



Email: info@elamusa.com

Website: www.elamusa.com

Twitter: @elam_usa

Tel: 888-510-ELAM

Fax: 317-567-9022

December 13, 2023

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

VIA E-MAIL

Re: Commercial Building Vapor Intrusion Assessment at 2516 E Cherry St and
Inspection of 2518 E Cherry St
VCP ID: NW2009; Cleanup Site ID: 4175; Facility/Site ID: 4765174
Former Cherry Street 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 Twilight Exit Bar commercial building located at 2516 E Cherry St ("2516") and inspection of the Tana Market commercial building located at 2518 E Cherry St ("2518") 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 conducting an annual inspection of 2516 and 2518 for continued Commercial land use. If Commercial land use is confirmed during the annual inspection, vapor intrusion ("VI") sampling should be conducted for

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, *Commercial Building Vapor Intrusion Assessments at 2516 and Inspection of 2518 E. Cherry St.*, TO: Christopher Mauer, Ecology, FROM: James Hogan, The ELAM Group, 4/1/22.



2516 during the “reasonable worst case” scenario.^{3,4} If land use changes to residential, additional VI sampling may be warranted. The following narrative describes the land use observations for both 2516 and 2518, VI sampling conducted for the 2516 building during March 2023, a summary of the results and an analysis of the data.

Background

Both buildings are located east of the former Cherry Street Cleaners dry cleaning facility, as shown on Figure 1. Cherry Street Cleaners was located 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 2516 and 2518, Ecology issued an Opinion Letter (“Opinion”) on 11/17/14 with regard to the VI sampling conducted during 2012 and 2013. The Opinion stated that the current receptors can be considered protected if levels detected are lower than the Commercial Model Toxics Control Act (“MTCA”) Method C Commercial Indoor Air Cleanup Levels (“IACLs”) provided that the buildings are used for commercial purposes.

On 6/29/17, a reassessment of the buildings was conducted because sub-slab soil gas (“SGss”) samples had not been collected contemporaneously with indoor air (“IA”) samples during the prior sampling events. Additionally, the Cherry Street Cleaners

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 “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).



building had been demolished since those sampling events, and a reassessment had not been conducted following the demolition. Therefore, as a part of remediation planning and to understand the VI potential after a condition had changed, a paired SGss/IA event was conducted. The results were reported to Ecology in a VIA report, dated 12/1/17.⁶ The analytical results showed that, for the first time, the SGss concentrations were lower than the Method C Commercial Soil Gas Screening Levels (“SGSLs”). Our conclusion stated that we believed that the 93% reduction in COC concentrations was related to the demolition of the former Cherry Street Cleaners building and subsequent off-gassing of COCs from the exposed soil. However, we recommended that VI sampling be conducted during the winter heating season when the building’s interior is likely to be depressurized to confirm the reduction in PCE in the SGss and to understand the seasonal variability of the COC concentrations.

Accordingly, VI sampling was completed in February of 2018. The results were reported to Ecology in a VIA report, dated 11/7/18.⁷ With the exception of a sample result from SGss sample port SS-1, all of the concentrations of the COCs associated with the former Cherry Street Cleaners in the samples from 2516 and 2518 collected during February 2018 once again complied with Ecology’s respective Commercial SGSLs and IACLs. To ensure that compliance is maintained, annual inspections of 2516 and 2518 for continued Commercial land use were recommended. If Commercial, the recommendation further stated that VI sampling in 2516 should be conducted annually, until the SGss concentrations reduce below the applicable SGSLs for two consecutive events.

Hence, another VI sampling event was conducted in January of 2020. The results were reported to Ecology in a VIA report, dated 4/27/20.⁸ With the exception of a sample result from SGss sample port SS-1, all of the concentrations of the COCs associated with the former Cherry Street Cleaners in the samples from 2516 and 2518 collected during February 2018 once again complied with Ecology’s respective Commercial

⁶ The ELAM Group, 2017, *Commercial Building Vapor Intrusion Assessments at 2516 & 2518 E. Cherry St.*, TO: Dale Myers, Ecology, FROM: James Hogan, The ELAM Group, 12/1/17.

⁷ The ELAM Group, 2018, *Commercial Building Vapor Intrusion Assessments at 2516 & 2518 E. Cherry St.*, TO: Sonia Fernandez, Ecology, FROM: James Hogan, The ELAM Group, 11/7/18.

⁸ The ELAM Group, 2020, *Commercial Building Vapor Intrusion Assessments at 2516 and Inspection of 2518 E. Cherry St.*, TO: Christopher Mauer, Ecology, FROM: James Hogan, The ELAM Group, 4/27/20.



SGSLs and IACLs. Continued annual inspection and VI sampling according to observed land use was carried forward into the Ecology-approved CAPrev1.⁹

The October 2021 VIA continued the annual sampling and inspection objectives specified in the CAPrev1. In addition, this VIA represents the first post-remedy sampling event following 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 2021.¹⁰ Hence, this sampling event also serves to monitor the effect those remedial actions had on soil gas.

As previously, this VI sampling in March of 2023 continues with the annual sampling and inspections specified in the CAPrev1. In addition, this VI sampling event 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 2022.¹¹ Hence, this sampling event also serves to monitor the effect of this ongoing remedial action on soil gas.

Inspection for Commercial Land Use

The current status of the premises at 2516 and 2518 are as follows:

- ☐ Twilight Exit Bar is operating as a commercial business at 2516
- ☐ An art gallery is operating in the commercial building space located at 2518

The occupancy at 2518 is a new condition compared to the prior inspection in October of 2021. The status will continue to be monitored as per the CAPrev1.

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

¹¹ 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.



Procedures

On 3/9/23, The ELAM Group surveyed the chemicals housed within the building located at 2516. According to the chemical inventory, paint and other building maintenance products were removed from a storage area. 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 Ecology-approved Quality Assurance Project Plan - Revision 1 ("QAPPrev1"), dated 3/7/23.

Results

The analytical results 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 included in Attachment B. The laboratory analytical report including Summa canister certifications is provided in Attachment C.

Analysis

Cherry Street Cleaners COCs Trend Analysis

The concentrations of the COCs associated with the former Cherry Street Cleaners in the IA samples collected from 2516 during March 2023 complied with Ecology's Method C IACLs. In addition to continued compliance with Method C IACLs, the concentrations of the COCs associated with the former Cherry Street Cleaners in the SGss samples collected from 2516 during March 2023 complied with Ecology's Method C SGSLS. During the previous sample collection event, PCE and TCE concentrations were above the Method C SGSLS. The PCE concentration detected at sample location SS-1 was considerably lower than the prior October 2021 concentration [1,300 micrograms per cubic meter ("ug/m³") vs. 29,200 ug/m³]. The PCE concentration detected at sample location SS-2 was also considerably lower than the prior October 2021 concentration (20 ug/m³ vs. 6,320 ug/m³).



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. This VI sample collection event represents the first post-remedy event where the PCE concentrations in the samples collected from both SS-1 and SS-2 did not exceed the Method C SGSL, and suggests that the above-referenced remedies contributed to a permanent reduction in concentration of PCE in soil gas.

Chloroform

With the exception of a single SGss sample collected from sample port SS-2, Chloroform did not exceed Ecology’s Method C SGSL. This same condition held true during the previous June 2017, February 2018, January 2020 and October 2021 sampling events.

The source of the chloroform is uncertain, and may result from a disinfection byproduct of treated water and/or cleaning activities. Chlorine bleach can react with ethanol to produce chloroform. 2516 is a bar serving alcoholic beverages. If chlorine bleach is used to disinfect and an alcoholic beverage spills in the vicinity of its use, the reaction would create chloroform.

Aside from those scenarios, chloroform is also a daughter product of carbon tetrachloride (“CT”). CT was commonly used as a dry-cleaning agent up through the 1940s prior to the use of PCE.¹² 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”).¹³

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

¹² Morrison, R.D. and Murphy, B.L., 2006, *Environmental Forensics*, Elsevier: New York, New York.

¹³ ECC Horizon, 2014, *Remedial Investigation*.



operated as Accurate Cleaners, which used petroleum-based dry cleaning solvents instead of PCE. Therefore, we conclude that the reported detections of CT and chloroform in the VI samples collected from 2516 are unrelated to the former operations of the Cherry Street Cleaners.

Petroleum-based Chemicals

Finally, the following petroleum-related COCs were detected at concentrations greater than the respective laboratory reporting limits: benzene and xylene. Moreover, the reported concentrations were below Ecology's respective Method C SGSs and IACs. The observed COCs are associated with petroleum and therefore 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 VIA, The ELAM Group concludes that the indoor air concentrations remain below the Method C IACs for the COCs associated with the Cherry Street Cleaners. When conjoined with the prior sampling events from 10/23/12, 4/10/13, 5/30/13, 6/29/17, 2/28/18, 1/27/20 and 10/4/21, we have now accumulated eight consecutive data sets that suggest that the Cherry Cleaners COCs within the IA samples have remained in compliance with the Method C IACs consistent with Ecology's Opinion from 11/17/14. Should the property usage change from Commercial to Residential, the more stringent Method B IACs and SGSs would apply.

Review of the historical VI sample results for 2516 indicate that PCE in the SGss samples collected from SS-1 and SS-2 have previously exceeded the Method C SGS. During the March 2023 sample collection event, the PCE concentration in the samples collected from SS-1 was equal to the Method C SGS (i.e. did not exceed the SGS) and SS-2 was lower than the Method C SGS. This observation suggests that the implemented remedies contributed to a permanent reduction in concentration of PCE in soil gas.

To ensure that compliance is maintained, Cherry Street Cleaners will continue annual inspection of the 2516 and 2518 properties for continued Commercial land use per the CAPrev1 schedule. The next inspection and sampling event will be conducted during February of 2024. The monitoring of the potential for VI will continue until the SGss



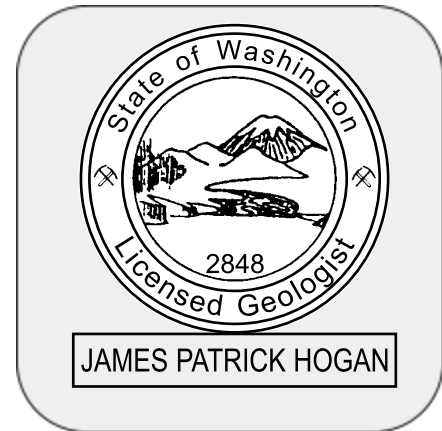
concentrations reduce below the applicable IACLs and SGSLS for two consecutive events. In the event that the land use changes to Residential, additional VI sampling may be warranted.

Closing

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 ID No. NW2009

Project No. WAKS2510C18.7

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

Sampling Event	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
2516 E Cherry Street																	
October 2012	SV-2	SV-2 Twilight	10/24/12	Sub-slab	6L Summa	NA	-28.5	-6	TO-15	36.000	<94	<69	<69	<45	<56		NT
	IA-2	IA-2 Twilight	10/24/12	Indoor Air	6L Summa	NA	-29.5	-8	TO-15	6.9	<0.19	<0.14	<0.71	<0.046	1.0		NT
	IA-3	IA-3 Twilight	10/24/12	Indoor Air	6L Summa	NA	-29	-8	TO-15	6.8	<0.20	<0.15	<0.76	<0.049	0.97		NT
	SV-3	SV-3 Twilight	10/24/12	Sub-slab	6L Summa	NA	-30+	-7	TO-15	28.000	<78	<58	<58	<37	<46		NT
	SV-4	SV-4 Twilight	10/24/12	Sub-slab	6L Summa	NA	-30	-8	TO-15	110.000	<240	<180	<180	<120	<140		NT
April 2013	IA-03	2516IA-03-20130410	04/10/13	Indoor Air	6L Summa	NA	NA	NA	TO-15	24	<0.17	<0.13	<0.64	<0.041	0.59	NA	NA
	IA-02	2516IA-02-20130410	04/10/13	Indoor Air	6L Summa	NA	NA	NA	TO-15	12	<0.18	<0.13	<0.65	<0.042	0.61	NA	NA
	Building Roof	2516INTAKE-20130410	04/10/13	Outdoor Air	6L Summa	NA	NA	NA	TO-15	0.24	<0.18	<0.13	<0.66	<0.042	0.40	NA	NA
May 2013	IA-03	2516IA-03-20130530	05/30/13	Indoor Air	6L Summa	NA	NA	NA	TO-15	25	<0.88	<0.65	<3.2	<0.21	<1.3	NA	NA
	IA-02	2516IA-02-20130530	05/30/13	Indoor Air	6L Summa	NA	NA	NA	TO-15	15	<0.36	<0.27	<1.3	<0.087	<0.54	NA	NA
June 2017	IA-1	IA-1:A062917	06/29/17	Indoor Air	6L Summa	7.3	-30+	-4	TO-15	2.9	<0.22	<0.19	<0.30	<0.15	0.66	0.52	0.40
	SS-1	SS-1:A062917	06/29/17	Sub-slab	6L Summa	7.5	-30+	-4	TO-15	1.900	18.7	<0.18	<0.29	<0.15	1.5	3.1	6.2
	IA-2	IA-2:A062917	06/29/17	Indoor Air	6L Summa	7.4	-30+	-5	TO-15	2.2	<0.22	<0.19	<0.30	<0.15	0.57	0.49	0.51
	IA-2	FD:A062917	06/29/17	Indoor Air	6L Summa	7.4	-24.5	-3.5	TO-15	5.6	<0.21	<0.18	<0.29	<0.15	9.1	0.45	0.51
	SS-2	SS-2:A062917	06/29/17	Sub-slab	6L Summa	7.5	-27	-4	TO-15	636	6.9	<0.18	<0.29	<0.15	1.3	1.1	84.7
February 2018	IA-1	IA1:A022818	02/28/18	Indoor Air	6L Summa	8.0	-30	-4	TO-15	19.6	0.13	<0.062	<0.062	<0.040	1.6	0.63	0.45
	SS-1	SS1:A022818	02/28/18	Sub-slab	6L Summa	8.0	-30	-11	TO-15	8.550	9.5	<0.085	<0.085	<0.055	1.0	0.99	5.1
	IA-2	IA2:A022818	02/28/18	Indoor Air	6L Summa	8.0	-30	-4	TO-15	16.9	1.2	<0.084	<0.084	<0.054	1.9	0.75	0.54
	SS-2	SS2:A022818	02/28/18	Sub-slab	6L Summa	8.0	-30	-2	TO-15	544	3.3	<0.058	<0.058	<0.037	0.79	4.5	143
January 2020	IA-1	IA1:A012720	01/27/20	Indoor Air	6L Summa	8.0	-30	-5.5	TO-15	4.1	<0.085	<0.062	<0.062	<0.040	1.9	0.81	0.44
	SS-1	SS1:A012720	01/27/20	Sub-slab	6L Summa	8.0	-30	-5.5	TO-15	28.000	<40.6	<30.0	<30.0	<19.3			
	IA-2	IA2:A012720	01/27/20	Indoor Air	6L Summa	8.0	-30	-5	TO-15	7.2	<0.088	<0.065	<0.065	<0.042	2.1	0.43	1.1
	IA-2	DuplicateIA:A012720	01/27/20	Indoor Air	6L Summa	8.0	-30	-6	TO-15	8.0	<0.088	<0.065	<0.065	<0.042	2.1	0.68	1.1
	SS-2	SS2:A0122720	01/27/20	Sub-slab	6L Summa	8.0	-29.9	-6	TO-15	742	3.8	<0.27	0.40	<0.17	2.6	1.9	82.6
October 2021	IA-1	IA1:A100421	10/04/21	Indoor Air	6L Summa	8.0	-29	-4	TO-15	2.1	0.13	<0.12	<0.12	<0.037	0.35		0.43
	SS-1	SS1:A100421	10/04/21	Sub-slab	6L Summa	8.0	-30	-2	TO-15	29.200	5.6	<0.12	<0.12	<0.037	0.36	0.80	5.4
	IA-2	IA2:A100421	10/04/21	Indoor Air	6L Summa	8.0	-30	-4.5	TO-15	0.91	<0.079	<0.12	<0.12	<0.037	0.33	0.37	0.24
	IA-2	FD1:A100421	10/04/21	Indoor Air	6L Summa	8.0	-30	-4.5	TO-15	0.94	2.4	1.6	<0.12	<0.039	0.32	0.54	0.24
	SS-2	SS2:A100421	10/04/21	Sub-slab	6L Summa	8.0	-30	-4	TO-15	6320	14.3	<0.12	<0.12	<0.037	0.13	0.68	78.4
March 2023	IA-1	IA1:A031123	03/11/23	Indoor Air	6L Summa	8.0	-29	-5	TO-15 SIM	17	<0.52	<0.38	<1.9	<0.12			
	SS-1	SS1:A031123	03/11/23	Sub-slab	6L Summa	8.0	-29	-5.0	TO-15 SIM	1,300	4.8	<1.1	<5.4	<0.35			8.3
	IA-2	IA2:A031123	03/11/23	Indoor Air	6L Summa	8.0	-28.5	-3.5	TO-15 SIM	12	<0.27	<0.20	<1.0	<0.064	0.63	0.40	0.56
	IA-2	FD1:A031123	03/11/23	Indoor Air	6L Summa	8.0	-29.5	-3.5	TO-15 SIM	13	<0.47	<0.35	<1.7	<0.11			0.61
	SS-2	SS2:A031123	03/11/23	Sub-slab	6L Summa	8.0	-29	-3.5	TO-15 SIM	20	0.95	<0.10	<0.52	<0.033	0.52	0.61	36

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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	
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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	
2518 E Cherry Street																		
October 2012	SV-5	SV-5 TANA MKT.	10/24/12	Sub-slab	6L Summa	NA	-30+	-7	TO-15	20	<0.18	<0.13	<0.67	<0.043	0.33		NT	
	SV-6	SV-6 TANA MKT.	10/24/12	Sub-slab	6L Summa	NA	-30+	-7	TO-15	0.90	<0.18	<0.13	<0.67	<0.043	0.41		NT	
	SV-7	SV-7 TANA MKT.	10/24/12	Sub-slab	6L Summa	NA	-28	-7	TO-15	1.8	<0.18	<0.13	<0.67	<0.043	0.50		NT	
April 2013	IA-01	2518IA-01-20130410	04/10/13	Indoor Air	6L Summa	NA	NA	NA	TO-15	15	<0.18	<0.13	<0.65	<0.042	1.1	NA	NA	
	IA-02	2518IA-02-20130410	04/10/13	Indoor Air	6L Summa	NA	NA	NA	TO-15	3.0	<0.36	<0.26	<1.3	<0.085	0.90	NA	NA	
	Building Roof	2518INTAKE-20130410	04/10/13	Outdoor Air	6L Summa	NA	NA	NA	TO-15	0.33	<0.18	<0.14	<0.68	<0.044	0.44	NA	NA	
May 2013	IA-01	2518IA-01-20130530	05/30/13	Indoor Air	6L Summa	NA	NA	NA	TO-15	20	<0.37	<0.27	<1.4	<0.087	0.88	NA	NA	
	IA-02	2518IA-02-20130530	05/30/13	Indoor Air	6L Summa	NA	NA	NA	TO-15	2.7	<0.45	<0.33	<1.7	<0.11	0.74	NA	NA	
June 2017	IA-3	IA-3:A062917	06/29/17	Indoor Air	6L Summa	7.3	-30	-4	TO-15	1.8	0.24	<0.18	<0.29	<0.15	0.79	0.47	0.73	
	CSA-3	CSA-3:A062917	06/29/17	Crawlspace	6L Summa	7.3	-30+	-4	TO-15	1.4	0.36	<0.18	<0.29	<0.15	1.7	0.52	1.2	
	IA-4	IA-4:A062917	06/29/17	Indoor Air	6L Summa	7.3	-30	-2	TO-15	5.7	1.5	<0.19	<0.30	<0.15	2.8	0.64	2.2	
	SS-4	SS-4:A062917	06/29/17	Sub-slab	6L Summa	7.3	-30+	-4.5	TO-15	2.020	2.5	<0.18	<0.29	<0.15	1.4	1.4	3.9	
February 2018	IA-3	IA3:A022818	02/28/18	Indoor Air	6L Summa	8.0	-29	-2	TO-15	2.2	0.11	<0.062	<0.062	0.047	1.2	0.62	1.6	
	CSA-3	CSA3:A022818	02/28/18	Crawlspace	6L Summa	8.0	-29	-4	TO-15	1.4	0.16	<0.062	<0.062	<0.040	0.97	0.63	0.60	
	IA-4	IA4:A022818	02/28/18	Indoor Air	6L Summa	8.0	-27	-2	TO-15	3.4	0.86	<0.056	<0.056	<0.036	1.8	0.49	8.6	
	IA-4	Dup2518:A022818	02/28/18	Indoor Air	6L Summa	8.0	-30	-5	TO-15	0.68	0.13	<0.062	<0.062	<0.040	1.7	0.90	7.8	
	SS-4	SS4:A022818	02/28/18	Sub-slab	6L Summa	8.0	-30	-4	TO-15	1.610	0.34	<0.062	<0.062	<0.040	3.6	0.69	4.3	
January 2020	The commercial building space located at 2518 was vacant and not open for business. Since Commercial land use was confirmed during the annual inspection, a VIA was not conducted in 2518 during the "reasonable worst case" scenario.																	
October 2021	The commercial building space located at 2518 was vacant and not open for business. Since Commercial land use was confirmed during the annual inspection, a VIA was not conducted in 2518 during the "reasonable worst case" scenario.																	
March 2023	The commercial building space located at 2518 was occupied by an art gallery. Since Commercial land use was confirmed during the annual inspection, a VIA was not conducted in 2518 during the "reasonable worst case" scenario.																	
Outdoor Air																		
October 2012	Outdoor	AMB-1	10/24/12	Outdoor Air	6L Summa	NA	-30+	-5.0	TO-15	0.68	<0.17	<0.12	<0.61	<0.040	0.81		NT	
April 2013	Outdoor	AMB-01-20130410	04/10/13	Outdoor Air	6L Summa	NA	NA	NA	TO-15	0.26	<0.17	<0.12	<0.63	<0.040	0.75	NA	NA	
May 2013	Outdoor	AMB-01-20130530	05/30/13	Outdoor Air	6L Summa	NA	NA	NA	TO-15	<0.22	<0.18	<0.13	<0.66	<0.042	0.30	NA	NA	
June 2017	Outdoor	OA:A062917	06/29/17	Outdoor Air	6L Summa	6.1	-27	-2.0	TO-15	1.2	<0.21	<0.18	<0.29	<0.15	0.44	0.44	<0.14	
February 2018	Outdoor	OA2516:A022818	02/28/18	Outdoor Air	6L Summa	8.0	-30	-3.0	TO-15	0.42	<0.076	<0.056	<0.056	<0.036	0.87	0.53	0.14	
January 2020	Outdoor	OA2516:A012720	01/27/20	Outdoor Air	6L Summa	8.0	-29.5	-6.0	TO-15	1.3	0.087	<0.062	<0.062	0.042	2.5	0.69	0.50	
October 2021	OA1	OA1:A100421	10/24/21	Outdoor Air	6L Summa	8.0	-30	-7.5	TO-15	0.18	<0.079	<0.12	<0.12	<0.037	0.44	0.54		
March 2023	OA-1	OA1:A031123	03/11/23	Outdoor Air	6L Summa	8.0	-28	-6.0	TO-15 SIM	0.26	<0.14	<0.10	<0.52	<0.033	0.51	0.45		

- Notes:
- All air analytical results are presented in micrograms per cubic meter (ug/m3).
 - All results are displayed for tetrachloroethene and its daughter compounds: trichloroethene, cis-1,2-diclroethene, 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.
 - A bold font style indicates that the concentration exceeds the applicable Method B Screening Level, and a bold underlined 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.
 - NT = Not Tested
 - NA = Not Available



VCP ID No. NW2009

Project No. WAKS2510C18.7

Date: 12/13/23

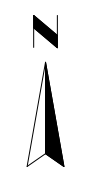
Figures



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

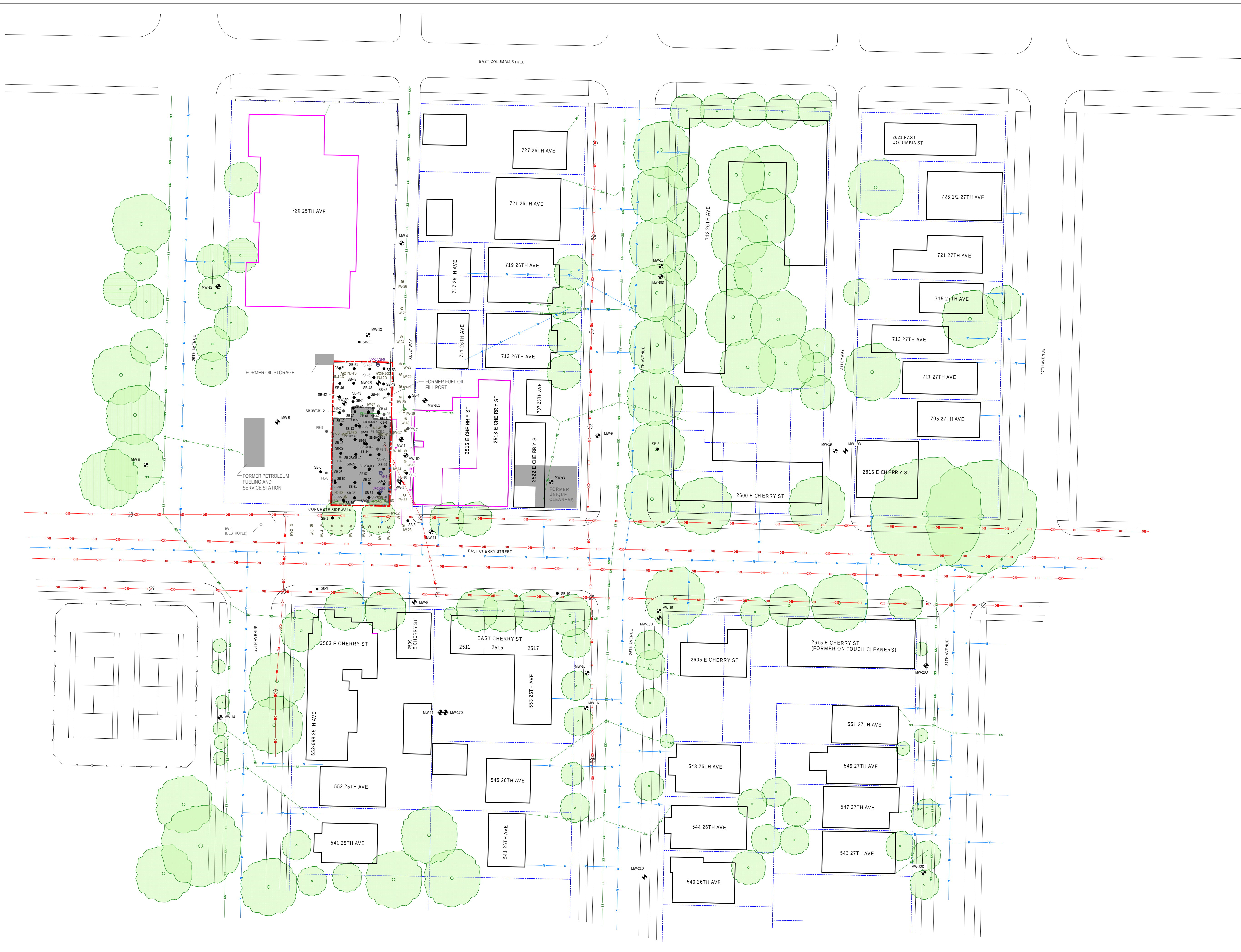
Scale: 1" = 30'

Project No: WAKS2510C18.7

Report: VIA Report

Drawn by: The ELAM Group

Date: 10/05/2023





TheELAMGroup

LEGEND

- Air Sampling Point
- Subslab/Crawl Space Soil Gas Sampling Point
- Air Sampling Point (2012)
- Subslab/Crawl Space Soil Gas Sampling Point (2012)
- Air Sampling Point (2013)
- 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/cubic meter (ug/m³)
 - Any analytical result that exceeds an applicable Commercial MTCA Method C Screening Level is shown in **bold font style**
 - Samples were analyzed for the full VOC list. Only PCE and its daughter products TCE and VC are shown

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

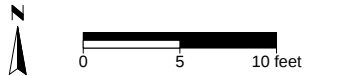
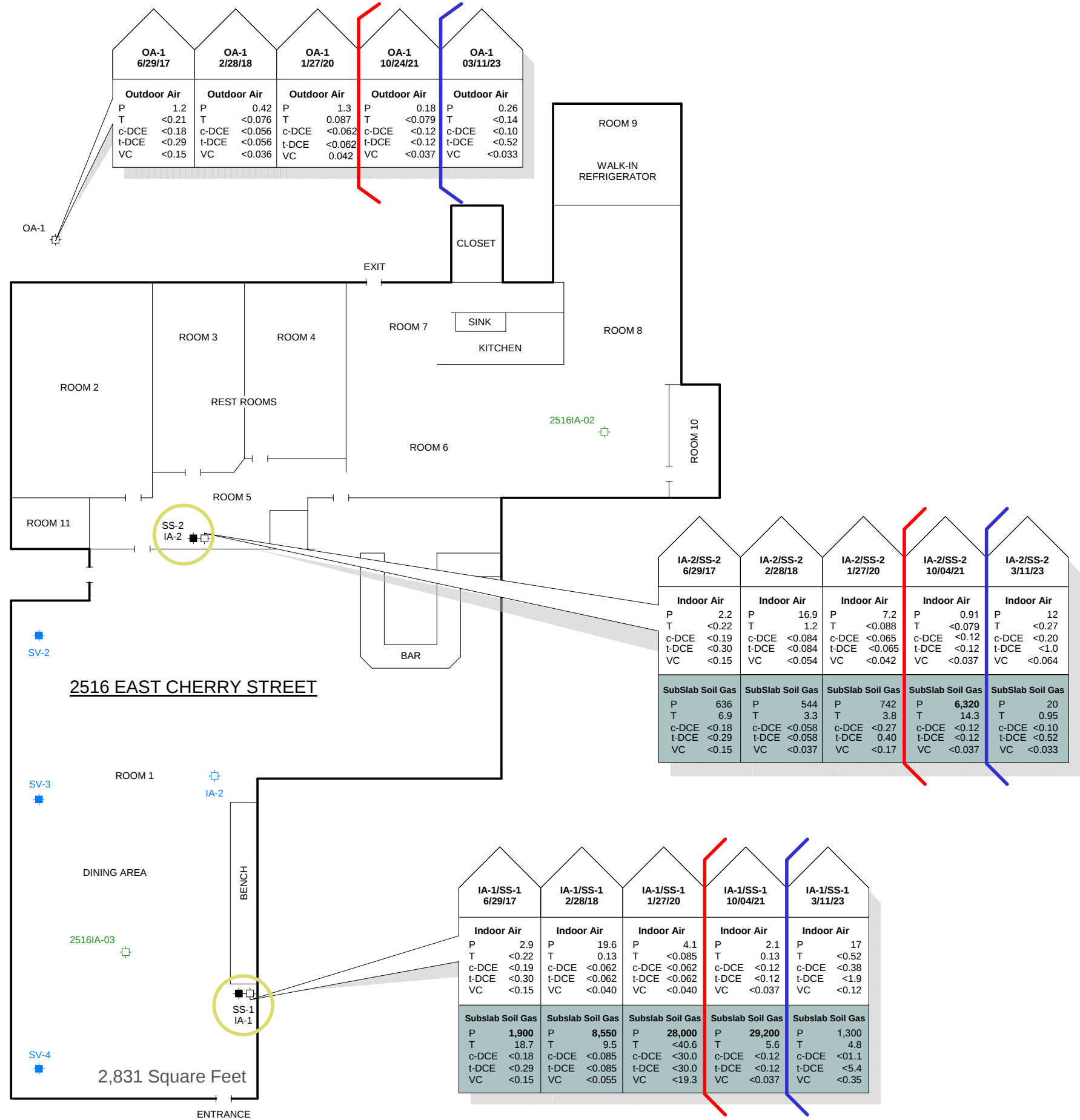


Figure No: 2
Title: VIA Sample Results
Scale: 1" = 10'
Project No: WAKS2510C18.7
Report: VIA Report
Drawn by: The ELAM Group
Date: 10/05/2023





VCP ID No. NW2009

Project No. WAKS2510C18.7

Date: 12/13/23

Attachment A

Chemical Inventory

Chemical Inventory

Page ____ of ____

Building Name/Address: Twilight East

Date: 3/9/23

Chemical Name	Container type/size	Location	cVOCs? (Y or N)	Removed? (Y or N)
Auto-Chlor Super 8 (QD)	9.46L Jug	Bar Area	N	N
Low Temp Rinse Aid	3.78L bottle	Bar Area	N	N
Glass Cleaner		Bar Area	N	N
Green Klean Floor Cleaner	2.5L bottle	Kitchen	N	N
Glass/Surface Cleaner	2.5L bottle	Kitchen	N	N
Auto-Chlor Super 8 (QD)	9.46L Jug	Kitchen	N	N
Floor Cleaner Glc-4 ^(QD)	2.5L jug	Kitchen	N	N
Auto-Chlor Emu-soak	2.5L Jug	Kitchen	N	N
Drum's Max Gel	1 gal bottle	Kitchen	N	N
Iris Hand Soap	1 gal bottle	Kitchen	N	N
Bleach	1 gal bottle	Kitchen	N	N
Pine-Sol	1 gal bottle	Kitchen	N	N
G.O.K. oven Klean	1 gal bottle	Kitchen	N	N
Raid Defense	14.5 oz spray can	Patrol	N	Y
Goo Gone Graffiti Remover	24 fl oz bottle	Patrol	N	Y
WD-40	11 oz can	Patrol	N	Y
HVAC Cleaner	19 oz can	Patrol	N	Y
Krylon Colormax Primer	12 oz can	Patrol	N	Y
Rustoleum Chalkboard	11 oz can	Patrol	N	Y
Rustoleum Gloss Protect	12 oz can	Patrol	N	Y
Spray Scents Deodorizer	7 oz can	Patrol	N	Y



VCP ID No. NW2009

Project No. WAKS2510C18.7

Date: 12/13/23

Attachment B

Summa Canister Air Sampling Form



SUMMA CANISTER AIR SAMPLING FORM

The LAM Group

PAGE 1 OF 2

GENERAL INFORMATION

SITE: Twilight East
 SAMPLING ADDRESS: _____
 SAMPLING EVENT (circle one): SUMMERTIME WINTERTIME
 TEMPERATURE (F): 43°F 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)
SSA: A031123		662393	2221	SHUT IN TEST	3/10/23	1940	-29
				INITIAL	3/11/23	1010	-26.5
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)			1109	-26.5
400 mL	TO-14A	Air	24 hour			1410	-10
1 L	TO-15	SGss	8 hour			1710	-6
6 L	TO-15 SIM	SGe	200 ml/min	FINAL		1810	-3.5
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
OPI: A031123		660836	2205	SHUT IN TEST	3/10/23	1943	-28.5
				INITIAL	3/11/23	1010	-28
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)			1109	-28
400 mL	TO-14A	Air	24 hour			1609	-13
1 L	TO-15	SGss	8 hour			1709	-9
6 L	TO-15 SIM	SGe	200 ml/min	FINAL		1809	-6
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
*IPA: A031123		661735	2242	SHUT IN TEST	3/10/23	1948	-28
				INITIAL	3/11/23	1010	-28.5
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)			1119	-26.5
400 mL	TO-14A	Air	24 hour			1610	-10
1 L	TO-15	SGss	8 hour			1709	-6.5
6 L	TO-15 SIM	SGe	200 ml/min	FINAL		1809	-3.5
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME	CAN P ("Hg)
SG1: A031123		663285	2217	SHUT IN TEST	3/10/23	1950	-29.5
				INITIAL	3/11/23	1009	-29
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)			1109	-27.5
400 mL	TO-14A	Air	24 hour			1609	-11
1 L	TO-15	SGss	8 hour			1709	-7
6 L	TO-15 SIM	SGe	200 ml/min	FINAL		1809	-5

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

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

2A1- 1409 - 9
 1309 - 5

Field Trip per telephone conversation w/ Jon Decker

get kicked
 1109 -
 Change
 -28
 1809
 1809



The LAM Group

SUMMA CANISTER AIR SAMPLING FORMPAGE 2 OF 2

GENERAL INFORMATION						
SITE:						
SAMPLING ADDRESS:						
SAMPLING EVENT (circle one):		SUMMERTIME		WINTERTIME		
TEMPERATURE (F):		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
FO1: A031123		663063	2228	SHUT IN TEST	3/10/23	2005
				INITIAL	3/11/23	1614
TYPE (circle one)	METHOD (circle one)	SOURCE (circle one)	VALVE (circle one)			
400 mL	TO-14A	Air	24 hour			1118
1 L	TO-15	SGss	8 hour			1610
6 L	TO-15 SIM	SGe	200 ml/min	FINAL		1710
						1809
SAMPLE ID		CANISTER #	FLOW CTRL #	READING (1)	DATE	TIME
				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
				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
				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 ID No. NW2009

Project No. WAKS2510C18.7

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: 2516 E Cherry St
Project #: WAKS2510C18.6
Workorder #: 2303506

Dear Mr. Chris Sloffer

The following report includes the data for the above referenced project for sample(s) received on 3/16/2023 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 #: 2303506

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 # WAKS2510C18.6 2516 E Cherry St

DATE RECEIVED: 03/16/2023

CONTACT: Jade White

DATE COMPLETED: 03/29/2023

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	FD1: A031123	Modified TO-15	4.0 "Hg	2 psi
01B	FD1: A031123	Modified TO-15	4.0 "Hg	2 psi
02A	SS1: A031123	Modified TO-15	5.0 "Hg	2 psi
02B	SS1: A031123	Modified TO-15	5.0 "Hg	2 psi
03A	IA1: A031123	Modified TO-15	6.5 "Hg	2 psi
03B	IA1: A031123	Modified TO-15	6.5 "Hg	2 psi
04A	SS2: A031123	Modified TO-15	4.0 "Hg	2 psi
04B	SS2: A031123	Modified TO-15	4.0 "Hg	2 psi
05A	IA2: A031123	Modified TO-15	3.0 "Hg	2 psi
05B	IA2: A031123	Modified TO-15	3.0 "Hg	2 psi
06A	OA1: A031123	Modified TO-15	4.0 "Hg	2 psi
06B	OA1: A031123	Modified TO-15	4.0 "Hg	2 psi
07A	Lab Blank	Modified TO-15	NA	NA
07B	Lab Blank	Modified TO-15	NA	NA
08A	CCV	Modified TO-15	NA	NA
08B	CCV	Modified TO-15	NA	NA
09A	LCS	Modified TO-15	NA	NA
09AA	LCSD	Modified TO-15	NA	NA
09B	LCS	Modified TO-15	NA	NA
09BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:



Technical Director

DATE: 03/29/23

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.

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.

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

(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

LABORATORY NARRATIVE
Modified TO-15 Full Scan/SIM
The ELAM Group
Workorder# 2303506

Five 6 Liter Summa Canister (100% SIM Ambient) and two 6 Liter Summa Canister (SIM Certified) samples were received on March 16, 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.

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

Receiving Notes

The Chain of Custody 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 FD1: A031123, SS1: A031123, IA1: A031123, SS2: A031123, IA2: A031123 and OA1: A031123. The year of collection was assumed to be 2023.

The Chain of Custody (COC) information for samples FD1: A031123, SS1: A031123, IA1: A031123, SS2: A031123, IA2: A031123 and OA1: A031123 did not match the information on the canister with regard to canister barcode. The samples labeled 663063, 663285, 663654, 662393, 661735 and 661004 on the COC are labeled as 6L3063, 6L3285, 6L3654, 6L2393, 6L1735 and 6L1004 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 QC analyses have not been flagged.

Dilution was performed on samples FD1: A031123, SS1: A031123, IA1: A031123 and IA2: A031123 due to the presence of high level target species.

The presence of a closely eluting non-target peak in sample SS2: A031123 is interfering with the quantitation mass ion for 4-Ethyltoluene. The reported 4-Ethyltoluene concentration is flagged with a "CN" flag to indicate a high bias due to matrix contribution.

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: A031123

Lab ID#: 2303506-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	8.7	1600 E	16	3000 E
Acetone	8.7	71	21	170

Client Sample ID: FD1: A031123

Lab ID#: 2303506-01B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.22	0.44	1.1	2.2
Chloroform	0.087	0.12	0.43	0.61
Toluene	0.22	0.27	0.82	1.0
Tetrachloroethene	0.087	1.9	0.59	13

Client Sample ID: SS1: A031123

Lab ID#: 2303506-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	27	81	51	150
2-Propanol	27	140	67	340

Client Sample ID: SS1: A031123

Lab ID#: 2303506-02B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.68	1.9	3.4	9.3
Chloroform	0.27	1.7	1.3	8.3
Trichloroethene	0.27	0.89	1.5	4.8
Toluene	0.68	0.77	2.6	2.9
Tetrachloroethene	0.27	190	1.8	1300
m,p-Xylene	0.54	0.60	2.4	2.6

Client Sample ID: IA1: A031123

Lab ID#: 2303506-03A

Summary of Detected Compounds

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

Client Sample ID: IA1: A031123

Lab ID#: 2303506-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	9.7	1800 E	18	3300 E
Acetone	9.7	32	23	75

Client Sample ID: IA1: A031123

Lab ID#: 2303506-03B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.24	0.44	1.2	2.2
Toluene	0.24	0.34	0.91	1.3
Tetrachloroethene	0.097	2.5	0.66	17
m,p-Xylene	0.19	0.28	0.84	1.2

Client Sample ID: SS2: A031123

Lab ID#: 2303506-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.13	0.22	0.74	1.2
Ethanol	2.6	66 E	4.9	120 E
Acetone	2.6	16	6.2	38
2-Propanol	2.6	320 E	6.4	780 E
2-Butanone (Methyl Ethyl Ketone)	0.66	0.79	1.9	2.3
4-Ethyltoluene	0.13	0.13 CN	0.64	0.66 CN
1,2,4-Trimethylbenzene	0.13	0.16	0.64	0.78
1,3-Dichlorobenzene	0.13	7.6	0.79	46

Client Sample ID: SS2: A031123

Lab ID#: 2303506-04B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.066	0.48	0.32	2.4
Chloroform	0.026	7.3	0.13	36
Carbon Tetrachloride	0.026	0.097	0.16	0.61



Air Toxics

Summary of Detected Compounds

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

Client Sample ID: SS2: A031123

Lab ID#: 2303506-04B

Benzene	0.066	0.16	0.21	0.52
Trichloroethene	0.026	0.18	0.14	0.95
Toluene	0.066	0.67	0.25	2.5
Tetrachloroethene	0.026	3.0	0.18	20
Ethyl Benzene	0.026	0.098	0.11	0.42
m,p-Xylene	0.052	0.34	0.23	1.5
o-Xylene	0.026	0.13	0.11	0.57

Client Sample ID: IA2: A031123

Lab ID#: 2303506-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethanol	5.0	1500 E	9.5	2800 E
Acetone	5.0	70	12	160

Client Sample ID: IA2: A031123

Lab ID#: 2303506-05B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.13	0.43	0.62	2.1
Chloroform	0.050	0.12	0.25	0.56
Carbon Tetrachloride	0.050	0.063	0.32	0.40
Benzene	0.13	0.20	0.40	0.63
Toluene	0.13	0.25	0.47	0.95
Tetrachloroethene	0.050	1.8	0.34	12
Ethyl Benzene	0.050	0.052	0.22	0.22
m,p-Xylene	0.10	0.16	0.44	0.71
o-Xylene	0.050	0.052	0.22	0.23

Client Sample ID: OA1: A031123

Lab ID#: 2303506-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	0.13	0.22	0.74	1.2

Summary of Detected Compounds

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

Client Sample ID: OA1: A031123

Lab ID#: 2303506-06A

Ethanol	2.6	4.8	4.9	9.0
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Client Sample ID: OA1: A031123

Lab ID#: 2303506-06B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.066	0.48	0.32	2.4
Carbon Tetrachloride	0.026	0.072	0.16	0.45
Benzene	0.066	0.16	0.21	0.51
Toluene	0.066	0.25	0.25	0.93
Tetrachloroethene	0.026	0.038	0.18	0.26
Ethyl Benzene	0.026	0.026	0.11	0.11
m,p-Xylene	0.052	0.088	0.23	0.38
o-Xylene	0.026	0.032	0.11	0.14



Air Toxics

Client Sample ID: FD1: A031123

Lab ID#: 2303506-01A

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

File Name:	20032418	Date of Collection: NA
Dil. Factor:	4.37	Date of Analysis: 3/24/23 08:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.44	Not Detected	0.97	Not Detected
Bromomethane	22	Not Detected	85	Not Detected
Freon 11	0.44	Not Detected	2.4	Not Detected
Ethanol	8.7	1600 E	16	3000 E
Freon 113	0.44	Not Detected	3.3	Not Detected
Acetone	8.7	71	21	170
2-Propanol	8.7	Not Detected	21	Not Detected
Carbon Disulfide	2.2	Not Detected	6.8	Not Detected
3-Chloropropene	2.2	Not Detected	6.8	Not Detected
Methylene Chloride	0.87	Not Detected	3.0	Not Detected
Hexane	2.2	Not Detected	7.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.2	Not Detected	6.4	Not Detected
Tetrahydrofuran	2.2	Not Detected	6.4	Not Detected
Cyclohexane	2.2	Not Detected	7.5	Not Detected
2,2,4-Trimethylpentane	2.2	Not Detected	10	Not Detected
Heptane	2.2	Not Detected	9.0	Not Detected
1,2-Dichloropropane	0.44	Not Detected	2.0	Not Detected
1,4-Dioxane	0.44	Not Detected	1.6	Not Detected
Bromodichloromethane	0.44	Not Detected	2.9	Not Detected
cis-1,3-Dichloropropene	0.44	Not Detected	2.0	Not Detected
4-Methyl-2-pentanone	0.44	Not Detected	1.8	Not Detected
trans-1,3-Dichloropropene	0.44	Not Detected	2.0	Not Detected
2-Hexanone	2.2	Not Detected	9.0	Not Detected
Dibromochloromethane	0.44	Not Detected	3.7	Not Detected
Chlorobenzene	0.44	Not Detected	2.0	Not Detected
Styrene	0.44	Not Detected	1.9	Not Detected
Bromoform	0.44	Not Detected	4.5	Not Detected
Cumene	0.44	Not Detected	2.1	Not Detected
Propylbenzene	0.44	Not Detected	2.1	Not Detected
4-Ethyltoluene	0.44	Not Detected	2.1	Not Detected
1,3,5-Trimethylbenzene	0.44	Not Detected	2.1	Not Detected
1,2,4-Trimethylbenzene	0.44	Not Detected	2.1	Not Detected
1,3-Dichlorobenzene	0.44	Not Detected	2.6	Not Detected
alpha-Chlorotoluene	0.44	Not Detected	2.3	Not Detected
1,2-Dichlorobenzene	0.44	Not Detected	2.6	Not Detected
1,2,4-Trichlorobenzene	2.2	Not Detected	16	Not Detected
Hexachlorobutadiene	2.2	Not Detected	23	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: FD1: A031123

Lab ID#: 2303506-01A

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

File Name:	20032418	Date of Collection: NA
Dil. Factor:	4.37	Date of Analysis: 3/24/23 08:51 PM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	84	70-130



Air Toxics

Client Sample ID: FD1: A031123

Lab ID#: 2303506-01B

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

File Name: 20032418sim
Dil. Factor: 4.37

Date of Collection: NA
Date of Analysis: 3/24/23 08:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.22	0.44	1.1	2.2
Freon 114	0.087	Not Detected	0.61	Not Detected
Chloromethane	2.2	Not Detected	4.5	Not Detected
Vinyl Chloride	0.044	Not Detected	0.11	Not Detected
Chloroethane	0.22	Not Detected	0.58	Not Detected
1,1-Dichloroethene	0.044	Not Detected	0.17	Not Detected
trans-1,2-Dichloroethene	0.44	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.44	Not Detected	1.6	Not Detected
1,1-Dichloroethane	0.087	Not Detected	0.35	Not Detected
cis-1,2-Dichloroethene	0.087	Not Detected	0.35	Not Detected
Chloroform	0.087	0.12	0.43	0.61
1,1,1-Trichloroethane	0.087	Not Detected	0.48	Not Detected
Carbon Tetrachloride	0.087	Not Detected	0.55	Not Detected
Benzene	0.22	Not Detected	0.70	Not Detected
1,2-Dichloroethane	0.087	Not Detected	0.35	Not Detected
Trichloroethene	0.087	Not Detected	0.47	Not Detected
Toluene	0.22	0.27	0.82	1.0
1,1,2-Trichloroethane	0.087	Not Detected	0.48	Not Detected
Tetrachloroethene	0.087	1.9	0.59	13
1,2-Dibromoethane (EDB)	0.087	Not Detected	0.67	Not Detected
Ethyl Benzene	0.087	Not Detected	0.38	Not Detected
m,p-Xylene	0.17	Not Detected	0.76	Not Detected
o-Xylene	0.087	Not Detected	0.38	Not Detected
1,1,2,2-Tetrachloroethane	0.087	Not Detected	0.60	Not Detected
1,4-Dichlorobenzene	0.087	Not Detected	0.52	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	114	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: SS1: A031123

Lab ID#: 2303506-02A

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

File Name:	20032419	Date of Collection:	3/11/23 6:09:00 PM
Dil. Factor:	13.6	Date of Analysis:	3/24/23 09:30 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	1.4	Not Detected	3.0	Not Detected
Bromomethane	68	Not Detected	260	Not Detected
Freon 11	1.4	Not Detected	7.6	Not Detected
Ethanol	27	81	51	150
Freon 113	1.4	Not Detected	10	Not Detected
Acetone	27	Not Detected	65	Not Detected
2-Propanol	27	140	67	340
Carbon Disulfide	6.8	Not Detected	21	Not Detected
3-Chloropropene	6.8	Not Detected	21	Not Detected
Methylene Chloride	2.7	Not Detected	9.4	Not Detected
Hexane	6.8	Not Detected	24	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6.8	Not Detected	20	Not Detected
Tetrahydrofuran	6.8	Not Detected	20	Not Detected
Cyclohexane	6.8	Not Detected	23	Not Detected
2,2,4-Trimethylpentane	6.8	Not Detected	32	Not Detected
Heptane	6.8	Not Detected	28	Not Detected
1,2-Dichloropropane	1.4	Not Detected	6.3	Not Detected
1,4-Dioxane	1.4	Not Detected	4.9	Not Detected
Bromodichloromethane	1.4	Not Detected	9.1	Not Detected
cis-1,3-Dichloropropene	1.4	Not Detected	6.2	Not Detected
4-Methyl-2-pentanone	1.4	Not Detected	5.6	Not Detected
trans-1,3-Dichloropropene	1.4	Not Detected	6.2	Not Detected
2-Hexanone	6.8	Not Detected	28	Not Detected
Dibromochloromethane	1.4	Not Detected	12	Not Detected
Chlorobenzene	1.4	Not Detected	6.3	Not Detected
Styrene	1.4	Not Detected	5.8	Not Detected
Bromoform	1.4	Not Detected	14	Not Detected
Cumene	1.4	Not Detected	6.7	Not Detected
Propylbenzene	1.4	Not Detected	6.7	Not Detected
4-Ethyltoluene	1.4	Not Detected	6.7	Not Detected
1,3,5-Trimethylbenzene	1.4	Not Detected	6.7	Not Detected
1,2,4-Trimethylbenzene	1.4	Not Detected	6.7	Not Detected
1,3-Dichlorobenzene	1.4	Not Detected	8.2	Not Detected
alpha-Chlorotoluene	1.4	Not Detected	7.0	Not Detected
1,2-Dichlorobenzene	1.4	Not Detected	8.2	Not Detected
1,2,4-Trichlorobenzene	6.8	Not Detected	50	Not Detected
Hexachlorobutadiene	6.8	Not Detected	72	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130



Air Toxics

Client Sample ID: SS1: A031123

Lab ID#: 2303506-02A

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

File Name:	20032419	Date of Collection: 3/11/23 6:09:00 PM
Dil. Factor:	13.6	Date of Analysis: 3/24/23 09:30 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: SS1: A031123

Lab ID#: 2303506-02B

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

File Name:	20032419sim	Date of Collection:	3/11/23 6:09:00 PM
Dil. Factor:	13.6	Date of Analysis:	3/24/23 09:30 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.68	1.9	3.4	9.3
Freon 114	0.27	Not Detected	1.9	Not Detected
Chloromethane	6.8	Not Detected	14	Not Detected
Vinyl Chloride	0.14	Not Detected	0.35	Not Detected
Chloroethane	0.68	Not Detected	1.8	Not Detected
1,1-Dichloroethene	0.14	Not Detected	0.54	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.4	Not Detected
Methyl tert-butyl ether	1.4	Not Detected	4.9	Not Detected
1,1-Dichloroethane	0.27	Not Detected	1.1	Not Detected
cis-1,2-Dichloroethene	0.27	Not Detected	1.1	Not Detected
Chloroform	0.27	1.7	1.3	8.3
1,1,1-Trichloroethane	0.27	Not Detected	1.5	Not Detected
Carbon Tetrachloride	0.27	Not Detected	1.7	Not Detected
Benzene	0.68	Not Detected	2.2	Not Detected
1,2-Dichloroethane	0.27	Not Detected	1.1	Not Detected
Trichloroethene	0.27	0.89	1.5	4.8
Toluene	0.68	0.77	2.6	2.9
1,1,2-Trichloroethane	0.27	Not Detected	1.5	Not Detected
Tetrachloroethene	0.27	190	1.8	1300
1,2-Dibromoethane (EDB)	0.27	Not Detected	2.1	Not Detected
Ethyl Benzene	0.27	Not Detected	1.2	Not Detected
m,p-Xylene	0.54	0.60	2.4	2.6
o-Xylene	0.27	Not Detected	1.2	Not Detected
1,1,2,2-Tetrachloroethane	0.27	Not Detected	1.9	Not Detected
1,4-Dichlorobenzene	0.27	Not Detected	1.6	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	113	70-130
4-Bromofluorobenzene	107	70-130



Air Toxics

Client Sample ID: IA1: A031123

Lab ID#: 2303506-03A

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

File Name:	20032417	Date of Collection:	3/11/23 5:09:00 PM
Dil. Factor:	4.83	Date of Analysis:	3/24/23 08:04 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.48	Not Detected	1.1	Not Detected
Bromomethane	24	Not Detected	94	Not Detected
Freon 11	0.48	Not Detected	2.7	Not Detected
Ethanol	9.7	1800 E	18	3300 E
Freon 113	0.48	Not Detected	3.7	Not Detected
Acetone	9.7	32	23	75
2-Propanol	9.7	Not Detected	24	Not Detected
Carbon Disulfide	2.4	Not Detected	7.5	Not Detected
3-Chloropropene	2.4	Not Detected	7.6	Not Detected
Methylene Chloride	0.97	Not Detected	3.4	Not Detected
Hexane	2.4	Not Detected	8.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.4	Not Detected	7.1	Not Detected
Tetrahydrofuran	2.4	Not Detected	7.1	Not Detected
Cyclohexane	2.4	Not Detected	8.3	Not Detected
2,2,4-Trimethylpentane	2.4	Not Detected	11	Not Detected
Heptane	2.4	Not Detected	9.9	Not Detected
1,2-Dichloropropane	0.48	Not Detected	2.2	Not Detected
1,4-Dioxane	0.48	Not Detected	1.7	Not Detected
Bromodichloromethane	0.48	Not Detected	3.2	Not Detected
cis-1,3-Dichloropropene	0.48	Not Detected	2.2	Not Detected
4-Methyl-2-pentanone	0.48	Not Detected	2.0	Not Detected
trans-1,3-Dichloropropene	0.48	Not Detected	2.2	Not Detected
2-Hexanone	2.4	Not Detected	9.9	Not Detected
Dibromochloromethane	0.48	Not Detected	4.1	Not Detected
Chlorobenzene	0.48	Not Detected	2.2	Not Detected
Styrene	0.48	Not Detected	2.0	Not Detected
Bromoform	0.48	Not Detected	5.0	Not Detected
Cumene	0.48	Not Detected	2.4	Not Detected
Propylbenzene	0.48	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.48	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.48	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.48	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.48	Not Detected	2.9	Not Detected
alpha-Chlorotoluene	0.48	Not Detected	2.5	Not Detected
1,2-Dichlorobenzene	0.48	Not Detected	2.9	Not Detected
1,2,4-Trichlorobenzene	2.4	Not Detected	18	Not Detected
Hexachlorobutadiene	2.4	Not Detected	26	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: IA1: A031123

Lab ID#: 2303506-03A

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

File Name:	20032417	Date of Collection: 3/11/23 5:09:00 PM
Dil. Factor:	4.83	Date of Analysis: 3/24/23 08:04 PM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	82	70-130



Air Toxics

Client Sample ID: IA1: A031123

Lab ID#: 2303506-03B

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

File Name:	20032417sim	Date of Collection:	3/11/23 5:09:00 PM
Dil. Factor:	4.83	Date of Analysis:	3/24/23 08:04 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.24	0.44	1.2	2.2
Freon 114	0.097	Not Detected	0.68	Not Detected
Chloromethane	2.4	Not Detected	5.0	Not Detected
Vinyl Chloride	0.048	Not Detected	0.12	Not Detected
Chloroethane	0.24	Not Detected	0.64	Not Detected
1,1-Dichloroethene	0.048	Not Detected	0.19	Not Detected
trans-1,2-Dichloroethene	0.48	Not Detected	1.9	Not Detected
Methyl tert-butyl ether	0.48	Not Detected	1.7	Not Detected
1,1-Dichloroethane	0.097	Not Detected	0.39	Not Detected
cis-1,2-Dichloroethene	0.097	Not Detected	0.38	Not Detected
Chloroform	0.097	Not Detected	0.47	Not Detected
1,1,1-Trichloroethane	0.097	Not Detected	0.53	Not Detected
Carbon Tetrachloride	0.097	Not Detected	0.61	Not Detected
Benzene	0.24	Not Detected	0.77	Not Detected
1,2-Dichloroethane	0.097	Not Detected	0.39	Not Detected
Trichloroethene	0.097	Not Detected	0.52	Not Detected
Toluene	0.24	0.34	0.91	1.3
1,1,2-Trichloroethane	0.097	Not Detected	0.53	Not Detected
Tetrachloroethene	0.097	2.5	0.66	17
1,2-Dibromoethane (EDB)	0.097	Not Detected	0.74	Not Detected
Ethyl Benzene	0.097	Not Detected	0.42	Not Detected
m,p-Xylene	0.19	0.28	0.84	1.2
o-Xylene	0.097	Not Detected	0.42	Not Detected
1,1,2,2-Tetrachloroethane	0.097	Not Detected	0.66	Not Detected
1,4-Dichlorobenzene	0.097	Not Detected	0.58	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	113	70-130
4-Bromofluorobenzene	98	70-130



Air Toxics

Client Sample ID: SS2: A031123

Lab ID#: 2303506-04A

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

File Name:	20032416	Date of Collection:	3/11/23 6:10:00 PM
Dil. Factor:	1.31	Date of Analysis:	3/24/23 07:21 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	6.6	Not Detected	25	Not Detected
Freon 11	0.13	0.22	0.74	1.2
Ethanol	2.6	66 E	4.9	120 E
Freon 113	0.13	Not Detected	1.0	Not Detected
Acetone	2.6	16	6.2	38
2-Propanol	2.6	320 E	6.4	780 E
Carbon Disulfide	0.66	Not Detected	2.0	Not Detected
3-Chloropropene	0.66	Not Detected	2.0	Not Detected
Methylene Chloride	0.26	Not Detected	0.91	Not Detected
Hexane	0.66	Not Detected	2.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.66	0.79	1.9	2.3
Tetrahydrofuran	0.66	Not Detected	1.9	Not Detected
Cyclohexane	0.66	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	0.66	Not Detected	3.0	Not Detected
Heptane	0.66	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	0.88	Not Detected
cis-1,3-Dichloropropene	0.13	Not Detected	0.59	Not Detected
4-Methyl-2-pentanone	0.13	Not Detected	0.54	Not Detected
trans-1,3-Dichloropropene	0.13	Not Detected	0.59	Not Detected
2-Hexanone	0.66	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	0.56	Not Detected
Bromoform	0.13	Not Detected	1.4	Not Detected
Cumene	0.13	Not Detected	0.64	Not Detected
Propylbenzene	0.13	Not Detected	0.64	Not Detected
4-Ethyltoluene	0.13	0.13 CN	0.64	0.66 CN
1,3,5-Trimethylbenzene	0.13	Not Detected	0.64	Not Detected
1,2,4-Trimethylbenzene	0.13	0.16	0.64	0.78
1,3-Dichlorobenzene	0.13	7.6	0.79	46
alpha-Chlorotoluene	0.13	Not Detected	0.68	Not Detected
1,2-Dichlorobenzene	0.13	Not Detected	0.79	Not Detected
1,2,4-Trichlorobenzene	0.66	Not Detected	4.9	Not Detected
Hexachlorobutadiene	0.66	Not Detected	7.0	Not Detected

E = Exceeds instrument calibration range.

CN = See Case Narrative explanation

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



Air Toxics

Client Sample ID: SS2: A031123

Lab ID#: 2303506-04A

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

File Name:	20032416	Date of Collection: 3/11/23 6:10:00 PM
Dil. Factor:	1.31	Date of Analysis: 3/24/23 07:21 PM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: SS2: A031123

Lab ID#: 2303506-04B

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

File Name:	20032416sim	Date of Collection:	3/11/23 6:10:00 PM
Dil. Factor:	1.31	Date of Analysis:	3/24/23 07:21 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.066	0.48	0.32	2.4
Freon 114	0.026	Not Detected	0.18	Not Detected
Chloromethane	0.66	Not Detected	1.4	Not Detected
Vinyl Chloride	0.013	Not Detected	0.033	Not Detected
Chloroethane	0.066	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	0.11	Not Detected
cis-1,2-Dichloroethene	0.026	Not Detected	0.10	Not Detected
Chloroform	0.026	7.3	0.13	36
1,1,1-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.026	0.097	0.16	0.61
Benzene	0.066	0.16	0.21	0.52
1,2-Dichloroethane	0.026	Not Detected	0.11	Not Detected
Trichloroethene	0.026	0.18	0.14	0.95
Toluene	0.066	0.67	0.25	2.5
1,1,2-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Tetrachloroethene	0.026	3.0	0.18	20
1,2-Dibromoethane (EDB)	0.026	Not Detected	0.20	Not Detected
Ethyl Benzene	0.026	0.098	0.11	0.42
m,p-Xylene	0.052	0.34	0.23	1.5
o-Xylene	0.026	0.13	0.11	0.57
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	92	70-130
Toluene-d8	113	70-130
4-Bromofluorobenzene	109	70-130



Air Toxics

Client Sample ID: IA2: A031123

Lab ID#: 2303506-05A

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

File Name:	20032414	Date of Collection:	3/11/23 6:09:00 PM
Dil. Factor:	2.52	Date of Analysis:	3/24/23 06:03 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,3-Butadiene	0.25	Not Detected	0.56	Not Detected
Bromomethane	13	Not Detected	49	Not Detected
Freon 11	0.25	Not Detected	1.4	Not Detected
Ethanol	5.0	1500 E	9.5	2800 E
Freon 113	0.25	Not Detected	1.9	Not Detected
Acetone	5.0	70	12	160
2-Propanol	5.0	Not Detected	12	Not Detected
Carbon Disulfide	1.3	Not Detected	3.9	Not Detected
3-Chloropropene	1.3	Not Detected	3.9	Not Detected
Methylene Chloride	0.50	Not Detected	1.8	Not Detected
Hexane	1.3	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.3	Not Detected	3.7	Not Detected
Tetrahydrofuran	1.3	Not Detected	3.7	Not Detected
Cyclohexane	1.3	Not Detected	4.3	Not Detected
2,2,4-Trimethylpentane	1.3	Not Detected	5.9	Not Detected
Heptane	1.3	Not Detected	5.2	Not Detected
1,2-Dichloropropane	0.25	Not Detected	1.2	Not Detected
1,4-Dioxane	0.25	Not Detected	0.91	Not Detected
Bromodichloromethane	0.25	Not Detected	1.7	Not Detected
cis-1,3-Dichloropropene	0.25	Not Detected	1.1	Not Detected
4-Methyl-2-pentanone	0.25	Not Detected	1.0	Not Detected
trans-1,3-Dichloropropene	0.25	Not Detected	1.1	Not Detected
2-Hexanone	1.3	Not Detected	5.2	Not Detected
Dibromochloromethane	0.25	Not Detected	2.1	Not Detected
Chlorobenzene	0.25	Not Detected	1.2	Not Detected
Styrene	0.25	Not Detected	1.1	Not Detected
Bromoform	0.25	Not Detected	2.6	Not Detected
Cumene	0.25	Not Detected	1.2	Not Detected
Propylbenzene	0.25	Not Detected	1.2	Not Detected
4-Ethyltoluene	0.25	Not Detected	1.2	Not Detected
1,3,5-Trimethylbenzene	0.25	Not Detected	1.2	Not Detected
1,2,4-Trimethylbenzene	0.25	Not Detected	1.2	Not Detected
1,3-Dichlorobenzene	0.25	Not Detected	1.5	Not Detected
alpha-Chlorotoluene	0.25	Not Detected	1.3	Not Detected
1,2-Dichlorobenzene	0.25	Not Detected	1.5	Not Detected
1,2,4-Trichlorobenzene	1.3	Not Detected	9.4	Not Detected
Hexachlorobutadiene	1.3	Not Detected	13	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: IA2: A031123

Lab ID#: 2303506-05A

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

File Name:	20032414	Date of Collection: 3/11/23 6:09:00 PM
Dil. Factor:	2.52	Date of Analysis: 3/24/23 06:03 PM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	85	70-130



Air Toxics

Client Sample ID: IA2: A031123

Lab ID#: 2303506-05B

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

File Name:	20032414sim	Date of Collection:	3/11/23 6:09:00 PM
Dil. Factor:	2.52	Date of Analysis:	3/24/23 06:03 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.13	0.43	0.62	2.1
Freon 114	0.050	Not Detected	0.35	Not Detected
Chloromethane	1.3	Not Detected	2.6	Not Detected
Vinyl Chloride	0.025	Not Detected	0.064	Not Detected
Chloroethane	0.13	Not Detected	0.33	Not Detected
1,1-Dichloroethene	0.025	Not Detected	0.10	Not Detected
trans-1,2-Dichloroethene	0.25	Not Detected	1.0	Not Detected
Methyl tert-butyl ether	0.25	Not Detected	0.91	Not Detected
1,1-Dichloroethane	0.050	Not Detected	0.20	Not Detected
cis-1,2-Dichloroethene	0.050	Not Detected	0.20	Not Detected
Chloroform	0.050	0.12	0.25	0.56
1,1,1-Trichloroethane	0.050	Not Detected	0.28	Not Detected
Carbon Tetrachloride	0.050	0.063	0.32	0.40
Benzene	0.13	0.20	0.40	0.63
1,2-Dichloroethane	0.050	Not Detected	0.20	Not Detected
Trichloroethene	0.050	Not Detected	0.27	Not Detected
Toluene	0.13	0.25	0.47	0.95
1,1,2-Trichloroethane	0.050	Not Detected	0.28	Not Detected
Tetrachloroethene	0.050	1.8	0.34	12
1,2-Dibromoethane (EDB)	0.050	Not Detected	0.39	Not Detected
Ethyl Benzene	0.050	0.052	0.22	0.22
m,p-Xylene	0.10	0.16	0.44	0.71
o-Xylene	0.050	0.052	0.22	0.23
1,1,2,2-Tetrachloroethane	0.050	Not Detected	0.35	Not Detected
1,4-Dichlorobenzene	0.050	Not Detected	0.30	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	113	70-130
4-Bromofluorobenzene	98	70-130



Air Toxics

Client Sample ID: OA1: A031123

Lab ID#: 2303506-06A

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

File Name:	20032413	Date of Collection:	3/11/23 6:09:00 PM
Dil. Factor:	1.31	Date of Analysis:	3/24/23 05:11 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	6.6	Not Detected	25	Not Detected
Freon 11	0.13	0.22	0.74	1.2
Ethanol	2.6	4.8	4.9	9.0
Freon 113	0.13	Not Detected	1.0	Not Detected
Acetone	2.6	Not Detected	6.2	Not Detected
2-Propanol	2.6	Not Detected	6.4	Not Detected
Carbon Disulfide	0.66	Not Detected	2.0	Not Detected
3-Chloropropene	0.66	Not Detected	2.0	Not Detected
Methylene Chloride	0.26	Not Detected	0.91	Not Detected
Hexane	0.66	Not Detected	2.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.66	Not Detected	1.9	Not Detected
Tetrahydrofuran	0.66	Not Detected	1.9	Not Detected
Cyclohexane	0.66	Not Detected	2.2	Not Detected
2,2,4-Trimethylpentane	0.66	Not Detected	3.0	Not Detected
Heptane	0.66	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	0.88	Not Detected
cis-1,3-Dichloropropene	0.13	Not Detected	0.59	Not Detected
4-Methyl-2-pentanone	0.13	Not Detected	0.54	Not Detected
trans-1,3-Dichloropropene	0.13	Not Detected	0.59	Not Detected
2-Hexanone	0.66	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	0.56	Not Detected
Bromoform	0.13	Not Detected	1.4	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	0.79	Not Detected
alpha-Chlorotoluene	0.13	Not Detected	0.68	Not Detected
1,2-Dichlorobenzene	0.13	Not Detected	0.79	Not Detected
1,2,4-Trichlorobenzene	0.66	Not Detected	4.9	Not Detected
Hexachlorobutadiene	0.66	Not Detected	7.0	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130



Air Toxics

Client Sample ID: OA1: A031123

Lab ID#: 2303506-06A

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

File Name:	20032413	Date of Collection: 3/11/23 6:09:00 PM
Dil. Factor:	1.31	Date of Analysis: 3/24/23 05:11 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
4-Bromofluorobenzene	81	70-130



Air Toxics

Client Sample ID: OA1: A031123

Lab ID#: 2303506-06B

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

File Name:	20032413sim	Date of Collection:	3/11/23 6:09:00 PM
Dil. Factor:	1.31	Date of Analysis:	3/24/23 05:11 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.066	0.48	0.32	2.4
Freon 114	0.026	Not Detected	0.18	Not Detected
Chloromethane	0.66	Not Detected	1.4	Not Detected
Vinyl Chloride	0.013	Not Detected	0.033	Not Detected
Chloroethane	0.066	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	0.11	Not Detected
cis-1,2-Dichloroethene	0.026	Not Detected	0.10	Not Detected
Chloroform	0.026	Not Detected	0.13	Not Detected
1,1,1-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.026	0.072	0.16	0.45
Benzene	0.066	0.16	0.21	0.51
1,2-Dichloroethane	0.026	Not Detected	0.11	Not Detected
Trichloroethene	0.026	Not Detected	0.14	Not Detected
Toluene	0.066	0.25	0.25	0.93
1,1,2-Trichloroethane	0.026	Not Detected	0.14	Not Detected
Tetrachloroethene	0.026	0.038	0.18	0.26
1,2-Dibromoethane (EDB)	0.026	Not Detected	0.20	Not Detected
Ethyl Benzene	0.026	0.026	0.11	0.11
m,p-Xylene	0.052	0.088	0.23	0.38
o-Xylene	0.026	0.032	0.11	0.14
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 (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	115	70-130
4-Bromofluorobenzene	96	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2303506-07A

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

File Name:	20032406	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/24/23 11:26 AM

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	107	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2303506-07A

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

File Name:	20032406	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/24/23 11:26 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
4-Bromofluorobenzene	86	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2303506-07B

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

File Name: 20032406sim
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/24/23 11:26 AM

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	94	70-130
Toluene-d8	113	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2303506-08A

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

File Name:	20032402	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/24/23 08:13 AM

Compound	%Recovery
1,3-Butadiene	127
Bromomethane	105
Freon 11	103
Ethanol	112
Freon 113	93
Acetone	113
2-Propanol	114
Carbon Disulfide	121
3-Chloropropene	98
Methylene Chloride	106
Hexane	121
2-Butanone (Methyl Ethyl Ketone)	116
Tetrahydrofuran	134 Q
Cyclohexane	109
2,2,4-Trimethylpentane	125
Heptane	126
1,2-Dichloropropane	121
1,4-Dioxane	112
Bromodichloromethane	102
cis-1,3-Dichloropropene	109
4-Methyl-2-pentanone	128
trans-1,3-Dichloropropene	108
2-Hexanone	117
Dibromochloromethane	99
Chlorobenzene	104
Styrene	104
Bromoform	93
Cumene	104
Propylbenzene	100
4-Ethyltoluene	98
1,3,5-Trimethylbenzene	105
1,2,4-Trimethylbenzene	95
1,3-Dichlorobenzene	94
alpha-Chlorotoluene	111
1,2-Dichlorobenzene	92
1,2,4-Trichlorobenzene	88
Hexachlorobutadiene	96

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#: 2303506-08A

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

File Name:	20032402	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/24/23 08:13 AM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 2303506-08B

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

File Name:	20032402sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/24/23 08:13 AM

Compound	%Recovery
Freon 12	90
Freon 114	93
Chloromethane	107
Vinyl Chloride	109
Chloroethane	111
1,1-Dichloroethene	102
trans-1,2-Dichloroethene	104
Methyl tert-butyl ether	94
1,1-Dichloroethane	106
cis-1,2-Dichloroethene	106
Chloroform	105
1,1,1-Trichloroethane	95
Carbon Tetrachloride	76
Benzene	112
1,2-Dichloroethane	111
Trichloroethene	114
Toluene	109
1,1,2-Trichloroethane	122
Tetrachloroethene	82
1,2-Dibromoethane (EDB)	121
Ethyl Benzene	113
m,p-Xylene	109
o-Xylene	103
1,1,2,2-Tetrachloroethane	118
1,4-Dichlorobenzene	97

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	114	70-130
4-Bromofluorobenzene	108	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 2303506-09A

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

File Name:	20032403	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/24/23 09:04 AM

Compound	%Recovery	Method Limits
1,3-Butadiene	128	70-130
Bromomethane	113	70-130
Freon 11	103	70-130
Ethanol	130	70-130
Freon 113	93	70-130
Acetone	114	70-130
2-Propanol	127	70-130
Carbon Disulfide	121	70-130
3-Chloropropene	113	70-130
Methylene Chloride	103	70-130
Hexane	120	70-130
2-Butanone (Methyl Ethyl Ketone)	116	70-130
Tetrahydrofuran	126	70-130
Cyclohexane	109	70-130
2,2,4-Trimethylpentane	123	70-130
Heptane	126	70-130
1,2-Dichloropropane	123	70-130
1,4-Dioxane	113	70-130
Bromodichloromethane	100	70-130
cis-1,3-Dichloropropene	112	70-130
4-Methyl-2-pentanone	131 Q	70-130
trans-1,3-Dichloropropene	111	70-130
2-Hexanone	129	70-130
Dibromochloromethane	103	70-130
Chlorobenzene	106	70-130
Styrene	110	70-130
Bromoform	99	70-130
Cumene	104	70-130
Propylbenzene	104	70-130
4-Ethyltoluene	101	70-130
1,3,5-Trimethylbenzene	104	70-130
1,2,4-Trimethylbenzene	98	70-130
1,3-Dichlorobenzene	95	70-130
alpha-Chlorotoluene	124	70-130
1,2-Dichlorobenzene	94	70-130
1,2,4-Trichlorobenzene	96	70-130
Hexachlorobutadiene	96	70-130

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
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Air Toxics

Client Sample ID: LCS

Lab ID#: 2303506-09A

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

File Name:	20032403	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/24/23 09:04 AM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2303506-09AA

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

File Name: 20032404
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/24/23 10:07 AM

Compound	%Recovery	Method Limits
1,3-Butadiene	125	70-130
Bromomethane	110	70-130
Freon 11	101	70-130
Ethanol	122	70-130
Freon 113	92	70-130
Acetone	110	70-130
2-Propanol	126	70-130
Carbon Disulfide	120	70-130
3-Chloropropene	115	70-130
Methylene Chloride	103	70-130
Hexane	119	70-130
2-Butanone (Methyl Ethyl Ketone)	114	70-130
Tetrahydrofuran	130	70-130
Cyclohexane	108	70-130
2,2,4-Trimethylpentane	123	70-130
Heptane	123	70-130
1,2-Dichloropropane	119	70-130
1,4-Dioxane	111	70-130
Bromodichloromethane	99	70-130
cis-1,3-Dichloropropene	112	70-130
4-Methyl-2-pentanone	130	70-130
trans-1,3-Dichloropropene	113	70-130
2-Hexanone	128	70-130
Dibromochloromethane	102	70-130
Chlorobenzene	105	70-130
Styrene	109	70-130
Bromoform	99	70-130
Cumene	103	70-130
Propylbenzene	104	70-130
4-Ethyltoluene	104	70-130
1,3,5-Trimethylbenzene	100	70-130
1,2,4-Trimethylbenzene	95	70-130
1,3-Dichlorobenzene	95	70-130
alpha-Chlorotoluene	123	70-130
1,2-Dichlorobenzene	92	70-130
1,2,4-Trichlorobenzene	96	70-130
Hexachlorobutadiene	101	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2303506-09AA

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

File Name:	20032404	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/24/23 10:07 AM

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 2303506-09B

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

File Name: 20032403sim
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/24/23 09:04 AM

Compound	%Recovery	Method Limits
Freon 12	91	70-130
Freon 114	95	70-130
Chloromethane	108	70-130
Vinyl Chloride	110	70-130
Chloroethane	114	70-130
1,1-Dichloroethene	100	70-130
trans-1,2-Dichloroethene	106	70-130
Methyl tert-butyl ether	92	70-130
1,1-Dichloroethane	107	70-130
cis-1,2-Dichloroethene	105	70-130
Chloroform	98	70-130
1,1,1-Trichloroethane	96	70-130
Carbon Tetrachloride	97	60-140
Benzene	110	70-130
1,2-Dichloroethane	106	70-130
Trichloroethene	112	70-130
Toluene	107	70-130
1,1,2-Trichloroethane	127	70-130
Tetrachloroethene	83	70-130
1,2-Dibromoethane (EDB)	124	70-130
Ethyl Benzene	114	70-130
m,p-Xylene	109	70-130
o-Xylene	102	70-130
1,1,2,2-Tetrachloroethane	124	70-130
1,4-Dichlorobenzene	98	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	112	70-130
4-Bromofluorobenzene	105	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 2303506-09BB

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

File Name: 20032404sim
Dil. Factor: 1.00

Date of Collection: NA
Date of Analysis: 3/24/23 10:07 AM

Compound	%Recovery	Method Limits
Freon 12	90	70-130
Freon 114	94	70-130
Chloromethane	107	70-130
Vinyl Chloride	109	70-130
Chloroethane	114	70-130
1,1-Dichloroethene	99	70-130
trans-1,2-Dichloroethene	106	70-130
Methyl tert-butyl ether	92	70-130
1,1-Dichloroethane	108	70-130
cis-1,2-Dichloroethene	105	70-130
Chloroform	98	70-130
1,1,1-Trichloroethane	96	70-130
Carbon Tetrachloride	96	60-140
Benzene	107	70-130
1,2-Dichloroethane	104	70-130
Trichloroethene	108	70-130
Toluene	105	70-130
1,1,2-Trichloroethane	124	70-130
Tetrachloroethene	81	70-130
1,2-Dibromoethane (EDB)	120	70-130
Ethyl Benzene	111	70-130
m,p-Xylene	106	70-130
o-Xylene	100	70-130
1,1,2,2-Tetrachloroethane	121	70-130
1,4-Dichlorobenzene	95	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	111	70-130
4-Bromofluorobenzene	106	70-130



For Laboratory Use Only

PID:

Workorder #:

2303506

page--of ---

Phone (800) 985-5955; Fax (916) 351-8279

Client: ELAM		Special Instructions/Notes:						Turnaround Time (Rush surcharges may apply)									
Project Name: WAKESJOC														Standard X Rush (specify)			
Project Manager: CS								Project # WAKESJOC 16-4						Canister Vacuum/Pressure Requested Analyses			
Sampler: JDe														Lab Use Only			
Site Name:																	
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: A031123	663063	2228	-	-	-	-	-29.5	-3.5								
02A	SS1: A031123	663285	2217	3/11	1009	3/11	1809	-29	-5								
03A	IA1: A031123	663654	2225	3/11	1009	3/11	1709	-29	-5								
04A	SS2: A031123	662393	2221	3/11	1810	3/11	1810	-28.5	-3.5								
05A	IA2: A031123	661735	2242	3/11	1810	3/11	1809	-28.5	-3.5								
06A	GA1: A031123	661004	2228-1	3/11	1810	3/11	1809	-28	-6								
Relinquished by: (Signature/Affiliation)				Date		Time		Received by: (Signature/Affiliation)				Date		Time			
James D. [Signature] ELAM				3/15/23		1048		Daryl [Signature] EATL				3-16-23		0958			
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: FEDEX		Custody Seals Intact?		Yes No None		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											