



December 30, 2021

Denise Dreszman
Sage-Louise Holdings, LLC
618 Oak Street
Baraboo, WI 53913

**Subject: Vapor Intrusion Sampling Results – 614 Oak Street, Baraboo, Wisconsin
BRRTS: 02-57-548538**

Dear Ms. Dreszman:

In accordance with your request, EnviroForensics, LLC is providing the results of environmental samples collected from your property located at 618 Oak Street in Baraboo, Wisconsin. The samples were collected on November 11, 2021. 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 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

Indoor Air:

Two indoor air samples 6492-618 Oak St.-IA-B and 6492-618 Oak St.-IA-1 were collected from within the basement and first floor, respectively. For quality control purposes, a sample of outdoor ambient air designated 6492-OA-1 was collected. 6492-618 Oak St.-IA-B and 6492-618 Oak St.-IA-1 contained a PCE concentration of 4.00 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and $5.36 \mu\text{g}/\text{m}^3$, respectively, which is **below** the Vapor Action Level (VAL) of $180 \mu\text{g}/\text{m}^3$ for PCE detected within small commercial buildings.

Document: 6492-2029
EnviroForensics, LLC
N16 W23390 Stone Ridge Drive, Suite G
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Phone: 262-290-4001 • Fax 317.972.7875

December 30, 2021

Sub-Slab Vapor:

One (1) sub-slab vapor sample designated 6492-618 Oak St.-SSV-1 was collected from beneath the basement floor of your building. The sub-slab vapor sample contained PCE at a concentration of 282 $\mu\text{g}/\text{m}^3$ which is **below** the Vapor Action Level (VAL) of 5,800 $\mu\text{g}/\text{m}^3$ for PCE detected within small commercial buildings.

The sampling locations are depicted on the attached **Figure 1**. The results of the vapor samples are summarized and compared to WDNR standards on the attached **Table 1**. A copy of the laboratory report that relates to the vapor samples is also attached.

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

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

Rob Hoverman, LPG
Senior Project Manager

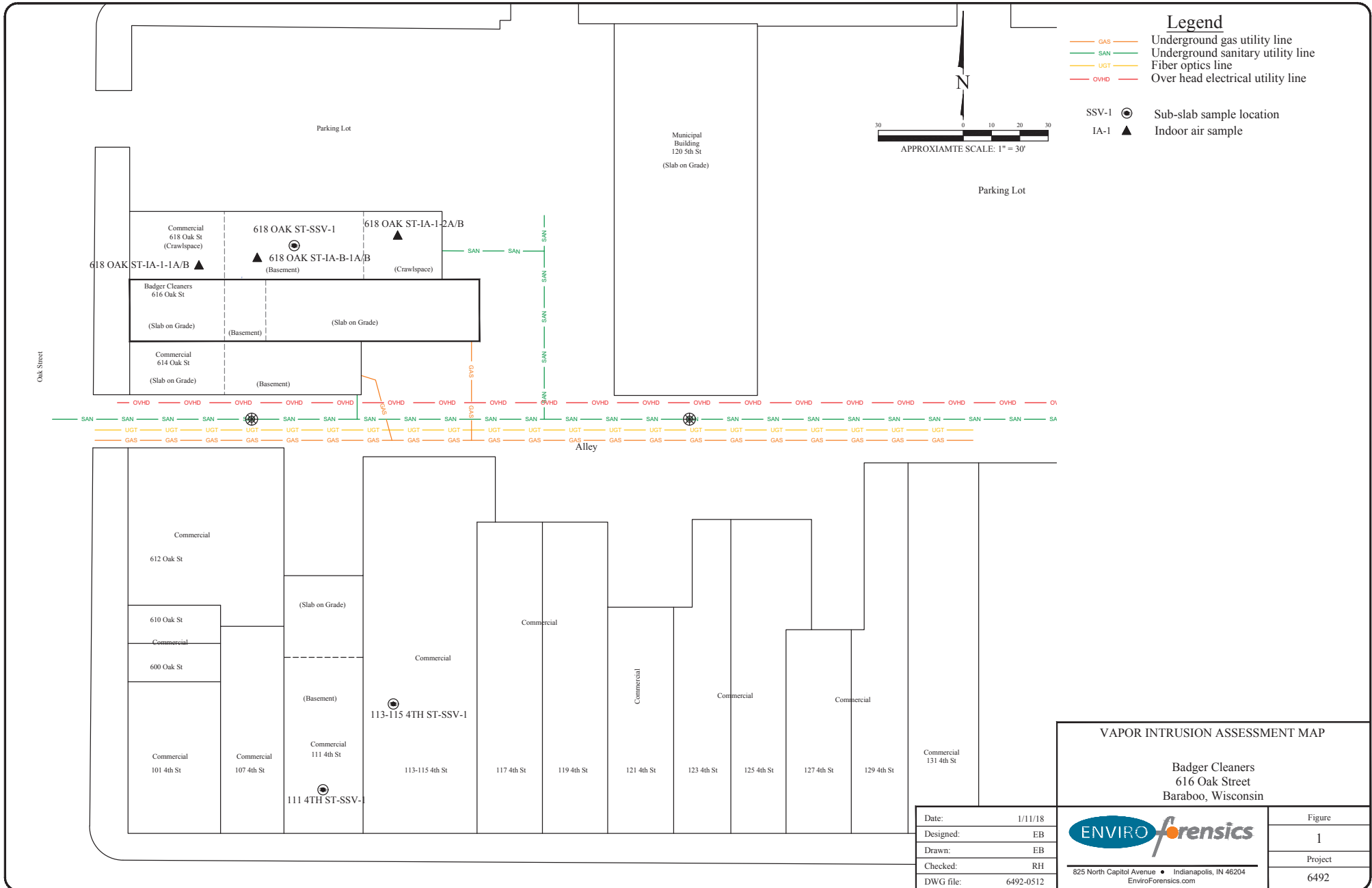
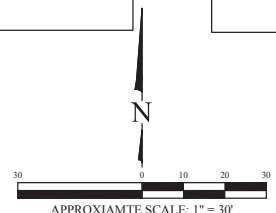
Attachments: Figure 1 – Vapor Intrusion Sampling Locations
Table 1 – Vapor Intrusion Assessment Results Summary
Laboratory Analytical Report

Copy: Trevor Bannister, Wisconsin Department of Natural Resources

Legend

- GAS — Underground gas utility line
- SAN — Underground sanitary utility line
- UGT — Fiber optics line
- OVHD — Over head electrical utility line

- SSV-1 Sub-slab sample location
- IA-1 Indoor air sample



| | |
|--|--------------------|
| VAPOR INTRUSION ASSESSMENT MAP | |
| Badger Cleaners 616 Oak Street Baraboo, Wisconsin | |
| | Figure 1 |
| 825 North Capital Avenue • Indianapolis, IN 46204 EnviroForensics.com | Project 6492 |

| | |
|-----------|-----------|
| Date: | 1/11/18 |
| Designed: | EB |
| Drawn: | EB |
| Checked: | RH |
| DWG file: | 6492-0512 |

TABLE 1
VAPOR INTRUSION ANALYTICAL RESULTS SUMMARY - 618 OAK STREET

Badger Cleaners
616 Oak Street, Baraboo, WI 53913

| Sample Identification | Date Sampled | Mitigation | Tetrachloroethene | Trichloroethene | Chloroform | Ethylbenzene | Xylenes (Total) |
|--|--------------|----------------|-------------------|-----------------|-------------|--------------|-----------------|
| INDOOR/ OUTDOOR AIR | | | | | | | |
| Small Commercial Vapor Action Level | | | 180 | 8.8 | 20 | 49 | 440 |
| 6492-618 Oak ST-IA-B | 08/21/17 | No | 378 | <1.07 | <0.83 | <8.68 | <86.8 |
| | 11/13/17 | Yes | 11,100 | <1.07 | <0.83 | 71.3 | 1,251 |
| | 06/19/18 | | 549 | <1.07 | <0.83 | <8.68 | <86.8 |
| | 11/11/21 | Yes* | 4.00 | <1.07 | NA | NA | NA |
| 6492-618 Oak ST-IA-1 | 08/21/17 | No | 298 | <1.07 | <0.83 | <8.68 | <86.8 |
| | 11/13/17 | Yes | 7,620 | <1.07 | 1.03 | <8.68 | 49.4 |
| | 06/19/18 | | 940 | <1.07 | <0.83 | <8.68 | <86.8 |
| | 11/11/21 | Yes* | 5.36 | <1.07 | NA | NA | NA |
| 6492-OA-1 | 08/21/17 | Not Applicable | 8.75 | <1.07 | <0.83 | <8.68 | <86.8 |
| | 11/13/17 | | <3.19 | <1.07 | <0.83 | <8.68 | <86.8 |
| | 06/19/18 | | <3.19 | <1.07 | <0.83 | <8.68 | <86.8 |
| | 11/11/21 | | <3.19 | <1.07 | NA | NA | NA |
| SUB-SLAB VAPOR | | | | | | | |
| Small Commercial Vapor Risk Screening Level | | | 5,800 | 290 | 670 | 1,600 | 15,000 |
| 6492-618 Oak ST-SSV-1 | 08/21/17 | No | 27,400 | <10.7 | <8.30 | <86.8 | <868 |
| | 11/11/21 | Yes | 282 | <10.7 | NA | NA | NA |
| STACK VAPOR | | | | | | | |
| 6492-618 Oak St-Stack-1 | 12/22/2017 | Yes | 8,630 | <10.7 | <10.7 | <8.30 | <868 |
| | 12/22/2017 | Yes | 1,250 | 24.2 | 24.2 | <8.30 | <868 |
| 6492-618 Oak St-Stack-2 | 12/19/2017 | Yes | 46,900 | <10.7 | <10.7 | <8.30 | <868 |
| | 6/19/2018 | Yes | 24,100 | 39.2 | 39.2 | <8.30 | <868 |

* Vapor mitigation turned off in October 2021, mitigation managed by active SVE system.

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
OA = Outdoor Air
SSV= Sub-slab vapor
NA= Not Analyzed
Bolded values are above detection limits

Bolded and Orange shaded concentration exceed the applicable non-residential screening level



EnvisionAir
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 www.envision-air.com

Client Name: ENVIROFORENSICS

Project ID: 6492

Client Project Manager: ROB HOVERMAN

EnvisionAir Project Number: 2021-557

Analytical Method: TO-15
Analytical Batch: 111721AIR

Client Sample ID: 6492-OA-1

EnvisionAir Sample Number: 21-2653
Sample Matrix: AIR

Sample Collection START Date/Time: 11/11/21 8:25
Sample Collection END Date/Time: 11/11/21 16:45
Sample Received Date/Time: 11/15/21 15:15

| <u>Compounds</u> | <u>Sample Results ug/m³</u> | <u>Reporting Limit ug/m³</u> | <u>Flag</u> |
|----------------------------------|--|---|-------------|
| cis-1,2-Dichloroethene | < 19.8 | 19.8 | |
| Tetrachloroethene | < 3.19 | 3.19 | |
| trans-1,2-Dichloroethene | < 39.6 | 39.6 | |
| Trichloroethene | < 1.07 | 1.07 | |
| Vinyl Chloride | < 1.28 | 1.28 | |
| 4-bromofluorobenzene (surrogate) | 103% | | |
| Analysis Date/Time: | 11-17-21/18:49 | | |
| Analyst Initials | tjg | | |



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Project ID: 6492

Client Project Manager: ROB HOVERMAN

EnvisionAir Project Number: 2021-557

Analytical Method: TO-15
Analytical Batch: 111721AIR

Client Sample ID: 6492-618 OAK-IA-1

Sample Collection START Date/Time: 11/11/21 8:55
Sample Collection END Date/Time: 11/11/21 15:31
Sample Received Date/Time: 11/15/21 15:15

EnvisionAir Sample Number: 21-2656
Sample Matrix: AIR

| <u>Compounds</u> | <u>Sample Results ug/m³</u> | <u>Reporting Limit ug/m³</u> | <u>Flag</u> |
|----------------------------------|--|---|-------------|
| cis-1,2-Dichloroethene | < 19.8 | 19.8 | |
| Tetrachloroethene | 5.36 | 3.19 | |
| trans-1,2-Dichloroethene | < 39.6 | 39.6 | |
| Trichloroethene | < 1.07 | 1.07 | |
| Vinyl Chloride | < 1.28 | 1.28 | |
| 4-bromofluorobenzene (surrogate) | 99% | | |
| Analysis Date/Time: | 11-17-21/20:58 | | |
| Analyst Initials | tjg | | |



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Project ID: 6492

Client Project Manager: ROB HOVERMAN

EnvisionAir Project Number: 2021-557

Analytical Method: TO-15
Analytical Batch: 111721AIR

Client Sample ID: 6492-618 OAK-IA-B

EnvisionAir Sample Number: 21-2657
Sample Matrix: AIR

Sample Collection START Date/Time: 11/11/21 8:58
Sample Collection END Date/Time: 11/11/21 15:53
Sample Received Date/Time: 11/15/21 15:15

| <u>Compounds</u> | <u>Sample Results ug/m³</u> | <u>Reporting Limit ug/m³</u> | <u>Flag</u> |
|----------------------------------|--|---|-------------|
| cis-1,2-Dichloroethene | < 19.8 | 19.8 | |
| Tetrachloroethene | 4.00 | 3.19 | |
| trans-1,2-Dichloroethene | < 39.6 | 39.6 | |
| Trichloroethene | < 1.07 | 1.07 | |
| Vinyl Chloride | < 1.28 | 1.28 | |
| 4-bromofluorobenzene (surrogate) | 104% | | |
| Analysis Date/Time: | 11-17-21/21:41 | | |
| Analyst Initials | tjg | | |



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Client Name: ENVIROFORENSICS

Project ID: 6492

Client Project Manager: ROB HOVERMAN

EnvisionAir Project Number: 2021-557

Analytical Method: TO-15
Analytical Batch: 111721AIR

Client Sample ID: 6492-618 OAK-SSV-1

Sample Collection START Date/Time: 11/11/21 11:09

Sample Collection END Date/Time: 11/11/21 11:15

EnvisionAir Sample Number: 21-2660

Sample Received Date/Time: 11/15/21 15:15

Sample Matrix: AIR

| <u>Compounds</u> | <u>Sample Results ug/m³</u> | <u>Reporting Limit ug/m³</u> | <u>Flag</u> |
|----------------------------------|--|---|-------------|
| cis-1,2-Dichloroethene | < 198 | 198 | |
| Tetrachloroethene | 282 | 31.9 | |
| trans-1,2-Dichloroethene | < 396 | 396 | |
| Trichloroethene | < 10.7 | 10.7 | |
| Vinyl Chloride | < 12.8 | 12.8 | |
| 4-bromofluorobenzene (surrogate) | 101% | | |
| Analysis Date/Time: | 11-18-21/06:11 | | |
| Analyst Initials | tjg | | |