07/01/2022 Terry Kilian-Lewandowski 133 East Thomas Wausau, WI 54401

> SUBJECT: Vapor Sampling Results - <u>Contaminants Not Detected</u> PROPERTY: 133 East Thomas Street, Wausau, WI 54401; BRRTS #0237000273

Dear Terry Kilian-Lewandowski,

Included are the findings of a recent investigation conducted by Arcadis U.S. Inc. (Arcadis) on your property located at 133 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

Terry Kilian-Lewandowski







	Location ID	North ROW Thomas Street^	133 East Thomas Street
	Sample ID	OA-1 (06082022)	IA-04B
	Sample Date	6/9/2022	6/9/2022
	Indoor Air VALs*		
Chemical Name	(μg/m³)		
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	133 East Thomas Street
	Sample ID	SS-04
	Sample Date	6/9/2022
	Sub-Slab RSLs**	
Chemical Name	(µg/m³)	
cis-1,2-Dichloroethene	NL	ND
trans-1,2-Dichloroethene	5800	ND
Trichloroethene	290	ND
Vinyl chloride	930	ND

#### **Acronyms and Abbreviations:**

 $\begin{array}{lll} \text{ID - Identification} & \text{ROW - Right-of-way} \\ \text{ND - Not Detected} & \text{RSL - Risk Screening Level} \\ \text{NL - Not Listed} & \mu\text{g/m}^3 \text{ - microgram per cubic meter} \\ \text{RL - Reporting Limit} & \text{VAL - Vapor Action Levels} \\ \end{array}$ 

<sup>\*</sup>WI Remediation and Redevelopment Residential Indoor Air Vapor Action Levels - February 2022

 $<sup>^{\</sup>star\star}\text{WI}$  Remediation and Redevelopment Residential Sub-Slab Risk Screening Levels - February 2022

<sup>^</sup>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.

Brian Whittaker

Regards,

Brian Whittaker

Project Manager



#### **WORK ORDER #: 2206327A**

Work Order Summary

CLIENT: Amir Roghani BILL TO: Accounts Payable

Arcadis U.S., Inc. Arcadis U.S., Inc. 2464 Fortune Drive #170 630 Plaza Drive

Lexington, KY 40509 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

FRACTION #	NAME	<u>TEST</u>	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	OA-1 (06082022)	Modified TO-15	6.5 "Hg	2 psi
03A	IA-04B	Modified TO-15	6.0 "Hg	2 psi
06A	Lab Blank	Modified TO-15	NA -	ŇA
07A	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA
08AA	LCSD	Modified TO-15	NA	NA

	fleide flages	06/22/22
CERTIFIED BY:		DATE: $\frac{06/23/22}{}$
•		•

Technical Director

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



#### 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.

Requirement	TO-15	ATL Modifications
Initial Calibration	=30% RSD with 2<br compounds allowed out to < 40% RSD	=30% RSD with 4 compounds allowed out to < 40% RSD</td
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-04B
Lab ID#: 2206327A-03A
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:         22062021sim         Date of Collection: 6/9/22 9:00:00 AM           Dil. Factor:         1.45         Date of Analysis: 6/20/22 10:38 PM		Det Limit Amount	A	But I had	
File Name: 22062021sim Date of Collection: 6/9/22 9:00:00 AM		Date of Analysis: 6/20/22 10:38 PM		1.45	Dil. Factor:
	Л	Date of Collection: 6/9/22 9:00:00 AM		22062021sim	File Name:

	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(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)

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



# Client Sample ID: IA-04B Lab ID#: 2206327A-03A

# MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	22062024sim	Date of Collection: 6/9/22 10:20:00 AM
Dil. Factor:	1.42	Date of Analysis: 6/21/22 12:35 AM

	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Vinyl Chloride	0.14	Not Detected	0.36	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.56	Not Detected
cis-1,2-Dichloroethene	0.14	Not Detected	0.56	Not Detected
Trichloroethene	0.14	Not Detected	0.76	Not Detected

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

		wethod
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	86	70-130



# Client Sample ID: Lab Blank Lab ID#: 2206327A-06A

#### MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	22062006sime 1.00	Date of Collection: NA  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 Appli	cable			
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	

		Method Limits	
Surrogates	%Recovery		
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

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

, , , , ,		Method Limits	
Surrogates	%Recovery		
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

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

<i>,</i>		Method	
Surrogates	%Recovery	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.

Brian Whittaker

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 BILL TO: Accounts Payable

Arcadis U.S., Inc. Arcadis U.S., Inc. 2464 Fortune Drive #170 630 Plaza Drive

Lexington, KY 40509 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

FRACTION #	<u>NAME</u>	<u>TEST</u>	RECEIPT <u>VAC./PRES.</u>	FINAL PRESSURE
07A	SS-04	TO-15	6.9 "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

	the	ide /	Rayes		
CERTIFIED BY:	0		0	DATE:	06/23/22

Technical Director

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



#### 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



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

Client Sample ID: SS-04
Lab ID#: 2206327B-07A
No Detections Were Found.



Client Sample ID: SS-04 Lab ID#: 2206327B-07A

# **EPA METHOD TO-15 GC/MS**

File Name:	p061818	Date of Collection: 6/9/22 1:33:00 PM
Dil. Factor:	2.17	Date of Analysis: 6/19/22 12:55 AM

	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Trichloroethene	1.1	Not Detected	5.8	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected

# **Container Type: 1 Liter Summa Canister**

•		Method
Surrogates	%Recovery	Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	108	70-130



# Client Sample ID: Lab Blank Lab ID#: 2206327B-09A

# **EPA METHOD TO-15 GC/MS**

File Name: Dil. Factor:	p061805d 1.00		of Collection: NA 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 Appl	licable			
				Method
Surrogates		%Recovery		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	

		Method
Surrogates	%Recovery	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

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

		Method Limits	
Surrogates	%Recovery		
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

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

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