

From: Kevin Hedinger <Kevin.Hedinger@gza.com>
Sent: Thursday, October 26, 2023 12:51 PM
To: Michalets, Linda M - DNR; James Drought
Cc: Sheryl Stephenson
Subject: RE: BRRTS #02-41-000826 Milwaukee Plating Update?
Attachments: Eurofins- 2309180_d.pdf; 2023090440 Assay Tech-CCM 09-21-23.pdf

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Linda:

As you requested, attached is the laboratory report for Eurofins for the samples that GZA requested analysis and the laboratory report that George provided to me for the samples analyzed by Assay Technology. For the Assay Technology samples there are only 2 pages and it is only the results. If there is more George would need to provide the other pages.

Thanks!

Kevin M. Hedinger
Senior Project Manager / Hydrogeologist
Direct: 262-754-2578
Cell: 262-424-1761

From: Michalets, Linda M - DNR <Linda.Michalets@wisconsin.gov>
Sent: Thursday, October 26, 2023 12:15 PM
To: Kevin Hedinger <Kevin.Hedinger@gza.com>; James Drought <James.Drought@gza.com>
Cc: Sheryl Stephenson <Sheryl.Stephenson@gza.com>
Subject: [EXTERNAL] RE: BRRTS #02-41-000826 Milwaukee Plating Update?

Kevin,
Could you send me the lab data sheets for both sampling device results?
Thank you!
Linda

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Linda Michalets
she/her/hers
Phone: 414-435-8010
linda.michalets@wisconsin.gov

From: Kevin Hedinger <Kevin.Hedinger@gza.com>
Sent: Thursday, October 26, 2023 10:03 AM
To: Michalets, Linda M - DNR <Linda.Michalets@wisconsin.gov>; James Drought <James.Drought@gza.com>
Cc: Sheryl Stephenson <Sheryl.Stephenson@gza.com>
Subject: RE: BRRTS #02-41-000826 Milwaukee Plating Update?

**CAUTION: This email originated from outside the organization.
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Linda:

Thank you for your message. It was well timed because I just had a conversation with the technical director for Eurofins this morning about the samples collected from the 1422 Building.

The coordinated sampling with George Beyer at 1422 Building did occur and we are evaluating the results. The results were similar to previous samples collected by George and GZA in that the GZA results indicate a lower concentration, below the VAL of 8.8 ug/m³ for all samples, and the samples collected by George indicated a slight exceedance of the VAL in two samples, West Exit Door and Basement Print Cage. Attached is the summary table of the results for George and GZA.

I inquired to and had discussion with Technical Director for Eurofins about the potential reason(s) for the difference between the sampling device and/or the analytical methods. The person at Eurofins reviewed the available information online about the AT525 passive sampling device used by George at 1422 Building since this device is specific to Assay Technology and Eurofins does not use or analyze this device.

From a conceptual sampler design and uptake rates, they indicated that the device seems to be similar to the Radiello 130 that GZA used to collect the samples. The sampling devices, AT525 and Radiello, were placed in open areas with good air circulation on all floors. The samples will the least air flow may be the West Exit Door and Basement samples because the stairwell is enclosed and the basement could have less air flow. However, the stairwell is next to the exit door and the basement has fans running so this may not be a concern.

The analytical method used for each sampler could be a potential difference. Both the AT525 and the Radiello use carbon disulfide solvent to extract the contaminants from the sorbent in the sampler. From information on the Assay Technology website, the AT525 extract is analyzed using a gas chromatograph with a flame ionization detector (GC/FID) and the Radiello is analyzed with a gas chromatograph with a mass spectrometer (GC/MS). The flame ionization detector can be influenced by interference compounds in the sample that elute near TCE and these other compounds cannot be distinguished. Using the GC/MS allows for each peak on the chromatograph to be separated and identified; this separation of peaks could reduce the TCE concentration reported in the sample. Indoor air has many different compounds from materials in the space and activities inside the building which could be influencing the results analyzed with the GC/FID. The laboratory report that George provided

to me to make the table indicates that the method reference is "AT L-OV (GC/FID)". This information could be confirmed for the specific samples analyzed for 1422 Building by Assay Technology.

These indoor air sample results along with the previous sample results collected by GZA from the 1422 indicate that the indoor air concentrations are less than the VAL for TCE of 8.8 ug/m³. Based on these results it appears that the repair of the vapor degreaser has influenced the concentration in the alley and potentially in the 1422 building.

If you have any questions or would like to discuss we could coordinate a virtual meeting.

Thanks!

Kevin M. Hedinger
Senior Project Manager / Hydrogeologist
Direct: 262-754-2578
Cell: 262-424-1761

From: Michalets, Linda M - DNR <Linda.Michalets@wisconsin.gov>
Sent: Thursday, October 26, 2023 9:03 AM
To: Kevin Hedinger <Kevin.Hedinger@gza.com>; James Drought <James.Drought@gza.com>
Subject: [EXTERNAL] BRRTS #02-41-000826 Milwaukee Plating Update?

Hi Keven and Jim,

I have not heard from you in a while. I thought that paired vapor sampling was going to be conducted in the 1422 building in September. Did that occur? Please provide me with an update on activities occurring here.

Thank you,

Linda

We are committed to service excellence.
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Linda Michalets
she/her/hers
Phone: 414-435-8010
linda.michalets@wisconsin.gov

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For information about GZA GeoEnvironmental, Inc. and its services, please visit our website at www.gza.com.

Customer: CHRIST CHURCH MILWAUKEE
Attention: GEORGE BEYER
Address: 1422 N VEL R PHILLIPS AVE
 MILWAUKEE, WI 53212-3802
 USA

Lab Work Order: 2023090440

Customer No.: 64133

Received Date: September 13, 2023

Date Reported: September 21, 2023

Phone No.: (262) 271-6040

Project ID: 1422 VEL PHILLIPS

PO No.:
Fax No.:

Exposure results are the average concentration for the period of time monitored. '<' means the result is 'less than the RptLmt'. RptLmt = Reporting Limit. The results relate only to the items tested. Unless noted below, samples were received in acceptable condition, all applicable quality control were within method specifications, lab blanks were subtracted before a result was reported, and any customer supplied field blanks were not subtracted from sample results. The molar volume at 25 C (24.45 L/mole) was used to calculate parts per million, ppm. Air concentrations reported are based upon field sampling information provided by the customer. For assistance with the content of this report, please visit the Customer Support section of our web site at <http://www.assaytech.com> or contact Technical Support at 1-800-833-1258. For details of significant method modifications go to www.assaytech.com/methmod.

Lab Sample ID	Lab Code	Date Sampled	Client Sample ID	Media	Media Lot / Serial #	Analytes Requested	Total	RptLmt	Units	Sample Vol. (L)	Time (min)	Concentration Found	Concentration Units
23048326	ATOH	Aug 29, 2023	FIRST FLOOR - GALLERY CENTER SOUTH	525	7F23 - QK17582	TRICHLOROETHYLENE	4.27	2.0	UG	1050	14395	0.00076	PPM
			Analyzed By: KTAYLOR		Analyzed On: September 15, 2023	Approved By: BEWING							
						Approved On: September 21, 2023							
23048327	ATOH	Aug 29, 2023	SECOND FLOOR - MOTHERS ROOM	525	7F23 - QK21231	TRICHLOROETHYLENE	5.36	2.0	UG	1050	14408	0.00095	PPM
			Analyzed By: KTAYLOR		Analyzed On: September 15, 2023	Approved By: BEWING							
						Approved On: September 21, 2023							
23048328	ATOH	Aug 29, 2023	BASEMENT - PRINT WORK ROOM CAGE	525	7F23 - QK17814	TRICHLOROETHYLENE	8.70	2.0	UG	1050	14410	0.0015	PPM
			Analyzed By: KTAYLOR		Analyzed On: September 15, 2023	Approved By: BEWING							
						Approved On: September 21, 2023							
23048329	ATOH	Aug 29, 2023	FIRST FLOOR - NE REAR CAGE	525	7F23 - QK21335	TRICHLOROETHYLENE	5.48	2.0	UG	1050	14428	0.00097	PPM
			Analyzed By: KTAYLOR		Analyzed On: September 15, 2023	Approved By: BEWING							
						Approved On: September 21, 2023							
23048330	ATOH	Aug 29, 2023	SECOND FLOOR - NE CONFERENCE ROOM	525	7F23 - QK17700	TRICHLOROETHYLENE	6.06	2.0	UG	1050	14404	0.0011	PPM
			Analyzed By: KTAYLOR		Analyzed On: September 15, 2023	Approved By: BEWING							
						Approved On: September 21, 2023							

Customer: CHRIST CHURCH MILWAUKEE
Attention: GEORGE BEYER
Address: 1422 N VEL R PHILLIPS AVE
 MILWAUKEE, WI 53212-3802
 USA

Lab Work Order: 2023090440

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Phone No.: (262) 271-6040

Project ID: 1422 VEL PHILLIPS

PO No.:
Fax No.:

Lab Sample ID	Lab Code	Date Sampled	Client Sample ID	Media	Media Lot / Serial #	Analytes Requested	Quantity Found			Sample Vol. (L)	Time (min)	Concentration Found	Concentration Units
							Total	RptLmt	Units				
23048331	ATOH	Aug 29, 2023	OUTDOOR -ALLEY	525	7F23 - QK21251	TRICHLOROETHYLENE	18.0	2.0	UG	1050	14406	0.0032	PPM
Analyzed By: KTAYLOR			Analyzed On: September 15, 2023		Approved By: BEWING	Approved On: September 21, 2023							
23048332	ATOH	Aug 29, 2023	FIRST FLOOR - WEST EXIT STAIR	525	7F23 - QK21079	TRICHLOROETHYLENE	9.56	2.0	UG	1050	14396	0.0017	PPM
Analyzed By: KTAYLOR			Analyzed On: September 15, 2023		Approved By: BEWING	Approved On: September 21, 2023							
23048333	ATOH	Aug 29, 2023	FIRST FLOOR - NW CORNER OFFICE	525	7F23 - QK21218	TRICHLOROETHYLENE	4.13	2.0	UG	1050	14404	0.00073	PPM
Analyzed By: KTAYLOR			Analyzed On: September 15, 2023		Approved By: BEWING	Approved On: September 21, 2023							
23048335	ATOH	Aug 29, 2023	SECOND FLOOR -NURSERY	525	7F23 - QK18159	TRICHLOROETHYLENE	6.74	2.0	UG	1050	14404	0.0012	PPM
Analyzed By: KTAYLOR			Analyzed On: September 15, 2023		Approved By: BEWING	Approved On: September 21, 2023							
23048336	ATOH	Aug 29, 2023	OUTDOOR - ROOFTOP UNIT #1	525	7F23 - QK21100	TRICHLOROETHYLENE	2.18	2.0	UG	1050	14398	0.00039	PPM
Analyzed By: KTAYLOR			Analyzed On: September 15, 2023		Approved By: BEWING	Approved On: September 21, 2023							

Method References:

<u>TestCode</u>	<u>Analytes Requested</u>	<u>Method Reference</u>	<u>Regulatory Agency</u>	<u>TWA Limit</u>	<u>STEL Limit</u>	<u>Exposure Units</u>
79016A	TRICHLOROETHYLENE	AT L-OV (GC/FID)	OSHA PEL/CEILING	100	200	PPM

Applicable OSHA PELs or NIOSH RELs have been included in this lab report for guidance, but may not be sufficient for regulatory compliance. Clients should be aware that more stringent international, state, local, or organizational exposure limits may supersede the limits included with this report. Visit www.OSHA.gov/dsg/annotated-pels for detailed information on exposure limits and OSHA policies.

9/22/2023
Ms. Heidi Woelfel
GZA GeoEnvironmental, Inc.
17975 West Sarah Lane
Suite 150
Brookfield WI 53045

Project Name: Milwaukee Plating
Project #: 20.0157661
Workorder #: 2309180

Dear Ms. Heidi Woelfel

The following report includes the data for the above referenced project for sample(s) received on 9/11/2023 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 #: 2309180

Work Order Summary

CLIENT:	Ms. Heidi Woelfel GZA GeoEnvironmental, Inc. 17975 West Sarah Lane Suite 150 Brookfield, WI 53045	BILL TO:	Ms. Heidi Woelfel GZA GeoEnvironmental, Inc. 17975 West Sarah Lane Suite 150 Brookfield, WI 53045
PHONE:	262-754-2560	P.O. #	
FAX:	262754-9711	PROJECT #	20.0157661 Milwaukee Plating
DATE RECEIVED:	09/11/2023	CONTACT:	Jade White
DATE COMPLETED:	09/22/2023		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	Outside Alley	Passive S.E. RAD130/SKC
02A	Basement-Print Cage	Passive S.E. RAD130/SKC
03A	1st Flr-NW Office	Passive S.E. RAD130/SKC
04A	1st Flr- Gallery	Passive S.E. RAD130/SKC
05A	1st Flr- Rear Cage	Passive S.E. RAD130/SKC
06A	1st Flr- West Stair Exit Door	Passive S.E. RAD130/SKC
07A	2nd Flr- Mother's Room	Passive S.E. RAD130/SKC
08A	2nd Flr- Nursery	Passive S.E. RAD130/SKC
09A	2nd Flr- East Conf Room	Passive S.E. RAD130/SKC
10A	Rooftop- 1st Flr Rooftop HVAC	Passive S.E. RAD130/SKC
11A	Lab Blank	Passive S.E. RAD130/SKC
12A	CCV	Passive S.E. RAD130/SKC
13A	LCS	Passive S.E. RAD130/SKC
13AA	LCSD	Passive S.E. RAD130/SKC

CERTIFIED BY:



DATE: 09/22/23

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP – 209222, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP – T104704434-22-18, UT NELAP – CA009332022-14, VA NELAP - 12240, WA ELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-017

Eurofins Environment Testing Northern California, LLC certifies that the test results contained in this report meet all requirements of the 2016 TNI Standard.

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000

**LABORATORY NARRATIVE
RAD130 Passive SE by Mod EPA TO-17
GZA GeoEnvironmental, Inc.
Workorder# 2309180**

Ten Radiello 145 (VOC TD) samples were received on September 11, 2023. 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:

Requirement	TO-17	ATL Modifications
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.

To calculate ug/m³ concentrations in the Lab Blank, a sampling duration of 14416 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



Air Toxics

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

Client Sample ID: Outside Alley

Lab ID#: 2309180-01A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.10	0.19	0.20
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.26	0.23
Carbon Tetrachloride	0.10	0.10	0.21	0.22
Heptane	0.10	0.12	0.19	0.22
Trichloroethene	0.10	0.10	11	11
Toluene	0.10	0.094	0.84	0.79
Ethyl Benzene	0.10	0.10	0.11	0.11
m,p-Xylene	0.10	0.099	0.32	0.32
o-Xylene	0.10	0.11	0.10	0.11
1,4-Dichlorobenzene	0.10	0.14	0.18	0.24

Client Sample ID: Basement-Print Cage

Lab ID#: 2309180-02A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	1.1	0.77
Hexane	0.10	0.10	0.45	0.48
Ethyl Acetate	0.40	0.36	0.40	0.36
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	1.0	0.88
Carbon Tetrachloride	0.10	0.10	0.32	0.33
1,2-Dichloroethane	0.10	0.090	0.20	0.18
Heptane	0.10	0.12	0.73	0.88
Trichloroethene	0.10	0.10	3.7	3.8
4-Methyl-2-pentanone	0.20	0.21	0.38	0.40
Toluene	0.10	0.094	2.6	2.4
Tetrachloroethene	0.10	0.12	0.11	0.13
Ethyl Benzene	0.10	0.10	0.25	0.26
m,p-Xylene	0.10	0.099	0.86	0.85
o-Xylene	0.10	0.11	0.23	0.25
Styrene	0.10	0.11	0.17	0.20



Air Toxics

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

Client Sample ID: 1st Flr-NW Office

Lab ID#: 2309180-03A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.10	0.22	0.23
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.47	0.42
Carbon Tetrachloride	0.10	0.10	0.20	0.21
Heptane	0.10	0.12	0.18	0.21
Trichloroethene	0.10	0.10	1.7	1.7
Toluene	0.10	0.094	1.1	1.0
Ethyl Benzene	0.10	0.10	0.10	0.11
m,p-Xylene	0.10	0.099	0.31	0.31
o-Xylene	0.10	0.11	0.10	0.11
Styrene	0.10	0.11	0.11	0.12

Client Sample ID: 1st Flr- Gallery

Lab ID#: 2309180-04A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.10	0.26	0.28
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.54	0.47
Carbon Tetrachloride	0.10	0.10	0.24	0.24
Heptane	0.10	0.12	0.22	0.26
Trichloroethene	0.10	0.10	1.7	1.7
Toluene	0.10	0.094	1.7	1.6
Ethyl Benzene	0.10	0.10	0.15	0.15
m,p-Xylene	0.10	0.099	0.44	0.44
o-Xylene	0.10	0.11	0.13	0.13

Client Sample ID: 1st Flr- Rear Cage

Lab ID#: 2309180-05A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.10	0.31	0.33
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.77	0.68
1,1,1-Trichloroethane	0.10	0.11	0.11	0.12
Carbon Tetrachloride	0.10	0.10	0.27	0.28



Air Toxics

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

Client Sample ID: 1st Flr- Rear Cage

Lab ID#: 2309180-05A

Heptane	0.10	0.12	0.28	0.34
Trichloroethene	0.10	0.10	1.9	1.9
Toluene	0.10	0.094	2.7	2.5
Ethyl Benzene	0.10	0.10	0.22	0.23
m,p-Xylene	0.10	0.099	0.57	0.56
o-Xylene	0.10	0.11	0.14	0.15

Client Sample ID: 1st Flr- West Stair Exit Door

Lab ID#: 2309180-06A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.10	0.27	0.29
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.56	0.50
Carbon Tetrachloride	0.10	0.10	0.24	0.25
Heptane	0.10	0.12	0.23	0.27
Trichloroethene	0.10	0.10	5.5	5.5
Toluene	0.10	0.094	1.4	1.3
Ethyl Benzene	0.10	0.10	0.13	0.13
m,p-Xylene	0.10	0.099	0.40	0.40
o-Xylene	0.10	0.11	0.12	0.13
Styrene	0.10	0.11	0.10	0.12

Client Sample ID: 2nd Flr- Mother's Room

Lab ID#: 2309180-07A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.10	0.28	0.29
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.45	0.40
Carbon Tetrachloride	0.10	0.10	0.21	0.22
Heptane	0.10	0.12	0.18	0.21
Trichloroethene	0.10	0.10	2.3	2.4
Toluene	0.10	0.094	1.5	1.4
m,p-Xylene	0.10	0.099	0.25	0.25
Styrene	0.10	0.11	0.12	0.13



Air Toxics

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

Client Sample ID: 2nd Flr- Nursery

Lab ID#: 2309180-08A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.10	0.33	0.35
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.48	0.42
Carbon Tetrachloride	0.10	0.10	0.24	0.24
Heptane	0.10	0.12	0.19	0.23
Trichloroethene	0.10	0.10	2.8	2.8
Toluene	0.10	0.094	1.5	1.4
m,p-Xylene	0.10	0.099	0.25	0.25
Styrene	0.10	0.11	0.10	0.12

Client Sample ID: 2nd Flr- East Conf Room

Lab ID#: 2309180-09A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.10	0.37	0.39
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.52	0.46
Carbon Tetrachloride	0.10	0.10	0.25	0.26
Benzene	0.40	0.35	0.41	0.35
Heptane	0.10	0.12	0.17	0.21
Trichloroethene	0.10	0.10	3.2	3.2
Toluene	0.10	0.094	2.0	1.9
m,p-Xylene	0.10	0.099	0.25	0.25

Client Sample ID: Rooftop- 1st Flr Rooftop HVAC

Lab ID#: 2309180-10A

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Hexane	0.10	0.10	0.26	0.27
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.32	0.28
Carbon Tetrachloride	0.10	0.10	0.26	0.26
Heptane	0.10	0.12	0.20	0.24
Trichloroethene	0.10	0.10	0.92	0.92
Toluene	0.10	0.094	0.82	0.77
m,p-Xylene	0.10	0.099	0.29	0.29



Air Toxics

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

Client Sample ID: Rooftop- 1st Flr Rooftop HVAC

Lab ID#: 2309180-10A



Air Toxics

Client Sample ID: Outside Alley

Lab ID#: 2309180-01A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091316sim	Date of Collection:	9/8/23 10:03:00 AM	
Dil. Factor:	1.00	Date of Analysis:	9/13/23 01:22 PM	
		Date of Extraction:	9/13/23	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	0.19	0.20
Ethyl Acetate	0.40	0.36	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.26	0.23
Chloroform	0.10	0.092	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	Not Detected	Not Detected
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	0.21	0.22
Benzene	0.40	0.35	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.090	Not Detected	Not Detected
Heptane	0.10	0.12	0.19	0.22
Trichloroethene	0.10	0.10	11	11
4-Methyl-2-pentanone	0.20	0.21	Not Detected	Not Detected
Toluene	0.10	0.094	0.84	0.79
Tetrachloroethylene	0.10	0.12	Not Detected	Not Detected
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	0.11	0.11
m,p-Xylene	0.10	0.099	0.32	0.32
o-Xylene	0.10	0.11	0.10	0.11
Styrene	0.10	0.11	Not Detected	Not Detected
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	0.18	0.24
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14403 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130



Air Toxics

Client Sample ID: Basement-Print Cage

Lab ID#: 2309180-02A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091317sim	Date of Collection:	9/8/23 9:53:00 AM	
Dil. Factor:	1.00	Date of Analysis:	9/13/23 01:49 PM	
		Date of Extraction:	9/13/23	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	1.1	0.77
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	0.45	0.48
Ethyl Acetate	0.40	0.36	0.40	0.36
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	1.0	0.88
Chloroform	0.10	0.092	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	Not Detected	Not Detected
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	0.32	0.33
Benzene	0.40	0.35	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.090	0.20	0.18
Heptane	0.10	0.12	0.73	0.88
Trichloroethene	0.10	0.10	3.7	3.8
4-Methyl-2-pentanone	0.20	0.21	0.38	0.40
Toluene	0.10	0.094	2.6	2.4
Tetrachloroethylene	0.10	0.12	0.11	0.13
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	0.25	0.26
m,p-Xylene	0.10	0.099	0.86	0.85
o-Xylene	0.10	0.11	0.23	0.25
Styrene	0.10	0.11	0.17	0.20
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	Not Detected	Not Detected
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14406 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130



Air Toxics

Client Sample ID: 1st Flr-NW Office

Lab ID#: 2309180-03A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091318sim	Date of Collection:	9/8/23 9:31:00 AM	
Dil. Factor:	1.00	Date of Analysis:	9/13/23 02:16 PM	
		Date of Extraction:	9/13/23	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	0.22	0.23
Ethyl Acetate	0.40	0.36	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.47	0.42
Chloroform	0.10	0.093	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	Not Detected	Not Detected
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	0.20	0.21
Benzene	0.40	0.35	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.090	Not Detected	Not Detected
Heptane	0.10	0.12	0.18	0.21
Trichloroethene	0.10	0.10	1.7	1.7
4-Methyl-2-pentanone	0.20	0.21	Not Detected	Not Detected
Toluene	0.10	0.094	1.1	1.0
Tetrachloroethylene	0.10	0.12	Not Detected	Not Detected
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	0.10	0.11
m,p-Xylene	0.10	0.099	0.31	0.31
o-Xylene	0.10	0.11	0.10	0.11
Styrene	0.10	0.11	0.11	0.12
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	Not Detected	Not Detected
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14396 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130



Air Toxics

Client Sample ID: 1st Flr- Gallery

Lab ID#: 2309180-04A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091319sim	Date of Collection:	9/8/23 9:37:00 AM	
Dil. Factor:	1.00	Date of Analysis:	9/13/23 02:43 PM	
		Date of Extraction:	9/13/23	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	0.26	0.28
Ethyl Acetate	0.40	0.36	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.54	0.47
Chloroform	0.10	0.093	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	Not Detected	Not Detected
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	0.24	0.24
Benzene	0.40	0.35	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.090	Not Detected	Not Detected
Heptane	0.10	0.12	0.22	0.26
Trichloroethene	0.10	0.10	1.7	1.7
4-Methyl-2-pentanone	0.20	0.21	Not Detected	Not Detected
Toluene	0.10	0.094	1.7	1.6
Tetrachloroethylene	0.10	0.12	Not Detected	Not Detected
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	0.15	0.15
m,p-Xylene	0.10	0.099	0.44	0.44
o-Xylene	0.10	0.11	0.13	0.13
Styrene	0.10	0.11	Not Detected	Not Detected
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	Not Detected	Not Detected
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14398 minutes.

Container Type: Radiello 130 (Solvent)

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



Air Toxics

Client Sample ID: 1st Flr- Rear Cage

Lab ID#: 2309180-05A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091320sim	Date of Collection:	9/8/23 9:58:00 AM	
Dil. Factor:	1.00	Date of Analysis:	9/13/23 03:10 PM	
		Date of Extraction:	9/13/23	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	0.31	0.33
Ethyl Acetate	0.40	0.36	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.77	0.68
Chloroform	0.10	0.092	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	0.11	0.12
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	0.27	0.28
Benzene	0.40	0.35	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.090	Not Detected	Not Detected
Heptane	0.10	0.12	0.28	0.34
Trichloroethene	0.10	0.10	1.9	1.9
4-Methyl-2-pentanone	0.20	0.21	Not Detected	Not Detected
Toluene	0.10	0.094	2.7	2.5
Tetrachloroethylene	0.10	0.12	Not Detected	Not Detected
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	0.22	0.23
m,p-Xylene	0.10	0.099	0.57	0.56
o-Xylene	0.10	0.11	0.14	0.15
Styrene	0.10	0.11	Not Detected	Not Detected
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	Not Detected	Not Detected
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14416 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130



Air Toxics

Client Sample ID: 1st Flr- West Stair Exit Door

Lab ID#: 2309180-06A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091321sim	Date of Collection:	9/8/23 9:41:00 AM	
Dil. Factor:	1.00	Date of Analysis:	9/13/23 03:36 PM	
		Date of Extraction:	9/13/23	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	0.27	0.29
Ethyl Acetate	0.40	0.36	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.56	0.50
Chloroform	0.10	0.093	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	Not Detected	Not Detected
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	0.24	0.25
Benzene	0.40	0.35	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.090	Not Detected	Not Detected
Heptane	0.10	0.12	0.23	0.27
Trichloroethene	0.10	0.10	5.5	5.5
4-Methyl-2-pentanone	0.20	0.21	Not Detected	Not Detected
Toluene	0.10	0.094	1.4	1.3
Tetrachloroethylene	0.10	0.12	Not Detected	Not Detected
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	0.13	0.13
m,p-Xylene	0.10	0.099	0.40	0.40
o-Xylene	0.10	0.11	0.12	0.13
Styrene	0.10	0.11	0.10	0.12
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	Not Detected	Not Detected
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14396 minutes.

Container Type: Radiello 130 (Solvent)

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



Air Toxics

Client Sample ID: 2nd Flr- Mother's Room

Lab ID#: 2309180-07A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091322sim	Date of Collection:	9/8/23 10:18:00 AM	
Dil. Factor:	1.00	Date of Analysis:	9/13/23 04:03 PM	
		Date of Extraction:	9/13/23	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	0.28	0.29
Ethyl Acetate	0.40	0.36	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.45	0.40
Chloroform	0.10	0.092	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	Not Detected	Not Detected
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	0.21	0.22
Benzene	0.40	0.35	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.090	Not Detected	Not Detected
Heptane	0.10	0.12	0.18	0.21
Trichloroethene	0.10	0.10	2.3	2.4
4-Methyl-2-pentanone	0.20	0.21	Not Detected	Not Detected
Toluene	0.10	0.094	1.5	1.4
Tetrachloroethylene	0.10	0.12	Not Detected	Not Detected
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	Not Detected	Not Detected
m,p-Xylene	0.10	0.099	0.25	0.25
o-Xylene	0.10	0.11	Not Detected	Not Detected
Styrene	0.10	0.11	0.12	0.13
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	Not Detected	Not Detected
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14410 minutes.

Container Type: Radiello 130 (Solvent)

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



Air Toxics

Client Sample ID: 2nd Flr- Nursery

Lab ID#: 2309180-08A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091323sim	Date of Collection:	9/8/23 10:15:00 AM	
Dil. Factor:	1.00	Date of Analysis:	9/13/23 04:30 PM	
		Date of Extraction:	9/13/23	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	0.33	0.35
Ethyl Acetate	0.40	0.36	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.48	0.42
Chloroform	0.10	0.092	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	Not Detected	Not Detected
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	0.24	0.24
Benzene	0.40	0.35	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.090	Not Detected	Not Detected
Heptane	0.10	0.12	0.19	0.23
Trichloroethene	0.10	0.10	2.8	2.8
4-Methyl-2-pentanone	0.20	0.21	Not Detected	Not Detected
Toluene	0.10	0.094	1.5	1.4
Tetrachloroethylene	0.10	0.12	Not Detected	Not Detected
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	Not Detected	Not Detected
m,p-Xylene	0.10	0.099	0.25	0.25
o-Xylene	0.10	0.11	Not Detected	Not Detected
Styrene	0.10	0.11	0.10	0.12
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	Not Detected	Not Detected
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14404 minutes.

Container Type: Radiello 130 (Solvent)

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



Air Toxics

Client Sample ID: 2nd Flr- East Conf Room

Lab ID#: 2309180-09A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091324sim	Date of Collection:	9/8/23 10:07:00 AM	
Dil. Factor:	1.00	Date of Analysis:	9/13/23 04:57 PM	
Date of Extraction: 9/13/23				
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	0.37	0.39
Ethyl Acetate	0.40	0.36	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.52	0.46
Chloroform	0.10	0.092	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	Not Detected	Not Detected
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	0.25	0.26
Benzene	0.40	0.35	0.41	0.35
1,2-Dichloroethane	0.10	0.090	Not Detected	Not Detected
Heptane	0.10	0.12	0.17	0.21
Trichloroethene	0.10	0.10	3.2	3.2
4-Methyl-2-pentanone	0.20	0.21	Not Detected	Not Detected
Toluene	0.10	0.094	2.0	1.9
Tetrachloroethylene	0.10	0.12	Not Detected	Not Detected
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	Not Detected	Not Detected
m,p-Xylene	0.10	0.099	0.25	0.25
o-Xylene	0.10	0.11	Not Detected	Not Detected
Styrene	0.10	0.11	Not Detected	Not Detected
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	Not Detected	Not Detected
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14405 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130



Air Toxics

Client Sample ID: Rooftop- 1st Flr Rooftop HVAC

Lab ID#: 2309180-10A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091325sim	Date of Collection:	9/8/23 10:11:00 AM	
Dil. Factor:	1.00	Date of Analysis:	9/13/23 05:24 PM	
		Date of Extraction:	9/13/23	
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	0.26	0.27
Ethyl Acetate	0.40	0.36	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	0.32	0.28
Chloroform	0.10	0.092	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	Not Detected	Not Detected
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	0.26	0.26
Benzene	0.40	0.35	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.090	Not Detected	Not Detected
Heptane	0.10	0.12	0.20	0.24
Trichloroethene	0.10	0.10	0.92	0.92
4-Methyl-2-pentanone	0.20	0.21	Not Detected	Not Detected
Toluene	0.10	0.094	0.82	0.77
Tetrachloroethylene	0.10	0.12	Not Detected	Not Detected
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	Not Detected	Not Detected
m,p-Xylene	0.10	0.099	0.29	0.29
o-Xylene	0.10	0.11	Not Detected	Not Detected
Styrene	0.10	0.11	Not Detected	Not Detected
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	Not Detected	Not Detected
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14406 minutes.

Container Type: Radiello 130 (Solvent)

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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2309180-11A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091309sim	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/13/23 10:08 AM		
		Date of Extraction: 9/13/23		
Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Ethanol	1.0	0.68	Not Detected	Not Detected
Methyl tert-butyl ether	0.10	0.11	Not Detected	Not Detected
Hexane	0.10	0.10	Not Detected	Not Detected
Ethyl Acetate	0.40	0.36	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.20	0.18	Not Detected	Not Detected
Chloroform	0.10	0.092	Not Detected	Not Detected
1,1,1-Trichloroethane	0.10	0.11	Not Detected	Not Detected
Cyclohexane	0.10	0.13	Not Detected	Not Detected
Carbon Tetrachloride	0.10	0.10	Not Detected	Not Detected
Benzene	0.40	0.35	Not Detected	Not Detected
1,2-Dichloroethane	0.10	0.090	Not Detected	Not Detected
Heptane	0.10	0.12	Not Detected	Not Detected
Trichloroethene	0.10	0.10	Not Detected	Not Detected
4-Methyl-2-pentanone	0.20	0.21	Not Detected	Not Detected
Toluene	0.10	0.094	Not Detected	Not Detected
Tetrachloroethylene	0.10	0.12	Not Detected	Not Detected
Chlorobenzene	0.10	0.10	Not Detected	Not Detected
Ethyl Benzene	0.10	0.10	Not Detected	Not Detected
m,p-Xylene	0.10	0.099	Not Detected	Not Detected
o-Xylene	0.10	0.11	Not Detected	Not Detected
Styrene	0.10	0.11	Not Detected	Not Detected
Propylbenzene	0.10	0.12	Not Detected	Not Detected
1,4-Dichlorobenzene	0.10	0.14	Not Detected	Not Detected
Naphthalene	0.10	0.28	Not Detected	Not Detected

Temperature = 77.0F , duration time = 14416 minutes.

Container Type: Radiello 130 (Solvent)

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2309180-12A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091302sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/13/23 06:55 AM
		Date of Extraction: NA

Compound	%Recovery
Ethanol	97
Methyl tert-butyl ether	111
Hexane	106
Ethyl Acetate	106
2-Butanone (Methyl Ethyl Ketone)	103
Chloroform	107
1,1,1-Trichloroethane	108
Cyclohexane	99
Carbon Tetrachloride	109
Benzene	98
1,2-Dichloroethane	115
Heptane	100
Trichloroethene	99
4-Methyl-2-pentanone	103
Toluene	99
Tetrachloroethylene	96
Chlorobenzene	98
Ethyl Benzene	96
m,p-Xylene	97
o-Xylene	97
Styrene	98
Propylbenzene	100
1,4-Dichlorobenzene	92
Naphthalene	77

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 2309180-13A

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091304sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/13/23 07:52 AM
		Date of Extraction: 9/13/23
Compound	%Recovery	Method Limits
Ethanol	50	50-130
Methyl tert-butyl ether	94	70-130
Hexane	94	70-130
Ethyl Acetate	89	70-130
2-Butanone (Methyl Ethyl Ketone)	80	70-130
Chloroform	90	70-130
1,1,1-Trichloroethane	97	70-130
Cyclohexane	92	70-130
Carbon Tetrachloride	98	70-130
Benzene	87	70-130
1,2-Dichloroethane	99	70-130
Heptane	95	70-130
Trichloroethene	93	70-130
4-Methyl-2-pentanone	91	70-130
Toluene	93	70-130
Tetrachloroethylene	90	70-130
Chlorobenzene	86	70-130
Ethyl Benzene	93	70-130
m,p-Xylene	90	70-130
o-Xylene	87	70-130
Styrene	61	20-100
Propylbenzene	94	70-130
1,4-Dichlorobenzene	75	50-110
Naphthalene	18	5-80

Container Type: NA - Not Applicable

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



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2309180-13AA

VOCS BY PASSIVE SAMPLER - GC/MS

File Name:	18091305sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/13/23 08:19 AM
		Date of Extraction: 9/13/23
Compound	%Recovery	Method Limits
Ethanol	64	50-130
Methyl tert-butyl ether	112	70-130
Hexane	106	70-130
Ethyl Acetate	104	70-130
2-Butanone (Methyl Ethyl Ketone)	94	70-130
Chloroform	102	70-130
1,1,1-Trichloroethane	107	70-130
Cyclohexane	98	70-130
Carbon Tetrachloride	105	70-130
Benzene	92	70-130
1,2-Dichloroethane	109	70-130
Heptane	98	70-130
Trichloroethene	96	70-130
4-Methyl-2-pentanone	93	70-130
Toluene	93	70-130
Tetrachloroethylene	89	70-130
Chlorobenzene	85	70-130
Ethyl Benzene	91	70-130
m,p-Xylene	90	70-130
o-Xylene	86	70-130
Styrene	60	20-100
Propylbenzene	92	70-130
1,4-Dichlorobenzene	75	50-110
Naphthalene	18	5-80

Container Type: NA - Not Applicable

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