

August 15, 2018

Mr. Kevin Lawrence
400 Forsythe LLC
1800 Churchman Avenue
Indianapolis, Indiana 46203

Re: **Vapor Intrusion Investigation**
400 Forsythe LLC
400 North Forsythe Street
Franklin, Indiana 46131
KERAMIDA Project No. 18112

Dear Mr. Lawrence:

At your request in response to concerns raised by tenants of your commercial facility located at 400 North Forsythe Street in Franklin, Indiana, KERAMIDA Inc. (KERAMIDA) completed a vapor intrusion (VI) investigation to confirm the chemicals being reported in nearby residences and other properties in the area are not present inside your building. KERAMIDA sampled for those same chemicals, reported to be coming from the former Amphenol (now Grayson Thermal) property north/northeast of the 400 Forsythe Building, including Volatile Organic Compounds (VOCs) and other chemicals which can enter interior spaces from contaminated soil and groundwater beneath structures. The purpose of this summary letter is to document VI analytical results for the VI investigation. No VOCs or other chemicals of concern were detected in any of the indoor air samples or in the ambient air samples obtained outside the building.

Air sampling locations are depicted in Attachment 1, in Figure 1. Field activities took place on August 8-9, 2018 and were conducted in accordance with KERAMIDA Standard

Mr. Kevin Lawrence
400 Forsythe LLC
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Page 2

Operating Procedures (SOPs). The VI analytical results are summarized in Attachment 2, in Table 1.

A copy of the laboratory analytical report is included in Attachment 3.

If you have any questions, please contact me at 317-289-1606.

Sincerely,
KERAMIDA Inc.



Chris Jaros
Vice President



Bruce Winningham, LPG
Senior Geologist

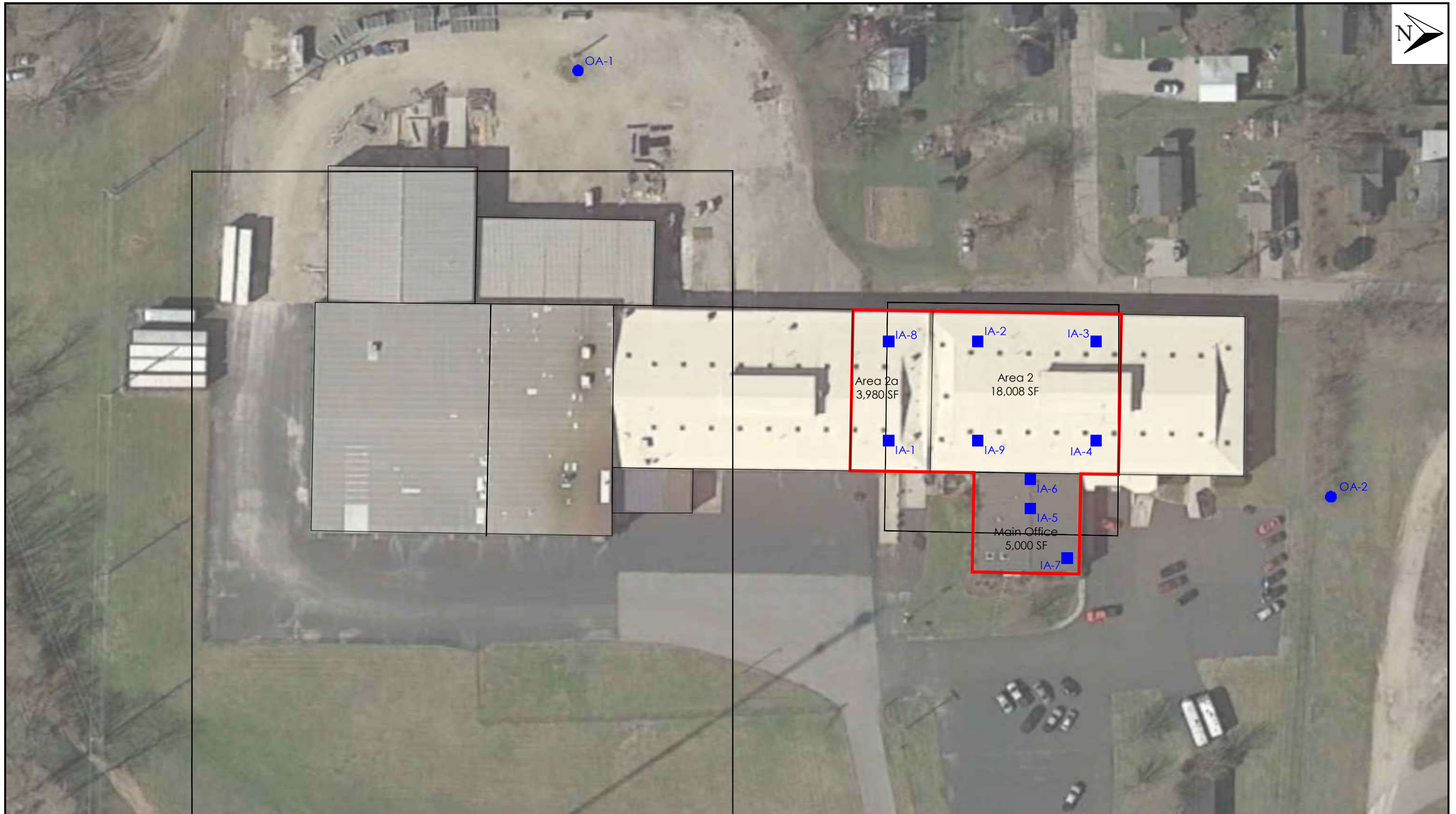


Chelsea Conduitt
Staff Geologist

Attachment 1:Figure 1: VI Sampling Location Map
Attachment 2:Table 1: Indoor Air VOC Analytical Results ($\mu\text{g}/\text{m}^3$)
Attachment 3:Laboratory Analytical Report
Chain-of-Custody Documentation

ATTACHMENT 1

FIGURE 1 **VI Sampling Location Map**



G:\AUTOCAD\CLIENTS\Plew Shadley\18112 Forsythe LLC

Image Source: Google Earth

LEGEND	
	Area of Investigation
	Indoor Air Sample
	Outdoor Air Sample



Project: 400 Forsythe LLC
 400 N. Forsythe Street
 Franklin, IN

Project Number: 18112
 Date: August 10, 2018

Drawn By: S. Grady
 Approved By: C.C.
 File No. 18112-IA

Figure 1

Indoor Air & Outdoor Air
 Sampling Locations

ATTACHMENT 2

Table 1

Indoor Air VOC analytical Results ($\mu\text{g}/\text{m}^3$)

Table 8
Indoor Air, Outdoor Air and Crawl Space (µg/m³)
826 East Sumner Avenue
Indianapolis, IN 46227
KERAMIDA Project No.17983

Sample No.	RCG Indoor Air Vapor Exposure - Commercial / Industrial ⁽¹⁾	RCG Indoor Air Vapor Exposure - Commercial / Industrial ⁽²⁾	IA-1	IA-2	IA-3	IA-4	IA-5	IA-5 DUP	IA-6	IA-7	IA-8	IA-9	OA-1	OA-2		
Sample Type			IA	IA	IA	IA	IA	IA	IA	IA	IA	IA	IA	OA	OA	
Date Sampled			8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20
Can #			A8050	15559	16023	4695	4658	16031	91537	4689	4698	14111	16022	80633		
Lab Sample No.			18-1977	18-1978	18-1979	18-1980	18-1981	18-1988	18-1982	18-1983	18-1984	18-1985	18-1986	18-1987		
Acetone	140,000	1,400,000	< 2380	< 2380	< 2380	< 2380	< 2380	< 2380	< 2380	< 2380	< 2380	< 2380	< 2380	< 2380		
Benzene	16	160	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6	< 1.6		
Benzyl chloride	2.5	25	< 0.414	< 0.414	< 0.414	< 0.414	< 0.414	< 0.414	< 0.414	< 0.414	< 0.414	< 0.414	< 0.414	< 0.414		
Bromodichloromethane	3.3	33	< 0.536	< 0.536	< 0.536	< 0.536	< 0.536	< 0.536	< 0.536	< 0.536	< 0.536	< 0.536	< 0.536	< 0.536		
Bromoform	110	1,100	< 10.3	< 10.3	< 10.3	< 10.3	< 10.3	< 10.3	< 10.3	< 10.3	< 10.3	< 10.3	< 10.3	< 10.3		
Bromomethane	22	220	< 3.88	< 3.88	< 3.88	< 3.88	< 3.88	< 3.88	< 3.88	< 3.88	< 3.88	< 3.88	< 3.88	< 3.88		
1,3-Butadiene	4.1	41	< 0.221	< 0.221	< 0.221	< 0.221	< 0.221	< 0.221	< 0.221	< 0.221	< 0.221	< 0.221	< 0.221	< 0.221		
2-Butanone (MEK)	22,000	220,000	< 2950	< 2950	< 2950	< 2950	< 2950	< 2950	< 2950	< 2950	< 2950	< 2950	< 2950	< 2950		
Carbon disulfide	3,100	31,000	< 311	< 311	< 311	< 311	< 311	< 311	< 311	< 311	< 311	< 311	< 311	< 311		
Carbon tetrachloride	20	200	< 0.629	< 0.629	< 0.629	< 0.629	< 0.629	< 0.629	< 0.629	< 0.629	< 0.629	< 0.629	< 0.629	< 0.629		
Chlorobenzene	220	2,200	< 23	< 23	< 23	< 23	< 23	< 23	< 23	< 23	< 23	< 23	< 23	< 23		
Chloroethane	44,000	440,000	< 13.2	< 13.2	< 13.2	< 13.2	< 13.2	< 13.2	< 13.2	< 13.2	< 13.2	< 13.2	< 13.2	< 13.2		
Chloroform	5.3	53	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83	< 0.83		
Chloromethane	390	3,900	< 20.6	< 20.6	< 20.6	< 20.6	< 20.6	< 20.6	< 20.6	< 20.6	< 20.6	< 20.6	< 20.6	< 20.6		
Cyclohexane	26,000	260,000	< 5510	< 5510	< 5510	< 5510	< 5510	< 5510	< 5510	< 5510	< 5510	< 5510	< 5510	< 5510		
Dibromochloromethane	NA	NA	< 0.852	< 0.852	< 0.852	< 0.852	< 0.852	< 0.852	< 0.852	< 0.852	< 0.852	< 0.852	< 0.852	< 0.852		
1,2-Dibromoethane (EDB)	0.2	2	< 0.0315	< 0.0315	< 0.0315	< 0.0315	< 0.0315	< 0.0315	< 0.0315	< 0.0315	< 0.0315	< 0.0315	< 0.0315	< 0.0315		
1,2-Dichlorobenzene	880	8,800	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1		
1,3-Dichlorobenzene	NA	NA	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1	< 60.1		
1,4-Dichlorobenzene	11	110	< 0.601	< 0.601	< 0.601	< 0.601	< 0.601	< 0.601	< 0.601	< 0.601	< 0.601	< 0.601	< 0.601	< 0.601		
1,4-Dioxane	85	850	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8		
1,1-Dichloroethane	77	770	< 4.05	< 4.05	< 4.05	< 4.05	< 4.05	< 4.05	< 4.05	< 4.05	< 4.05	< 4.05	< 4.05	< 4.05		
1,2-Dichloroethane	4.7	47	< 0.405	< 0.405	< 0.405	< 0.405	< 0.405	< 0.405	< 0.405	< 0.405	< 0.405	< 0.405	< 0.405	< 0.405		
1,1-Dichloroethene	880	8,800	< 198	< 198	< 198	< 198	< 198	< 198	< 198	< 198	< 198	< 198	< 198	< 198		
cis-1,2-Dichloroethene	NA	NA	< 19.8	< 19.8	< 19.8	< 19.8	< 19.8	< 19.8	< 19.8	< 19.8	< 19.8	< 19.8	< 19.8	< 19.8		
trans-1,2-Dichloroethene	NA	NA	< 39.6	< 39.6	< 39.6	< 39.6	< 39.6	< 39.6	< 39.6	< 39.6	< 39.6	< 39.6	< 39.6	< 39.6		
1,2-Dichloropropane	18	180	< 0.462	< 0.462	< 0.462	< 0.462	< 0.462	< 0.462	< 0.462	< 0.462	< 0.462	< 0.462	< 0.462	< 0.462		
cis-1,3-Dichloropropene	31	310	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54		
trans-1,3-Dichloropropene	31	310	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54	< 4.54		
Ethyl acetate	310	3,100	< 54.1	< 54.1	< 54.1	< 54.1	< 54.1	< 54.1	< 54.1	< 54.1	< 54.1	< 54.1	< 54.1	< 54.1		
Ethylbenzene	49	490	< 8.68	< 8.68	< 8.68	< 8.68	< 8.68	< 8.68	< 8.68	< 8.68	< 8.68	< 8.68	< 8.68	< 8.68		
4-Ethyltoluene	NA	NA	< 492	< 492	< 492	< 492	< 492	< 492	< 492	< 492	< 492	< 492	< 492	< 492		
n-Heptane	NA	NA	< 410	< 410	< 410	< 410	< 410	< 410	< 410	< 410	< 410	< 410	< 410	< 410		
Hexachloro-1,3-butadiene	5.6	56	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07		
n-Hexane	3,100	31,000	< 176	< 176	< 176	< 176	< 176	< 176	< 176	< 176	< 176	< 176	< 176	< 176		
2-Hexanone	130	1,300	< 20.5	< 20.5	< 20.5	< 20.5	< 20.5	< 20.5	< 20.5	< 20.5	< 20.5	< 20.5	< 20.5	< 20.5		
Isooctane	NA	NA	< 467	< 467	< 467	< 467	< 467	< 467	< 467	< 467	< 467	< 467	< 467	< 467		
Methylene Chloride	2,600	26,000	< 41.7	< 41.7	< 41.7	< 41.7	< 41.7	< 41.7	< 41.7	< 41.7	< 41.7	< 41.7	< 41.7	< 41.7		
4-Methyl-2-pentanone (MIBK)	13,000	130,000	< 2050	< 2050	< 2050	< 2050	< 2050	< 2050	< 2050	< 2050	< 2050	< 2050	< 2050	< 2050		
Methyl-tert-butyl ether	470	4,700	< 36.1	< 36.1	< 36.1	< 36.1	< 36.1	< 36.1	< 36.1	< 36.1	< 36.1	< 36.1	< 36.1	< 36.1		
Propylene	13,000	130,000	< 172	< 172	< 172	< 172	< 172	< 172	< 172	< 172	< 172	< 172	< 172	< 172		
Styrene	4,400	44,000	< 426	< 426	< 426	< 426	< 426	< 426	< 426	< 426	< 426	< 426	< 426	< 426		
1,1,2,2-Tetrachloroethane	2.1	21	< 0.336	< 0.336	< 0.336	< 0.336	< 0.336	< 0.336	< 0.336	< 0.336	< 0.336	< 0.336	< 0.336	< 0.336		
Tetrachloroethene	180	1,800	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19	< 3.19		
Tetrahydrofuran	8,800	88,000	< 295	< 295	< 295	< 295	< 295	< 295	< 295	< 295	< 295	< 295	< 295	< 295		
Toluene	22,000	220,000	< 3770	< 3770	< 3770	< 3770	< 3770	< 3770	< 3770	< 3770	< 3770	< 3770	< 3770	< 3770		
1,2,4-Trichlorobenzene	8.8	88	< 0.742	< 0.742	< 0.742	< 0.742	< 0.742	< 0.742	< 0.742	< 0.742	< 0.742	< 0.742	< 0.742	< 0.742		
1,1,1-Trichloroethane	22,000	220,000	< 546	< 546	< 546	< 546	< 546	< 546	< 546	< 546	< 546	< 546	< 546	< 546		
1,1,2-Trichloroethane	0.88	9	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21	< 0.21		
Trichloroethene	8.8	88	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07	< 1.07		
Trichlorofluoromethane	NA	NA	< 562	< 562	< 562	< 562	< 562	< 562	< 562	< 562	< 562	< 562	< 562	< 562		
1,2,4-Trimethylbenzene	260	2,600	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92		
1,3,5-Trimethylbenzene	260	2,600	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92	< 4.92		

Table 8
 Indoor Air, Outdoor Air and Crawl Space ($\mu\text{g}/\text{m}^3$)
 826 East Sumer Avenue
 Indianapolis, IN 46227
 KERAMIDA Project No.17983

Vinyl acetate	880	8,800	< 176	< 176	< 176	< 176	< 176	< 176	< 176	< 176	< 176	< 176	< 176
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Table 8
Indoor Air, Outdoor Air and Crawl Space ($\mu\text{g}/\text{m}^3$)
826 East Sumer Avenue
Indianapolis, IN 46227
KERAMIDA Project No.17983

Sample No.	RCG Indoor Air Vapor Exposure - Commercial / Industrial ⁽¹⁾	RCG Indoor Air Vapor Exposure - Commercial / Industrial ⁽²⁾	IA-1	IA-2	IA-3	IA-4	IA-5	IA-5 DUP	IA-6	IA-7	IA-8	IA-9	OA-1	OA-2	
Sample Type			IA	IA	IA	IA	IA	IA	IA	IA	IA	IA	OA	OA	
Date Sampled			8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20	8/2018 - 8/9/20
Can #			A8050	15559	16023	4695	4658	16031	91537	4689	4698	14111	16022	80633	
Lab Sample No.	18-1977	18-1978	18-1979	18-1980	18-1981	18-1988	18-1982	18-1983	18-1984	18-1985	18-1986	18-1987			
Vinyl Bromide	3.8	38	< 0.437	< 0.437	< 0.437	< 0.437	< 0.437	< 0.437	< 0.437	< 0.437	< 0.437	< 0.437	< 0.437	< 0.437	
Vinyl chloride	28	280	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	< 1.28	
m&p-Xylene	440	4,400	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	
o-Xylene	440	4,400	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	< 43.4	

Samples analyzed using EPA Method TO-15

$\mu\text{g}/\text{m}^3$ = microgram per cubic meter

NA = Not Available

IA = Indoor Air

CR = Crawl Space

OA = Outdoor Air

SS = Sub-Slab

(1) Indiana Department of Environmental Management Remediation Closure Guide, Appendix A,

Table A-6, Final, March 22, 2012, with updates through March 2018.

BOLD = Indicates Detection
Exceeds RCG Vapor Exposure - Indoor Air-Commercial/Industrial Screening Levels
Exceeds RCG Vapor Exposure - Indoor Air-Commercial/Industrial Action Levels

ATTACHMENT 3

Laboratory Analytical Report
Chain of Custody Documentation



EnvisionAir
1441 Sadlier Circle West Drive
Indianapolis, IN 46239
Ph: 317-351-0885
Fax: 317-351-0882
www.envision-air.com

Mr. Chris Jaros
Keramida, Inc.
401 North College Avenue
Indianapolis, IN 46202

August 10, 2018

EnvisionAir Project Number: 2018-485
Client Project Name: 18112

Dear Mr. Jaros,

Please find the attached analytical report for the samples received August 9, 2018. All test methods performed were fully compliant with local, state, and federal EPA methods unless otherwise noted. The project was analyzed as requested on the enclosed chain of custody record. Please review the comments section for additional information about your results or Quality Control data.

Feel free to contact me if you have any questions or comments regarding your analytical report or service.

Thank you for your business. EnvisionAir looks forward to working with you on your next project.

Yours Sincerely,

A handwritten signature in black ink that reads "Stanley O. Hunnicutt".

Stan Hunnicutt

Project Manager
EnvisionAir, LLC



EnvisionAir
 1441 Sadlier Circle West Drive
 Indianapolis, IN 46239
 Ph: 317-351-0885
 Fax: 317-351-0882
 www.envision-air.com

Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Sample Summary

Canister Pressure / Vacuum

<u>Laboratory Sample Number:</u>	<u>Sample Description:</u>	<u>Matrix:</u>	<u>START</u>	<u>START</u>	<u>End Date</u>	<u>End Time</u>	<u>Date</u>	<u>Time</u>	<u>Initial Field</u>	<u>Final Field</u>	<u>Lab</u>
			<u>Collected:</u>	<u>Collected:</u>	<u>Collected:</u>	<u>Collected:</u>	<u>Received:</u>	<u>Received</u>	<u>(in. Hg)</u>	<u>(in. Hg)</u>	<u>(in. Hg)</u>
18-1977	IA-1	A	8/8/18	20:48	8/9/18	4:51	8/9/18	8:17	-29	-6.5	-6.5
18-1978	IA-2	A	8/8/18	20:53	8/9/18	4:58	8/9/18	8:17	-29	-8	-8
18-1979	IA-3	A	8/8/18	20:52	8/9/18	4:56	8/9/18	8:17	-30	-7	-7
18-1980	IA-4	A	8/8/18	20:51	8/9/18	4:55	8/9/18	8:17	-29	-6.5	-6.5
18-1981	IA-5	A	8/8/18	20:56	8/9/18	5:02	8/9/18	8:17	-29	-7	-7
18-1982	IA-6	A	8/8/18	21:01	8/9/18	5:06	8/9/18	8:17	-29	-7	-7
18-1983	IA-7	A	8/8/18	20:58	8/9/18	5:05	8/9/18	8:17	-28	-4.5	-4.5
18-1984	IA-8	A	8/8/18	20:54	8/9/18	5:00	8/9/18	8:17	-27	-5.5	-5.5
18-1985	IA-9	A	8/8/18	20:50	8/9/18	4:53	8/9/18	8:17	-28.5	-5.5	-5.5
18-1986	OA-1	A	8/8/18	21:09	8/9/18	5:17	8/9/18	8:17	-28.5	-5.5	-5.5
18-1987	OA-2	A	8/8/18	21:05	8/9/18	5:12	8/9/18	8:17	-29	-5	-5
18-1988	DUP	A	8/8/18		8/9/18		8/9/18	8:17	-29	-7	-7



EnvisionAir
 1441 Sadler Circle West Drive
 Indianapolis, IN 46239
 Ph: 317-351-0885
 Fax: 317-351-0882
 www.envision-air.com

Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: IA-1
EnvisionAir Sample Number: 18-1977
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18 20:48
Sample Collection END Date/Time: 8/9/18 4:51
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	90%		
Analysis Date/Time:	8-9-18/10:52		
Analyst Initials	tjg		



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Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: IA-2
EnvisionAir Sample Number: 18-1978
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18 20:53
Sample Collection END Date/Time: 8/9/18 4:58
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	86%		
Analysis Date/Time:	8-9-18/11:31		
Analyst Initials	tjg		



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Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: IA-3
EnvisionAir Sample Number: 18-1979
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18 20:52
Sample Collection END Date/Time: 8/9/18 4:56
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	88%		
Analysis Date/Time:	8-9-18/12:11		
Analyst Initials	tjg		



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Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: IA-4
EnvisionAir Sample Number: 18-1980
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18 20:51
Sample Collection END Date/Time: 8/9/18 4:55
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	93%		
Analysis Date/Time:	8-9-18/12:52		
Analyst Initials	tjg		



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Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: IA-5
EnvisionAir Sample Number: 18-1981
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18 20:56
Sample Collection END Date/Time: 8/9/18 5:02
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	87%		
Analysis Date/Time:	8-9-18/13:34		
Analyst Initials	tjg		



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Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: IA-6
EnvisionAir Sample Number: 18-1982
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18 21:01
Sample Collection END Date/Time: 8/9/18 5:06
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	100%		
Analysis Date/Time:	8-9-18/14:23		
Analyst Initials	tjg		



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Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: IA-7
EnvisionAir Sample Number: 18-1983
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18 20:58
Sample Collection END Date/Time: 8/9/18 5:05
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	89%		
Analysis Date/Time:	8-9-18/15:03		
Analyst Initials	tjg		



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Client Name: KERAMIDA

Project ID: 18112

Client Project Manager: CHRIS JAROS

EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: IA-8

Sample Collection START Date/Time: 8/8/18 20:54

Sample Collection END Date/Time: 8/9/18 5:00

EnvisionAir Sample Number: 18-1984

Sample Received Date/Time: 8/9/18 8:17

Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	90%		
Analysis Date/Time:	8-9-18/15:42		
Analyst Initials	tjg		



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Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: IA-9
EnvisionAir Sample Number: 18-1985
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18 20:50
Sample Collection END Date/Time: 8/9/18 4:53
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	89%		
Analysis Date/Time:	8-9-18/16:59		
Analyst Initials	tjg		



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Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: OA-1
EnvisionAir Sample Number: 18-1986
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18 21:09
Sample Collection END Date/Time: 8/9/18 5:17
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	82%		
Analysis Date/Time:	8-9-18/17:36		
Analyst Initials	tjg		



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Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: OA-2
EnvisionAir Sample Number: 18-1987
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18 21:05
Sample Collection END Date/Time: 8/9/18 5:12
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	98%		
Analysis Date/Time:	8-9-18/18:14		
Analyst Initials	tjg		



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Client Name: KERAMIDA
Project ID: 18112
Client Project Manager: CHRIS JAROS
EnvisionAir Project Number: 2018-485

Analytical Method: TO-15
Analytical Batch: 080918AIR

Client Sample ID: DUP
EnvisionAir Sample Number: 18-1988
Sample Matrix: AIR

Sample Collection START Date/Time: 8/8/18
Sample Collection END Date/Time: 8/9/18
Sample Received Date/Time: 8/9/18 8:17

<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,2,2-Tetrachloroethane	< 0.34	0.34	1
1,1,2-Trichloroethane	< 0.21	0.21	1
1,1-Dichloroethane	< 4.05	4.05	
1,1-Dichloroethene	< 198	198	
1,2,4-Trichlorobenzene	< 0.74	0.74	
1,2,4-Trimethylbenzene	< 4.92	4.92	
1,2-dibromoethane (EDB)	< 0.03	0.03	1
1,2-Dichlorobenzene	< 60.1	60.1	
1,2-Dichloroethane	< 0.40	0.40	
1,2-Dichloropropane	< 0.46	0.46	
1,3,5-Trimethylbenzene	< 4.92	4.92	
1,3-Butadiene	< 0.22	0.22	
1,3-Dichlorobenzene	< 60.1	60.1	
1,4-Dichlorobenzene	< 0.60	0.60	
1,4-Dioxane	< 1.80	1.80	
2-Butanone (MEK)	< 2950	2950	
2-Hexanone	< 20.5	20.5	
Acetone	< 2380	2380	
Benzene	< 1.60	1.60	
Benzyl Chloride	< 0.41	0.41	1
Bromodichloromethane	< 0.54	0.54	1
Bromoform	< 10.3	10.3	
Bromomethane	< 3.88	3.88	
Carbon Disulfide	< 311	311	
Carbon Tetrachloride	< 0.63	0.63	
Chlorobenzene	< 23.0	23.0	
Chloroethane	< 13.2	13.2	



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<u>Compounds</u>	<u>Sample Results ug/m³</u>	<u>Reporting Limit ug/m³</u>	<u>Flag</u>
Chloroform	< 0.83	0.83	
Chloromethane	< 20.6	20.6	
cis-1,2-Dichloroethene	< 19.8	19.8	
cis-1,3-Dichloropropene	< 4.54	4.54	
Cyclohexane	< 5510	5510	
Dibromochloromethane	< 0.85	0.85	
Dichlorodifluoromethane	< 49.5	49.5	
Ethyl Acetate	< 54.1	54.1	
Ethylbenzene	< 8.68	8.68	
Hexachloro-1,3-butadiene	< 1.07	1.07	
Isooctane	< 467	467	
m,p-Xylene	< 43.4	43.4	
Methylene Chloride	< 41.7	41.7	
Methyl-tert-butyl ether	< 36.1	36.1	
N-Heptane	< 410	410	
N-Hexane	< 176	176	
o-Xylene	< 43.4	43.4	
Propylene	< 172	172	
Styrene	< 426	426	
Tetrachloroethene	< 3.19	3.19	
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	< 1.07	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	87%		
Analysis Date/Time:	8-9-18/18:53		
Analyst Initials	tjg		

TO-15 Quality Control Data

EnvisionAir Batch Number: 080918AIR

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
4-Ethyltoluene	< 100	100	
4-Methyl-2-pentanone (MIBK)	< 500	500	
1,1,1-Trichloroethane	< 100	100	
1,1,1,2-Tetrachloroethane	< 0.049	0.049	1
1,1,2-Trichloroethane	< 0.038	0.038	1
1,1-Dichloroethane	< 1	1	
1,1-Dichloroethene	< 50	50	
1,2,4-Trichlorobenzene	< 0.1	0.1	
1,2,4-Trimethylbenzene	< 1	1	
1,2-dibromoethane (EDB)	< 0.0041	0.0041	1
1,2-Dichlorobenzene	< 10	10	
1,2-Dichloroethane	< 0.1	0.1	
1,2-Dichloropropane	< 0.1	0.1	
1,3,5-Trimethylbenzene	< 1	1	
1,3-Butadiene	< 0.1	0.1	
1,3-Dichlorobenzene	< 10	10	
1,4-Dichlorobenzene	< 0.1	0.1	
1,4-Dioxane	< 0.5	0.5	
2-Butanone (MEK)	< 1000	1000	
2-Hexanone	< 5	5	
Acetone	< 1000	1000	
Benzene	< 0.5	0.5	
Benzyl Chloride	< 0.08	0.08	1
Bromodichloromethane	< 0.08	0.08	1
Bromoform	< 1	1	
Bromomethane	< 1	1	
Carbon Disulfide	< 100	100	
Carbon Tetrachloride	< 0.1	0.1	
Chlorobenzene	< 5	5	
Chloroethane	< 5	5	
Chloroform	< 0.17	0.17	
Chloromethane	< 10	10	
cis-1,2-Dichloroethene	< 5	5	
cis-1,3-Dichloropropene	< 1	1	
Cyclohexane	< 1600	1600	
Dibromochloromethane	< 0.1	0.1	
Dichlorodifluoromethane	< 10	10	
Ethyl Acetate	< 15	15	
Ethylbenzene	< 2	2	
Hexachloro-1,3-butadiene	< 0.1	0.1	
Isooctane	< 100	100	
m,p-Xylene	< 10	10	
Methylene Chloride	< 12	12	
Methyl-tert-butyl ether	< 10	10	
N-Heptane	< 100	100	
N-Hexane	< 50	50	
o-Xylene	< 10	10	
Propylene	< 100	100	
Styrene	< 100	100	
Tetrachloroethene	< 0.47	0.47	
Tetrahydrofuran	< 100	100	



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Analytical Report

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>				
Toluene	< 1000	1000					
trans-1,2-Dichloroethene	< 10	10					
trans-1,3-Dichloropropene	< 1	1					
Trichloroethene	< 0.2	0.2					
Trichlorofluoromethane	< 100	100					
Vinyl Acetate	< 50	50					
Vinyl Bromide	< 0.1	0.1					
Vinyl Chloride	< 0.5	0.5					
4-bromofluorobenzene (surrogate)	91%						
Analysis Date/Time:	8-9-18/10:15						
Analyst Initials	tjg						

<u>LCS/LCSD</u>	<u>LCS Results (ppbv)</u>	<u>LCSD Results (ppbv)</u>	<u>LCS/D</u>	<u>LCS</u>	<u>LCSD</u>	<u>RPD</u>	<u>Flag</u>
			<u>Conc(ppbv)</u>	<u>Rec.</u>	<u>Rec.</u>		
Propylene	10.7	11.1	10	107%	111%	3.7%	
Dichlorodifluoromethane	9.67	9.76	10	97%	98%	0.9%	
Chloromethane	11.5	11.9	10	115%	119%	3.4%	
Vinyl Chloride	11.1	11	10	111%	110%	0.9%	
1,3-Butadiene	11.2	11.2	10	112%	112%	0.0%	
Bromomethane	11.4	11.8	10	114%	118%	3.4%	
Chloroethane	10.8	11.9	10	108%	119%	9.7%	
Vinyl Bromide	10.7	10.7	10	107%	107%	0.0%	
Trichlorofluoromethane	9.04	8.07	10	90%	81%	11.3%	
Acetone	10.2	10.1	10	102%	101%	1.0%	
1,1-Dichloroethene	10.7	10.9	10	107%	109%	1.9%	
Methylene Chloride	10.8	11.2	10	108%	112%	3.6%	
Carbon Disulfide	11.4	11.7	10	114%	117%	2.6%	
trans-1,2-Dichloroethene	10.4	10.3	10	104%	103%	1.0%	
Methyl-tert-butyl ether	9.45	9.4	10	95%	94%	0.5%	
1,1-Dichloroethane	10.5	10.9	10	105%	109%	3.7%	
Vinyl Acetate	9.79	10.3	10	98%	103%	5.1%	
N-Hexane	9.8	9.99	10	98%	100%	1.9%	
2-Butanone (MEK)	11.3	11.2	10	113%	112%	0.9%	
cis-1,2-Dichloroethene	9.76	9.69	10	98%	97%	0.7%	
Ethyl Acetate	10.5	10.7	10	105%	107%	1.9%	
Chloroform	9.5	9.54	10	95%	95%	0.4%	
Tetrahydrofuran	11.3	11.5	10	113%	115%	1.8%	
1,2-Dichloroethane	9.19	9.07	10	92%	91%	1.3%	
1,1,1-Trichloroethane	9.43	9.44	10	94%	94%	0.1%	
Carbon Tetrachloride	9.68	9.57	10	97%	96%	1.1%	
Benzene	9.94	9.81	10	99%	98%	1.3%	
Cyclohexane	9.91	9.77	10	99%	98%	1.4%	
1,2-Dichloropropane	9.78	9.61	10	98%	96%	1.8%	
Trichloroethene	9.16	9.22	10	92%	92%	0.7%	
Bromodichloromethane	9.8	9.59	10	98%	96%	2.2%	
1,4-Dioxane	10.2	9.61	10	102%	96%	6.0%	
Isooctane	9.21	8.97	10	92%	90%	2.6%	
N-Heptane	9.77	9.85	10	98%	99%	0.8%	
cis-1,3-Dichloropropene	9.57	9.27	10	96%	93%	3.2%	
4-Methyl-2-pentanone (MIBK)	10.1	9.89	10	101%	99%	2.1%	
trans-1,3-Dichloropropene	9.27	8.98	10	93%	90%	3.2%	
1,1,2-Trichloroethane	9.48	9.22	10	95%	92%	2.8%	
Toluene	9.01	8.83	10	90%	88%	2.0%	
2-Hexanone	9.86	9.7	10	99%	97%	1.6%	
Dibromochloromethane	11.2	10.7	10	112%	107%	4.6%	
1,2-dibromoethane (EDB)	10.4	9.76	10	104%	98%	6.3%	
Tetrachloroethene	9.53	9.47	10	95%	95%	0.6%	
Chlorobenzene	9.81	9.25	10	98%	93%	5.9%	
Ethylbenzene	9.46	9.04	10	95%	90%	4.5%	
m,p-Xylene	18.2	17.6	20	91%	88%	3.4%	
Bromoform	10.4	10.1	10	104%	101%	2.9%	



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<u>LCS/LCSD</u>	<u>LCS Results (ppbv)</u>	<u>LCSD Results (ppbv)</u>	<u>LCS/D Conc(ppbv)</u>	<u>LCS Rec.</u>	<u>LCSD Rec.</u>	<u>RPD Flag</u>
Styrene	9.87	9.57	10	99%	96%	3.1%
1,1,2,2-Tetrachloroethane	9.26	8.81	10	93%	88%	5.0%
o-Xylene	9.64	9.22	10	96%	92%	4.5%
4-Ethyltoluene	9.3	9.02	10	93%	90%	3.1%
1,3,5-Trimethylbenzene	9.13	8.45	10	91%	85%	7.7%
1,2,4-Trimethylbenzene	9.24	8.68	10	92%	87%	6.3%
1,3-Dichlorobenzene	9.73	9.19	10	97%	92%	5.7%
Benzyl Chloride	9.86	9.25	10	99%	93%	6.4%
1,4-Dichlorobenzene	8.98	8.89	10	90%	89%	1.0%
1,2-Dichlorobenzene	9.49	9.06	10	95%	91%	4.6%
1,2,4-Trichlorobenzene	8.29	8.26	10	83%	83%	0.4%
Hexachloro-1,3-butadiene	8.39	8.28	10	84%	83%	1.3%
4-bromofluorobenzene (surrogate)	92%	89%				
Analysis Date/Time:	8-9-18/09:01	8-9-18/09:40				
Analyst Initials	tjg	tjg				



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<u>Flag Number</u>	<u>Comments</u>
1	Reporting limit is supported by MDL. TJG

