

Pfeiffer, Jane K - DNR

From: Robert Reineke <rreineke@ksinghengineering.com>
Sent: Wednesday, November 23, 2022 12:47 PM
To: Pfeiffer, Jane K - DNR
Subject: RE: Community Within the Corridor - West Block (02-41-587376) - Updated 2nd Round Commissioning Report
Attachments: Passive Sampling Results.pdf; 2209608ACOC.pdf; 2209608A_d.pdf

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Jane,

Please find updated results.

We have two additional locations where TCE VALs were exceeded. IA-6-01A had a TCE Concentration of 2.7 ug/m3 in the storage space of Building 6. TCE here does not make a whole lot of sense as the room is above the basement area of IA-6 where a reading of 1.2 ug/m3 for TCE was obtained and the room does not directly touch areas of subsurface vapor exceedances. Potentially something is stored in the area or the trash area to the west or was used that contains PCE. Or potentially, building 5 to the south where the VMS system has not been installed yet is a source of TCE, albeit I do not see why it would affect the first floor room instead of the basement.

A hallway sample of 2.1 ug/m3 was detected in IA-7-01A. Similar to the other hallway sample, we expect that the background air concentration of 0.27 ug/m3 is impacting the actual reading and the vapor system is functioning fine.

No apartments had any exceedances of the TCE VAL.

We'll be performing a third round of commissioning sampling shortly.

Robert Reineke, PE

Principal Engineer | rreineke@ksinghengineering.com
262.821.1171, ext. 111 (p) | 262.424.5191 (cell)
www.ksinghengineering.com



From: Pfeiffer, Jane K - DNR <jane.pfeiffer@wisconsin.gov>
Sent: Monday, November 21, 2022 3:00 PM
To: Robert Reineke <rreineke@ksinghengineering.com>
Subject: Community Within the Corridor - West Block (02-41-587376) - Updated 2nd Round Commissioning Report

Hi Robert – As we discussed on the phone on 11/17, the second round VMS commissioning report for the above-referenced site, received on 11/11/22, appeared to be missing information/data tables. Do you have any update on when this additional information will be submitted?

Thank you, Jane

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Jane K. Pfeiffer

Hydrogeologist - Remediation & Redevelopment Program

Wisconsin Department of Natural Resources

Phone: (414) 435-8021

jane.pfeiffer@wisconsin.gov



TABLE 2
 Passive Air Sampling Results for Commissioning
 Community Within the Corridor - West Block - Building 6, 7, 8A, and 8B

Sample ID	Units	Residential Indoor Air VAL*	IA-6-01A	IA-6-01A	IA-6-01B	IA-6-01B	IA-6-01C	IA-6-01C	IA-6-02A	IA-6-02A	IA-6-02B	IA-6-02B	IA-6-02C	IA-6-02C	IA-6-Basement	IA-6-Basement	IA-7-01A	IA-7-01A	IA-7-01B
Date	---	---	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022
Trichloroethene	ug/m ³	2.1	<0.14	2.7	<0.14	0.59	0.10	0.37	<0.14	0.53	<0.14	0.47	0.14	0.48	<0.14	1.2	<0.14	2.1	<0.14
Tetrachloroethene	ug/m ³	42	<0.17	<0.17	<0.17	<0.17	0.44	<0.16	0.23	<0.17	0.14	<0.17	0.25	0.18	<0.17	<0.17	0.11	<0.17	0.10
cis-1,2-Dichloroethene	ug/m ³	--	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
trans-1,2-Dichloroethene	ug/m ³	42	0.31	0.95	2.4	13	0.78	<0.32	1.9	1.2	2.2	10	1.4	0.36	0.62	1.8	1.4	2.0	1.1

*Based on WDNR Quick Look-Up Table dated February 2022

TABLE 2
 Passive Air Sampling Results for Commissioning
 Community Within the Corridor - West Block - Building 6, 7, 8A, and 8B

Sample ID	Units	Residential Indoor Air VAL*	IA-7-01B	IA-7-01C	IA-7-01C	IA-7-01D	IA-7-01D	IA-7-02A	IA-7-02A	IA-7-02B	IA-7-02B	IA-7-02C	IA-7-02C	IA-8A-01A	IA-8A-01A	IA-8A-01B	IA-8A-01B	IA-8A-01C	IA-8A-01C	
Date	---	---	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022
Trichloroethene	ug/m ³	2.1	Missing	<0.14	<0.14	<0.14	0.24	<0.14	0.64	<0.14	0.76	<0.14	<0.14	<0.14	1.8	<0.14	1.2	<0.14	<0.14	
Tetrachloroethene	ug/m ³	42	Missing	0.27	<0.16	0.40	<0.17	0.13	<0.17	0.12	<0.17	1.1	<0.17	3.4	<0.17	42	<0.17	0.42	<0.17	
cis-1,2-Dichloroethene	ug/m ³	--	Missing	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
trans-1,2-Dichloroethene	ug/m ³	42	Missing	1.1	<0.32	0.74	<0.33	1.7	1.0	1.7	1.1	1.1	<0.33	6.2	2.8	4.3	2.7	3.7	0.6	

*Based on WDNR Quick Look-Up Table dated February 2022

TABLE 2
 Passive Air Sampling Results for Commissioning
 Community Within the Corridor - West Block - Building 6, 7, 8A, and 8B

Sample ID	Units	Residential Indoor Air VAL*	IA-8A-01D	IA-8A-01D	IA-8A-02A	IA-8A-02A	IA-8A-02B	IA-8A-02B	IA-8A-02C	IA-8A-02C	IA-8A-02D	IA-8A-02D	IA-8A-03A	IA-8A-03A	IA-8A-03B	IA-8A-03B	IA-8A-03C	IA-8A-03C	IA-8A-03D
Date	---	---	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022
Trichloroethene	ug/m ³	2.1	<0.14	1.2	<0.14	0.65	<0.14	2	<0.14	0.17	<0.14	0.21	<0.14	0.4	<0.14	0.9	<0.14	<0.14	<0.14
Tetrachloroethene	ug/m ³	42	2.5	<0.17	0.44	<0.17	1.8	<0.17	4.4	<0.17	0.28	<0.17	0.66	<0.17	0.85	<0.17	2.1	<0.17	0.53
cis-1,2-Dichloroethene	ug/m ³	--	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
trans-1,2-Dichloroethene	ug/m ³	42	8.1	2.8	1.9	1.6	6.2	1.9	1.7	0.5	2.6	3.7	6.6	2.6	4.4	2.4	4.4	0.66	6.0

*Based on WDNR Quick Look-Up Table dated February 2022

TABLE 2
 Passive Air Sampling Results for Commissioning
 Community Within the Corridor - West Block - Building 6, 7, 8A, and 8B

Sample ID	Units	Residential Indoor Air VAL*	IA-8A-03D	IA-8A-03E	IA-8A-03E	IA-8A-03F	IA-8A-03F	IA-8A-BASEMENT	IA-8A-BASEMENT	IA-8B-01A	IA-8B-01A	IA-8B-01B	IA-8B-01B
Date	---	---	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022
Trichloroethene	ug/m ³	2.1	0.46	<0.14	0.18	<0.14	0.41	<0.14	0.36	<0.14	0.21	<0.14	2.1
Tetrachloroethene	ug/m ³	42	<0.17	0.31	<0.17	0.48	<0.17	2.9	0.3	0.25	<0.17	0.30	<0.17
cis-1,2-Dichloroethene	ug/m ³	--	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16
trans-1,2-Dichloroethene	ug/m ³	42	3.2	5.0	4.3	23	2.9	9.9	6.2	2.0	<0.34	2.1	2.2

*Based on WDNR Quick Look-Up Table dated February 2022

TABLE 2
 Passive Air Sampling Results for Commissioning
 Community Within the Corridor - West Block - Building 6, 7, 8A, and 8B

Sample ID	Units	Residential Indoor Air VAL*	IA-8B-01C	IA-8B-01C	IA-8B-01D	IA-8B-01D	IA-8B-02A	IA-8B-02A	IA-8B-02B	IA-8B-02B	IA-8B-02C	IA-8B-02C	IA-8B-02D	IA-8B-02D	OA-6/7/8A/8B Background	OA-6/7/8A/8B Background
Date	---	---	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022	6/8/2022	9/12/2022
Trichloroethene	ug/m ³	2.1	<0.14	<0.14	<0.14	1.9	<0.14	0.67	<0.14	0.28	0.25	Missing	<0.14	0.7	<0.14	0.27
Tetrachloroethene	ug/m ³	42	0.31	<0.17	0.41	<0.17	0.26	<0.17	0.28	<0.17	1.1	Missing	0.32	<0.17	<0.17	<0.17
cis-1,2-Dichloroethene	ug/m ³	--	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	Missing	<0.16	<0.16	<0.16	<0.16
trans-1,2-Dichloroethene	ug/m ³	42	0.40	<0.33	2.4	1.9	2.8	1.2	2.4	<0.33	1.5	Missing	3.0	1.2	<0.33	<0.33

*Based on WDNR Quick Look-Up Table dated February 2022

Passive Sorbent Chain of Custody

Case Seal #: _____

WO# **2209608**

Company: K. Singh & Associates, Inc Project #: 40443A P.O. #: _____
 Project Manager: Robert Reineke Project Name: CWC - West Block
 Contact phone/email: 262-821-1171 Collected by: _____

Lab I.D.	Sample Identification	Sampler ID	Date of Deployment (mm/dd/yy)	Time of Deployment (hr:min)	Date of Retrieval (mm/dd/yy)	Time of Retrieval (hr:min)	Sample Matrix (check one)				Reporting Units (circle)		Turn Around Time:	
							Indoor/Outdoor Air	Soil Gas	Workplace Monitoring	Other ()	ppbv	µg/m3		ppmv
01A	IA-6-01A	01291	09/12/22	1:55 PM	9/19/22	11:21 AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
02A	IA-6-01B	01466	09/12/22	1:57 PM	9/19/22	11:58 AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	MISSING
03A	IA-6-01C	01467	09/12/22	1:44 PM	9/19/22	2:16 PM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
04A	IA-6-02A	01464	09/12/22	1:28 PM	9/19/22	1:49 PM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
05A	IA-6-02B	01465	09/12/22	1:41 PM	9/19/22	1:50 PM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
06A	IA-6-02C	01301	09/12/22	12:09 PM	9/19/22	12:42 PM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
07A	IA-6-Backout	01296	09/12/22	1:53 PM	9/19/22	11:44 AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
08A	IA-7-01A	01298	09/12/22	1:58 PM	9/19/22	11:11 AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
	IA-7-01B		09/12/22	1:46 PM			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	MISSING
09A	IA-7-01C	01468	09/12/22	1:35 AM	9/19/22	2:25 AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
10A	IA-7-01D	01298	09/12/22	1:40 AM	9/19/22	12:20 AM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
11A	IA-7-02A	01456	09/12/22	1:27 PM	9/19/22	1:30 PM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
12A	IA-7-02B	01463	09/12/22	1:31 PM	9/19/22	1:42 PM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
13A	IA-7-02C	01300	09/12/22	12:08 PM	9/19/22	12:40 PM	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	µg/m3	ng	<input checked="" type="checkbox"/> Normal	
Relinquished by: (signature)			Date	Time	Received by: (signature)	Date	Time	Notes to Lab:						
			9/21/22	2 PM		9/23/22	1:20							
Relinquished by: (signature)			Date	Time	Received by: (signature)	Date	Time	Notes to Lab:						

Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxicics against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples.

Shipper Name: Fed Ex Custody Seals Intact? Yes No None Sample Condition Upon Receipt: Good SDR
 Air Bill #: _____ Temperature (°C) NA Lab Use Only

10/12/2022

Mr. Robert Reineke
K Singh & Associates
3636 N 124th St

Wauwatosa WI 53222

Project Name: CWC - West Block

Project #: 40443A

Workorder #: 2209608A

Dear Mr. Robert Reineke

The following report includes the data for the above referenced project for sample(s) received on 9/23/2022 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Passive S.E. RAD130/SKC 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: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Jade White
Project Manager

WORK ORDER #: 2209608A

Work Order Summary

CLIENT: Mr. Robert Reineke
K Singh & Associates
3636 N 124th St
Wauwatosa, WI 53222

BILL TO: Mr. Robert Reineke
K Singh & Associates
3636 N 124th St
Wauwatosa, WI 53222

PHONE:

P.O. #

FAX:

PROJECT # 40443A CWC - West Block

DATE RECEIVED: 09/23/2022

CONTACT: Jade White

DATE COMPLETED: 10/12/2022

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	IA-6-01A	Passive S.E. RAD130/SKC
02A	IA-6-01B	Passive S.E. RAD130/SKC
03A	IA-6-01C	Passive S.E. RAD130/SKC
04A	IA-6-02A	Passive S.E. RAD130/SKC
05A	IA-6-02B	Passive S.E. RAD130/SKC
06A	IA-6-02C	Passive S.E. RAD130/SKC
07A	IA-6-Baseament	Passive S.E. RAD130/SKC
08A	IA-7-01A	Passive S.E. RAD130/SKC
09A	IA-7-01C	Passive S.E. RAD130/SKC
10A	IA-7-01D	Passive S.E. RAD130/SKC
11A	IA-7-02A	Passive S.E. RAD130/SKC
12A	IA-7-02B	Passive S.E. RAD130/SKC
13A	IA-7-02C	Passive S.E. RAD130/SKC
14A	Lab Blank	Passive S.E. RAD130/SKC
15A	CCV	Passive S.E. RAD130/SKC
16A	LCS	Passive S.E. RAD130/SKC
16AA	LCS D	Passive S.E. RAD130/SKC

CERTIFIED BY: 

DATE: 10/12/22

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

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
RAD130 Passive SE by Mod EPA TO-17
K Singh & Associates
Workorder# 2209608A

Thirteen Radiello 130 (Solvent) samples were received on September 23, 2022. The laboratory analyzed the charcoal sorbent bed of the passive sampler following modified method EPA TO-17. The VOCs were chemically extracted using carbon disulfide and an aliquot of the extract was injected into a GC/MS for identification and quantification of volatile organic compounds (VOCs).

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the sampling rate for each VOC. If sampling rates were calculated by the lab or the manufacturer, the concentration result has been flagged as an estimated value. Results are not corrected for desorption efficiency.

The reference method used for this procedure is EPA TO-17, which describes the collection of VOCs in ambient air using sorbents and analysis by GC/MS. Because TO-17 describes active sample collection using a pump and thermal desorption as the preparation step, several modifications are required. Modifications to TO-17 are listed in the table below:

<i>Requirement</i>	<i>TO-17</i>	<i>ATL Modifications</i>
Sample Collection	Pump pulls measured air volume through sorbent tube	VOCs in air adsorbed onto sorbent bed passively through diffusion
Sample Preparation	Thermal extraction	Solvent extraction
Sorbent tube conditioning	Condition newly packed tubes prior to use	Charcoal-based sorbent is a single use media and conditioning is conducted by vendor.
Instrumentation	Thermal desorption introduction system	Liquid injection introduction system
Internal Standard	Gas-phase internal standard introduced on the tube or focusing trap during analysis	Liquid-phase internal standard introduced on the tube at the time of extraction
Media and sample storage	<4 deg C, 30 days	Media shelf life is determined by vendor; sample hold-time is 6 months for the RAD130 and WMS. Sample preservation requirements are storage in a cool, solvent-free refrigerator and optional use of ice during shipping.
Internal Standard Recovery	+/-40% of daily CCV area	-50% to +100% of daily CCV area

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The uptake rates were corrected based on average field temperatures if provided. In the absence of field temperatures, the uptake rates determined at 25 deg C were used.

If validated uptake rates were not available, rates were estimated using the chemical's diffusion coefficient in air and the geometric constant of the sampler. Chemicals that are poorly retained by the sorbent over the sampling duration may exhibit a low bias. All concentrations calculated using estimated rates are qualified with a "C" flag.

To calculate ug/m³ concentrations in the Lab Blank, a sampling duration of 10250 minutes was applied. The assumed temperature used for the uptake rate is listed on the data page. If the field temperatures were provided, the rate was adjusted in the same manner as the field samples.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicate 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.

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

N - The identification is based on presumptive evidence.

C - Estimated concentration due to calculated sampling rate

CN - See case narrative explanation.

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
VOCS BY PASSIVE SAMPLER - GC/MS**

Client Sample ID: IA-6-01A

Lab ID#: 2209608A-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.15	1.8	2.7
trans-1,2-Dichloroethene	0.20	0.34	0.56 C	0.95 C

Client Sample ID: IA-6-01B

Lab ID#: 2209608A-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.41	0.59
trans-1,2-Dichloroethene	0.20	0.33	7.7 C	13 C

Client Sample ID: IA-6-01C

Lab ID#: 2209608A-03A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.26	0.37

Client Sample ID: IA-6-02A

Lab ID#: 2209608A-04A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.37	0.53
trans-1,2-Dichloroethene	0.20	0.33	0.70 C	1.2 C

Client Sample ID: IA-6-02B

Lab ID#: 2209608A-05A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.32	0.47
trans-1,2-Dichloroethene	0.20	0.33	6.3 C	10 C

Client Sample ID: IA-6-02C

Lab ID#: 2209608A-06A

**Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS**

Client Sample ID: IA-6-02C

Lab ID#: 2209608A-06A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.33	0.48
Tetrachloroethene	0.10	0.17	0.11	0.18
trans-1,2-Dichloroethene	0.20	0.33	0.22 C	0.36 C

Client Sample ID: IA-6-Basement

Lab ID#: 2209608A-07A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.86	1.2
trans-1,2-Dichloroethene	0.20	0.34	1.0 C	1.8 C

Client Sample ID: IA-7-01A

Lab ID#: 2209608A-08A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.15	1.4	2.1
trans-1,2-Dichloroethene	0.20	0.34	1.2 C	2.0 C

Client Sample ID: IA-7-01C

Lab ID#: 2209608A-09A

No Detections Were Found.

Client Sample ID: IA-7-01D

Lab ID#: 2209608A-10A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.16	0.24

Client Sample ID: IA-7-02A

Lab ID#: 2209608A-11A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
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**Summary of Detected Compounds
VOCS BY PASSIVE SAMPLER - GC/MS**

Client Sample ID: IA-7-02A

Lab ID#: 2209608A-11A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.45	0.64
trans-1,2-Dichloroethene	0.20	0.33	0.64 C	1.0 C

Client Sample ID: IA-7-02B

Lab ID#: 2209608A-12A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.52	0.76
trans-1,2-Dichloroethene	0.20	0.33	0.69 C	1.1 C

Client Sample ID: IA-7-02C

Lab ID#: 2209608A-13A

No Detections Were Found.

Client Sample ID: IA-6-01A

Lab ID#: 2209608A-01A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101112sim	Date of Collection:	9/19/22 11:21:00 AM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 11:12 AM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.15	1.8	2.7
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.34	0.56 C	0.95 C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 9926 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130

Client Sample ID: IA-6-01B

Lab ID#: 2209608A-02A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101113sim	Date of Collection:	9/19/22 1:57:00 PM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 11:39 AM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.41	0.59
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	7.7 C	13 C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10080 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130



Air Toxics

Client Sample ID: IA-6-01C

Lab ID#: 2209608A-03A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101114sim	Date of Collection:	9/19/22 2:16:00 PM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 12:05 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.26	0.37
Tetrachloroethene	0.10	0.16	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.32	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10228 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130



Air Toxics

Client Sample ID: IA-6-02A

Lab ID#: 2209608A-04A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101115sim	Date of Collection:	9/19/22 1:49:00 PM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 12:32 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.37	0.53
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	0.70 C	1.2 C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10091 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130

Client Sample ID: IA-6-02B

Lab ID#: 2209608A-05A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101116sim	Date of Collection:	9/19/22 1:50:00 PM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 12:59 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.32	0.47
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	6.3 C	10 C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10089 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130

Client Sample ID: IA-6-02C

Lab ID#: 2209608A-06A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101117sim	Date of Collection:	9/19/22 12:42:00 PM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 01:26 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.33	0.48
Tetrachloroethene	0.10	0.17	0.11	0.18
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	0.22 C	0.36 C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10113 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130

Client Sample ID: IA-6-Basement

Lab ID#: 2209608A-07A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101118sim	Date of Collection:	9/19/22 11:44:00 AM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 01:52 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.86	1.2
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.34	1.0 C	1.8 C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 9945 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130

Client Sample ID: IA-7-01A

Lab ID#: 2209608A-08A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101119sim	Date of Collection:	9/19/22 11:11:00 AM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 02:19 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.15	1.4	2.1
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.34	1.2 C	2.0 C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 9921 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130

Client Sample ID: IA-7-01C

Lab ID#: 2209608A-09A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101120sim	Date of Collection:	9/19/22 4:25:00 AM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 02:46 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Tetrachloroethene	0.10	0.16	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.32	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10250 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130

Client Sample ID: IA-7-01D

Lab ID#: 2209608A-10A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101121sim	Date of Collection:	9/19/22 12:20:00 PM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 03:12 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.16	0.24
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10120 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130



Air Toxics

Client Sample ID: IA-7-02A

Lab ID#: 2209608A-11A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101122sim	Date of Collection:	9/19/22 1:38:00 PM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 03:39 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.45	0.64
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	0.64 C	1.0 C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10091 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	95	70-130



Air Toxics

Client Sample ID: IA-7-02B

Lab ID#: 2209608A-12A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101123sim	Date of Collection:	9/19/22 1:42:00 PM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 04:05 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	0.52	0.76
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	0.69 C	1.1 C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10091 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130

Client Sample ID: IA-7-02C

Lab ID#: 2209608A-13A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101124sim	Date of Collection:	9/19/22 12:40:00 PM
Dil. Factor:	1.00	Date of Analysis:	10/11/22 04:32 PM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Tetrachloroethene	0.10	0.17	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.33	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10115 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130

Client Sample ID: Lab Blank

Lab ID#: 2209608A-14A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101111sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/11/22 10:36 AM
		Date of Extraction:	10/11/22

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Trichloroethene	0.10	0.14	Not Detected	Not Detected
Tetrachloroethene	0.10	0.16	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.10	0.16	Not Detected C	Not Detected C
trans-1,2-Dichloroethene	0.20	0.32	Not Detected C	Not Detected C

C = Estimated concentration due to calculated sampling rate.

Temperature = 77.0F , duration time = 10250 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130

Client Sample ID: CCV

Lab ID#: 2209608A-15A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101106sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/11/22 08:09 AM
		Date of Extraction: NA

Compound	%Recovery
Trichloroethene	107
Tetrachloroethene	109
cis-1,2-Dichloroethene	98
trans-1,2-Dichloroethene	99

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130

Client Sample ID: LCS

Lab ID#: 2209608A-16A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101109sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/11/22 09:43 AM
		Date of Extraction:	10/11/22

Compound	%Recovery	Method Limits
Trichloroethene	119	70-130
Tetrachloroethene	116	70-130
cis-1,2-Dichloroethene	108	70-130
trans-1,2-Dichloroethene	111	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130

Client Sample ID: LCSD

Lab ID#: 2209608A-16AA

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	c101110sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/11/22 10:09 AM
		Date of Extraction:	10/11/22

Compound	%Recovery	Method Limits
Trichloroethene	106	70-130
Tetrachloroethene	106	70-130
cis-1,2-Dichloroethene	100	70-130
trans-1,2-Dichloroethene	101	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130