



January 22, 2018

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

**Subject: Vapor Intrusion Sampling Results – 113-115 4th 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 4th Street in Baraboo, Wisconsin. The samples were collected on December 19-20, 2017. 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 designated 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. No other COCs were detected in the indoor air samples. PCE and trichloroethene were detected in both sub-slab vapor samples, however, the concentrations detected were *below* their respective vapor risk screening Levels. No other COCs were detected in the sub-slab vapor samples.

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

January 22, 2018



At this time, there does not appear to be a vapor intrusion risk to your building. EnviroForensics recommends a second sampling event to verify the sampling results and 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. The WDNR project manager, Trevor Bannister, can be reached at 608-275-3490. We greatly appreciate your help and patience with this matter.

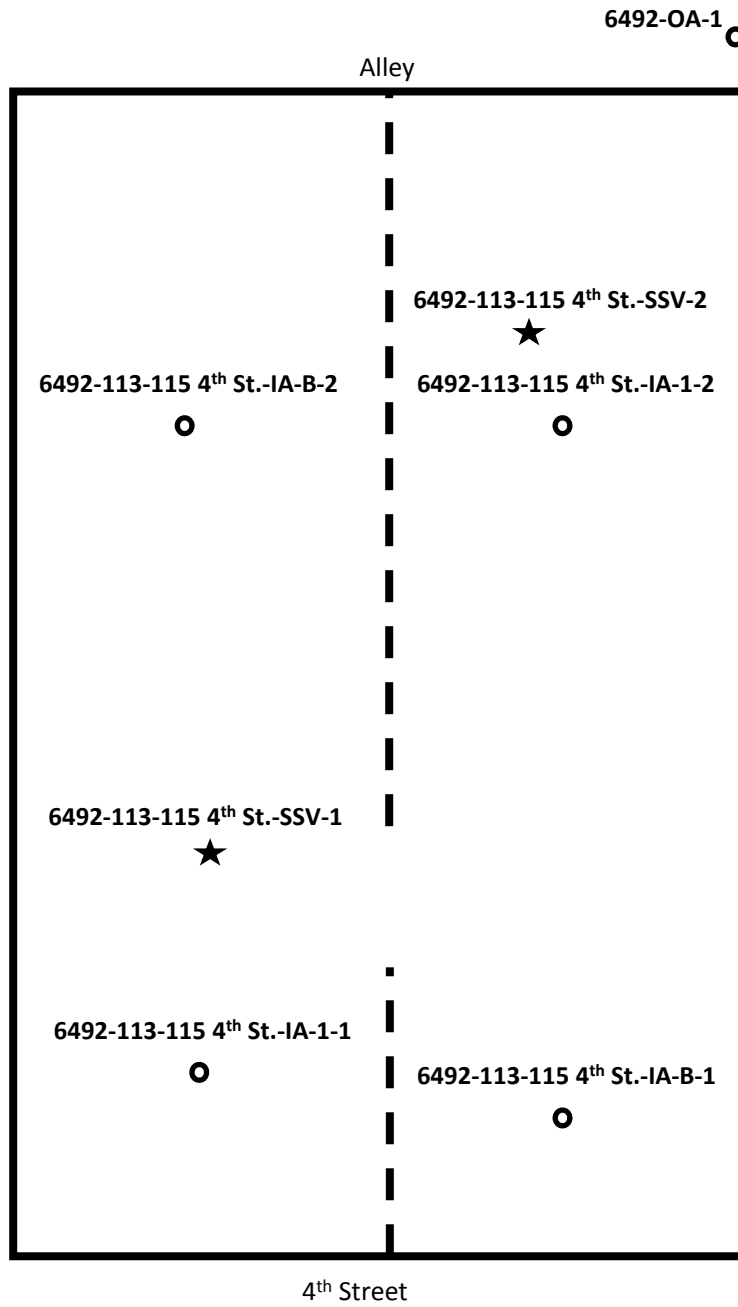
Sincerely,
EnviroForensics, LLC

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

FIGURE 1
VAPOR INTRUSION SAMPLE LOCATIONS
113-115 4th 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



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
INDOOR/ OUTDOOR AIR					
Small Commercial Vapor Action Level				180	8.8
6492-OA-1	113-115 4th St	12/19/2017	No	8.34	<1.07
6492-113-115 4th St-IA-B-1		12/19/2017	No	17.6	<1.07
6492-113-115 4th St-IA-B-2		12/19/2017	No	13.4	<1.07
6492-113-115 4th St-IA-1-1		12/19/2017	No	14.4	<1.07
6492-113-115 4th St-IA-1-2		12/19/2017	No	22.5	<1.07
SUB-SLAB VAPOR					
Small Commercial Vapor Risk Screening Level				6,000	290
6492-113-115 4th St-SSV-1	113-115 4th St	12/20/2017	No	22.5	9.03
6492-113-115 4th St-SSV-2		12/20/2017	No	203	4.25

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



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Mr. Rob Hoverman
Enviroforensics
N16 W. 23390 Stone Ridge Dr
Suite G
Waukesha, WI 53188

January 5, 2018

EnvisionAir Project Number: 2017-768
Client Project Name: 6492 Badger Cleaners

Dear Mr. Hoverman,

Please find the attached analytical report for the samples received December 26, 2017. 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



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Client Name: ENVIROFORENSICS
Project ID: 6492 / BADGER CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2017-768

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>
17-2887	6492-113-115 4TH ST-IA-B-1	A	12/19/17	9:50	12/19/17	17:30	12/26/17	10:00	-29	-7	-7
17-2888	6492-113-115 4TH ST-IA-B-2	A	12/19/17	9:55	12/19/17	17:35	12/26/17	10:00	-29	-6	-6
17-2889	6492-113-115 4TH ST-IA-1-1	A	12/19/17	9:40	12/19/17	17:20	12/26/17	10:00	-29	-7	-7
17-2890	6492-113-115 4TH ST-IA-1-2	A	12/19/17	9:45	12/19/17	17:25	12/26/17	10:00	-29	-5	-5
17-2891	6492-113-115 4TH ST-SSV-1	A	12/19/17	9:25	12/19/17	9:31	12/26/17	10:00	-29	-3	-3
17-2892	6492-113-115 4TH ST-SSV-2	A	12/19/17	9:45	12/19/17	9:50	12/26/17	10:00	-29	-3	-3



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Client Name: ENVIROFORENSICS
Project ID: 6492 / BADGER CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2017-768

Analytical Method: TO-15
Analytical Batch: 122817AIR

Client Sample ID: 6492-113-115 4TH ST-IA-B-1
Envision Sample Number: 17-2887
Sample Matrix: AIR

Sample Collection START Date/Time: 12/19/17 9:50
Sample Collection END Date/Time: 12/19/17 17:30
Sample Received Date/Time: 12/26/17 10:00

<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	< 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	17.6	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:	12-29-17/20:55		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: 6492 / BADGER CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2017-768

Analytical Method: TO-15
Analytical Batch: 122817AIR

Client Sample ID: 6492-113-115 4TH ST-IA-B-2
Envision Sample Number: 17-2888
Sample Matrix: AIR

Sample Collection START Date/Time: 12/19/17 9:55
Sample Collection END Date/Time: 12/19/17 17:35
Sample Received Date/Time: 12/26/17 10:00

<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	< 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	13.4	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:	12-29-17/21:33		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: 6492 / BADGER CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2017-768

Analytical Method: TO-15
Analytical Batch: 122817AIR

Client Sample ID: 6492-113-115 4TH ST-IA-1-1
Envision Sample Number: 17-2889
Sample Matrix: AIR

Sample Collection START Date/Time: 12/19/17 9:40
Sample Collection END Date/Time: 12/19/17 17:20
Sample Received Date/Time: 12/26/17 10:00

<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	< 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	14.4	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:	12-29-17/22:11		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: 6492 / BADGER CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2017-768

Analytical Method: TO-15
Analytical Batch: 122817AIR

Client Sample ID: 6492-113-115 4TH ST-IA-1-2
Envision Sample Number: 17-2890
Sample Matrix: AIR

Sample Collection START Date/Time: 12/19/17 9:45
Sample Collection END Date/Time: 12/19/17 17:25
Sample Received Date/Time: 12/26/17 10:00

<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	< 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	22.5	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)	101%		
Analysis Date/Time:	12-29-17/22:50		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: 6492 / BADGER CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2017-768

Analytical Method: TO-15
Analytical Batch: 010218AIR

Client Sample ID: 6492-113-115 4TH ST-SSV-1
Envision Sample Number: 17-2891
Sample Matrix: AIR

Sample Collection START Date/Time: 12/19/17 9:25
Sample Collection END Date/Time: 12/19/17 9:31
Sample Received Date/Time: 12/26/17 10:00

<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	< 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	22.5	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	9.03	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	111%		
Analysis Date/Time:	1-4-18/03:58		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS
Project ID: 6492 / BADGER CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2017-768

Analytical Method: TO-15
Analytical Batch: 010218AIR

Client Sample ID: 6492-113-115 4TH ST-SSV-2
Envision Sample Number: 17-2892
Sample Matrix: AIR

Sample Collection START Date/Time: 12/19/17 9:45
Sample Collection END Date/Time: 12/19/17 9:50
Sample Received Date/Time: 12/26/17 10:00

<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	< 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	203	31.9	2
Tetrahydrofuran	< 295	295	
Toluene	< 3770	3770	
trans-1,2-Dichloroethene	< 39.6	39.6	
trans-1,3-Dichloropropene	< 4.54	4.54	
Trichloroethene	4.25	1.07	
Trichlorofluoromethane	< 562	562	
Vinyl Acetate	< 176	176	
Vinyl Bromide	< 0.44	0.44	
Vinyl Chloride	< 1.28	1.28	
4-bromofluorobenzene (surrogate)	110%		
Analysis Date/Time:	1-4-18/04:36		
Analyst Initials	tjg		

TO-15 Quality Control Data

EnvisionAir Batch Number: 122817AIR

<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)	86%		
Analysis Date/Time:	12-29-17/15:23		
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	8.48	8.72	10	85%	87%	2.8%	
Dichlorodifluoromethane	10.1	9.11	10	101%	91%	10.3%	
Chloromethane	9.12	9.17	10	91%	92%	0.5%	
Vinyl Chloride	9.18	9.44	10	92%	94%	2.8%	
1,3-Butadiene	9.76	9.81	10	98%	98%	0.5%	
Bromomethane	9.09	9.31	10	91%	93%	2.4%	
Chloroethane	9.25	9.38	10	93%	94%	1.4%	
Vinyl Bromide	9.96	10.2	10	100%	102%	2.4%	
Trichlorofluoromethane	8.64	9.2	10	86%	92%	6.3%	
Acetone	8.87	9.3	10	89%	93%	4.7%	
1,1-Dichloroethene	9.85	10.5	10	99%	105%	6.4%	
Methylene Chloride	8.77	9.13	10	88%	91%	4.0%	
Carbon Disulfide	8.78	9.27	10	88%	93%	5.4%	
trans-1,2-Dichloroethene	9.12	9.5	10	91%	95%	4.1%	
Methyl-tert-butyl ether	9.26	9.85	10	93%	99%	6.2%	
1,1-Dichloroethane	9.38	9.88	10	94%	99%	5.2%	
Vinyl Acetate	10.2	10.6	10	102%	106%	3.8%	
N-Hexane	10.1	10.6	10	101%	106%	4.8%	
2-Butanone (MEK)	9.72	10.3	10	97%	103%	5.8%	
cis-1,2-Dichloroethene	9.38	10	10	94%	100%	6.4%	
Ethyl Acetate	8.65	9.19	10	87%	92%	6.1%	
Chloroform	10.5	11.2	10	105%	112%	6.5%	
Tetrahydrofuran	9.1	9.34	10	91%	93%	2.6%	
1,2-Dichloroethane	8	8.34	10	80%	83%	4.2%	
1,1,1-Trichloroethane	8.48	8.73	10	85%	87%	2.9%	
Carbon Tetrachloride	10.4	10.7	10	104%	107%	2.8%	
Benzene	10	10.3	10	100%	103%	3.0%	
Cyclohexane	10.8	11.3	10	108%	113%	4.5%	
1,2-Dichloropropane	10.3	10.69	10	103%	107%	3.7%	
Trichloroethene	10.1	10.7	10	101%	107%	5.8%	
Bromodichloromethane	10	10.4	10	100%	104%	3.9%	
1,4-Dioxane	9.68	10.3	10	97%	103%	6.2%	
Isooctane	8.08	8.34	10	81%	83%	3.2%	
N-Heptane	10.6	11	10	106%	110%	3.7%	
cis-1,3-Dichloropropene	10.5	10.8	10	105%	108%	2.8%	
4-Methyl-2-pentanone (MIBK)	9.65	9.99	10	97%	100%	3.5%	
trans-1,3-Dichloropropene	10.4	11	10	104%	110%	5.6%	
1,1,2-Trichloroethane	9.42	9.75	10	94%	98%	3.4%	
Toluene	9.46	9.68	10	95%	97%	2.3%	
2-Hexanone	9.95	10.3	10	100%	103%	3.5%	
Dibromochloromethane	11.9	11.6	10	119%	116%	2.6%	
1,2-dibromoethane (EDB)	11.6	11.2	10	116%	112%	3.5%	
Tetrachloroethene	11	11.8	10	110%	118%	7.0%	
Chlorobenzene	10.7	10.4	10	107%	104%	2.8%	
Ethylbenzene	10.1	9.64	10	101%	96%	4.7%	
m,p-Xylene	22.6	22	20	113%	110%	2.7%	
Bromoform	11.1	10.6	10	111%	106%	4.6%	

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	10.6	11.8	10	106%	118%	10.7%	
1,1,2,2-Tetrachloroethane	10.4	10	10	104%	100%	3.9%	
o-Xylene	12	11.6	10	120%	116%	3.4%	
4-Ethyltoluene	10.8	10.2	10	108%	102%	5.7%	
1,3,5-Trimethylbenzene	9.86	9.72	10	99%	97%	1.4%	
1,2,4-Trimethylbenzene	10.5	10.1	10	105%	101%	3.9%	
1,3-Dichlorobenzene	11.2	10.6	10	112%	106%	5.5%	
Benzyl Chloride	10.8	10.6	10	108%	106%	1.9%	
1,4-Dichlorobenzene	11.2	10.7	10	112%	107%	4.6%	
1,2-Dichlorobenzene	10.3	10.1	10	103%	101%	2.0%	
1,2,4-Trichlorobenzene	9.09	8.7	10	91%	87%	4.4%	
Hexachloro-1,3-butadiene	8.23	8.18	10	82%	82%	0.6%	
4-bromofluorobenzene (surrogate)	112%	102%					
Analysis Date/Time:	12-29-17/14:09	12-29-17/14:49					
Analyst Initials	tjg	tjg					

TO-15 Quality Control Data

EnvisionAir Batch Number: 010218AIR

<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)	93%		
Analysis Date/Time:	1-3-18/20:02		
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	9.58	10.1	10	96%	101%	5.3%	
Dichlorodifluoromethane	8.26	8.43	10	83%	84%	2.0%	
Chloromethane	9.07	9.18	10	91%	92%	1.2%	
Vinyl Chloride	9.52	9.94	10	95%	99%	4.3%	
1,3-Butadiene	9.93	10.4	10	99%	104%	4.6%	
Bromomethane	11	11.3	10	110%	113%	2.7%	
Chloroethane	10.8	11.4	10	108%	114%	5.4%	
Vinyl Bromide	10.4	10.8	10	104%	108%	3.8%	
Trichlorofluoromethane	9	8.51	10	90%	85%	5.6%	
Acetone	9.52	10.4	10	95%	104%	8.8%	
1,1-Dichloroethene	9.49	9.99	10	95%	100%	5.1%	
Methylene Chloride	9.54	9.85	10	95%	99%	3.2%	
Carbon Disulfide	10	10.7	10	100%	107%	6.8%	
trans-1,2-Dichloroethene	9.95	10.2	10	100%	102%	2.5%	
Methyl-tert-butyl ether	10	10.6	10	100%	106%	5.8%	
1,1-Dichloroethane	9.28	9.84	10	93%	98%	5.9%	
Vinyl Acetate	9.22	9.64	10	92%	96%	4.5%	
N-Hexane	10.1	10.7	10	101%	107%	5.8%	
2-Butanone (MEK)	9.63	10.3	10	96%	103%	6.7%	
cis-1,2-Dichloroethene	9.64	10.4	10	96%	104%	7.6%	
Ethyl Acetate	9.44	9.97	10	94%	100%	5.5%	
Chloroform	9.8	10.4	10	98%	104%	5.9%	
Tetrahydrofuran	9.95	10.1	10	100%	101%	1.5%	
1,2-Dichloroethane	9.44	9.46	10	94%	95%	0.2%	
1,1,1-Trichloroethane	8.96	8.95	10	90%	90%	0.1%	
Carbon Tetrachloride	9.38	9.34	10	94%	93%	0.4%	
Benzene	9.93	10.1	10	99%	101%	1.7%	
Cyclohexane	10.8	10.6	10	108%	106%	1.9%	
1,2-Dichloropropane	9.45	9.62	10	95%	96%	1.8%	
Trichloroethene	9.75	9.6	10	98%	96%	1.6%	
Bromodichloromethane	9.1	9.19	10	91%	92%	1.0%	
1,4-Dioxane	9.96	10	10	100%	100%	0.4%	
Isooctane	9.54	9.59	10	95%	96%	0.5%	
N-Heptane	9.56	9.81	10	96%	98%	2.6%	
cis-1,3-Dichloropropene	9.68	9.98	10	97%	100%	3.1%	
4-Methyl-2-pentanone (MIBK)	9.73	9.86	10	97%	99%	1.3%	
trans-1,3-Dichloropropene	9.69	9.79	10	97%	98%	1.0%	
1,1,2-Trichloroethane	8.96	8.96	10	90%	90%	0.0%	
Toluene	9.46	9.47	10	95%	95%	0.1%	
2-Hexanone	10.1	10.1	10	101%	101%	0.0%	
Dibromochloromethane	10.3	10.1	10	103%	101%	2.0%	
1,2-dibromoethane (EDB)	9.96	9.96	10	100%	100%	0.0%	
Tetrachloroethene	10.7	10.7	10	107%	107%	0.0%	
Chlorobenzene	9.91	9.7	10	99%	97%	2.1%	
Ethylbenzene	10.2	9.93	10	102%	99%	2.7%	
m,p-Xylene	19.6	20.3	20	98%	102%	3.5%	
Bromoform	10.7	10.8	10	107%	108%	0.9%	



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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	10.9	10.8	10	109%	108%	0.9%	
1,1,2,2-Tetrachloroethane	10.3	10.1	10	103%	101%	2.0%	
o-Xylene	10.1	10.1	10	101%	101%	0.0%	
4-Ethyltoluene	9.5	9.47	10	95%	95%	0.3%	
1,3,5-Trimethylbenzene	9.51	9.12	10	95%	91%	4.2%	
1,2,4-Trimethylbenzene	9.23	9.2	10	92%	92%	0.3%	
1,3-Dichlorobenzene	8.89	8.68	10	89%	87%	2.4%	
Benzyl Chloride	9.79	9.67	10	98%	97%	1.2%	
1,4-Dichlorobenzene	9.21	9.62	10	92%	96%	4.4%	
1,2-Dichlorobenzene	8.91	8.85	10	89%	89%	0.7%	
1,2,4-Trichlorobenzene	9.21	9.9	10	92%	99%	7.2%	
Hexachloro-1,3-butadiene	8.88	8.58	10	89%	86%	3.4%	
4-bromofluorobenzene (surrogate)	100%	110%					
Analysis Date/Time:	1-3-18/18:12	1-3-18/18:53					
Analyst Initials	tjg	tjg					



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<u>Flag Number</u>	<u>Comments</u>
1	Reporting limit is supported by MDL. TJG
2	Reported value is from a 10x dilution. TJG 1/4/18

CHAIN OF CUSTODY RECORD

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

Canister Pressure / Vacuum

REQUESTED PARAMETERS

TO-15 Full List
TO-15 Short List

Client: *Enviro Forensics* P.O. Number: *2017-1883*
 Report No: *W23390 Stone Ridge Dr* Project Name or Number: *6492*
 Address: *Wamblesha WI 53188* Badger Cleaners
 Report To: *R. Heinsman / K. Heinsman* Sampled by: *K. Heinsman*
 Phone: *209-390-9814* QA/QC Required: (circle if applicable) Level III Level IV
 Invoice Address: Reporting Units needed: (circle) **PPBV** **PPMV**
 Media type: **1LC** = 1 Liter Canister
6LC = 6 Liter Canister
TB = Tedlar Bag
TD = Thermal Description Tube
 Desired TAT: (Please Circle One) **1 day** **2 days** **3 days** **5 (5 bus. days)**

Air Sample ID	Media Type (see code above)	Coll. Date (Start/Comp)	Coll. Time (Start/Comp)	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
6492-113-115-4th St-IA-B-1	6LC	12-19-17	950	12-19-17	1730	91607	02238	-29	-7	-7	17-2887
6492-113-115-4th St-IA-B-2	6LC	12-19-17	955	12-19-17	1735	16888	04649	-29	-6	-6	17-2888
6492-113-115-4th St-IA-1-1	6LC	12-19-17	940	12-19-17	1720	17903	07442	-29	-7	-7	17-2889
6492-113-115-4th St-IA-1-2	6LC	12-19-17	945	12-19-17	1725	91577	04147	-29	-5	-5	17-2890
6492-113-115-4th St-SSV-1	1LC	12-19-17	925	12-19-17	931	2219	-	-29	-3	-3	17-2891
6492-113-115-4th St-SSV-2	1LC	12-19-17	945	12-19-17	950	83840	-	-29	-3	-3	17-2892

Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
<i>[Signature]</i>	12-22-2017		<i>Feed Ex</i>	12-22-2017	
			<i>[Signature]</i>	12/26/17	1000



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Client Name: ENVIROFORENSICS
Project ID: 6492 / BADGER CLEANERS
Client Project Manager: ROB HOVERMAN
EnvisionAir Project Number: 2017-772

Analytical Method: TO-15
Analytical Batch: 122817AIR

Client Sample ID: 6492-OA-1
Envision Sample Number: 17-2914
Sample Matrix: AIR

Sample Collection START Date/Time: 12/19/17 8:00
Sample Collection END Date/Time: 12/19/17 16:00
Sample Received Date/Time: 12/26/17 10:00

<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	< 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	8.34	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)	94%		
Analysis Date/Time:	12-30-17/02:45		
Analyst Initials	tjg		