



April 4, 2018

Janice Deppe  
113-115 4th Street  
Baraboo, WI 53913

**Subject: Vapor Intrusion Sampling Results – 113-115 4<sup>th</sup> Street, Baraboo, Wisconsin  
BRRTS: 02-57-548538**

Dear Mrs. Deppe:

In accordance with Wisconsin Department of Natural Resources (WDNR) regulation NR 716.14, EnviroForensics, LLC. (EnviroForensics) is providing the results of environmental samples collected from your property located at 113-115 4<sup>th</sup> Street in Baraboo, Wisconsin. The samples were collected on March 1, 2018. The sampling activities are part of an environmental investigation being performed for the Badger Cleaners facility located at 616 Oak Street in Baraboo at the direction of the WDNR pursuant to the authority granted to it under State and Federal law. The chemicals of concern (COCs) for the investigation are the dry cleaning solvent tetrachloroethene (PCE) and its associated breakdown products.

The Responsible Party is:

Badger Cleaners  
616 Oak Street  
Baraboo, WI

### **Sampling Results**

Four indoor air samples were collected from within your building and two (2) sub-slab vapor samples were collected from beneath the concrete slab at your building. For quality control purposes a sample of outdoor ambient air was also collected. The sampling locations are depicted on the attached **Figure 1**. The results of the indoor air and sub-slab vapor samples are summarized and compared to WDNR standards on the attached **Table 1**. A copy of the laboratory report that relates to the indoor air and sub-slab vapor samples is also attached.

PCE was detected in indoor all four indoor air samples, however, the concentrations detected were *below* the vapor action level for PCE detected within small commercial buildings. Trichloroethene (TCE) was detected in one (1) indoor air sample at a concentration *below* the screening level. No other COCs were detected in the indoor air samples. PCE was detected in both sub-slab vapor samples, however, the concentrations detected were *below* their respective vapor risk screening

Document: 6492-0528  
EnviroForensics, LLC  
N16 W23390 Stone Ridge Drive, Suite G  
Waukesha, WI 53188  
Phone: 262-290-4001 • Fax 317.972.7875

April 4, 2018



Levels. TCE was detected in one (1) sub-slab vapor sample at a concentration above the screening level. No other COCs were detected in the sub-slab vapor samples.

EnviroForensics recommends periodic monitoring to evaluate the detections of PCE and TCE results. We will contact you to schedule the next event. If you have any questions or concerns, please contact us at 262-510-0612 or by email at [rhoverman@enviroforensics.com](mailto:rhoverman@enviroforensics.com). The WDNR project manager, Trevor Bannister, can be reached at 608-275-3490. We greatly appreciate your help and patience with this matter.

Sincerely,  
**EnviroForensics, LLC**

A handwritten signature in blue ink, appearing to read "Rob Hoverman".

Rob Hoverman, LPG  
*Senior Project Manager*

Attachments: Figure 1 – Vapor Intrusion Sampling Locations  
Table 1 – Vapor Intrusion Assessment Results Summary  
Laboratory Analytical Report

Copy: Trevor Bannister, Wisconsin Department of Natural Resources

**TABLE 1**  
**VAPOR INTRUSION ANALYTICAL RESULTS SUMMARY - 113-115 4TH STREET**  
 Badger Cleaners  
 616 Oak Street, Baraboo, WI 53913

Sample Identification	Sample Location	Date Sampled	Mitigation	Tetrachloroethene	Trichloroethene
<b>INDOOR/ OUTDOOR AIR</b>					
<b>Small Commercial Vapor Action Level</b>				<b>180</b>	<b>8.8</b>
6492-OA-1	113-115 4th St	12/19/2017	No	<b>8.34</b>	<1.07
		3/1/2018	No	<3.19	<1.07
6492-113-115 4th St-IA-B-1		12/19/2017	No	<b>17.6</b>	<1.07
		3/1/2018	No	<b>15.3</b>	<1.07
6492-113-115 4th St-IA-B-2		12/19/2017	No	<b>13.4</b>	<1.07
		3/1/2018	No	<b>14.8</b>	<1.07
6492-113-115 4th St-IA-1-1		12/19/2017	No	<b>14.4</b>	<1.07
		3/1/2018	No	<b>22.0</b>	<1.07
6492-113-115 4th St-IA-1-2		12/19/2017	No	<b>22.5</b>	<1.07
		3/1/2018	No	<b>19.7</b>	<b>3.17</b>
<b>SUB-SLAB VAPOR</b>					
<b>Small Commercial Vapor Risk Screening Level</b>				<b>6,000</b>	<b>290</b>
6492-113-115 4th St-SSV-1	113-115 4th St	12/20/2017	No	<b>22.5</b>	<b>9.03</b>
		3/1/2018	No	<b>817</b>	<b>379</b>
6492-113-115 4th St-SSV-2		12/20/2017	No	<b>203</b>	<b>4.25</b>
		3/1/2018	No	<b>712</b>	<86.8

**Notes:**

Results reported in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )

Samples analyzed according to EPA Method TO-15

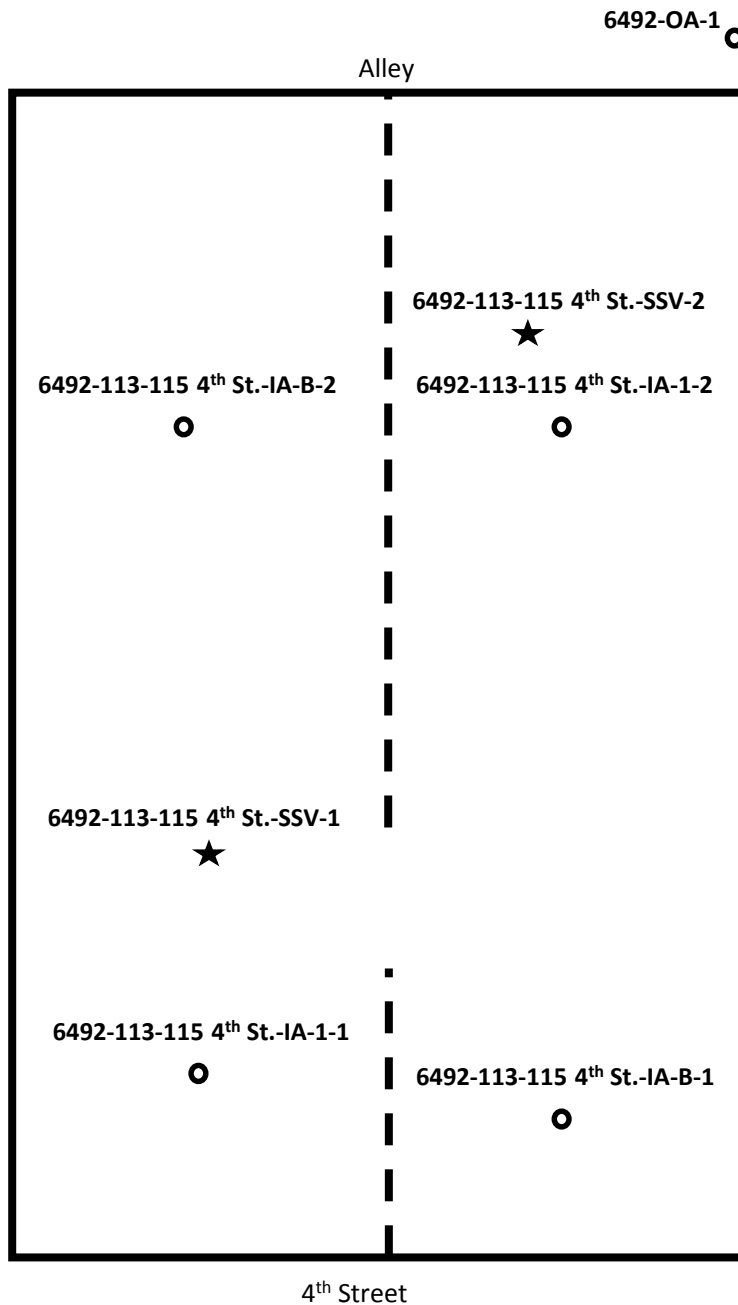
The Vapor Risk Screening/Action Levels are calculated in accordance with WDNR Publication RR-800 and subsequent guidance documents.

IA = Indoor Air

SSV= Sub-slab vapor

**Bolded** values are above detection limits

**FIGURE 1**  
**VAPOR INTRUSION SAMPLE LOCATIONS**  
**113-115 4<sup>th</sup> Street, Baraboo Wisconsin**



**Legend**

- = Indoor/Outdoor Air Sample
- IA-1 = Indoor air sample
- SSV-1 = Sub-Slab Vapor
- ★ = Sub-Slab Vapor Sampling Port Location
- — = Interior Wall





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

Mr. Kyle Vander Heiden  
Enviroforensics  
N16 W. 23390 Stone Ridge Dr  
Suite G  
Waukesha, WI 53188

March 20, 2018

EnvisionAir Project Number: 2018-150  
Client Project Name: 6492

Dear Mr. Vander Heiden,

Please find the attached analytical report for the samples received March 7, 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 A. Hunnicutt".

Stanley A 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:** ENVIROFORENSICS  
**Project ID:** 6492  
**Client Project Manager:** KYLE VANDER HEIDEN  
**EnvisionAir Project Number:** 2018-150

**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>Canister Pressure / Vacuum</u>		<u>Lab</u>
			<u>Collected:</u>	<u>Collected:</u>					<u>Received:</u>	<u>Received:</u>	<u>(in. Hg)</u>
18-682	6492-113-115 4TH ST-IA-B-1	A	3/1/18	9:19	3/1/18	17:03	3/7/18	11:00	-30	-7	-7
18-683	6492-113-115 4TH ST-IA-B-2	A	3/1/18	9:22	3/1/18	17:05	3/7/18	11:00	-30	-13	-13
18-684	6492-113-115 4TH ST-IA-1-1	A	3/1/18	9:14	3/1/18	17:01	3/7/18	11:00	-29	-6	-6
18-685	6492-113-115 4TH ST-IA-1-2	A	3/1/18	9:10	3/1/18	17:08	3/7/18	11:00	-29	-7	-7
18-686	6492-113-115 4TH ST-SSV-1	A	3/1/18	17:42	3/1/18	17:48	3/7/18	11:00	-30	-2	-2
18-687	6492-113-115 4TH ST-SSV-2	A	3/1/18	18:02	3/1/18	18:05	3/7/18	11:00	-20	-2	-2



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

**Client Name:** ENVIROFORENSICS  
**Project ID:** 6492  
**Client Project Manager:** KYLE VANDER HEIDEN  
**EnvisionAir Project Number:** 2018-150

**Analytical Method:** TO-15  
**Analytical Batch:** 031018AIR

**Client Sample ID:** 6492-113-115 4TH ST-IA-B-1  
**Envision Sample Number:** 18-682  
**Sample Matrix:** AIR

**Sample Collection START Date/Time:** 3/1/18 9:19  
**Sample Collection END Date/Time:** 3/1/18 17:03  
**Sample Received Date/Time:** 3/7/18 11:00

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></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	

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></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	< 1800	1800	
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	<b>15.3</b>	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)	96%		
Analysis Date/Time:	3-12-18/01:41		
Analyst Initials	tjg		





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

**Client Name:** ENVIROFORENSICS  
**Project ID:** 6492  
**Client Project Manager:** KYLE VANDER HEIDEN  
**EnvisionAir Project Number:** 2018-150

**Analytical Method:** TO-15  
**Analytical Batch:** 031018AIR

**Client Sample ID:** 6492-113-115 4TH ST-IA-B-2  
**Envision Sample Number:** 18-683  
**Sample Matrix:** AIR

**Sample Collection START Date/Time:** 3/1/18 9:22  
**Sample Collection END Date/Time:** 3/1/18 17:05  
**Sample Received Date/Time:** 3/7/18 11:00

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></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	



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

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></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	< 1800	1800	
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	<b>14.8</b>	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)	99%		
Analysis Date/Time:	3-12-18/02:25		
Analyst Initials	tjg		



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

**Client Name:** ENVIROFORENSICS  
**Project ID:** 6492  
**Client Project Manager:** KYLE VANDER HEIDEN  
**EnvisionAir Project Number:** 2018-150

**Analytical Method:** TO-15  
**Analytical Batch:** 031018AIR

**Client Sample ID:** 6492-113-115 4TH ST-IA-1-1  
**Envision Sample Number:** 18-684  
**Sample Matrix:** AIR

**Sample Collection START Date/Time:** 3/1/18 9:14  
**Sample Collection END Date/Time:** 3/1/18 17:01  
**Sample Received Date/Time:** 3/7/18 11:00

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,1,2-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	



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

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></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	< 1800	1800	
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	<b>22.0</b>	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)	97%		
Analysis Date/Time:	3-12-18/03:04		
Analyst Initials	tjg		



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

**Client Name:** ENVIROFORENSICS  
**Project ID:** 6492  
**Client Project Manager:** KYLE VANDER HEIDEN  
**EnvisionAir Project Number:** 2018-150

**Analytical Method:** TO-15  
**Analytical Batch:** 031018AIR

**Client Sample ID:** 6492-113-115 4TH ST-IA-1-2  
**Envision Sample Number:** 18-685  
**Sample Matrix:** AIR

**Sample Collection START Date/Time:** 3/1/18 9:10  
**Sample Collection END Date/Time:** 3/1/18 17:08  
**Sample Received Date/Time:** 3/7/18 11:00

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></u>	<u>Flag</u>
4-Ethyltoluene	< 492	492	
4-Methyl-2-pentanone (MIBK)	< 2050	2050	
1,1,1-Trichloroethane	< 546	546	
1,1,1,2-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	



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

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></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	< 1800	1800	
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	<b>19.7</b>	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	<b>3.17</b>	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	95%		
Analysis Date/Time:	3-12-18/03:43		
Analyst Initials	tjg		



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

**Client Name:** ENVIROFORENSICS  
**Project ID:** 6492  
**Client Project Manager:** KYLE VANDER HEIDEN  
**EnvisionAir Project Number:** 2018-150

**Analytical Method:** TO-15  
**Analytical Batch:** 031418AIR

**Client Sample ID:** 6492-113-115 4TH ST-SSV-1  
**Envision Sample Number:** 18-686  
**Sample Matrix:** AIR

**Sample Collection START Date/Time:** 3/1/18 17:42  
**Sample Collection END Date/Time:** 3/1/18 17:48  
**Sample Received Date/Time:** 3/7/18 11:00

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></u>	<u>Flag</u>
4-Ethyltoluene	< 4920	4920	
4-Methyl-2-pentanone (MIBK)	< 20500	20500	
1,1,1-Trichloroethane	< 5460	5460	
1,1,2,2-Tetrachloroethane	< 3.36	3.36	1
1,1,2-Trichloroethane	< 2.10	2.10	1
1,1-Dichloroethane	< 40.5	40.5	
1,1-Dichloroethene	< 1980	1980	
1,2,4-Trichlorobenzene	< 7.42	7.42	
1,2,4-Trimethylbenzene	< 49.2	49.2	
1,2-dibromoethane (EDB)	< 0.32	0.32	1
1,2-Dichlorobenzene	< 601	601	
1,2-Dichloroethane	< 4.05	4.05	
1,2-Dichloropropane	< 4.62	4.62	
1,3,5-Trimethylbenzene	< 49.2	49.2	
1,3-Butadiene	< 2.21	2.21	
1,3-Dichlorobenzene	< 601	601	
1,4-Dichlorobenzene	< 6.01	6.01	
1,4-Dioxane	< 18.0	18.0	
2-Butanone (MEK)	< 29500	29500	
2-Hexanone	< 205	205	
Acetone	< 23800	23800	
Benzene	< 16.0	16.0	
Benzyl Chloride	< 4.14	4.14	1
Bromodichloromethane	< 5.36	5.36	1
Bromoform	< 103	103	
Bromomethane	< 38.8	38.8	
Carbon Disulfide	< 3110	3110	
Carbon Tetrachloride	< 6.29	6.29	
Chlorobenzene	< 230	230	
Chloroethane	< 132	132	



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

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></u>	<u>Flag</u>
Chloroform	< 8.30	8.30	
Chloromethane	< 206	206	
cis-1,2-Dichloroethene	< 198	198	
cis-1,3-Dichloropropene	< 45.4	45.4	
Cyclohexane	< 55100	55100	
Dibromochloromethane	< 8.52	8.52	
Dichlorodifluoromethane	< 495	495	
Ethyl Acetate	< 18000	18000	
Ethylbenzene	< 86.8	86.8	
Hexachloro-1,3-butadiene	< 10.7	10.7	
Isooctane	< 4670	4670	
m,p-Xylene	< 434	434	
Methylene Chloride	< 417	417	
Methyl-tert-butyl ether	< 361	361	
N-Heptane	< 4100	4100	
N-Hexane	< 1760	1760	
o-Xylene	< 434	434	
Propylene	< 1720	1720	
Styrene	< 4260	4260	
Tetrachloroethene	<b>817</b>	31.9	
Tetrahydrofuran	< 2950	2950	
Toluene	< 37700	37700	
trans-1,2-Dichloroethene	< 396	396	
trans-1,3-Dichloropropene	< 45.4	45.4	
Trichloroethene	<b>379</b>	10.7	
Trichlorofluoromethane	< 5620	5620	
Vinyl Acetate	< 1760	1760	
Vinyl Bromide	< 4.37	4.37	
Vinyl Chloride	< 12.8	12.8	
4-bromofluorobenzene (surrogate)	106%		
Analysis Date/Time:	3-15-18/23:57		
Analyst Initials	tjg		





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

**Client Name:** ENVIROFORENSICS  
**Project ID:** 6492  
**Client Project Manager:** KYLE VANDER HEIDEN  
**EnvisionAir Project Number:** 2018-150

**Analytical Method:** TO-15  
**Analytical Batch:** 031418AIR

**Client Sample ID:** 6492-113-115 4TH ST-SSV-2 **Sample Collection START Date/Time:** 3/1/18 18:02  
**Sample Collection END Date/Time:** 3/1/18 18:05  
**Envision Sample Number:** 18-687 **Sample Received Date/Time:** 3/7/18 11:00  
**Sample Matrix:** AIR

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></u>	<u>Flag</u>
4-Ethyltoluene	< 4920	4920	
4-Methyl-2-pentanone (MIBK)	< 20500	20500	
1,1,1-Trichloroethane	< 5460	5460	
1,1,2,2-Tetrachloroethane	< 3.36	3.36	1
1,1,2-Trichloroethane	< 2.10	2.10	1
1,1-Dichloroethane	< 40.5	40.5	
1,1-Dichloroethene	< 1980	1980	
1,2,4-Trichlorobenzene	< 7.42	7.42	
1,2,4-Trimethylbenzene	< 49.2	49.2	
1,2-dibromoethane (EDB)	< 0.32	0.32	1
1,2-Dichlorobenzene	< 601	601	
1,2-Dichloroethane	< 4.05	4.05	
1,2-Dichloropropane	< 4.62	4.62	
1,3,5-Trimethylbenzene	< 49.2	49.2	
1,3-Butadiene	< 2.21	2.21	
1,3-Dichlorobenzene	< 601	601	
1,4-Dichlorobenzene	< 6.01	6.01	
1,4-Dioxane	< 18.0	18.0	
2-Butanone (MEK)	< 29500	29500	
2-Hexanone	< 205	205	
Acetone	< 23800	23800	
Benzene	< 16.0	16.0	
Benzyl Chloride	< 4.14	4.14	1
Bromodichloromethane	< 5.36	5.36	1
Bromoform	< 103	103	
Bromomethane	< 38.8	38.8	
Carbon Disulfide	< 3110	3110	
Carbon Tetrachloride	< 6.29	6.29	
Chlorobenzene	< 230	230	
Chloroethane	< 132	132	



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

<u>Compounds</u>	<u>Sample Results ug/m<sup>3</sup></u>	<u>Reporting Limit ug/m<sup>3</sup></u>	<u>Flag</u>
Chloroform	< 8.30	8.30	
Chloromethane	< 206	206	
cis-1,2-Dichloroethene	< 198	198	
cis-1,3-Dichloropropene	< 45.4	45.4	
Cyclohexane	< 55100	55100	
Dibromochloromethane	< 8.52	8.52	
Dichlorodifluoromethane	< 495	495	
Ethyl Acetate	< 18000	18000	
Ethylbenzene	< 86.8	86.8	
Hexachloro-1,3-butadiene	< 10.7	10.7	
Isooctane	< 4670	4670	
m,p-Xylene	< 434	434	
Methylene Chloride	< 417	417	
Methyl-tert-butyl ether	< 361	361	
N-Heptane	< 4100	4100	
N-Hexane	< 1760	1760	
o-Xylene	< 434	434	
Propylene	< 1720	1720	
Styrene	< 4260	4260	
Tetrachloroethene	<b>712</b>	31.9	
Tetrahydrofuran	< 2950	2950	
Toluene	< 37700	37700	
trans-1,2-Dichloroethene	< 396	396	
trans-1,3-Dichloropropene	< 45.4	45.4	
Trichloroethene	< 10.7	10.7	
Trichlorofluoromethane	< 5620	5620	
Vinyl Acetate	< 1760	1760	
Vinyl Bromide	< 4.37	4.37	
Vinyl Chloride	< 12.8	12.8	
4-bromofluorobenzene (surrogate)	99%		
Analysis Date/Time:	3-16-18/00:34		
Analyst Initials	tjg		

**TO-15 Quality Control Data**

**EnvisionAir Batch Number:** 031018AIR

<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	
1,1,2,2-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	< 500	500	
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	

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)	97%		
Analysis Date/Time:	3-11-18/09:39		
Analyst Initials	tjg		

<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</u>	<u>Flag</u>
Propylene	9.34	8.98	10	93%	90%	3.9%	
Dichlorodifluoromethane	11.3	11.2	10	113%	112%	0.9%	
Chloromethane	10.1	9.86	10	101%	99%	2.4%	
Vinyl Chloride	9.9	9.75	10	99%	98%	1.5%	
1,3-Butadiene	8.94	8.48	10	89%	85%	5.3%	
Bromomethane	10.8	10.2	10	108%	102%	5.7%	
Chloroethane	11.3	10.7	10	113%	107%	5.5%	
Vinyl Bromide	10.5	10.3	10	105%	103%	1.9%	
Trichlorofluoromethane	11.7	9.48	10	117%	95%	20.5%	2
Acetone	8.56	8.03	10	86%	80%	6.4%	
1,1-Dichloroethene	9.32	8.81	10	93%	88%	5.6%	
Methylene Chloride	9.03	8.72	10	90%	87%	3.5%	
Carbon Disulfide	10.1	9.68	10	101%	97%	4.2%	
trans-1,2-Dichloroethene	9.45	8.94	10	95%	89%	5.5%	
Methyl-tert-butyl ether	8.02	8.64	10	80%	86%	7.4%	
1,1-Dichloroethane	8.93	8.53	10	89%	85%	4.6%	
Vinyl Acetate	9.39	9.02	10	94%	90%	4.0%	
N-Hexane	9.36	8.99	10	94%	90%	4.0%	
2-Butanone (MEK)	9.84	9.31	10	98%	93%	5.5%	
cis-1,2-Dichloroethene	8.76	8.54	10	88%	85%	2.5%	
Ethyl Acetate	8.99	8.84	10	90%	88%	1.7%	
Chloroform	8.73	8.43	10	87%	84%	3.5%	
Tetrahydrofuran	10.6	10.3	10	106%	103%	2.9%	
1,2-Dichloroethane	9.35	8.87	10	94%	89%	5.3%	
1,1,1-Trichloroethane	9.69	9.19	10	97%	92%	5.3%	
Carbon Tetrachloride	9.32	9.03	10	93%	90%	3.2%	
Benzene	9.83	9.42	10	98%	94%	4.3%	
Cyclohexane	9.92	9.49	10	99%	95%	4.4%	
1,2-Dichloropropane	9.13	8.89	10	91%	89%	2.7%	
Trichloroethene	9.28	8.92	10	93%	89%	4.0%	
Bromodichloromethane	9.2	8.93	10	92%	89%	3.0%	
1,4-Dioxane	10.0	9.38	10	100%	94%	6.0%	
Isooctane	8.57	8.34	10	86%	83%	2.7%	
N-Heptane	8.84	8.47	10	88%	85%	4.3%	
cis-1,3-Dichloropropene	9.26	8.98	10	93%	90%	3.1%	
4-Methyl-2-pentanone (MIBK)	8.5	8.22	10	85%	82%	3.3%	
trans-1,3-Dichloropropene	9.33	8.84	10	93%	88%	5.4%	
1,1,2-Trichloroethane	9.27	9.03	10	93%	90%	2.6%	
Toluene	9.51	9.37	10	95%	94%	1.5%	
2-Hexanone	10.2	9.83	10	102%	98%	3.7%	
Dibromochloromethane	9.87	9.79	10	99%	98%	0.8%	
1,2-dibromoethane (EDB)	10.2	9.93	10	102%	99%	2.7%	
Tetrachloroethene	8.78	8.5	10	88%	85%	3.2%	
Chlorobenzene	10.4	10.1	10	104%	101%	2.9%	
Ethylbenzene	10.1	9.93	10	101%	99%	1.7%	
m,p-Xylene	20.6	19.8	20	103%	99%	4.0%	
Bromoform	9.86	9.71	10	99%	97%	1.5%	

Analytical Report

<u>LCS/LCSD</u>	<u>LCS Results (ppbv)</u>	<u>LCSD Results (ppbv)</u>	<u>LCS/D</u> <u>Conc(ppbv)</u>	<u>LCS</u> <u>Rec.</u>	<u>LCSD</u> <u>Rec.</u>	<u>RPD</u>	<u>Flag</u>
Styrene	11.1	10.7	10	111%	107%	3.7%	
1,1,2,2-Tetrachloroethane	10.5	10.1	10	105%	101%	3.9%	
o-Xylene	10.4	10.2	10	104%	102%	1.9%	
4-Ethyltoluene	10.7	10.5	10	107%	105%	1.9%	
1,3,5-Trimethylbenzene	9.96	9.7	10	100%	97%	2.6%	
1,2,4-Trimethylbenzene	9.96	9.75	10	100%	98%	2.1%	
1,3-Dichlorobenzene	10.9	11	10	109%	110%	0.9%	
Benzyl Chloride	9.89	11.4	10	99%	114%	14.2%	
1,4-Dichlorobenzene	11.4	10.8	10	114%	108%	5.4%	
1,2-Dichlorobenzene	9.97	9.67	10	100%	97%	3.1%	
1,2,4-Trichlorobenzene	11.1	10.1	10	111%	101%	9.4%	
Hexachloro-1,3-butadiene	8.95	8.94	10	90%	89%	0.1%	
4-bromofluorobenzene (surrogate)	113%	115%					
Analysis Date/Time:	3-11-18/09:05	3-11-18/15:27					
Analyst Initials	tjg	tjg					

**TO-15 Quality Control Data**

**EnvisionAir Batch Number:** 031418AIR

<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	
1,1,2,2-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	< 500	500	
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	

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)	107%		
Analysis Date/Time:	3-15-18/15:17		
Analyst Initials	tjg		

<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</u>	<u>Flag</u>
Propylene	10.3	9.5	10	103%	95%	8.1%	
Dichlorodifluoromethane	11	10.8	10	110%	108%	1.8%	
Chloromethane	10.5	10.4	10	105%	104%	1.0%	
Vinyl Chloride	10.6	9.91	10	106%	99%	6.7%	
1,3-Butadiene	9.7	8.68	10	97%	87%	11.1%	
Bromomethane	11.6	11.7	10	116%	117%	0.9%	
Chloroethane	10.7	11.4	10	107%	114%	6.3%	
Vinyl Bromide	11.3	11.2	10	113%	112%	0.9%	
Trichlorofluoromethane	11.2	10.1	10	112%	101%	10.3%	
Acetone	9.45	8.93	10	95%	89%	5.7%	
1,1-Dichloroethene	9.74	9.46	10	97%	95%	2.9%	
Methylene Chloride	9.95	9.9	10	100%	99%	0.5%	
Carbon Disulfide	10.5	10.2	10	105%	102%	2.9%	
trans-1,2-Dichloroethene	10.2	9.94	10	102%	99%	2.6%	
Methyl-tert-butyl ether	8.95	8.34	10	90%	83%	7.1%	
1,1-Dichloroethane	9.36	9.15	10	94%	92%	2.3%	
Vinyl Acetate	10.1	9.6	10	101%	96%	5.1%	
N-Hexane	10	9.52	10	100%	95%	4.9%	
2-Butanone (MEK)	10.6	10.3	10	106%	103%	2.9%	
cis-1,2-Dichloroethene	9.67	9.24	10	97%	92%	4.5%	
Ethyl Acetate	9.96	9.42	10	100%	94%	5.6%	
Chloroform	9.46	9.08	10	95%	91%	4.1%	
Tetrahydrofuran	10.1	10.3	10	101%	103%	2.0%	
1,2-Dichloroethane	8.71	9.31	10	87%	93%	6.7%	
1,1,1-Trichloroethane	8.9	9.62	10	89%	96%	7.8%	
Carbon Tetrachloride	8.49	9.45	10	85%	95%	10.7%	
Benzene	9.25	9.99	10	93%	100%	7.7%	
Cyclohexane	9.24	9.82	10	92%	98%	6.1%	
1,2-Dichloropropane	8.76	9.49	10	88%	95%	8.0%	
Trichloroethene	9.0	9.99	10	90%	100%	10.8%	
Bromodichloromethane	8.72	9.5	10	87%	95%	8.6%	
1,4-Dioxane	11.1	12	10	111%	120%	7.8%	
Isooctane	10.4	8.68	10	104%	87%	18.0%	
N-Heptane	8.3	8.57	10	83%	86%	3.2%	
cis-1,3-Dichloropropene	8.9	9.57	10	89%	96%	7.3%	
4-Methyl-2-pentanone (MIBK)	8.62	9.07	10	86%	91%	5.1%	
trans-1,3-Dichloropropene	8.91	9.58	10	89%	96%	7.2%	
1,1,2-Trichloroethane	8.89	9.83	10	89%	98%	10.0%	
Toluene	9.26	10.2	10	93%	102%	9.7%	
2-Hexanone	10.6	11.2	10	106%	112%	5.5%	
Dibromochloromethane	8.67	8.66	10	87%	87%	0.1%	
1,2-dibromoethane (EDB)	9.11	9	10	91%	90%	1.2%	
Tetrachloroethene	8.25	8.55	10	83%	86%	3.6%	
Chlorobenzene	9.49	9.39	10	95%	94%	1.1%	
Ethylbenzene	9.3	9.22	10	93%	92%	0.9%	
m,p-Xylene	18.7	18.3	20	94%	92%	2.2%	
Bromoform	8.93	8.75	10	89%	88%	2.0%	

Analytical Report

<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</u>	<u>Flag</u>
Styrene	10.1	10.1	10	101%	101%	0.0%	
1,1,2,2-Tetrachloroethane	9.61	9.45	10	96%	95%	1.7%	
o-Xylene	9.82	9.39	10	98%	94%	4.5%	
4-Ethyltoluene	10	9.89	10	100%	99%	1.1%	
1,3,5-Trimethylbenzene	9.34	9.3	10	93%	93%	0.4%	
1,2,4-Trimethylbenzene	9.35	9.35	10	94%	94%	0.0%	
1,3-Dichlorobenzene	10.9	10.6	10	109%	106%	2.8%	
Benzyl Chloride	10.4	11.1	10	104%	111%	6.5%	
1,4-Dichlorobenzene	10.8	10.7	10	108%	107%	0.9%	
1,2-Dichlorobenzene	9.58	9.56	10	96%	96%	0.2%	
1,2,4-Trichlorobenzene	10.3	11.7	10	103%	117%	12.7%	
Hexachloro-1,3-butadiene	9.01	9.02	10	90%	90%	0.1%	
4-bromofluorobenzene (surrogate)	112%	113%					
Analysis Date/Time:	3-15-18/12:48	3-15-18/15:59					
Analyst Initials	tjg	tjg					



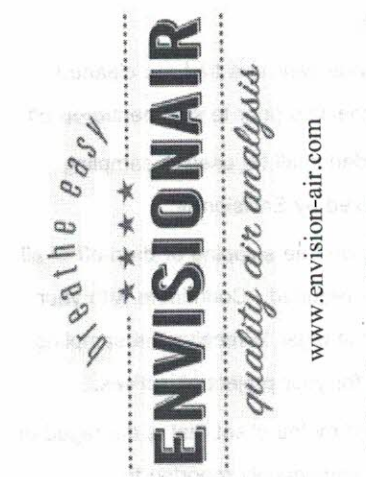


**EnvisionAir**  
1441 Sadler Circle West Drive  
Indianapolis, IN 46239  
Ph: 317-351-0885  
Fax: 317-351-0882  
[www.envision-air.com](http://www.envision-air.com)

<u>Flag Number</u>	<u>Comments</u>
1	Reporting limit is supported by MDL. TJG
2	RPD is biased high, but recoveries are within control. TJG 3/16/18

# CHAIN OF CUSTODY RECORD

EnvisionAir | 1437 Sadlier Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882



**REQUESTED PARAMETERS**

TO-15 Full List

TO-15 Short List

Sampling Type:  
 Soil-Gas:   
 Sub-Slab:   
 Indoor-Air:

Client: EnviroForensics, LLC  
 Report: N16 W2390 Stone Ridge Dr Suite 6  
 Address: Waukesha, WI 53188

Report To: K. Vander Weiden / R. Houwers  
 Phone: (262) 290-4001

Invoice Address:

P.O. Number: 2018-0176  
 Project Name or Number: 6492  
 Sampled by: KV

QA/QC Required: (circle if applicable)  
 Level III Level IV JA only

Reporting Units needed: (circle)  
 ug/m<sup>3</sup> mg/m<sup>3</sup> PPBV PPMV

Media type: 1LC = 1 Liter Canister  
 6LC = 6 Liter Canister  
 TB = Tedlar Bag  
 TD = Thermal Desorption Tube

Desired TAT: (Please Circle One)  
 1 day 2 days 3 days Std (5 bus. days)

Air Sample ID	Media Type (see code above)	Coll. Date (Grab/Comp Start)	Coll. Time (Grab/Comp Start)	Coll. Date (Comp. End)	Coll. Time (Comp. End)	Canister Serial #	Flow Controller Serial #	Initial Field (in. Hg)	Final Field (in. Hg)	Lab Received (in. Hg)	EnvisionAir Sample Number	Canister Pressure / Vacuum	
												TO-15 Full List	TO-15 Short List
6492-113-115 4th SE -JA-B-1	6LC	3/1/18	0919	3/1/18	1703	91536	03059	-30	-7	-7	18-682		
6492-113-115 4th SE -JA-B-2	6LC	3/1/18	0922	3/1/18	1705	14120	05715	-30	-13	-13	18-683		
6492-113-115 4th SE -JA-1-1	6LC	3/1/18	0914	3/1/18	1701	91601	05303	-29	-6	-6	18-684		
6492-113-115 4th SE -JA-1-2	6LC	3/1/18	0910	3/1/18	1708	91578	07254	-29	-7	-7	18-685		
6492-113-115 4th SE -SSV-1	1LC	3/1/18	1742	3/1/18	1748	83781	0055	-30	-2	-2	18-686		
6492-113-115 4th SE -SSV-2	1LC	3/1/18	1802	3/1/18	1805	2233	NA	-20	-2	-2	18-687		

Comments:

Relinquished by: *[Signature]* Date: 3/5/18 Time: 1100

Received by: *[Signature]* Date: 3/7/18 Time: 1100