m3	1	2/23/2018 6:31:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	2/23/2018 6:31:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	2/23/2018 6:31:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	Ambient
Lab Order:	C1802064	**Tag Number:**	1191 340
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-001A	**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	2.8	0.74		ug/m3	1	2/23/2018 6:31:00 PM
Heptane	< 0.61	0.61		ug/m3	1	2/23/2018 6:31:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/23/2018 6:31:00 PM
Hexane	< 0.53	0.53		ug/m3	1	2/23/2018 6:31:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	2/23/2018 6:31:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	2/23/2018 6:31:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 6:31:00 PM
Methyl Ethyl Ketone	0.44	0.88	J	ug/m3	1	2/23/2018 6:31:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 6:31:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/23/2018 6:31:00 PM
Methylene chloride	0.94	0.52		ug/m3	1	2/23/2018 6:31:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	2/23/2018 6:31:00 PM
Propylene	< 0.26	0.26		ug/m3	1	2/23/2018 6:31:00 PM
Styrene	< 0.64	0.64		ug/m3	1	2/23/2018 6:31:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	2/23/2018 6:31:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	2/23/2018 6:31:00 PM
Toluene	< 0.57	0.57		ug/m3	1	2/23/2018 6:31:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/23/2018 6:31:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 6:31:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 6:31:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/23/2018 6:31:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/23/2018 6:31:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	2/23/2018 6:31:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 4A IA
Lab Order:	C1802064	**Tag Number:**	318 298
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-002A	**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**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 7:12:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	2/23/2018 7:12:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 7:12:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 7:12:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 7:12:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	2/23/2018 7:12:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/23/2018 7:12:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	2/23/2018 7:12:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 7:12:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 7:12:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	2/23/2018 7:12:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/23/2018 7:12:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	2/23/2018 7:12:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 7:12:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 7:12:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	2/23/2018 7:12:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	2/23/2018 7:12:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	2/23/2018 7:12:00 PM
Acetone	53	7.1		ug/m3	10	2/24/2018 8:26:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	2/23/2018 7:12:00 PM
Benzene	0.48	0.48		ug/m3	1	2/23/2018 7:12:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	2/23/2018 7:12:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	2/23/2018 7:12:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	2/23/2018 7:12:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	2/23/2018 7:12:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	2/23/2018 7:12:00 PM
Carbon tetrachloride	3.3	0.19		ug/m3	1	2/23/2018 7:12:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	2/23/2018 7:12:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	2/23/2018 7:12:00 PM
Chloroform	1.3	0.73		ug/m3	1	2/23/2018 7:12:00 PM
Chloromethane	1.5	0.31		ug/m3	1	2/23/2018 7:12:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 7:12:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 7:12:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	2/23/2018 7:12:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	2/23/2018 7:12:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	2/23/2018 7:12:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	2/23/2018 7:12:00 PM
Freon 11	2.2	0.84		ug/m3	1	2/23/2018 7:12:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	2/23/2018 7:12:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	2/23/2018 7:12:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 4A IA
Lab Order:	C1802064	**Tag Number:**	318 298
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-002A	**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	2.9	0.74		ug/m3	1	2/23/2018 7:12:00 PM
Heptane	< 0.61	0.61		ug/m3	1	2/23/2018 7:12:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/23/2018 7:12:00 PM
Hexane	< 0.53	0.53		ug/m3	1	2/23/2018 7:12:00 PM
Isopropyl alcohol	13	3.7		ug/m3	10	2/24/2018 8:26:00 PM
m&p-Xylene	0.61	1.3	J	ug/m3	1	2/23/2018 7:12:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 7:12:00 PM
Methyl Ethyl Ketone	0.62	0.88	J	ug/m3	1	2/23/2018 7:12:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 7:12:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/23/2018 7:12:00 PM
Methylene chloride	1.7	0.52		ug/m3	1	2/23/2018 7:12:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	2/23/2018 7:12:00 PM
Propylene	< 0.26	0.26		ug/m3	1	2/23/2018 7:12:00 PM
Styrene	< 0.64	0.64		ug/m3	1	2/23/2018 7:12:00 PM
Tetrachloroethylene	11	1.0		ug/m3	1	2/23/2018 7:12:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	2/23/2018 7:12:00 PM
Toluene	20	5.7		ug/m3	10	2/24/2018 8:26:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/23/2018 7:12:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 7:12:00 PM
Trichloroethene	0.64	0.16		ug/m3	1	2/23/2018 7:12:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/23/2018 7:12:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/23/2018 7:12:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	2/23/2018 7:12:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 4 IA
Lab Order:	C1802064	**Tag Number:**	320 338
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-003A	**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**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 7:53:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	2/23/2018 7:53:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 7:53:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 7:53:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 7:53:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	2/23/2018 7:53:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/23/2018 7:53:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	2/23/2018 7:53:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 7:53:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 7:53:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	2/23/2018 7:53:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/23/2018 7:53:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	2/23/2018 7:53:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 7:53:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 7:53:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	2/23/2018 7:53:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	2/23/2018 7:53:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	2/23/2018 7:53:00 PM
Acetone	37	7.1		ug/m3	10	2/24/2018 9:03:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	2/23/2018 7:53:00 PM
Benzene	< 0.48	0.48		ug/m3	1	2/23/2018 7:53:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	2/23/2018 7:53:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	2/23/2018 7:53:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	2/23/2018 7:53:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	2/23/2018 7:53:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	2/23/2018 7:53:00 PM
Carbon tetrachloride	37	1.9		ug/m3	10	2/24/2018 9:03:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	2/23/2018 7:53:00 PM
Chloroethane	0.26	0.40	J	ug/m3	1	2/23/2018 7:53:00 PM
Chloroform	9.0	0.73		ug/m3	1	2/23/2018 7:53:00 PM
Chloromethane	< 0.31	0.31		ug/m3	1	2/23/2018 7:53:00 PM
cis-1,2-Dichloroethene	0.24	0.16		ug/m3	1	2/23/2018 7:53:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 7:53:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	2/23/2018 7:53:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	2/23/2018 7:53:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	2/23/2018 7:53:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	2/23/2018 7:53:00 PM
Freon 11	3.9	0.84		ug/m3	1	2/23/2018 7:53:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	2/23/2018 7:53:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	2/23/2018 7:53:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 4 IA
Lab Order:	C1802064	**Tag Number:**	320 338
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-003A	**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	2.9	0.74		ug/m3	1	2/23/2018 7:53:00 PM
Heptane	< 0.61	0.61		ug/m3	1	2/23/2018 7:53:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/23/2018 7:53:00 PM
Hexane	< 0.53	0.53		ug/m3	1	2/23/2018 7:53:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	2/23/2018 7:53:00 PM
m&p-Xylene	0.48	1.3	J	ug/m3	1	2/23/2018 7:53:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 7:53:00 PM
Methyl Ethyl Ketone	< 0.88	0.88		ug/m3	1	2/23/2018 7:53:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 7:53:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/23/2018 7:53:00 PM
Methylene chloride	2.8	0.52		ug/m3	1	2/23/2018 7:53:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	2/23/2018 7:53:00 PM
Propylene	< 0.26	0.26		ug/m3	1	2/23/2018 7:53:00 PM
Styrene	< 0.64	0.64		ug/m3	1	2/23/2018 7:53:00 PM
Tetrachloroethylene	12	1.0		ug/m3	1	2/23/2018 7:53:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	2/23/2018 7:53:00 PM
Toluene	5.8	0.57		ug/m3	1	2/23/2018 7:53:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/23/2018 7:53:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 7:53:00 PM
Trichloroethene	1.1	0.16		ug/m3	1	2/23/2018 7:53:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/23/2018 7:53:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/23/2018 7:53:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	2/23/2018 7:53:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 3A IA
Lab Order:	C1802064	**Tag Number:**	207 272
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-004A	**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**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 8:33:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	2/23/2018 8:33:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 8:33:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 8:33:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 8:33:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	2/23/2018 8:33:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/23/2018 8:33:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	2/23/2018 8:33:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 8:33:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 8:33:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	2/23/2018 8:33:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/23/2018 8:33:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	2/23/2018 8:33:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 8:33:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 8:33:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	2/23/2018 8:33:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	2/23/2018 8:33:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	2/23/2018 8:33:00 PM
Acetone	50	7.1		ug/m3	10	2/24/2018 9:40:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	2/23/2018 8:33:00 PM
Benzene	0.45	0.48	J	ug/m3	1	2/23/2018 8:33:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	2/23/2018 8:33:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	2/23/2018 8:33:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	2/23/2018 8:33:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	2/23/2018 8:33:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	2/23/2018 8:33:00 PM
Carbon tetrachloride	0.63	0.19		ug/m3	1	2/23/2018 8:33:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	2/23/2018 8:33:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	2/23/2018 8:33:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	2/23/2018 8:33:00 PM
Chloromethane	1.1	0.31		ug/m3	1	2/23/2018 8:33:00 PM
cis-1,2-Dichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 8:33:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 8:33:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	2/23/2018 8:33:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	2/23/2018 8:33:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	2/23/2018 8:33:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	2/23/2018 8:33:00 PM
Freon 11	2.1	0.84		ug/m3	1	2/23/2018 8:33:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	2/23/2018 8:33:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	2/23/2018 8:33:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 3A IA
Lab Order:	C1802064	**Tag Number:**	207 272
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-004A	**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	3.2	0.74		ug/m3	1	2/23/2018 8:33:00 PM
Heptane	< 0.61	0.61		ug/m3	1	2/23/2018 8:33:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/23/2018 8:33:00 PM
Hexane	< 0.53	0.53		ug/m3	1	2/23/2018 8:33:00 PM
Isopropyl alcohol	54	3.7		ug/m3	10	2/24/2018 9:40:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	2/23/2018 8:33:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 8:33:00 PM
Methyl Ethyl Ketone	0.59	0.88	J	ug/m3	1	2/23/2018 8:33:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 8:33:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/23/2018 8:33:00 PM
Methylene chloride	1.3	0.52		ug/m3	1	2/23/2018 8:33:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	2/23/2018 8:33:00 PM
Propylene	< 0.26	0.26		ug/m3	1	2/23/2018 8:33:00 PM
Styrene	< 0.64	0.64		ug/m3	1	2/23/2018 8:33:00 PM
Tetrachloroethylene	1.4	1.0		ug/m3	1	2/23/2018 8:33:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	2/23/2018 8:33:00 PM
Toluene	< 0.57	0.57		ug/m3	1	2/23/2018 8:33:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/23/2018 8:33:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 8:33:00 PM
Trichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 8:33:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/23/2018 8:33:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/23/2018 8:33:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	2/23/2018 8:33:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 3 IA
Lab Order:	C1802064	**Tag Number:**	226 253
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-005A	**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**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 9:16:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	2/23/2018 9:16:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 9:16:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 9:16:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 9:16:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	2/23/2018 9:16:00 PM
1,2,4-Trimethylbenzene	0.84	0.74		ug/m3	1	2/23/2018 9:16:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	2/23/2018 9:16:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 9:16:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 9:16:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	2/23/2018 9:16:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/23/2018 9:16:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	2/23/2018 9:16:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 9:16:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 9:16:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	2/23/2018 9:16:00 PM
2,2,4-trimethylpentane	0.61	0.70	J	ug/m3	1	2/23/2018 9:16:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	2/23/2018 9:16:00 PM
Acetone	56	7.1		ug/m3	10	2/24/2018 10:18:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	2/23/2018 9:16:00 PM
Benzene	0.57	0.48		ug/m3	1	2/23/2018 9:16:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	2/23/2018 9:16:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	2/23/2018 9:16:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	2/23/2018 9:16:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	2/23/2018 9:16:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	2/23/2018 9:16:00 PM
Carbon tetrachloride	0.50	0.19		ug/m3	1	2/23/2018 9:16:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	2/23/2018 9:16:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	2/23/2018 9:16:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	2/23/2018 9:16:00 PM
Chloromethane	0.78	0.31		ug/m3	1	2/23/2018 9:16:00 PM
cis-1,2-Dichloroethene	0.24	0.16		ug/m3	1	2/23/2018 9:16:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 9:16:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	2/23/2018 9:16:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	2/23/2018 9:16:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	2/23/2018 9:16:00 PM
Ethylbenzene	0.52	0.65	J	ug/m3	1	2/23/2018 9:16:00 PM
Freon 11	1.6	0.84		ug/m3	1	2/23/2018 9:16:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	2/23/2018 9:16:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	2/23/2018 9:16:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 3 IA
Lab Order:	C1802064	**Tag Number:**	226 253
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-005A	**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	2/23/2018 9:16:00 PM
Heptane	0.78	0.61		ug/m3	1	2/23/2018 9:16:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/23/2018 9:16:00 PM
Hexane	0.85	0.53		ug/m3	1	2/23/2018 9:16:00 PM
Isopropyl alcohol	50	3.7		ug/m3	10	2/24/2018 10:18:00 PM
m&p-Xylene	2.0	1.3		ug/m3	1	2/23/2018 9:16:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 9:16:00 PM
Methyl Ethyl Ketone	3.2	0.88		ug/m3	1	2/23/2018 9:16:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 9:16:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/23/2018 9:16:00 PM
Methylene chloride	1.7	0.52		ug/m3	1	2/23/2018 9:16:00 PM
o-Xylene	0.82	0.65		ug/m3	1	2/23/2018 9:16:00 PM
Propylene	< 0.26	0.26		ug/m3	1	2/23/2018 9:16:00 PM
Styrene	< 0.64	0.64		ug/m3	1	2/23/2018 9:16:00 PM
Tetrachloroethylene	30	10		ug/m3	10	2/24/2018 10:18:00 PM
Tetrahydrofuran	15	4.4		ug/m3	10	2/24/2018 10:18:00 PM
Toluene	1.9	0.57		ug/m3	1	2/23/2018 9:16:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/23/2018 9:16:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 9:16:00 PM
Trichloroethene	1.3	0.16		ug/m3	1	2/23/2018 9:16:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/23/2018 9:16:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/23/2018 9:16:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	2/23/2018 9:16:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 1A IA
Lab Order:	C1802064	**Tag Number:**	188 293
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-006A	**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**
1,1,1-Trichloroethane	7.6	0.82		ug/m3	1	2/23/2018 9:57:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	2/23/2018 9:57:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	2/23/2018 9:57:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 9:57:00 PM
1,1-Dichloroethene	< 0.16	0.16		ug/m3	1	2/23/2018 9:57:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	2/23/2018 9:57:00 PM
1,2,4-Trimethylbenzene	0.64	0.74	J	ug/m3	1	2/23/2018 9:57:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	2/23/2018 9:57:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 9:57:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	2/23/2018 9:57:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	2/23/2018 9:57:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/23/2018 9:57:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	2/23/2018 9:57:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 9:57:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/23/2018 9:57:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	2/23/2018 9:57:00 PM
2,2,4-trimethylpentane	0.75	0.70		ug/m3	1	2/23/2018 9:57:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	2/23/2018 9:57:00 PM
Acetone	15	14		ug/m3	20	2/26/2018 8:52:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	2/23/2018 9:57:00 PM
Benzene	2.0	0.48		ug/m3	1	2/23/2018 9:57:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	2/23/2018 9:57:00 PM
Bromodichloromethane	2.1	1.0		ug/m3	1	2/23/2018 9:57:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	2/23/2018 9:57:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	2/23/2018 9:57:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	2/23/2018 9:57:00 PM
Carbon tetrachloride	15	3.8		ug/m3	20	2/26/2018 8:52:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	2/23/2018 9:57:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	2/23/2018 9:57:00 PM
Chloroform	130	15		ug/m3	20	2/26/2018 8:52:00 PM
Chloromethane	1.4	0.31		ug/m3	1	2/23/2018 9:57:00 PM
cis-1,2-Dichloroethene	0.40	0.16		ug/m3	1	2/23/2018 9:57:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 9:57:00 PM
Cyclohexane	0.45	0.52	J	ug/m3	1	2/23/2018 9:57:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	2/23/2018 9:57:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	2/23/2018 9:57:00 PM
Ethylbenzene	0.43	0.65	J	ug/m3	1	2/23/2018 9:57:00 PM
Freon 11	1.9	0.84		ug/m3	1	2/23/2018 9:57:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	2/23/2018 9:57:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	2/23/2018 9:57:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 1A IA
Lab Order:	C1802064	**Tag Number:**	188 293
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-006A	**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	2.9	0.74		ug/m3	1	2/23/2018 9:57:00 PM
Heptane	0.98	0.61		ug/m3	1	2/23/2018 9:57:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/23/2018 9:57:00 PM
Hexane	3.9	0.53		ug/m3	1	2/23/2018 9:57:00 PM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	2/23/2018 9:57:00 PM
m&p-Xylene	1.5	1.3		ug/m3	1	2/23/2018 9:57:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 9:57:00 PM
Methyl Ethyl Ketone	1.4	0.88		ug/m3	1	2/23/2018 9:57:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/23/2018 9:57:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/23/2018 9:57:00 PM
Methylene chloride	2.2	0.52		ug/m3	1	2/23/2018 9:57:00 PM
o-Xylene	0.61	0.65	J	ug/m3	1	2/23/2018 9:57:00 PM
Propylene	< 0.26	0.26		ug/m3	1	2/23/2018 9:57:00 PM
Styrene	< 0.64	0.64		ug/m3	1	2/23/2018 9:57:00 PM
Tetrachloroethylene	6.8	1.0		ug/m3	1	2/23/2018 9:57:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	2/23/2018 9:57:00 PM
Toluene	3.1	0.57		ug/m3	1	2/23/2018 9:57:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/23/2018 9:57:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/23/2018 9:57:00 PM
Trichloroethene	2.1	0.16		ug/m3	1	2/23/2018 9:57:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/23/2018 9:57:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/23/2018 9:57:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	2/23/2018 9:57:00 PM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 1A SS
Lab Order:	C1802064	**Tag Number:**	131 256
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	6.3	0.82		ug/m3	1	2/24/2018 4:34:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	2/24/2018 4:34:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	2/24/2018 4:34:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	2/24/2018 4:34:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	2/24/2018 4:34:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	2/24/2018 4:34:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/24/2018 4:34:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	2/24/2018 4:34:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/24/2018 4:34:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	2/24/2018 4:34:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	2/24/2018 4:34:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	2/24/2018 4:34:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	2/24/2018 4:34:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/24/2018 4:34:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	2/24/2018 4:34:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	2/24/2018 4:34:00 AM
2,2,4-trimethylpentane	0.47	0.70	J	ug/m3	1	2/24/2018 4:34:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	2/24/2018 4:34:00 AM
Acetone	7.6	14	J	ug/m3	20	2/26/2018 10:06:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	2/24/2018 4:34:00 AM
Benzene	1.3	0.48		ug/m3	1	2/24/2018 4:34:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	2/24/2018 4:34:00 AM
Bromodichloromethane	1.4	1.0		ug/m3	1	2/24/2018 4:34:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	2/24/2018 4:34:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	2/24/2018 4:34:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	2/24/2018 4:34:00 AM
Carbon tetrachloride	12	0.94		ug/m3	1	2/24/2018 4:34:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	2/24/2018 4:34:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	2/24/2018 4:34:00 AM
Chloroform	110	15		ug/m3	20	2/26/2018 10:06:00 PM
Chloromethane	1.5	0.31		ug/m3	1	2/24/2018 4:34:00 AM
cis-1,2-Dichloroethene	0.44	0.59	J	ug/m3	1	2/24/2018 4:34:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/24/2018 4:34:00 AM
Cyclohexane	< 0.52	0.52		ug/m3	1	2/24/2018 4:34:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	2/24/2018 4:34:00 AM
Ethyl acetate	0.76	0.54		ug/m3	1	2/24/2018 4:34:00 AM
Ethylbenzene	< 0.65	0.65		ug/m3	1	2/24/2018 4:34:00 AM
Freon 11	1.7	0.84		ug/m3	1	2/24/2018 4:34:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	2/24/2018 4:34:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	2/24/2018 4:34:00 AM

Qualifiers:

**	Quantitation Limit	.	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		

Centek Laboratories, LLC

Date: *27-Feb-18*

CLIENT:	Geosyntec - Moosic	**Client Sample ID:**	JCI - 1A SS
Lab Order:	C1802064	**Tag Number:**	131 256
Project:	JCI Caledonia	**Collection Date:**	2/22/2018
Lab ID:	C1802064-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.9	0.74		ug/m3	1	2/24/2018 4:34:00 AM
Heptane	0.61	0.61		ug/m3	1	2/24/2018 4:34:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	2/24/2018 4:34:00 AM
Hexane	2.4	0.53		ug/m3	1	2/24/2018 4:34:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	2/24/2018 4:34:00 AM
m&p-Xylene	0.87	1.3	J	ug/m3	1	2/24/2018 4:34:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	2/24/2018 4:34:00 AM
Methyl Ethyl Ketone	0.86	0.88	J	ug/m3	1	2/24/2018 4:34:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	2/24/2018 4:34:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	2/24/2018 4:34:00 AM
Methylene chloride	1.9	0.52		ug/m3	1	2/24/2018 4:34:00 AM
o-Xylene	< 0.65	0.65		ug/m3	1	2/24/2018 4:34:00 AM
Propylene	< 0.26	0.26		ug/m3	1	2/24/2018 4:34:00 AM
Styrene	< 0.64	0.64		ug/m3	1	2/24/2018 4:34:00 AM
Tetrachloroethylene	9.2	1.0		ug/m3	1	2/24/2018 4:34:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	2/24/2018 4:34:00 AM
Toluene	1.8	0.57		ug/m3	1	2/24/2018 4:34:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	2/24/2018 4:34:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	2/24/2018 4:34:00 AM
Trichloroethene	2.4	0.81		ug/m3	1	2/24/2018 4:34:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	2/24/2018 4:34:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	2/24/2018 4:34:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	2/24/2018 4:34:00 AM

Qualifiers:

**	Quantitation Limit	.	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		

APPENDIX C

NYSDOH GUIDANCE MATRICES

Soil Vapor/Indoor Air Matrix A

May 2017

Analytes Assigned:
Trichloroethene (TCE), *cis*-1,2-Dichloroethene (*c*12-DCE), 1,1-Dichloroethene (11-DCE), Carbon Tetrachloride

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)		
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	< 0.2	0.2 to < 1	1 and above
< 6	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	4. No further action	5. MONITOR	6. MITIGATE
60 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

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

Identify Source(s) and Resample or Mitigate: We recommend 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, we recommend 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: We recommend 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: We recommend 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.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX A

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

[1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).

[2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.

[3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.

[4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.

[5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.

[6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix B

May 2017

Analytes Assigned:
Tetrachloroethene (PCE), 1,1,1-Trichloroethane (111-TCA), Methylene Chloride

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)		
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	< 3	3 to < 10	10 and above
< 100	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
100 to < 1,000	4. No further action	5. MONITOR	6. MITIGATE
1,000 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

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

Identify Source(s) and Resample or Mitigate: We recommend 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, we recommend 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: We recommend 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: We recommend 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.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX B

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

[1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).

[2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.

[3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 1 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.

[4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.

[5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.

[6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix C

May 2017

Analytes Assigned:
Vinyl Chloride

	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)	
SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	< 0.2	0.2 and above
< 6	1. No further action	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	3. MONITOR	4. MITIGATE
60 and above	5. MITIGATE	6. MITIGATE

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

Identify Source(s) and Resample or Mitigate: We recommend 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, we recommend 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: We recommend 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: We recommend 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.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX C

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

[1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).

[2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.

[3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.

[4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.

[5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.

[6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.