



January 16, 2019

Jeff Carr
Facilities Supervisor
Monona Grove School District
5301 Monona Drive
Monona, WI 53716-3126

**Subject: Environmental Sampling Results
BRRTS# 02-13-551928**

Dear Mr. Carr:

In accordance with the Access Agreement between the Monona Grove School District and Klinke Clothing Care, Corp. (Klinke) dated August 7, 2012 and related amendments, EnviroForensics LLC (EnviroForensics) is providing the attached sampling results associated with indoor air and sub-slab vapor samples collected from Monona Grove School District property located at 4400 Monona Drive, Monona, Wisconsin (the "Property"). The sampling activities were conducted at the direction of the Wisconsin Department of Natural Resources (WDNR) as part of an environmental investigation and remediation being performed for Klinke Cleaners located at 4518 Monona Drive Madison, Wisconsin. The WDNR has assigned the following identification number to the Klinke Cleaners site: BRRTS# 02-13-551928. The chemicals of concern for the investigation are the solvent tetrachloroethene (PCE) and its associated breakdown products.

Paired indoor air and sub-slab vapor samples were collected from locations at which pre-mitigation PCE concentrations in sub-slab vapor samples were above the screening level established by WDNR. The sample locations are generally in the southwest part of the school. The purpose of this sampling event was to confirm the results of vapor samples collected in July 2018, which indicated that the vapor intrusion risk had been eliminated as a result of the remedial actions implemented at the Klinke property. The vapor mitigation system installed at the school was shut down on June 28, 2018 and has not operated since that date.

Sampling Results

Five (5) indoor air samples and five (5) sub-slab vapor samples were collected on December 28, 2018. The approximate sample locations are shown on **Figures 1 and 2** (attached). The analytical results of the samples are summarized on **Tables 1 and 2**, and the laboratory report is also attached.

Document: 6404-1628
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The chemicals of concern were not detected in any of the indoor air samples. In sub-slab vapor, the concentrations of PCE were less than the vapor risk screening level in all samples. However, the trichloroethene (TCE) concentration in sub-slab vapor sample “6404-MGHS-SSV-OPIT” was above the screening level of 13 parts per billion by volume (ppbv).

The TCE screening level exceedance in the orchestra pit vapor sample indicates a risk is still present in that area. Therefore, operation of the System 3 and System 4 fans should be resumed by plugging in the audible alarm devices and turning on the circuit breakers in electrical panel LB1-2 as shown on the attached **Figure 3**. EnviroForensics can assist with re-starting the systems if needed. The other system fans can be operated at the discretion of the school district; however, they are no longer needed for mitigation of solvent vapor.

Overall, the sampling results indicate that the vapor intrusion risk at the school has been considerably reduced as a result of the actions performed at the Klinke property to address the source of contamination. We expect that PCE and TCE concentrations in vapor will continue to decrease and propose to re-evaluate vapor conditions in the orchestra pit area during the next winter break in December 2019.

In accordance with the Access Agreement, we will contact you prior to any subsequent work on the Property. If you have any questions or concerns, please contact me at 414-326-4412 or by email at bkappen@enviroforensics.com. The WDNR project manager, Mike Schmoller, can be reached at 608-275-3303. We greatly appreciate your assistance with this matter.

Sincerely,
EnviroForensics, LLC

A handwritten signature in blue ink, appearing to read "B. J. Kappen".

Brian Kappen, PG
Project Manager

Copy: Steve Klinke, Klinke Cleaners
Mike Schmoller, Wisconsin Department of Natural Resources

Attachments:

- Figure 1 – Indoor Air Sample Locations
- Figure 2 – Sub-Slab Vapor Sample Locations
- Figure 3 – Vapor Mitigation System Layout
- Table 1 – Indoor Air Sample Analytical Results Summary
- Table 2 – Sub-Slab Vapor Sample Analytical Results Summary
- Laboratory Analytical Reports

FIGURE 1
Monona Grove High School
Indoor Air Sample Locations

Legend

- Indoor Air Sample Location

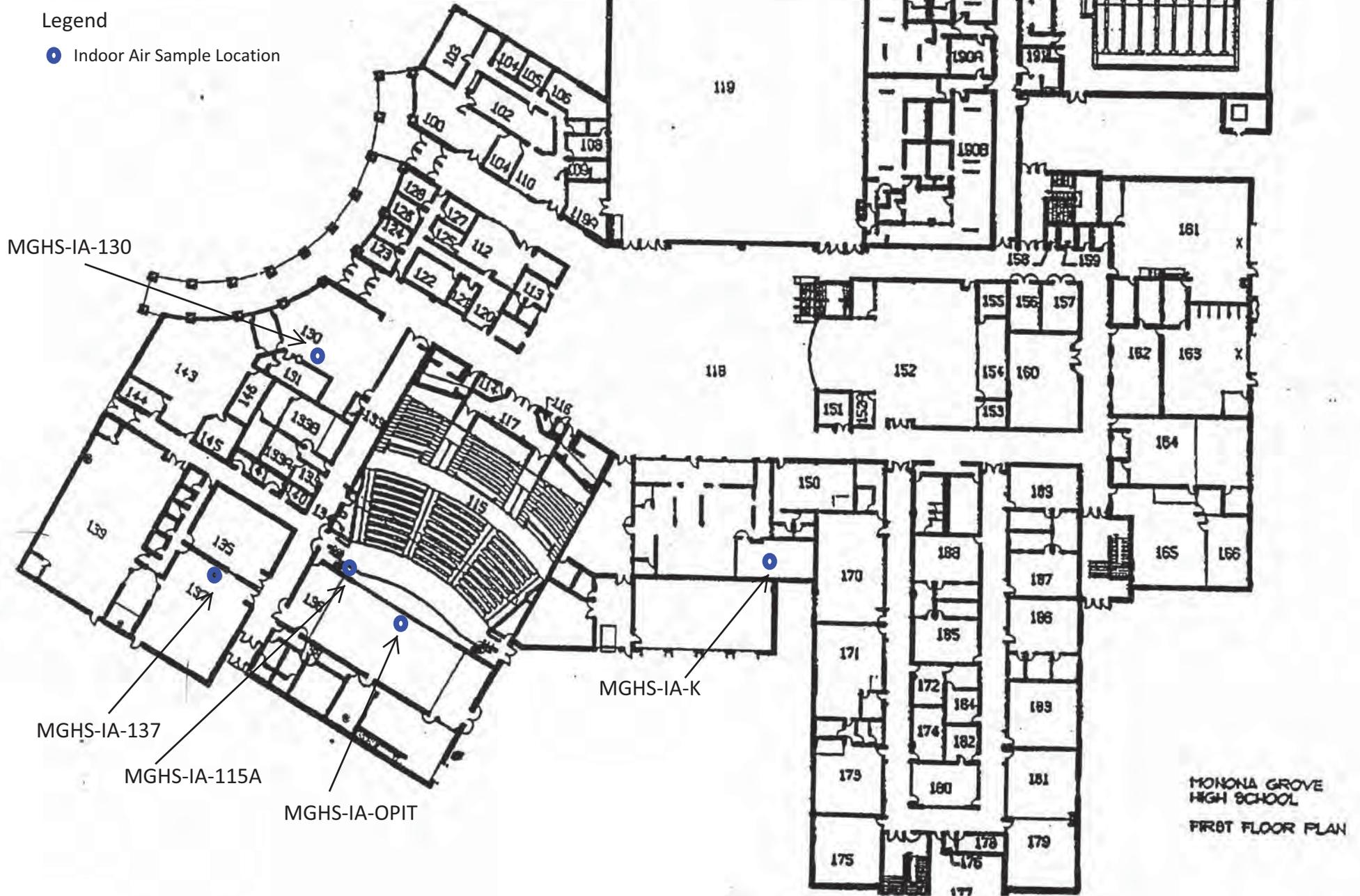
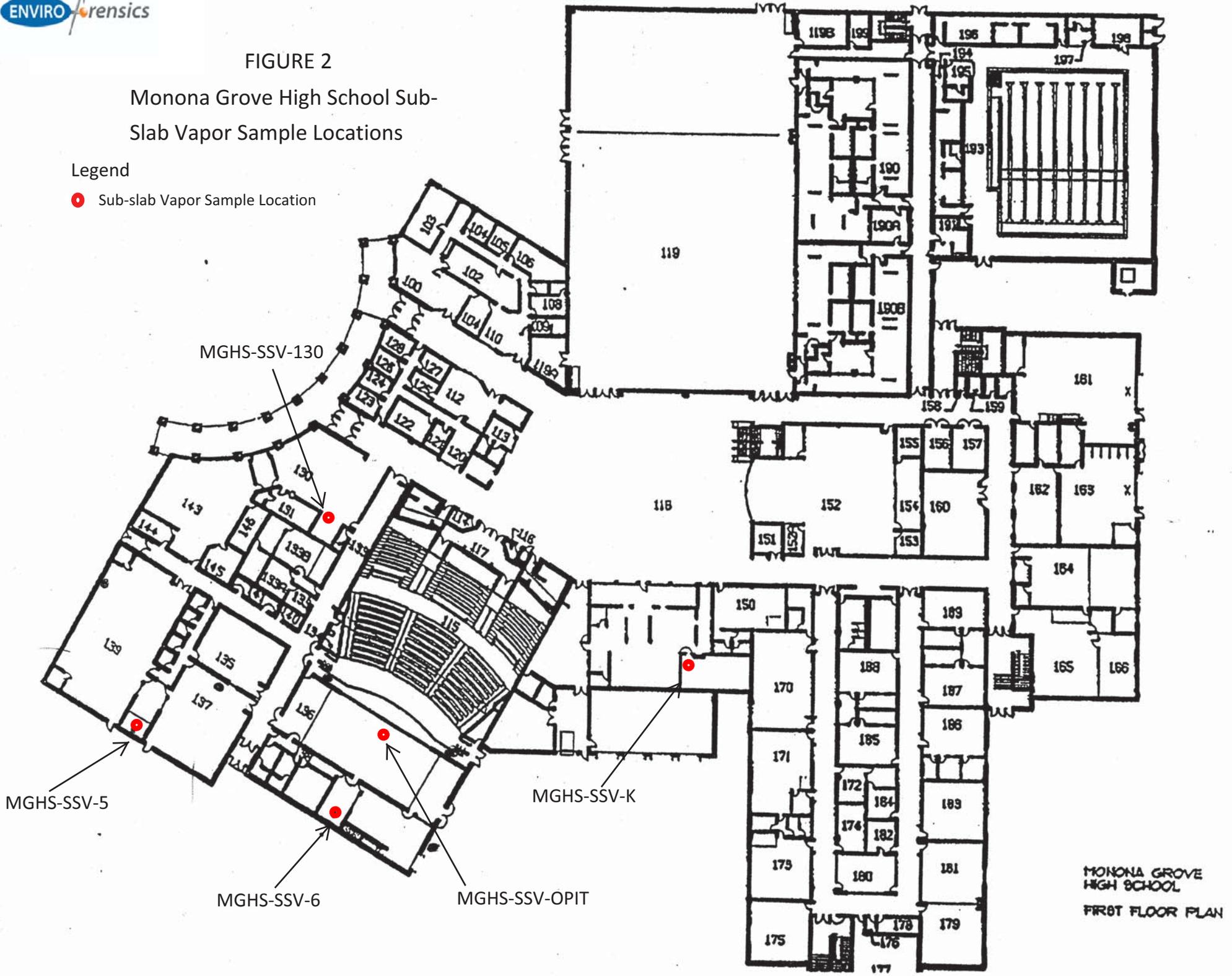


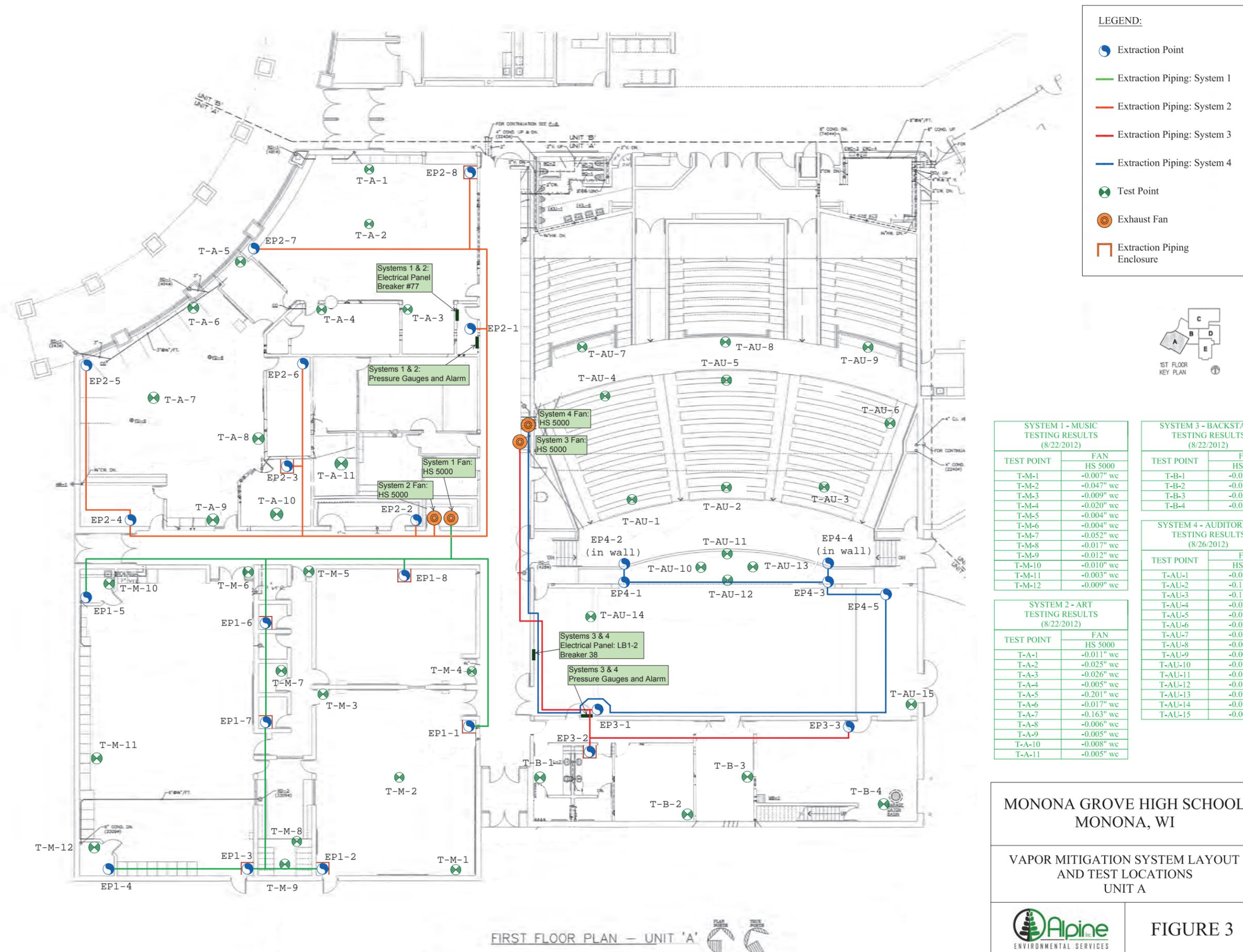
FIGURE 2

Monona Grove High School Sub-Slab Vapor Sample Locations

Legend

- Sub-slab Vapor Sample Location





LEGEND:

- Extraction Point
- Extraction Piping: System 1
- Extraction Piping: System 2
- Extraction Piping: System 3
- Extraction Piping: System 4
- Test Point
- Exhaust Fan
- Extraction Piping Enclosure



SYSTEM 1 - MUSIC TESTING RESULTS (8/22/2012)

TEST POINT	FAN
	HS 5000
T-M-1	-0.007" wc
T-M-2	-0.047" wc
T-M-3	-0.009" wc
T-M-4	-0.020" wc
T-M-5	-0.004" wc
T-M-6	-0.004" wc
T-M-7	-0.052" wc
T-M-8	-0.017" wc
T-M-9	-0.012" wc
T-M-10	-0.010" wc
T-M-11	-0.003" wc
T-M-12	-0.009" wc

SYSTEM 3 - BACKSTAGE TESTING RESULTS (8/22/2012)

TEST POINT	FAN
	HS 5000
T-B-1	-0.034" wc
T-B-2	-0.018" wc
T-B-3	-0.034" wc
T-B-4	-0.027" wc

SYSTEM 4 - AUDITORIUM TESTING RESULTS (8/26/2012)

TEST POINT	FAN
	HS 5000
T-AU-1	-0.084" wc
T-AU-2	-0.115" wc
T-AU-3	-0.117" wc
T-AU-4	-0.023" wc
T-AU-5	-0.017" wc
T-AU-6	-0.021" wc
T-AU-7	-0.035" wc
T-AU-8	-0.009" wc
T-AU-9	-0.003" wc
T-AU-10	-0.013" wc
T-AU-11	-0.015" wc
T-AU-12	-0.014" wc
T-AU-13	-0.013" wc
T-AU-14	-0.011" wc
T-AU-15	-0.006" wc

SYSTEM 2 - ART TESTING RESULTS (8/22/2012)

TEST POINT	FAN
	HS 5000
T-A-1	-0.011" wc
T-A-2	-0.025" wc
T-A-3	-0.026" wc
T-A-4	-0.005" wc
T-A-5	-0.201" wc
T-A-6	-0.017" wc
T-A-7	-0.163" wc
T-A-8	-0.006" wc
T-A-9	-0.005" wc
T-A-10	-0.008" wc
T-A-11	-0.005" wc

**MONONA GROVE HIGH SCHOOL
MONONA, WI**

**VAPOR MITIGATION SYSTEM LAYOUT
AND TEST LOCATIONS
UNIT A**



FIGURE 3

TABLE 1
INDOOR AIR SAMPLE ANALYTICAL RESULTS SUMMARY
MONONA GROVE HIGH SCHOOL

Klinke Cleaners
4518 Monona Drive, Madison, Wisconsin

Sampling Identification	Sampling Location	Mitigation (pre/post)	Date Sampled	Tetrachloroethene	Trichloroethene		
Residential Indoor Air Vapor Action Level				6.2	0.39		
6243-MGHS-IA-137	Band/Choir	pre	5/3/2012	3.9	0.22		
6243-MGHS-IA-137-DUP			5/3/2012	NS	NS		
6243-MGHS-IA-137			5/8/2012	NS	NS		
6243-MGHS-IA-137			5/18/2012	0.46	ND		
6243-MGHS-IA-137			5/31/2012	1.1	ND		
6243-MGHS-IA-137		post	8/28/2012	0.28	ND		
6243-MGHS-IA-137			9/26/2012	ND	ND		
6243-MGHS-IA-137			1/3/2013	0.27	ND		
6243-MGHS-IA-137			4/3/2013	0.27	ND		
6243-MGHS-IA-137			8/7/2013	0.26	ND		
6243-MGHS-IA-137			11/25/2013	ND	ND		
6243-MGHS-IA-137			7/1/2014	ND	ND		
6243-MGHS-IA-137			12/23/2014	ND	ND		
6243-MGHS-IA-137			12/29/2015	0.66	ND		
6404-MGHS-IA-137			7/26/2018	ND	ND		
6404-MGHS-IA-137			12/28/2018	ND	ND		
6243-MGHS-IA-115A			Auditorium	pre	5/3/2012	7.5	0.30
6243-MGHS-IA-DUP-1					5/3/2012	4.4	ND
6243-MGHS-IA-115A	5/8/2012	NS			NS		
6243-MGHS-IA-115A	5/18/2012	0.33			ND		
6243-MGHS-IA-115A	5/31/2012	0.26			ND		
6243-MGHS-IA-115A	post	8/28/2012		0.44	ND		
6243-MGHS-IA-115A		9/26/2012		ND	ND		
6243-MGHS-IA-115A		1/3/2013		0.51	ND		
6243-MGHS-IA-115A		4/3/2013		0.36	ND		
6243-MGHS-IA-115A		8/7/2013		ND	ND		
6243-MGHS-IA-115A		11/25/2013		ND	ND		
6243-MGHS-IA-115A		7/1/2014		ND	ND		
6243-MGHS-IA-115A		12/23/2014		0.30	ND		
6243-MGHS-IA-115A		12/29/2015		ND	ND		
6404-MGHS-IA-115A		7/26/2018		ND	ND		
6404-MGHS-IA-115A		12/28/2018		ND	ND		
6243-MGHS-IA-130		Fine Arts Wing		Post	9/26/2012	ND	ND
6243-MGHS-IA-130					1/3/2013	ND	ND
6243-MGHS-IA-130	4/3/2013		0.57		ND		
6243-MGHS-IA-130	8/7/2013		0.42		ND		
6243-MGHS-IA-130	11/25/2014		ND		ND		
6243-MGHS-IA-130	7/1/2014		ND		ND		
6243-MGHS-IA-130	12/23/2014		0.25		ND		
6243-MGHS-IA-130	12/29/2015		0.44		ND		
6404-MGHS-IA-130	7/26/2018		ND		ND		
6404-MGHS-IA-130	12/28/2018		ND		ND		
6243-MGHS-IA-K	Kitchen Storage	pre	5/3/2012	ND	ND		
6243-MGHS-IA-K		post	8/28/2012	0.41	ND		
6243-MGHS-IA-K			9/26/2012	ND	0.22		
6243-MGHS-IA-K			1/3/2013	0.50	ND		
6243-MGHS-IA-K			4/3/2013	1.5	1.9		
6243-MGHS-IA-K			8/7/2013	ND	ND		
6243-MGHS-IA-K			11/25/2013	ND	ND		
6243-MGHS-IA-K			7/1/2014	ND	ND		
6243-MGHS-IA-K			12/23/2014	17	ND		
6243-MGHS-IA-K			2/27/2015	0.32	0.27		
6243-MGHS-IA-K-DUP			2/27/2015	0.30	0.25		
6243-MGHS-IA-K			12/29/2015	2.5	ND		
6404-MGHS-IA-K			7/26/2018	ND	ND		
6404-MGHS-IA-K	12/28/2018	ND	ND				

TABLE 1
INDOOR AIR SAMPLE ANALYTICAL RESULTS SUMMARY
MONONA GROVE HIGH SCHOOL

Klinke Cleaners
4518 Monona Drive, Madison, Wisconsin

Sampling Identification	Sampling Location	Mitigation (pre/post)	Date Sampled	Tetrachloroethene	Trichloroethene
Residential Indoor Air Vapor Action Level				6.2	0.39
6243-MGHS-IA-OP	Orchestra Pit	pre	5/18/2012	10	0.0
6243-MGHS-IA-OP			5/31/2012	13	ND
6243-MGHS-IA-OP		post	8/28/2012	4.6	ND
6243-MGHS-IA-OP			9/26/2012	0.67	ND
6243-MGHS-IA-OPIT			1/3/2013	1.6	ND
6243-MGHS-DUP			1/3/2013	1.2	ND
6243-MGHS-IA-OP			4/3/2013	1.5	ND
6243-MGHS-IA-DUP			4/3/2013	0.62	ND
6243-MGHS-IA-OPIT			8/7/2013	0.21	ND
6243-MGHS-DUP			8/7/2013	0.51	ND
6243-MGHS-IA-OPIT			11/25/2013	0.20	ND
6243-MGHS-IA-OPIT			7/1/2014	2.0	ND
6243-MGHS-IA-OPIT			12/23/2014	0.44	ND
6243-MGHS-IA-OPIT			12/29/2015	ND	ND
6404-MGHS-IA-OPIT			7/26/2018	ND	ND
6404-MGHS-IA-OPIT			12/28/2018	ND	ND

Notes:

Units in ppbv = parts per billion by volume

Indoor air vapor action levels calculated in accordance with WDNR Publication RR-800.

Bolded values are above detection limits

Bolded and shaded values exceed the residential vapor action level

Mitigation system installation completed August 21, 2012

ND = Compound not detected

TABLE 2
SUB-SLAB VAPOR SAMPLE ANALYTICAL RESULTS SUMMARY
MONONA GROVE HIGH SCHOOL

Klinke Cleaners
4518 Monona Drive, Madison, Wisconsin

Sample Identification	Sampling Location	Date Sampled	Tetrachloroethene	Trichloroethene
Residential Vapor Risk Screening Level			210	13
6243-SSV-5	Band/Choir	4/3/2012	2,285	14.1
6243-SSV-5		5/4/2012	1,300	<13
6404-MGHS-SSV-5		7/26/2018	2.75	0.33
6404-MGHS-SSV-5		12/28/2018	6.90	<2
6243-SSV-6	Backstage Storage	4/3/2012	1,188	7.3
6243-SSV-6		5/4/2012	280	<3.3
6404-MGHS-SSV-6		7/26/2018	3.72	0.34
6404-MGHS-SSV-6		12/28/2018	12.5	<2
6243-MGHS-SSV-K	Kitchen	5/4/2012	340	2.4
6404-MGHS-SSV-K		7/26/2018	19	11.4
6404-MGHS-SSV-K		12/28/2018	<4.7	<2
6243-MGHS-SSV-130	Fine Arts Wing	5/4/2012	940	<8.3
6404-MGHS-SSV-130		7/26/2018	1.90	<0.2
6404-MGHS-SSV-130		12/28/2018	42.8	<2
6243-MGHS-SSV-OPIT	Orchestra Pit	5/4/2012	3,700	<47
6243-SSV-DUP (OPIT)		5/4/2012	4,600	<56
6404-MGHS-SSV-OPIT		7/26/2018	16.3	1.47
6404-MGHS-SSV-OPIT		12/28/2018	28.8	66.1

Notes:

Concentrations reported in units in ppbv = parts per billion by volume

Vapor risk screening levels calculated according to the procedures described in

WDNR Publication RR-800 and subsequent guidance

Bolded values are above detection limits

Bolded and shaded values exceed land use specific screening levels



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Mr. Brian Kappen
Enviroforensics
N16 W. 23390 Stone Ridge Dr
Suite G
Waukesha, WI 53188

January 11, 2019

EnvisionAir Project Number: 2019-5
Client Project Name: 6404

Dear Mr. Kappen,

Please find the attached analytical report for the samples received January 4, 2019. 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: 6404
Client Project Manager: BRIAN KAPPEN
EnvisionAir Project Number: 2019-5

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>Date</u>	<u>Time</u>					<u>Initial Field</u>	<u>Final Field</u>	<u>Received</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>
19-19	6404-MGHS-IA-130	A	12/27/18	10:40	12/28/18	10:59	1/4/19	11:30	-27	-4	-4
19-20	6404-MGHS-IA-137	A	12/27/18	10:48	12/28/18	11:02	1/4/19	11:30	-28	-3	-3
19-21	6404-MGHS-IA-115A	A	12/27/18	10:53	12/28/18	11:06	1/4/19	11:30	-32	-4	-4
19-22	6404-MGHS-IA-OPIT	A	12/27/18	10:59	12/28/18	11:08	1/4/19	11:30	-31	-3.5	-3.5
19-23	6404-MGHS-IA-K	A	12/27/18	11:06	12/28/18	11:15	1/4/19	11:30	-28	0	0
19-24	6404-MGHS-SSV-130	A	12/28/18	12:38	12/28/18	12:43	1/4/19	11:30	-26	-2	-2
19-25	6404-MGHS-SSV-5	A	12/28/18	12:17	12/28/18	12:22	1/4/19	11:30	-25	-2	-2
19-26	6404-MGHS-SSV-6	A	12/28/18	12:01	12/28/18	12:06	1/4/19	11:30	-27	-2	-2
19-27	6404-MGHS-SSV-OPIT	A	12/28/18	12:59	12/28/18	13:10	1/4/19	11:30	-28	-2	-2
19-28	6404-MGHS-SSV-K	A	12/28/18	11:42	12/28/18	11:47	1/4/19	11:30	-28	-2	-2



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Client Name: ENVIROFORENSICS

Project ID: 6404

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-5

Analytical Method: TO-15
Analytical Batch: 010619AIR(1)

Client Sample ID: 6404-MGHS-IA-130

Sample Collection START Date/Time: 12/27/18 10:40

Sample Collection END Date/Time: 12/28/18 10:59

Envision Sample Number: 19-19

Sample Received Date/Time: 1/4/19 11:30

Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichloroethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	99%		
Analysis Date/Time:	1-6-18/21:22		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS

Project ID: 6404

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-5

Analytical Method: TO-15
Analytical Batch: 010619AIR(1)

Client Sample ID: 6404-MGHS-IA-137 **Sample Collection START Date/Time:** 12/27/18 10:48
Sample Collection END Date/Time: 12/28/18 11:02
Envision Sample Number: 19-20 **Sample Received Date/Time:** 1/4/19 11:30
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichloroethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	102%		
Analysis Date/Time:	1-6-18/21:55		
Analyst Initials	tjg		



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Project ID: 6404

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-5

Analytical Method: TO-15
Analytical Batch: 010619AIR(1)

Client Sample ID: 6404-MGHS-IA-115A
Envision Sample Number: 19-21
Sample Matrix: AIR

Sample Collection START Date/Time: 12/27/18 10:53
Sample Collection END Date/Time: 12/28/18 11:06
Sample Received Date/Time: 1/4/19 11:30

<u>Compounds</u>	<u>Sample Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichloroethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	106%		
Analysis Date/Time:	1-6-18/22:29		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS

Project ID: 6404

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-5

Analytical Method: TO-15
Analytical Batch: 010619AIR(1)

Client Sample ID: 6404-MGHS-IA-OPIT
Envision Sample Number: 19-22
Sample Matrix: AIR

Sample Collection START Date/Time: 12/27/18 10:59
Sample Collection END Date/Time: 12/28/18 11:08
Sample Received Date/Time: 1/4/19 11:30

<u>Compounds</u>	<u>Sample Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichloroethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	111%		
Analysis Date/Time:	1-6-18/23:03		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS

Project ID: 6404

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-5

Analytical Method: TO-15
Analytical Batch: 010619AIR(1)

Client Sample ID: 6404-MGHS-IA-K

Sample Collection START Date/Time: 12/27/18 11:06

Sample Collection END Date/Time: 12/28/18 11:15

Envision Sample Number: 19-23

Sample Received Date/Time: 1/4/19 11:30

Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichloroethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	101%		
Analysis Date/Time:	1-6-18/23:37		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS

Project ID: 6404

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-5

Analytical Method: TO-15
Analytical Batch: 010619AIR(2)

Client Sample ID: 6404-MGHS-SSV-130
Envision Sample Number: 19-24
Sample Matrix: AIR

Sample Collection START Date/Time: 12/28/18
Sample Collection END Date/Time: 12/28/18
Sample Received Date/Time: 1/4/19

<u>Compounds</u>	<u>Sample Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 50	50	
Tetrachloroethene	42.8	4.7	
trans-1,2-Dichloroethene	< 100	100	
Trichloroethene	< 2	2	
Vinyl Chloride	< 5	5	
4-bromofluorobenzene (surrogate)	101%		
Analysis Date/Time:	1-8-19/13:08		
Analyst Initials	tjg		



EnvisionAir
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Fax: 317-351-0882
www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6404

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-5

Analytical Method: TO-15
Analytical Batch: 010619AIR(2)

Client Sample ID: 6404-MGHS-SSV-5

Sample Collection START Date/Time: 12/28/18

Sample Collection END Date/Time: 12/28/18

Envision Sample Number: 19-25

Sample Received Date/Time: 1/4/19

Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 50	50	
Tetrachloroethene	6.90	4.7	
trans-1,2-Dichloroethene	< 100	100	
Trichloroethene	< 2	2	
Vinyl Chloride	< 5	5	
4-bromofluorobenzene (surrogate)	98%		
Analysis Date/Time:	1-8-19/14:17		
Analyst Initials	tjg		



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Project ID: 6404

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-5

Analytical Method: TO-15
Analytical Batch: 010619AIR(2)

Client Sample ID: 6404-MGHS-SSV-6

Sample Collection START Date/Time: 12/28/18

Sample Collection END Date/Time: 12/28/18

Envision Sample Number: 19-26

Sample Received Date/Time: 1/4/19

Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 50	50	
Tetrachloroethene	12.5	4.7	
trans-1,2-Dichloroethene	< 100	100	
Trichloroethene	< 2	2	
Vinyl Chloride	< 5	5	
4-bromofluorobenzene (surrogate)	96%		
Analysis Date/Time:	1-8-19/14:51		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS

Project ID: 6404

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-5

Analytical Method: TO-15
Analytical Batch: 010619AIR(2)

Client Sample ID: 6404-MGHS-SSV-OPIT **Sample Collection START Date/Time:** 12/28/18
Sample Collection END Date/Time: 12/28/18

Envision Sample Number: 19-27 **Sample Received Date/Time:** 1/4/19
Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 50	50	
Tetrachloroethene	28.8	4.7	
trans-1,2-Dichloroethene	< 100	100	
Trichloroethene	66.1	2	
Vinyl Chloride	< 5	5	
4-bromofluorobenzene (surrogate)	95%		
Analysis Date/Time:	1-8-19/15:26		
Analyst Initials	tjg		



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Client Name: ENVIROFORENSICS

Project ID: 6404

Client Project Manager: BRIAN KAPPEN

EnvisionAir Project Number: 2019-5

Analytical Method: TO-15
Analytical Batch: 010619AIR(2)

Client Sample ID: 6404-MGHS-SSV-K

Sample Collection START Date/Time: 12/28/18

Sample Collection END Date/Time: 12/28/18

Envision Sample Number: 19-28

Sample Received Date/Time: 1/4/19

Sample Matrix: AIR

<u>Compounds</u>	<u>Sample Results ppbv</u>	<u>Reporting Limit ppbv</u>	<u>Flag</u>
cis-1,2-Dichloroethene	< 50	50	
Tetrachloroethene	< 4.7	4.7	
trans-1,2-Dichloroethene	< 100	100	
Trichloroethene	< 2	2	
Vinyl Chloride	< 5	5	
4-bromofluorobenzene (surrogate)	91%		
Analysis Date/Time:	1-8-19/16:00		
Analyst Initials	tjg		

TO-15 Quality Control Data

EnvisionAir Batch Number: 010619AIR(1)

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichloroethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	84%		
Analysis Date/Time:	1-6-18/18:29		
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>
Vinyl Chloride	10.2	10.2	10	102%	102%	0.0%	
trans-1,2-Dichloroethene	11.2	10.5	10	112%	105%	6.5%	
cis-1,2-Dichloroethene	11.2	10.4	10	112%	104%	7.4%	
Trichloroethene	9.91	10.9	10	99%	109%	9.5%	
Tetrachloroethene	9.6	10.5	10	96%	105%	9.0%	
4-bromofluorobenzene (surrogate)	106%	118%					
Analysis Date/Time:	1-6-18/17:18	1-6-18/19:40					
Analyst Initials	tjg	tjg					

TO-15 Quality Control Data

EnvisionAir Batch Number: 010619AIR(2)

<u>Method Blank (MB):</u>	<u>MB Results (ppbv)</u>	<u>Reporting Limit (ppbv)</u>	<u>Flags</u>
cis-1,2-Dichloroethene	< 5	5	
Tetrachloroethene	< 0.47	0.47	
trans-1,2-Dichloroethene	< 10	10	
Trichloroethene	< 0.2	0.2	
Vinyl Chloride	< 0.5	0.5	
4-bromofluorobenzene (surrogate)	93%		
Analysis Date/Time:	1-7-19/17:55		
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>
Vinyl Chloride	10.2	10.6	10	102%	106%	3.8%	
trans-1,2-Dichloroethene	11.1	11.2	10	111%	112%	0.9%	
cis-1,2-Dichloroethene	10.8	10.8	10	108%	108%	0.0%	
Trichloroethene	9.62	10.9	10	96%	109%	12.5%	
Tetrachloroethene	10.1	10.3	10	101%	103%	2.0%	
4-bromofluorobenzene (surrogate)	99%	104%					
Analysis Date/Time:	1-7-19/17:20	1-7-19/19:07					
Analyst Initials	tjg	tjg					



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Flag Number

Comments

CHAIN OF CUSTODY RECORD

EnvisionAir | 1441 Sadler Circle West Drive | Indianapolis, IN 46239 | Phone: (317) 351-0885 | Fax: (317) 351-0882

Client: <u>EnviroForensics, LLC</u>	P.O. Number: <u>2018-1587</u>
Report Address: <u>N16 W2390 Stone Ridge Dr Suite G Waukesha WI 53188</u>	Project Name or Number: <u>6404</u>
Report To: <u>B. Kappen & K. VanderHeiden</u>	Sampled by: <u>KV</u>
Phone: <u>(262) 290-4001</u>	QA/QC Required: (circle if applicable) <u>Level III</u> <u>Level IV</u> <i>IA/PA only</i>
Invoice Address:	Reporting Units needed: (circle) <u>ug/m³</u> <u>mg/m³</u> <u>PPBV</u> <u>PPMV</u>
Desired TAT: (Please Circle One) <u>1 day</u> <u>2 days</u> <u>3 days</u> <u>Std (5 bus. days)</u>	Media type: <u>1LC = 1 Liter Canister</u> <u>6LC = 6 Liter Canister</u> <u>TB = Tedlar Bag</u> <u>TD = Thermal Desorption Tube</u>

REQUESTED PARAMETERS

TO-15 Full List

TO-15 Short List



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

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Canister Pressure / Vacuum

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
6404-MGHS-IA-13G	6LC	12/27/18	1040	12/28/18	1059		X		14948	04680	-27	-4	-4	19-19
6404-MGHS-IA-137	6LC	12/27/18	1048	12/28/18	1102		X		11083	05300	-28	-3	-3	19-20
6404-MGHS-IA-118A	6LC	12/27/18	1053	12/28/18	1106		X		10342	07462	-32	-4	-4	19-21
6404-MGHS-IA-OPIT	6LC	12/29/18	1059	12/29/18	1108		X		14113	08007	-31	-3.5	-3.5	19-22
6404-MGHS-IA-K	6LC	12/29/18	1106	12/28/18	1115		X		10345	07223	-28	0	0	19-23
6404-MGHS-SSU-13G	1LC	12/28/18	1238	12/28/18	1243		X		2538	0082	-26	-2	-2	19-24
6404-MGHS-SSV-5	1LC	12/28/18	1217	12/28/18	1222		X		84049	0078	-25	-2	-2	19-25
6404-MGHS-SSV-6	1LC	12/28/18	1201	12/28/18	1206		<		2539	0044	-27	-2	-2	19-26
6404-MGHS-SSV-OPIT	1LC	12/28/18	1259	12/28/18	1310		X		83942	0037	-28	-2	-2	19-27
6404-MGHS-SSV-K	1LC	12/28/18	1142	12/28/18	1147		X		83944	0042	-28	-2	-2	19-28

Comments: PO# 2018-1587

Relinquished by:	Date	Time	Received by:	Date	Time
<i>[Signature]</i>	1/2/19	1000	<i>Paul Rex</i>		
			<i>Paul Hummel</i>	1/4/19	1130