

07/01/2022

Jordan Avery and Kendall Avery
129 East Thomas Street
Wausau, WI 54401

SUBJECT: Vapor Sampling Results - Contaminants Not Detected
PROPERTY: 129 East Thomas Street, Wausau, WI 54401; BRRTS #0237000273

Dear Mr. and Ms. Avery,

Included are the findings of a recent investigation conducted by Arcadis U.S. Inc. (Arcadis) on your property located at 129 East Thomas Street, Wausau, WI 54401.

As you are aware, this investigation was conducted because of the potential for contaminant vapors to be generated from groundwater leaving the nearby former Wausau Motors property and the potential for these vapors to migrate through soil, accumulate beneath the foundation of your home, and possibly enter your indoor air. The contaminant of concern at the former Wausau Motors property was trichloroethylene or TCE. The history of this site and the potential concerns to neighboring residents were described in detail in the original letter sent to your home. The former Wausau Motors site is currently used by 3M Company (3M) as a parking lot and rail car storage.

On 06/08/2022, Arcadis hired by 3M started collecting an indoor air sample in the basement of your building. This indoor air sample was collected the next day (06/09/2022) after 24 hours of sampling. On 06/09/2022 after collecting the indoor air sample, Arcadis installed a sub-slab vapor sampling port into the floor of your foundation. The sub-slab vapor sample was collected 2 hours after installation of the sampling port. The indoor air and sub-slab vapor samples were submitted to Eurofins Air Toxics LLC for laboratory analysis of four contaminants including TCE, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene and vinyl chloride.

Your Test Results:

Attached is a copy of the laboratory report for your sub-slab vapor and indoor air samples. The results of this round of sampling show that TCE and/or by-products were not detected. There does not appear to be a risk of TCE vapor entering your home from beneath the foundation at this time. In order to confirm the results, Arcadis will contact you to schedule another sampling visit in the near future.

Please feel free to contact me at 651-381-2583 if you have any questions about these results.

Sincerely,

Kevin Madson,
3M Center, Bldg 224-5-W-17
Maplewood, MN 55114
651-381-2583

Copy: Matt Thompson; Phone: 715-492-2304
Jordan M Avery; Michelle A Avery



Wisconsin Department of Natural Resources
P.O. Box 7921, Madison, WI 53707
dnr.wi.gov, search "brownfield"



Table 1
Summary of Indoor Air and Sub-Slab Analytical Results
129 East Thomas Street
Wausau, WI

	Location ID	North ROW Thomas Street^	129 East Thomas Street
	Sample ID	OA-1 (06082022)	IA-03B
	Sample Date	6/9/2022	6/9/2022
Chemical Name	Indoor Air VALs* (µg/m ³)		
cis-1,2-Dichloroethene	NL	ND	ND
trans-1,2-Dichloroethene	180	ND	ND
Trichloroethene	8.8	ND	ND
Vinyl chloride	28	ND	ND

	Location ID	129 East Thomas Street
	Sample ID	SS-03
	Sample Date	6/9/2022
Chemical Name	Sub-Slab RSLs** (µg/m ³)	
cis-1,2-Dichloroethene	NL	ND
trans-1,2-Dichloroethene	5800	ND
Trichloroethene	290	ND
Vinyl chloride	930	ND

Acronyms and Abbreviations:

ID - Identification	ROW - Right-of-way
ND - Not Detected	RSL - Risk Screening Level
NL - Not Listed	µg/m ³ - microgram per cubic meter
RL - Reporting Limit	VAL - Vapor Action Levels

*WI Remediation and Redevelopment Residential Indoor Air Vapor Action Levels - February 2022

**WI Remediation and Redevelopment Residential Sub-Slab Risk Screening Levels - February 2022

^North ROW of Thomas Street, Across from 127/129 East Thomas Street

6/23/2022

Amir Roghani
Arcadis U.S., Inc.
2464 Fortune Drive #170

Lexington KY 40509

Project Name: 3M Wausau
Project #: 30130903.01
Workorder #: 2206327A

Dear Amir Roghani

The following report includes the data for the above referenced project for sample(s) received on 6/10/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Brian Whittaker at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Brian Whittaker
Project Manager

WORK ORDER #: 2206327A

Work Order Summary

CLIENT:	Amir Roghani Arcadis U.S., Inc. 2464 Fortune Drive #170 Lexington, KY 40509	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	859-253-9036	P.O. #	30130903.01
FAX:	(859) 253-9136	PROJECT #	30130903.01 3M Wausau
DATE RECEIVED:	06/10/2022	CONTACT:	Brian Whittaker
DATE COMPLETED:	06/23/2022		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	OA-1 (06082022)	Modified TO-15	6.5 "Hg	2 psi
02A	IA-03B	Modified TO-15	5.5 "Hg	2 psi
06A	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA
08AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: 

 Technical Director

DATE: 06/23/22

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
 (916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
Modified TO-15
Arcadis U.S., Inc.
Workorder# 2206327A

Five 6 Liter Summa Canister (100% Cert Ambient) samples were received on June 10, 2022. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
Initial Calibration	</=30% RSD with 2 compounds allowed out to < 40% RSD	</=30% RSD with 4 compounds allowed out to < 40% RSD
Blank and standards	Zero Air	UHP Nitrogen provides a higher purity gas matrix than zero air

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: OA-1 (06082022)

Lab ID#: 2206327A-01A

No Detections Were Found.

Client Sample ID: IA-03B

Lab ID#: 2206327A-02A

No Detections Were Found.

Client Sample ID: OA-1 (06082022)

Lab ID#: 2206327A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	22062021 sim	Date of Collection: 6/9/22 9:00:00 AM
Dil. Factor:	1.45	Date of Analysis: 6/20/22 10:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.14	Not Detected	0.37	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected
cis-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected
Trichloroethene	0.14	Not Detected	0.78	Not Detected

Container Type: 6 Liter Summa Canister (100% Cert Ambient)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	84	70-130

Client Sample ID: IA-03B

Lab ID#: 2206327A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	22062023sim	Date of Collection: 6/9/22 10:00:00 AM
Dil. Factor:	1.39	Date of Analysis: 6/20/22 11:56 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.14	Not Detected	0.36	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.55	Not Detected
cis-1,2-Dichloroethene	0.14	Not Detected	0.55	Not Detected
Trichloroethene	0.14	Not Detected	0.75	Not Detected

Container Type: 6 Liter Summa Canister (100% Cert Ambient)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	92	70-130

Client Sample ID: Lab Blank

Lab ID#: 2206327A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	22062006sime	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/20/22 11:52 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Trichloroethene	0.10	Not Detected	0.54	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	84	70-130

Client Sample ID: CCV

Lab ID#: 2206327A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	22062002sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/20/22 08:36 AM

Compound	%Recovery
Vinyl Chloride	90
trans-1,2-Dichloroethene	88
cis-1,2-Dichloroethene	98
Trichloroethene	120

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	126	70-130
4-Bromofluorobenzene	101	70-130

Client Sample ID: LCS

Lab ID#: 2206327A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	22062003sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/20/22 09:26 AM

Compound	%Recovery	Method Limits
Vinyl Chloride	91	70-130
trans-1,2-Dichloroethene	86	70-130
cis-1,2-Dichloroethene	95	70-130
Trichloroethene	115	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	124	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: LCSD

Lab ID#: 2206327A-08AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	22062004sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/20/22 10:15 AM

Compound	%Recovery	Method Limits
Vinyl Chloride	91	70-130
trans-1,2-Dichloroethene	86	70-130
cis-1,2-Dichloroethene	96	70-130
Trichloroethene	114	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	123	70-130
4-Bromofluorobenzene	100	70-130

6/23/2022

Amir Roghani
Arcadis U.S., Inc.
2464 Fortune Drive #170

Lexington KY 40509

Project Name: 3M Wausau
Project #: 30130903.01
Workorder #: 2206327B

Dear Amir Roghani

The following report includes the data for the above referenced project for sample(s) received on 6/10/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Brian Whittaker at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Brian Whittaker
Project Manager

WORK ORDER #: 2206327B

Work Order Summary

CLIENT:	Amir Roghani Arcadis U.S., Inc. 2464 Fortune Drive #170 Lexington, KY 40509	BILL TO:	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	859-253-9036	P.O. #	30130903.01
FAX:	(859) 253-9136	PROJECT #	30130903.01 3M Wausau
DATE RECEIVED:	06/10/2022	CONTACT:	Brian Whittaker
DATE COMPLETED:	06/20/2022		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
06A	SS-03	TO-15	5.5 "Hg	9.9 psi
09A	Lab Blank	TO-15	NA	NA
10A	CCV	TO-15	NA	NA
11A	LCS	TO-15	NA	NA
11AA	LCSD	TO-15	NA	NA

CERTIFIED BY: 
 Technical Director

DATE: 06/23/22

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP - 209221, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-21-17, UT NELAP – CA009332021-13, VA NELAP - 10615, WA NELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005-015, Effective date: 10/18/2021, Expiration date: 10/17/2022.

Eurofins Air Toxics, LLC certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
 (916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 2206327B

Three 1 Liter Summa Canister samples were received on June 10, 2022. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Air Toxics

**Summary of Detected Compounds
EPA METHOD TO-15 GC/MS**

Client Sample ID: SS-03

Lab ID#: 2206327B-06A

No Detections Were Found.

Client Sample ID: SS-03

Lab ID#: 2206327B-06A

EPA METHOD TO-15 GC/MS

File Name:	p061817	Date of Collection:	6/9/22 12:26:00 PM
Dil. Factor:	2.05	Date of Analysis:	6/19/22 12:25 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
cis-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Trichloroethene	1.0	Not Detected	5.5	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	108	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2206327B-09A

EPA METHOD TO-15 GC/MS

File Name:	p061805d	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	6/18/22 04:10 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	104	70-130

Client Sample ID: CCV

Lab ID#: 2206327B-10A

EPA METHOD TO-15 GC/MS

File Name:	p061802	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/22 02:30 PM

Compound	%Recovery
Vinyl Chloride	88
cis-1,2-Dichloroethene	104
Trichloroethene	98
trans-1,2-Dichloroethene	97

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	106	70-130

Client Sample ID: LCS

Lab ID#: 2206327B-11A

EPA METHOD TO-15 GC/MS

File Name:	p061803	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/22 02:58 PM

Compound	%Recovery	Method Limits
Vinyl Chloride	98	70-130
cis-1,2-Dichloroethene	113	70-130
Trichloroethene	105	70-130
trans-1,2-Dichloroethene	104	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	106	70-130

Client Sample ID: LCSD

Lab ID#: 2206327B-11AA

EPA METHOD TO-15 GC/MS

File Name:	p061804	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/18/22 03:27 PM

Compound	%Recovery	Method Limits
Vinyl Chloride	97	70-130
cis-1,2-Dichloroethene	113	70-130
Trichloroethene	108	70-130
trans-1,2-Dichloroethene	107	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	106	70-130