



STATE OF WASHINGTON  
**DEPARTMENT OF ECOLOGY**

Eastern Region Office

4601 North Monroe St., Spokane, WA 99205-1295 • 509-329-3400

September 24, 2024

Sam Rudnick  
Reata Ranches LLC  
186 Vinehill Road  
Walla Walla, WA 99362

**Re: Indoor Air Sampling Results for 106 N 2<sup>nd</sup> Street Walla Walla, WA:**

Dear Sam Rudnick:

The Department of Ecology (Ecology) completed indoor air sampling in your office building located at 106 N 2<sup>nd</sup> Street (106 Building) in Walla Walla, WA in order to evaluate the current indoor air condition resulting from the petroleum release from the [Stillwater Holdings Chevron](#) located at 7 E Rose St in Walla Walla, WA (Cleanup Site ID 16913).

**Summary of work performed**

On August 16, 2024, Ecology collected four indoor air samples and a duplicate at the 106 Building to identify vapor intrusion contamination concentrations in the building. Samples were collected in 6-liter summa canisters on an 8-hour time integrated sample (between the hours of 7:30 and 15:30). Samples were collected adjacent to the sump and an office selected on each floor of the building. Sample identification is as follows:

- Adjacent to the basement sump 106-SumpRm-081624
- Basement office: 106-basement-081624
- 1<sup>st</sup> floor office: 106-floor1-081624
- 2nd floor office: 106-floor2-081624
- Duplicate sample collected next to the sump sample: 106-Sumpdup-081624

Summa canisters were shipped to Eurofins Air Toxics in Sacramento, California and analyzed for volatile organic compounds (VOCs) by Environmental Protection Agency (EPA) Method Modified TO-15. Results are compared to Model Toxics Control Act (MTCA) vapor intrusion cleanup levels in the attached table.

## Recommendations

- If the building is used as an office space with no children present on a regular basis, and there are no overnight residents, MTCA Method C vapor intrusion screening levels would likely be appropriate to screen indoor air sample results against. If children are to be present or tenants are proposed to be present at durations greater than 8 hours the more stringent MTCA Method B vapor intrusion screen level may need to be applied.
- In the future, Ecology recommends that when indoor air is sampled, subslab or crawl space air and upwind outdoor air should also be sampled. It is important to be able to compare these concentrations to ensure proper characterization of the site.
- Indoor air sampling events should be conducted over multiple events in different seasons and ensure the worst-case vapor intrusion scenario is captured. At least one sampling event should take place when the temperature difference between indoor air and outdoor air is at least 30 degrees Fahrenheit and the temperature is falling. Please see Ecology's March 2022 "[Guidance for Evaluating Vapor Intrusion in Washington State](#)".
- It will be important to account for potential future exposures such as movement of groundwater, especially if the plume is not stable and if there are any changes to building conditions that could cause preferential pathways to be present.
- There is currently a temporary system installed at the sump that is actively removing vapors. If operation were to cease, indoor air concentrations may not be protective for occupants. In this site-specific case, having the sump sealed and a permanent treatment system installed would likely be protective.


After you have an opportunity to review our recommendations and evaluate the initial data, Ecology would welcome the opportunity to meet with you to discuss potential next steps. Should you have any questions regarding this project, please contact me at either by phone (509) 385-5443 or email at [Beth.Kercher@ecy.wa.gov](mailto:Beth.Kercher@ecy.wa.gov).

Sincerely,



Elizabeth P. Kercher  
LUST Site Manager  
ERO Toxics Cleanup Program

Sam Rudnick  
September 24, 2024  
Page 2 of 2

cc: Nicholas Acklam, Ecology   
Yancy Meyer, BMEC  
Ecology Site file

Encl (2): Indoor Air Sample Results Table  
Lab Report

**Indoor Air Sample Results  
106 N 2nd Street Building  
Walla Walla, WA**

	VI Method B Indoor Air Cancer	VI Method B Indoor Air NonCancer	VI Method C Cancer	VI Method C NonCancer	106-floor1-081624	106-floor2-081624	106-basement-081624	106-SumpRm-081624	106-Sumpdup-081624
Benzene	0.32	13.71	3.21	30	0.50	0.45	1.20	5.30	3.90
Toluene	NE	nc2	NE	nc2	3.1	2.6	5.8	25	18
Ethylbenzene	NE	nc2	NE	nc2	1.0	0.80	1.6	6.3	4.7
m,p-xylenes	NE	NE	NE	NE	6.7	5.4	9.8	38	28
o-xylenes	NE	NE	NE	NE	4.0	3.0	5.8	22	17
total-xylenes	NE	nc2	NE	nc2	10.7	8.4	15.6	60	45
Ethanol	NE	NE	NE	NE	35	18	20	23	25
Freon 11	NE	NE	NE	NE	1.3	1.3	1.2	1.1	1.2
Freon 12	NE	NE	NE	NE	2.2	2.2	2.2	2.2	2.2
Acetone	NE	NE	NE	NE	23	20	19	21	21
2-Propanol	NE	NE	NE	NE	56	17	19	20	22
4-Ethyltoluene	NE	NE	NE	NE	4.6	1.4	2.2	6.2	5.2
1,3,5-Trimethylbenzene	NE	27.43	NE	60	2.0	1.7	2.8	11	8.7
1,2,4-Trimethylbenzene	NE	27.43	NE	60	5.4	4.8	6.5	23	19.0
Chloroform	0.11	44.80	1.09	98	0.17	<0.14*	0.21	0.58	0.47
Carbon Tetrachloride	0.42	45.71	4.17	100	0.41	0.40	0.41	0.41	0.40
Methylene Chloride	65.79	274.29	2500	600	<1.0	<1.0	0.98	<0.96	2.2
Hexane	NE	nc2	NE	nc2	<2.6	<2.5	4.6	21	14
Cyclohexane	NE	2742.86	NE	6000	<2.5	<2.5	6.9	36	25
2,2,4-Trimethylpentane	NE	NE	NE	NE	<3.4	<3.4	9.2	39	28
Heptane	NE	182.86	NE	400	<3.0	<3.0	5.4	15	10
Propylbenzene	NE	457.14	NE	1000	<0.72	<0.71	0.69	1.8	1.5
2-Butanone (Methyl Ethyl Ketone)	NE	2285.71	NE	5000	<2.2	2.9	<2.0	2.0	2.4
Cumene	NE	182.86	NE	400	<0.72	<0.71	<0.68	0.72	<0.69

- VI = vapor intrusion
- All results in µg/m<sup>3</sup>
- nc2 = non-cancer driver qualification - applicable only if singular constituent and not part of petroleum mixture.
- NE = not established
- <3.0 = less than laboratory detection limit
- 2.9 = concentration result above laboratory detection limits, below established CULs
- 0.50 = above Method B cancer driven VI CUL
- 0.50 = above Method B non-cancer driven VI CUL
- 0.50 = above Method C cancer driven VI CUL
- 0.50 = above Method C non-cancer driven VI CUL
- <0.14\* = laboratory detection limit is above Method CUL

8/23/2024

Ms. Beth Kercher

Washington State Dept. of Ecology

4601 N. Monroe Street

Spokane WA 99205

Project Name: Stillwater Holdings

Project #: Chevron 16913

Workorder #: 2408450

Dear Ms. Beth Kercher

The following report includes the data for the above referenced project for sample(s) received on 8/19/2024 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: Monica Tran at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Monica Tran

Project Manager

**WORK ORDER #: 2408450**

Work Order Summary

<b>CLIENT:</b>	Ms. Beth Kercher Washington State Dept. of Ecology 4601 N. Monroe Street Spokane, WA 99205	<b>BILL TO:</b>	Accounts Payable Washington State Dept. of Ecology PO Box 47612 Accounts Payable Olympia, WA 98504-7612
<b>PHONE:</b>		<b>P.O. #</b>	25-22938
<b>FAX:</b>		<b>PROJECT #</b>	Chevron 16913 Stillwater Holdings
<b>DATE RECEIVED:</b>	08/19/2024	<b>CONTACT:</b>	Monica Tran
<b>DATE COMPLETED:</b>	08/23/2024		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	106-floor1-081624	Modified TO-15	6.9 "Hg	1.9 psi
01B	106-floor1-081624	Modified TO-15	6.9 "Hg	1.9 psi
02A	106-floor2-081624	Modified TO-15	6.7 "Hg	1.8 psi
02B	106-floor2-081624	Modified TO-15	6.7 "Hg	1.8 psi
03A	106-basement-081624	Modified TO-15	5.5 "Hg	1.9 psi
03B	106-basement-081624	Modified TO-15	5.5 "Hg	1.9 psi
04A	106-SumpRm-081624	Modified TO-15	5.5 "Hg	1.9 psi
04B	106-SumpRm-081624	Modified TO-15	5.5 "Hg	1.9 psi
05A	106-Sumpdup-081624	Modified TO-15	6.1 "Hg	1.8 psi
05B	106-Sumpdup-081624	Modified TO-15	6.1 "Hg	1.8 psi
06A	Lab Blank	Modified TO-15	NA	NA
06B	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA
07B	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA
08AA	LCSD	Modified TO-15	NA	NA
08B	LCS	Modified TO-15	NA	NA
08BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:   
 \_\_\_\_\_  
 Technical Director

DATE: 08/23/24

Cert. No.: AZ Licensure-AZ0775, FL NELAP-E87680, LA NELAP-02089, MN NELAP-2703122, NH NELAP-209223-B, NJ NELAP-CA016, NY NELAP-11291, TX NELAP-T104704434, UT NELAP-CA009332023-16, VA NELAP-12695, WA NELAP-C935  
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-20  
 Eurofins Environment Testing Northern California, LLC certifies that the test results contained in this report meet all requirements of the 2016 TNI Standard.

**LABORATORY NARRATIVE  
Modified TO-15 Full Scan/SIM  
Washington State Dept. of Ecology  
Workorder# 2408450**

Five 6 Liter Summa Canister (100% SIM Ambient) samples were received on August 19, 2024. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan and SIM acquisition modes. The method involves concentrating up to 1.0 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
ICAL %RSD acceptance criteria	$\leq 30\%$ RSD with 2 compounds allowed out to $< 40\%$ RSD	For Full Scan: 30% RSD with 4 compounds allowed out to $< 40\%$ RSD  For SIM: Project specific; default criteria is $\leq 30\%$ RSD with 10% of compounds allowed out to $< 40\%$ RSD
Daily Calibration	$\pm 30\%$ Difference	For Full Scan: $\leq 30\%$ Difference with four allowed out up to $\leq 40\%$ .; flag and narrate outliers  For SIM: Project specific; default criteria is $\leq 30\%$ Difference with 10% of compounds allowed out up to $\leq 40\%$ .; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

**Receiving Notes**

The Chain of Custody (COC) information for sample 106-SumpRm-081624 did not match the information on the canister with regard to canister barcode. The sample labeled 6L27318 on the COC is labeled as 6L3400 on the canister. The client was notified of the discrepancy and the information on the canister was used to process and report the sample.

**Analytical Notes**

The results for each sample in this report were acquired from two separate data files originating from the same analytical run. The two data files have the same base file name and are differentiated with a "sim" extension on the SIM data file.

**Definition of Data Qualifying Flags**

Nine 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.

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

N - The identification is based on presumptive evidence.

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  
EPA METHOD TO-15 GC/MS SIM/FULL SCAN**

**Client Sample ID: 106-floor1-081624**

**Lab ID#: 2408450-01A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 11	0.15	0.22	0.82	1.3
Ethanol	2.9	18	5.5	35
Acetone	2.9	9.8	7.0	23
2-Propanol	2.9	23	7.2	56
4-Ethyltoluene	0.15	0.32	0.72	1.6
1,3,5-Trimethylbenzene	0.15	0.41	0.72	2.0
1,2,4-Trimethylbenzene	0.15	1.1	0.72	5.4

**Client Sample ID: 106-floor1-081624**

**Lab ID#: 2408450-01B**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.074	0.45	0.36	2.2
Chloroform	0.029	0.035	0.14	0.17
Carbon Tetrachloride	0.029	0.066	0.18	0.41
Benzene	0.074	0.16	0.23	0.50
Toluene	0.074	0.83	0.28	3.1
Ethyl Benzene	0.029	0.23	0.13	1.0
m,p-Xylene	0.059	1.6	0.26	6.7
o-Xylene	0.029	0.92	0.13	4.0

**Client Sample ID: 106-floor2-081624**

**Lab ID#: 2408450-02A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 11	0.14	0.23	0.81	1.3
Ethanol	2.9	9.6	5.4	18
Acetone	2.9	8.3	6.8	20
2-Propanol	2.9	7.0	7.1	17
2-Butanone (Methyl Ethyl Ketone)	0.72	0.99	2.1	2.9
4-Ethyltoluene	0.14	0.28	0.71	1.4
1,3,5-Trimethylbenzene	0.14	0.34	0.71	1.7
1,2,4-Trimethylbenzene	0.14	0.97	0.71	4.8

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

**Client Sample ID: 106-floor2-081624**

**Lab ID#: 2408450-02A**

**Client Sample ID: 106-floor2-081624**

**Lab ID#: 2408450-02B**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.072	0.44	0.36	2.2
Carbon Tetrachloride	0.029	0.064	0.18	0.40
Benzene	0.072	0.14	0.23	0.45
Toluene	0.072	0.68	0.27	2.6
Ethyl Benzene	0.029	0.18	0.12	0.80
m,p-Xylene	0.058	1.2	0.25	5.4
o-Xylene	0.029	0.70	0.12	3.0

**Client Sample ID: 106-basement-081624**

**Lab ID#: 2408450-03A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 11	0.14	0.21	0.78	1.2
Ethanol	2.8	11	5.2	20
Acetone	2.8	7.9	6.6	19
2-Propanol	2.8	7.9	6.8	19
Methylene Chloride	0.28	0.28	0.96	0.98
Hexane	0.69	1.3	2.4	4.6
Cyclohexane	0.69	2.0	2.4	6.9
2,2,4-Trimethylpentane	0.69	2.0	3.2	9.2
Heptane	0.69	1.3	2.8	5.4
Propylbenzene	0.14	0.14	0.68	0.69
4-Ethyltoluene	0.14	0.45	0.68	2.2
1,3,5-Trimethylbenzene	0.14	0.58	0.68	2.8
1,2,4-Trimethylbenzene	0.14	1.3	0.68	6.5

**Client Sample ID: 106-basement-081624**

**Lab ID#: 2408450-03B**

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

**Client Sample ID: 106-basement-081624**

**Lab ID#: 2408450-03B**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.069	0.44	0.34	2.2
Chloroform	0.028	0.043	0.13	0.21
Carbon Tetrachloride	0.028	0.065	0.17	0.41
Benzene	0.069	0.37	0.22	1.2
Toluene	0.069	1.5	0.26	5.8
Ethyl Benzene	0.028	0.38	0.12	1.6
m,p-Xylene	0.055	2.3	0.24	9.8
o-Xylene	0.028	1.3	0.12	5.8

**Client Sample ID: 106-SumpRm-081624**

**Lab ID#: 2408450-04A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 11	0.14	0.20	0.78	1.1
Ethanol	2.8	12	5.2	23
Acetone	2.8	9.0	6.6	21
2-Propanol	2.8	8.3	6.8	20
Hexane	0.69	5.9	2.4	21
2-Butanone (Methyl Ethyl Ketone)	0.69	0.69	2.0	2.0
Cyclohexane	0.69	10	2.4	36
2,2,4-Trimethylpentane	0.69	8.4	3.2	39
Heptane	0.69	3.6	2.8	15
Cumene	0.14	0.15	0.68	0.72
Propylbenzene	0.14	0.38	0.68	1.8
4-Ethyltoluene	0.14	1.3	0.68	6.2
1,3,5-Trimethylbenzene	0.14	2.3	0.68	11
1,2,4-Trimethylbenzene	0.14	4.7	0.68	23

**Client Sample ID: 106-SumpRm-081624**

**Lab ID#: 2408450-04B**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.069	0.45	0.34	2.2

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

**Client Sample ID: 106-SumpRm-081624**

**Lab ID#: 2408450-04B**

Chloroform	0.028	0.12	0.13	0.58
Carbon Tetrachloride	0.028	0.066	0.17	0.41
Benzene	0.069	1.7	0.22	5.3
Toluene	0.069	6.6	0.26	25
Ethyl Benzene	0.028	1.4	0.12	6.3
m,p-Xylene	0.055	8.7	0.24	38
o-Xylene	0.028	5.2	0.12	22

**Client Sample ID: 106-Sumpdup-081624**

**Lab ID#: 2408450-05A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.14	0.22	0.79	1.2
Ethanol	2.8	13	5.3	25
Acetone	2.8	8.8	6.7	21
2-Propanol	2.8	9.0	6.9	22
Methylene Chloride	0.28	0.63	0.98	2.2
Hexane	0.70	4.0	2.5	14
2-Butanone (Methyl Ethyl Ketone)	0.70	0.80	2.1	2.4
Cyclohexane	0.70	7.3	2.4	25
2,2,4-Trimethylpentane	0.70	6.0	3.3	28
Heptane	0.70	2.5	2.9	10
Propylbenzene	0.14	0.31	0.69	1.5
4-Ethyltoluene	0.14	1.1	0.69	5.2
1,3,5-Trimethylbenzene	0.14	1.8	0.69	8.7
1,2,4-Trimethylbenzene	0.14	3.9	0.69	19

**Client Sample ID: 106-Sumpdup-081624**

**Lab ID#: 2408450-05B**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.070	0.44	0.35	2.2
Chloroform	0.028	0.097	0.14	0.47
Carbon Tetrachloride	0.028	0.064	0.18	0.40

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

**Client Sample ID: 106-Sumpdup-081624**

**Lab ID#: 2408450-05B**

Benzene	0.070	1.2	0.22	3.9
Toluene	0.070	4.7	0.26	18
Ethyl Benzene	0.028	1.1	0.12	4.7
m,p-Xylene	0.056	6.5	0.24	28
o-Xylene	0.028	3.9	0.12	17
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Air Toxics

Client Sample ID: 106-floor1-081624

Lab ID#: 2408450-01A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082221	Date of Collection:	8/16/24 3:25:00 PM
Dil. Factor:	1.47	Date of Analysis:	8/22/24 11:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.15	Not Detected	0.32	Not Detected
Bromomethane	7.4	Not Detected	28	Not Detected
Freon 11	0.15	0.22	0.82	1.3
Ethanol	2.9	18	5.5	35
Freon 113	0.15	Not Detected	1.1	Not Detected
Acetone	2.9	9.8	7.0	23
2-Propanol	2.9	23	7.2	56
Carbon Disulfide	0.74	Not Detected	2.3	Not Detected
3-Chloropropene	0.74	Not Detected	2.3	Not Detected
Methylene Chloride	0.29	Not Detected	1.0	Not Detected
Hexane	0.74	Not Detected	2.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.74	Not Detected	2.2	Not Detected
Tetrahydrofuran	0.74	Not Detected	2.2	Not Detected
Cyclohexane	0.74	Not Detected	2.5	Not Detected
2,2,4-Trimethylpentane	0.74	Not Detected	3.4	Not Detected
Heptane	0.74	Not Detected	3.0	Not Detected
1,2-Dichloropropane	0.15	Not Detected	0.68	Not Detected
1,4-Dioxane	0.15	Not Detected	0.53	Not Detected
Bromodichloromethane	0.15	Not Detected	0.98	Not Detected
cis-1,3-Dichloropropene	0.15	Not Detected	0.67	Not Detected
4-Methyl-2-pentanone	0.15	Not Detected	0.60	Not Detected
trans-1,3-Dichloropropene	0.15	Not Detected	0.67	Not Detected
2-Hexanone	0.74	Not Detected	3.0	Not Detected
Dibromochloromethane	0.15	Not Detected	1.2	Not Detected
Chlorobenzene	0.15	Not Detected	0.68	Not Detected
Styrene	0.15	Not Detected	0.63	Not Detected
Bromoform	0.15	Not Detected	1.5	Not Detected
Cumene	0.15	Not Detected	0.72	Not Detected
Propylbenzene	0.15	Not Detected	0.72	Not Detected
4-Ethyltoluene	0.15	0.32	0.72	1.6
1,3,5-Trimethylbenzene	0.15	0.41	0.72	2.0
1,2,4-Trimethylbenzene	0.15	1.1	0.72	5.4
1,3-Dichlorobenzene	0.15	Not Detected	0.88	Not Detected
alpha-Chlorotoluene	0.15	Not Detected	0.76	Not Detected
1,2-Dichlorobenzene	0.15	Not Detected	0.88	Not Detected
1,2,4-Trichlorobenzene	0.74	Not Detected	5.4	Not Detected
Hexachlorobutadiene	0.74	Not Detected	7.8	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130



Air Toxics

Client Sample ID: 106-floor1-081624

Lab ID#: 2408450-01A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082221	Date of Collection: 8/16/24 3:25:00 PM
Dil. Factor:	1.47	Date of Analysis: 8/22/24 11:54 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
4-Bromofluorobenzene	108	70-130

Client Sample ID: 106-floor1-081624

Lab ID#: 2408450-01B

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082221sim	Date of Collection:	8/16/24 3:25:00 PM
Dil. Factor:	1.47	Date of Analysis:	8/22/24 11:54 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.074	0.45	0.36	2.2
Freon 114	0.029	Not Detected	0.20	Not Detected
Chloromethane	0.74	Not Detected	1.5	Not Detected
Vinyl Chloride	0.015	Not Detected	0.038	Not Detected
Chloroethane	0.074	Not Detected	0.19	Not Detected
1,1-Dichloroethene	0.015	Not Detected	0.058	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
Methyl tert-butyl ether	0.15	Not Detected	0.53	Not Detected
1,1-Dichloroethane	0.029	Not Detected	0.12	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	0.12	Not Detected
Chloroform	0.029	0.035	0.14	0.17
1,1,1-Trichloroethane	0.029	Not Detected	0.16	Not Detected
Carbon Tetrachloride	0.029	0.066	0.18	0.41
Benzene	0.074	0.16	0.23	0.50
1,2-Dichloroethane	0.029	Not Detected	0.12	Not Detected
Trichloroethene	0.029	Not Detected	0.16	Not Detected
Toluene	0.074	0.83	0.28	3.1
1,1,2-Trichloroethane	0.029	Not Detected	0.16	Not Detected
Tetrachloroethene	0.029	Not Detected	0.20	Not Detected
1,2-Dibromoethane (EDB)	0.029	Not Detected	0.22	Not Detected
Ethyl Benzene	0.029	0.23	0.13	1.0
m,p-Xylene	0.059	1.6	0.26	6.7
o-Xylene	0.029	0.92	0.13	4.0
1,1,2,2-Tetrachloroethane	0.029	Not Detected	0.20	Not Detected
1,4-Dichlorobenzene	0.029	Not Detected	0.18	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	101	70-130





Air Toxics

Client Sample ID: 106-floor2-081624

Lab ID#: 2408450-02A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082222	Date of Collection:	8/16/24 3:30:00 PM
Dil. Factor:	1.44	Date of Analysis:	8/23/24 12:26 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.14	Not Detected	0.32	Not Detected
Bromomethane	7.2	Not Detected	28	Not Detected
Freon 11	0.14	0.23	0.81	1.3
Ethanol	2.9	9.6	5.4	18
Freon 113	0.14	Not Detected	1.1	Not Detected
Acetone	2.9	8.3	6.8	20
2-Propanol	2.9	7.0	7.1	17
Carbon Disulfide	0.72	Not Detected	2.2	Not Detected
3-Chloropropene	0.72	Not Detected	2.2	Not Detected
Methylene Chloride	0.29	Not Detected	1.0	Not Detected
Hexane	0.72	Not Detected	2.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.72	0.99	2.1	2.9
Tetrahydrofuran	0.72	Not Detected	2.1	Not Detected
Cyclohexane	0.72	Not Detected	2.5	Not Detected
2,2,4-Trimethylpentane	0.72	Not Detected	3.4	Not Detected
Heptane	0.72	Not Detected	3.0	Not Detected
1,2-Dichloropropane	0.14	Not Detected	0.66	Not Detected
1,4-Dioxane	0.14	Not Detected	0.52	Not Detected
Bromodichloromethane	0.14	Not Detected	0.96	Not Detected
cis-1,3-Dichloropropene	0.14	Not Detected	0.65	Not Detected
4-Methyl-2-pentanone	0.14	Not Detected	0.59	Not Detected
trans-1,3-Dichloropropene	0.14	Not Detected	0.65	Not Detected
2-Hexanone	0.72	Not Detected	2.9	Not Detected
Dibromochloromethane	0.14	Not Detected	1.2	Not Detected
Chlorobenzene	0.14	Not Detected	0.66	Not Detected
Styrene	0.14	Not Detected	0.61	Not Detected
Bromoform	0.14	Not Detected	1.5	Not Detected
Cumene	0.14	Not Detected	0.71	Not Detected
Propylbenzene	0.14	Not Detected	0.71	Not Detected
4-Ethyltoluene	0.14	0.28	0.71	1.4
1,3,5-Trimethylbenzene	0.14	0.34	0.71	1.7
1,2,4-Trimethylbenzene	0.14	0.97	0.71	4.8
1,3-Dichlorobenzene	0.14	Not Detected	0.86	Not Detected
alpha-Chlorotoluene	0.14	Not Detected	0.74	Not Detected
1,2-Dichlorobenzene	0.14	Not Detected	0.86	Not Detected
1,2,4-Trichlorobenzene	0.72	Not Detected	5.3	Not Detected
Hexachlorobutadiene	0.72	Not Detected	7.7	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130

Client Sample ID: 106-floor2-081624

Lab ID#: 2408450-02A

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

File Name:	21082222	Date of Collection: 8/16/24 3:30:00 PM
Dil. Factor:	1.44	Date of Analysis: 8/23/24 12:26 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	107	70-130



Air Toxics

Client Sample ID: 106-floor2-081624

Lab ID#: 2408450-02B

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082222sim	Date of Collection:	8/16/24 3:30:00 PM
Dil. Factor:	1.44	Date of Analysis:	8/23/24 12:26 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.072	0.44	0.36	2.2
Freon 114	0.029	Not Detected	0.20	Not Detected
Chloromethane	0.72	Not Detected	1.5	Not Detected
Vinyl Chloride	0.014	Not Detected	0.037	Not Detected
Chloroethane	0.072	Not Detected	0.19	Not Detected
1,1-Dichloroethene	0.014	Not Detected	0.057	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected
Methyl tert-butyl ether	0.14	Not Detected	0.52	Not Detected
1,1-Dichloroethane	0.029	Not Detected	0.12	Not Detected
cis-1,2-Dichloroethene	0.029	Not Detected	0.11	Not Detected
Chloroform	0.029	Not Detected	0.14	Not Detected
1,1,1-Trichloroethane	0.029	Not Detected	0.16	Not Detected
Carbon Tetrachloride	0.029	0.064	0.18	0.40
Benzene	0.072	0.14	0.23	0.45
1,2-Dichloroethane	0.029	Not Detected	0.12	Not Detected
Trichloroethene	0.029	Not Detected	0.15	Not Detected
Toluene	0.072	0.68	0.27	2.6
1,1,2-Trichloroethane	0.029	Not Detected	0.16	Not Detected
Tetrachloroethene	0.029	Not Detected	0.20	Not Detected
1,2-Dibromoethane (EDB)	0.029	Not Detected	0.22	Not Detected
Ethyl Benzene	0.029	0.18	0.12	0.80
m,p-Xylene	0.058	1.2	0.25	5.4
o-Xylene	0.029	0.70	0.12	3.0
1,1,2,2-Tetrachloroethane	0.029	Not Detected	0.20	Not Detected
1,4-Dichlorobenzene	0.029	Not Detected	0.17	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: 106-basement-081624

Lab ID#: 2408450-03A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082223	Date of Collection:	8/16/24 3:37:00 PM
Dil. Factor:	1.38	Date of Analysis:	8/23/24 12:58 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.14	Not Detected	0.30	Not Detected
Bromomethane	6.9	Not Detected	27	Not Detected
Freon 11	0.14	0.21	0.78	1.2
Ethanol	2.8	11	5.2	20
Freon 113	0.14	Not Detected	1.0	Not Detected
Acetone	2.8	7.9	6.6	19
2-Propanol	2.8	7.9	6.8	19
Carbon Disulfide	0.69	Not Detected	2.1	Not Detected
3-Chloropropene	0.69	Not Detected	2.2	Not Detected
Methylene Chloride	0.28	0.28	0.96	0.98
Hexane	0.69	1.3	2.4	4.6
2-Butanone (Methyl Ethyl Ketone)	0.69	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.69	Not Detected	2.0	Not Detected
Cyclohexane	0.69	2.0	2.4	6.9
2,2,4-Trimethylpentane	0.69	2.0	3.2	9.2
Heptane	0.69	1.3	2.8	5.4
1,2-Dichloropropane	0.14	Not Detected	0.64	Not Detected
1,4-Dioxane	0.14	Not Detected	0.50	Not Detected
Bromodichloromethane	0.14	Not Detected	0.92	Not Detected
cis-1,3-Dichloropropene	0.14	Not Detected	0.63	Not Detected
4-Methyl-2-pentanone	0.14	Not Detected	0.56	Not Detected
trans-1,3-Dichloropropene	0.14	Not Detected	0.63	Not Detected
2-Hexanone	0.69	Not Detected	2.8	Not Detected
Dibromochloromethane	0.14	Not Detected	1.2	Not Detected
Chlorobenzene	0.14	Not Detected	0.64	Not Detected
Styrene	0.14	Not Detected	0.59	Not Detected
Bromoform	0.14	Not Detected	1.4	Not Detected
Cumene	0.14	Not Detected	0.68	Not Detected
Propylbenzene	0.14	0.14	0.68	0.69
4-Ethyltoluene	0.14	0.45	0.68	2.2
1,3,5-Trimethylbenzene	0.14	0.58	0.68	2.8
1,2,4-Trimethylbenzene	0.14	1.3	0.68	6.5
1,3-Dichlorobenzene	0.14	Not Detected	0.83	Not Detected
alpha-Chlorotoluene	0.14	Not Detected	0.71	Not Detected
1,2-Dichlorobenzene	0.14	Not Detected	0.83	Not Detected
1,2,4-Trichlorobenzene	0.69	Not Detected	5.1	Not Detected
Hexachlorobutadiene	0.69	Not Detected	7.4	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130



Air Toxics

Client Sample ID: 106-basement-081624

Lab ID#: 2408450-03A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082223	Date of Collection: 8/16/24 3:37:00 PM
Dil. Factor:	1.38	Date of Analysis: 8/23/24 12:58 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	109	70-130

Client Sample ID: 106-basement-081624

Lab ID#: 2408450-03B

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082223sim	Date of Collection:	8/16/24 3:37:00 PM
Dil. Factor:	1.38	Date of Analysis:	8/23/24 12:58 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.069	0.44	0.34	2.2
Freon 114	0.028	Not Detected	0.19	Not Detected
Chloromethane	0.69	Not Detected	1.4	Not Detected
Vinyl Chloride	0.014	Not Detected	0.035	Not Detected
Chloroethane	0.069	Not Detected	0.18	Not Detected
1,1-Dichloroethene	0.014	Not Detected	0.055	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.55	Not Detected
Methyl tert-butyl ether	0.14	Not Detected	0.50	Not Detected
1,1-Dichloroethane	0.028	Not Detected	0.11	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	0.11	Not Detected
Chloroform	0.028	0.043	0.13	0.21
1,1,1-Trichloroethane	0.028	Not Detected	0.15	Not Detected
Carbon Tetrachloride	0.028	0.065	0.17	0.41
Benzene	0.069	0.37	0.22	1.2
1,2-Dichloroethane	0.028	Not Detected	0.11	Not Detected
Trichloroethene	0.028	Not Detected	0.15	Not Detected
Toluene	0.069	1.5	0.26	5.8
1,1,2-Trichloroethane	0.028	Not Detected	0.15	Not Detected
Tetrachloroethene	0.028	Not Detected	0.19	Not Detected
1,2-Dibromoethane (EDB)	0.028	Not Detected	0.21	Not Detected
Ethyl Benzene	0.028	0.38	0.12	1.6
m,p-Xylene	0.055	2.3	0.24	9.8
o-Xylene	0.028	1.3	0.12	5.8
1,1,2,2-Tetrachloroethane	0.028	Not Detected	0.19	Not Detected
1,4-Dichlorobenzene	0.028	Not Detected	0.16	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: 106-SumpRm-081624

Lab ID#: 2408450-04A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082224	Date of Collection:	8/16/24 3:40:00 PM
Dil. Factor:	1.38	Date of Analysis:	8/23/24 01:31 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.14	Not Detected	0.30	Not Detected
Bromomethane	6.9	Not Detected	27	Not Detected
Freon 11	0.14	0.20	0.78	1.1
Ethanol	2.8	12	5.2	23
Freon 113	0.14	Not Detected	1.0	Not Detected
Acetone	2.8	9.0	6.6	21
2-Propanol	2.8	8.3	6.8	20
Carbon Disulfide	0.69	Not Detected	2.1	Not Detected
3-Chloropropene	0.69	Not Detected	2.2	Not Detected
Methylene Chloride	0.28	Not Detected	0.96	Not Detected
Hexane	0.69	5.9	2.4	21
2-Butanone (Methyl Ethyl Ketone)	0.69	0.69	2.0	2.0
Tetrahydrofuran	0.69	Not Detected	2.0	Not Detected
Cyclohexane	0.69	10	2.4	36
2,2,4-Trimethylpentane	0.69	8.4	3.2	39
Heptane	0.69	3.6	2.8	15
1,2-Dichloropropane	0.14	Not Detected	0.64	Not Detected
1,4-Dioxane	0.14	Not Detected	0.50	Not Detected
Bromodichloromethane	0.14	Not Detected	0.92	Not Detected
cis-1,3-Dichloropropene	0.14	Not Detected	0.63	Not Detected
4-Methyl-2-pentanone	0.14	Not Detected	0.56	Not Detected
trans-1,3-Dichloropropene	0.14	Not Detected	0.63	Not Detected
2-Hexanone	0.69	Not Detected	2.8	Not Detected
Dibromochloromethane	0.14	Not Detected	1.2	Not Detected
Chlorobenzene	0.14	Not Detected	0.64	Not Detected
Styrene	0.14	Not Detected	0.59	Not Detected
Bromoform	0.14	Not Detected	1.4	Not Detected
Cumene	0.14	0.15	0.68	0.72
Propylbenzene	0.14	0.38	0.68	1.8
4-Ethyltoluene	0.14	1.3	0.68	6.2
1,3,5-Trimethylbenzene	0.14	2.3	0.68	11
1,2,4-Trimethylbenzene	0.14	4.7	0.68	23
1,3-Dichlorobenzene	0.14	Not Detected	0.83	Not Detected
alpha-Chlorotoluene	0.14	Not Detected	0.71	Not Detected
1,2-Dichlorobenzene	0.14	Not Detected	0.83	Not Detected
1,2,4-Trichlorobenzene	0.69	Not Detected	5.1	Not Detected
Hexachlorobutadiene	0.69	Not Detected	7.4	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130

Client Sample ID: 106-SumpRm-081624

Lab ID#: 2408450-04A

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

File Name:	21082224	Date of Collection: 8/16/24 3:40:00 PM
Dil. Factor:	1.38	Date of Analysis: 8/23/24 01:31 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
4-Bromofluorobenzene	108	70-130





Air Toxics

Client Sample ID: 106-SumpRm-081624

Lab ID#: 2408450-04B

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082224sim	Date of Collection:	8/16/24 3:40:00 PM
Dil. Factor:	1.38	Date of Analysis:	8/23/24 01:31 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.069	0.45	0.34	2.2
Freon 114	0.028	Not Detected	0.19	Not Detected
Chloromethane	0.69	Not Detected	1.4	Not Detected
Vinyl Chloride	0.014	Not Detected	0.035	Not Detected
Chloroethane	0.069	Not Detected	0.18	Not Detected
1,1-Dichloroethene	0.014	Not Detected	0.055	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.55	Not Detected
Methyl tert-butyl ether	0.14	Not Detected	0.50	Not Detected
1,1-Dichloroethane	0.028	Not Detected	0.11	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	0.11	Not Detected
Chloroform	0.028	0.12	0.13	0.58
1,1,1-Trichloroethane	0.028	Not Detected	0.15	Not Detected
Carbon Tetrachloride	0.028	0.066	0.17	0.41
Benzene	0.069	1.7	0.22	5.3
1,2-Dichloroethane	0.028	Not Detected	0.11	Not Detected
Trichloroethene	0.028	Not Detected	0.15	Not Detected
Toluene	0.069	6.6	0.26	25
1,1,2-Trichloroethane	0.028	Not Detected	0.15	Not Detected
Tetrachloroethene	0.028	Not Detected	0.19	Not Detected
1,2-Dibromoethane (EDB)	0.028	Not Detected	0.21	Not Detected
Ethyl Benzene	0.028	1.4	0.12	6.3
m,p-Xylene	0.055	8.7	0.24	38
o-Xylene	0.028	5.2	0.12	22
1,1,2,2-Tetrachloroethane	0.028	Not Detected	0.19	Not Detected
1,4-Dichlorobenzene	0.028	Not Detected	0.16	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130

Client Sample ID: 106-Sumpdup-081624

Lab ID#: 2408450-05A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082225	Date of Collection:	8/16/24 3:41:00 PM
Dil. Factor:	1.41	Date of Analysis:	8/23/24 02:03 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.14	Not Detected	0.31	Not Detected
Bromomethane	7.0	Not Detected	27	Not Detected
Freon 11	0.14	0.22	0.79	1.2
Ethanol	2.8	13	5.3	25
Freon 113	0.14	Not Detected	1.1	Not Detected
Acetone	2.8	8.8	6.7	21
2-Propanol	2.8	9.0	6.9	22
Carbon Disulfide	0.70	Not Detected	2.2	Not Detected
3-Chloropropene	0.70	Not Detected	2.2	Not Detected
Methylene Chloride	0.28	0.63	0.98	2.2
Hexane	0.70	4.0	2.5	14
2-Butanone (Methyl Ethyl Ketone)	0.70	0.80	2.1	2.4
Tetrahydrofuran	0.70	Not Detected	2.1	Not Detected
Cyclohexane	0.70	7.3	2.4	25
2,2,4-Trimethylpentane	0.70	6.0	3.3	28
Heptane	0.70	2.5	2.9	10
1,2-Dichloropropane	0.14	Not Detected	0.65	Not Detected
1,4-Dioxane	0.14	Not Detected	0.51	Not Detected
Bromodichloromethane	0.14	Not Detected	0.94	Not Detected
cis-1,3-Dichloropropene	0.14	Not Detected	0.64	Not Detected
4-Methyl-2-pentanone	0.14	Not Detected	0.58	Not Detected
trans-1,3-Dichloropropene	0.14	Not Detected	0.64	Not Detected
2-Hexanone	0.70	Not Detected	2.9	Not Detected
Dibromochloromethane	0.14	Not Detected	1.2	Not Detected
Chlorobenzene	0.14	Not Detected	0.65	Not Detected
Styrene	0.14	Not Detected	0.60	Not Detected
Bromoform	0.14	Not Detected	1.4	Not Detected
Cumene	0.14	Not Detected	0.69	Not Detected
Propylbenzene	0.14	0.31	0.69	1.5
4-Ethyltoluene	0.14	1.1	0.69	5.2
1,3,5-Trimethylbenzene	0.14	1.8	0.69	8.7
1,2,4-Trimethylbenzene	0.14	3.9	0.69	19
1,3-Dichlorobenzene	0.14	Not Detected	0.85	Not Detected
alpha-Chlorotoluene	0.14	Not Detected	0.73	Not Detected
1,2-Dichlorobenzene	0.14	Not Detected	0.85	Not Detected
1,2,4-Trichlorobenzene	0.70	Not Detected	5.2	Not Detected
Hexachlorobutadiene	0.70	Not Detected	7.5	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130



Air Toxics

Client Sample ID: 106-Sumpdup-081624

Lab ID#: 2408450-05A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082225	Date of Collection: 8/16/24 3:41:00 PM
Dil. Factor:	1.41	Date of Analysis: 8/23/24 02:03 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
4-Bromofluorobenzene	108	70-130

Client Sample ID: 106-Sumpdup-081624

Lab ID#: 2408450-05B

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082225sim	Date of Collection:	8/16/24 3:41:00 PM
Dil. Factor:	1.41	Date of Analysis:	8/23/24 02:03 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.070	0.44	0.35	2.2
Freon 114	0.028	Not Detected	0.20	Not Detected
Chloromethane	0.70	Not Detected	1.4	Not Detected
Vinyl Chloride	0.014	Not Detected	0.036	Not Detected
Chloroethane	0.070	Not Detected	0.19	Not Detected
1,1-Dichloroethene	0.014	Not Detected	0.056	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.56	Not Detected
Methyl tert-butyl ether	0.14	Not Detected	0.51	Not Detected
1,1-Dichloroethane	0.028	Not Detected	0.11	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	0.11	Not Detected
Chloroform	0.028	0.097	0.14	0.47
1,1,1-Trichloroethane	0.028	Not Detected	0.15	Not Detected
Carbon Tetrachloride	0.028	0.064	0.18	0.40
Benzene	0.070	1.2	0.22	3.9
1,2-Dichloroethane	0.028	Not Detected	0.11	Not Detected
Trichloroethene	0.028	Not Detected	0.15	Not Detected
Toluene	0.070	4.7	0.26	18
1,1,2-Trichloroethane	0.028	Not Detected	0.15	Not Detected
Tetrachloroethene	0.028	Not Detected	0.19	Not Detected
1,2-Dibromoethane (EDB)	0.028	Not Detected	0.22	Not Detected
Ethyl Benzene	0.028	1.1	0.12	4.7
m,p-Xylene	0.056	6.5	0.24	28
o-Xylene	0.028	3.9	0.12	17
1,1,2,2-Tetrachloroethane	0.028	Not Detected	0.19	Not Detected
1,4-Dichlorobenzene	0.028	Not Detected	0.17	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2408450-06A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082207a	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	8/22/24 01:21 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.10	Not Detected	0.22	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Freon 11	0.10	Not Detected	0.56	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.10	Not Detected	0.77	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
3-Chloropropene	0.50	Not Detected	1.6	Not Detected
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
1,4-Dioxane	0.10	Not Detected	0.36	Not Detected
Bromodichloromethane	0.10	Not Detected	0.67	Not Detected
cis-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
4-Methyl-2-pentanone	0.10	Not Detected	0.41	Not Detected
trans-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
2-Hexanone	0.50	Not Detected	2.0	Not Detected
Dibromochloromethane	0.10	Not Detected	0.85	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Styrene	0.10	Not Detected	0.42	Not Detected
Bromoform	0.10	Not Detected	1.0	Not Detected
Cumene	0.10	Not Detected	0.49	Not Detected
Propylbenzene	0.10	Not Detected	0.49	Not Detected
4-Ethyltoluene	0.10	Not Detected	0.49	Not Detected
1,3,5-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,3-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
alpha-Chlorotoluene	0.10	Not Detected	0.52	Not Detected
1,2-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,2,4-Trichlorobenzene	0.50	Not Detected	3.7	Not Detected
Hexachlorobutadiene	0.50	Not Detected	5.3	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130

Client Sample ID: Lab Blank

Lab ID#: 2408450-06A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082207a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/24 01:21 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	91	70-130
4-Bromofluorobenzene	104	70-130

Client Sample ID: Lab Blank

Lab ID#: 2408450-06B

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082207sima	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	8/22/24 01:21 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.050	Not Detected	0.25	Not Detected
Freon 114	0.020	Not Detected	0.14	Not Detected
Chloromethane	0.50	Not Detected	1.0	Not Detected
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
Chloroethane	0.050	Not Detected	0.13	Not Detected
1,1-Dichloroethene	0.010	Not Detected	0.040	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
1,1-Dichloroethane	0.020	Not Detected	0.081	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Chloroform	0.020	Not Detected	0.098	Not Detected
1,1,1-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Carbon Tetrachloride	0.020	Not Detected	0.12	Not Detected
Benzene	0.050	Not Detected	0.16	Not Detected
1,2-Dichloroethane	0.020	Not Detected	0.081	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Toluene	0.050	Not Detected	0.19	Not Detected
1,1,2-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
1,2-Dibromoethane (EDB)	0.020	Not Detected	0.15	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected
1,1,2,2-Tetrachloroethane	0.020	Not Detected	0.14	Not Detected
1,4-Dichlorobenzene	0.020	Not Detected	0.12	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130

Client Sample ID: CCV

Lab ID#: 2408450-07A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082203	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/24 10:36 AM

Compound	%Recovery
1,3-Butadiene	81
Bromomethane	107
Freon 11	98
Ethanol	75
Freon 113	99
Acetone	84
2-Propanol	73
Carbon Disulfide	93
3-Chloropropene	84
Methylene Chloride	86
Hexane	83
2-Butanone (Methyl Ethyl Ketone)	84
Tetrahydrofuran	72
Cyclohexane	76
2,2,4-Trimethylpentane	82
Heptane	79
1,2-Dichloropropane	86
1,4-Dioxane	82
Bromodichloromethane	90
cis-1,3-Dichloropropene	76
4-Methyl-2-pentanone	71
trans-1,3-Dichloropropene	83
2-Hexanone	88
Dibromochloromethane	95
Chlorobenzene	96
Styrene	91
Bromoform	92
Cumene	88
Propylbenzene	91
4-Ethyltoluene	94
1,3,5-Trimethylbenzene	89
1,2,4-Trimethylbenzene	88
1,3-Dichlorobenzene	90
alpha-Chlorotoluene	93
1,2-Dichlorobenzene	90
1,2,4-Trichlorobenzene	100
Hexachlorobutadiene	104

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130





Air Toxics

Client Sample ID: CCV

Lab ID#: 2408450-07A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082203	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/24 10:36 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
4-Bromofluorobenzene	113	70-130

Client Sample ID: CCV

Lab ID#: 2408450-07B

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082203sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/24 10:36 AM

Compound	%Recovery
Freon 12	91
Freon 114	88
Chloromethane	91
Vinyl Chloride	88
Chloroethane	85
1,1-Dichloroethene	89
trans-1,2-Dichloroethene	92
Methyl tert-butyl ether	70
1,1-Dichloroethane	86
cis-1,2-Dichloroethene	91
Chloroform	78
1,1,1-Trichloroethane	85
Carbon Tetrachloride	84
Benzene	80
1,2-Dichloroethane	84
Trichloroethene	90
Toluene	88
1,1,2-Trichloroethane	92
Tetrachloroethene	88
1,2-Dibromoethane (EDB)	88
Ethyl Benzene	94
m,p-Xylene	86
o-Xylene	83
1,1,2,2-Tetrachloroethane	87
1,4-Dichlorobenzene	83

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	103	70-130

Client Sample ID: LCS

Lab ID#: 2408450-08A

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082204	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/24 11:23 AM

Compound	%Recovery	Method Limits
1,3-Butadiene	85	70-130
Bromomethane	108	70-130
Freon 11	102	70-130
Ethanol	78	70-130
Freon 113	96	70-130
Acetone	85	70-130
2-Propanol	86	70-130
Carbon Disulfide	96	70-130
3-Chloropropene	89	70-130
Methylene Chloride	88	70-130
Hexane	85	70-130
2-Butanone (Methyl Ethyl Ketone)	86	70-130
Tetrahydrofuran	74	70-130
Cyclohexane	79	70-130
2,2,4-Trimethylpentane	84	70-130
Heptane	94	70-130
1,2-Dichloropropane	97	70-130
1,4-Dioxane	88	70-130
Bromodichloromethane	89	70-130
cis-1,3-Dichloropropene	89	70-130
4-Methyl-2-pentanone	83	70-130
trans-1,3-Dichloropropene	86	70-130
2-Hexanone	92	70-130
Dibromochloromethane	95	70-130
Chlorobenzene	99	70-130
Styrene	94	70-130
Bromoform	108	70-130
Cumene	88	70-130
Propylbenzene	90	70-130
4-Ethyltoluene	94	70-130
1,3,5-Trimethylbenzene	90	70-130
1,2,4-Trimethylbenzene	89	70-130
1,3-Dichlorobenzene	90	70-130
alpha-Chlorotoluene	93	70-130
1,2-Dichlorobenzene	90	70-130
1,2,4-Trichlorobenzene	99	70-130
Hexachlorobutadiene	101	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130

Client Sample ID: LCS

Lab ID#: 2408450-08A

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

File Name:	21082204	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/24 11:23 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	111	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2408450-08AA

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082205	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/24 11:54 AM

Compound	%Recovery	Method Limits
1,3-Butadiene	86	70-130
Bromomethane	109	70-130
Freon 11	102	70-130
Ethanol	74	70-130
Freon 113	96	70-130
Acetone	89	70-130
2-Propanol	86	70-130
Carbon Disulfide	95	70-130
3-Chloropropene	88	70-130
Methylene Chloride	88	70-130
Hexane	85	70-130
2-Butanone (Methyl Ethyl Ketone)	86	70-130
Tetrahydrofuran	77	70-130
Cyclohexane	82	70-130
2,2,4-Trimethylpentane	86	70-130
Heptane	91	70-130
1,2-Dichloropropane	99	70-130
1,4-Dioxane	90	70-130
Bromodichloromethane	90	70-130
cis-1,3-Dichloropropene	91	70-130
4-Methyl-2-pentanone	86	70-130
trans-1,3-Dichloropropene	86	70-130
2-Hexanone	95	70-130
Dibromochloromethane	96	70-130
Chlorobenzene	99	70-130
Styrene	94	70-130
Bromoform	93	70-130
Cumene	89	70-130
Propylbenzene	92	70-130
4-Ethyltoluene	95	70-130
1,3,5-Trimethylbenzene	93	70-130
1,2,4-Trimethylbenzene	93	70-130
1,3-Dichlorobenzene	93	70-130
alpha-Chlorotoluene	95	70-130
1,2-Dichlorobenzene	93	70-130
1,2,4-Trichlorobenzene	123	70-130
Hexachlorobutadiene	121	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130

Client Sample ID: LCSD

Lab ID#: 2408450-08AA

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

File Name:	21082205	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/24 11:54 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	108	70-130

Client Sample ID: LCS

Lab ID#: 2408450-08B

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082204sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/24 11:23 AM

Compound	%Recovery	Method Limits
Freon 12	94	70-130
Freon 114	89	70-130
Chloromethane	97	70-130
Vinyl Chloride	95	70-130
Chloroethane	90	70-130
1,1-Dichloroethene	88	70-130
trans-1,2-Dichloroethene	94	70-130
Methyl tert-butyl ether	74	70-130
1,1-Dichloroethane	89	70-130
cis-1,2-Dichloroethene	92	70-130
Chloroform	79	70-130
1,1,1-Trichloroethane	87	70-130
Carbon Tetrachloride	88	70-130
Benzene	84	70-130
1,2-Dichloroethane	88	70-130
Trichloroethene	90	70-130
Toluene	88	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	89	70-130
1,2-Dibromoethane (EDB)	89	70-130
Ethyl Benzene	97	70-130
m,p-Xylene	88	70-130
o-Xylene	86	70-130
1,1,2,2-Tetrachloroethane	88	70-130
1,4-Dichlorobenzene	83	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	102	70-130

Client Sample ID: LCSD

Lab ID#: 2408450-08BB

EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	21082205sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/24 11:54 AM

Compound	%Recovery	Method Limits
Freon 12	93	70-130
Freon 114	89	70-130
Chloromethane	96	70-130
Vinyl Chloride	94	70-130
Chloroethane	90	70-130
1,1-Dichloroethene	88	70-130
trans-1,2-Dichloroethene	94	70-130
Methyl tert-butyl ether	75	70-130
1,1-Dichloroethane	90	70-130
cis-1,2-Dichloroethene	92	70-130
Chloroform	80	70-130
1,1,1-Trichloroethane	88	70-130
Carbon Tetrachloride	89	70-130
Benzene	84	70-130
1,2-Dichloroethane	88	70-130
Trichloroethene	90	70-130
Toluene	88	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	90	70-130
1,2-Dibromoethane (EDB)	90	70-130
Ethyl Benzene	98	70-130
m,p-Xylene	89	70-130
o-Xylene	87	70-130
1,1,2,2-Tetrachloroethane	90	70-130
1,4-Dichlorobenzene	86	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	100	70-130



**Method : \_TO-15 Hi/Lo (LL Full List)-Std 25 RLs**

<b>CAS Number</b>	<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>
75-71-8	Freon 12	0.050
76-14-2	Freon 114	0.020
74-87-3	Chloromethane	0.50
75-01-4	Vinyl Chloride	0.010
75-00-3	Chloroethane	0.050
75-35-4	1,1-Dichloroethene	0.010
156-60-5	trans-1,2-Dichloroethene	0.10
1634-04-4	Methyl tert-butyl ether	0.10
75-34-3	1,1-Dichloroethane	0.020
156-59-2	cis-1,2-Dichloroethene	0.020
67-66-3	Chloroform	0.020
71-55-6	1,1,1-Trichloroethane	0.020
56-23-5	Carbon Tetrachloride	0.020
71-43-2	Benzene	0.050
107-06-2	1,2-Dichloroethane	0.020
79-01-6	Trichloroethene	0.020
108-88-3	Toluene	0.050
79-00-5	1,1,2-Trichloroethane	0.020
127-18-4	Tetrachloroethene	0.020
106-93-4	1,2-Dibromoethane (EDB)	0.020
100-41-4	Ethyl Benzene	0.020
108-38-3	m,p-Xylene	0.040
95-47-6	o-Xylene	0.020
79-34-5	1,1,2,2-Tetrachloroethane	0.020
106-46-7	1,4-Dichlorobenzene	0.020
106-99-0	1,3-Butadiene	0.10
74-83-9	Bromomethane	5.0
75-69-4	Freon 11	0.10
64-17-5	Ethanol	2.0
76-13-1	Freon 113	0.10
67-64-1	Acetone	2.0
67-63-0	2-Propanol	2.0
75-15-0	Carbon Disulfide	0.50
107-05-1	3-Chloropropene	0.50
75-09-2	Methylene Chloride	0.20
110-54-3	Hexane	0.50
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.50
109-99-9	Tetrahydrofuran	0.50
110-82-7	Cyclohexane	0.50
540-84-1	2,2,4-Trimethylpentane	0.50
142-82-5	Heptane	0.50
78-87-5	1,2-Dichloropropane	0.10
123-91-1	1,4-Dioxane	0.10
75-27-4	Bromodichloromethane	0.10

**Method : \_TO-15 Hi/Lo (LL Full List)-Std 25 RLs**

<b>CAS Number</b>	<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>
10061-01-5	cis-1,3-Dichloropropene	0.10
108-10-1	4-Methyl-2-pentanone	0.10
10061-02-6	trans-1,3-Dichloropropene	0.10
591-78-6	2-Hexanone	0.50
124-48-1	Dibromochloromethane	0.10
108-90-7	Chlorobenzene	0.10
100-42-5	Styrene	0.10
75-25-2	Bromoform	0.10
98-82-8	Cumene	0.10
103-65-1	Propylbenzene	0.10
622-96-8	4-Ethyltoluene	0.10
108-67-8	1,3,5-Trimethylbenzene	0.10
95-63-6	1,2,4-Trimethylbenzene	0.10
541-73-1	1,3-Dichlorobenzene	0.10
100-44-7	alpha-Chlorotoluene	0.10
95-50-1	1,2-Dichlorobenzene	0.10
120-82-1	1,2,4-Trichlorobenzene	0.50
87-68-3	Hexachlorobutadiene	0.50
	<b>Surrogate</b>	<b>Method Limits</b>
17060-07-0	1,2-Dichloroethane-d4	70-130
2037-26-5	Toluene-d8	70-130
<b>460-00-4</b>	<b>4-Bromofluorobenzene</b>	<b>70-130</b>