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December 13, 2023

Christopher Maurer
Voluntary Cleanup Program ("VCP")
Washington Department of Ecology ("Ecology")
P.O. Box 47600
Olympia, WA 98504-7600

VIA E-MAIL

Re: Request for Opinion
Vapor Intrusion Assessment Report - 720 25th Ave, Seattle, WA
VCP ID: NW2009; Cleanup Site ID: 4175; Facility/Site ID: 476174
Former Cherry Cleaners
2510 E Cherry St
Seattle, Washington 98122

Dear Mr. Maurer:

On behalf of the former Cherry Street Cleaners, this letter documents an assessment of continued compliance with regard to the potential for vapor intrusion ("VI") at the Islamic School of Seattle ("ISS") pursuant to the Washington Department of Ecology ("Ecology")-approved *Cleanup Action Plan (Revision 1)* ("CAPrev1")¹ and the previous vapor intrusion assessment ("VIA") report.² The ELAM Group previously recommended continuing vapor intrusion ("VI") sampling in the south-central portion of the ISS building annually until the sub-slab soil gas ("SGss") concentrations reduce below the applicable soil gas screening levels ("SGSLs") for two consecutive events following implementation of the remedy.^{3,4} The following narrative describes the VI sampling conducted for the

¹ The ELAM Group, 2020, *Cleanup Action Plan (Revision 1)*, TO: Chris Mauer, Ecology, FROM: James Hogan, The ELAM Group, 7/30/20.

² The ELAM Group, 2022, *Vapor Intrusion Assessment Report - 720 E. 25th Ave., Seattle, WA*, TO: Christopher Mauer, Ecology, FROM: James Hogan, The ELAM Group, 4/1/22.

³ Ecology, 2022, *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action*, October 2009 (Revised February 2016, April 2018 and November 2021), Ecology: <https://fortress.wa.gov/ecy/publications/documents/0909047.pdf> (URL last verified 10/3/23).

⁴ A "reasonable worst case" VI scenario as defined by Ecology's *Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action*, dated October 2009 (revised February 2016, April 2018 and November 2021) is a period of time when the building's interior is likely to be



south-central portion of the building during March 2023, a summary of the results and an analysis of the data.

Background

The building at 720 25th Ave (“720”) is located north of the former Cherry Street Cleaners dry cleaning facility as shown on Figure 1. Cherry Street Cleaners operated at 2510 E Cherry St from 1968 to 2007. During this period, the facility handled tetrachloroethene (“PCE”), which was released to the subsurface. The constituents of concern (“COCs”) in this matter are thus associated with historical dry cleaning operations, including chlorinated volatile organic compounds (“cVOCs”) such as PCE and its daughter products trichloroethene (“TCE”), *cis*-1,2-dichloroethene (“c-DCE”), *trans*-1,2-dichloroethene (“t-DCE”) and vinyl chloride (“VC”). Several investigations and remedial activities of the COC impacts to soil, groundwater and soil gas have ensued since 2007. Details of the prior work is publicly available through Ecology’s dedicated website to this site.⁵

Specific to 720, Ecology issued an Opinion Letter (“Opinion”) on 3/6/14 with regard to the VI sampling conducted during 2012 and 2013. The VI data were compared to the Model Toxics Control Act (“MTCA”) Method B Residential Indoor Air Cleanup Levels (“IACLs”) and Soil Gas Screening Levels (“SGSLs”). The Opinion stated that the vapor intrusion pathway was incomplete at 720 for residential receptors.

On 1/5/17, Ecology requested that Cherry Cleaners once again re-assess the VI potential after receiving a call from the ISS regarding the results. Although Ecology determined that the VI pathway was incomplete, the noncompliant sub-slab soil gas (“SGss”) results dictated another VI sampling event.

On 3/16/17, VI sampling was conducted within the entire ISS building, replicating the sampling effort from 2013. The results were reported to Ecology in a VIA report, dated 12/13/17.⁶ The results indicated that VI was not occurring when comparing the SGss

“depressurized with respect to the subsurface.” This condition is common during the “heating season”, but also during periods of falling barometric pressure and during snow and/or precipitation when soil gas may preferentially migrate to the drier subsurface airspace beneath building structures.

⁵ Ecology, 2022, *Cherry Street Cleaners*, Ecology: <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=4175> (URL last accessed 10/3/23).

⁶ The ELAM Group, 2017, *Vapor Intrusion Assessment Report - 720 E. 25th Ave., Seattle, WA*, TO: Dale Myers, Ecology, FROM: James Hogan, The ELAM Group, 12/13/17.



results with the indoor air (“IA”) results directly overlying the SGss sample locations. However, a sample from a 2nd-story room in the south-central portion of the ISS building contained concentrations of PCE and TCE that exceeded Ecology’s Method B IACLs. The detection could not be rationally explained as stemming from the SGss, but rather as an unidentified source within the room itself.

On 2/28/18, VI sampling was again conducted within the ISS building, this time only in the southern portion of the building nearest the former Cherry Street Cleaners. The results were reported to Ecology in a VIA report, dated 11/7/18.⁷ The conclusion in the report indicates that the VI pathway remained below the Method B IACLs for the COCs associated with the Cherry Street Cleaners. To ensure that compliance is maintained, it was recommended that VI sampling in the south-central portion of the building be conducted annually.

On 1/27/20, VI sampling was conducted in the southern portion of the ISS building. The results were reported to Ecology in a VIA report, dated 4/29/20.⁸ Like the prior reporting, the conclusion in this report indicates that the VI pathway remained below Method B IACLs for the COCs associated with the Cherry Street Cleaners. To ensure that compliance is maintained, it was recommended that VI sampling in the south-central portion of the building be conducted annually until the SGss concentrations reduce below the applicable SGSLs for two consecutive events. Continued annual inspection and VI sampling according to observed land use was carried forward into the Ecology-approved CAPrev1.⁹

On 1/11/22, VI sampling was conducted in the southern portion of the ISS building. The results were reported to Ecology in a VIA report, dated 4/1/22.¹⁰ Like the prior reporting, the conclusion in this report indicates that the VI pathway remained below Method B IACLs for the COCs associated with the Cherry Street Cleaners. Review of the historical VI sample results for 720 indicate that PCE in the SGss samples collected from SS-2 have previously exceeded the Method B SGSL. However, the PCE concentration in the sample collected from SS-2 was lower than the SGSL during this first sampling event

⁷ The ELAM Group, 2018, *Vapor Intrusion Assessment Report - 720 E. 25th Ave., Seattle, WA*, TO: Sonia Fernandez, Ecology, FROM: James Hogan, The ELAM Group, 11/7/18.

⁸ The ELAM Group, 2020, *Vapor Intrusion Assessment Report - 720 E. 25th Ave., Seattle, WA*, TO: Christopher Mauer, Ecology, FROM: James Hogan, The ELAM Group, 4/29/20.

⁹ Ecology, 2020, *Opinion on Proposed Cleanup of the following Site*, TO: Vera Benton, Cherry Street Cleaners, FROM: Chris Maurer, Ecology, 12/8/20.

¹⁰ The ELAM Group, 2022, *Vapor Intrusion Assessment Report - 720 E. 25th Ave., Seattle, WA*, TO: Christopher Mauer, Ecology, FROM: James Hogan, The ELAM Group, 4/1/22.



following several remediation activities conducted in June 2021 within the Facility's property, removal of a heating oil tank ("HOT"), excavation of the surface soils from 0 to 2 feet below ground surface ("bgs") and *in-situ* chemical oxidation ("ISCO") from 2 to 10 feet bgs within the Facility property boundary during June of 2021.¹¹ Accordingly, the report concluded that these remediation activities have contributed to the beneficial effect on the soil gas beneath the building at 720. To ensure that compliance is maintained, it was recommended that VI sampling in the south-central portion of the building be conducted annually until the SGss concentrations reduce below the applicable SGSLs for two consecutive events.

The VI sample collection activities completed in March of 2023 continues with the annual sampling objective and inspections specified in the Ecology-approved CAPrev1. In addition, this VI sampling effort represents the second post-remedy sampling event following the previously mentioned remedies conducted in June of 2021. To address the PCE impacts deeper in the vadose zone and in the saturated zone, the CAPrev1 included installation and operation of an Ozone Injection Treatment System ("OITS"). The OITS began operation in November of 2022.¹² Hence, this sampling event also serves to monitor the effect of this ongoing remedial action on soil gas.

Procedures

On 3/15/23, chemicals housed within the ISS building were inventoried. According to the chemical inventory, paint and other building maintenance products were removed from a storage locker located in the basement. None of the chemicals removed contained cVOCs. Not less than 48 hours after the chemicals were removed, a staff scientist with The ELAM Group initiated subslab and indoor air sampling using laboratory-supplied 6-liter stainless steel Summa canisters in accordance with the Quality Assurance Project Plan - Revision 1 ("QAPPrev1"), dated 3/7/23.

One exception to the planned sampling was that SGss sample port SS-3 was inaccessible due to surface water covering the floor in this location. Consequently, SS-3 was neither accessed nor sampled.

¹¹ The ELAM Group, 2022, *Annual Report - 2510 E Cherry St, Seattle, WA*, TO: Christopher Mauer, Ecology, FROM: James Hogan, The ELAM Group, 4/5/22.

¹² The ELAM Group, 2023, *Annual Report - 2510 E Cherry St, Seattle, WA*, TO: Christopher Mauer, Ecology, FROM: James Hogan, The ELAM Group, 5/5/23.



Results

The analytical results for the VI samples collected on 3/15/23 are summarized in Table 1 and shown relative to the sample locations on Figure 2. The chemical inventory is provided in Attachment A. The sampling forms are provided in Attachment B. The laboratory analytical report, including Summa canister certifications, is provided in Attachment C.

Analysis

Cherry Street Cleaners COCs Analysis

The concentrations of the COCs associated with the former Cherry Street Cleaners in the samples from 720 all complied with Ecology's respective Method B SGSLs and IACLs. Based on these results, we have the following findings:

1. The data support the assertion that the demolition of the former Cherry Street Cleaners building is largely responsible for the release of entrapped soil gas.
2. The remedies specified in CAPrev1, including the completed soil excavation of the upper 2 feet of soil and *in-situ* chemical oxidation ("ISCO") of the vadose zone soil between 2 and 10 feet below ground surface ("bgs") as well as the ongoing ISCO with ozone in groundwater and the lower part of the vadose zone, are reducing PCE mass in the subsurface.
3. The historical PCE concentrations in the samples collected from SS-2 had consistently exceeded the Method B SGSL. This VI sample collection event represents the second post-remedy event where the PCE concentrations in the samples collected from SS-2 were below the Method B SGSL, and suggests that the above-referenced remedies contributed to a permanent reduction in concentration of PCE in soil gas.

Carbon Tetrachloride/Chloroform/Dichlorodifluoromethane Analysis

Carbon Tetrachloride ("CT") was detected in each of the seven IA samples collected from the southern portion of the building. Three of the observed concentrations of CT



exceeded the Method B IACL. CT was also detected in the two functional SGss sample ports, SS-1 and SS-2, but only exceeded the Method B SGSL in one of the samples, SS-2.

Chloroform was detected in each of the seven IA samples collected from the southern portion of the building. Each of the observed chloroform concentrations exceeded the Method B IACL. Chloroform was also detected in the two functional SGss sample ports, SS-1 and SS-2, but the reported concentrations were below the Method B SGSL.

The source of the chloroform is uncertain, and may result from a disinfection byproduct of treated water and/or result of it being a daughter product of CT. CT was commonly used as a dry-cleaning agent up through the 1940s prior to the use of PCE.¹³ Accordingly, the source of the CT could relate to a dry cleaner that operated during that time. The former Neighborhood Cleaners/Unique Cleaners building once existed between 1924 and 1965 at 2522 E Cherry St ("2522").¹⁴

As previously reported in the 4/29/20 and 4/1/22 VIA reports, an alternative source of CT may exist at the ISS by way of dichlorodifluoromethane, which is also known as Freon 12. Freon 12 was detected within all SGss and IA samples in the south section of the building. The presence of Freon 12 appears to be related to the ISS building. When manufactured, Freon 12 was produced via a reaction of CT with hydrogen fluoride in the presence of antimony chloride.^{15,16}

Cherry Street Cleaners' use of chlorinated solvent began in 1968 with PCE and remained PCE until it ceased dry-cleaning activities in 2007. Prior to 1968, the business operated as Accurate Cleaners, which used petroleum-based dry cleaning solvents instead of PCE. Therefore, we conclude that the reported detections of CT, chloroform and dichlorodifluoromethane in the samples collected from 720 are unrelated to the former operations of the Cherry Street Cleaners.

¹³ Morrison, R.D. and Murphy, B.L., 2006, *Environmental Forensics*, Elsevier: New York, New York.

¹⁴ ECC Horizon, 2014, *Remedial Investigation*.

¹⁵ USEPA, 1984, *Locating and Estimating Air Emissions from Carbon Tetrachloride*, USEPA Office of Air Quality Document No. EPA-450/4-84-007b, March 1984, USEPA: <https://www3.epa.gov/ttnchie1/le/carbtet.pdf> (URL last verified 3/10/22).

¹⁶ Urban, P., 2013, *Brethericks Handbook of Reactive Chemical Hazards*, Volume 1, Academic Press, 7th Edition.



Petroleum-Based Chemicals

Finally, the following petroleum-related compounds were detected at concentrations greater than the respective laboratory reporting limits: benzene and xylene. Of these, benzene was the only petroleum-related compound with a reported concentration that exceeded the Method B IACL. The reported concentrations for the other petroleum-related compounds were below the respective Method B IACLs and SGSLs. The observed petroleum-related compounds are unrelated to the PCE and daughter product COCs associated with the former operations of the Cherry Street Cleaners.

Summary and Recommendation

Based on the March 2023 VI sampling analytical results, The ELAM Group concludes that VI exposure pathway remained below Method B IACLs for the COCs associated with the Cherry Street Cleaners. When conjoined with the prior sampling events from 11/30/12, 11/7/13, 3/16/17, 2/28/18, 1/27/20 and 1/13/22, each of which were conducted during a “reasonable worst case” VI scenario, we have now accumulated seven consecutive data sets that suggest VI is not occurring at concentrations greater than the applicable Method B IACLs.

Review of the historical VI sample results for 720 indicate that PCE in the SGss samples collected from SS-2 have previously exceeded the Method B SGSL. During the January 2022 sample collection event, the PCE concentration in the sample collected from SS-2 was lower than the SGSL. At that point in time, we concluded that the June 2021 remediation activities, including HOT removal, soil grading and off-Site disposal, ISCO soil mixing and interim site restoration per the Ecology-approved CAPrev1, contributed to the beneficial effect on the soil gas beneath the building at 720.

To address the PCE impacts deeper in the vadose zone and in the saturated zone, the CAPrev1 included installation and operation of an OITS. The OITS began operation in November of 2022. During the March 2023 sample collection event, the PCE concentration in the sample collected from SS-2 was again lower than the SGSL. This VI sampling event being the second post-remedy event following the June 2021 remediation activities, and the first after operation of the OITS beginning in November 2022, suggests that the implemented remedies have contributed to the permanent reduction in concentrations of PCE in soil gas.



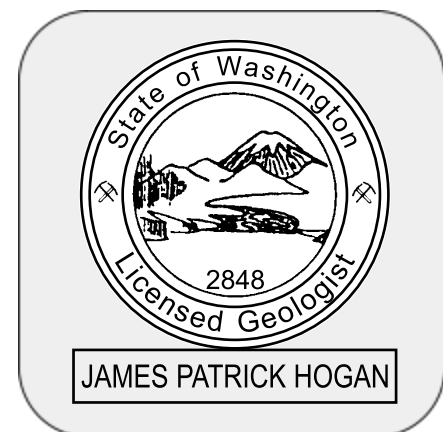
The ELAM Group previously recommended conducting VI sampling in the south-central portion of the ISS building annually until the SGss concentrations reduce below the applicable SGSs for two consecutive events following implementation of the remedy. The January 2022 and March 2023 represent the two consecutive events following remedy implementation where the SGss concentrations are below the applicable SGSs. Based on the information provided herein, The ELAM Group recommends that assessment of continued compliance with regard to the potential for VI at ISS be discontinued.

Closing

The ELAM Group requests an Opinion from Ecology for the above-referenced request for the discontinuation of VI sampling at 720 25th Ave based on meeting the criterion specified in the Ecology-approved CAPrev1 of two consecutive sampling events where concentrations. Should you have any questions with this VIA report, please contact me at (888) 510-3526 x102 or james.hogan@elamusa.com.

Sincerely,

James P. Hogan, RG





VCP No. NW2009

Project No. WAKS2510C18.5

Date: 12/13/23

Table

Table 1. Summary of Sub-Slab Soil Gas and Indoor Air VOC Results

Former Cherry Cleaners
2510 E. Cherry Street, Seattle, WA 98122
VCP ID No. NW2009

Building Location	Area / Building Floor	Sample Location	Sample ID	Date	Sample Type	Sample Container	Sample Duration (hrs)	Initial Field Can P ("Hg)	Final Field Can P ("Hg)	Analytical Method	Tetrachloro-ethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Carbon Tetrachloride	Chloroform
Chemical Abstracts Service Registry Number ("CASRN")											127-18-4	79-01-6	156-59-2	156-60-5	75-01-4	71-43-2	56-23-5	67-66-3
2023 Indoor Air Cleanup Level, Method B											9.62	0.334	18.3	18.3	0.284	0.321	0.417	0.109
2023 Indoor Air Cleanup Level, Method C											40	2	40	40	2.84	3.21	4.17	1.09
2023 Sub-Slab Soil Gas Screening Level, Method B											320	11	610	610	9.5	11	14	3.6
2023 Sub-Slab Soil Gas Screening Level, Method C											1,300	67	1,300	1,300	95	110	140	36
720 E 25th Street																		
North-West	Basement	IA-14	IA-14 ISS 720 25th Ave	11/30/12	Indoor Air	6L Summa	8.0	-28.0	-11.0	TO-15 SIM	<0.23	<0.18	<0.14	<0.68	<0.044	1.2	NT	NT
	Second Floor	IA-15	IA-15:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-6.5	TO-15 SIM	<0.22	<0.18	<0.13	<0.65	<0.042	0.36	NT	NT
	First Floor	IA-11	IA-11:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15 SIM	<0.21	<0.17	<0.12	<0.62	<0.040	0.31	NT	NT
	Basement	IA-8	IA-8:A110713	11/07/13	Indoor Air	6L Summa	8.0	-29.5	-5.5	TO-15 SIM	<0.23	<0.18	<0.13	<0.66	<0.043	0.36	NT	NT
	Basement	SS-8	SS-8:A110713	11/07/13	Sub-slab	6L Summa	8.0	-30.0	-7.0	TO-15 SIM	1.9	<0.17	<0.12	<0.61	0.083		NT	NT
	Second Floor	IA-15	IA-15:A031617	03/16/17	Indoor Air	6L Summa	8.1	-35.0	-6.0	TO-15	<1.0	<0.82	<1.2	<1.2	<0.77	1.2		
	First Floor	IA-11	IA-11:A031617	03/16/17	Indoor Air	6L Summa	8.0	-30+	-5.0	TO-15	<1.0	<0.82	<1.2	<1.2	<0.77			
	Basement	IA-8	IA-8:A031617	03/16/17	Indoor Air	6L Summa	8.0	-30+	-5.0	TO-15	<1.0	<0.82	<1.2	<1.2	<0.77			
	Basement	SS-8	SS-8:A031617	03/16/17	Sub-slab	6L Summa	8.0	-30+	-5.0	TO-15	4.3	<0.85	<1.3	<1.3	<0.81			
North-Central	Basement	IA-16	IA-16 ISS 720 25th Ave	11/30/12	Indoor Air	6L Summa	8.0	-27.5	-5.0	TO-15 SIM	<0.22	<0.18	<0.13	<0.66	<0.042	1.2	NT	NT
	Basement	IA-15	IA-15 ISS 720 25th Ave	11/30/12	Indoor Air	6L Summa		-28.5	-8.0	TO-15 SIM	0.41	<0.21	<0.16	<0.79	<0.051	1.3	NT	NT
	Second Floor	IA-14	IA-14:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-6.0	TO-15 SIM	<0.22	<0.18	<0.13	<0.65	<0.042	0.33	NT	NT
	First Floor	IA-10	IA-10:A110713	11/07/13	Indoor Air	6L Summa	8.0	-29.0	-5.0	TO-15 SIM	<0.21	<0.17	<0.12	<0.61	<0.040	0.29	NT	NT
	Basement	IA-9	IA-9:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-7.0	TO-15 SIM	<0.23	<0.18	<0.13	<0.67	<0.043	0.44	NT	NT
	Basement	SS-9	SS-9:A110713	11/07/13	Sub-slab	6L Summa	8.0	-30.0	-5.5	TO-15 SIM	4.4	<0.17	<0.13	<0.63	0.11	0.47	NT	NT
	Second Floor	IA-14	IA-14:A031617	03/16/17	Indoor Air	6L Summa	8.1	-26.0	-4.0	TO-15	<1.1	<0.85	<1.3	<1.3	<0.81			
	First Floor	IA-10	IA-10:A031617	03/16/17	Indoor Air	6L Summa	8.0	-30+	-5.0	TO-15	<1.0	<0.82	<1.2	<1.2	<0.77			
	Basement	IA-9	IA-9:A031617	03/16/17	Indoor Air	6L Summa	8.0	-26.5	-4.0	TO-15	<1.1	<0.85	<1.3	<1.3	<0.81			
	Basement	SS-9	SS-9:A031617	03/16/17	Sub-slab	6L Summa	8.0	-30+	-6.5	TO-15	4.1	<0.85	<1.3	<1.3	<0.81			5.0
	First Floor	IA-7	IA-7:A110713	11/07/13	Indoor Air	6L Summa	8.1	-30+	-6.5	TO-15	<0.21	<0.17	<0.12	<0.62	<0.040	0.34		
	First Floor	SS-7	SS-7:A110713	11/07/13	Sub-slab	6L Summa	8.1	-30.0	-5.5	TO-15	0.22	<0.16	<0.12	<0.61	<0.039			
	First Floor	IA-7	IA-7:A031617	03/16/17	Indoor Air	6L Summa	8.1	-30+	-4.0	TO-15	<0.99	<0.79	<1.2	<1.2	<0.75			
	First Floor	SS-7	SS-7:A031617	03/16/17	Sub-slab	6L Summa	8.1	-30+	-7.0	TO-15	<1.1	<0.85	<1.3	<1.3	<0.81			
Center	First Floor	IA-6	IA-6:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15 SIM	<0.21	<0.16	<0.12	<0.61	<0.039	0.37	NT	NT
	First Floor	SS-6	SS-6:A110713	11/07/13	Sub-slab	6L Summa	8.0	-30.0	-5.0	TO-15 SIM	<0.21	<0.17	<0.12	<0.62	<0.040		NT	NT
	First Floor	IA-6	IA-6:A031617	03/16/17	Indoor Air	6L Summa	8.0	-29.0	-7.5	TO-15	<0.92	<0.74	<1.1	<1.1	<0.70			
	First Floor	SS-6	SS-6:A031617	03/16/17	Sub-slab	6L Summa	8.1	-30.0	-6.0	TO-15	<2.1	<0.85	<1.3	<1.3	<0.40	0.55		
Central-South	First Floor	IA-4	IA-4:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-6.0	TO-15 SIM	<0.21	<0.17	<0.12	<0.61	<0.040	0.63	NT	NT
	First Floor	IA-5	IA-5:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-6.5	TO-15 SIM	<0.21	<0.17	<0.12	<0.63	<0.040	0.39	NT	NT
	First Floor	SS-4	SS-4:A110713	11/07/13	Sub-slab	6L Summa	8.0	-30.0	-6.5	TO-15 SIM	0.73	<0.17	<0.12	<0.62	<0.040		NT	NT
	First Floor	SS-5	SS-5:A110713	11/07/13	Sub-slab	6L Summa	8.0	-30.0	-5.0	TO-15 SIM	0.29	<0.17	<0.12	<0.62	0.072		NT	NT
	First Floor	IA-4	IA-4:A031617	03/16/17	Indoor Air	6L Summa	8.0	-29.0	-6.0	TO-15	<2.1	<0.82	<1.2	<1.2	<0.39			
	First Floor	IA-5	IA-5:A031617	03/16/17	Indoor Air	6L Summa	8.1	-30.0	-5.5	TO-15	<2.1	<0.82	<1.2	<1.2	<0.39			
	First Floor	SS-4	SS-4:A031617	03/16/17	Sub-slab	6L Summa	8.0	-30+	-5.0	TO-15	1.2	<0.82	<1.2	<1.2	<0.39	0.69		

Table 1. Summary of Sub-Slab Soil Gas and Indoor Air VOC Results

Former Cherry Cleaners
2510 E. Cherry Street, Seattle, WA 98122
VCP ID No. NW2009

Building Location	Area / Building Floor	Sample Location	Sample ID	Date	Sample Type	Sample Container	Sample Duration (hrs)	Initial Field Can P ("Hg)	Final Field Can P ("Hg)	Analytical Method	Tetrachloro-ethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Carbon Tetrachloride	Chloroform
Chemical Abstracts Service Registry Number ("CASRN")											127-18-4	79-01-6	156-59-2	156-60-5	75-01-4	71-43-2	56-23-5	67-66-3
2023 Indoor Air Cleanup Level, Method B											9.62	0.334	18.3	18.3	0.284	0.321	0.417	0.109
2023 Indoor Air Cleanup Level, Method C											40	2	40	40	2.84	3.21	4.17	1.09
2023 Sub-Slab Soil Gas Screening Level, Method B											320	11	610	610	9.5	11	14	3.6
2023 Sub-Slab Soil Gas Screening Level, Method C											1,300	67	1,300	1,300	95	110	140	36
720 E 25th Street																		
	First Floor	SS-5	SS-5:A031617	03/16/17	Sub-slab	6L Summa	8.0	-30+	-6.0	TO-15	<1.8	<0.74	<1.1	<1.1	<0.35	0.55		
South-West	Basement	IA-17	IA-17 ISS 720 25th Ave	11/30/12	Indoor Air	6L Summa	8.0	-20.0	-7.0	TO-15 SIM	0.57	<0.18	<0.13	<0.67	<0.043	1.2	NT	NT
	Basement	IA-13	IA-13 ISS 720 25th Ave	11/30/12	Indoor Air	6L Summa	8.0	-29.0	-8.0	TO-15 SIM	0.81	<0.20	<0.14	<0.72	<0.047	1.3	NT	NT
	Basement	SV-23	SV-23 ISS 720 25th Ave	11/30/12	Sub-slab	6L Summa	8.0	-28.5	-7.0	TO-15 SIM	230	<0.19	<0.14	<0.71	<0.046		NT	NT
	Basement	SV-24	SV-24 ISS 720 25th Ave	11/30/12	Sub-slab	6L Summa	8.0	-28.0	-11.0	TO-15 SIM	300	<0.26	<0.19	<0.96	<0.062	0.51	NT	NT
	Second Floor	IA-17	IA-17:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15 SIM	4.8	3.2	<0.10	<0.52	<0.033	0.48	NT	NT
	First Floor	IA-13	IA-13:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-6.0	TO-15 SIM	0.65	<0.17	<0.12	<0.62	<0.040	0.32	NT	NT
	Basement	IA-3	IA-3:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-6.5	TO-15 SIM	<0.22	<0.18	<0.13	<0.65	<0.042	0.31	NT	NT
	Basement	SS-3	SS-3:A110713	11/07/13	Sub-slab	6L Summa	8.0	-27.0	-13.5	TO-15 SIM	4.1	<0.24	<0.18	<0.88	0.49	0.95	NT	NT
	Second Floor	IA-17	IA-17:A031617	03/16/17	Indoor Air	6L Summa	7.7	-30.0	-6.0	TO-15	<2.1	<0.85	<1.3	<1.3	<0.40	0.62		
	First Floor	IA-13	IA-13:A031617	03/16/17	Indoor Air	6L Summa	8.2	-30.0	-4.0	TO-15	<2.3	<0.92	<1.4	<1.4	<0.44			
	Basement	IA-3	IA-3:A031617	03/16/17	Indoor Air	6L Summa	8.0	-30.0	-4.0	TO-15	1.0	<0.79	<1.2	<1.2	<0.37			
	Basement	SS-3	--	--	Sub-slab	--	--	--	--	--	Sample not collected because of water in sample port							
	Second Floor	IA-17	IA-17:A022818	02/28/18	Indoor Air	6L Summa	8.0	-30.0	-2.0	TO-15	0.16	0.089	<0.056	<0.056	<0.036	0.77	0.63	0.28
	First Floor	IA-13	IA-13:A022818	02/28/18	Indoor Air	6L Summa	8.0	-30.0	-2.0	TO-15	0.13	0.13	<0.058	<0.058	<0.037	0.75	0.58	2.0
	Basement	IA-3	IA-3:A022818	02/28/18	Indoor Air	6L Summa	8.0	-28.0	-3.0	TO-15	0.22	0.11	<0.062	<0.062	<0.040	0.76	0.45	0.15
	Basement	SS-3	--	--	Sub-slab	--	--	--	--	--	Sample not collected because of water in sample port							
	Second Floor	IA-17	IA-17:A012720	01/27/20	Indoor Air	6L Summa	8.0	-30.5	-15.0	TO-15	<0.16	<0.13	<0.093	<0.093	<0.060	0.54	0.25	0.49
	First Floor	IA-13	IA-13:A012720	01/27/20	Indoor Air	6L Summa	8.0	-28.0	-6.0	TO-15	<0.12	<0.093	<0.069	<0.069	<0.044	0.53	0.56	1.6
	Basement	IA-3	IA-3:A012720	01/27/20	Indoor Air	6L Summa	8.0	-30.0	-10.0	TO-15	<0.12	<0.096	<0.071	<0.071	<0.046	0.63	0.88	0.30
	Basement	SS-3	--	--	Sub-slab	--	--	--	--	--	Sample not collected because of water in sample port							
	Second Floor	IA17	IA17:A011322	01/13/22	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15	0.64	<0.074	<0.11	0.39	<0.035	0.80	0.41	0.64
	First Floor	IA13	IA13:A011322	01/13/22	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15	0.49	<0.083	<0.12	<0.12	<0.040	0.91	0.22	0.76
	Basement	IA3	IA3:A011322	01/13/22	Indoor Air	6L Summa	8.0	-30.0	-3.0	TO-15	0.25	<0.080	<0.12	<0.12	<0.038	0.77	0.26	0.16
	Basement	SS-3	--	--	Sub-slab	--	--	--	--	--	Sample not collected because of water in sample port							
	Second Floor	IA17	IA17:A031523	03/15/23	Indoor Air	6L Summa	8.0	-25.5	-3.5	TO-15 SIM	<0.17	<0.13	<0.098	<0.49	<0.032	0.38	0.42	0.44
	First Floor	IA13	IA13:A031523	03/15/23	Indoor Air	6L Summa	8.0	-27.5	-5.5	TO-15 SIM	<0.17	<0.14	<0.10	<0.51	<0.033	0.35	0.42	0.51
	Basement	IA3	IA3:A031523	03/15/23	Indoor Air	6L Summa	8.0	-27.5	-5.5	TO-15 SIM	<0.18	<0.14	<0.10	<0.52	<0.033	0.34	0.41	0.20
	Basement	SS-3	--	--	Sub-slab	--	--	--	--	--	Sample not collected because of water in sample port							
	Basement	SV-21	SV-21 ISS 720 25th Ave	11/30/12	Sub-slab	6L Summa	8.0	-29.0	-8.0	TO-15 SIM	210	1.4	<0.15	<0.75	<0.048	28	NT	NT
	Basement	SV-22	SV-22 ISS 720 25th Ave	11/30/12	Sub-slab	6L Summa	8.0	-29.5	-7.0	TO-15 SIM	240	<0.20	<0.14	<0.72	<0.047		NT	NT
	Second Floor	IA-16	IA-16:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15 SIM	<0.21	<0.17	<0.12	<0.62	<0.040	0.38	NT	NT
	First Floor	IA-12	IA-12:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-6.0	TO-15 SIM	<0.21	<0.17	<0.12	<0.62	<0.040	0.28	NT	NT
	Basement	IA-2	IA-2:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-5.5	TO-15 SIM	0.36	0.17	<0.12	<0.62	<0.040	0.31	NT	NT
	Basement	SS-2	SS-2:A110713	11/07/13	Sub-slab	6L Summa	8.0	-30.0	-6.5	TO-15 SIM	82	<0.17	<0.12	<0.62	0.10	0.33	NT	NT

Table 1. Summary of Sub-Slab Soil Gas and Indoor Air VOC Results

Former Cherry Cleaners
2510 E. Cherry Street, Seattle, WA 98122
VCP ID No. NW2009

Building Location	Area / Building Floor	Sample Location	Sample ID	Date	Sample Type	Sample Container	Sample Duration (hrs)	Initial Field Can P ("Hg)	Final Field Can P ("Hg)	Analytical Method	Tetrachloro-ethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Carbon Tetrachloride	Chloroform
Chemical Abstracts Service Registry Number ("CASRN")											127-18-4	79-01-6	156-59-2	156-60-5	75-01-4	71-43-2	56-23-5	67-66-3
2023 Indoor Air Cleanup Level, Method B											9.62	0.334	18.3	18.3	0.284	0.321	0.417	0.109
2023 Indoor Air Cleanup Level, Method C											40	2	40	40	2.84	3.21	4.17	1.09
2023 Sub-Slab Soil Gas Screening Level, Method B											320	11	610	610	9.5	11	14	3.6
2023 Sub-Slab Soil Gas Screening Level, Method C											1,300	67	1,300	1,300	95	110	140	36
720 E 25th Street																		
South-Central	Second Floor	IA-16	IA-16:A031617	03/16/17	Indoor Air	6L Summa	8.1	-30+	-6.0	TO-15	22.5	220	<1.3	<1.3	<0.40	0.62		
	First Floor	IA-12	IA-12:A031617	03/16/17	Indoor Air	6L Summa	8.0	-29.0	-5.0	TO-15	<2.2	<0.89	<1.3	<1.3	<0.42			
	Basement	IA-2	IA-2:A031617	03/16/17	Indoor Air	6L Summa	8.0	-29.0	-5.0	TO-15	<2.1	<0.85	<1.3	<1.3	<0.40			
	Basement	IA-2	FD:A031617	03/16/17	Indoor Air	6L Summa	8.0	-30+	-5.0	TO-15	<1.1	<0.85	<1.3	<1.3	<0.40	0.55		
	Basement	SS-2	SS-2:A031617	03/16/17	Sub-slab	6L Summa	8.0	-30.0	-5.5	TO-15	445	<0.89	<1.3	<1.3	<0.42	0.63	220	2.6
	Second Floor	IA-16	IA-16:A022818	02/28/18	Indoor Air	6L Summa	8.0	-30.0	-3.0	TO-15	0.13	<0.079	<0.058	<0.058	<0.037	0.73	0.61	0.23
	Second Floor	IA-16	Dup720:A022818	02/28/18	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15	0.13	0.086	<0.056	<0.056	<0.036	0.72	0.61	0.22
	First Floor	IA-12	IA-12:A022818	02/28/18	Indoor Air	6L Summa	8.0	-29.0	-10.0	TO-15	0.23	0.23	<0.074	<0.074	<0.048	0.73	0.62	0.18
	Basement	IA-2	IA-2:A022818	02/28/18	Indoor Air	6L Summa	8.0	-30.0	-4.0	TO-15	0.29	0.20	<0.062	<0.062	<0.040	0.77	0.61	0.22
	Basement	SS-2	SS-2:A022818	02/28/18	Sub-slab	6L Summa	8.0	-30.0	-2.0	TO-15	442	0.26	<0.058	<0.058	<0.037	0.24	205	2.0
	Second Floor	IA-16	IA-16:A012720	01/27/20	Indoor Air	6L Summa	8.0	-30.0	-4.0	TO-15	0.20	<0.081	<0.060	<0.060	<0.039	0.50	0.56	0.44
	Second Floor	IA-16	DuplicateIA:A012720	01/27/20	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15	0.91	<0.085	<0.062	0.11	<0.040	0.60	0.48	0.46
	First Floor	IA-12	IA-12:A012720	01/27/20	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15	0.13	<0.085	<0.062	<0.062	<0.040	0.66	0.56	0.31
	Basement	IA-2	IA-2:A012720	01/27/20	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15	0.71	<0.088	<0.065	<0.065	<0.042	0.57	0.50	1.1
	Basement	SS-2	SS-2:A012720	01/27/20	Sub-slab	6L Summa	8.0	-30.0	-9.5	TO-15	412	0.48	<0.068	0.070	<0.044	0.66	119	2.3
	Second Floor	IA16	IA16:A011322	01/13/22	Indoor Air	6L Summa	7.0	-30.0	-5.0	TO-15	0.72	<0.085	<0.12	<0.12	<0.040	0.77		0.58
	Second Floor	IA16	FD:A011322	01/13/22	Indoor Air	6L Summa	8.0	-29.0	-3.0	TO-15	0.73	<0.080	<0.12	<0.12	<0.038	0.69		0.68
	First Floor	IA12	IA12:A011322	01/13/22	Indoor Air	6L Summa	8.0	-28.0	-3.0	TO-15	0.47	<0.080	<0.12	<0.12	<0.038	0.69	0.36	0.42
	Basement	IA2	IA2:A011322	01/13/22	Indoor Air	6L Summa	8.0	-30.0	-3.0	TO-15	4.3	<0.079	<0.12	<0.12	<0.037	0.77	0.43	0.15
	Basement	SS2	SS2:A011322	01/13/22	Sub-slab	6L Summa	8.0	-30.0	-5.0	TO-15	217	0.18	<0.12	<0.12	<0.038	0.43	179	1.7
	Second Floor	IA16	IA16:A031523	03/15/23	Indoor Air	6L Summa	8.0	-28.0	-2.5	TO-15 SIM	<0.17	<0.13	<0.098	<0.49	<0.031	0.38	0.40	0.51
	Second Floor	IA16	FD:A031523	03/15/23	Indoor Air	6L Summa	8.0	-28.0	-2.5	TO-15 SIM	<0.17	<0.13	<0.098	<0.49	<0.031	0.38	0.40	0.49
	First Floor	IA12	IA12:A031523	03/15/23	Indoor Air	6L Summa	8.0	-28.0	-2.5	TO-15 SIM	<0.17	<0.13	<0.099	<0.50	<0.032	0.34	0.39	0.17
	Basement	IA2	IA2:A031523	03/15/23	Indoor Air	6L Summa	8.0	-29.0	-4.0	TO-15 SIM	0.69	<0.14	<0.10	<0.50	<0.032	0.34	0.41	0.20
	Basement	SS2	SS2:A031523	03/15/23	Sub-slab	6L Summa	8.0	-28.0	-3.5	TO-15 SIM	16	<0.14	<0.10	<0.51	<0.033	0.33	150	1.4
South-East	Basement	SV-20	SV-20 ISS 720 25th Ave	11/30/12	Sub-slab	6L Summa	8.0	-30.0	-8.0	TO-15 SIM	67	<0.19	<0.14	<0.71	<0.046		NT	NT
	Basement	SV-25	SV-25 ISS 720 25th Ave	11/30/12	Sub-slab	6L Summa	8.0	-27.0	-7.0	TO-15 SIM	75	1.7	<0.14	<0.70	<0.046	30	NT	NT
	Outdoor Soil Gas	SB-11	SB-11	02/22/12	Soil Gas						27,600	<553	<814		<261	<327		
	Basement	IA-1	IA-1:A110713	11/07/13	Indoor Air	6L Summa	8.0	-30.0	-5.5	TO-15 SIM	0.38	<0.17	<0.12	<0.62	<0.040	0.32	NT	NT
	Basement	SS-1	SS-1:A110713	11/07/13	Sub-slab	6L Summa	8.0	-30.0	-4.5	TO-15 SIM	26	<0.17	<0.13	<0.63	<0.041		NT	NT
	Basement	IA-1	IA-1:A031617	03/16/17	Indoor Air	6L Summa	8.0	-30.0	-5.0	TO-15	<2.1	<0.85	<1.3	<1.3	<0.40			
	Basement	SS-1	SS-1:A031617	03/16/17	Sub-slab	6L Summa	8.0	-28.0	-4.0	TO-15	62.7	<0.85	<1.3	<1.3	<0.40	0.58		
	Basement	IA-1	IA-1:A022818	02/28/18	Indoor Air	6L Summa	8.0	-29.0	-3.0	TO-15	0.31	<0.079	<0.058	<0.058	<0.037	1.1	0.52	0.44
	Basement	SS-1	SS-1:A022818	02/28/18	Sub-slab	6L Summa	8.0	-28.0	-2.0	TO-15	9.8	17.5	0.060	0.21	<0.037	0.58	0.77	0.26
	Basement	IA-1	IA-1:A012720	01/27/20	Indoor Air	6L Summa	8.0	-30.0	-5.5	TO-15	0.12	<0.085	<0.062	<0.062	<0.040	0.60	0.59	0.55

Table 1. Summary of Sub-Slab Soil Gas and Indoor Air VOC Results

Former Cherry Cleaners
2510 E. Cherry Street, Seattle, WA 98122
VCP ID No. NW2009

Building Location	Area / Building Floor	Sample Location	Sample ID	Date	Sample Type	Sample Container	Sample Duration (hrs)	Initial Field Can P ("Hg)	Final Field Can P ("Hg)	Analytical Method	Tetrachloro-ethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Carbon Tetrachloride	Chloroform
Chemical Abstracts Service Registry Number ("CASRN")											127-18-4	79-01-6	156-59-2	156-60-5	75-01-4	71-43-2	56-23-5	67-66-3
2023 Indoor Air Cleanup Level, Method B											9.62	0.334	18.3	18.3	0.284	0.321	0.417	0.109
2023 Indoor Air Cleanup Level, Method C											40	2	40	40	2.84	3.21	4.17	1.09
2023 Sub-Slab Soil Gas Screening Level, Method B											320	11	610	610	9.5	11	14	3.6
2023 Sub-Slab Soil Gas Screening Level, Method C											1,300	67	1,300	1,300	95	110	140	36
720 E 25th Street																		
	Basement	SS-1	SS-1:A012720	01/27/20	Sub-slab	6L Summa	8.0	-30.0	-6.0	TO-15	84.2	0.28	<0.062	<0.062	<0.040	0.57	1.5	1.0
	Basement	IA1	IA1:A011322	01/13/22	Indoor Air	6L Summa	8.0	-29.0	-3.0	TO-15	1.8	<0.080	<0.12	<0.12	<0.038	1.9	0.44	1.6
	Basement	SS1	SS1:A011322	01/13/22	Sub-slab	6L Summa	8.0	-30.0	-4.0	TO-15	22.6	<0.079	<0.12	<0.12	<0.037	0.78	1.1	0.37
	Basement	IA1	IA1:A031523	03/15/23	Indoor Air	6L Summa	8.0	-34.0	-4.5	TO-15 SIM	<0.17	<0.14	<0.10	<0.51	<0.033	0.47	0.44	2.8
	Basement	SS1	SS1:A031523	03/15/23	Sub-slab	6L Summa	8.0	-34.0	-4.0	TO-15 SIM	1.6	<0.14	<0.10	<0.51	<0.033	0.26	0.44	0.73
Outdoor Air																		
November 2012	Outdoor	AMB-3	AMB-3 ISS 720 25th Ave	11/30/12	Outdoor Air	6L Summa	8.0	-29.5	-8.0	TO-15 SIM	<0.22	<0.18	<0.13	<0.65	<0.042	0.84	NT	NT
November 2013	Outdoor	OA1	OA-1:A110713	11/07/13	Outdoor Air	6L Summa	8.0	-30.0+	-6.0	TO-15 SIM	<0.21	<0.17	<0.12	<0.61	<0.040	0.35	NT	NT
November 2013	Outdoor	OA2	OA-1:A110713	11/07/13	Outdoor Air	6L Summa	8.0	-30.0+	-6.5	TO-15 SIM	<0.22	<0.17	<0.13	<0.63	<0.041	0.35	NT	NT
February 2018	Outdoor	OA720	OA-720:A022818	02/28/18	Outdoor Air	6L Summa	8.0	-30.0+	-4.0	TO-15 SIM	0.20	0.17	<0.060	<0.060	<0.039	0.77	0.65	0.12
January 2020	Outdoor	OA720	OA720:A012720	01/27/20	Outdoor Air	6L Summa	8.0	-30.0	-5.0	TO-15 SIM	1.3	0.089	<0.064	<0.064	<0.041	2.0	0.74	0.43
January 2022	Outdoor	OA	OA:A011322	01/13/22	Outdoor Air	6L Summa	8.0	-30	-5.0	TO-15	0.49	<0.077	<0.11	<0.11	<0.037	0.69	0.44	

- Notes:
1. All air analytical results are presented in micrograms per cubic meter (ug/m3).
 2. All results are displayed for tetrachloroethene and its daughter compounds: trichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene and vinyl chloride. The other compounds presented contain at least one sample that was detected at a concentration greater than the applicable cleanup/screening level during the most recent sample collection event.
 3. A bold font style indicates that the concentration exceeds the applicable Method B Screening Level, and a bold underelined font style indicates that the concentration exceeds the applicable Method C. For carcinogens, the Cancer Screening Level is used. For non-carcinogens, the Noncancer Screening Level is used.
 4. NT = Not Tested
 5. NA = Not Available



VCP No. NW2009

Project No. WAKS2510C18.5

Date: 12/13/23

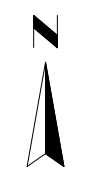
Figures



The **ELAM** Group

LEGEND

- Monitoring Well
- Soil Boring
- Injection Well
- Soil Vapor Extraction Well
- Vapor Monitoring Point
- Abandoned Injection Well
- Abandoned Soil Vapor Extraction Well
- Abandoned Vapor Monitoring Point
- Underground Sanitary Sewer Line
- Underground Water Line
- Underground Natural Gas Line
- Overhead Electric Line
- Utility Pole
- Tree
- Former Building Location
- Vapor Intrusion Assessment Location



0 30 60

Figure No: 1

Title: Site Plan

Scale: 1" = 30'

Project No: WAKS2510C18.5

Report: VIA Report

Drawn by: The ELAM Group

Date: 10/05/2023





TheELAMGroup

LEGEND

- Air Sampling Point
- Subslab Soil Gas Sampling Point
- Air Sampling Point (2012)
- Subslab/Crawl Space Soil Gas Sampling Point (2012)
- Sample collected after soil treatment at Cherry Street Cleaners facility in June 2021
- Sample collected after operation of Ozone Injection Treatment System began in November 2022
- Paired IA/SS Sampling Location

Notes:

- Analytical results are presented in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).
- Any analytical result that exceeds an applicable Residential MTCA Method B Screening Level is shown in **bold font style**.

P Tetrachloroethylene (PCE)
T Trichloroethylene (TCE)
c-DCE cis-1,2-Dichloroethane
t-DCE trans-1,2-Dichloroethane
VC Vinyl Chloride

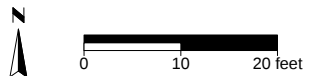


Figure No: 9

Title: VIA Sample Results

Scale: 1" = 20'

Project No: WAKS2510C18.5

Report: VIA Report

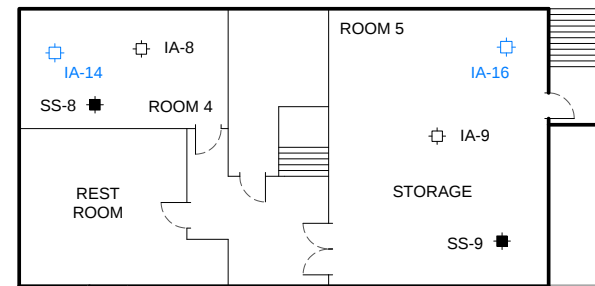
Drawn by: The ELAM Group

Date: 10/05/2023

BASEMENT PLAN

1ST FLOOR PLAN

2ND FLOOR PLAN

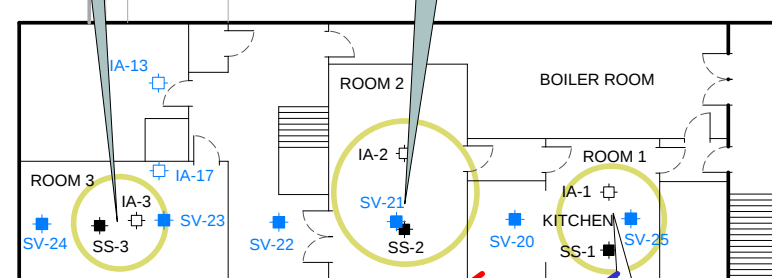


IA-3 3/16/17	IA-3 2/28/18	IA-3 1/27/20	IA-3 1/13/22	IA-3 3/15/23
P 1.0	P 0.22	P <0.12	P 0.25	P <0.18
T <0.79	T 0.11	T <0.096	T <0.080	T <0.14
c-DCE <1.2	c-DCE <0.062	c-DCE <0.071	c-DCE <0.12	c-DCE <0.10
t-DCE <1.2	t-DCE <0.062	t-DCE <0.071	t-DCE <0.12	t-DCE <0.52
VC <0.37	VC <0.040	VC <0.046	VC <0.038	VC <0.033

SS-3 3/16/17	SS-3 2/28/18	SS-3 1/27/20	SS-3 1/13/22	SS-3 3/15/23
P NS	P NS	P NS	P NS	P NS
T NS	T NS	T NS	T NS	T NS
c-DCE NS	c-DCE NS	c-DCE NS	c-DCE NS	c-DCE NS
t-DCE NS	t-DCE NS	t-DCE NS	t-DCE NS	t-DCE NS
VC NS	VC NS	VC NS	VC NS	VC NS

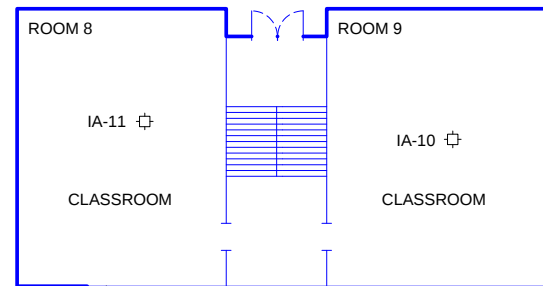
IA-2 3/16/17	IA-2 2/28/18	IA-2 1/27/20	IA-2 1/13/22	IA-2 3/15/23
P <2.1	P 0.29	P 0.71	P 4.3	P 0.69
T <0.85	T 0.20	T <0.088	T <0.079	T <0.14
c-DCE <1.3	c-DCE <0.062	c-DCE <0.065	c-DCE <0.12	c-DCE <0.10
t-DCE <1.3	t-DCE <0.062	t-DCE <0.065	t-DCE <0.12	t-DCE <0.50
VC <0.40	VC <0.040	VC <0.042	VC <0.037	VC <0.032

SS-2 3/16/17	SS-2 2/28/18	SS-2 1/27/20	SS-2 1/13/22	SS-2 3/15/23
P 445	P 442	P 412	P 217	P 16
T <0.89	T 0.26	T 0.48	T 0.18	T <0.14
c-DCE <1.3	c-DCE <0.058	c-DCE <0.068	c-DCE <0.12	c-DCE <0.10
t-DCE <1.3	t-DCE <0.058	t-DCE <0.070	t-DCE <0.12	t-DCE <0.51
VC <0.42	VC <0.037	VC <0.044	VC <0.038	VC <0.033



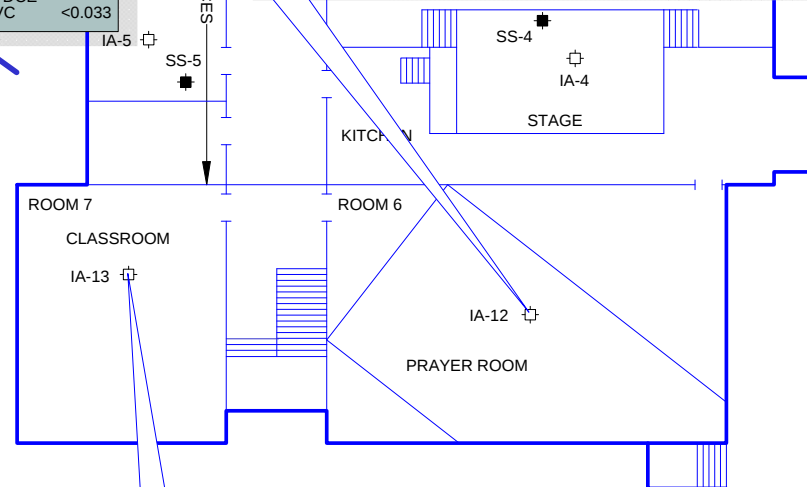
IA-1 3/16/17	IA-1 2/28/18	IA-1 1/27/20	IA-1 1/13/22	IA-1 3/15/23
P <2.1	P 0.31	P 0.12	P 1.8	P <0.17
T <0.85	T <0.079	T <0.085	T <0.080	T <0.14
c-DCE <1.3	c-DCE <0.058	c-DCE <0.062	c-DCE <0.12	c-DCE <0.10
t-DCE <1.3	t-DCE <0.058	t-DCE <0.062	t-DCE <0.12	t-DCE <0.51
VC <0.40	VC <0.037	VC <0.040	VC <0.038	VC <0.033

SS-1 3/16/17	SS-1 2/28/18	SS-1 1/27/20	SS-1 1/13/22	SS-1 3/15/23
P 62.7	P 9.8	P 84.2	P 22.6	P 1.6
T <0.85	T 17.5	T 0.28	T <0.079	T <0.14
c-DCE <1.3	c-DCE 0.060	c-DCE <0.062	c-DCE <0.12	c-DCE <0.10
t-DCE <1.3	t-DCE 0.21	t-DCE <0.062	t-DCE <0.12	t-DCE <0.51
VC <0.40	VC <0.037	VC <0.040	VC <0.037	VC <0.033

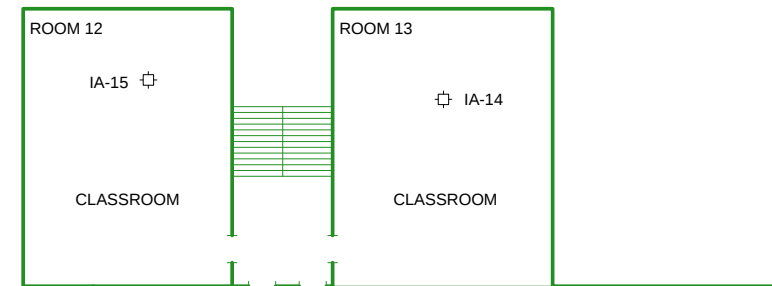


IA-12 3/16/17	IA-12 2/28/18	IA-12 1/27/20	IA-12 1/13/22	IA-12 3/15/23
P <2.2	P 0.23	P 0.13	P 0.47	P <0.17
T <0.89	T 0.23	T <0.085	T <0.080	T <0.13
c-DCE <1.3	c-DCE <0.074	c-DCE <0.062	c-DCE <0.12	c-DCE <0.099
t-DCE <1.3	t-DCE <0.074	t-DCE <0.062	t-DCE <0.12	t-DCE <0.50
VC <0.42	VC <0.048	VC <0.040	VC <0.038	VC <0.032

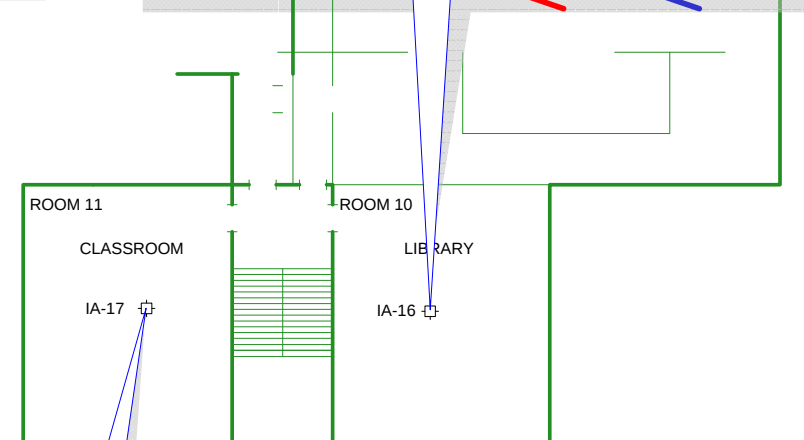
IA-16 3/16/17	IA-16 2/28/18	IA-16 1/27/20	IA-16 1/13/22	IA-16 3/15/23
P 22.5	P 0.13	P 0.20	P 0.72	P <0.17
T 220	T <0.079	T <0.081	T <0.085	T <0.13
c-DCE <1.3	c-DCE <0.058	c-DCE <0.060	c-DCE <0.12	c-DCE <0.098
t-DCE <1.3	t-DCE <0.058	t-DCE <0.060	t-DCE <0.12	t-DCE <0.49
VC <0.40	VC <0.037	VC <0.039	VC <0.040	VC <0.031



IA-13 3/16/17	IA-13 2/28/18	IA-13 1/27/20	IA-13 1/13/22	IA-13 3/15/23
P <2.3	P 0.13	P <0.12	P 0.49	P <0.17
T <0.92	T 0.13	T <0.093	T <0.083	T <0.14
c-DCE <1.4	c-DCE <0.058	c-DCE <0.069	c-DCE <0.12	c-DCE <0.10
t-DCE <1.4	t-DCE <0.058	t-DCE <0.069	t-DCE <0.12	t-DCE <0.51
VC <0.44	VC <0.037	VC <0.044	VC <0.040	VC <0.033



IA-17 3/16/17	IA-17 2/28/18	IA-17 1/27/20	IA-17 1/13/22	IA-17 3/15/23
P <2.1	P 0.16	P <0.16	P 0.64	P <0.17
T <0.85	T 0.089	T <0.13	T <0.074	T <0.13
c-DCE <1.3	c-DCE <0.056	c-DCE <0.093	c-DCE <0.11	c-DCE <0.098
t-DCE <1.3	t-DCE <0.056	t-DCE <0.093	t-DCE 0.39	t-DCE <0.49
VC <0.40	VC <0.036	VC <0.060	VC <0.035	VC <0.032



IA-17 3/16/17	IA-17 2/28/18	IA-17 1/27/20	IA-17 1/13/22	IA-17 3/15/23
P <2.1	P 0.16	P <0.16	P 0.64	P <0.17
T <0.85	T 0.089	T <0.13	T <0.074	T <0.13
c-DCE <1.3	c-DCE <0.056	c-DCE <0.093	c-DCE <0.11	c-DCE <0.098
t-DCE <1.3	t-DCE <0.056	t-DCE <0.093	t-DCE 0.39	t-DCE <0.49
VC <0.40	VC <0.036	VC <0.060	VC <0.035	VC <0.032



VCP No. NW2009

Project No. WAKS2510C18.5

Date: 12/13/23

Attachment A

Chemical Inventory

Chemical Inventory

Page 1 of 2

Building Name/Address: _____

Date: _____

Chemical Name	Container type/size	Location	cVOCs? (Y or N)	Removed? (Y or N)
Bona Hardwood Cleaner	32 Fl oz bottle	Basement	N	Y
Absorb-A-Spill (x2)	24 oz can	Basement	N	Y
Mineral Spiritz	1 qt can	Basement	N	Y
Ace Stain and Finish	1 qt can	Basement	N	Y
Red Devil Gloss Finish	8 Fl oz can	Basement	N	Y
Vorathane Clear Stain	12 1/4 oz can	Basement	N	Y
GameTime Graffiti Remover	8 Fl oz bottle	Basement	N	Y
Deep Glazing	8 Fl oz bucket	Basement	N	X
Vorathane Clear Gloss	946 ml can	Basement	N	Y
Rustoleum Topcoat Paint	32 Fl oz can	Basement	N	Y
Cabot Polystain	1 qt can	Basement	N	X
Minwax Spar Urethane	1 qt can	Basement	N	X
Klean Strip Acetone	1 gal can	Basement	N	X
(x2) Olympic Latex Paint	31 Fl oz can	Basement	N	Y
Wallboard Joint Compound	32 Fl oz bucket	Basement	N	Y
Elmer's Snow Drift Paint	32 Fl oz bucket	Basement	N	Y
Kilz Original Stainblocker	13 oz can	Basement	N	Y
Evermore Latex Enamel	1 gal can	Basement	N	Y
(x2) Korker Paint Wall Glow	5 gal bucket	Basement	N	Y
Pro Sealing Sealer	1 gal can	Basement	N	Y
(x3) Unknown Paint	1 gal can	Basement	N	Y
Henry Roof Cement	1 gal can	Basement	N	Y
Ralph Semi-Gloss Paint	1 gal can	Basement	N	Y
Behr Stain Enamel	1 gal can	Basement	N	Y
Miller Acrylic House Paint	1 gal can	Basement	N	Y
Danquer Trim Paint	1 gal can	Basement	N	Y

Chemical Inventory

Page 2 of 2

Building Name/Address: _____

Date: _____

[illegible]



VCP No. NW2009

Project No. WAKS2510C18.5

Date: 12/13/23

Attachment B

Summa Canister Air Sampling Forms



SUMMA CANISTER AIR SAMPLING FORM

The LAN Group

PAGE 1 OF 3

GENERAL INFORMATION						
SITE: <u>UNIVERSITY</u>						
SAMPLING ADDRESS: <u>720 E 18th Street 25th Ave</u>						
SAMPLING EVENT (circle one): SUMMERTIME ☐ WINTERTIME ☒						
TEMPERATURE (F): <u>35</u>		BAROMETRIC PRESSURE: <u>29.84</u>		PRECIPITATION (circle one): <u>Y</u> N		
WIND DIRECTION (circle one): N NE E <u>SE</u> S SW W NW						
SAMPLING PERSONNEL ID & AFFILIATION: <u>JD</u>						
SAMPLING INFORMATION						
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	CAN P ("Hg)
SS1: A031523		661841	2242	SHUT IN TEST	3/14/23	1835
				INITIAL	3/15/23	0814
TYPE	METHOD	SOURCE	VALVE			
(circle one)	(circle one)	(circle one)	(circle one)			
400 mL	TO-14A	Air	24 hour			1415
1 L	<u>TO-15</u>	<u>SGSS</u>	<u>8 hour</u>			1515
<u>6 L</u>	<u>TO-15 SIM</u>	SGe	200 ml/min	FINAL		1615
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	CAN P ("Hg)
TS1: A031523		661721	2242-2	SHUT IN TEST	3/14/23	1832
				INITIAL	3/15/23	0814
TYPE	METHOD	SOURCE	VALVE			
(circle one)	(circle one)	(circle one)	(circle one)			
400 mL	TO-14A	<u>Air</u>	24 hour			1415
1 L	<u>TO-15</u>	<u>SGSS</u>	<u>8 hour</u>			1515
<u>6 L</u>	<u>TO-15 SIM</u>	SGe	200 ml/min	FINAL		1615
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	CAN P ("Hg)
SS2: A031523		660103	2217	SHUT IN TEST	3/14/23	1827
				INITIAL	3/15/23	0816
TYPE	METHOD	SOURCE	VALVE			
(circle one)	(circle one)	(circle one)	(circle one)			
400 mL	TO-14A	Air	24 hour			1416
1 L	<u>TO-15</u>	<u>SGSS</u>	<u>8 hour</u>			1516
<u>6 L</u>	<u>TO-15 SIM</u>	SGe	200 ml/min	FINAL		1617
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	CAN P ("Hg)
TS2: A031523		660916	2242-3	SHUT IN TEST	3/14/23	1823
				INITIAL	3/15/23	0816
TYPE	METHOD	SOURCE	VALVE			
(circle one)	(circle one)	(circle one)	(circle one)			
400 mL	TO-14A	<u>Air</u>	24 hour			1416
1 L	<u>TO-15</u>	<u>SGSS</u>	<u>8 hour</u>			1516
<u>6 L</u>	<u>TO-15 SIM</u>	SGe	200 ml/min	FINAL		1617

(1) Pressure reading recording guidelines for various time-weighted average (TWA) valves:

- 24-hour TWA: Initial, Hour 1, Hour 2, Hour 22, Hour 23, and Final
- 8-hour TWA: Initial, Hour 1, Hour 2, Hour 6, Hour 7, and Final
- 200 mL/min: Initial and Final (5 min for 1 L, and 30 min for 6 L)



SUMMA CANISTER AIR SAMPLING FORM

The Summit Group

PAGE 2 OF 3

GENERAL INFORMATION

SITE: WALCRAFT
SAMPLING ADDRESS: 720 E 10th St 25th Ave
SAMPLING EVENT (circle one): 38 SUMMERTIME WINTERTIME
TEMPERATURE (F): 38 BAROMETRIC PRESSURE: PRECIPITATION (circle one): Y N
WIND DIRECTION (circle one): N NE E SE S SW W NW
SAMPLING PERSONNEL ID & AFFILIATION:

SAMPLING INFORMATION

SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
IA3: A4P1523		660738	2228-2	SHUT IN TEST	3/14/23	1854	-27.5
				INITIAL	3/15/23	0817	-27
TYPE	METHOD	SOURCE	VALVE			0915	-25
(circle one)	(circle one)	(circle one)	(circle one)				
400 mL	TO-14A	<u>Air</u>	24 hour			1417	-10.5
1 L	<u>TO-15</u>	SGss	<u>8 hour</u>			1517	-8
<u>6 L</u>	<u>TO-15 SIM</u>	SGe	200 ml/min	FINAL		1617	-5.5
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
IA2: A031523		663083	2217-1	SHUT IN TEST	3/14/23	1840	-28
				INITIAL	3/15/23	0818	-28
TYPE	METHOD	SOURCE	VALVE			0918	-26
(circle one)	(circle one)	(circle one)	(circle one)				
400 mL	TO-14A	<u>Air</u>	24 hour			1420	-7
1 L	<u>TO-15</u>	SGss	<u>8 hour</u>			1520	-4.5
<u>6 L</u>	<u>TO-15 SIM</u>	SGe	200 ml/min	FINAL		1618	-2.5
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
IA16: A031523		660310	2228	SHUT IN TEST	3/14/23	1901	-28
				INITIAL	3/15/23	0821	-28
TYPE	METHOD	SOURCE	VALVE			0922	-26.5
(circle one)	(circle one)	(circle one)	(circle one)				
400 mL	TO-14A	<u>Air</u>	24 hour			1421	-7.5
1 L	<u>TO-15</u>	SGss	<u>8 hour</u>			1521	-5
<u>6 L</u>	<u>TO-15 SIM</u>	SGe	200 ml/min	FINAL		1621	-2.5
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
IA17: A031523		660219	2217-2	SHUT IN TEST	3/14/23	1838	-25.5
				INITIAL	3/15/23	0821	-26
TYPE	METHOD	SOURCE	VALVE			0923	-23.5
(circle one)	(circle one)	(circle one)	(circle one)				
400 mL	TO-14A	<u>Air</u>	24 hour			1420	-8.5
1 L	<u>TO-15</u>	SGss	<u>8 hour</u>			1520	-6
<u>6 L</u>	<u>TO-15 SIM</u>	SGe	200 ml/min	FINAL		1620	-3.5

(1) Pressure reading recording guidelines for various time-weighted average (TWA) valves:

- 24-hour TWA: Initial, Hour 1, Hour 2, Hour 22, Hour 23, and Final
- 8-hour TWA: Initial, Hour 1, Hour 2, Hour 6, Hour 7, and Final
- 200 mL/min: Initial and Final (5 min for 1 L, and 30 min for 6 L)



The ELAM Group

SUMMA CANISTER AIR SAMPLING FORM

PAGE 3 OF 3

GENERAL INFORMATION

SITE: 6015200CSAMPLING ADDRESS: 720 E 1st St 25th AveSAMPLING EVENT (circle one): SUMMERTIME WINTER TIMETEMPERATURE (F): 38°F BAROMETRIC PRESSURE: 29.86 PRECIPITATION (circle one): Y NWIND DIRECTION (circle one): N NE E SE S SW W NWSAMPLING PERSONNEL ID & AFFILIATION: JDe

SAMPLING INFORMATION

SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
T13: 401523		622078	2242-1	SHUT IN TEST	3/14/23	1857	-27.5
				INITIAL	3/15/23	0920	-27.5
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)			1020	-25
400 mL	TO-14A	Air	24 hour				
1 L	TO-15	SGss	8 hour				
6 L	TO-15 SIM	SGe	200 ml/min	FINAL		1717	-5.5
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
FD1: 4031523		662726	2225-1	SHUT IN TEST	3/14/23	1845	-28
				INITIAL	3/15/23	0821	-28
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)			0922	-26
400 mL	TO-14A	Air	24 hour			1420	-7
1 L	TO-15	SGss	8 hour			1520	-4.5
6 L	TO-15 SIM	SGe	200 ml/min	FINAL		1621	-2.5
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
				SHUT IN TEST			
				INITIAL			
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)				
400 mL	TO-14A	Air	24 hour				
1 L	TO-15	SGss	8 hour				
6 L	TO-15 SIM	SGe	200 ml/min	FINAL			
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
				SHUT IN TEST			
				INITIAL			
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)				
400 mL	TO-14A	Air	24 hour				
1 L	TO-15	SGss	8 hour				
6 L	TO-15 SIM	SGe	200 ml/min	FINAL			

(1) Pressure reading recording guidelines for various time-weighted average (TWA) valves:

- 24-hour TWA: Initial, Hour 1, Hour 2, Hour 22, Hour 23, and Final
- 8-hour TWA: Initial, Hour 1, Hour 2, Hour 6, Hour 7, and Final
- 200 mL/min: Initial and Final (5 min for 1 L, and 30 min for 6 L)



VCP No. NW2009

Project No. WAKS2510C18.5

Date: 12/13/23

Attachment C

Laboratory Analytical Report

Analytical Report

3/30/2023

Mr. Chris Sloffer
The ELAM Group
161 Lakeview Drive
Ste B
Noblesville IN 46060

Project Name: 720 E 25th St
Project #:
Workorder #: 2303549

Dear Mr. Chris Sloffer

The following report includes the data for the above referenced project for sample(s) received on 3/17/2023 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: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Jade White
Project Manager

WORK ORDER #: 2303549

Work Order Summary

CLIENT: Mr. Chris Sloffer
The ELAM Group
161 Lakeview Drive
Ste B
Noblesville, IN 46060

BILL TO: Mr. Chris Sloffer
The ELAM Group
161 Lakeview Drive
Ste B
Noblesville, IN 46060

PHONE: 888-510-3526

P.O. #

FAX:

PROJECT # 720 E 25th St

DATE RECEIVED: 03/17/2023

CONTACT: Jade White

DATE COMPLETED: 03/30/2023

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	FD1:A031523	Modified TO-15	2.4 "Hg	1.9 psi
01B	FD1:A031523	Modified TO-15	2.4 "Hg	1.9 psi
02A	SS1:A031523	Modified TO-15	3.5 "Hg	1.9 psi
02B	SS1:A031523	Modified TO-15	3.5 "Hg	1.9 psi
03A	SS2:A031523	Modified TO-15	3.5 "Hg	1.9 psi
03B	SS2:A031523	Modified TO-15	3.5 "Hg	1.9 psi
04A	IA1:A031523	Modified TO-15	3.5 "Hg	1.9 psi
04B	IA1:A031523	Modified TO-15	3.5 "Hg	1.9 psi
05A	IA2:A031523	Modified TO-15	3.3 "Hg	1.9 psi
05B	IA2:A031523	Modified TO-15	3.3 "Hg	1.9 psi
06A	IA3:A031523	Modified TO-15	3.9 "Hg	1.9 psi
06B	IA3:A031523	Modified TO-15	3.9 "Hg	1.9 psi
07A	IA12:A031523	Modified TO-15	2.8 "Hg	1.9 psi
07B	IA12:A031523	Modified TO-15	2.8 "Hg	1.9 psi
08A	IA13:A031523	Modified TO-15	3.5 "Hg	1.9 psi
08B	IA13:A031523	Modified TO-15	3.5 "Hg	1.9 psi
09A	IA16:A031523	Modified TO-15	2.4 "Hg	1.9 psi
09B	IA16:A031523	Modified TO-15	2.4 "Hg	1.9 psi
10A	IA17:A031523	Modified TO-15	2.6 "Hg	1.9 psi
10B	IA17:A031523	Modified TO-15	2.6 "Hg	1.9 psi
11A	Lab Blank	Modified TO-15	NA	NA
11B	Lab Blank	Modified TO-15	NA	NA
12A	CCV	Modified TO-15	NA	NA

Continued on next page

WORK ORDER #: 2303549

Work Order Summary

CLIENT: Mr. Chris Sloffer
The ELAM Group
161 Lakeview Drive
Ste B
Noblesville, IN 46060

BILL TO: Mr. Chris Sloffer
The ELAM Group
161 Lakeview Drive
Ste B
Noblesville, IN 46060

PHONE: 888-510-3526

P.O. #

FAX:

PROJECT # 720 E 25th St

DATE RECEIVED: 03/17/2023

CONTACT: Jade White

DATE COMPLETED: 03/30/2023

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
12B	CCV	Modified TO-15	NA	NA
13A	LCS	Modified TO-15	NA	NA
13AA	LCSD	Modified TO-15	NA	NA
13B	LCS	Modified TO-15	NA	NA
13BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:



Technical Director

DATE: 03/30/23

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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LABORATORY NARRATIVE
Modified TO-15 Full Scan/SIM
The ELAM Group
Workorder# 2303549

Four 6 Liter Summa Canister (SIM Certified) and six 6 Liter Summa Canister (100% SIM Ambient) samples were received on March 17, 2023. 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.

Requirement	TO-15	ATL Modifications
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 was missing method information. EATL proceeded with the analysis as per the original contract or verbal agreement.

Sample collection date was incomplete on the Chain of Custody for samples SS1:A031523, SS2:A031523, IA1:A031523, IA2:A031523, IA3:A031523, IA12:A031523, IA13:A031523, IA16:A031523 and IA17:A031523. The year of collection was assumed to be 2303.

The Chain of Custody (COC) information for samples FD1:A031523, SS1:A031523, SS2:A031523, IA1:A031523, IA2:A031523, IA3:A031523, IA12:A031523, IA13:A031523, IA16:A031523 and IA17:A031523 did not match the information on the canister with regard to canister barcode. The samples labeled 662726, 661841, 660103, 661721, 660916, 660738, 663083, 622078, 660310 and 663219 on the COC is labeled as 6L2726, 6L1841, 6L0103, 6L1721, 6L0916, 6L0738, 6L3083,

6L2078, 6L0310 and 6L3219 on the canister. The client was notified of the discrepancy and the information on the canister was used to process and report the samples.

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.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in CCV analyses have not been flagged.

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

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

Client Sample ID: FD1:A031523

Lab ID#: 2303549-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.12	0.20	0.69	1.1
Ethanol	2.5	6.9	4.6	13
Acetone	2.5	3.5	5.8	8.2

Client Sample ID: FD1:A031523

Lab ID#: 2303549-01B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.062	0.40	0.30	2.0
Chloroform	0.025	0.10	0.12	0.49
Carbon Tetrachloride	0.025	0.064	0.15	0.40
Benzene	0.062	0.12	0.20	0.38
Toluene	0.062	0.17	0.23	0.64
m,p-Xylene	0.049	0.067	0.21	0.29
o-Xylene	0.025	0.025	0.11	0.11

Client Sample ID: SS1:A031523

Lab ID#: 2303549-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.13	0.18	0.72	1.0
Ethanol	2.6	12	4.8	22
Acetone	2.6	14	6.1	32
2-Propanol	2.6	170 E	6.3	420 E
1,3-Dichlorobenzene	0.13	0.63	0.77	3.8

Client Sample ID: SS1:A031523

Lab ID#: 2303549-02B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.064	0.38	0.32	1.9
Chloroform	0.026	0.15	0.12	0.73

Summary of Detected Compounds

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

Client Sample ID: SS1:A031523

Lab ID#: 2303549-02B

Carbon Tetrachloride	0.026	0.070	0.16	0.44
Benzene	0.064	0.080	0.20	0.26
Toluene	0.064	0.16	0.24	0.62
Tetrachloroethene	0.026	0.24	0.17	1.6
Ethyl Benzene	0.026	0.031	0.11	0.14
m,p-Xylene	0.051	0.10	0.22	0.44
o-Xylene	0.026	0.041	0.11	0.18

Client Sample ID: SS2:A031523

Lab ID#: 2303549-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.13	0.20	0.72	1.1
Ethanol	2.6	15	4.8	29
Acetone	2.6	11	6.1	27
2-Propanol	2.6	240 E	6.3	600 E
1,3-Dichlorobenzene	0.13	0.63	0.77	3.8

Client Sample ID: SS2:A031523

Lab ID#: 2303549-03B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.064	0.38	0.32	1.9
Chloroform	0.026	0.29	0.12	1.4
Carbon Tetrachloride	0.026	24	0.16	150
Benzene	0.064	0.10	0.20	0.33
Toluene	0.064	0.28	0.24	1.0
Tetrachloroethene	0.026	2.4	0.17	16
Ethyl Benzene	0.026	0.033	0.11	0.14
m,p-Xylene	0.051	0.10	0.22	0.44
o-Xylene	0.026	0.043	0.11	0.19

Client Sample ID: IA1:A031523

Lab ID#: 2303549-04A

Summary of Detected Compounds

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

Client Sample ID: IA1:A031523

Lab ID#: 2303549-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.13	0.18	0.72	1.0
Ethanol	2.6	22	4.8	42
Acetone	2.6	10	6.1	24

Client Sample ID: IA1:A031523

Lab ID#: 2303549-04B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.064	0.38	0.32	1.9
Chloromethane	0.64	0.68	1.3	1.4
Chloroform	0.026	0.57	0.12	2.8
Carbon Tetrachloride	0.026	0.070	0.16	0.44
Benzene	0.064	0.15	0.20	0.47
Toluene	0.064	0.17	0.24	0.65
m,p-Xylene	0.051	0.062	0.22	0.27

Client Sample ID: IA2:A031523

Lab ID#: 2303549-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.13	0.19	0.71	1.1
Ethanol	2.5	2.6	4.8	5.0
Acetone	2.5	5.5	6.0	13

Client Sample ID: IA2:A031523

Lab ID#: 2303549-05B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.064	0.40	0.31	2.0
Chloroform	0.025	0.040	0.12	0.20
Carbon Tetrachloride	0.025	0.065	0.16	0.41
Benzene	0.064	0.11	0.20	0.34

Summary of Detected Compounds

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

Client Sample ID: IA2:A031523

Lab ID#: 2303549-05B

Toluene	0.064	0.36	0.24	1.3
Tetrachloroethene	0.025	0.10	0.17	0.69
m,p-Xylene	0.051	0.054	0.22	0.24

Client Sample ID: IA3:A031523

Lab ID#: 2303549-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.13	0.19	0.73	1.1
Acetone	2.6	2.6 J	6.2	6.1 J

Client Sample ID: IA3:A031523

Lab ID#: 2303549-06B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.065	0.39	0.32	1.9
Chloroform	0.026	0.040	0.13	0.20
Carbon Tetrachloride	0.026	0.065	0.16	0.41
Benzene	0.065	0.10	0.21	0.34
Toluene	0.065	0.14	0.24	0.53

Client Sample ID: IA12:A031523

Lab ID#: 2303549-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.12	0.18	0.70	1.0
Ethanol	2.5	8.7	4.7	16
Acetone	2.5	6.3	5.9	15

Client Sample ID: IA12:A031523

Lab ID#: 2303549-07B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.062	0.39	0.31	1.9

Summary of Detected Compounds

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

Client Sample ID: IA12:A031523

Lab ID#: 2303549-07B

Chloroform	0.025	0.035	0.12	0.17
Carbon Tetrachloride	0.025	0.062	0.16	0.39
Benzene	0.062	0.10	0.20	0.34
Toluene	0.062	0.12	0.24	0.47

Client Sample ID: IA13:A031523

Lab ID#: 2303549-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.13	0.20	0.72	1.1
Ethanol	2.6	16	4.8	30
Acetone	2.6	5.4	6.1	13

Client Sample ID: IA13:A031523

Lab ID#: 2303549-08B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.064	0.40	0.32	2.0
Chloroform	0.026	0.10	0.12	0.51
Carbon Tetrachloride	0.026	0.066	0.16	0.42
Benzene	0.064	0.11	0.20	0.35
Toluene	0.064	0.32	0.24	1.2

Client Sample ID: IA16:A031523

Lab ID#: 2303549-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.12	0.20	0.69	1.1
Ethanol	2.5	5.3	4.6	10
Acetone	2.5	3.7	5.8	8.7

Client Sample ID: IA16:A031523

Lab ID#: 2303549-09B

Summary of Detected Compounds

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

Client Sample ID: IA16:A031523

Lab ID#: 2303549-09B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.062	0.40	0.30	2.0
Chloroform	0.025	0.10	0.12	0.51
Carbon Tetrachloride	0.025	0.064	0.15	0.40
Benzene	0.062	0.12	0.20	0.38
Toluene	0.062	0.18	0.23	0.67
m,p-Xylene	0.049	0.066	0.21	0.29
o-Xylene	0.025	0.026	0.11	0.11

Client Sample ID: IA17:A031523

Lab ID#: 2303549-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.12	0.20	0.70	1.1
Ethanol	2.5	4.1	4.7	7.7
Acetone	2.5	3.6	5.9	8.6

Client Sample ID: IA17:A031523

Lab ID#: 2303549-10B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.062	0.40	0.31	2.0
Chloroform	0.025	0.091	0.12	0.44
Carbon Tetrachloride	0.025	0.066	0.16	0.42
Benzene	0.062	0.12	0.20	0.38
Toluene	0.062	0.17	0.23	0.63
m,p-Xylene	0.050	0.061	0.22	0.26



Air Toxics

Client Sample ID: FD1:A031523

Lab ID#: 2303549-01A

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

File Name:	v032711	Date of Collection: NA
Dil. Factor:	1.23	Date of Analysis: 3/27/23 03:59 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.12	Not Detected	0.27	Not Detected
Bromomethane	6.2	Not Detected	24	Not Detected
Freon 11	0.12	0.20	0.69	1.1
Ethanol	2.5	6.9	4.6	13
Freon 113	0.12	Not Detected	0.94	Not Detected
Acetone	2.5	3.5	5.8	8.2
2-Propanol	2.5	Not Detected	6.0	Not Detected
Carbon Disulfide	0.62	Not Detected	1.9	Not Detected
3-Chloropropene	0.62	Not Detected	1.9	Not Detected
Methylene Chloride	0.25	Not Detected	0.85	Not Detected
Hexane	0.62	Not Detected	2.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.62	Not Detected	1.8	Not Detected
Tetrahydrofuran	0.62	Not Detected	1.8	Not Detected
Cyclohexane	0.62	Not Detected	2.1	Not Detected
2,2,4-Trimethylpentane	0.62	Not Detected	2.9	Not Detected
Heptane	0.62	Not Detected	2.5	Not Detected
1,2-Dichloropropane	0.12	Not Detected	0.57	Not Detected
1,4-Dioxane	0.12	Not Detected	0.44	Not Detected
Bromodichloromethane	0.12	Not Detected	0.82	Not Detected
cis-1,3-Dichloropropene	0.12	Not Detected	0.56	Not Detected
4-Methyl-2-pentanone	0.12	Not Detected	0.50	Not Detected
trans-1,3-Dichloropropene	0.12	Not Detected	0.56	Not Detected
2-Hexanone	0.62	Not Detected	2.5	Not Detected
Dibromochloromethane	0.12	Not Detected	1.0	Not Detected
Chlorobenzene	0.12	Not Detected	0.57	Not Detected
Styrene	0.12	Not Detected	0.52	Not Detected
Bromoform	0.12	Not Detected	1.3	Not Detected
Cumene	0.12	Not Detected	0.60	Not Detected
Propylbenzene	0.12	Not Detected	0.60	Not Detected
4-Ethyltoluene	0.12	Not Detected	0.60	Not Detected
1,3,5-Trimethylbenzene	0.12	Not Detected	0.60	Not Detected
1,2,4-Trimethylbenzene	0.12	Not Detected	0.60	Not Detected
1,3-Dichlorobenzene	0.12	Not Detected	0.74	Not Detected
alpha-Chlorotoluene	0.12	Not Detected	0.64	Not Detected
1,2-Dichlorobenzene	0.12	Not Detected	0.74	Not Detected
1,2,4-Trichlorobenzene	0.62	Not Detected	4.6	Not Detected
Hexachlorobutadiene	0.62	Not Detected	6.6	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130



Air Toxics

Client Sample ID: FD1:A031523

Lab ID#: 2303549-01A

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

File Name:	v032711	Date of Collection: NA
Dil. Factor:	1.23	Date of Analysis: 3/27/23 03:59 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
4-Bromofluorobenzene	82	70-130



Air Toxics

Client Sample ID: FD1:A031523

Lab ID#: 2303549-01B

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

File Name:	v032711sim	Date of Collection: NA
Dil. Factor:	1.23	Date of Analysis: 3/27/23 03:59 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.062	0.40	0.30	2.0
Freon 114	0.025	Not Detected	0.17	Not Detected
Chloromethane	0.62	Not Detected	1.3	Not Detected
Vinyl Chloride	0.012	Not Detected	0.031	Not Detected
Chloroethane	0.062	Not Detected	0.16	Not Detected
1,1-Dichloroethene	0.012	Not Detected	0.049	Not Detected
trans-1,2-Dichloroethene	0.12	Not Detected	0.49	Not Detected
Methyl tert-butyl ether	0.12	Not Detected	0.44	Not Detected
1,1-Dichloroethane	0.025	Not Detected	0.10	Not Detected
cis-1,2-Dichloroethene	0.025	Not Detected	0.098	Not Detected
Chloroform	0.025	0.10	0.12	0.49
1,1,1-Trichloroethane	0.025	Not Detected	0.13	Not Detected
Carbon Tetrachloride	0.025	0.064	0.15	0.40
Benzene	0.062	0.12	0.20	0.38
1,2-Dichloroethane	0.025	Not Detected	0.10	Not Detected
Trichloroethene	0.025	Not Detected	0.13	Not Detected
Toluene	0.062	0.17	0.23	0.64
1,1,2-Trichloroethane	0.025	Not Detected	0.13	Not Detected
Tetrachloroethene	0.025	Not Detected	0.17	Not Detected
1,2-Dibromoethane (EDB)	0.025	Not Detected	0.19	Not Detected
Ethyl Benzene	0.025	Not Detected	0.11	Not Detected
m,p-Xylene	0.049	0.067	0.21	0.29
o-Xylene	0.025	0.025	0.11	0.11
1,1,2,2-Tetrachloroethane	0.025	Not Detected	0.17	Not Detected
1,4-Dichlorobenzene	0.025	Not Detected	0.15	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	81	70-130



Air Toxics

Client Sample ID: SS1:A031523

Lab ID#: 2303549-02A

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

File Name:	v032712	Date of Collection:	3/15/23 4:15:00 PM
Dil. Factor:	1.28	Date of Analysis:	3/27/23 04:39 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.13	Not Detected	0.28	Not Detected
Bromomethane	6.4	Not Detected	25	Not Detected
Freon 11	0.13	0.18	0.72	1.0
Ethanol	2.6	12	4.8	22
Freon 113	0.13	Not Detected	0.98	Not Detected
Acetone	2.6	14	6.1	32
2-Propanol	2.6	170 E	6.3	420 E
Carbon Disulfide	0.64	Not Detected	2.0	Not Detected
3-Chloropropene	0.64	Not Detected	2.0	Not Detected
Methylene Chloride	0.26	Not Detected	0.89	Not Detected
Hexane	0.64	Not Detected	2.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.64	Not Detected	1.9	Not Detected
Tetrahydrofuran	0.64	Not Detected	1.9	Not Detected
Cyclohexane	0.64	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	0.64	Not Detected	3.0	Not Detected
Heptane	0.64	Not Detected	2.6	Not Detected
1,2-Dichloropropane	0.13	Not Detected	0.59	Not Detected
1,4-Dioxane	0.13	Not Detected	0.46	Not Detected
Bromodichloromethane	0.13	Not Detected	0.86	Not Detected
cis-1,3-Dichloropropene	0.13	Not Detected	0.58	Not Detected
4-Methyl-2-pentanone	0.13	Not Detected	0.52	Not Detected
trans-1,3-Dichloropropene	0.13	Not Detected	0.58	Not Detected
2-Hexanone	0.64	Not Detected	2.6	Not Detected
Dibromochloromethane	0.13	Not Detected	1.1	Not Detected
Chlorobenzene	0.13	Not Detected	0.59	Not Detected
Styrene	0.13	Not Detected	0.54	Not Detected
Bromoform	0.13	Not Detected	1.3	Not Detected
Cumene	0.13	Not Detected	0.63	Not Detected
Propylbenzene	0.13	Not Detected	0.63	Not Detected
4-Ethyltoluene	0.13	Not Detected	0.63	Not Detected
1,3,5-Trimethylbenzene	0.13	Not Detected	0.63	Not Detected
1,2,4-Trimethylbenzene	0.13	Not Detected	0.63	Not Detected
1,3-Dichlorobenzene	0.13	0.63	0.77	3.8
alpha-Chlorotoluene	0.13	Not Detected	0.66	Not Detected
1,2-Dichlorobenzene	0.13	Not Detected	0.77	Not Detected
1,2,4-Trichlorobenzene	0.64	Not Detected	4.7	Not Detected
Hexachlorobutadiene	0.64	Not Detected	6.8	Not Detected

E = Exceeds instrument calibration range.

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

Surrogates	%Recovery	Method Limits
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Air Toxics

Client Sample ID: SS1:A031523

Lab ID#: 2303549-02A

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

File Name:	v032712	Date of Collection: 3/15/23 4:15:00 PM
Dil. Factor:	1.28	Date of Analysis: 3/27/23 04:39 PM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	104	70-130



Air Toxics

Client Sample ID: SS1:A031523

Lab ID#: 2303549-02B

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

File Name:	v032712sim	Date of Collection:	3/15/23 4:15:00 PM
Dil. Factor:	1.28	Date of Analysis:	3/27/23 04:39 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.064	0.38	0.32	1.9
Freon 114	0.026	Not Detected	0.18	Not Detected
Chloromethane	0.64	Not Detected	1.3	Not Detected
Vinyl Chloride	0.013	Not Detected	0.033	Not Detected
Chloroethane	0.064	Not Detected	0.17	Not Detected
1,1-Dichloroethene	0.013	Not Detected	0.051	Not Detected
trans-1,2-Dichloroethene	0.13	Not Detected	0.51	Not Detected
Methyl tert-butyl ether	0.13	Not Detected	0.46	Not Detected
1,1-Dichloroethane	0.026	Not Detected	0.10	Not Detected
cis-1,2-Dichloroethene	0.026	Not Detected	0.10	Not Detected
Chloroform	0.026	0.15	0.12	0.73
1,1,1-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.026	0.070	0.16	0.44
Benzene	0.064	0.080	0.20	0.26
1,2-Dichloroethane	0.026	Not Detected	0.10	Not Detected
Trichloroethene	0.026	Not Detected	0.14	Not Detected
Toluene	0.064	0.16	0.24	0.62
1,1,2-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Tetrachloroethene	0.026	0.24	0.17	1.6
1,2-Dibromoethane (EDB)	0.026	Not Detected	0.20	Not Detected
Ethyl Benzene	0.026	0.031	0.11	0.14
m,p-Xylene	0.051	0.10	0.22	0.44
o-Xylene	0.026	0.041	0.11	0.18
1,1,2,2-Tetrachloroethane	0.026	Not Detected	0.18	Not Detected
1,4-Dichlorobenzene	0.026	Not Detected	0.15	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	103	70-130



Air Toxics

Client Sample ID: SS2:A031523

Lab ID#: 2303549-03A

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

File Name:	v032713	Date of Collection:	3/15/23 4:17:00 PM
Dil. Factor:	1.28	Date of Analysis:	3/27/23 05:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.13	Not Detected	0.28	Not Detected
Bromomethane	6.4	Not Detected	25	Not Detected
Freon 11	0.13	0.20	0.72	1.1
Ethanol	2.6	15	4.8	29
Freon 113	0.13	Not Detected	0.98	Not Detected
Acetone	2.6	11	6.1	27
2-Propanol	2.6	240 E	6.3	600 E
Carbon Disulfide	0.64	Not Detected	2.0	Not Detected
3-Chloropropene	0.64	Not Detected	2.0	Not Detected
Methylene Chloride	0.26	Not Detected	0.89	Not Detected
Hexane	0.64	Not Detected	2.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.64	Not Detected	1.9	Not Detected
Tetrahydrofuran	0.64	Not Detected	1.9	Not Detected
Cyclohexane	0.64	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	0.64	Not Detected	3.0	Not Detected
Heptane	0.64	Not Detected	2.6	Not Detected
1,2-Dichloropropane	0.13	Not Detected	0.59	Not Detected
1,4-Dioxane	0.13	Not Detected	0.46	Not Detected
Bromodichloromethane	0.13	Not Detected	0.86	Not Detected
cis-1,3-Dichloropropene	0.13	Not Detected	0.58	Not Detected
4-Methyl-2-pentanone	0.13	Not Detected	0.52	Not Detected
trans-1,3-Dichloropropene	0.13	Not Detected	0.58	Not Detected
2-Hexanone	0.64	Not Detected	2.6	Not Detected
Dibromochloromethane	0.13	Not Detected	1.1	Not Detected
Chlorobenzene	0.13	Not Detected	0.59	Not Detected
Styrene	0.13	Not Detected	0.54	Not Detected
Bromoform	0.13	Not Detected	1.3	Not Detected
Cumene	0.13	Not Detected	0.63	Not Detected
Propylbenzene	0.13	Not Detected	0.63	Not Detected
4-Ethyltoluene	0.13	Not Detected	0.63	Not Detected
1,3,5-Trimethylbenzene	0.13	Not Detected	0.63	Not Detected
1,2,4-Trimethylbenzene	0.13	Not Detected	0.63	Not Detected
1,3-Dichlorobenzene	0.13	0.63	0.77	3.8
alpha-Chlorotoluene	0.13	Not Detected	0.66	Not Detected
1,2-Dichlorobenzene	0.13	Not Detected	0.77	Not Detected
1,2,4-Trichlorobenzene	0.64	Not Detected	4.7	Not Detected
Hexachlorobutadiene	0.64	Not Detected	6.8	Not Detected

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
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Air Toxics

Client Sample ID: SS2:A031523

Lab ID#: 2303549-03A

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

File Name:	v032713	Date of Collection: 3/15/23 4:17:00 PM
Dil. Factor:	1.28	Date of Analysis: 3/27/23 05:18 PM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	110	70-130



Air Toxics

Client Sample ID: SS2:A031523

Lab ID#: 2303549-03B

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

File Name:	v032713sim	Date of Collection:	3/15/23 4:17:00 PM
Dil. Factor:	1.28	Date of Analysis:	3/27/23 05:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.064	0.38	0.32	1.9
Freon 114	0.026	Not Detected	0.18	Not Detected
Chloromethane	0.64	Not Detected	1.3	Not Detected
Vinyl Chloride	0.013	Not Detected	0.033	Not Detected
Chloroethane	0.064	Not Detected	0.17	Not Detected
1,1-Dichloroethene	0.013	Not Detected	0.051	Not Detected
trans-1,2-Dichloroethene	0.13	Not Detected	0.51	Not Detected
Methyl tert-butyl ether	0.13	Not Detected	0.46	Not Detected
1,1-Dichloroethane	0.026	Not Detected	0.10	Not Detected
cis-1,2-Dichloroethene	0.026	Not Detected	0.10	Not Detected
Chloroform	0.026	0.29	0.12	1.4
1,1,1-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.026	24	0.16	150
Benzene	0.064	0.10	0.20	0.33
1,2-Dichloroethane	0.026	Not Detected	0.10	Not Detected
Trichloroethene	0.026	Not Detected	0.14	Not Detected
Toluene	0.064	0.28	0.24	1.0
1,1,2-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Tetrachloroethene	0.026	2.4	0.17	16
1,2-Dibromoethane (EDB)	0.026	Not Detected	0.20	Not Detected
Ethyl Benzene	0.026	0.033	0.11	0.14
m,p-Xylene	0.051	0.10	0.22	0.44
o-Xylene	0.026	0.043	0.11	0.19
1,1,2,2-Tetrachloroethane	0.026	Not Detected	0.18	Not Detected
1,4-Dichlorobenzene	0.026	Not Detected	0.15	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	105	70-130



Air Toxics

Client Sample ID: IA1:A031523

Lab ID#: 2303549-04A

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

File Name:	v032714	Date of Collection:	3/15/23 4:15:00 PM
Dil. Factor:	1.28	Date of Analysis:	3/27/23 05:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.13	Not Detected	0.28	Not Detected
Bromomethane	6.4	Not Detected	25	Not Detected
Freon 11	0.13	0.18	0.72	1.0
Ethanol	2.6	22	4.8	42
Freon 113	0.13	Not Detected	0.98	Not Detected
Acetone	2.6	10	6.1	24
2-Propanol	2.6	Not Detected	6.3	Not Detected
Carbon Disulfide	0.64	Not Detected	2.0	Not Detected
3-Chloropropene	0.64	Not Detected	2.0	Not Detected
Methylene Chloride	0.26	Not Detected	0.89	Not Detected
Hexane	0.64	Not Detected	2.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.64	Not Detected	1.9	Not Detected
Tetrahydrofuran	0.64	Not Detected	1.9	Not Detected
Cyclohexane	0.64	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	0.64	Not Detected	3.0	Not Detected
Heptane	0.64	Not Detected	2.6	Not Detected
1,2-Dichloropropane	0.13	Not Detected	0.59	Not Detected
1,4-Dioxane	0.13	Not Detected	0.46	Not Detected
Bromodichloromethane	0.13	Not Detected	0.86	Not Detected
cis-1,3-Dichloropropene	0.13	Not Detected	0.58	Not Detected
4-Methyl-2-pentanone	0.13	Not Detected	0.52	Not Detected
trans-1,3-Dichloropropene	0.13	Not Detected	0.58	Not Detected
2-Hexanone	0.64	Not Detected	2.6	Not Detected
Dibromochloromethane	0.13	Not Detected	1.1	Not Detected
Chlorobenzene	0.13	Not Detected	0.59	Not Detected
Styrene	0.13	Not Detected	0.54	Not Detected
Bromoform	0.13	Not Detected	1.3	Not Detected
Cumene	0.13	Not Detected	0.63	Not Detected
Propylbenzene	0.13	Not Detected	0.63	Not Detected
4-Ethyltoluene	0.13	Not Detected	0.63	Not Detected
1,3,5-Trimethylbenzene	0.13	Not Detected	0.63	Not Detected
1,2,4-Trimethylbenzene	0.13	Not Detected	0.63	Not Detected
1,3-Dichlorobenzene	0.13	Not Detected	0.77	Not Detected
alpha-Chlorotoluene	0.13	Not Detected	0.66	Not Detected
1,2-Dichlorobenzene	0.13	Not Detected	0.77	Not Detected
1,2,4-Trichlorobenzene	0.64	Not Detected	4.7	Not Detected
Hexachlorobutadiene	0.64	Not Detected	6.8	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130



Air Toxics

Client Sample ID: IA1:A031523

Lab ID#: 2303549-04A

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

File Name:	v032714	Date of Collection: 3/15/23 4:15:00 PM
Dil. Factor:	1.28	Date of Analysis: 3/27/23 05:58 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	83	70-130



Air Toxics

Client Sample ID: IA1:A031523

Lab ID#: 2303549-04B

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

File Name:	v032714sim	Date of Collection:	3/15/23 4:15:00 PM
Dil. Factor:	1.28	Date of Analysis:	3/27/23 05:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.064	0.38	0.32	1.9
Freon 114	0.026	Not Detected	0.18	Not Detected
Chloromethane	0.64	0.68	1.3	1.4
Vinyl Chloride	0.013	Not Detected	0.033	Not Detected
Chloroethane	0.064	Not Detected	0.17	Not Detected
1,1-Dichloroethene	0.013	Not Detected	0.051	Not Detected
trans-1,2-Dichloroethene	0.13	Not Detected	0.51	Not Detected
Methyl tert-butyl ether	0.13	Not Detected	0.46	Not Detected
1,1-Dichloroethane	0.026	Not Detected	0.10	Not Detected
cis-1,2-Dichloroethene	0.026	Not Detected	0.10	Not Detected
Chloroform	0.026	0.57	0.12	2.8
1,1,1-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.026	0.070	0.16	0.44
Benzene	0.064	0.15	0.20	0.47
1,2-Dichloroethane	0.026	Not Detected	0.10	Not Detected
Trichloroethene	0.026	Not Detected	0.14	Not Detected
Toluene	0.064	0.17	0.24	0.65
1,1,2-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Tetrachloroethene	0.026	Not Detected	0.17	Not Detected
1,2-Dibromoethane (EDB)	0.026	Not Detected	0.20	Not Detected
Ethyl Benzene	0.026	Not Detected	0.11	Not Detected
m,p-Xylene	0.051	0.062	0.22	0.27
o-Xylene	0.026	Not Detected	0.11	Not Detected
1,1,2,2-Tetrachloroethane	0.026	Not Detected	0.18	Not Detected
1,4-Dichlorobenzene	0.026	Not Detected	0.15	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	82	70-130



Air Toxics

Client Sample ID: IA2:A031523

Lab ID#: 2303549-05A

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

File Name:	v032715	Date of Collection:	3/15/23 4:17:00 PM
Dil. Factor:	1.27	Date of Analysis:	3/27/23 06:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.13	Not Detected	0.28	Not Detected
Bromomethane	6.4	Not Detected	25	Not Detected
Freon 11	0.13	0.19	0.71	1.1
Ethanol	2.5	2.6	4.8	5.0
Freon 113	0.13	Not Detected	0.97	Not Detected
Acetone	2.5	5.5	6.0	13
2-Propanol	2.5	Not Detected	6.2	Not Detected
Carbon Disulfide	0.64	Not Detected	2.0	Not Detected
3-Chloropropene	0.64	Not Detected	2.0	Not Detected
Methylene Chloride	0.25	Not Detected	0.88	Not Detected
Hexane	0.64	Not Detected	2.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.64	Not Detected	1.9	Not Detected
Tetrahydrofuran	0.64	Not Detected	1.9	Not Detected
Cyclohexane	0.64	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	0.64	Not Detected	3.0	Not Detected
Heptane	0.64	Not Detected	2.6	Not Detected
1,2-Dichloropropane	0.13	Not Detected	0.59	Not Detected
1,4-Dioxane	0.13	Not Detected	0.46	Not Detected
Bromodichloromethane	0.13	Not Detected	0.85	Not Detected
cis-1,3-Dichloropropene	0.13	Not Detected	0.58	Not Detected
4-Methyl-2-pentanone	0.13	Not Detected	0.52	Not Detected
trans-1,3-Dichloropropene	0.13	Not Detected	0.58	Not Detected
2-Hexanone	0.64	Not Detected	2.6	Not Detected
Dibromochloromethane	0.13	Not Detected	1.1	Not Detected
Chlorobenzene	0.13	Not Detected	0.58	Not Detected
Styrene	0.13	Not Detected	0.54	Not Detected
Bromoform	0.13	Not Detected	1.3	Not Detected
Cumene	0.13	Not Detected	0.62	Not Detected
Propylbenzene	0.13	Not Detected	0.62	Not Detected
4-Ethyltoluene	0.13	Not Detected	0.62	Not Detected
1,3,5-Trimethylbenzene	0.13	Not Detected	0.62	Not Detected
1,2,4-Trimethylbenzene	0.13	Not Detected	0.62	Not Detected
1,3-Dichlorobenzene	0.13	Not Detected	0.76	Not Detected
alpha-Chlorotoluene	0.13	Not Detected	0.66	Not Detected
1,2-Dichlorobenzene	0.13	Not Detected	0.76	Not Detected
1,2,4-Trichlorobenzene	0.64	Not Detected	4.7	Not Detected
Hexachlorobutadiene	0.64	Not Detected	6.8	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130



Air Toxics

Client Sample ID: IA2:A031523

Lab ID#: 2303549-05A

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

File Name:	v032715	Date of Collection: 3/15/23 4:17:00 PM
Dil. Factor:	1.27	Date of Analysis: 3/27/23 06:38 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	83	70-130

Client Sample ID: IA2:A031523

Lab ID#: 2303549-05B

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

File Name:	v032715sim	Date of Collection:	3/15/23 4:17:00 PM
Dil. Factor:	1.27	Date of Analysis:	3/27/23 06:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.064	0.40	0.31	2.0
Freon 114	0.025	Not Detected	0.18	Not Detected
Chloromethane	0.64	Not Detected	1.3	Not Detected
Vinyl Chloride	0.013	Not Detected	0.032	Not Detected
Chloroethane	0.064	Not Detected	0.17	Not Detected
1,1-Dichloroethene	0.013	Not Detected	0.050	Not Detected
trans-1,2-Dichloroethene	0.13	Not Detected	0.50	Not Detected
Methyl tert-butyl ether	0.13	Not Detected	0.46	Not Detected
1,1-Dichloroethane	0.025	Not Detected	0.10	Not Detected
cis-1,2-Dichloroethene	0.025	Not Detected	0.10	Not Detected
Chloroform	0.025	0.040	0.12	0.20
1,1,1-Trichloroethane	0.025	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.025	0.065	0.16	0.41
Benzene	0.064	0.11	0.20	0.34
1,2-Dichloroethane	0.025	Not Detected	0.10	Not Detected
Trichloroethene	0.025	Not Detected	0.14	Not Detected
Toluene	0.064	0.36	0.24	1.3
1,1,2-Trichloroethane	0.025	Not Detected	0.14	Not Detected
Tetrachloroethene	0.025	0.10	0.17	0.69
1,2-Dibromoethane (EDB)	0.025	Not Detected	0.20	Not Detected
Ethyl Benzene	0.025	Not Detected	0.11	Not Detected
m,p-Xylene	0.051	0.054	0.22	0.24
o-Xylene	0.025	Not Detected	0.11	Not Detected
1,1,2,2-Tetrachloroethane	0.025	Not Detected	0.17	Not Detected
1,4-Dichlorobenzene	0.025	Not Detected	0.15	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	80	70-130



Air Toxics

Client Sample ID: IA3:A031523

Lab ID#: 2303549-06A

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

File Name:	v032716	Date of Collection:	3/15/23 4:17:00 PM
Dil. Factor:	1.30	Date of Analysis:	3/27/23 07:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.13	Not Detected	0.29	Not Detected
Bromomethane	6.5	Not Detected	25	Not Detected
Freon 11	0.13	0.19	0.73	1.1
Ethanol	2.6	Not Detected	4.9	Not Detected
Freon 113	0.13	Not Detected	1.0	Not Detected
Acetone	2.6	2.6 J	6.2	6.1 J
2-Propanol	2.6	Not Detected	6.4	Not Detected
Carbon Disulfide	0.65	Not Detected	2.0	Not Detected
3-Chloropropene	0.65	Not Detected	2.0	Not Detected
Methylene Chloride	0.26	Not Detected	0.90	Not Detected
Hexane	0.65	Not Detected	2.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.65	Not Detected	1.9	Not Detected
Tetrahydrofuran	0.65	Not Detected	1.9	Not Detected
Cyclohexane	0.65	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	0.65	Not Detected	3.0	Not Detected
Heptane	0.65	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.13	Not Detected	0.60	Not Detected
1,4-Dioxane	0.13	Not Detected	0.47	Not Detected
Bromodichloromethane	0.13	Not Detected	0.87	Not Detected
cis-1,3-Dichloropropene	0.13	Not Detected	0.59	Not Detected
4-Methyl-2-pentanone	0.13	Not Detected	0.53	Not Detected
trans-1,3-Dichloropropene	0.13	Not Detected	0.59	Not Detected
2-Hexanone	0.65	Not Detected	2.7	Not Detected
Dibromochloromethane	0.13	Not Detected	1.1	Not Detected
Chlorobenzene	0.13	Not Detected	0.60	Not Detected
Styrene	0.13	Not Detected	0.55	Not Detected
Bromoform	0.13	Not Detected	1.3	Not Detected
Cumene	0.13	Not Detected	0.64	Not Detected
Propylbenzene	0.13	Not Detected	0.64	Not Detected
4-Ethyltoluene	0.13	Not Detected	0.64	Not Detected
1,3,5-Trimethylbenzene	0.13	Not Detected	0.64	Not Detected
1,2,4-Trimethylbenzene	0.13	Not Detected	0.64	Not Detected
1,3-Dichlorobenzene	0.13	Not Detected	0.78	Not Detected
alpha-Chlorotoluene	0.13	Not Detected	0.67	Not Detected
1,2-Dichlorobenzene	0.13	Not Detected	0.78	Not Detected
1,2,4-Trichlorobenzene	0.65	Not Detected	4.8	Not Detected
Hexachlorobutadiene	0.65	Not Detected	6.9	Not Detected

J = Estimated value.

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

Surrogates	%Recovery	Method Limits
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Air Toxics

Client Sample ID: IA3:A031523

Lab ID#: 2303549-06A

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

File Name:	v032716	Date of Collection: 3/15/23 4:17:00 PM
Dil. Factor:	1.30	Date of Analysis: 3/27/23 07:18 PM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	84	70-130

Client Sample ID: IA3:A031523

Lab ID#: 2303549-06B

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

File Name:	v032716sim	Date of Collection:	3/15/23 4:17:00 PM
Dil. Factor:	1.30	Date of Analysis:	3/27/23 07:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.065	0.39	0.32	1.9
Freon 114	0.026	Not Detected	0.18	Not Detected
Chloromethane	0.65	Not Detected	1.3	Not Detected
Vinyl Chloride	0.013	Not Detected	0.033	Not Detected
Chloroethane	0.065	Not Detected	0.17	Not Detected
1,1-Dichloroethene	0.013	Not Detected	0.052	Not Detected
trans-1,2-Dichloroethene	0.13	Not Detected	0.52	Not Detected
Methyl tert-butyl ether	0.13	Not Detected	0.47	Not Detected
1,1-Dichloroethane	0.026	Not Detected	0.10	Not Detected
cis-1,2-Dichloroethene	0.026	Not Detected	0.10	Not Detected
Chloroform	0.026	0.040	0.13	0.20
1,1,1-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.026	0.065	0.16	0.41
Benzene	0.065	0.10	0.21	0.34
1,2-Dichloroethane	0.026	Not Detected	0.10	Not Detected
Trichloroethene	0.026	Not Detected	0.14	Not Detected
Toluene	0.065	0.14	0.24	0.53
1,1,2-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Tetrachloroethene	0.026	Not Detected	0.18	Not Detected
1,2-Dibromoethane (EDB)	0.026	Not Detected	0.20	Not Detected
Ethyl Benzene	0.026	Not Detected	0.11	Not Detected
m,p-Xylene	0.052	Not Detected	0.22	Not Detected
o-Xylene	0.026	Not Detected	0.11	Not Detected
1,1,2,2-Tetrachloroethane	0.026	Not Detected	0.18	Not Detected
1,4-Dichlorobenzene	0.026	Not Detected	0.16	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	79	70-130



Air Toxics

Client Sample ID: IA12:A031523

Lab ID#: 2303549-07A

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

File Name:	v032717	Date of Collection:	3/15/23 4:18:00 PM
Dil. Factor:	1.25	Date of Analysis:	3/27/23 07:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.12	Not Detected	0.28	Not Detected
Bromomethane	6.2	Not Detected	24	Not Detected
Freon 11	0.12	0.18	0.70	1.0
Ethanol	2.5	8.7	4.7	16
Freon 113	0.12	Not Detected	0.96	Not Detected
Acetone	2.5	6.3	5.9	15
2-Propanol	2.5	Not Detected	6.1	Not Detected
Carbon Disulfide	0.62	Not Detected	1.9	Not Detected
3-Chloropropene	0.62	Not Detected	2.0	Not Detected
Methylene Chloride	0.25	Not Detected	0.87	Not Detected
Hexane	0.62	Not Detected	2.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.62	Not Detected	1.8	Not Detected
Tetrahydrofuran	0.62	Not Detected	1.8	Not Detected
Cyclohexane	0.62	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	0.62	Not Detected	2.9	Not Detected
Heptane	0.62	Not Detected	2.6	Not Detected
1,2-Dichloropropane	0.12	Not Detected	0.58	Not Detected
1,4-Dioxane	0.12	Not Detected	0.45	Not Detected
Bromodichloromethane	0.12	Not Detected	0.84	Not Detected
cis-1,3-Dichloropropene	0.12	Not Detected	0.57	Not Detected
4-Methyl-2-pentanone	0.12	Not Detected	0.51	Not Detected
trans-1,3-Dichloropropene	0.12	Not Detected	0.57	Not Detected
2-Hexanone	0.62	Not Detected	2.6	Not Detected
Dibromochloromethane	0.12	Not Detected	1.1	Not Detected
Chlorobenzene	0.12	Not Detected	0.58	Not Detected
Styrene	0.12	Not Detected	0.53	Not Detected
Bromoform	0.12	Not Detected	1.3	Not Detected
Cumene	0.12	Not Detected	0.61	Not Detected
Propylbenzene	0.12	Not Detected	0.61	Not Detected
4-Ethyltoluene	0.12	Not Detected	0.61	Not Detected
1,3,5-Trimethylbenzene	0.12	Not Detected	0.61	Not Detected
1,2,4-Trimethylbenzene	0.12	Not Detected	0.61	Not Detected
1,3-Dichlorobenzene	0.12	Not Detected	0.75	Not Detected
alpha-Chlorotoluene	0.12	Not Detected	0.65	Not Detected
1,2-Dichlorobenzene	0.12	Not Detected	0.75	Not Detected
1,2,4-Trichlorobenzene	0.62	Not Detected	4.6	Not Detected
Hexachlorobutadiene	0.62	Not Detected	6.7	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	116	70-130



Air Toxics

Client Sample ID: IA12:A031523

Lab ID#: 2303549-07A

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

File Name:	v032717	Date of Collection: 3/15/23 4:18:00 PM
Dil. Factor:	1.25	Date of Analysis: 3/27/23 07:58 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	85	70-130

Client Sample ID: IA12:A031523

Lab ID#: 2303549-07B

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

File Name:	v032717sim	Date of Collection:	3/15/23 4:18:00 PM
Dil. Factor:	1.25	Date of Analysis:	3/27/23 07:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.062	0.39	0.31	1.9
Freon 114	0.025	Not Detected	0.17	Not Detected
Chloromethane	0.62	Not Detected	1.3	Not Detected
Vinyl Chloride	0.012	Not Detected	0.032	Not Detected
Chloroethane	0.062	Not Detected	0.16	Not Detected
1,1-Dichloroethene	0.012	Not Detected	0.050	Not Detected
trans-1,2-Dichloroethene	0.12	Not Detected	0.50	Not Detected
Methyl tert-butyl ether	0.12	Not Detected	0.45	Not Detected
1,1-Dichloroethane	0.025	Not Detected	0.10	Not Detected
cis-1,2-Dichloroethene	0.025	Not Detected	0.099	Not Detected
Chloroform	0.025	0.035	0.12	0.17
1,1,1-Trichloroethane	0.025	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.025	0.062	0.16	0.39
Benzene	0.062	0.10	0.20	0.34
1,2-Dichloroethane	0.025	Not Detected	0.10	Not Detected
Trichloroethene	0.025	Not Detected	0.13	Not Detected
Toluene	0.062	0.12	0.24	0.47
1,1,2-Trichloroethane	0.025	Not Detected	0.14	Not Detected
Tetrachloroethene	0.025	Not Detected	0.17	Not Detected
1,2-Dibromoethane (EDB)	0.025	Not Detected	0.19	Not Detected
Ethyl Benzene	0.025	Not Detected	0.11	Not Detected
m,p-Xylene	0.050	Not Detected	0.22	Not Detected
o-Xylene	0.025	Not Detected	0.11	Not Detected
1,1,2,2-Tetrachloroethane	0.025	Not Detected	0.17	Not Detected
1,4-Dichlorobenzene	0.025	Not Detected	0.15	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	80	70-130



Air Toxics

Client Sample ID: IA13:A031523

Lab ID#: 2303549-08A

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

File Name:	v032718	Date of Collection:	3/15/23 5:17:00 PM
Dil. Factor:	1.28	Date of Analysis:	3/27/23 08:37 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.13	Not Detected	0.28	Not Detected
Bromomethane	6.4	Not Detected	25	Not Detected
Freon 11	0.13	0.20	0.72	1.1
Ethanol	2.6	16	4.8	30
Freon 113	0.13	Not Detected	0.98	Not Detected
Acetone	2.6	5.4	6.1	13
2-Propanol	2.6	Not Detected	6.3	Not Detected
Carbon Disulfide	0.64	Not Detected	2.0	Not Detected
3-Chloropropene	0.64	Not Detected	2.0	Not Detected
Methylene Chloride	0.26	Not Detected	0.89	Not Detected
Hexane	0.64	Not Detected	2.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.64	Not Detected	1.9	Not Detected
Tetrahydrofuran	0.64	Not Detected	1.9	Not Detected
Cyclohexane	0.64	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	0.64	Not Detected	3.0	Not Detected
Heptane	0.64	Not Detected	2.6	Not Detected
1,2-Dichloropropane	0.13	Not Detected	0.59	Not Detected
1,4-Dioxane	0.13	Not Detected	0.46	Not Detected
Bromodichloromethane	0.13	Not Detected	0.86	Not Detected
cis-1,3-Dichloropropene	0.13	Not Detected	0.58	Not Detected
4-Methyl-2-pentanone	0.13	Not Detected	0.52	Not Detected
trans-1,3-Dichloropropene	0.13	Not Detected	0.58	Not Detected
2-Hexanone	0.64	Not Detected	2.6	Not Detected
Dibromochloromethane	0.13	Not Detected	1.1	Not Detected
Chlorobenzene	0.13	Not Detected	0.59	Not Detected
Styrene	0.13	Not Detected	0.54	Not Detected
Bromoform	0.13	Not Detected	1.3	Not Detected
Cumene	0.13	Not Detected	0.63	Not Detected
Propylbenzene	0.13	Not Detected	0.63	Not Detected
4-Ethyltoluene	0.13	Not Detected	0.63	Not Detected
1,3,5-Trimethylbenzene	0.13	Not Detected	0.63	Not Detected
1,2,4-Trimethylbenzene	0.13	Not Detected	0.63	Not Detected
1,3-Dichlorobenzene	0.13	Not Detected	0.77	Not Detected
alpha-Chlorotoluene	0.13	Not Detected	0.66	Not Detected
1,2-Dichlorobenzene	0.13	Not Detected	0.77	Not Detected
1,2,4-Trichlorobenzene	0.64	Not Detected	4.7	Not Detected
Hexachlorobutadiene	0.64	Not Detected	6.8	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130



Air Toxics

Client Sample ID: IA13:A031523

Lab ID#: 2303549-08A

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

File Name:	v032718	Date of Collection: 3/15/23 5:17:00 PM
Dil. Factor:	1.28	Date of Analysis: 3/27/23 08:37 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
4-Bromofluorobenzene	84	70-130



Air Toxics

Client Sample ID: IA13:A031523

Lab ID#: 2303549-08B

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

File Name:	v032718sim	Date of Collection:	3/15/23 5:17:00 PM
Dil. Factor:	1.28	Date of Analysis:	3/27/23 08:37 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.064	0.40	0.32	2.0
Freon 114	0.026	Not Detected	0.18	Not Detected
Chloromethane	0.64	Not Detected	1.3	Not Detected
Vinyl Chloride	0.013	Not Detected	0.033	Not Detected
Chloroethane	0.064	Not Detected	0.17	Not Detected
1,1-Dichloroethene	0.013	Not Detected	0.051	Not Detected
trans-1,2-Dichloroethene	0.13	Not Detected	0.51	Not Detected
Methyl tert-butyl ether	0.13	Not Detected	0.46	Not Detected
1,1-Dichloroethane	0.026	Not Detected	0.10	Not Detected
cis-1,2-Dichloroethene	0.026	Not Detected	0.10	Not Detected
Chloroform	0.026	0.10	0.12	0.51
1,1,1-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.026	0.066	0.16	0.42
Benzene	0.064	0.11	0.20	0.35
1,2-Dichloroethane	0.026	Not Detected	0.10	Not Detected
Trichloroethene	0.026	Not Detected	0.14	Not Detected
Toluene	0.064	0.32	0.24	1.2
1,1,2-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Tetrachloroethene	0.026	Not Detected	0.17	Not Detected
1,2-Dibromoethane (EDB)	0.026	Not Detected	0.20	Not Detected
Ethyl Benzene	0.026	Not Detected	0.11	Not Detected
m,p-Xylene	0.051	Not Detected	0.22	Not Detected
o-Xylene	0.026	Not Detected	0.11	Not Detected
1,1,2,2-Tetrachloroethane	0.026	Not Detected	0.18	Not Detected
1,4-Dichlorobenzene	0.026	Not Detected	0.15	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	81	70-130



Air Toxics

Client Sample ID: IA16:A031523

Lab ID#: 2303549-09A

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

File Name:	v032719	Date of Collection:	3/15/23 4:21:00 PM
Dil. Factor:	1.23	Date of Analysis:	3/27/23 09:17 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.12	Not Detected	0.27	Not Detected
Bromomethane	6.2	Not Detected	24	Not Detected
Freon 11	0.12	0.20	0.69	1.1
Ethanol	2.5	5.3	4.6	10
Freon 113	0.12	Not Detected	0.94	Not Detected
Acetone	2.5	3.7	5.8	8.7
2-Propanol	2.5	Not Detected	6.0	Not Detected
Carbon Disulfide	0.62	Not Detected	1.9	Not Detected
3-Chloropropene	0.62	Not Detected	1.9	Not Detected
Methylene Chloride	0.25	Not Detected	0.85	Not Detected
Hexane	0.62	Not Detected	2.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.62	Not Detected	1.8	Not Detected
Tetrahydrofuran	0.62	Not Detected	1.8	Not Detected
Cyclohexane	0.62	Not Detected	2.1	Not Detected
2,2,4-Trimethylpentane	0.62	Not Detected	2.9	Not Detected
Heptane	0.62	Not Detected	2.5	Not Detected
1,2-Dichloropropane	0.12	Not Detected	0.57	Not Detected
1,4-Dioxane	0.12	Not Detected	0.44	Not Detected
Bromodichloromethane	0.12	Not Detected	0.82	Not Detected
cis-1,3-Dichloropropene	0.12	Not Detected	0.56	Not Detected
4-Methyl-2-pentanone	0.12	Not Detected	0.50	Not Detected
trans-1,3-Dichloropropene	0.12	Not Detected	0.56	Not Detected
2-Hexanone	0.62	Not Detected	2.5	Not Detected
Dibromochloromethane	0.12	Not Detected	1.0	Not Detected
Chlorobenzene	0.12	Not Detected	0.57	Not Detected
Styrene	0.12	Not Detected	0.52	Not Detected
Bromoform	0.12	Not Detected	1.3	Not Detected
Cumene	0.12	Not Detected	0.60	Not Detected
Propylbenzene	0.12	Not Detected	0.60	Not Detected
4-Ethyltoluene	0.12	Not Detected	0.60	Not Detected
1,3,5-Trimethylbenzene	0.12	Not Detected	0.60	Not Detected
1,2,4-Trimethylbenzene	0.12	Not Detected	0.60	Not Detected
1,3-Dichlorobenzene	0.12	Not Detected	0.74	Not Detected
alpha-Chlorotoluene	0.12	Not Detected	0.64	Not Detected
1,2-Dichlorobenzene	0.12	Not Detected	0.74	Not Detected
1,2,4-Trichlorobenzene	0.62	Not Detected	4.6	Not Detected
Hexachlorobutadiene	0.62	Not Detected	6.6	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130



Air Toxics

Client Sample ID: IA16:A031523

Lab ID#: 2303549-09A

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

File Name:	v032719	Date of Collection: 3/15/23 4:21:00 PM
Dil. Factor:	1.23	Date of Analysis: 3/27/23 09:17 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
4-Bromofluorobenzene	85	70-130



Air Toxics

Client Sample ID: IA16:A031523

Lab ID#: 2303549-09B

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

File Name:	v032719sim	Date of Collection:	3/15/23 4:21:00 PM
Dil. Factor:	1.23	Date of Analysis:	3/27/23 09:17 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.062	0.40	0.30	2.0
Freon 114	0.025	Not Detected	0.17	Not Detected
Chloromethane	0.62	Not Detected	1.3	Not Detected
Vinyl Chloride	0.012	Not Detected	0.031	Not Detected
Chloroethane	0.062	Not Detected	0.16	Not Detected
1,1-Dichloroethene	0.012	Not Detected	0.049	Not Detected
trans-1,2-Dichloroethene	0.12	Not Detected	0.49	Not Detected
Methyl tert-butyl ether	0.12	Not Detected	0.44	Not Detected
1,1-Dichloroethane	0.025	Not Detected	0.10	Not Detected
cis-1,2-Dichloroethene	0.025	Not Detected	0.098	Not Detected
Chloroform	0.025	0.10	0.12	0.51
1,1,1-Trichloroethane	0.025	Not Detected	0.13	Not Detected
Carbon Tetrachloride	0.025	0.064	0.15	0.40
Benzene	0.062	0.12	0.20	0.38
1,2-Dichloroethane	0.025	Not Detected	0.10	Not Detected
Trichloroethene	0.025	Not Detected	0.13	Not Detected
Toluene	0.062	0.18	0.23	0.67
1,1,2-Trichloroethane	0.025	Not Detected	0.13	Not Detected
Tetrachloroethene	0.025	Not Detected	0.17	Not Detected
1,2-Dibromoethane (EDB)	0.025	Not Detected	0.19	Not Detected
Ethyl Benzene	0.025	Not Detected	0.11	Not Detected
m,p-Xylene	0.049	0.066	0.21	0.29
o-Xylene	0.025	0.026	0.11	0.11
1,1,2,2-Tetrachloroethane	0.025	Not Detected	0.17	Not Detected
1,4-Dichlorobenzene	0.025	Not Detected	0.15	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	81	70-130



Air Toxics

Client Sample ID: IA17:A031523

Lab ID#: 2303549-10A

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

File Name:	v032720	Date of Collection:	3/15/23 4:20:00 PM
Dil. Factor:	1.24	Date of Analysis:	3/27/23 09:57 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.12	Not Detected	0.27	Not Detected
Bromomethane	6.2	Not Detected	24	Not Detected
Freon 11	0.12	0.20	0.70	1.1
Ethanol	2.5	4.1	4.7	7.7
Freon 113	0.12	Not Detected	0.95	Not Detected
Acetone	2.5	3.6	5.9	8.6
2-Propanol	2.5	Not Detected	6.1	Not Detected
Carbon Disulfide	0.62	Not Detected	1.9	Not Detected
3-Chloropropene	0.62	Not Detected	1.9	Not Detected
Methylene Chloride	0.25	Not Detected	0.86	Not Detected
Hexane	0.62	Not Detected	2.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.62	Not Detected	1.8	Not Detected
Tetrahydrofuran	0.62	Not Detected	1.8	Not Detected
Cyclohexane	0.62	Not Detected	2.1	Not Detected
2,2,4-Trimethylpentane	0.62	Not Detected	2.9	Not Detected
Heptane	0.62	Not Detected	2.5	Not Detected
1,2-Dichloropropane	0.12	Not Detected	0.57	Not Detected
1,4-Dioxane	0.12	Not Detected	0.45	Not Detected
Bromodichloromethane	0.12	Not Detected	0.83	Not Detected
cis-1,3-Dichloropropene	0.12	Not Detected	0.56	Not Detected
4-Methyl-2-pentanone	0.12	Not Detected	0.51	Not Detected
trans-1,3-Dichloropropene	0.12	Not Detected	0.56	Not Detected
2-Hexanone	0.62	Not Detected	2.5	Not Detected
Dibromochloromethane	0.12	Not Detected	1.0	Not Detected
Chlorobenzene	0.12	Not Detected	0.57	Not Detected
Styrene	0.12	Not Detected	0.53	Not Detected
Bromoform	0.12	Not Detected	1.3	Not Detected
Cumene	0.12	Not Detected	0.61	Not Detected
Propylbenzene	0.12	Not Detected	0.61	Not Detected
4-Ethyltoluene	0.12	Not Detected	0.61	Not Detected
1,3,5-Trimethylbenzene	0.12	Not Detected	0.61	Not Detected
1,2,4-Trimethylbenzene	0.12	Not Detected	0.61	Not Detected
1,3-Dichlorobenzene	0.12	Not Detected	0.74	Not Detected
alpha-Chlorotoluene	0.12	Not Detected	0.64	Not Detected
1,2-Dichlorobenzene	0.12	Not Detected	0.74	Not Detected
1,2,4-Trichlorobenzene	0.62	Not Detected	4.6	Not Detected
Hexachlorobutadiene	0.62	Not Detected	6.6	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130



Air Toxics

Client Sample ID: IA17:A031523

Lab ID#: 2303549-10A

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

File Name:	v032720	Date of Collection: 3/15/23 4:20:00 PM
Dil. Factor:	1.24	Date of Analysis: 3/27/23 09:57 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
4-Bromofluorobenzene	81	70-130



Air Toxics

Client Sample ID: IA17:A031523

Lab ID#: 2303549-10B

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

File Name:	v032720sim	Date of Collection:	3/15/23 4:20:00 PM
Dil. Factor:	1.24	Date of Analysis:	3/27/23 09:57 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.062	0.40	0.31	2.0
Freon 114	0.025	Not Detected	0.17	Not Detected
Chloromethane	0.62	Not Detected	1.3	Not Detected
Vinyl Chloride	0.012	Not Detected	0.032	Not Detected
Chloroethane	0.062	Not Detected	0.16	Not Detected
1,1-Dichloroethene	0.012	Not Detected	0.049	Not Detected
trans-1,2-Dichloroethene	0.12	Not Detected	0.49	Not Detected
Methyl tert-butyl ether	0.12	Not Detected	0.45	Not Detected
1,1-Dichloroethane	0.025	Not Detected	0.10	Not Detected
cis-1,2-Dichloroethene	0.025	Not Detected	0.098	Not Detected
Chloroform	0.025	0.091	0.12	0.44
1,1,1-Trichloroethane	0.025	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.025	0.066	0.16	0.42
Benzene	0.062	0.12	0.20	0.38
1,2-Dichloroethane	0.025	Not Detected	0.10	Not Detected
Trichloroethene	0.025	Not Detected	0.13	Not Detected
Toluene	0.062	0.17	0.23	0.63
1,1,2-Trichloroethane	0.025	Not Detected	0.14	Not Detected
Tetrachloroethene	0.025	Not Detected	0.17	Not Detected
1,2-Dibromoethane (EDB)	0.025	Not Detected	0.19	Not Detected
Ethyl Benzene	0.025	Not Detected	0.11	Not Detected
m,p-Xylene	0.050	0.061	0.22	0.26
o-Xylene	0.025	Not Detected	0.11	Not Detected
1,1,2,2-Tetrachloroethane	0.025	Not Detected	0.17	Not Detected
1,4-Dichlorobenzene	0.025	Not Detected	0.15	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	79	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2303549-11A

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

File Name:	v032706	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/27/23 12:12 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	117	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2303549-11A

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

File Name:	v032706	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/27/23 12:12 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	85	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2303549-11B

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

File Name: v032706sim
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/27/23 12:12 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	116	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	80	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2303549-12A

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

File Name:	v032702	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/27/23 08:46 AM

Compound	%Recovery
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1,3-Butadiene	115
Bromomethane	109
Freon 11	106
Ethanol	94
Freon 113	99
Acetone	110
2-Propanol	102
Carbon Disulfide	103
3-Chloropropene	93
Methylene Chloride	100
Hexane	117
2-Butanone (Methyl Ethyl Ketone)	101
Tetrahydrofuran	105
Cyclohexane	98
2,2,4-Trimethylpentane	115
Heptane	137 Q
1,2-Dichloropropane	131 Q
1,4-Dioxane	110
Bromodichloromethane	115
cis-1,3-Dichloropropene	103
4-Methyl-2-pentanone	122
trans-1,3-Dichloropropene	109
2-Hexanone	131 Q
Dibromochloromethane	113
Chlorobenzene	109
Styrene	113
Bromoform	114
Cumene	108
Propylbenzene	116
4-Ethyltoluene	121
1,3,5-Trimethylbenzene	124
1,2,4-Trimethylbenzene	122
1,3-Dichlorobenzene	111
alpha-Chlorotoluene	111
1,2-Dichlorobenzene	110
1,2,4-Trichlorobenzene	103
Hexachlorobutadiene	112

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
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Air Toxics

Client Sample ID: CCV

Lab ID#: 2303549-12A

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

File Name: v032702
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/27/23 08:46 AM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	118	70-130
4-Bromofluorobenzene	98	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2303549-12B

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

File Name:	v032702sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/27/23 08:46 AM

Compound	%Recovery
Freon 12	96
Freon 114	99
Chloromethane	119
Vinyl Chloride	112
Chloroethane	111
1,1-Dichloroethene	93
trans-1,2-Dichloroethene	98
Methyl tert-butyl ether	97
1,1-Dichloroethane	111
cis-1,2-Dichloroethene	98
Chloroform	94
1,1,1-Trichloroethane	94
Carbon Tetrachloride	100
Benzene	105
1,2-Dichloroethane	108
Trichloroethene	100
Toluene	102
1,1,2-Trichloroethane	110
Tetrachloroethene	105
1,2-Dibromoethane (EDB)	102
Ethyl Benzene	110
m,p-Xylene	104
o-Xylene	98
1,1,2,2-Tetrachloroethane	107
1,4-Dichlorobenzene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	116	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 2303549-13A

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

File Name:	v032703	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/27/23 09:39 AM

Compound	%Recovery	Method Limits
1,3-Butadiene	108	70-130
Bromomethane	98	70-130
Freon 11	96	70-130
Ethanol	103	70-130
Freon 113	86	70-130
Acetone	99	70-130
2-Propanol	94	70-130
Carbon Disulfide	96	70-130
3-Chloropropene	86	70-130
Methylene Chloride	90	70-130
Hexane	107	70-130
2-Butanone (Methyl Ethyl Ketone)	89	70-130
Tetrahydrofuran	99	70-130
Cyclohexane	92	70-130
2,2,4-Trimethylpentane	106	70-130
Heptane	118	70-130
1,2-Dichloropropane	109	70-130
1,4-Dioxane	88	70-130
Bromodichloromethane	98	70-130
cis-1,3-Dichloropropene	91	70-130
4-Methyl-2-pentanone	104	70-130
trans-1,3-Dichloropropene	93	70-130
2-Hexanone	106	70-130
Dibromochloromethane	95	70-130
Chlorobenzene	97	70-130
Styrene	101	70-130
Bromoform	97	70-130
Cumene	96	70-130
Propylbenzene	102	70-130
4-Ethyltoluene	107	70-130
1,3,5-Trimethylbenzene	111	70-130
1,2,4-Trimethylbenzene	108	70-130
1,3-Dichlorobenzene	99	70-130
alpha-Chlorotoluene	99	70-130
1,2-Dichlorobenzene	98	70-130
1,2,4-Trichlorobenzene	99	70-130
Hexachlorobutadiene	110	70-130

Container Type: NA - Not Applicable

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



Air Toxics

Client Sample ID: LCS

Lab ID#: 2303549-13A

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

File Name:	v032703	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/27/23 09:39 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	112	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2303549-13AA

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

File Name: v032704
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/27/23 10:31 AM

Compound	%Recovery	Method Limits
1,3-Butadiene	106	70-130
Bromomethane	94	70-130
Freon 11	94	70-130
Ethanol	106	70-130
Freon 113	84	70-130
Acetone	98	70-130
2-Propanol	94	70-130
Carbon Disulfide	93	70-130
3-Chloropropene	85	70-130
Methylene Chloride	88	70-130
Hexane	106	70-130
2-Butanone (Methyl Ethyl Ketone)	90	70-130
Tetrahydrofuran	103	70-130
Cyclohexane	91	70-130
2,2,4-Trimethylpentane	107	70-130
Heptane	114	70-130
1,2-Dichloropropane	104	70-130
1,4-Dioxane	84	70-130
Bromodichloromethane	88	70-130
cis-1,3-Dichloropropene	87	70-130
4-Methyl-2-pentanone	100	70-130
trans-1,3-Dichloropropene	86	70-130
2-Hexanone	100	70-130
Dibromochloromethane	86	70-130
Chlorobenzene	90	70-130
Styrene	93	70-130
Bromoform	89	70-130
Cumene	89	70-130
Propylbenzene	93	70-130
4-Ethyltoluene	96	70-130
1,3,5-Trimethylbenzene	99	70-130
1,2,4-Trimethylbenzene	97	70-130
1,3-Dichlorobenzene	90	70-130
alpha-Chlorotoluene	92	70-130
1,2-Dichlorobenzene	88	70-130
1,2,4-Trichlorobenzene	94	70-130
Hexachlorobutadiene	101	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2303549-13AA

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

File Name: v032704
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/27/23 10:31 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	114	70-130
4-Bromofluorobenzene	98	70-130

Client Sample ID: LCS

Lab ID#: 2303549-13B

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

File Name: v032703sim
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/27/23 09:39 AM

Compound	%Recovery	Method Limits
Freon 12	88	70-130
Freon 114	88	70-130
Chloromethane	108	70-130
Vinyl Chloride	105	70-130
Chloroethane	104	70-130
1,1-Dichloroethene	82	70-130
trans-1,2-Dichloroethene	87	70-130
Methyl tert-butyl ether	90	70-130
1,1-Dichloroethane	100	70-130
cis-1,2-Dichloroethene	88	70-130
Chloroform	83	70-130
1,1,1-Trichloroethane	86	70-130
Carbon Tetrachloride	70	60-140
Benzene	92	70-130
1,2-Dichloroethane	95	70-130
Trichloroethene	88	70-130
Toluene	88	70-130
1,1,2-Trichloroethane	97	70-130
Tetrachloroethene	92	70-130
1,2-Dibromoethane (EDB)	91	70-130
Ethyl Benzene	98	70-130
m,p-Xylene	92	70-130
o-Xylene	90	70-130
1,1,2,2-Tetrachloroethane	96	70-130
1,4-Dichlorobenzene	90	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	113	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2303549-13BB

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

File Name: v032704sim
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/27/23 10:31 AM

Compound	%Recovery	Method Limits
Freon 12	85	70-130
Freon 114	85	70-130
Chloromethane	105	70-130
Vinyl Chloride	102	70-130
Chloroethane	101	70-130
1,1-Dichloroethene	80	70-130
trans-1,2-Dichloroethene	85	70-130
Methyl tert-butyl ether	89	70-130
1,1-Dichloroethane	97	70-130
cis-1,2-Dichloroethene	85	70-130
Chloroform	81	70-130
1,1,1-Trichloroethane	84	70-130
Carbon Tetrachloride	68	60-140
Benzene	86	70-130
1,2-Dichloroethane	89	70-130
Trichloroethene	83	70-130
Toluene	84	70-130
1,1,2-Trichloroethane	88	70-130
Tetrachloroethene	84	70-130
1,2-Dibromoethane (EDB)	82	70-130
Ethyl Benzene	92	70-130
m,p-Xylene	86	70-130
o-Xylene	84	70-130
1,1,2,2-Tetrachloroethane	88	70-130
1,4-Dichlorobenzene	81	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	114	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Analysis Request / Canister Chain of Custody

For Laboratory Use Only

PID: _____

Workorder #: _____

615324-23
~~615324-23~~ 2303549

page--of --

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Client: <u>ELAM</u>		Special Instructions/Notes:						Turnaround Time (Rush surcharges may apply)							
Project Name: <u>720 E Mang 25th St</u>								Standard <u>X</u>		Rush _____ (specify)					
Project Manager: <u>CS</u>								Canister Vacuum/Pressure		Requested Analyses					
Sampler: <u>JDe</u>								Lab Use Only							
Site Name: <u>Firmer Cherry St</u>		Project # _____													
Lab ID	Field Sample Identification(Location)	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N ₂ / He				
				Date	Time	Date	Time								
01A	FD1: A031523	662726	2228-1	—	—	—	—	-28	-2.5						
02A	SS1: A031523	661841	2242	3/15	0815	3/15	1615	-30	-4						
03A	SS2: A031523	660103	2217	3/15	0817	3/15	1617	-28	-3.5						
04A	TA1: A031523	661721	2242-2	3/15	0815	3/15	1615	-30	-4.5						
05A	TA2: A031523	660916	2242-3	3/15	0817	3/15	1617	-28.5	-4						
06A	TA3: A031523	660738	2228-2	3/15	0817	3/15	1617	-27	-5.5						
07A	TA12: A031523	663083	2217-1	3/15	0818	3/15	1618	-28	-2.5						
08A	TA13: A031523	662078	2242-1	3/15	0920	3/15	1717	-27.5	-5.5						
09A	TA14: A031523	660310	2228	3/15	0821	3/15	1621	-28	-2.5						
10A	TA17: A031523	663219	2217-2	3/15	0820	3/15	1620	-26	-3.5						
Relinquished by: (Signature/Affiliation)		Date		Time		Received by: (Signature/Affiliation)		Date		Time					
<u>[Signature]</u> ELAM		3/16/23		1220		<u>[Signature]</u> EHTL		3-17-23		0952					
Relinquished by: (Signature/Affiliation)		Date		Time		Received by: (Signature/Affiliation)		Date		Time					
Relinquished by: (Signature/Affiliation)		Date		Time		Received by: (Signature/Affiliation)		Date		Time					
Lab Use Only															
Shipper Name: <u>FEDEX</u>		Custody Seals Intact?		Yes No <u>None</u>											
Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922															