

June 26, 2024

Megan Kuczka
Environmental Program Specialist 1
New York State Department of Environmental Conservation
Division of Environmental Remediation
700 Delaware Avenue
Buffalo, New York 14209

**Re: 240 – 260 Lakefront Boulevard Site (C915340) – Building A and Building B
Soil Vapor Intrusion Sampling Results**

Dear Ms. Kuczka:

C&S Engineers, Inc. (C&S) has performed a soil vapor intrusion (SVI) assessment for the structures located at 240 Lakefront Boulevard in Buffalo, New York (The "Site"). The SVI was conducted within the two four-unit townhomes – identified as "Building A" and "Building B."

BACKGROUND

The Site is an approximately a 2.09-acre area and is bounded by the Lakefront Boulevard to the northeast, Marina Parks townhomes to the south, Ojibwa Circle to the east, and Erie Basin Marina to the west.

Lakefront Boulevard, LLC entered into a Brownfield Cleanup Agreement (BCA) on February 13, 2019 with the NYSDEC to remediate the Site to achieve a Track 4 Restricted Residential Use Level Cleanup. A Site Management Plan (SMP) was prepared and approved by the NYSDEC and NYSDOH to manage the remaining contamination at the Site. The SMP states that after each building is enclosed, indoor air samples and air samples from the vent piping will be collected to evaluate if the passive system will need to be converted to an active system.

SCOPE

The sampling was performed based upon the soil vapor intrusion assessment methodologies recommended by the New York State Department of Health (NYSDOH) in its Guidance for Evaluating Soil Vapor Intrusion in the State of New York (Final), dated October 2006 (including subsequent updates) and considers the content of and ASTM E2600-15 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.

This letter describes the scope, methods, and findings / results of our SVI assessment.

METHODS

The SVI assessment was performed consistent with the NYSDOH document: *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006 (as amended), the USEPA Technical Guidance documents, as well as C&S' proposal.

C&S's methods included:

- Prior to sampling, a background review, building assessment, and preliminary screening was performed to select appropriate sampling locations that will not be affected by building operations, construction, or features such as occupants, sumps / basements, windows / doors, heating / cooling systems, material storage, etc.
- C&S personnel screened sampling areas with a photoionization detector (PID) and prepared an inventory of petroleum or chemical storage that could affect sampling results. To prevent the probability of a spill, the inventory was prepared without handling containers.
- Field documentation was maintained in a field notebook and on field data forms.
- At sub-slab sampling locations, C&S personnel drilled holes through the concrete slab using a hand-held hammer drill. Temporary tubing was used for sample collection. Holes in the concrete slab were filled and sealed after completion of sampling. Sub-slab vapor samples were collected in the following manner:
 - Sealed the sub-slab vapor sample tubing to the surface with a putty product for temporary installation.
 - Verified sub-slab sampling point seal integrity (helium short circuit testing) using tracer gas. Helium was used as a field tracer prior to sampling to confirm that sub-slab airspace and indoor air space are not connected. The helium was introduced into a dome positioned above the sampling point. The tubing and indoor air were isolated prior to introducing helium into the dome. The helium concentration was measured using a helium meter that is capable to read down to 1-2%. If helium was detected by the meter, the clay seal is replaced and the tracer test is re-performed.
 - Purged approximately one to three volumes (i.e., the volume of the sample probe and tube) prior to collecting the samples to ensure samples collected are representative.
 - Ensured that flow rates for both purging and collecting did not exceed 0.2 liters per minute to minimize outdoor air infiltration during sampling.
 - Equipped sub-slab vapor sample canisters with a 24-hour regulator to allow the sample to be collected over an approximate 24-hour period.
 - Collected samples, using conventional sampling methods, in laboratory provided sampling containers (e.g., low flow rate; Summa® canisters if analyzed by EPA Method TO-15).

- Concurrent with the sub-slab samples, collected indoor air, and outdoor air samples. Indoor air samples were collected adjacent to a respective sub-slab vapor location based upon accessibility within the building. One outdoor, field located air sample was collected from a ground level location upwind of the facility, as determined on the day of sub-slab vapor sampling field activities. Indoor and outdoor air sample canisters were equipped with a 24-hour regulator to allow the sample to be collected over the same approximate 24-hour period as the sub-slab vapor samples.
- Each 6-liter canister, with an initial pressure of approximately 50 millitorr (compared to 760 torr of pressure in the atmosphere at sea level), was fitted with a sampling valve that uses a critical orifice and mass flow controller to regulate the air flow into the canister for the selected sampling period. The mass flow controller maintained a relative constant air flow rate throughout the sampling period. Summa canister valves remained closed until the sample holes are complete and all of the canisters are in their respective positions. The valves were then opened for the designated collection period.
- Samples were submitted to a NYSDOH accredited analytical laboratory and analyzed via United States Environmental Protection Agency (USEPA) Method TO-15 for VOCs.

For this assessment, C&S collected the following samples:

<i>Sample ID</i>	<i>Location</i>	<i>Date Sampled</i>
260-SS-01	Building A; Unit 260	12/5/2023
260-IA-01	Building A; Unit 260	12/5/2023
256-SS-02	Building A; Unit 256	12/5/2023
256-IA-02	Building A; Unit 256	12/5/2023
OA-01-120423	Outdoor;	12/5/2023
244-SS-01	Building B; Unit 244	3/29/2024
244-IA-01	Building B; Unit 244	3/29/2024
252-SS-02	Building B; Unit 252	3/29/2024
252-IA-02	Building B; Unit 252	3/29/2024
OA-01	Outdoor	3/29/2024

SS = Sub Slab, IA = Indoor Air, OA = Outdoor Air

Sample locations were selected by C&S based on the work plan, meeting with the NYSDEC on December 4, 2023 and which units were available and had the heating system operating. The sample locations are shown in the **Figures** section.

During the completion of the background review / building assessment / chemical inventory; no building features or chemical storage practices were identified that were expected to affect sampling results.

The air samples were analyzed by Alpha Analytical and Centek Laboratories. The samples were analyzed via USEPA Method TO-15 for VOCs. Analytical methods are consistent with USEPA protocols for collecting air samples using TO-15 Summa™ canisters [(*Compendium of Methods for the Determination of Compounds in Ambient Air, Second Edition, Compendium Method TO-15, Determination of Volatile Organic Compounds in Air Collected in Specially-prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GCMS)*)]. Each batch of canisters is certified clean by the laboratory according to USEPA Method TO-15.

Building Assessment

- PID screening of the indoor air was 0 ppm within the garage and 1st floor.
- Products stored within the townhome are not expected to affect sample results. The following products were observed:
 - Drywall
 - Drywall joint compound
 - PVC piping

FINDINGS / RESULTS

Results Compared to NYSDOH Decision Matrices

To provide a framework to aid in determining appropriate actions in response to SVI risk, NYSDOH has developed decision matrices to be used as a risk management tool for data assessment. They are designed to be applied on a case-by-case basis, for identifying actions that should be taken to address current and potential exposures related to SVI. These decision matrices were developed to apply to specific volatile chemicals of interest, but are also intended to be generic, and, as such, may be modified based on site-specific conditions and contaminants. The NYSDOH decision matrices are as follows:

Matrix A – carbon tetrachloride, 1,1-dichloroethene, cis-1,2-dichloroethene, and trichloroethene.

Sub-Slab Vapor Concentration of Compound ($\mu\text{g}/\text{M}^3$)	Indoor Air Concentration of Compounds ($\mu\text{g}/\text{M}^3$)		
	< 0.2	0.2 to < 1	1+
< 6	No further action	No further action	Identify source(s) and resample or mitigate
6 to < 60	No further action	Monitor	Mitigate
60+	Mitigate	Mitigate	Mitigate

Matrix B – methylene chloride, tetrachloroethene, and 1,1,1-trichloroethane.

Sub-Slab Vapor Concentration of Compound ($\mu\text{g}/\text{M}^3$)	Indoor Air Concentration of Compounds ($\mu\text{g}/\text{M}^3$)		
	< 3	3 to 10	10+
< 100	No further action	No further action	Identify source(s) and resample or mitigate
100 to < 1,000	No further action	Monitor	Mitigate
1,000+	Mitigate	Mitigate	Mitigate

Matrix C – vinyl chloride

Sub-Slab Vapor Concentration of Compound ($\mu\text{g}/\text{M}^3$)	Indoor Air Concentration of Compounds ($\mu\text{g}/\text{M}^3$)	
	< 0.2	0.2+
< 6	No further action	Identify source(s) and resample or mitigate
6 to < 60	Monitor	Mitigate
60+	Mitigate	Mitigate

Matrix D – benzene, ethylbenzene, naphthalene, cyclohexane, isooctane (2,2,4-trimethylpentane), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, o-xylene.

Sub-Slab Vapor Concentration of Compound ($\mu\text{g}/\text{M}^3$)	Indoor Air Concentration of Compounds ($\mu\text{g}/\text{M}^3$)		
	< 2	2 to < 10	10+
< 60	No further action	No further action	Identify source(s) and resample or mitigate
60 to 600	No further action	Monitor	Mitigate
600+	Mitigate	Mitigate	Mitigate

Matrix E – m-xylene, p-xylene, heptane, hexane.

Sub-Slab Vapor Concentration of Compound ($\mu\text{g}/\text{M}^3$)	Indoor Air Concentration of Compounds ($\mu\text{g}/\text{M}^3$)		
	< 6	6 to 20	20+
< 200	No further action	No further action	Identify source(s) and resample or mitigate
200 to < 2,000	No further action	Monitor	Mitigate
2,000+	Mitigate	Mitigate	Mitigate

Matrix F – toluene

Sub-Slab Vapor Concentration of Compound ($\mu\text{g}/\text{M}^3$)	Indoor Air Concentration of Compounds ($\mu\text{g}/\text{M}^3$)		
	< 10	10 to < 50	50+
< 300	No further action	No further action	Identify source(s) and resample or mitigate
300 to < 3,000	No further action	Monitor	Mitigate
3,000+	Mitigate	Mitigate	Mitigate

The following table indicates what actions, if any, are needed, based on the results.

NYSDOH Decision Matrices Results

Compound	Decision Matrices	Result
carbon tetrachloride	A	No Further Action
1,1-dichloroethene,		No Further Action
cis-1,2-dichloroethene		No Further Action
trichloroethene		No Further Action
methylene chloride	B	No Further Action
tetrachloroethene		No Further Action
1,1,1-trichloroethane		No Further Action
vinyl chloride	C	No Further Action
benzene	D	No Further Action
ethylbenzene		No Further Action

Compound	Decision Matrices	Result
naphthalene		No Further Action
cyclohexane		Mitigate
isooctane (2,2,4-trimethylpentane),		No Further Action
1,2,4-trimethylbenzene		No Further Action
1,3,5-trimethylbenzene		No Further Action
o-xylene		No Further Action
m-xylene	E	No Further Action
p-xylene		No Further Action
heptane		No Further Action
hexane		No Further Action
toluene	F	No Further Action

NYSDOH explains No Further Action, Identify Source(s) and Resample or Mitigate, Monitor, and Mitigate as follows:

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: DOH recommends that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, DOH recommends the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: DOH recommends monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: DOH recommends mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building - specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

A **Sampling Data Summary** as well as the **Laboratory Analytical Report** are attached.

Indoor air results were compared to the NYS Fuel Oil Study (1997 – 2003) Upper Fence and the USEPA Building Assessment Survey and Evaluation (BASE) Study 95th percentile. **Table 2** presents the data comparison to detected analytes only that are not included in the matrices above.

CONCLUSION

Based on the results of this SVI assessment, the data does not indicate that there are impacts to indoor air quality. Carbon tetrachloride was identified in all indoor and outdoor air samples at an average concentration of 0.44 ug/m^3 (Matrix A – 0.2 ug/m^3). The concentrations of ethylbenzene, cyclohexane, o-xylene, m&p-xylene, heptane and hexane were above their matrix values for sub-slab vapor; however, concentrations in the collocated indoor air samples were below their matrix values, or not present. In Unit 260, cyclohexane was detected over 600 ug/m^3 in the sub-slab air; based on Matrix D, mitigation may be needed. Indoor air concentration collocated with this sub-slab sample was detected below the 2 ug/m^3 guidance value.

Units 244 and 252 had indoor concentrations of 2-butanone at 27 ug/m^3 and 59 ug/m^3 , respectively. These concentrations exceed USEPA BASE value of 7.8 ug/m^3 for 2-butanone. Tetrahydrofuran was detected at concentrations above the NYS Upper Fence of 0.78 ug/m^3 in all four indoor air samples. Concentrations of tetrahydrofuran ranged from 22 ug/m^3 to 40 ug/m^3 .

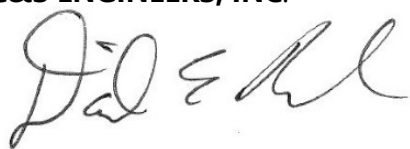
During the Remedial Investigation for this Site, two soil vapor probes were advanced and sampled on April 4, 2019. Cyclohexane was detected at 19 ug/m^3 and 17 ug/m^3 . In November 2020, the eight-unit townhome was sampled for sub-slab and indoor air at three locations. Cyclohexane was not detected in all sub-slab and indoor air samples. Therefore, past investigations indicate that cyclohexane was not a contaminant of concern. Cyclohexane can be a compound found in common building materials such as adhesives, adhesive removers and paints (see EPA [ChemExpo \(epa.gov\)](https://www.epa.gov/chemexpo)). It is more likely that cyclohexane is present in newly installed building materials rather than from remaining soil contamination.

Based on the results of this investigation, C&S Engineers, recommends the passive sub-slab depressurization system remain operational for the two four-unit townhomes. This system does not require modification to an active sub-slab depressurization system.

Should you have any questions regarding this letter or require additional information, please feel free to contact the undersigned.

Sincerely,

C&S ENGINEERS, INC.



Daniel E. Riker, P.G.
Service Group Manager



Cody A. Martin
Project Environmental Scientist

Attachments: Figures

A – Data Summary

B – Laboratory Analytical Report

C – Field Logs

Figures

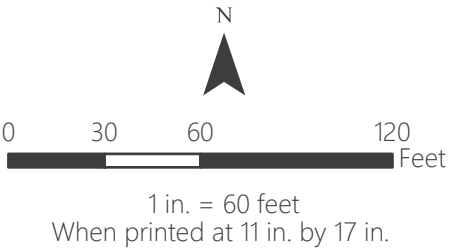


Figure 1

Sample Locations

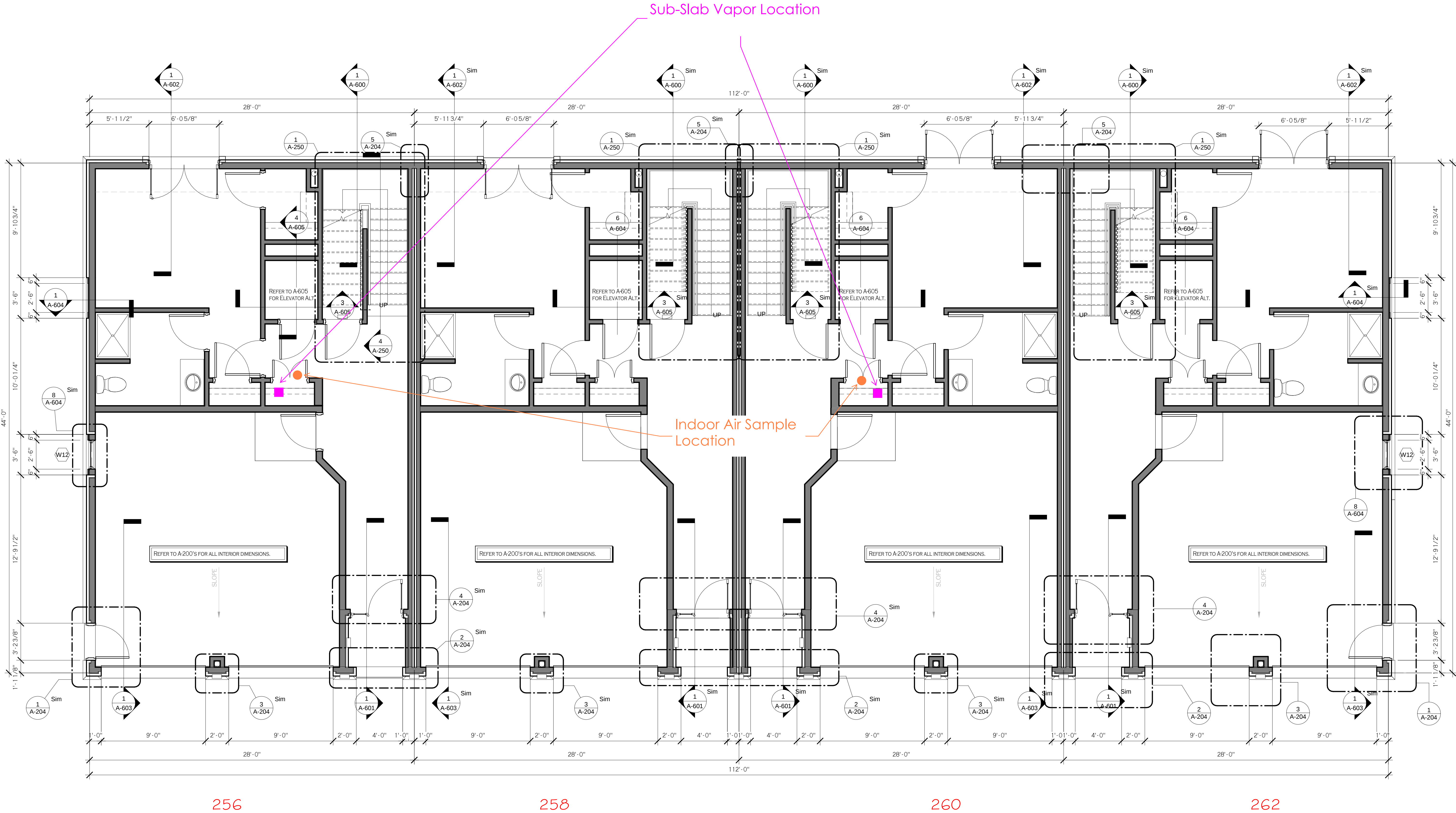
 Brownfield Cleanup Program

 Property



240 - 260 Lakefront Boulevard Site
BCP Site #C915340

Sources: . Created by C&S Engineers, Inc.



1 4 UNIT - LEVEL 1
A-100 1/4" = 1'-0"

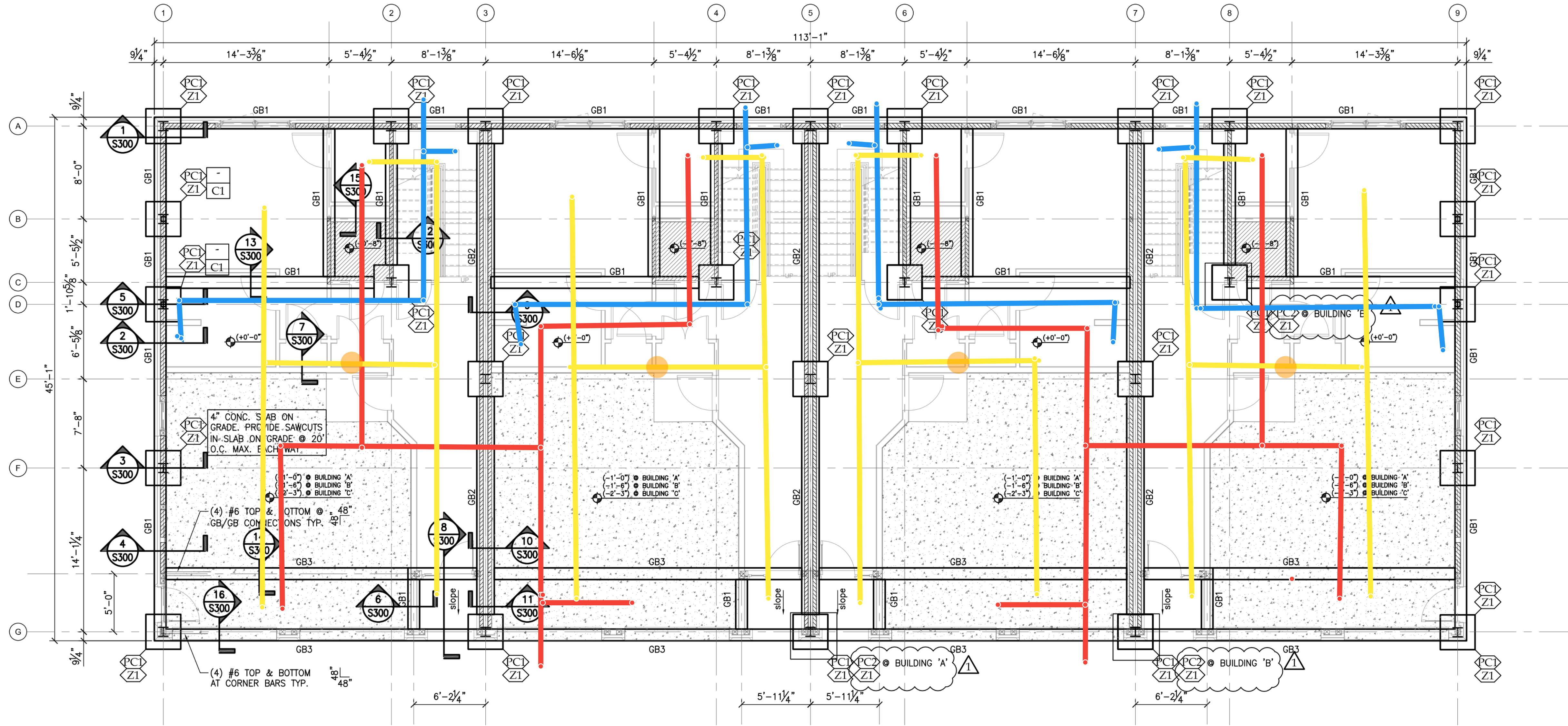
Sample locations for Building A

1/23/2019 7:12:38 PM



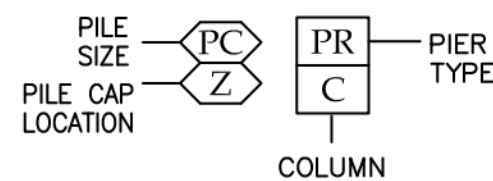
Sample locations for Building B

Storm: Red: 3'-4" depth
Sanitary: Blue 2'-3' depth
SSDS: Yellow: Up to 12" depth



FOUNDATION PLAN BUILDING 'A', 'B' & 'C'
SCALE: 3/16" = 1'-0"

LEGEND



GRADE BEAM SCHEDULE		
TYPE	SIZE	REINFORCING
GB1-GB3	SEE DETAILS S300	SEE DETAILS S300

PILE SCHEDULE	
TYPE	SIZE
PC1	SEE DETAILS S302

NOTE: PILES ARE HP10x42.

COLUMN SCHEDULE		
TYPE	SIZE	BASE PLATE
C1	HSS5x5x5/16	1

PILE LOCATION SCHEDULE		
TYPE	TOP PILE CAP ELEVATION	LOCATION
Z1	(-1'-6") @ BUILDING 'A' (-2'-0") @ BUILDING 'B' (-2'-9") @ BUILDING 'C'	PER PLAN; SEE DETAIL

THIS PLAN HAS BEEN PREPARED IN CONJUNCTION WITH THE SITE GRADING PLAN PREPARED BY: CARMINA WOOD MORRIS PROJECT NO.: 18-122 DRAWING NO.: C-200 REVISION NO.: DATED: 6-29-18

ALL PILES MUST BE INSTALLED PER THE SOILS REPORT NOTED BELOW

NOTE: VERIFY ALL COLUMN LOCATIONS WITH ARCHITECTURAL DRAWINGS.

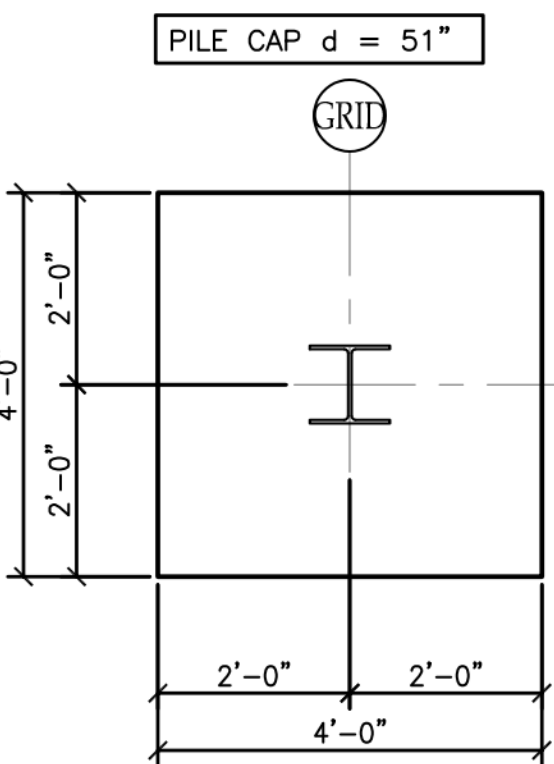
TOP OF SLAB ELEV. 0'-0" = REFERENCE ELEV.

NOTE: VERIFY LOCATIONS & SIZES OF ALL EXTERIOR DOORS WITH ARCH. DWGS. VERIFY DIMENSIONS WITH ARCH. DWGS.

NOTE: VERIFY ALL SLAB RECESS DIMENSIONS AND LOCATIONS WITH ARCHITECTURAL DRAWINGS.

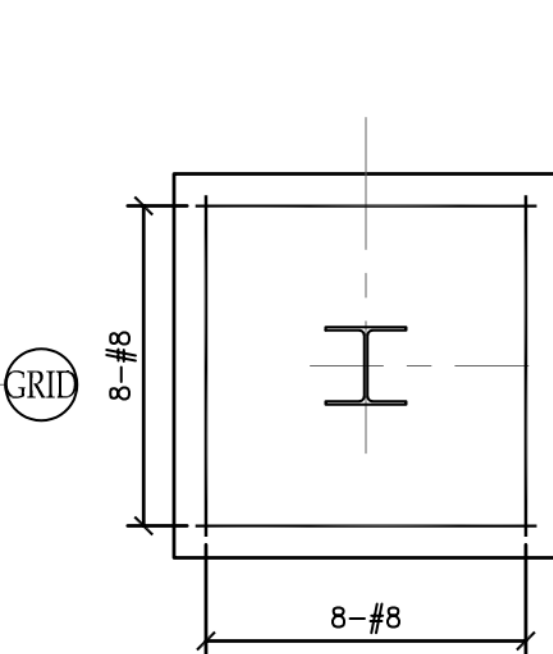
NOTE: ALL FOUNDATION & BACKFILL WORK SHALL BE DONE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY: BARRON & ASSOCIATES P.C. PROJECT NO.: 17-510 DATED: JANUARY 25, 2018

FLOOR CONSTRUCTION: 4" CONCRETE SLAB ON GRADE WITH FIBERMESH REINFORCING ON COMPACTED GRANULAR FILL PER GEOTECHNICAL ENGINEERS REPORT. GENERAL CONTRACTOR MUST REVIEW FLOOR SLAB CONSTRUCTION REQ'TS. IN SOILS REPORT PRIOR TO PREPARING SUBGRADE FOR SLAB ON GRADE.

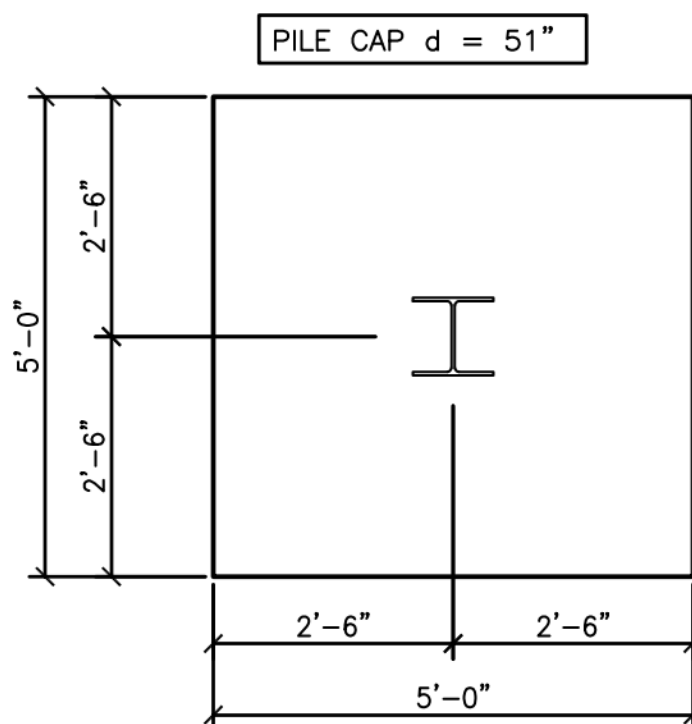


PILE CAP 'PC2' DETAIL
SCALE: 1/2" = 1'-0"

NOTE: CENTER OF PILE CAP = CENTER OF EXISTING PILE

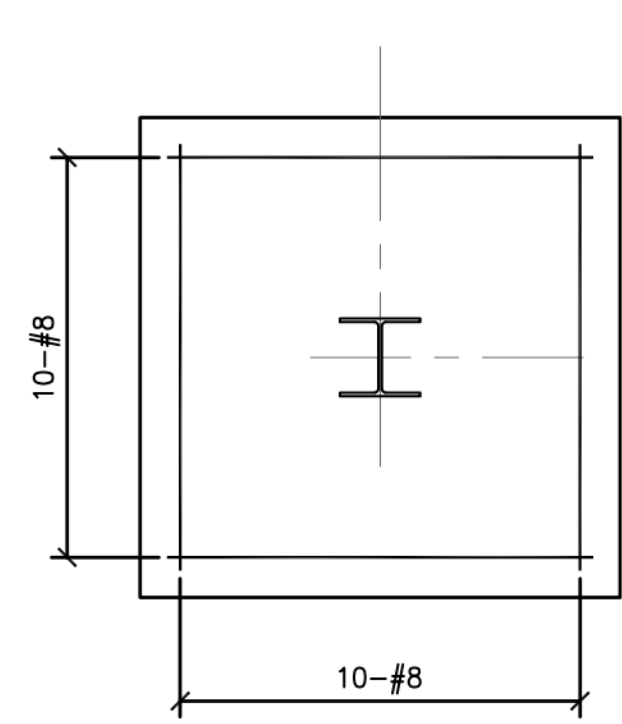


PILE CAP 'PC2' REINFORCING DETAIL
SCALE: 1/2" = 1'-0"



PILE CAP 'PC3' DETAIL
SCALE: 1/2" = 1'-0"

NOTE: CENTER OF PILE CAP = CENTER OF EXISTING PILE



PILE CAP 'PC3' REINFORCING DETAIL
SCALE: 1/2" = 1'-0"

No.	Description	Date
1	REVISED	7/30/19
2	REVISED	8/30/19
3	REVISED	10/18/19
4	REVISED	11/21/19
5	REVISED	2/24/20

PROJECT NAME:

New Construction:
The West End
240-260 Lakefront Blvd
Buffalo Ny, 14202

Issued for Construction: xx.xx.xx
Municipality Submission: 19/01/23
Drawn By:
Checked By: L.Traynor

DRAWING NAME:
4 Unit Building
'A', 'B' & 'C'
Foundation Plan

DRAWING NO.

S-100

Project No: 18.122



studio T3
ENGINEERING, PLLC
2495 Main Street, Suite 301
Buffalo, New York 14214
Phone: (716) 803-6400
Fax: (716) 810-9504

Attachment A

Data Summary Tables

TABLE 1-A

Soil Vapor Data Summary
Matrix A
240 - 260 Lakefront Boulevard Site
Buffalo, New York



ANALYTE	SAMPLE ID:		260-SS-01			260-IA-01			256-SS-02			256-IA-02			OA-01-120423			244-SS-01			244-IA-01			252-SS-02			252-IA-02			OA-01		
	COLLECTION DATE:		12/5/2023			12/5/2023			12/5/2023			12/5/2023			12/5/2023			3/29/2024			3/29/2024			3/29/2024			3/29/2024			3/29/2024		
	SAMPLE MATRIX:		SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR			SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR		
	NY-IAC-A	NY-SSC-A																														
(ug/m3)	(ug/m3)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
VOLATILE ORGANICS IN AIR																																
1,1-Dichloroethene	6	ND	2.48	-	UJ	-	ND	UJ	2.2	-	-	-	-	ND	0.59	-	-	ND	0.59	-	-	-	-	-	-	-	-	-	-	-	-	
cis-1,2-Dichloroethene	6	ND	2.48	-	UJ	-	ND	UJ	2.2	-	-	-	-	0.52	J	0.59	-	-	ND	0.59	-	-	-	-	-	-	-	-	-	-		
Carbon tetrachloride	6	ND	3.93	-	UJ	-	ND	UJ	3.5	-	-	-	-	ND	UJ	0.94	-	UJ	-	ND	UJ	0.94	-	UJ	-	-	UJ	-	-	UJ	-	
Trichloroethene	6	ND	3.36	-	UJ	-	ND	UJ	2.778	-	-	-	-	2.5	J	0.81	-	UJ	-	1.7	J	0.81	-	UJ	-	-	UJ	-	-	UJ	-	
VOLATILE ORGANICS IN AIR BY SIM																																
1,1-Dichloroethene	0.2	-	-	ND	UJ	0.079	-	UJ	-	ND	0.079	ND	0.079	-	-	ND	0.16	-	-	ND	0.16	-	-	ND	0.16	ND	0.16	ND	0.16	ND	0.16	
cis-1,2-Dichloroethene	0.2	-	-	ND	UJ	0.079	-	UJ	-	ND	0.079	ND	0.079	-	-	ND	0.16	-	-	ND	0.16	-	-	ND	0.16	ND	0.16	ND	0.16	ND	0.16	
Carbon tetrachloride	0.2	-	-	0.428	J	0.126	-	UJ	-	0.447	0.126	0.453	0.126	-	UJ	-	0.44	J	0.19	-	J	-	0.44	J	0.19	0.44	J	0.19	0.44	J	0.19	
Trichloroethene	0.2	-	-	ND	UJ	0.107	-	UJ	-	ND	0.107	ND	0.107	-	UJ	-	ND	UJ	0.16	-	UJ	-	ND	UJ	0.16	ND	UJ	0.16	ND	UJ	0.16	

ND = Analyte was not detected at the reporting limit

NY-IAC-A: New York DOH Matrix A Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-SSC-A: New York DOH Matrix A Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

Bold = Concentration above NY-IAC-A only (No further action)

Bold & Italicized = Concentration above NY-SSC-A only (No further action)

Yellow = Concentration above both NY-IAC-A and NY-SSC-A (Monitor or Mitigate)

TABLE 1-B

Soil Vapor Data Summary
Matrix B
240 - 260 Lakefront Boulevard Site
Buffalo, New York



ANALYTE	SAMPLE ID:		260-SS-01			260-IA-01			256-SS-02			256-IA-02			OA-01-120423			244-SS-01			244-IA-01			252-SS-02			252-IA-02			OA-01					
	COLLECTION DATE:		12/5/2023			12/5/2023			12/5/2023			12/5/2023			12/5/2023			3/29/2024			3/29/2024			3/29/2024			3/29/2024			3/29/2024					
	SAMPLE MATRIX:		SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR			AIR			SOIL VAPOR			AIR			AIR			AIR					
	NY-IAC-B (ug/m3)	NY-SSC-B (ug/m3)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL			
VOLATILE ORGANICS IN AIR																																			
Methylene chloride	100		10.9		5.42	-	UJ	-		ND	UJ	4.83	-		-	-		14		5.2	-		-	11		5.2	-		-	-		-			
1,1,1-Trichloroethane	100		ND		3.41	-	UJ	-		ND	UJ	3.03	-		-	-		ND		0.82	-		-	ND		0.82	-		-	-		-			
Tetrachloroethene	100		ND		4.24	-	UJ	-		ND	UJ	3.77	-		-	-		0.75	J	1	-		-	ND		1	-		-	-		-			
Trichloroethene																																			
Methylene chloride	3		-		-	1.81	J	1.74	-		-	UJ	-		1.94		1.74	2.09		1.74	-		-	0.69		0.52	-		-	0.73		5.2	0.52		5.2
1,1,1-Trichloroethane	3		-		-	ND	UJ	0.109	-		-	UJ	-		ND		0.109	ND		0.109	-		-	ND		0.82	-		-	ND		0.82	ND		0.82
Tetrachloroethene	3		-		-	ND	UJ	0.136	-		-	UJ	-		ND		0.136	ND		0.136	-		-	ND		1	-		-	ND		1	ND		1

ND = Analyte was not detected at the reporting limit
NY-IAC-B: New York DOH Matrix B Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
NY-SSC-B: New York DOH Matrix B Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.
Bold = Concentration above NY-IAC-B only (No further action)
Bold & Italicized = Concentration above NY-SSC-B only (No further action)

TABLE 1-C

Soil Vapor Data Summary
Matrix C
240 - 260 Lakefront Boulevard Site
Buffalo, New York



SAMPLE ID:		260-SS-01			260-IA-01			256-SS-02			256-IA-02			OA-01-120423			244-SS-01			244-IA-01			252-SS-02			252-IA-02			OA-01				
COLLECTION DATE:		12/5/2023			12/5/2023			12/5/2023			12/5/2023			12/5/2023			3/29/2024			3/29/2024			3/29/2024			3/29/2024			3/29/2024				
SAMPLE MATRIX:		SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR			SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR				
NY-IAC-C		NY-SSC-C																															
ANALYTE	(ug/m3)	(ug/m3)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL				
VOLATILE ORGANICS IN AIR																																	
Vinyl chloride		6	ND		1.6	-	UJ	-	ND	UJ	1.42	-		-	-	-	-	ND	0.38	-		-	ND	0.38	-		-	-	-				
VOLATILE ORGANICS IN AIR BY SIM																																	
Vinyl chloride		0.2	-		-	ND	UJ	0.051	-	UJ	-	ND		0.051	ND		0.051	-		-	ND		0.1	-		-	ND		0.1				

Trichloroethene

ND = Analyte was not detected at the reporting limit

NY-IAC-C: New York DOH Matrix C Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

NY-SSC-C: New York DOH Matrix C Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, October 2006, and updated May 2017.

Bold = Concentration above NY-IAC-C only (No further action)

Bold & Italicized = Concentration above NY-SSC-C only (No further action)

 Concentration above both NY-IAC-C and NY-SSC-C (Monitor or Mitigate)

TABLE 1-D

Soil Vapor Data Summary
Matrix D
240 - 260 Lakefront Boulevard Site
Buffalo, New York



SAMPLE ID:		260-SS-01			260-IA-01			256-SS-02			256-IA-02			OA-01-120423			244-SS-01			244-IA-01			252-SS-02			252-IA-02			OA-01						
COLLECTION DATE:		12/5/2023			12/5/2023			12/5/2023			12/5/2023			12/5/2023			3/29/2024			3/29/2024			3/29/2024			3/29/2024			3/29/2024						
SAMPLE MATRIX:		SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR			SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR						
NY-IAC-D		NY-SSC-D																																	
ANALYTE	(ug/m3)	(ug/m3)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL						
VOLATILE ORGANICS IN AIR																																			
Benzene	60		47.3		2	-	UJ	-	11.7	J	1.78	-	-	-	-	-	-	1.3		0.48	-	-	-	1.1		0.48	-	-	-	-					
Ethylbenzene	60		63.9		2.71	-	UJ	-	12.3	J	2.42	-	-	-	-	-	-	ND		0.65	-	-	-	ND		0.65	-	-	-	-					
Naphthalene	60		-		-	-	UJ	-	-	UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Cyclohexane	60		692		2.15	-	UJ	-	235	J	1.91	-	-	-	-	-	-	18		5.2	-	-	-	0.59		5.2	-	-	-	-					
Isooctane (2,2,4-Trimethylpentane)	60		ND		2.92	-	UJ	-	ND	UJ	2.6	-	-	-	-	-	-	ND		0.7	-	-	-	ND		0.7	-	-	-	-					
1,2,4-Trimethylbenzene	60		40.4		3.07	-	UJ	-	ND	UJ	2.73	-	-	-	-	-	-	0.74		0.74	-	-	-	0.54		0.74	-	-	-	-					
1,3,5-Trimethylbenzene	60		21.7		3.07	-	UJ	-	ND	UJ	2.73	-	-	-	-	-	-	ND		0.74	-	-	-	ND		0.74	-	-	-	-					
o-Xylene	60		97.7		2.71	-	UJ	-	17	J	2.42	-	-	-	-	-	-	ND		0.65	-	-	-	0.43		0.65	-	-	-	-					
VOLATILE ORGANICS IN AIR BY SIM																																			
Benzene	2		-		-	ND	UJ	0.639	-	UJ	-	ND		0.639	ND		0.639	-		-	0.48		0.48	-		-	0.45		0.48	ND		0.48			
Ethylbenzene	2		-		-	0.951	J	0.869	-	UJ	-	ND		0.869	ND		0.869	-		-	ND		0.65	-		-	ND		0.65	ND		0.65			
Naphthalene	2		-		-	-		-	-	UJ	-	-		-	-		-	-	-	-	-	-	-	-		-	-	-	-	-					
Cyclohexane	2		-		-	1.62	J	0.688	-	UJ	-	1.27		0.688	ND		0.688	-		-	1.8		0.52	-		-	1.2		5.2	ND		5.2			
Isooctane (2,2,4-Trimethylpentane)	2		-		-	ND	UJ	0.934	-	UJ	-	ND		0.934	ND		0.934	-		-	ND		0.7	-		-	ND		0.74	ND		0.7			
1,2,4-Trimethylbenzene	2		-		-	ND	UJ	0.983	-	UJ	-	ND		0.983	ND		0.983	-		-	0.49	J	0.74	-		-	ND		0.74	ND		0.74			
1,3,5-Trimethylbenzene	2		-		-	ND	UJ	0.983	-	UJ	-	ND		0.983	ND		0.983	-		-	ND		0.74	-		-	ND		0.74	ND		0.74			
o-Xylene	2		-		-	1.72	J	0.869	-	UJ	-	0.943		0.869	ND		0.869	-		-	ND		0.65	-		-	ND		0.65	ND		0.65			

ND = Analyte was not detected at the reporting limit
J = Analyte detected below quantitation limits
NY-IAC-D: New York DOH Matrix D Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.
NY-SSC-D: New York DOH Matrix D Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.
Bold = Concentration above NY-IAC-D only (No further action)
Bold & Italicized = Concentration above NY-SSC-D only (No further action)
Yellow = Concentration above both NY-IAC-D and NY-SSC-D (Monitor or Mitigate)

TABLE 1-E

Soil Vapor Data Summary
Matrix E
240 - 260 Lakefront Boulevard Site
Buffalo, New York



ANALYTE	SAMPLE ID:		260-SS-01			260-IA-01			256-SS-02			256-IA-02			OA-01-120423			244-SS-01			244-IA-01			252-SS-02			252-IA-02			OA-01				
	COLLECTION DATE:		12/5/2023			12/5/2023			12/5/2023			12/5/2023			12/5/2023			3/29/2024			3/29/2024			3/29/2024			3/29/2024			3/29/2024				
	SAMPLE MATRIX:		SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR			SOIL VAPOR			AIR			SOIL VAPOR			AIR			AIR				
	NY-IAC-E (ug/m3)	NY-SSC-E (ug/m3)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL		
VOLATILE ORGANICS IN AIR																																		
m&p-Xylene		200	288		5.43	-	UJ	-		50	J	4.82	-		-	-		1.1	1.3	-		-	1.3	J	1.3	-		-	-		-			
Heptane		200	631		2.56	-	UJ	-		193	J	2.28	-		-	-		9.4	6.1	-		-	ND		6.1	-		-	-		-			
Hexane		200	617	NJ	2.2	-	NJ	-		190	NJ	1.96	-		NJ	-	-		16	6.1	-		-	0.53		6.1	-		-	-		-		
Trichloroethene																																		
m&p-Xylene		6	-		-	3.81	J	1.74	-		UJ	-	2.33		1.74	ND		1.74	-		-	1		1.3	-		-	0.74		1.3	ND		1.3	
Heptane		6	-		-	1.94	J	0.82	-		UJ	-	1.3		0.82	ND		0.82	-		-	ND		0.61	-		-	ND		6.1	ND		6.1	
Hexane		6	-		NJ	-	2.17	NJ	0.705	-		NJ	-	2.12	NJ	0.705	ND		0.705	-		-	1.4		0.53	-		-	0.56		6.1	ND		6.1

ND = Analyte was not detected at the reporting limit
J = Analyte detected below quantitation limits
m&p-Xylene were analyzed together for this comparison.
NY-IAC-E: New York DOH Matrix E Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.
NY-SSC-E: New York DOH Matrix E Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.
Bold = Concentration above NY-IAC-E only (No further action)
Bold & Italicized = Concentration above NY-SSC-E only (No further action)
 Concentration above both NY-IAC-E and NY-SSC-E (Monitor or Mitigate)

TABLE 1-F

Soil Vapor Data Summary
Matrix F
240 - 260 Lakefront Boulevard Site
Buffalo, New York



ANALYTE	SAMPLE ID:	260-SS-01	260-IA-01	256-SS-02	256-IA-02	OA-01-120423	244-SS-01	244-IA-01	252-SS-02	252-IA-02	OA-01													
	COLLECTION DATE:	12/5/2023	12/5/2023	12/5/2023	12/5/2023	12/5/2023	3/29/2024	3/29/2024	3/29/2024	3/29/2024	3/29/2024													
	SAMPLE MATRIX:	SOIL VAPOR	AIR	SOIL VAPOR	AIR	AIR	SOIL VAPOR	AIR	SOIL VAPOR	AIR	AIR													
	NY-IAC-F (ug/m3)	NY-SSC-F (ug/m3)	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	
VOLATILE ORGANICS IN AIR																								
Toluene		300	255	2.36	-	UJ	-	60.3	J	2.1	-	-	-	-	9.8	5.7	-	-	8.7	5.7	-	-	-	-
VOLATILE ORGANICS IN AIR BY SIM																								
Toluene		10	-	-	7.88	J	0.75	-	UJ	-	6.52	0.754	ND	0.754	-	-	2.6	0.57	-	-	4.9	0.57	ND	0.57

Trichloroethene

ND = Analyte was not detected at the reporting limit

J = Analyte detected below quantitation limits

NY-IAC-F: New York DOH Matrix F Indoor Air Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.

NY-SSC-F: New York DOH Matrix F Sub-slab Vapor Concentrations Criteria per Guidance for Evaluating Soil Vapor Intrusion, February 2024.

Bold = Concentration above NY-IAC-F only (No further action)**Bold & Italicized** = Concentration above NY-SSC-F only (No further action)**Yellow** = Concentration above both NY-IAC-F and NY-SSC-F (Monitor or Mitigate)

TABLE 2

Indoor Air Data Summary
NYS Fuel Oil Study and EPA BASE Study
240 - 260 Lakefront Boulevard Site
Buffalo, New York



ANALYTE	SAMPLE ID: COLLECTION DATE: SAMPLE MATRIX:		256-IA-02 12/5/2023 AIR			260-IA-01 12/5/2023 AIR			244-IA-01 3/29/2024 AIR			252-IA-02 3/29/2024 AIR		
	NYS Fuel Oil Study Upper Fence	90th Percentile EPA BASE Study												
(ug/m3)	(ug/m3)		Result	Flg	RL	Result	Flg	RL	Result	Flg	RL	Result	Flg	RL
VOLATILE ORGANICS IN AIR														
1,2,4-Trimethylbenzene	9.8	9.5	ND		0.983	ND	UJ	0.983	0.49		0.74	ND		0.74
1,4-Dioxane	NA	NA	ND		0.721	ND	UJ	0.721	ND		1.1	0.4		1.1
Dichlorodifluoromethane (Freon 12)	10	16.5	2.29		0.989	2.25	J	0.989	2		1.3	2		1.3
Chloromethane	4.2	3.7	0.966		0.413	0.938	J	0.413	ND		0.31	0.52		0.31
Chloroethane	NA	1.1	ND		0.528	ND	UJ	0.528	0.34		0.4	0.5		0.4
Cyclohexane	6.3	NA	1.27		0.688	1.62	J	0.688	1.8		0.52	1.2		0.52
Benzene	13	9.4	ND		0.639	ND	UJ	0.639	0.48		0.48	0.45		0.48
m&p-Xylene	11	22.2	2.33		1.74	3.81	J	1.74	1		1.3	0.74		1.3
Ethyl Acetate	NA	5.4	2.21		1.8	2.88	J	1.8	0.58		0.54	0.68		0.54
Toluene	57	43	6.52		0.754	7.88	J	0.754	2.6		0.57	4.9		0.57
Methylene Chloride	NA	10	1.94		1.74	1.81	J	1.74	0.69		0.52	0.73		0.52
Ethanol	1300	210	60.3		9.42	40.5	J	9.42	ND		9.42	ND		9.42
Acetone	115	98.9	89.8		2.38	96.7	J	2.38	63		29	91		29
Trichlorofluoromethane (Freon 11)	12	18.1	1.14		1.12	1.14	J	1.12	1.1		0.84	1.1		0.84
Isopropanol	NA	NA	7.57		1.23	5.24	J	1.23	4.7	NJ	0.37	6.9	NJ	3.7
Tertiary butyl Alcohol	NA	NA	ND		1.52	1.97	J	1.52	ND		1.52	ND		1.52
Carbon disulfide	NA	4.2	ND		0.623	ND	UJ	0.623	ND		0.47	ND		0.47
Carbon tetrachloride	1.3	1.3	ND		0.19	ND	UJ	0.19	0.44	J	0.19	0.44	J	0.19
2-Butanone (methyl ethyl ketone)	16	12	6.02		1.47	5.72	J	1.47	27		8.8	59		8.8
2-Hexanone (methyl butyl ketone)	1.9	NA	ND		0.82	ND	UJ	0.82	ND		1.2	0.41		1.2
Ethyl Acetate	NA	5.4	2.21		1.8	2.88	J	1.8	0.58		0.54	0.68		0.54
Tetrahydrofuran	0.78	NA	29.8		1.47	28.3	J	1.47	22		4.4	40		4.4
n-Hexane	14	10.2	2.12	NJ	0.705	2.17	NJ	0.705	1.4		0.53	0.56		0.53
Styrene	1.4	1.9	1.91		0.852	2.39	J	0.852	1		0.64	2.5		0.64

ND = Analyte was not detected at the reporting limit

J = Analyte detected below quantitation limits

Attachment B

Laboratory Analytical Report



ANALYTICAL REPORT

Lab Number:	L2371495
Client:	C&S Companies 141 Elm Street, Suite 100 Buffalo, NY 14203
ATTN:	Cody Martin
Phone:	(716) 847-1630
Project Name:	240 LAKEFRONT BLVD
Project Number:	E67.022.009
Report Date:	12/19/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0825), DoD (L2474), FL (E87814), IL (200081), IN (C-MA-04), KY (KY98046), LA (85084), ME (MA00030), MD (350), MI (99110), NJ (MA015), NY (11627), NC (685), OH (CL106), OR (MA-0262), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #525-23-107-88708), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2371495-01	260-SS-01	SOIL_VAPOR	Not Specified	12/05/23 13:02	12/05/23
L2371495-02	260-IA-01	AIR	Not Specified	12/05/23 13:01	12/05/23
L2371495-03	256-SS-02	SOIL_VAPOR	Not Specified	12/05/23 13:15	12/05/23
L2371495-04	256-IA-02	AIR	Not Specified	12/05/23 13:17	12/05/23
L2371495-05	OA-01-120423	AIR	Not Specified	12/05/23 13:27	12/05/23
L2371495-06	UNUSED CAN #2446	SOIL_VAPOR	Not Specified		12/05/23
L2371495-07	UNUSED CAN #3582	SOIL_VAPOR	Not Specified		12/05/23
L2371495-08	UNUSED CAN #2523	AIR	Not Specified		12/05/23
L2371495-09	UNUSED CAN #3322	AIR	Not Specified		12/05/23

Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on November 29, 2023. The canister certification results are provided as an addendum.

The WG1862125-3 LCS recovery for bromoform (141%), associated with L2371495-02, -04, and -05, is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

The WG1862126-3 LCS recovery for bromoform (146%), associated with L2371495-02, -04, and -05, is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

The WG1864611-3 LCS recovery for bromoform (138%), associated with L2371495-01D and -03D, is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

L2371495-01D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2371495-03D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Jennifer Jerome

Title: Technical Director/Representative

Date: 12/19/23

AIR

Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

SAMPLE RESULTS

Lab ID: L2371495-01 D
Client ID: 260-SS-01
Sample Location:

Date Collected: 12/05/23 13:02
Date Received: 12/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Analytical Method: 48,TO-15
Analytical Date: 12/15/23 22:38
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.625	--	ND	3.09	--		3.125
Chloromethane	ND	0.625	--	ND	1.29	--		3.125
Freon-114	ND	0.625	--	ND	4.37	--		3.125
Vinyl chloride	ND	0.625	--	ND	1.60	--		3.125
1,3-Butadiene	ND	0.625	--	ND	1.38	--		3.125
Bromomethane	ND	0.625	--	ND	2.43	--		3.125
Chloroethane	ND	0.625	--	ND	1.65	--		3.125
Ethanol	29.9	15.6	--	56.3	29.4	--		3.125
Vinyl bromide	ND	0.625	--	ND	2.73	--		3.125
Acetone	146	3.12	--	347	7.41	--		3.125
Trichlorofluoromethane	ND	0.625	--	ND	3.51	--		3.125
Isopropanol	3.26	1.56	--	8.01	3.83	--		3.125
1,1-Dichloroethene	ND	0.625	--	ND	2.48	--		3.125
Tertiary butyl Alcohol	ND	1.56	--	ND	4.73	--		3.125
Methylene chloride	3.14	1.56	--	10.9	5.42	--		3.125
3-Chloropropene	ND	0.625	--	ND	1.96	--		3.125
Carbon disulfide	ND	0.625	--	ND	1.95	--		3.125
Freon-113	ND	0.625	--	ND	4.79	--		3.125
trans-1,2-Dichloroethene	ND	0.625	--	ND	2.48	--		3.125
1,1-Dichloroethane	ND	0.625	--	ND	2.53	--		3.125
Methyl tert butyl ether	ND	0.625	--	ND	2.25	--		3.125
2-Butanone	7.38	1.56	--	21.8	4.60	--		3.125
cis-1,2-Dichloroethene	ND	0.625	--	ND	2.48	--		3.125



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-01 D

Client ID: 260-SS-01

Sample Location:

Date Collected: 12/05/23 13:02

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	1.56	--	ND	5.62	--		3.125
Chloroform	ND	0.625	--	ND	3.05	--		3.125
Tetrahydrofuran	30.7	1.56	--	90.5	4.60	--		3.125
1,2-Dichloroethane	ND	0.625	--	ND	2.53	--		3.125
n-Hexane	175	0.625	--	617	2.20	--		3.125
1,1,1-Trichloroethane	ND	0.625	--	ND	3.41	--		3.125
Benzene	14.8	0.625	--	47.3	2.00	--		3.125
Carbon tetrachloride	ND	0.625	--	ND	3.93	--		3.125
Cyclohexane	201	0.625	--	692	2.15	--		3.125
1,2-Dichloropropane	ND	0.625	--	ND	2.89	--		3.125
Bromodichloromethane	ND	0.625	--	ND	4.19	--		3.125
1,4-Dioxane	ND	0.625	--	ND	2.25	--		3.125
Trichloroethene	ND	0.625	--	ND	3.36	--		3.125
2,2,4-Trimethylpentane	ND	0.625	--	ND	2.92	--		3.125
Heptane	154	0.625	--	631	2.56	--		3.125
cis-1,3-Dichloropropene	ND	0.625	--	ND	2.84	--		3.125
4-Methyl-2-pentanone	ND	1.56	--	ND	6.39	--		3.125
trans-1,3-Dichloropropene	ND	0.625	--	ND	2.84	--		3.125
1,1,2-Trichloroethane	ND	0.625	--	ND	3.41	--		3.125
Toluene	67.7	0.625	--	255	2.36	--		3.125
2-Hexanone	ND	0.625	--	ND	2.56	--		3.125
Dibromochloromethane	ND	0.625	--	ND	5.32	--		3.125
1,2-Dibromoethane	ND	0.625	--	ND	4.80	--		3.125
Tetrachloroethene	ND	0.625	--	ND	4.24	--		3.125
Chlorobenzene	ND	0.625	--	ND	2.88	--		3.125
Ethylbenzene	14.7	0.625	--	63.9	2.71	--		3.125



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-01 D

Client ID: 260-SS-01

Sample Location:

Date Collected: 12/05/23 13:02

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	66.2	1.25	--	288	5.43	--		3.125
Bromoform	ND	0.625	--	ND	6.46	--		3.125
Styrene	ND	0.625	--	ND	2.66	--		3.125
1,1,2,2-Tetrachloroethane	ND	0.625	--	ND	4.29	--		3.125
o-Xylene	22.5	0.625	--	97.7	2.71	--		3.125
4-Ethyltoluene	1.53	0.625	--	7.52	3.07	--		3.125
1,3,5-Trimethylbenzene	4.42	0.625	--	21.7	3.07	--		3.125
1,2,4-Trimethylbenzene	8.22	0.625	--	40.4	3.07	--		3.125
Benzyl chloride	ND	0.625	--	ND	3.24	--		3.125
1,3-Dichlorobenzene	ND	0.625	--	ND	3.76	--		3.125
1,4-Dichlorobenzene	ND	0.625	--	ND	3.76	--		3.125
1,2-Dichlorobenzene	ND	0.625	--	ND	3.76	--		3.125
1,2,4-Trichlorobenzene	ND	0.625	--	ND	4.64	--		3.125
Hexachlorobutadiene	ND	0.625	--	ND	6.67	--		3.125

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	94		60-140



Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

SAMPLE RESULTS

Lab ID: L2371495-02
 Client ID: 260-IA-01
 Sample Location:

Date Collected: 12/05/23 13:01
 Date Received: 12/05/23
 Field Prep: Not Specified

Sample Depth:
 Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/10/23 21:06
 Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.456	0.200	--	2.25	0.989	--		1
Chloromethane	0.454	0.200	--	0.938	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	21.5	5.00	--	40.5	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	40.7	1.00	--	96.7	2.38	--		1
Trichlorofluoromethane	0.203	0.200	--	1.14	1.12	--		1
Isopropanol	2.13	0.500	--	5.24	1.23	--		1
Tertiary butyl Alcohol	0.651	0.500	--	1.97	1.52	--		1
Methylene chloride	0.522	0.500	--	1.81	1.74	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	1.94	0.500	--	5.72	1.47	--		1
Ethyl Acetate	0.800	0.500	--	2.88	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	9.61	0.500	--	28.3	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-02

Client ID: 260-IA-01

Sample Location:

Date Collected: 12/05/23 13:01

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
n-Hexane	0.616	0.200	--	2.17	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	0.470	0.200	--	1.62	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.473	0.200	--	1.94	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	2.09	0.200	--	7.88	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.219	0.200	--	0.951	0.869	--		1
p/m-Xylene	0.878	0.400	--	3.81	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.562	0.200	--	2.39	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.395	0.200	--	1.72	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-02

Date Collected: 12/05/23 13:01

Client ID: 260-IA-01

Date Received: 12/05/23

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-02

Client ID: 260-IA-01

Sample Location:

Date Collected: 12/05/23 13:01

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/10/23 21:06

Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.068	0.020	--	0.428	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	95		60-140



Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

SAMPLE RESULTS

Lab ID: L2371495-03 D
Client ID: 256-SS-02
Sample Location:

Date Collected: 12/05/23 13:15
Date Received: 12/05/23
Field Prep: Not Specified

Sample Depth:
Matrix: Soil_Vapor
Analytical Method: 48,TO-15
Analytical Date: 12/15/23 23:53
Analyst: KJD

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.556	--	ND	2.75	--		2.778
Chloromethane	ND	0.556	--	ND	1.15	--		2.778
Freon-114	ND	0.556	--	ND	3.89	--		2.778
Vinyl chloride	ND	0.556	--	ND	1.42	--		2.778
1,3-Butadiene	ND	0.556	--	ND	1.23	--		2.778
Bromomethane	ND	0.556	--	ND	2.16	--		2.778
Chloroethane	ND	0.556	--	ND	1.47	--		2.778
Ethanol	ND	13.9	--	ND	26.2	--		2.778
Vinyl bromide	ND	0.556	--	ND	2.43	--		2.778
Acetone	107	2.78	--	254	6.60	--		2.778
Trichlorofluoromethane	ND	0.556	--	ND	3.12	--		2.778
Isopropanol	2.23	1.39	--	5.48	3.42	--		2.778
1,1-Dichloroethene	ND	0.556	--	ND	2.20	--		2.778
Tertiary butyl Alcohol	1.52	1.39	--	4.61	4.21	--		2.778
Methylene chloride	ND	1.39	--	ND	4.83	--		2.778
3-Chloropropene	ND	0.556	--	ND	1.74	--		2.778
Carbon disulfide	1.55	0.556	--	4.83	1.73	--		2.778
Freon-113	ND	0.556	--	ND	4.26	--		2.778
trans-1,2-Dichloroethene	ND	0.556	--	ND	2.20	--		2.778
1,1-Dichloroethane	ND	0.556	--	ND	2.25	--		2.778
Methyl tert butyl ether	ND	0.556	--	ND	2.00	--		2.778
2-Butanone	4.40	1.39	--	13.0	4.10	--		2.778
cis-1,2-Dichloroethene	ND	0.556	--	ND	2.20	--		2.778



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-03 D

Client ID: 256-SS-02

Sample Location:

Date Collected: 12/05/23 13:15

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	4.15	1.39	--	15.0	5.01	--		2.778
Chloroform	ND	0.556	--	ND	2.72	--		2.778
Tetrahydrofuran	20.9	1.39	--	61.6	4.10	--		2.778
1,2-Dichloroethane	ND	0.556	--	ND	2.25	--		2.778
n-Hexane	53.8	0.556	--	190	1.96	--		2.778
1,1,1-Trichloroethane	ND	0.556	--	ND	3.03	--		2.778
Benzene	3.65	0.556	--	11.7	1.78	--		2.778
Carbon tetrachloride	ND	0.556	--	ND	3.50	--		2.778
Cyclohexane	68.4	0.556	--	235	1.91	--		2.778
1,2-Dichloropropane	ND	0.556	--	ND	2.57	--		2.778
Bromodichloromethane	ND	0.556	--	ND	3.72	--		2.778
1,4-Dioxane	ND	0.556	--	ND	2.00	--		2.778
Trichloroethene	ND	0.556	--	ND	2.99	--		2.778
2,2,4-Trimethylpentane	ND	0.556	--	ND	2.60	--		2.778
Heptane	47.2	0.556	--	193	2.28	--		2.778
cis-1,3-Dichloropropene	ND	0.556	--	ND	2.52	--		2.778
4-Methyl-2-pentanone	ND	1.39	--	ND	5.70	--		2.778
trans-1,3-Dichloropropene	ND	0.556	--	ND	2.52	--		2.778
1,1,2-Trichloroethane	ND	0.556	--	ND	3.03	--		2.778
Toluene	16.0	0.556	--	60.3	2.10	--		2.778
2-Hexanone	ND	0.556	--	ND	2.28	--		2.778
Dibromochloromethane	ND	0.556	--	ND	4.74	--		2.778
1,2-Dibromoethane	ND	0.556	--	ND	4.27	--		2.778
Tetrachloroethene	ND	0.556	--	ND	3.77	--		2.778
Chlorobenzene	ND	0.556	--	ND	2.56	--		2.778
Ethylbenzene	2.84	0.556	--	12.3	2.42	--		2.778



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-03 D

Client ID: 256-SS-02

Sample Location:

Date Collected: 12/05/23 13:15

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
p/m-Xylene	11.5	1.11	--	50.0	4.82	--		2.778
Bromoform	ND	0.556	--	ND	5.75	--		2.778
Styrene	ND	0.556	--	ND	2.37	--		2.778
1,1,2,2-Tetrachloroethane	ND	0.556	--	ND	3.82	--		2.778
o-Xylene	3.92	0.556	--	17.0	2.42	--		2.778
4-Ethyltoluene	ND	0.556	--	ND	2.73	--		2.778
1,3,5-Trimethylbenzene	ND	0.556	--	ND	2.73	--		2.778
1,2,4-Trimethylbenzene	ND	0.556	--	ND	2.73	--		2.778
Benzyl chloride	ND	0.556	--	ND	2.88	--		2.778
1,3-Dichlorobenzene	ND	0.556	--	ND	3.34	--		2.778
1,4-Dichlorobenzene	ND	0.556	--	ND	3.34	--		2.778
1,2-Dichlorobenzene	ND	0.556	--	ND	3.34	--		2.778
1,2,4-Trichlorobenzene	ND	0.556	--	ND	4.13	--		2.778
Hexachlorobutadiene	ND	0.556	--	ND	5.93	--		2.778

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	95		60-140



Project Name: 240 LAKEFRONT BLVD**Project Number:** E67.022.009**Lab Number:** L2371495**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-04

Client ID: 256-IA-02

Sample Location:

Date Collected: 12/05/23 13:17

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15

Analytical Date: 12/10/23 21:46

Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.464	0.200	--	2.29	0.989	--		1
Chloromethane	0.468	0.200	--	0.966	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	32.0	5.00	--	60.3	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	37.8	1.00	--	89.8	2.38	--		1
Trichlorofluoromethane	0.202	0.200	--	1.14	1.12	--		1
Isopropanol	3.08	0.500	--	7.57	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.559	0.500	--	1.94	1.74	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.04	0.500	--	6.02	1.47	--		1
Ethyl Acetate	0.612	0.500	--	2.21	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	10.1	0.500	--	29.8	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-04

Client ID: 256-IA-02

Sample Location:

Date Collected: 12/05/23 13:17

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
n-Hexane	0.602	0.200	--	2.12	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	0.370	0.200	--	1.27	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.316	0.200	--	1.30	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.73	0.200	--	6.52	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	0.537	0.400	--	2.33	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	0.449	0.200	--	1.91	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.217	0.200	--	0.943	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-04

Client ID: 256-IA-02

Sample Location:

Date Collected: 12/05/23 13:17

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	93		60-140



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-04

Client ID: 256-IA-02

Sample Location:

Date Collected: 12/05/23 13:17

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/10/23 21:46

Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	92		60-140



Project Name: 240 LAKEFRONT BLVD**Project Number:** E67.022.009**Lab Number:** L2371495**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-05

Client ID: OA-01-120423

Sample Location:

Date Collected: 12/05/23 13:27

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15

Analytical Date: 12/10/23 20:27

Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.455	0.200	--	2.25	0.989	--		1
Chloromethane	0.442	0.200	--	0.913	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.49	1.00	--	3.54	2.38	--		1
Trichlorofluoromethane	0.209	0.200	--	1.17	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	0.602	0.500	--	2.09	1.74	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-05

Client ID: OA-01-120423

Sample Location:

Date Collected: 12/05/23 13:27

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-05

Date Collected: 12/05/23 13:27

Client ID: OA-01-120423

Date Received: 12/05/23

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	91		60-140



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**SAMPLE RESULTS**

Lab ID: L2371495-05

Client ID: OA-01-120423

Sample Location:

Date Collected: 12/05/23 13:27

Date Received: 12/05/23

Field Prep: Not Specified

Sample Depth:

Matrix: Air

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/10/23 20:27

Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	93		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	91		60-140



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/10/23 18:30

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 02,04-05 Batch: WG1862125-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: 240 LAKEFRONT BLVD

Lab Number: L2371495

Project Number: E67.022.009

Report Date: 12/19/23

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/10/23 18:30

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 02,04-05 Batch: WG1862125-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1



Project Name: 240 LAKEFRONT BLVD

Lab Number: L2371495

Project Number: E67.022.009

Report Date: 12/19/23

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/10/23 18:30

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 02,04-05 Batch: WG1862125-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 12/10/23 19:09

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 02,04-05 Batch: WG1862126-4								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/15/23 18:05

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01,03 Batch: WG1864611-4								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/15/23 18:05

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01,03 Batch: WG1864611-4								
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1



Project Name: 240 LAKEFRONT BLVD

Lab Number: L2371495

Project Number: E67.022.009

Report Date: 12/19/23

Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 12/15/23 18:05

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01,03 Batch: WG1864611-4								
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 240 LAKEFRONT BLVD

Project Number: E67.022.009

Lab Number: L2371495

Report Date: 12/19/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02,04-05 Batch: WG1862125-3								
Dichlorodifluoromethane	95		-		70-130	-		
Chloromethane	81		-		70-130	-		
Freon-114	97		-		70-130	-		
Vinyl chloride	89		-		70-130	-		
1,3-Butadiene	87		-		70-130	-		
Bromomethane	92		-		70-130	-		
Chloroethane	90		-		70-130	-		
Ethanol	78		-		40-160	-		
Vinyl bromide	87		-		70-130	-		
Acetone	95		-		40-160	-		
Trichlorofluoromethane	99		-		70-130	-		
Isopropanol	76		-		40-160	-		
1,1-Dichloroethene	95		-		70-130	-		
Tertiary butyl Alcohol	79		-		70-130	-		
Methylene chloride	76		-		70-130	-		
3-Chloropropene	79		-		70-130	-		
Carbon disulfide	99		-		70-130	-		
Freon-113	100		-		70-130	-		
trans-1,2-Dichloroethene	96		-		70-130	-		
1,1-Dichloroethane	95		-		70-130	-		
Methyl tert butyl ether	89		-		70-130	-		
2-Butanone	100		-		70-130	-		
cis-1,2-Dichloroethene	97		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 240 LAKEFRONT BLVD

Project Number: E67.022.009

Lab Number: L2371495

Report Date: 12/19/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02,04-05 Batch: WG1862125-3								
Ethyl Acetate	106		-		70-130	-		
Chloroform	98		-		70-130	-		
Tetrahydrofuran	93		-		70-130	-		
1,2-Dichloroethane	90		-		70-130	-		
n-Hexane	93		-		70-130	-		
1,1,1-Trichloroethane	92		-		70-130	-		
Benzene	89		-		70-130	-		
Carbon tetrachloride	106		-		70-130	-		
Cyclohexane	95		-		70-130	-		
1,2-Dichloropropane	93		-		70-130	-		
Bromodichloromethane	108		-		70-130	-		
1,4-Dioxane	97		-		70-130	-		
Trichloroethene	94		-		70-130	-		
2,2,4-Trimethylpentane	96		-		70-130	-		
Heptane	94		-		70-130	-		
cis-1,3-Dichloropropene	93		-		70-130	-		
4-Methyl-2-pentanone	94		-		70-130	-		
trans-1,3-Dichloropropene	88		-		70-130	-		
1,1,2-Trichloroethane	95		-		70-130	-		
Toluene	96		-		70-130	-		
2-Hexanone	94		-		70-130	-		
Dibromochloromethane	126		-		70-130	-		
1,2-Dibromoethane	101		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 240 LAKEFRONT BLVD

Project Number: E67.022.009

Lab Number: L2371495

Report Date: 12/19/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 02,04-05 Batch: WG1862125-3								
Tetrachloroethene	96		-		70-130	-		
Chlorobenzene	98		-		70-130	-		
Ethylbenzene	100		-		70-130	-		
p/m-Xylene	101		-		70-130	-		
Bromoform	141	Q	-		70-130	-		
Styrene	99		-		70-130	-		
1,1,2,2-Tetrachloroethane	105		-		70-130	-		
o-Xylene	102		-		70-130	-		
4-Ethyltoluene	104		-		70-130	-		
1,3,5-Trimethylbenzene	102		-		70-130	-		
1,2,4-Trimethylbenzene	102		-		70-130	-		
Benzyl chloride	92		-		70-130	-		
1,3-Dichlorobenzene	107		-		70-130	-		
1,4-Dichlorobenzene	106		-		70-130	-		
1,2-Dichlorobenzene	106		-		70-130	-		
1,2,4-Trichlorobenzene	88		-		70-130	-		
Hexachlorobutadiene	92		-		70-130	-		

Lab Control Sample Analysis Batch Quality Control

Project Name: 240 LAKEFRONT BLVD

Project Number: E67.022.009

Lab Number: L2371495

Report Date: 12/19/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 02,04-05 Batch: WG1862126-3								
Vinyl chloride	83		-		70-130	-		25
1,1-Dichloroethene	98		-		70-130	-		25
3-Chloropropene	94		-		70-130	-		25
cis-1,2-Dichloroethene	91		-		70-130	-		25
1,1,1-Trichloroethane	85		-		70-130	-		25
Carbon tetrachloride	100		-		70-130	-		25
Trichloroethene	88		-		70-130	-		25
Tetrachloroethene	87		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: 240 LAKEFRONT BLVD

Project Number: E67.022.009

Lab Number: L2371495

Report Date: 12/19/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,03 Batch: WG1864611-3								
Dichlorodifluoromethane	96		-		70-130	-		
Chloromethane	96		-		70-130	-		
Freon-114	101		-		70-130	-		
Vinyl chloride	92		-		70-130	-		
1,3-Butadiene	91		-		70-130	-		
Bromomethane	98		-		70-130	-		
Chloroethane	100		-		70-130	-		
Ethanol	82		-		40-160	-		
Vinyl bromide	109		-		70-130	-		
Acetone	118		-		40-160	-		
Trichlorofluoromethane	108		-		70-130	-		
Isopropanol	99		-		40-160	-		
1,1-Dichloroethene	101		-		70-130	-		
Tertiary butyl Alcohol	79		-		70-130	-		
Methylene chloride	96		-		70-130	-		
3-Chloropropene	125		-		70-130	-		
Carbon disulfide	103		-		70-130	-		
Freon-113	115		-		70-130	-		
trans-1,2-Dichloroethene	118		-		70-130	-		
1,1-Dichloroethane	118		-		70-130	-		
Methyl tert butyl ether	94		-		70-130	-		
2-Butanone	116		-		70-130	-		
cis-1,2-Dichloroethene	120		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 240 LAKEFRONT BLVD

Project Number: E67.022.009

Lab Number: L2371495

Report Date: 12/19/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,03 Batch: WG1864611-3								
Ethyl Acetate	126		-		70-130	-		
Chloroform	109		-		70-130	-		
Tetrahydrofuran	115		-		70-130	-		
1,2-Dichloroethane	117		-		70-130	-		
n-Hexane	96		-		70-130	-		
1,1,1-Trichloroethane	105		-		70-130	-		
Benzene	84		-		70-130	-		
Carbon tetrachloride	112		-		70-130	-		
Cyclohexane	96		-		70-130	-		
1,2-Dichloropropane	106		-		70-130	-		
Bromodichloromethane	112		-		70-130	-		
1,4-Dioxane	103		-		70-130	-		
Trichloroethene	101		-		70-130	-		
2,2,4-Trimethylpentane	100		-		70-130	-		
Heptane	104		-		70-130	-		
cis-1,3-Dichloropropene	90		-		70-130	-		
4-Methyl-2-pentanone	106		-		70-130	-		
trans-1,3-Dichloropropene	88		-		70-130	-		
1,1,2-Trichloroethane	105		-		70-130	-		
Toluene	98		-		70-130	-		
2-Hexanone	99		-		70-130	-		
Dibromochloromethane	130		-		70-130	-		
1,2-Dibromoethane	97		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 240 LAKEFRONT BLVD

Project Number: E67.022.009

Lab Number: L2371495

Report Date: 12/19/23

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01,03 Batch: WG1864611-3								
Tetrachloroethene	95		-		70-130	-		
Chlorobenzene	92		-		70-130	-		
Ethylbenzene	101		-		70-130	-		
p/m-Xylene	103		-		70-130	-		
Bromoform	138	Q	-		70-130	-		
Styrene	92		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		
o-Xylene	104		-		70-130	-		
4-Ethyltoluene	96		-		70-130	-		
1,3,5-Trimethylbenzene	94		-		70-130	-		
1,2,4-Trimethylbenzene	95		-		70-130	-		
Benzyl chloride	105		-		70-130	-		
1,3-Dichlorobenzene	101		-		70-130	-		
1,4-Dichlorobenzene	98		-		70-130	-		
1,2-Dichlorobenzene	98		-		70-130	-		
1,2,4-Trichlorobenzene	80		-		70-130	-		
Hexachlorobutadiene	82		-		70-130	-		

Project Name: 240 LAKEFRONT BLVD

Serial_No:12192310:30
Lab Number: L2371495

Project Number: E67.022.009

Report Date: 12/19/23

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2371495-01	260-SS-01	01122	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.3	10
L2371495-01	260-SS-01	3486	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-11.8	-	-	-	-
L2371495-02	260-IA-01	02145	Flow 2	11/29/23	445465		-	-	-	Pass	3.0	4.8	42
L2371495-02	260-IA-01	2447	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	0.0	-	-	-	-
L2371495-03	256-SS-02	0982	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.7	21
L2371495-03	256-SS-02	1936	6.0L Can	11/29/23	445465	L2369115-05	Pass	-29.6	0.0	-	-	-	-
L2371495-04	256-IA-02	0240	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.2	6
L2371495-04	256-IA-02	2840	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-6.7	-	-	-	-
L2371495-05	OA-01-120423	01246	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.8	24
L2371495-05	OA-01-120423	3365	6.0L Can	11/29/23	445465	L2369115-05	Pass	-29.5	-1.0	-	-	-	-
L2371495-06	UNUSED CAN #2446	02191	Flow 5	11/29/23	445465		-	-	-	Pass	3.0	3.1	3
L2371495-06	UNUSED CAN #2446	3582	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-29.4	-	-	-	-
L2371495-07	UNUSED CAN #3582	01480	Flow 3	11/29/23	445465		-	-	-	Pass	3.0	4.5	40
L2371495-07	UNUSED CAN #3582	2446	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-29.4	-	-	-	-
L2371495-08	UNUSED CAN #2523	0765	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	5.0	50

Project Name: 240 LAKEFRONT BLVD

Serial_No:12192310:30
Lab Number: L2371495

Project Number: E67.022.009

Report Date: 12/19/23

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2371495-08	UNUSED CAN #2523	2523	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.5	-29.4	-	-	-	-
L2371495-09	UNUSED CAN #3322	0958	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	4.2	33
L2371495-09	UNUSED CAN #3322	3322	6.0L Can	11/29/23	445465	L2369115-10	Pass	-29.6	-29.4	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-05
Client ID: CAN 3970 SHELF 59
Sample Location:

Date Collected: 11/20/23 18:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 11/21/23 19:45
Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-05
Client ID: CAN 3970 SHELF 59
Sample Location:

Date Collected: 11/20/23 18:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-05
Client ID: CAN 3970 SHELF 59
Sample Location:

Date Collected: 11/20/23 18:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-05
Client ID: CAN 3970 SHELF 59
Sample Location:

Date Collected: 11/20/23 18:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2369115**Project Number:** CANISTER QC BAT**Report Date:** 12/19/23**Air Canister Certification Results**

Lab ID: L2369115-05

Date Collected: 11/20/23 18:00

Client ID: CAN 3970 SHELF 59

Date Received: 11/21/23

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	108		60-140
Bromochloromethane	101		60-140
chlorobenzene-d5	106		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-05
Client ID: CAN 3970 SHELF 59
Sample Location:

Date Collected: 11/20/23 18:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 11/21/23 19:45
Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-05
Client ID: CAN 3970 SHELF 59
Sample Location:

Date Collected: 11/20/23 18:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2369115**Project Number:** CANISTER QC BAT**Report Date:** 12/19/23**Air Canister Certification Results**

Lab ID: L2369115-05

Date Collected: 11/20/23 18:00

Client ID: CAN 3970 SHELF 59

Date Received: 11/21/23

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	106		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	108		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-07
Client ID: CAN 2695 SHELF 66
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 11/21/23 21:42
Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-07
Client ID: CAN 2695 SHELF 66
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-07
Client ID: CAN 2695 SHELF 66
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-07
Client ID: CAN 2695 SHELF 66
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2369115**Project Number:** CANISTER QC BAT**Report Date:** 12/19/23**Air Canister Certification Results**

Lab ID: L2369115-07

Date Collected: 11/21/23 13:00

Client ID: CAN 2695 SHELF 66

Date Received: 11/21/23

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	106		60-140
Bromochloromethane	100		60-140
chlorobenzene-d5	107		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-07
Client ID: CAN 2695 SHELF 66
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 11/21/23 21:42
Analyst: RAY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-07
Client ID: CAN 2695 SHELF 66
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2369115**Project Number:** CANISTER QC BAT**Report Date:** 12/19/23**Air Canister Certification Results**

Lab ID: L2369115-07

Date Collected: 11/21/23 13:00

Client ID: CAN 2695 SHELF 66

Date Received: 11/21/23

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	106		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	108		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-10
Client ID: CAN 3311 SHELF 67
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 11/23/23 01:59
Analyst: BJB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-10
Client ID: CAN 3311 SHELF 67
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-10
Client ID: CAN 3311 SHELF 67
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-10
Client ID: CAN 3311 SHELF 67
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2369115**Project Number:** CANISTER QC BAT**Report Date:** 12/19/23**Air Canister Certification Results**

Lab ID: L2369115-10

Date Collected: 11/21/23 13:00

Client ID: CAN 3311 SHELF 67

Date Received: 11/21/23

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds				

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-10
Client ID: CAN 3311 SHELF 67
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Analytical Method: 48,TO-15-SIM
Analytical Date: 11/23/23 01:59
Analyst: BJB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acrolein	ND	0.050	--	ND	0.115	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L2369115
Report Date: 12/19/23

Air Canister Certification Results

Lab ID: L2369115-10
Client ID: CAN 3311 SHELF 67
Sample Location:

Date Collected: 11/21/23 13:00
Date Received: 11/21/23
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.100	--	ND	0.377	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.100	--	ND	0.518	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION**Lab Number:** L2369115**Project Number:** CANISTER QC BAT**Report Date:** 12/19/23**Air Canister Certification Results**

Lab ID: L2369115-10

Date Collected: 11/21/23 13:00

Client ID: CAN 3311 SHELF 67

Date Received: 11/21/23

Sample Location:

Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	102		60-140
bromochloromethane	104		60-140
chlorobenzene-d5	98		60-140

Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information

Cooler	Custody Seal
NA	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2371495-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2371495-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2371495-03A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2371495-04A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2371495-05A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2371495-06A	Canister - 6 Liter	NA	NA			Y	Absent		CLEAN-FEE()
L2371495-07A	Canister - 6 Liter	NA	NA			Y	Absent		CLEAN-FEE()
L2371495-08A	Canister - 6 Liter	NA	NA			Y	Absent		CLEAN-FEE()
L2371495-09A	Canister - 6 Liter	NA	NA			Y	Absent		CLEAN-FEE()

Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report



Project Name: 240 LAKEFRONT BLVD**Lab Number:** L2371495**Project Number:** E67.022.009**Report Date:** 12/19/23**Data Qualifiers**

- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 20

Department: **Quality Assurance**

Published Date: 6/16/2023 4:52:28 PM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 625.1:** alpha-Terpineol**EPA 8260D:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270E:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables).**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522, EPA 537.1.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



Centek/SanAir Laboratories TO-15 Package Review Checklist

Client: C&S - BUFFALO Project: 240-260 Lakefront Blvd SDG: 2404002

		YES	NO	NA
Analytical Results	Present and Complete	☒	☐	☐
TIC's Present	Present and Complete	☐	☐	☒
	Holdin Times Met	☒	☐	☐
		0		

Comments:

Chain of Custody	Present and Complete	☒	☐	☐
Surrogate	Present and Complete	☒	☐	☐
	Recoveries within Limits	☒	☐	☐
	Sample(s) reanalyzed	☐	☐	☒
Internal Standards	Present and Complete	☒	☐	☐
Recovery	Recoveries within Limits	☒	☐	☐
	Sample(s) reanalyzed	☐	☐	☒

Comments:

Lab Control Sample (LCS)	Present and Complete	☒	☐	☐
	Recoveries within Limits	☒	☐	☐
Lab Control Sample Dupe (LCSD)	Present and Complete	☒	☐	☐
	Recoveries within Limits	☐	☒	☐
MS/MSD	Present and Complete	☐	☐	☒
	Recoveries within Limits	☐	☐	☒

Comments: *See case narrative.*

Sample Raw Data	Present and Complete	☒	☐	☐
	Spectra present	☒	☐	☐

Comments:

Centek/SanAir Laboratories TO-15 Package Review CheckList

Client: C&S - BUFFALO

Project: 240-260 Lakefront Blvd SDG:

2404002

Standards Data

		YES	NO	NA
Initial Calibration	Present and Complete	☒	☐	☐
Continuing Calibration	Calibration meets criteria	☒	☐	☐
	Present and Complete	☒	☐	☐
	Calibration meets criteria	☐	☒	☐
Standards Raw Data	Present and Complete	☒	☐	☐

Comments: See case narrative.**Raw Quality Control Data**

Tune Criteria Report	Present and Complete	☒	☐	☐
Method Blank Data	MB Results <PQL	☒	☐	☐
	Associated results flagged "B"	☐	☐	☒
LCS Sample Data	Present and Complete	☒	☐	☐
LCSD Sample Data	Present and Complete	☒	☐	☐
MS/MSD Sample Data	Present and Complete	☐	☐	☒

Comments:

Logbooks

Injection Log	☒	☐	☐
Standards Log	☒	☐	☐
Can Cleaning Log	☒	☐	☐
Calculation Sheet	☒	☐	☐
IDL's	☒	☐	☐
Canister Order Form	☒	☐	☐
Sample Tracking Form	☒	☐	☐

Additional Comments:

Section Supervisor:

Will Dahl

Date:

4/24/2024

QC Supervisor:

1/1/24

Date:

4/24/24



*SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us*

Alexander Brennen
C & S Engineers, Inc.
141 Elm St., Suite 100
Buffalo, NY 14203
TEL: (716) 847-1630
FAX:

RE: 240-260 Lakefront Blvd

Order No.: 2404002

Dear Alexander Brennen:

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness. Release of the data contained in this hardcopy data package and/or in the computer readable data submitted has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times.

Test results are not Method Blank (MB) corrected for contamination.

Centek/SanAir Laboratories is distinctively qualified to meet your needs for precise and timely volatile organic compound analysis. We perform all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.
Centek/SanAir Laboratories SOP TS-80

Analytical results relate to samples as received at laboratory.

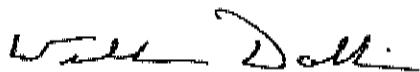
We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services.

Please contact your client service representative at (315) 431-9730 or myself, if you would like any additional information regarding this report.

This report cannot be reproduced except in its entirety, without prior written authorization.

Original

Disclaimer: This report is the sole property of the client named on the Centek/SanAir chain-of-custody (COC). Results in the report are confidential information intended only for the use by the customer listed on the COC. Neither results nor reports will be discussed with or released to any third party without our client's written permission. Final reports cannot be reproduced, except in full, without written authorization from Centek/SanAir. This report and any information contained within shall not be edited, altered, or modified in any way by any persons or agencies receiving, viewing, distributing, or otherwise possessing a copy of this final report. The laboratory reserves the right to perform amendments to any finalized report, of which shall supersede and make obsolete any previous editions. Such changes, modifications, additions, or deletions shall be effective immediately upon notice thereof, which may be given by means including but not limited to posting on the client portal website, electronic or conventional mail, or by any other means. The information provided in this report applies only to the samples submitted and is relevant only for the date, time, and location of sampling. The accuracy of the results of the analysis is dependent upon the method of sample procurement and information provided by the client on the COC. Centek/SanAir assumes no responsibility for the method of sample procurement. Centek/SanAir assumes no responsibility for the information provided by the client on the COC which includes the site name, project name, po number, canister order number, sample identifications or numbers, date sampled, canister numbers, regulator number, vacuum start/stop times in the field or in the lab, analyses requested, PM10# and PM2.5#, sampled by, relinquished by and date/time, and special instructions that may affect the validity of the results in this report. Centek/SanAir is not responsible for shipping or transport of the samples to be tested. Evaluation reports are based solely on the sample(s) in the condition at which they were received at the laboratory and the information provided by the client on the COC. Centek/SanAir assumes no responsibility or liability for the manner in which the results are used or interpreted. In receiving this report, the customer agrees that the full extend of any and all liability for actual and consequential damages of Centek/SanAir for the services performed shall be equal to the fee charged to the customer for the services as liquidated damages. NELAP Accredited, NYSDOH ELAP, Lab Id No: 11830. NYSDOH ELAP does not offer accreditation for the following parameters by this method at present time: 4-ethyltoluene, ethyl acetate, propylene, Tetrahydrofuran, 4-PCH, sulfur derived, silicon series compounds, and EPA modified Method IP-10A. EPA Method IP-1A May 1990 has been replaced with Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999. The laboratory is also not accredited under NYSDOH ELAP for EPA Method TO-17. However, LEED requirements state that laboratories must be accredited under ISO 17025, which the laboratory does hold accreditation with AIHA LAP, LLC for ISO/IEC 17025:2017 under Unique Scopes (Laboratory ID LAP-182993). See www.centeklabs.us for an up to date list of laboratory accreditations and scopes. This report does not constitute nor shall be used by the client to claim product, process, system, or person certification, approval, or endorsement by NIST, NELAC, AIHA LAP, LLC, and/or any other US governmental agencies; and may not be accredited by every local, state and federal regulatory agency.



Original

William Dobbin
Lead Technical Director

CC:
Jesse Alt-Winzig

Original

ASP CAT B DELIVERABLE PACKAGE Table of Contents

1. Package Review Check List
2. Case Narrative
 - a. Corrective actions
3. Sample Summary Form
4. Sample Tracking Form
5. Bottle Order
6. Analytical Results
 - a. Form 1
7. Quality Control Summary
 - a. Qc Summary Report
 - b. IS Summary Report
 - c. MB Summary Report
 - d. LCS Summary Report
 - e. MSD Summary Report
 - f. IDL's
 - g. Calculation
8. Sample Data
 - a. Form 1 (if requested) TIC's
 - b. Quantitation Report with Spectra
9. Standards Data
 - a. Initial Calibration with Quant Report
 - b. Continuing Calibration with Quant Report
10. Raw Data
 - a. Tuning Data
11. Raw QC Data
 - a. Method Blank
 - b. LCS
 - c. MS/MSD
12. Log Books
 - a. Injection Log Book
 - b. Standards Log Book
 - c. QC Canister Log Book



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

Case Narrative

WO#: 2404002
Date: 4/23/2024

CLIENT: C & S Engineers, Inc.
Project: 240-260 Lakefront Blvd

All documents contain the SanAir Technologies DBA Centek Laboratories Work Order Number assigned to this report.

Samples were analyzed using the methods outlined in the following references:

Centek Laboratories, LLC SOP TS-80

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the corrective action report(s). All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

NYSDEC ASP samples:

Canisters should be evacuated to a reading of less than or equal to 50 millitorr prior to shipment to sampling personnel. The vacuum in the canister will be field checked prior to sampling, and must read 28" of Hg ($\pm 2''$, vacuum, absolute) before a sample can be collected. After the sample has been collected, the pressure of the canister will be read and recorded again, and must be 5" of Hg ($\pm 1''$, vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg, $\pm 1''$. Please record and report the pressure/vacuum of received canisters on the sample receipt paperwork. A pressure/vacuum reading should also be taken just prior to the withdrawal of sample from the canister, and recorded on the sample preparation log sheet. All regulators are calibrated to meet these requirements before they leave the laboratory. However, due to environmental conditions and use of the equipment Centek cannot guarantee that these criteria can always be achieved.

Any comments or problems with the analytical events associated with this report are noted below.

See Corrective Action: [209] CC did not meet criteria.

See Corrective Action: [210] LCS/LCSD did not meet criteria.

Original

SanAir Technologies DBA Centek Laboratories

Corrective Action Report

Date Initiated: 02-Apr-24	Initiated By: Derek Areson	CAR ID: 209
MainID Type: RunID		Department: MSVOA
Instrument ID: HP5975 MSD6		Run ID: 1245
Analyst: Derek Areson		Batch ID:
Client ID: C&S - Buffalo		WorkOrder: 2404002

Corrective Action Description

CAR Summary: CC did not meet criteria.

Description of Nonconformance: Continuing calibration did not meet criteria on 4/1/24 for carbon tetrachloride. The compound was more sensitive. Results may be biased high.

Description of Corrective Action: Sample results for the associated compound may be biased high. No corrective action taken at this time. If results continue to be outside established limits, then recalibrate system. All sets of data submitted.

Performed By: Derek Areson **Completion Date:** 05-Apr-24

Client Notification

Client Notification Required: No **Notified By:**

Comment:

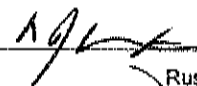
Quality Assurance Review

Nonconformance Type: Deficiency

Further Action required by QA: System recalibrated 4/5/24. Calibration standard has been replaced after the purchase of a new TO15 standard

Approval and Closure

Technical Director /
Deputy Tech. Dir.:


Russell Pellegrino

Close Date: 23-Apr-24

QA Officer Approval:


William Dobbins

QA Date: 01-Apr-24

Last Updated BY: Russell Pellegrino

Updated: 23-Apr-2024 12:03 PM

Reported: 23-Apr-2024 1:34 PM

SanAir Technologies DBA Centek Laboratories

Corrective Action Report

Date Initiated: 02-Apr-24	Initiated By: Derek Areson	CAR ID: 210
MainID Type: RunID		Department: MSVOA
Instrument ID: HP5975 MSD6		Run ID: 1245
Analyst: Derek Areson		Batch ID:
Client ID: C&S - Buffalo		WorkOrder: 2404002

Corrective Action Description

CAR Summary: LCS/LCSD did not meet criteria.

Description of Nonconformance: ALCS_1UG-040124/ALCS_1UGD-040124 did not meet criteria for multiple compounds' % recoveries. These compounds met criteria in the Continuing Calibration, with the exception of Carbon Tetrachloride. The LCS 6 Liter Canister was independent of the 6 Liter Continuing Calibration canister. Results for the associated compounds may be biased high, except for vinyl acetate, which may be biased low.

Description of Corrective Action: Since the LCS 6 Liter canister was independent of the 6 Liter Continuing Calibration canister and all of the associated compounds except for Carbon Tetrachloride passed in the Continuing Calibration, then continue with analysis. If results continue outside established limits, then recalibrate system. All sets of data submitted.

Performed By: Derek Areson **Completion Date:** 05-Apr-24

Client Notification

Client Notification Required: No **Notified By:**

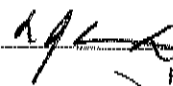
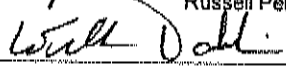
Comment:

Quality Assurance Review

Nonconformance Type: Deficiency

Further Action required by QA: System recalibrated 4/5/24. LCS has been replaced after the purchase of a new TO15 standard

Approval and Closure

Technical Director / Deputy Tech. Dir.:		Close Date: 23-Apr-24
	Russell Pellegrino	
QA Officer Approval:		QA Date: 01-Apr-24
	William Dobbins	

Last Updated BY: Russell Pellegrino **Updated:** 23-Apr-2024 12:02 PM **Reported:** 23-Apr-2024 1:35 PM

Centek/SanAir Technologies Laboratory - Chain of Custody				Site Name: 240-260 Lakefront Blvd.		Report Level ☐ Level I ☐ Level II ☒ Cat "B" Like	
Centek Laboratories 143 Midler Park Drive Syracuse, NY 13206 315-431-9730 www.CentekLabs.us				Project: Building B SVI Sampling PO#: E67.022.008 Quote # Q-5P Canister Order # 316		Detection Limit ☐ 5ppbv ☒ 1ug/M3 ☒ 1ug/M3 + 0.2 NYS	
Vapor Intrusion & IAQ				Company: C+S Engineers Check Here If Same: ☒			
Report to: 141 Elm Street, Suite 100 Address: Buffalo, NY 14203 City, State, Zip Email: cmartin@csos.com Phone: (716) 847-1630				Invoice to: Address: City, State, Zip Email: Phone:			
Canister Number Regulator Number Analysis Request				Field Vacuum Start / Stop		Labs Vacuum** RecV/Analysis	
Sample ID Date Sampled				Comments			
244-SS-01 3/29/2024 1040				TO-15 29.0, 0.0		-1, -1	
244-IA-01 3/29/2024 1040				TO-15 31.5, 3.1		-1, -1	
252-SS-02 3/29/2024 1050				TO-15 31.0, 5.9		-2, -1	
252-IA-02 3/29/2024 1050				TO-15 31.5, 3.1		-1, -1	
OA-01 3/29/2024 1100				TO-15 31.5, 12.2		-1, -1	
Chain of Custody Sampled by: Jesse Alt-Winzig (CS) Relinquished by: Jesse Alt-Winzig (CS) Received at Lab by: Robin Gushlad				Signature Jesse Alt-Winzig Jesse Alt-Winzig Robin Gushlad		Date/Time 3/29/2024 1100 3/29/2024 1200 4-1-24	
Courier: CIRCLE ONE FedEx (UPS) Pickup/Dropoff				Work Order # 2401002			

***Chain of Custody must be completed in full. Lack of any missing information will affect your Turn Around Times (TAT)
 *** By signing Centek/SanAir Labs Chain of Custody, you are accepting the Terms and Conditions listed on the reverse side.



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730

Workorder Sample Summary

WO#: 2404002

17-Apr-24

CLIENT: C & S Engineers, Inc.
Project: 240-260 Lakefront Blvd

Lab SampleID	Client Sample ID	TDTube	CanisterID	FlowCon ID	Equip ID	Date Collected	Date Received	Matrix
2404002-001	244-SS-01		1L Mini- Can - 1162 VI - 0207	Time-Set Reg - 759 VI - 0385		3/29/2024	4/1/2024	Air
2404002-002	244-IA-01		1L Mini- Can - 1264 VI - 0288	Time-Set Reg - 833 VI - 0454		3/29/2024	4/1/2024	Air
2404002-003	252-SS-02		1L Mini- Can - 1381 VI - 0479	Time-Set Reg - 825 VI - 0446		3/29/2024	4/1/2024	Air
2404002-004	252-IA-02		1L Mini- Can - 1349 VI - 0422	Time-Set Reg - 760 VI - 0386		3/29/2024	4/1/2024	Air
2404002-005	OA-01		1L Mini- Can - 1174 VI - 0242	Time-Set Reg - 774 VI - 0395		3/29/2024	4/1/2024	Air

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

Sample Receipt Checklist

Client Name: C&S - Buffalo

RcptNo: 1

Date and Time Received: 4/1/2024 10:13:29 AM

Work Order Number 2404002

Received by: Robin Gushlaw

Completed by:

Reviewed by:

Completed Date:

4/1/2024 12:17:35 PM

Reviewed Date:

Carrier name: UPS Ground

Chain of custody present?	Yes ☒	No ☐		
Chain of custody signed when relinquished and received?	Yes ☒	No ☐		
Chain of custody agrees with sample labels?	Yes ☒	No ☐	Not Present	☐
Are matrices correctly identified on Chain of custody?	Yes ☒	No ☐		
Is it clear what analyses were requested?	Yes ☒	No ☐		
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☒
Samples in proper container/bottle?	Yes ☒	No ☐		
Were correct preservatives used and noted?	Yes ☐	No ☐	NA	☒
Sample containers intact?	Yes ☒	No ☐		
Sufficient sample volume for indicated test?	Yes ☒	No ☐		
Were container labels complete (ID, Pres, Date)?	Yes ☒	No ☐		
All samples received within holding time?	Yes ☒	No ☐		
Was an attempt made to cool the samples?	Yes ☐	No ☐	NA	☒
All samples received at a temp. of $> 0^{\circ}\text{C}$ to 6.0°C ?	Yes ☐	No ☐	NA	☒
Response when temperature is outside of range:				
Preservative added to bottles:				
Sample Temp. taken and recorded upon receipt?	Yes ☐	No ☒	To	$^{\circ}\text{C}$
Water - Were bubbles absent in VOC vials?	Yes ☐	No ☐	No Vials	☒
Water - Was there Chlorine Present?	Yes ☐	No ☐	NA	☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	NA	☒
Are Samples considered acceptable?	Yes ☒	No ☐		
Custody Seals present?	Yes ☐	No ☒		
Traffic Report or Packing Lists present?	Yes ☐	No ☒		
Airbill or Sticker?	Air Bill ☐	Sticker ☒	Not Present	☐
Sample Tags Present?	Yes ☐	No ☒		
Sample Tags Listed on COC?	Yes ☐	No ☒		
Tag Numbers:				
Sample Condition?	Intact ☒	Broken ☐	Leaking	☐

Case Number:

SDG:

SAS:

Cooler Information

Assets Information

ID	Description	Type
1L Mini-Can - 1132 VI - 016		Canisters
1L Mini-Can - 1162 VI - 020		Canisters
1L Mini-Can - 1174 VI - 024		Canisters



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

Sample Receipt Checklist

Client Name: C&S - Buffalo

Work Order Number 2404002

ID	Description	Type
1L Mini-Can - 1264 VI - 028		Canisters
1L Mini-Can - 1349 VI - 042		Canisters
1L Mini-Can - 1381 VI - 047		Canisters
Time-Set Reg - 759 VI - 038		Flow Controller
Time-Set Reg - 760 VI - 038		Flow Controller
Time-Set Reg - 774 VI - 039		Flow Controller
Time-Set Reg - 778 VI - 039		Flow Controller
Time-Set Reg - 825 VI - 044		Flow Controller
Time-Set Reg - 833 VI - 045		Flow Controller
Tracer Gas Dome-04 - 0501	Tracer Gas Dome-04 - 0501	Equipments
Tracer Gas Kit-01 - 0503	Tracer Gas Kit-01 - 0503	Equipments

Adjusted?

Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client Contacted? ☐ Yes ☐ No ☒ NA Person Contacted:

Comments:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted:

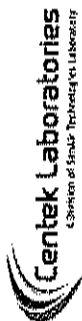
Contacted By:

Regarding:

CorrectiveAction:

Sample Details

SampleID	ClientSampleID	ContainerID	Type	Org pH	Temp.	ReptNo	Cooler No	Comments
2404002-001A	244-SS-01	1L Mini-Can - 1162 VI - 0207	Canister					
2404002-002A	244-IA-01	1L Mini-Can - 1264 VI - 0288	Canister					
2404002-003A	252-SS-02	1L Mini-Can - 1381 VI - 0479	Canister					
2404002-004A	252-IA-02	1L Mini-Can - 1349 VI - 0422	Canister					
2404002-005A	OA-01	1L Mini-Can - 1174 VI - 0242	Canister					



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

DATES REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.
Project: 240-260 Lakefront Blvd

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
2404002-001A	244-SS-01	3/29/2024	Air	1ug/M3 by Method TO15			4/2/2024 3:13:00 AM
2404002-002A	244-1A-01			1ug/M3 w/ 0.2ug/M3 CT-TCE-VC-DCI 1,1DCE			4/1/2024 9:27:00 PM
				1ug/M3 w/ 0.2ug/M3 CT-TCE-VC-DCI 1,1DCE			4/2/2024 12:21:00 AM
				1ug/M3 w/ 0.2ug/M3 CT-TCE-VC-DCI 1,1DCE			4/1/2024 11:39:00 PM
2404002-003A	252-SS-02			1ug/M3 by Method TO15			4/1/2024 7:14:00 PM
				1ug/M3 by Method TO15			4/2/2024 3:56:00 AM
2404002-004A	252-1A-02			1ug/M3 w/ 0.2ug/M3 CT-TCE-VC-DCI 1,1DCE			4/1/2024 10:12:00 PM
				1ug/M3 w/ 0.2ug/M3 CT-TCE-VC-DCI 1,1DCE			4/2/2024 1:46:00 AM
				1ug/M3 w/ 0.2ug/M3 CT-TCE-VC-DCI 1,1DCE			4/2/2024 1:04:00 AM
				1ug/M3 w/ 0.2ug/M3 CT-TCE-VC-DCI 1,1DCE			4/1/2024 7:59:00 PM
2404002-005A	0A-01			1ug/M3 w/ 0.2ug/M3 CT-TCE-VC-DCI 1,1DCE			4/2/2024 2:28:00 AM
				1ug/M3 w/ 0.2ug/M3 CT-TCE-VC-DCI 1,1DCE			4/1/2024 8:43:00 PM

Original



SanAir Technologies DBA Centek
Laboratories

143 Midler Park Drive
Syracuse, NY 13206

TEL: (315) 431-9730

Website: www.CentekLabs.us

Container Order Report

Container Order #: 316

17-Apr-24

CLIENT: C & S Engineers, Inc.
Contact: Cody Martin
Contact Email: cmartin@cscos.com
Address: 141 Elm St., Suite 100
Buffalo, NY, US, 14203
Phone: (716) 847-1630

Submitted By Russell Pellegrino
Ship Date: 3/25/2024
VIA: UPS Ground
Tracking No: 1Z81WF480340568865
Due Date: 3/26/2024
Quote ID:

Qty	TestCode	TEST(s)	Bottle Code	Matrix	Remarks
3	1ugM3_TO15	1ug/M3 by Method TO15	MC1000CC	Air	
3	0.20_NYS	1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-	MC1000CC	Air	
1	HE_LT	Helium Leak Test	MC1000CC	Air	

Equipment Name	Equipment Type	Barcode #
1L Mini-Can - 1132 VI - 0162	Canister1	162
1L Mini-Can - 1162 VI - 0207	Canister1	207
1L Mini-Can - 1174 VI - 0242	Canister1	242
1L Mini-Can - 1264 VI - 0288	Canister1	288
1L Mini-Can - 1349 VI - 0422	Canister1	422
1L Mini-Can - 1381 VI - 0479	Canister1	479
Tracer Gas Dome-04 - 0501	Equipment	501
Tracer Gas Kit-01 - 0503	Equipment	503
Time-Set Reg - 778 VI - 0399	FlowController	399
Time-Set Reg - 759 VI - 0385	FlowController	385
Time-Set Reg - 833 VI - 0454	FlowController	454
Time-Set Reg - 825 VI - 0446	FlowController	446
Time-Set Reg - 774 VI - 0395	FlowController	395
Time-Set Reg - 760 VI - 0386	FlowController	386

Comment 6 IL @ 24hr + helium kit



SanAir Technologies DBA Centek
Laboratory

143 Midler Park Drive

Syracuse, NY 13201

TEL: (315) 431-9731

Website: www.CentekLabs.u

Definition / TAC

WO#: 2404002

Date:

Definitions:

% REC: Percent Recovery; a measure of accuracy expressed as a percentage of a measured (recovered) concentration compared to the known concentration added to the sample.

% RPD: Relative Percent Difference; a measure of precision expressed as a percentage of the difference between two duplicates relative to the average concentration.

DF: Dilution factor; the dilution factor applied to the prepared sample.

DL: Detection Limit of the instrument used for the analysis. This does not reflect the maximum concentration of the regulatory limits.

DUP: Duplicate; aliquots of a sample taken from the same container under laboratory conditions and processed and analyzed independently, used to calculate Precision (%RPD).

LCS: Laboratory Control Sample; prepared by adding a known mass of target analytes to a specified amount of de-ionized water and prepared with the batch of samples, used to calculate Accuracy (%REC).

LCSD: The duplicate sample of the LCS, used to calculate both Accuracy (%REC) and Precision (%RPD)

MBLK: Method Blank; a sample of similar matrix that is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedure, and in which no target analytes or interferences are present at concentrations that impact the analytical results for sample analyses.

MS: Matrix Spike; prepared by adding a known mass of target analytes to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available, used to calculate Accuracy (%REC)

MSD: The duplicate sample of the MS, used to calculate both Accuracy (%REC) and Precision (%RPD)

Qual: Qualifier that applies to the analyte reported

Result: Analyte concentration reported

RL: Reporting Limit/Limit of Quantitation; the limit to which data is compared for reporting. Analyte concentrations below the reporting limit are reported as ND or with a "J" qualifier.

Units: The units in which the analyte concentration is reported.

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13201
TEL: (315) 431-9731
Website: www.CentekLabs.us

Definition / TAC

WO#: 2404002

Date:

Centek/SanAir Laboratories - Terms and Conditions

Chain of Custody

Chain of Custody must be completed in full. Lack of any missing information will affect your Turn Around Times (TAT) Internal Chain of Custody provided when you notify Centek/SanAir Laboratories

Sample Submission

All samples sent to Centek/SanAir Laboratories should be accompanied by our Request for Analysis Form or Chain of Custody Form. A Chain of Custody will be provided with each order shipped for all sampling events, or if needed, one is available at our website www.Centek/SanAirLabs.us. Samples received after 3:00pm are a part of the next day's business.

Sample Media

Samples can be collected in a canister or a Tedlar bag. Depending on your analytical needs, Centek/SanAir Laboratories may receive a bulk, liquid, soil or other matrix sample for headspace analysis.

Blanks

Every sample is run with a surrogate or tracer compound at a pre-established concentration. The surrogate compound run with each sample is used as a standard to measure the performance of each run of the instrument. If required, a Minican can be provided containing nitrogen to be run as a trip blank with your samples.

Sampling Equipment

Centek/SanAir Laboratories will be happy to provide the canisters to carry-out your sampling event at no charge. The necessary accessories, such as regulators, tubing or personal sampling belts, are also provided to meet your sampling needs. The customer is responsible for all shipping charges to the client's destination and return shipping to the laboratory. Client assumes all responsibility for lost, stolen and any damages of equipment.

****Any sampling equipment that exceeds holding times, cancellation of job or non-notice of rescheduling is subject to restocking fees****

Turn Around time (TAT)

Centek/SanAir Laboratories will provide results to its clients in one business-week by 6:00pm EST after receipt of samples. For example, if samples are received on a Monday, they are due on the following Monday by 6:00pm EST. Results are faxed or emailed to the requested location indicated on the Chain of Custody. Non-routine analysis may require more than the one business-week turnaround time. Please confirm non-routine sample

Original



SanAir Technologies DBA Centek
Laboratorie.

143 Midler Park Drive
Syracuse, NY 13204

TEL: (315) 431-9731

Website: www.CentekLabs.us

Definition / TAC

WO#: 2404002

Date:

Reporting

Results are emailed or faxed at no additional charge. A hard copy of the result report is mailed within 24 hours of the faxing or emailing of your results. Cat "B" like packages is within 3-4 weeks from time of analysis (add 10%/sample for Cat B). Standard Electronic Disk Deliverables (EDD) is also available at no additional charge.

Payment Terms

Payment for all purchases shall be due within 30 days from date of invoice. The client agrees to pay a finance charge of 1.5% per month on the overdue balance and cost of collection, including attorney fees, if collection proceedings are necessary. You must have a completed credit application on file to extend credit. Purchase orders or checks information must be submitted for us to release results.

Rush Turnaround Samples

Expedited turnaround times is available. Please confirm rush turnaround times with Client Services before submitting samples.

Applicable Surcharges for Rush Turnaround Samples:

Same day TAT = 200%

Next business day TAT by Noon = 150%

Next business day TAT by 6:00pm = 100%

Second business day TAT by 6:00pm = 75%

Third business day TAT by 6:00pm = 50%

Fourth business day TAT by 6:00pm = 35%

Fifth business day = Standard

Statement of Confidentiality

Centek/SanAir Laboratories is aware of the importance of the confidentiality of results to many of our clients. Your name and data will be held in the strictest of confidence. We will not accept business that may constitute a conflict of interest. We commonly sign Confidential Nondisclosure Agreements with clients prior to beginning work. All research, results and reports will be kept strictly confidential. Secrecy Agreements and Disclosure Statements will be signed for the client if so specified. Results will be provided only to the addressee specified on the Chain of Custody Form submitted with the samples unless law requires release. Written permission is required from the addressee to release results to any other party.

Original



*SanAir Technologies DBA Centek
Laboratories*

*143 Midler Park Drive
Syracuse, NY 13201*

TEL: (315) 431-9731

Website: www.CentekLabs.us

Definition / TAC

WO#: 2404002

Date:

Limitation on Liability

Centek/SanAir Laboratories warrants the test results to be accurate to the methodology and sample type for each sample submitted to Centek/SanAir Laboratories. In no event shall Centek/SanAir Laboratories be liable for direct, indirect, special, punitive, incidental, exemplary or consequential damages, or any damages whatsoever, even if Centek/SanAir Laboratories has been previously advised of the possibility of such damages whether in an action under contract, negligence, or any other theory, arising out of or in connection with the use, inability to use or performance of the information, services, products and materials available from the laboratory or this site. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. This is a comprehensive limitation of liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect, or consequential damages, loss of data, income or profit and or loss of or damage to property and claims of third parties.

Original

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

ANALYTICAL RESULTS



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: 244-SS-01

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-001

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

FieldSampler	Jesse		
Lab Vacuum In	-1	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 BY METHOD TO15

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 9:27:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 9:27:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 9:27:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 9:27:00 PM
1,1-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 9:27:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 9:27:00 PM
1,2,4-Trimethylbenzene	0.15	0.15	ppbV	0.74	0.74		1	4/1/2024 9:27:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 9:27:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 9:27:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 9:27:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 9:27:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 9:27:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 9:27:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 9:27:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 9:27:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 9:27:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 9:27:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 9:27:00 PM
Acetone	9.6	3.0	ppbV	23	7.1		10	4/2/2024 3:13:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 9:27:00 PM

Qualifiers:
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Limit
 U Samples with CalcVal < MDL

E Value above quantitation range
 N Tentatively identified compounds
 R RPD outside accepted recovery limits
 SC Sub-Contracted
 J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Lab Order: 2404002

Project: 240-260 Lakefront Blvd

Lab ID: 2404002-001

Client Sample ID: 244-SS-01

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15		Analyst: DA		
Benzene	0.41	0.15	ppbV	1.3	0.48		1	4/1/2024 9:27:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 9:27:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 9:27:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 9:27:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 9:27:00 PM
Carbon disulfide	0.12	0.15	ppbV	0.37	0.47	J	1	4/1/2024 9:27:00 PM
Carbon tetrachloride	< 0.15	0.15	ppbV	<0.94	0.94	U	1	4/1/2024 9:27:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 9:27:00 PM
Chloroethane	< 0.15	0.15	ppbV	<0.4	0.4	U	1	4/1/2024 9:27:00 PM
Chloroform	0.18	0.15	ppbV	0.88	0.73		1	4/1/2024 9:27:00 PM
Chloromethane	< 0.15	0.15	ppbV	<0.31	0.31	U	1	4/1/2024 9:27:00 PM
cis-1,2-Dichloroethene	0.13	0.15	ppbV	0.52	0.59	J	1	4/1/2024 9:27:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 9:27:00 PM
Cyclohexane	5.3	1.5	ppbV	18	5.2		10	4/2/2024 3:13:00 AM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 9:27:00 PM
Ethyl acetate	0.38	0.15	ppbV	1.4	0.54		1	4/1/2024 9:27:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 9:27:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 9:27:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 9:27:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 9:27:00 PM
Freon 12	0.41	0.15	ppbV	2	0.74		1	4/1/2024 9:27:00 PM
Heptane	2.3	1.5	ppbV	9.4	6.1		10	4/2/2024 3:13:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 9:27:00 PM
Hexane	4.5	1.5	ppbV	16	5.3		10	4/2/2024 3:13:00 AM
Isopropyl alcohol	2.3	1.5	ppbV	5.7	3.7		10	4/2/2024 3:13:00 AM
m&p-Xylene	0.26	0.30	ppbV	1.1	1.3	J	1	4/1/2024 9:27:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 9:27:00 PM
Methyl Ethyl Ketone	2.5	3.0	ppbV	7.4	8.8	J	10	4/2/2024 3:13:00 AM

Qualifiers:
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Limit
 U Samples with CalcVal < MDL

E Value above quantitation range
 N Tentatively identified compounds
 R RPD outside accepted recovery limits
 SC Sub-Contracted
 J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-001

Client Sample ID: 244-SS-01
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15				Analyst: DA
Methyl Isobutyl Ketone	0.12	0.30	ppbV	0.49	1.2	J	1	4/1/2024 9:27:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 9:27:00 PM
Methylene chloride	3.9	1.5	ppbV	14	5.2		10	4/2/2024 3:13:00 AM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 9:27:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 9:27:00 PM
Styrene	< 0.15	0.15	ppbV	<0.64	0.64	U	1	4/1/2024 9:27:00 PM
Tetrachloroethylene	0.11	0.15	ppbV	0.75	1	J	1	4/1/2024 9:27:00 PM
Tetrahydrofuran	< 0.15	0.15	ppbV	<0.44	0.44	U	1	4/1/2024 9:27:00 PM
Toluene	2.6	1.5	ppbV	9.8	5.7		10	4/2/2024 3:13:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 9:27:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 9:27:00 PM
Trichloroethene	0.47	0.15	ppbV	2.5	0.81		1	4/1/2024 9:27:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 9:27:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 9:27:00 PM
Vinyl chloride	< 0.15	0.15	ppbV	<0.38	0.38	U	1	4/1/2024 9:27:00 PM
Surr: Bromofluorobenzene	101	70-130	%Rec				1	4/1/2024 9:27:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-002

Client Sample ID: 244-IA-01

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

FieldSampler	Jesse		
Lab Vacuum In	-1	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:14:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:14:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:14:00 PM
1,1-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:14:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:14:00 PM
1,2,4-Trimethylbenzene	0.10	0.15	ppbV	0.49	0.74	J	1	4/1/2024 7:14:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 7:14:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:14:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:14:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:14:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:14:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 7:14:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:14:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:14:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 7:14:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 7:14:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:14:00 PM
Acetone	26	12	ppbV	63	29		40	4/2/2024 12:21:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:14:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Lab Order: 2404002

Project: 240-260 Lakefront Blvd

Lab ID: 2404002-002

Client Sample ID: 244-IA-01

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Benzene	0.15	0.15	ppbV	0.48	0.48		1	4/1/2024 7:14:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 7:14:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:14:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 7:14:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:14:00 PM
Carbon tetrachloride	0.070	0.030	ppbV	0.44	0.19		1	4/1/2024 7:14:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:14:00 PM
Chloroethane	0.13	0.15	ppbV	0.34	0.4	J	1	4/1/2024 7:14:00 PM
Chloroform	< 0.15	0.15	ppbV	<0.73	0.73	U	1	4/1/2024 7:14:00 PM
Chloromethane	< 0.15	0.15	ppbV	<0.31	0.31	U	1	4/1/2024 7:14:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:14:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:14:00 PM
Cyclohexane	0.53	0.15	ppbV	1.8	0.52		1	4/1/2024 7:14:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 7:14:00 PM
Ethyl acetate	0.16	0.15	ppbV	0.58	0.54		1	4/1/2024 7:14:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:14:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 7:14:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:14:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
Freon 12	0.41	0.15	ppbV	2	0.74		1	4/1/2024 7:14:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:14:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:14:00 PM
Hexane	0.39	0.15	ppbV	1.4	0.53		1	4/1/2024 7:14:00 PM
Isopropyl alcohol	1.9	0.15	ppbV	4.7	0.37		1	4/1/2024 7:14:00 PM
m&p-Xylene	0.23	0.30	ppbV	1	1.3	J	1	4/1/2024 7:14:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 7:14:00 PM
Methyl Ethyl Ketone	9.2	3.0	ppbV	27	8.8		10	4/1/2024 11:39:00 PM

Qualifiers:
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Limit
 U Samples with CalcVal < MDL

E Value above quantitation range
 N Tentatively identified compounds
 R RPD outside accepted recovery limits
 SC Sub-Contracted
 J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-002

Client Sample ID: 244-IA-01
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15		Analyst: DA		
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 7:14:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 7:14:00 PM
Methylene chloride	0.20	0.15	ppbV	0.69	0.52		1	4/1/2024 7:14:00 PM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:14:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 7:14:00 PM
Styrene	0.24	0.15	ppbV	1	0.64		1	4/1/2024 7:14:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
Tetrahydrofuran	7.3	1.5	ppbV	22	4.4		10	4/1/2024 11:39:00 PM
Toluene	0.70	0.15	ppbV	2.6	0.57		1	4/1/2024 7:14:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 7:14:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:14:00 PM
Trichloroethene	< 0.030	0.030	ppbV	<0.16	0.16	U	1	4/1/2024 7:14:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 7:14:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 7:14:00 PM
Vinyl chloride	< 0.040	0.040	ppbV	<0.1	0.1	U	1	4/1/2024 7:14:00 PM
Surr: Bromofluorobenzene	102	70-130	%Rec				1	4/1/2024 7:14:00 PM

Qualifiers: B Analyte detected in the Associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-003

Client Sample ID: 252-SS-02

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

Field Sampler	Jesse		
Lab Vacuum In	-2	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 BY METHOD TO15

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 10:12:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 10:12:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 10:12:00 PM
1,1-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 10:12:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 10:12:00 PM
1,2,4-Trimethylbenzene	0.11	0.15	ppbV	0.54	0.74	J	1	4/1/2024 10:12:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 10:12:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 10:12:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 10:12:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 10:12:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 10:12:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 10:12:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 10:12:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 10:12:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 10:12:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 10:12:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 10:12:00 PM
Acetone	14	3.0	ppbV	32	7.1		10	4/2/2024 3:56:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 10:12:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: 252-SS-02

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-003

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15		Analyst: DA		
Benzene	0.33	0.15	ppbV	1.1	0.48		1	4/1/2024 10:12:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 10:12:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 10:12:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 10:12:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 10:12:00 PM
Carbon tetrachloride	< 0.15	0.15	ppbV	<0.94	0.94	U	1	4/1/2024 10:12:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 10:12:00 PM
Chloroethane	< 0.15	0.15	ppbV	<0.4	0.4	U	1	4/1/2024 10:12:00 PM
Chloroform	0.13	0.15	ppbV	0.63	0.73	J	1	4/1/2024 10:12:00 PM
Chloromethane	0.10	0.15	ppbV	0.21	0.31	J	1	4/1/2024 10:12:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 10:12:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 10:12:00 PM
Cyclohexane	0.17	0.15	ppbV	0.59	0.52		1	4/1/2024 10:12:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 10:12:00 PM
Ethyl acetate	0.46	0.15	ppbV	1.7	0.54		1	4/1/2024 10:12:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 10:12:00 PM
Freon 11	0.19	0.15	ppbV	1.1	0.84		1	4/1/2024 10:12:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 10:12:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
Freon 12	0.42	0.15	ppbV	2.1	0.74		1	4/1/2024 10:12:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 10:12:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 10:12:00 PM
Hexane	0.15	0.15	ppbV	0.53	0.53		1	4/1/2024 10:12:00 PM
Isopropyl alcohol	2.1	1.5	ppbV	5.2	3.7		10	4/2/2024 3:56:00 AM
m&p-Xylene	0.29	0.30	ppbV	1.3	1.3	J	1	4/1/2024 10:12:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 10:12:00 PM
Methyl Ethyl Ketone	5.2	3.0	ppbV	15	8.8		10	4/2/2024 3:56:00 AM

Qualifiers:
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Limit
 U Samples with CalcVal < MDL

E Value above quantitation range
 N Tentatively identified compounds
 R RPD outside accepted recovery limits
 SC Sub-Contracted
 J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-003

Client Sample ID: 252-SS-02

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15		Analyst: DA		
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 10:12:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 10:12:00 PM
Methylene chloride	3.1	1.5	ppbV	11	5.2		10	4/2/2024 3:56:00 AM
o-Xylene	0.10	0.15	ppbV	0.43	0.65	J	1	4/1/2024 10:12:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 10:12:00 PM
Styrene	0.14	0.15	ppbV	0.6	0.64	J	1	4/1/2024 10:12:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
Tetrahydrofuran	2.9	1.5	ppbV	8.6	4.4		10	4/2/2024 3:56:00 AM
Toluene	2.3	1.5	ppbV	8.7	5.7		10	4/2/2024 3:56:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 10:12:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 10:12:00 PM
Trichloroethene	0.32	0.15	ppbV	1.7	0.81		1	4/1/2024 10:12:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 10:12:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 10:12:00 PM
Vinyl chloride	< 0.15	0.15	ppbV	<0.38	0.38	U	1	4/1/2024 10:12:00 PM
Surr: Bromofluorobenzene	97.0	70-130	%Rec				1	4/1/2024 10:12:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Lab Order: 2404002

Project: 240-260 Lakefront Blvd

Lab ID: 2404002-004

Client Sample ID: 252-1A-02

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

Field Sampler	Jesse		
Lab Vacuum In	-1	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:59:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:59:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:59:00 PM
1,1-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:59:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:59:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:59:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 7:59:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:59:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:59:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:59:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:59:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 7:59:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:59:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:59:00 PM
1,4-Dioxane	0.11	0.30	ppbV	0.4	1.1	J	1	4/1/2024 7:59:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 7:59:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:59:00 PM
Acetone	38	12	ppbV	91	29		40	4/2/2024 1:46:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:59:00 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- RL Reporting Limit
- U Samples with CalcVal < MDL

- E Value above quantitation range
- N Tentatively identified compounds
- R RPD outside accepted recovery limits
- SC Sub-Contracted
- J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Lab Order: 2404002

Project: 240-260 Lakefront Blvd

Lab ID: 2404002-004

Client Sample ID: 252-IA-02

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Benzene	0.14	0.15	ppbV	0.45	0.48	J	1	4/1/2024 7:59:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 7:59:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:59:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 7:59:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:59:00 PM
Carbon tetrachloride	0.070	0.030	ppbV	0.44	0.19		1	4/1/2024 7:59:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:59:00 PM
Chloroethane	0.19	0.15	ppbV	0.5	0.4		1	4/1/2024 7:59:00 PM
Chloroform	< 0.15	0.15	ppbV	<0.73	0.73	U	1	4/1/2024 7:59:00 PM
Chloromethane	0.25	0.15	ppbV	0.52	0.31		1	4/1/2024 7:59:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:59:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:59:00 PM
Cyclohexane	0.34	0.15	ppbV	1.2	0.52		1	4/1/2024 7:59:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 7:59:00 PM
Ethyl acetate	0.19	0.15	ppbV	0.68	0.54		1	4/1/2024 7:59:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:59:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 7:59:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:59:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
Freon 12	0.40	0.15	ppbV	2	0.74		1	4/1/2024 7:59:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:59:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:59:00 PM
Hexane	0.16	0.15	ppbV	0.56	0.53		1	4/1/2024 7:59:00 PM
Isopropyl alcohol	2.8	1.5	ppbV	6.9	3.7		10	4/2/2024 1:04:00 AM
m&p-Xylene	0.17	0.30	ppbV	0.74	1.3	J	1	4/1/2024 7:59:00 PM
Methyl Butyl Ketone	0.10	0.30	ppbV	0.41	1.2	J	1	4/1/2024 7:59:00 PM
Methyl Ethyl Ketone	20	3.0	ppbV	59	8.8		10	4/2/2024 1:04:00 AM

Qualifiers:
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Limit
 U Samples with CalcVal < MDL

E Value above quantitation range
 N Tentatively identified compounds
 R RPD outside accepted recovery limits
 SC Sub-Contracted
 J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Lab Order: 2404002

Project: 240-260 Lakefront Blvd

Lab ID: 2404002-004

Client Sample ID: 252-1A-02

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15		Analyst: DA		
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 7:59:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 7:59:00 PM
Methylene chloride	0.21	0.15	ppbV	0.73	0.52		1	4/1/2024 7:59:00 PM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:59:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 7:59:00 PM
Styrene	0.59	0.15	ppbV	2.5	0.64		1	4/1/2024 7:59:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
Tetrahydrofuran	14	1.5	ppbV	40	4.4		10	4/2/2024 1:04:00 AM
Toluene	1.3	0.15	ppbV	4.9	0.57		1	4/1/2024 7:59:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 7:59:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:59:00 PM
Trichloroethene	< 0.030	0.030	ppbV	<0.16	0.16	U	1	4/1/2024 7:59:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 7:59:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 7:59:00 PM
Vinyl chloride	< 0.040	0.040	ppbV	<0.1	0.1	U	1	4/1/2024 7:59:00 PM
Surr: Bromofluorobenzene	107	70-130	%Rec				1	4/1/2024 7:59:00 PM

Qualifiers:

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Lab Order: 2404002

Project: 240-260 Lakefront Blvd

Lab ID: 2404002-005

Client Sample ID: OA-01

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

Field Sampler	Jesse		
Lab Vacuum In	-1	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 8:43:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 8:43:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 8:43:00 PM
1,1-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 8:43:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 8:43:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 8:43:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 8:43:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 8:43:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 8:43:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 8:43:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 8:43:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 8:43:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 8:43:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 8:43:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 8:43:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 8:43:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 8:43:00 PM
Acetone	3.1	3.0	ppbV	7.4	7.1		10	4/2/2024 2:28:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 8:43:00 PM

Qualifiers:
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Limit
 U Samples with CalcVal < MDL

E Value above quantitation range
 N Tentatively identified compounds
 R RPD outside accepted recovery limits
 SC Sub-Contracted
 J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: OA-01

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-005

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15				Analyst: DA
Benzene	< 0.15	0.15	ppbV	<0.48	0.48	U	1	4/1/2024 8:43:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 8:43:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 8:43:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 8:43:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 8:43:00 PM
Carbon tetrachloride	0.070	0.030	ppbV	0.44	0.19		1	4/1/2024 8:43:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 8:43:00 PM
Chloroethane	< 0.15	0.15	ppbV	<0.4	0.4	U	1	4/1/2024 8:43:00 PM
Chloroform	< 0.15	0.15	ppbV	<0.73	0.73	U	1	4/1/2024 8:43:00 PM
Chloromethane	0.40	0.15	ppbV	0.83	0.31		1	4/1/2024 8:43:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 8:43:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 8:43:00 PM
Cyclohexane	< 0.15	0.15	ppbV	<0.52	0.52	U	1	4/1/2024 8:43:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 8:43:00 PM
Ethyl acetate	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 8:43:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 8:43:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 8:43:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 8:43:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
Freon 12	0.40	0.15	ppbV	2	0.74		1	4/1/2024 8:43:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 8:43:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 8:43:00 PM
Hexane	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 8:43:00 PM
Isopropyl alcohol	0.45	0.15	ppbV	1.1	0.37		1	4/1/2024 8:43:00 PM
m&p-Xylene	< 0.30	0.30	ppbV	<1.3	1.3	U	1	4/1/2024 8:43:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 8:43:00 PM
Methyl Ethyl Ketone	0.18	0.30	ppbV	0.53	0.88	J	1	4/1/2024 8:43:00 PM

Qualifiers:
 B Analyte detected in the associated Method Blank
 R Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Limit
 U Samples with CalcVal < MDL

E Value above quantitation range
 N Tentatively identified compounds
 R RPD outside accepted recovery limits
 SC Sub-Contracted
 J Analyte detected below quantitation limits

Original

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

QUALITY CONTROL SUMMARY

Tune File : C:\msdchem\1\data\AV040101.D

Tune Time : 1 Apr 2024 10:56 am

Daily Calibration File : C:\msdchem\1\data\AV040102.D

		(BFB)	(IS1)	(IS2)	(IS3)
			36643	198307	188233
File	Sample	Surrogate Recovery %	Internal Standard Responses		
=====					
AV040103.D					
	ALCS1UG-040124	103	37087	196134	191254

AV040104.D					
	ALCS1UGD-040124	101	36922	204204	192631

AV040105.D					
	AMB1UG-040124	90	37124	194036	184973

AV040112.D					
	2404002-002A	102	34741	194034	185346

AV040113.D					
	2404002-004A	107	37326	198229	193279

AV040114.D					
	2404002-005A	98	36634	197793	183952

AV040115.D					
	2404002-001A	101	36602	198458	192172

AV040116.D					
	2404002-003A	97	37192	200904	191771

AV040118.D					
	2404002-002A 10X	92	40810	223245	193219

AV040119.D					
	2404002-002A 40X	90	39449	213246	182720

AV040120.D					
	2404002-004A 10X	94	38878	212062	184759

AV040121.D					
	2404002-004A 40X	88	37217	208722	179021

AV040122.D					
	2404002-005A 10X	89	37744	202266	178005

AV040123.D					
	2404002-001A 10X	93	36786	200971	171681

AV040124.D					
	2404002-003A 10X	91	36198	198053	169884

(fails) - fails 24hr time check * - fails criteria

Created: Wed Apr 17 09:47:59 2024 Instrument 1



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

Batch ID: R1245

Sample ID: AMB1UG-040124		Sample Type: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245					
Client ID: PBW	Batch ID: R1245		TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11559					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	< 0.15	0.15									U
1,1,1,2,2-Tetrachloroethane	< 0.15	0.15									U
1,1,2-Trichloroethane	< 0.15	0.15									U
1,1-Dichloroethane	< 0.15	0.15									U
1,1-Dichloroethene	< 0.040	0.040									U
1,2,4-Trichlorobenzene	< 0.15	0.15									U
1,2,4-Trimethylbenzene	< 0.15	0.15									U
1,2-Dibromoethane	< 0.15	0.15									U
1,2-Dichlorobenzene	< 0.15	0.15									U
1,2-Dichloroethane	< 0.15	0.15									U
1,2-Dichloropropane	< 0.15	0.15									U
1,3,5-Trimethylbenzene	< 0.15	0.15									U
1,3-butadiene	< 0.15	0.15									U
1,3-Dichlorobenzene	< 0.15	0.15									U
1,4-Dichlorobenzene	< 0.15	0.15									U
1,4-Dioxane	< 0.30	0.30									U
2,2,4-Trimethylpentane	< 0.15	0.15									U
4-ethyltoluene	< 0.15	0.15									U
Acetone	< 0.30	0.30									U
Allyl chloride	< 0.15	0.15									U
Benzene	< 0.15	0.15									U
Benzyl chloride	< 0.15	0.15									U
Bromodichloromethane	< 0.15	0.15									U
Bromoform	< 0.15	0.15									U
Bromomethane	< 0.15	0.15									U
Carbon disulfide	< 0.15	0.15									U

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
J Analyte detected below quantitation limits

Original



Centek Laboratories
A Division of SanAir Technologies Laboratory



SanAir Technologies DBA Centek Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

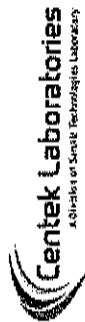
Batch ID: R1245

Sample ID: AMB1UG-040124	SampType: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: PBW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11559						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Carbon tetrachloride	<0.030	0.030									U
Chlorobenzene	<0.15	0.15									U
Chloroethane	<0.15	0.15									U
Chloroform	<0.15	0.15									U
Chloromethane	<0.15	0.15									U
cis-1,2-Dichloroethene	<0.040	0.040									U
cis-1,3-Dichloropropene	<0.15	0.15									U
Cyclohexane	<0.15	0.15									U
Dibromochloromethane	<0.15	0.15									U
Ethyl acetate	<0.15	0.15									U
Ethylbenzene	<0.15	0.15									U
Freon 11	<0.15	0.15									U
Freon 113	<0.15	0.15									U
Freon 114	<0.15	0.15									U
Freon 12	<0.15	0.15									U
Heptane	<0.15	0.15									U
Hexachloro-1,3-butadiene	<0.15	0.15									U
Hexane	<0.15	0.15									U
Isopropyl alcohol	<0.15	0.15									U
m&p-Xylene	<0.30	0.30									U
Methyl Butyl Ketone	<0.30	0.30									U
Methyl Ethyl Ketone	<0.30	0.30									U
Methyl Isobutyl Ketone	<0.30	0.30									U
Methyl tert-butyl ether	<0.15	0.15									U
Methylene chloride	<0.15	0.15									U
o-Xylene	<0.15	0.15									U

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceed
ND	Not Detected at the Reporting Limit		R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits		SC	Sub-Contracted	J	Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 240-4002
17-Apr-24

Client: C & S Engineers, Inc.
Project: 240-260 Lakefront Blvd

Batch ID: R1245

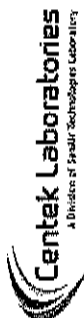
Sample ID: AMB1UG-040124	Sample Type: MBLK	TestCode: 0.20_NYS	Units: ppbv	Prep Date:	RunNo: 1245						
Client ID: PBW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11559						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	< 0.15	0.15									U
Styrene	< 0.15	0.15									U
Tetrachloroethylene	< 0.15	0.15									U
Tetrahydrofuran	< 0.15	0.15									U
Toluene	< 0.15	0.15									U
trans-1,2-Dichloroethene	< 0.15	0.15									U
trans-1,3-Dichloropropene	< 0.15	0.15									U
Trichloroethene	< 0.030	0.030									U
Vinyl acetate	< 0.15	0.15									U
Vinyl Bromide	< 0.15	0.15									U
Vinyl chloride	< 0.040	0.040									U
Surr: Bromofluorobenzene	0.90		1.000		90.0	70	130				S

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Corrected

H Holding times for preparation or analysis exceed
RL Reporting Limit
I Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002

17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

Batch ID: R1245

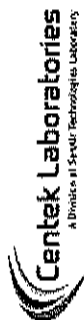
Sample ID: ALCS1UG-040124	Samp Type: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11560						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.2	0.15	1.000	0	120	70	130				
1,1,2,2-Tetrachloroethane	1.1	0.15	1.000	0	107	70	130				
1,1,2-Trichloroethane	1.0	0.15	1.000	0	105	70	130				
1,1-Dichloroethane	0.83	0.15	1.000	0	83.0	70	130				
1,1-Dichloroethene	0.89	0.040	1.000	0	89.0	70	130				
1,2,4-Trichlorobenzene	1.3	0.15	1.000	0	126	70	130				
1,2,4-Trimethylbenzene	1.0	0.15	1.000	0	105	70	130				
1,2-Dibromoethane	1.1	0.15	1.000	0	106	70	130				
1,2-Dichlorobenzene	1.0	0.15	1.000	0	101	70	130				
1,2-Dichloroethane	0.86	0.15	1.000	0	86.0	70	130				
1,2-Dichloropropane	0.96	0.15	1.000	0	96.0	70	130				
1,3,5-Trimethylbenzene	1.0	0.15	1.000	0	100	70	130				
1,3-butadiene	0.86	0.15	1.000	0	86.0	70	130				
1,3-Dichlorobenzene	1.1	0.15	1.000	0	110	70	130				
1,4-Dichlorobenzene	1.1	0.15	1.000	0	109	70	130				
1,4-Dioxane	1.0	0.30	1.000	0	100	70	130				
2,2,4-trimethylpentane	0.94	0.15	1.000	0	94.0	70	130				
4-ethyltoluene	1.0	0.15	1.000	0	104	70	130				
Acetone	0.76	0.30	1.000	0	76.0	70	130				
Allyl chloride	0.80	0.15	1.000	0	80.0	70	130				
Benzene	0.99	0.15	1.000	0	99.0	70	130				
Benzyl chloride	0.82	0.15	1.000	0	82.0	70	130				
Bromodichloromethane	1.3	0.15	1.000	0	129	70	130				
Bromoform	1.4	0.15	1.000	0	139	70	130				
Bromomethane	0.88	0.15	1.000	0	88.0	70	130				
Carbon disulfide	0.85	0.15	1.000	0	85.0	70	130				S

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantization range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
J Analyte detected below quantification limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UG-040124	SampType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11560						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	1.5	0.030	1.000	0	150	70	130				S
Chlorobenzene	1.0	0.15	1.000	0	100	70	130				
Chloroethane	0.88	0.15	1.000	0	88.0	70	130				
Chloroform	0.89	0.15	1.000	0	89.0	70	130				
Chloromethane	0.90	0.15	1.000	0	90.0	70	130				
cis-1,2-Dichloroethene	0.75	0.040	1.000	0	75.0	70	130				
cis-1,3-Dichloropropene	1.0	0.15	1.000	0	103	70	130				
Cyclohexane	0.95	0.15	1.000	0	95.0	70	130				
Dibromochloromethane	1.3	0.15	1.000	0	130	70	130				
Ethyl acetate	1.2	0.15	1.000	0	123	70	130				
Ethylbenzene	1.0	0.15	1.000	0	100	70	130				
Freon 11	0.91	0.15	1.000	0	91.0	70	130				
Freon 113	0.86	0.15	1.000	0	86.0	70	130				
Freon 114	0.96	0.15	1.000	0	96.0	70	130				
Freon 12	0.87	0.15	1.000	0	87.0	70	130				
Heptane	0.95	0.15	1.000	0	95.0	70	130				
Hexachloro-1,3-butadiene	1.2	0.15	1.000	0	115	70	130				
Hexane	0.84	0.15	1.000	0	84.0	70	130				
Isopropyl alcohol	0.77	0.15	1.000	0	77.0	70	130				
m&p-Xylene	2.0	0.30	2.000	0	98.5	70	130				
Methyl Butyl Ketone	0.93	0.30	1.000	0	93.0	70	130				
Methyl Ethyl Ketone	0.80	0.30	1.000	0	80.0	70	130				
Methyl Isobutyl Ketone	0.92	0.30	1.000	0	92.0	70	130				
Methyl tert-butyl ether	0.76	0.15	1.000	0	76.0	70	130				
Methylene chloride	0.83	0.15	1.000	0	83.0	70	130				
o-Xylene	0.99	0.15	1.000	0	99.0	70	130				

Qualifiers: B Analyte detected in the associated Method Block
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantization range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding time for preparation or analysis exceed
RL Reporting Limit
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WOF#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.
Project: 240-260 Lakefront Blvd

Batch ID: R1245

Sample ID:	ALCS1UG-040124	Samp Type: LCS	Test Code: 0.20_NYS	Units: ppbv	Prep Date:	Run No: 1245
Client ID:	LCSW	Batch ID: R1245	PQL	SPK value	SPK Ref Val	Seq No: 11560
Analyte	Result	%REC	Low Limit	High Limit	RPD Ref Val	RPD Limit
Propylene	0.77	77.0	70	130		
Styrene	1.0	100	70	130		
Tetrachloroethylene	1.0	100	70	130		
Tetrahydrofuran	0.78	78.0	70	130		
Toluene	0.97	97.0	70	130		
trans-1,2-Dichloroethene	0.86	86.0	70	130		
trans-1,3-Dichloropropene	0.97	97.0	70	130		
Trichloroethene	1.1	108	70	130		
Vinyl acetate	0.54	54.0	70	130		
Vinyl Bromide	0.86	86.0	70	130		
Vinyl chloride	0.76	76.0	70	130		
Surf: Bromofluorobenzene	1.0	103	70	130		

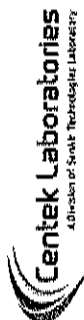
S

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantification range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
J Analyte detected below quantification limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002

17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UGD-040124		SampType: LCSD		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 1245		
Client ID: LCSS02	Batch ID: R1245	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte												
1,1,1-Trichloroethane		1.2	0.15	1.000	0	122	70	130	1.200	1.65	30	
1,1,2,2-Tetrachloroethane		1.1	0.15	1.000	0	110	70	130	1.070	2.76	30	
1,1,2-Trichloroethane		1.0	0.15	1.000	0	100	70	130	1.050	4.88	30	
1,1-Dichloroethane		0.85	0.15	1.000	0	85.0	70	130	0.8300	2.38	30	
1,1-Dichloroethene		0.91	0.040	1.000	0	91.0	70	130	0.8900	2.22	30	
1,2,4-Trichlorobenzene		1.0	0.15	1.000	0	100	70	130	1.260	23.0	30	
1,2,4-Trimethylbenzene		1.0	0.15	1.000	0	105	70	130	1.050	0	30	
1,2-Dibromoethane		1.1	0.15	1.000	0	107	70	130	1.060	0.939	30	
1,2-Dichlorobenzene		1.0	0.15	1.000	0	100	70	130	1.010	0.995	30	
1,2-Dichloroethane		0.89	0.15	1.000	0	89.0	70	130	0.8600	3.43	30	
1,2-Dichloropropane		0.95	0.15	1.000	0	95.0	70	130	0.9600	1.05	30	
1,3,5-Trimethylbenzene		1.0	0.15	1.000	0	101	70	130	1.000	0.995	30	
1,3-butadiene		0.83	0.15	1.000	0	83.0	70	130	0.8600	3.55	30	
1,3-Dichlorobenzene		1.1	0.15	1.000	0	106	70	130	1.100	3.70	30	
1,4-Dichlorobenzene		1.1	0.15	1.000	0	107	70	130	1.090	1.85	30	
1,4-Dioxane		0.98	0.30	1.000	0	98.0	70	130	1.000	2.02	30	
2,2,4-trimethylpentane		0.93	0.15	1.000	0	93.0	70	130	0.9400	1.07	30	
4-ethyltoluene		1.0	0.15	1.000	0	104	70	130	1.040	0	30	
Acetone		0.85	0.30	1.000	0	85.0	70	130	0.7600	11.2	30	
Allyl chloride		0.82	0.15	1.000	0	82.0	70	130	0.8000	2.47	30	
Benzene		0.96	0.15	1.000	0	96.0	70	130	0.9900	3.08	30	
Benzyl chloride		0.78	0.15	1.000	0	78.0	70	130	0.8200	5.00	30	
Bromodichloromethane		1.3	0.15	1.000	0	128	70	130	1.290	0.778	30	
Bromoform		1.4	0.15	1.000	0	145	70	130	1.390	4.23	30	S
Bromomethane		0.86	0.15	1.000	0	86.0	70	130	0.8800	2.30	30	
Carbon disulfide		0.85	0.15	1.000	0	85.0	70	130	0.8500	0	30	

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
F Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.
Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UGD-040124	Sample Type: LCSD	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSS02	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11561						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	1.6	0.030	1.000	0	158	70	130	1.500	5.19	30	S
Chlorobenzene	1.0	0.15	1.000	0	101	70	130	1.000	0.995	30	
Chloroethane	0.84	0.15	1.000	0	84.0	70	130	0.8800	4.65	30	
Chloroform	0.91	0.15	1.000	0	91.0	70	130	0.8900	2.22	30	
Chloromethane	0.89	0.15	1.000	0	89.0	70	130	0.9000	1.12	30	
cis-1,2-Dichloroethene	0.75	0.040	1.000	0	75.0	70	130	0.7500	0	30	
cis-1,3-Dichloropropene	1.0	0.15	1.000	0	103	70	130	1.030	0	30	
Cyclohexane	0.95	0.15	1.000	0	95.0	70	130	0.9500	0	30	
Dibromochloromethane	1.4	0.15	1.000	0	144	70	130	1.300	10.2	30	S
Ethyl acetate	1.3	0.15	1.000	0	129	70	130	1.230	4.76	30	
Ethylbenzene	1.0	0.15	1.000	0	102	70	130	1.000	1.98	30	
Freon 11	0.91	0.15	1.000	0	91.0	70	130	0.9100	0	30	
Freon 113	0.89	0.15	1.000	0	89.0	70	130	0.8600	3.43	30	
Freon 114	0.96	0.15	1.000	0	96.0	70	130	0.9600	0	30	
Freon 12	0.88	0.15	1.000	0	88.0	70	130	0.8700	1.14	30	
Heptane	0.97	0.15	1.000	0	97.0	70	130	0.9500	2.08	30	
Hexachloro-1,3-butadiene	1.1	0.15	1.000	0	110	70	130	1.150	4.44	30	
Hexane	0.86	0.15	1.000	0	86.0	70	130	0.8400	2.35	30	
Isopropyl alcohol	0.77	0.15	1.000	0	77.0	70	130	0.7700	0	30	
m,p-Xylene	2.0	0.30	2.000	0	102	70	130	1.970	3.49	30	
Methyl Butyl Ketone	0.94	0.30	1.000	0	94.0	70	130	0.9300	1.07	30	
Methyl Ethyl Ketone	0.90	0.30	1.000	0	90.0	70	130	0.8000	11.8	30	
Methyl Isobutyl Ketone	0.94	0.30	1.000	0	94.0	70	130	0.9200	2.15	30	
Methyl tert-butyl ether	0.78	0.15	1.000	0	78.0	70	130	0.7600	2.60	30	
Methylene chloride	0.83	0.15	1.000	0	83.0	70	130	0.8300	0	30	
o-Xylene	1.0	0.15	1.000	0	101	70	130	0.9900	2.00	30	

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.
Project: 240-260 Lakefront Blvd

BatchID: R1245

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	0.81	0.15	1.000	0	81.0	70	130	0.7700	5.06	30	
Styrene	1.0	0.15	1.000	0	100	70	130	1.000	0	30	
Tetrachloroethylene	1.0	0.15	1.000	0	100	70	130	1.000	0	30	
Tetrahydrofuran	0.79	0.15	1.000	0	79.0	70	130	0.7800	1.27	30	
Toluene	0.97	0.15	1.000	0	97.0	70	130	0.9700	0	30	
trans-1,2-Dichloroethene	0.88	0.15	1.000	0	88.0	70	130	0.8600	2.30	30	
trans-1,3-Dichloropropene	0.97	0.15	1.000	0	97.0	70	130	0.9700	0	30	
Trichloroethene	1.0	0.030	1.000	0	105	70	130	1.080	2.82	30	
Vinyl acetate	0.55	0.15	1.000	0	55.0	70	130	0.5400	1.83	30	S
Vinyl Bromide	0.79	0.15	1.000	0	79.0	70	130	0.8600	8.48	30	
Vinyl chloride	0.75	0.040	1.000	0	75.0	70	130	0.7600	1.32	30	
Surf: Bromofluorobenzene	1.0		1.000		101	70	130		0	0	

RunNo: 1245
SeqNo: 11561

Prep Date:
Analysis Date: 4/1/2024

Units: ppbv

TestCode: 0.20_NYS
TestNo: TO-15

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
I Analyte detected below quantitation limits

Original

Compound	Amt	IDL #1	IDL #2	IDL #3	IDL #4	IDL #5	IDL #6	IDL #7	AVG	StdDev	%Rec	IDL
Propylene	0.3	0.31	0.33	0.32	0.26	0.3	0.31	0.33	0.31	0.02	102.9%	0.076
Freon 12	0.3	0.33	0.31	0.31	0.31	0.32	0.31	0.31	0.31	0.01	104.8%	0.025
Chloromethane	0.3	0.31	0.31	0.3	0.26	0.31	0.34	0.33	0.31	0.03	102.9%	0.080
Freon 114	0.3	0.32	0.32	0.32	0.32	0.34	0.32	0.33	0.32	0.01	108.1%	0.025
Vinyl Chloride	0.3	0.34	0.32	0.31	0.33	0.31	0.31	0.3	0.32	0.01	105.7%	0.043
Butane	0.3	0.31	0.32	0.33	0.3	0.31	0.32	0.33	0.32	0.01	105.7%	0.035
1,3-butadiene	0.3	0.33	0.33	0.33	0.28	0.39	0.36	0.35	0.34	0.03	112.9%	0.106
Bromomethane	0.3	0.33	0.31	0.33	0.33	0.36	0.34	0.31	0.33	0.02	110.0%	0.054
Chloroethane	0.3	0.39	0.29	0.29	0.35	0.28	0.32	0.34	0.32	0.04	107.6%	0.125
Ethanol	0.3	0.34	0.3	0.3	0.26	0.35	0.28	0.34	0.31	0.03	103.3%	0.107
Acrolein	0.3	0.33	0.28	0.27	0.28	0.25	0.3	0.23	0.28	0.03	92.4%	0.102
Vinyl Bromide	0.3	0.34	0.35	0.33	0.34	0.35	0.33	0.32	0.34	0.01	112.4%	0.035
Freon 11	0.3	0.32	0.33	0.34	0.31	0.34	0.31	0.32	0.32	0.01	108.1%	0.040
Acetone	0.3	0.39	0.27	0.31	0.3	0.27	0.33	0.26	0.30	0.05	101.4%	0.143
Pentane	0.3	0.29	0.29	0.29	0.27	0.31	0.39	0.29	0.30	0.04	101.4%	0.124
Isopropyl alcohol	0.3	0.3	0.28	0.28	0.28	0.26	0.27	0.26	0.28	0.01	91.9%	0.044
1,1-dichloroethene	0.3	0.3	0.31	0.32	0.3	0.34	0.31	0.32	0.31	0.01	104.8%	0.044
Freon 113	0.3	0.32	0.31	0.32	0.31	0.32	0.31	0.31	0.31	0.01	104.8%	0.017
t-Butyl alcohol	0.3	0.28	0.3	0.29	0.26	0.29	0.27	0.3	0.28	0.02	94.8%	0.048
Methylene chloride	0.3	0.35	0.35	0.31	0.33	0.33	0.34	0.33	0.33	0.01	111.4%	0.044
Allyl chloride	0.3	0.29	0.29	0.29	0.27	0.26	0.23	0.29	0.27	0.02	91.4%	0.072
Carbon disulfide	0.3	0.34	0.33	0.33	0.33	0.33	0.3	0.31	0.32	0.01	108.1%	0.044
trans-1,2-dichloroethene	0.3	0.28	0.3	0.31	0.29	0.31	0.28	0.3	0.30	0.01	98.6%	0.040
methyl tert-butyl ether	0.3	0.28	0.3	0.29	0.27	0.3	0.27	0.29	0.29	0.01	95.2%	0.040
1,1-dichloroethane	0.3	0.31	0.27	0.28	0.29	0.31	0.29	0.28	0.29	0.02	96.7%	0.048
Vinyl acetate	0.3	0.28	0.28	0.29	0.27	0.29	0.26	0.29	0.28	0.01	93.3%	0.036
Methyl Ethyl Ketone	0.3	0.31	0.3	0.34	0.3	0.28	0.29	0.25	0.30	0.03	98.6%	0.087
cis-1,2-dichloroethene	0.3	0.35	0.34	0.34	0.26	0.35	0.27	0.27	0.31	0.04	103.8%	0.133
Hexane	0.3	0.28	0.29	0.27	0.25	0.26	0.24	0.27	0.27	0.02	88.6%	0.054
Ethyl acetate	0.3	0.28	0.28	0.29	0.26	0.29	0.24	0.27	0.27	0.02	91.0%	0.057
Chloroform	0.3	0.31	0.3	0.31	0.3	0.32	0.29	0.29	0.30	0.01	101.0%	0.035
Tetrahydrofuran	0.3	0.29	0.3	0.29	0.29	0.27	0.27	0.31	0.29	0.01	96.2%	0.046

Compound	Amt	IDL #1	IDL #2	IDL #3	IDL #4	IDL #5	IDL #6	IDL #7	AVG	StdDev	%Rec	IDL
1,2-dichloroethane	0.3	0.3	0.26	0.3	0.29	0.32	0.28	0.29	0.29	0.02	97.1%	0.059
1,1,1-trichloroethane	0.3	0.3	0.29	0.29	0.32	0.31	0.34	0.32	0.31	0.02	103.3%	0.057
Cyclohexane	0.3	0.27	0.29	0.29	0.3	0.29	0.31	0.31	0.29	0.01	98.1%	0.044
Carbon tetrachloride	0.3	0.31	0.3	0.29	0.34	0.31	0.36	0.32	0.32	0.02	106.2%	0.076
Benzene	0.3	0.32	0.3	0.3	0.32	0.32	0.34	0.32	0.32	0.01	105.7%	0.043
Methyl methacrylate	0.3	0.31	0.31	0.3	0.31	0.31	0.27	0.26	0.30	0.02	98.6%	0.068
1,4-dioxane	0.3	0.28	0.29	0.29	0.28	0.29	0.29	0.28	0.29	0.01	95.2%	0.017
2,2,4-trimethylpentane	0.3	0.29	0.29	0.28	0.3	0.29	0.3	0.3	0.29	0.01	97.6%	0.024
Heptane	0.3	0.28	0.27	0.27	0.26	0.29	0.29	0.29	0.28	0.01	92.9%	0.038
Trichloroethene	0.3	0.33	0.32	0.3	0.34	0.32	0.35	0.32	0.33	0.02	108.6%	0.051
1,2-dichloropropane	0.3	0.31	0.3	0.29	0.33	0.31	0.34	0.32	0.31	0.02	104.8%	0.054
Bromodichloromethane	0.3	0.31	0.29	0.28	0.32	0.3	0.34	0.31	0.31	0.02	102.4%	0.062
cis-1,3-dichloropropene	0.3	0.28	0.25	0.25	0.27	0.26	0.29	0.26	0.27	0.02	88.6%	0.048
trans-1,3-dichloropropene	0.3	0.27	0.25	0.25	0.25	0.26	0.27	0.28	0.26	0.01	87.1%	0.038
1,1,2-trichloroethane	0.3	0.31	0.31	0.31	0.32	0.32	0.33	0.31	0.32	0.01	105.2%	0.025
Toluene	0.3	0.29	0.3	0.3	0.3	0.29	0.31	0.3	0.30	0.01	99.5%	0.022
Methyl Isobutyl Ketone	0.3	0.29	0.27	0.29	0.29	0.28	0.31	0.32	0.29	0.02	97.6%	0.054
Dibromochloromethane	0.3	0.31	0.28	0.28	0.32	0.27	0.33	0.32	0.30	0.02	100.5%	0.076
Methyl Butyl Ketone	0.3	0.27	0.28	0.29	0.27	0.28	0.26	0.27	0.27	0.01	91.4%	0.031
1,2-dibromoethane	0.3	0.28	0.3	0.28	0.31	0.27	0.33	0.33	0.30	0.02	100.0%	0.077
Tetrachloroethylene	0.3	0.35	0.33	0.32	0.35	0.31	0.36	0.36	0.34	0.02	113.3%	0.063
Chlorobenzene	0.3	0.32	0.31	0.29	0.31	0.3	0.32	0.33	0.31	0.01	103.8%	0.042
Ethylbenzene	0.3	0.28	0.29	0.26	0.27	0.28	0.28	0.29	0.28	0.01	92.9%	0.034
m&p-xylene	0.6	0.56	0.55	0.52	0.53	0.55	0.56	0.55	0.55	0.02	91.0%	0.048
Nonane	0.3	0.27	0.26	0.25	0.26	0.26	0.27	0.28	0.26	0.01	88.1%	0.031
Styrene	0.3	0.28	0.24	0.25	0.25	0.25	0.28	0.3	0.26	0.02	88.1%	0.070
Bromoform	0.3	0.32	0.25	0.25	0.3	0.26	0.33	0.32	0.29	0.04	96.7%	0.112
o-xylene	0.3	0.3	0.27	0.25	0.31	0.27	0.32	0.33	0.29	0.03	97.6%	0.094
Cumene	0.3	0.27	0.23	0.23	0.27	0.23	0.27	0.27	0.25	0.02	84.3%	0.067
1,1,2,2-tetrachloroethane	0.3	0.32	0.29	0.29	0.34	0.29	0.34	0.34	0.32	0.03	105.2%	0.079
Propylbenzene	0.3	0.26	0.23	0.22	0.26	0.23	0.27	0.27	0.25	0.02	82.9%	0.066
p-Chlorotoluene	0.3	0.27	0.24	0.25	0.29	0.24	0.29	0.3	0.27	0.03	89.5%	0.080
o-ethyltoluene	0.3	0.25	0.22	0.23	0.26	0.21	0.27	0.27	0.24	0.02	81.4%	0.077

SanAir/Centek Laboratory
IDL Study

1ug/m3 Detection Limit
January 2023

Method TO-15
Units=ppb

Compound	Amt	IDL #1	IDL #2	IDL #3	IDL #4	IDL #5	IDL #6	IDL #7	AVG	StdDev	%Rec	IDL
1,3,5-trimethylbenzene	0.3	0.28	0.24	0.26	0.28	0.24	0.29	0.31	0.27	0.03	90.5%	0.082
1,2,4-trimethylbenzene	0.3	0.28	0.22	0.23	0.26	0.22	0.26	0.27	0.25	0.02	82.9%	0.078
1,3-dichlorobenzene	0.3	0.29	0.26	0.27	0.29	0.25	0.3	0.32	0.28	0.02	94.3%	0.076
benzyl chloride	0.3	0.24	0.28	0.32	0.29	0.23	0.27	0.29	0.27	0.03	91.4%	0.097
1,4-dichlorobenzene	0.3	0.28	0.24	0.26	0.31	0.23	0.29	0.32	0.28	0.03	91.9%	0.107
1,2,3-trimethylbenzene	0.3	0.26	0.25	0.24	0.24	0.19	0.27	0.27	0.25	0.03	81.9%	0.087
1,2-dichlorobenzene	0.3	0.32	0.27	0.26	0.3	0.25	0.32	0.32	0.29	0.03	97.1%	0.097
1,2,4-trichlorobenzene	0.3	0.26	0.31	0.3	0.28	0.3	0.3	0.31	0.29	0.02	98.1%	0.057
Naphthalene	0.3	0.27	0.32	0.26	0.26	0.29	0.28	0.26	0.28	0.02	92.4%	0.070
Hexachloro-1,3-butadiene	0.3	0.35	0.31	0.33	0.34	0.31	0.36	0.37	0.34	0.02	112.9%	0.074

Centek Laboratories
IDL Study

0.20 ug/m3 Detection Limit
January 2023

Method TO-15
Units=ppb

Compound	Amt	IDL #1	IDL #2	IDL #3	IDL #4	IDL #5	IDL #6	IDL #7	AVG	StdDev	%Rec	IDL
Vinyl Chloride	0.1	0.09	0.09	0.10	0.11	0.10	0.11	0.10	0.10	0.01	100.0%	0.026
1,1-dichloroethene	0.1	0.09	0.09	0.09	0.11	0.11	0.13	0.10	0.10	0.01	102.9%	0.047
1,1-dichloroethane	0.1	0.09	0.09	0.09	0.10	0.09	0.11	0.10	0.10	0.01	95.7%	0.025
cis-1,2-dichloroethene	0.1	0.09	0.09	0.09	0.09	0.09	0.11	0.10	0.09	0.01	94.3%	0.025
1,1,1-trichloroethane	0.1	0.09	0.09	0.09	0.10	0.09	0.10	0.10	0.09	0.01	94.3%	0.017
Carbon tetrachloride	0.1	0.09	0.09	0.09	0.10	0.09	0.10	0.10	0.09	0.01	94.3%	0.017
Trichloroethene	0.1	0.09	0.10	0.09	0.11	0.11	0.10	0.12	0.10	0.01	102.9%	0.035
Tetrachloroethylene	0.1	0.10	0.10	0.10	0.11	0.09	0.11	0.12	0.10	0.01	104.3%	0.031
Naphthalene	0.1	0.10	0.08	0.09	0.11	0.09	0.06	0.09	0.09	0.02	88.6%	0.049

GC/MS-Whole Air Calculations

Relative Response Factor (RRF)

$$RRF = \frac{A_x * C_{is}}{A_{is} * C_x}$$

where: A_x = area of the characteristic ion for the compound being measured
 A_{is} = area of the characteristic ion for the specific internal standard of the compound being measured
 C_x = concentration of the compound being measured (ppbv)
 C_{is} = concentration of the internal standard (ppbv)

Percent Relative Standard Deviation (%RSD)

$$\% RSD = \frac{\text{Standard deviation of RRF values} * 100}{\text{mean RRF}}$$

Percent Difference (%D)

$$\% D = \frac{(RRF_c - \text{mean } RRF_i) * 100}{\text{mean } RRF_i}$$

where: RRF_c = relative response factor from the continuing calibration
 $\text{mean } RRF_i$ = mean relative response factor from the initial calibration

Sample Calculations

$$ppbv = \frac{A_x * I_s * D_f}{A_{is} * RRF}$$

where: A_x = area of the characteristic ion for the compound being measured
 A_{is} = area of the characteristic ion for the specific internal standard of the compound being measured
 I_s = Concentration of the internal standard injected (ppbv)
 RRF = relative response factor for the compound being measured
 D_f = Dilution factor

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

SAMPLE DATA



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Lab Order: 2404002

Project: 240-260 Lakefront Blvd

Lab ID: 2404002-001

Client Sample ID: 244-SS-01

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
FIELD PARAMETERS				FLD				Analyst:
FieldSampler	Jesse							
Lab Vacuum In	-1		"Hg					
Lab Vacuum Out	-30		"Hg					

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15				Analyst: DA
1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 9:27:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 9:27:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 9:27:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 9:27:00 PM
1,1-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 9:27:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 9:27:00 PM
1,2,4-Trimethylbenzene	0.15	0.15	ppbV	0.74	0.74		1	4/1/2024 9:27:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 9:27:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 9:27:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 9:27:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 9:27:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 9:27:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 9:27:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 9:27:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 9:27:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 9:27:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 9:27:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 9:27:00 PM
Acetone	9.6	3.0	ppbV	23	7.1		10	4/2/2024 3:13:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 9:27:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: 244-SS-01

Lab Order: 2404002

TagNo:
Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-001

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15		Analyst: DA		
Benzene	0.41	0.15	ppbV	1.3	0.48		1	4/1/2024 9:27:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 9:27:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 9:27:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 9:27:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 9:27:00 PM
Carbon disulfide	0.12	0.15	ppbV	0.37	0.47	J	1	4/1/2024 9:27:00 PM
Carbon tetrachloride	< 0.15	0.15	ppbV	<0.94	0.94	U	1	4/1/2024 9:27:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 9:27:00 PM
Chloroethane	< 0.15	0.15	ppbV	<0.4	0.4	U	1	4/1/2024 9:27:00 PM
Chloroform	0.18	0.15	ppbV	0.88	0.73		1	4/1/2024 9:27:00 PM
Chloromethane	< 0.15	0.15	ppbV	<0.31	0.31	U	1	4/1/2024 9:27:00 PM
cis-1,2-Dichloroethene	0.13	0.15	ppbV	0.52	0.59	J	1	4/1/2024 9:27:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 9:27:00 PM
Cyclohexane	5.3	1.5	ppbV	18	5.2		10	4/2/2024 3:13:00 AM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 9:27:00 PM
Ethyl acetate	0.38	0.15	ppbV	1.4	0.54		1	4/1/2024 9:27:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 9:27:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 9:27:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 9:27:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 9:27:00 PM
Freon 12	0.41	0.15	ppbV	2	0.74		1	4/1/2024 9:27:00 PM
Heptane	2.3	1.5	ppbV	9.4	6.1		10	4/2/2024 3:13:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 9:27:00 PM
Hexane	4.5	1.5	ppbV	16	5.3		10	4/2/2024 3:13:00 AM
Isopropyl alcohol	2.3	1.5	ppbV	5.7	3.7		10	4/2/2024 3:13:00 AM
m&p-Xylene	0.26	0.30	ppbV	1.1	1.3	J	1	4/1/2024 9:27:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 9:27:00 PM
Methyl Ethyl Ketone	2.5	3.0	ppbV	7.4	8.8	J	10	4/2/2024 3:13:00 AM

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Lab Order: 2404002

Project: 240-260 Lakefront Blvd

Lab ID: 2404002-001

Client Sample ID: 244-SS-01

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15				Analyst: DA
Methyl Isobutyl Ketone	0.12	0.30	ppbV	0.49	1.2	J	1	4/1/2024 9:27:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 9:27:00 PM
Methylene chloride	3.9	1.5	ppbV	14	5.2		10	4/2/2024 3:13:00 AM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 9:27:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 9:27:00 PM
Styrene	< 0.15	0.15	ppbV	<0.64	0.64	U	1	4/1/2024 9:27:00 PM
Tetrachloroethylene	0.11	0.15	ppbV	0.75	1	J	1	4/1/2024 9:27:00 PM
Tetrahydrofuran	< 0.15	0.15	ppbV	<0.44	0.44	U	1	4/1/2024 9:27:00 PM
Toluene	2.6	1.5	ppbV	9.8	5.7		10	4/2/2024 3:13:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 9:27:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 9:27:00 PM
Trichloroethene	0.47	0.15	ppbV	2.5	0.81		1	4/1/2024 9:27:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 9:27:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 9:27:00 PM
Vinyl chloride	< 0.15	0.15	ppbV	<0.38	0.38	U	1	4/1/2024 9:27:00 PM
Surr: Bromofluorobenzene	101	70-130	%Rec				1	4/1/2024 9:27:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

Data Path : C:\msdchem\1\data\
 Data File : AV040115.D
 Acq On : 1 Apr 2024 9:27 pm
 Operator : DA
 Sample : 2404002-001A
 Misc : A325_1UG
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 02 02:48:21 2024
 Quant Method : C:\msdchem\1\methods\A325_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Mar 26 09:11:14 2024
 Response via : Initial Calibration

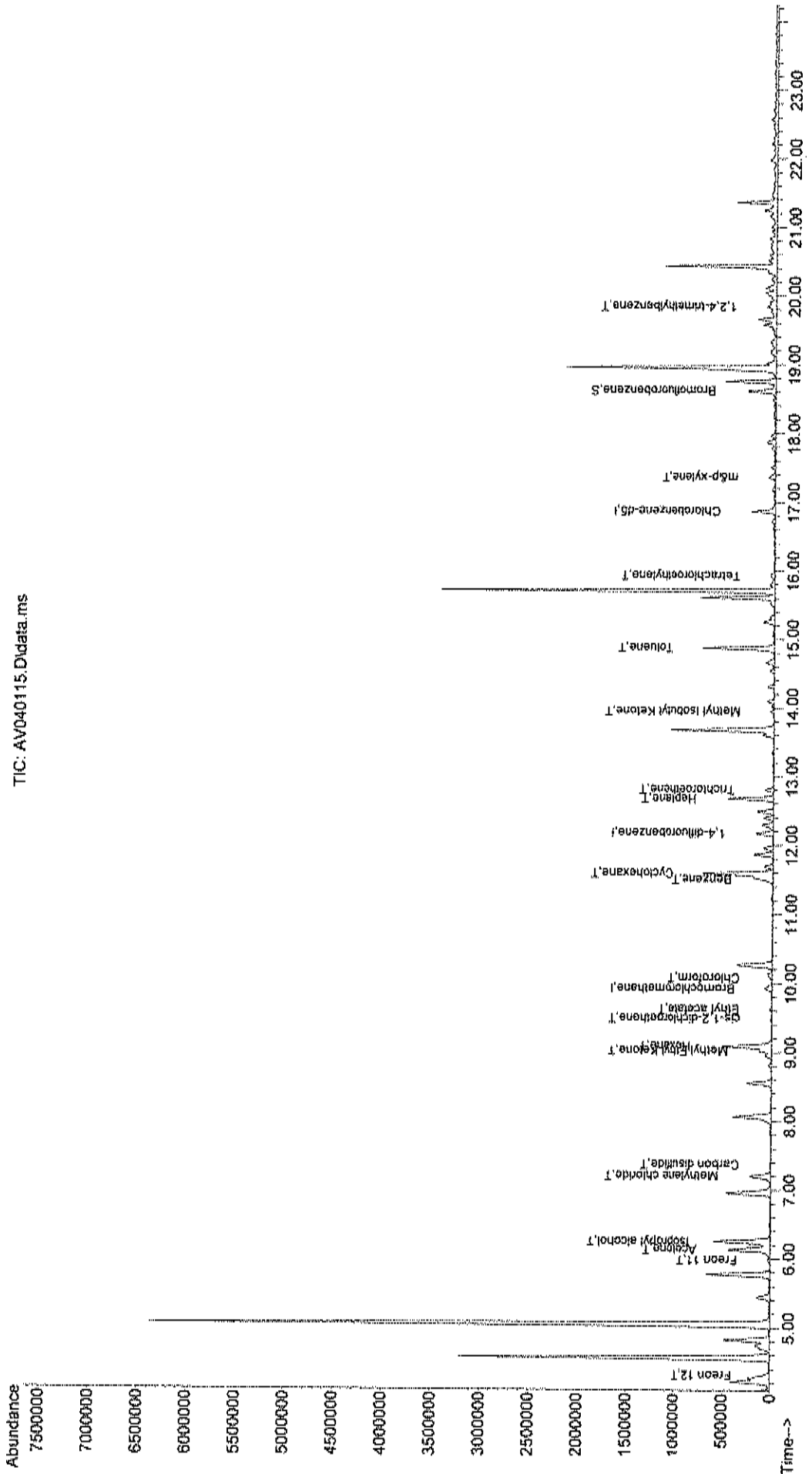
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

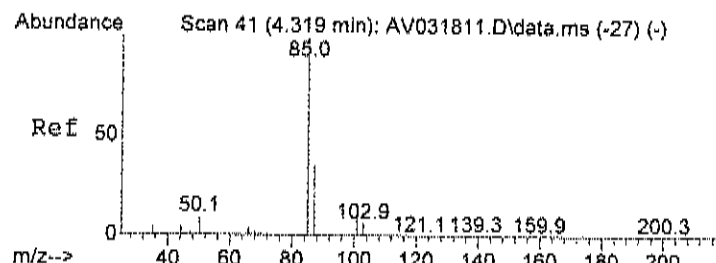
Internal Standards						
1) Bromochloromethane	9.921	128	36602	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	198458	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	192172	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	135260	1.01	ppb	0.00
Spiked Amount	1.000	Range	70 ~ 130	Recovery	=	101.00%
Target Compounds						
						Qvalue
3) Freon 12	4.314	85	74581	0.41	ppb	98
14) Freon 11	5.980	101	36743	0.20	ppb	99
15) Acetone	6.134	58	253626m ^{PA}	10.68	ppb	
17) Isopropyl alcohol	6.241	45	159109	2.21	ppb	# 1
21) Methylene chloride	7.199	84	192388	3.58	ppb	# 79
23) Carbon disulfide	7.364	76	18779	0.12	ppb	87
28) Methyl Ethyl Ketone	9.019	72	72687	2.32	ppb	# 1
29) cis-1,2-dichloroethene	9.490	61	11221	0.13	ppb	86
30) Hexane	9.087	57	392629	4.58	ppb	93
31) Ethyl acetate	9.620	43	34384	0.38	ppb	99
32) Chloroform	10.074	83	24861	0.18	ppb	# 45
37) Cyclohexane	11.588	56	440694	6.22	ppb	# 67
39) Benzene	11.503	78	71531	0.41	ppb	96
43) Heptane	12.671	43	192730	2.51	ppb	93
44) Trichloroethene	12.807	130	41289	0.47	ppb	94
51) Toluene	14.871	92	392221	2.73	ppb	93
52) Methyl Isobutyl Ketone	13.946	43	13290	0.12	ppb	90
56) Tetrachloroethylene	15.925	164	10494	0.11	ppb	98
59) m&p-xylene	17.360	91	71177	0.26	ppb	100
71) 1,2,4-trimethylbenzene	19.837	105	50973	0.15	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040115.D
Acq On : 1 Apr 2024 9:27 pm
Operator : DA
Sample : 2404002-001A
Misc : A325_1UG
ALS Vial : 10 Sample Multiplier: 1

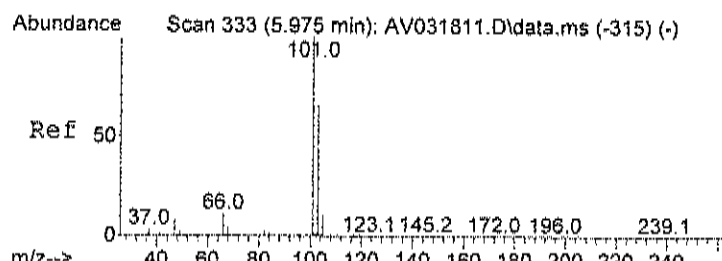
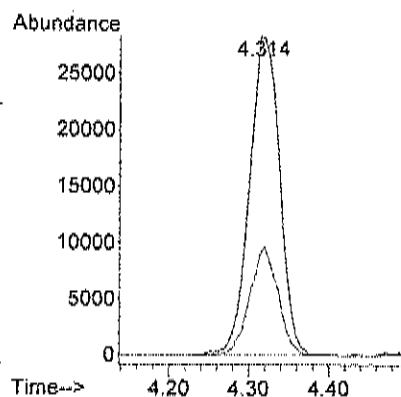
Quant Time: Apr 02 02:48:21 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





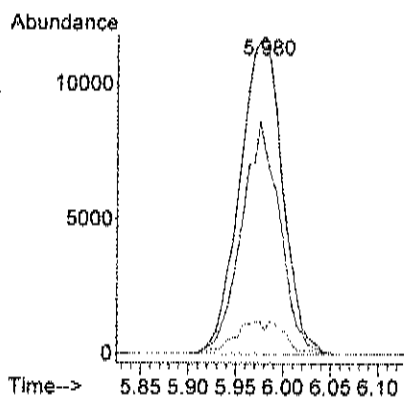
#3
Freon 12
Concen: 0.41 ppb
RT: 4.314 min Scan# 40
Delta R.T. -0.011 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

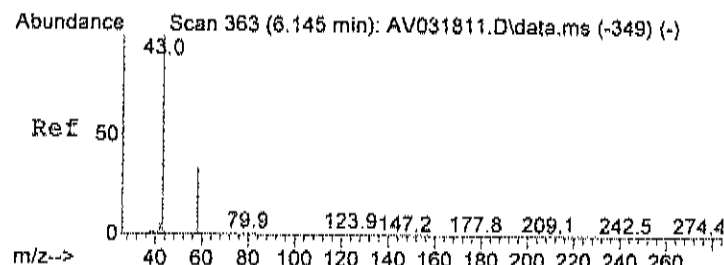
Tgt Ion: 85 Resp: 74581
Ion Ratio Lower Upper
85 100
87 32.1 13.2 53.2



#14
Freon 11
Concen: 0.20 ppb
RT: 5.980 min Scan# 334
Delta R.T. -0.001 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

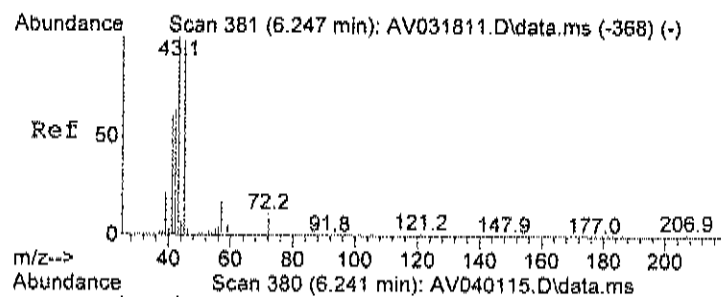
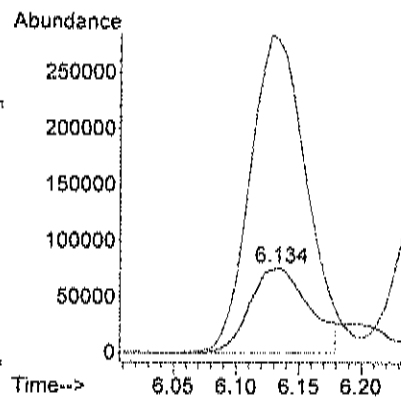
Tgt Ion: 101 Resp: 36743
Ion Ratio Lower Upper
101 100
103 66.2 46.2 86.2
105 12.1 0.0 30.1





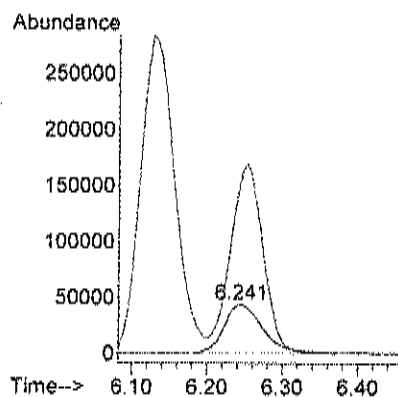
#15
Acetone
Concen: 10.68 ppb m
RT: 6.134 min Scan# 361
Delta R.T. -0.005 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

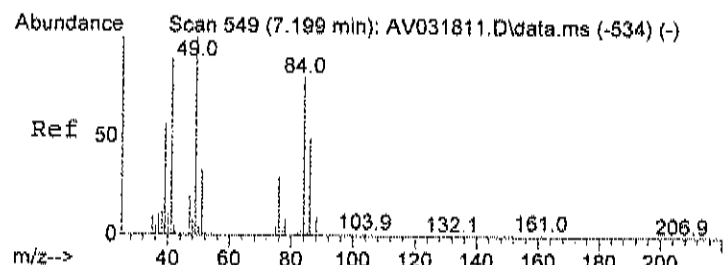
Tgt Ion: 58 Resp: 253626
Ion Ratio Lower Upper
58 100
43 355.3 257.9 317.9#



#17
Isopropyl alcohol
Concen: 2.21 ppb
RT: 6.241 min Scan# 380
Delta R.T. -0.006 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

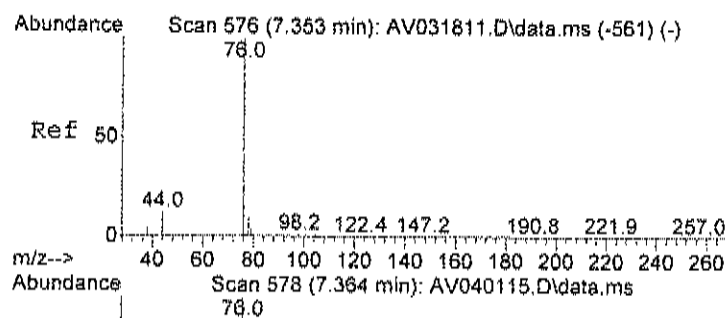
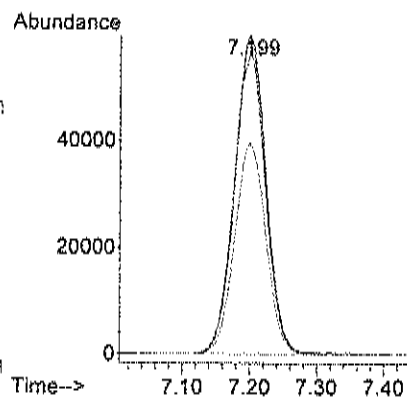
Tgt Ion: 45 Resp: 159109
Ion Ratio Lower Upper
45 100
43 315.9 118.7 158.7#





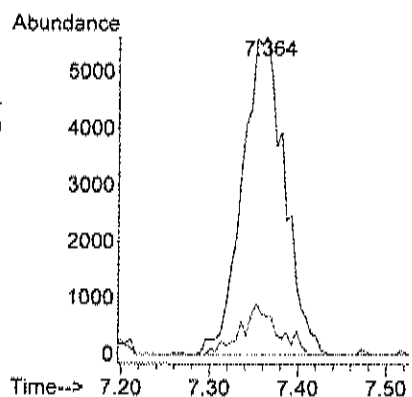
#21
Methylene chloride
Concen: 3.58 ppb
RT: 7.199 min Scan# 549
Delta R.T. -0.006 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

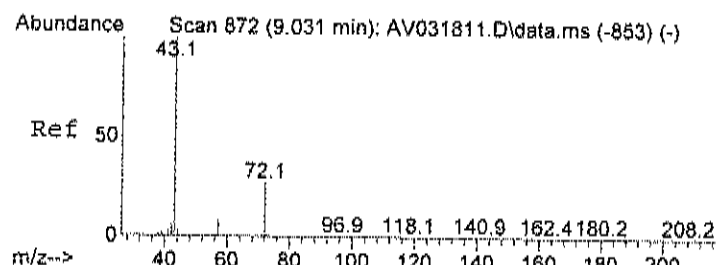
Tgt Ion	Ratio	Lower	Upper
84	100		
49	96.0	110.8	150.8#
86	66.8	44.8	84.8



#23
Carbon disulfide
Concen: 0.12 ppb
RT: 7.364 min Scan# 578
Delta R.T. -0.000 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

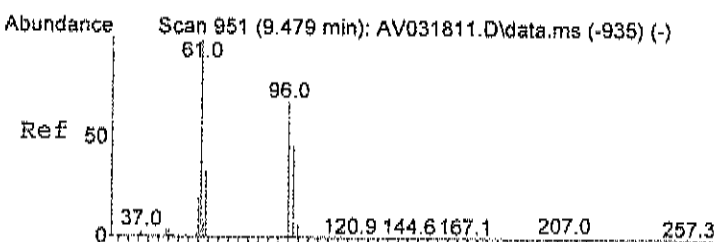
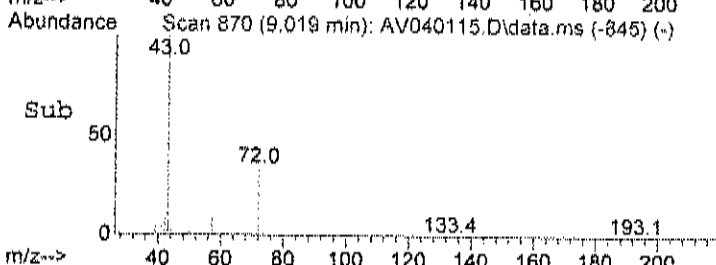
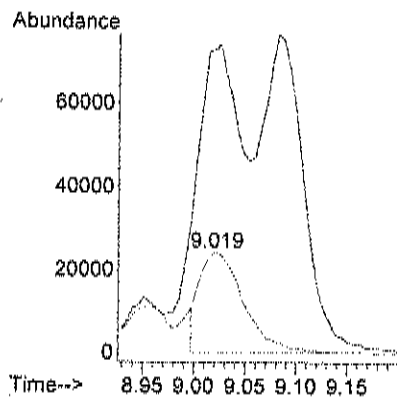
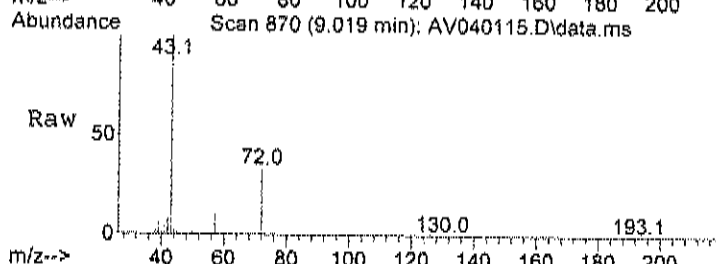
Tgt Ion	Ratio	Lower	Upper
76	100		
78	13.5	0.0	28.9





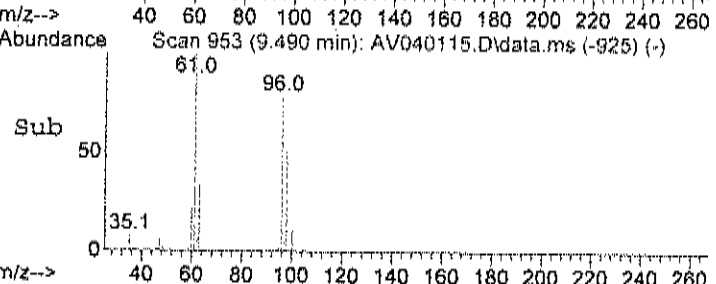
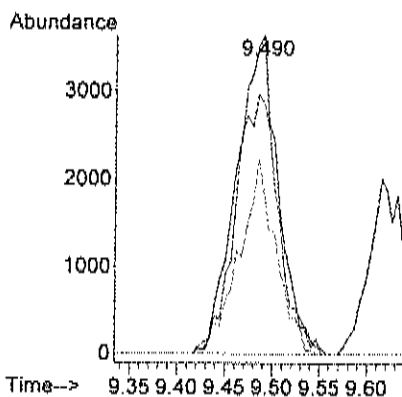
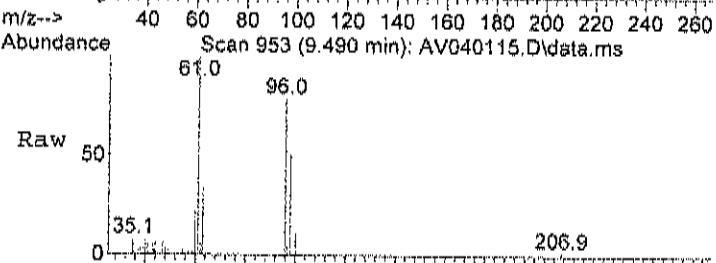
#28
Methyl Ethyl Ketone
Concen: 2.32 ppb
RT: 9.019 min Scan# 870
Delta R.T. -0.006 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

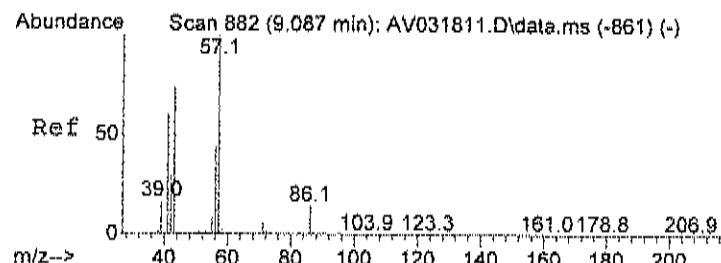
Tgt Ion: 72 Resp: 72687
Ion Ratio Lower Upper
72 100
43 0.0 339.5 379.5#
72 100.0 80.0 120.0



#29
cis-1,2-dichloroethene
Concen: 0.13 ppb
RT: 9.490 min Scan# 953
Delta R.T. 0.006 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

Tgt Ion: 61 Resp: 11221
Ion Ratio Lower Upper
61 100
96 84.3 50.9 90.9
98 53.2 26.7 66.7





#30

Hexane

Concen: 4.58 ppb

RT: 9.087 min Scan# 882

Delta R.T. -0.001 min

Lab File: AV040115.D

Acq: 1 Apr 2024 9:27 pm

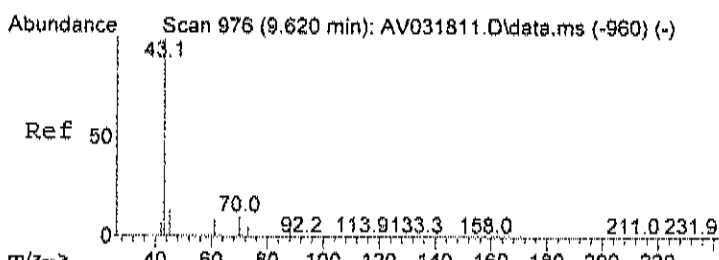
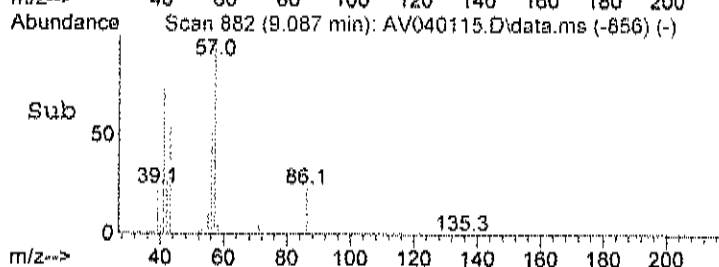
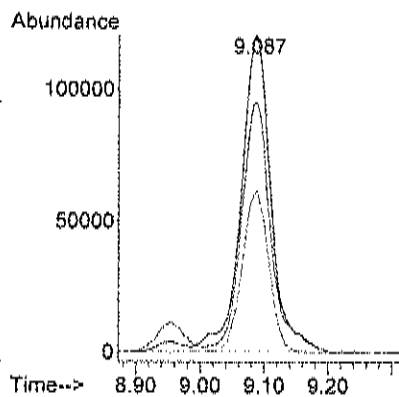
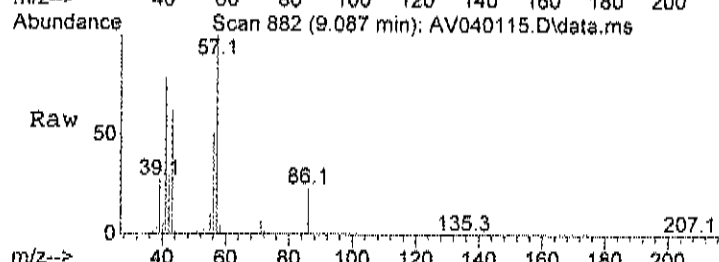
Tgt Ion: 57 Resp: 392629

Ion Ratio Lower Upper

57 100

41 77.3 53.9 93.9

56 45.5 32.6 72.6



#31

Ethyl acetate

Concen: 0.38 ppb

RT: 9.620 min Scan# 976

Delta R.T. -0.001 min

Lab File: AV040115.D

Acq: 1 Apr 2024 9:27 pm

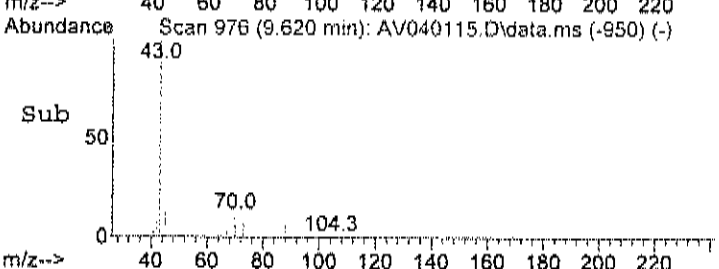
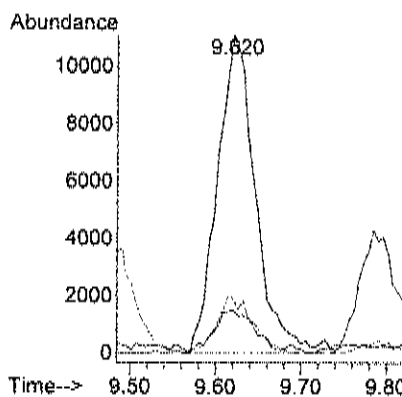
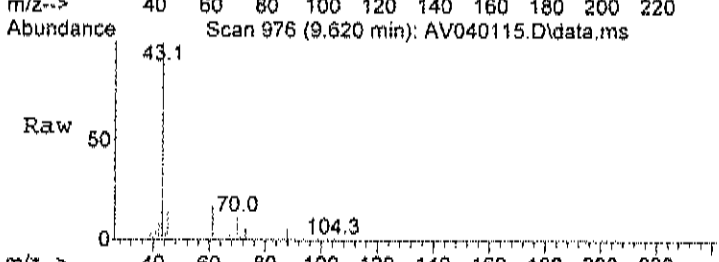
Tgt Ion: 43 Resp: 34384

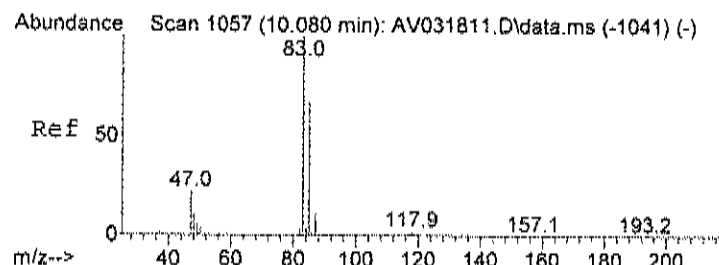
Ion Ratio Lower Upper

43 100

45 14.5 0.0 35.3

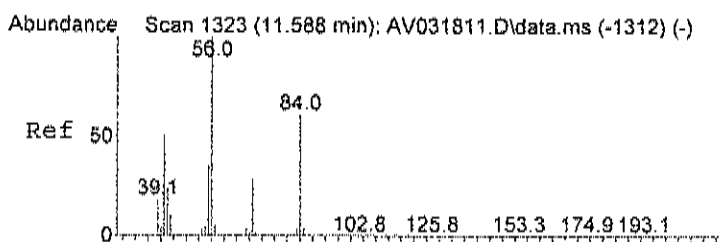
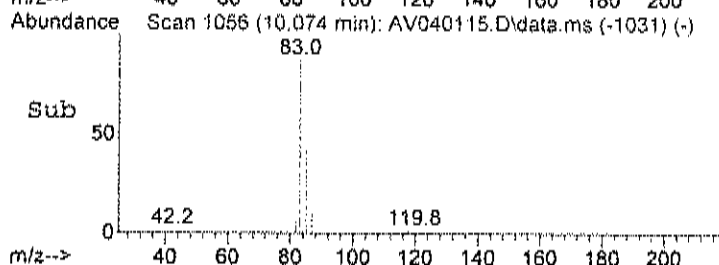
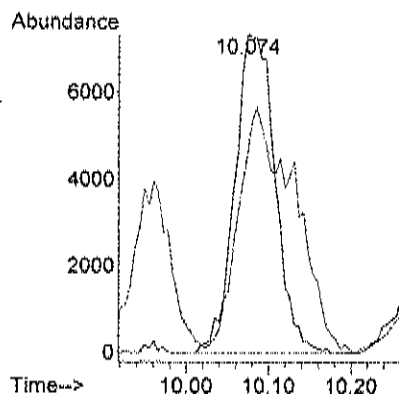
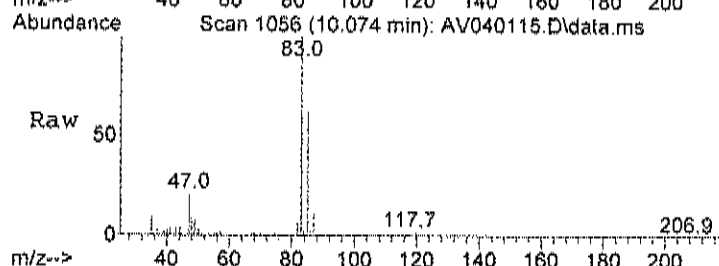
61 16.9 0.0 37.0





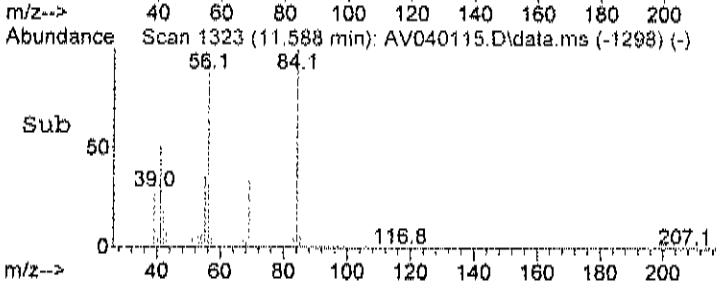
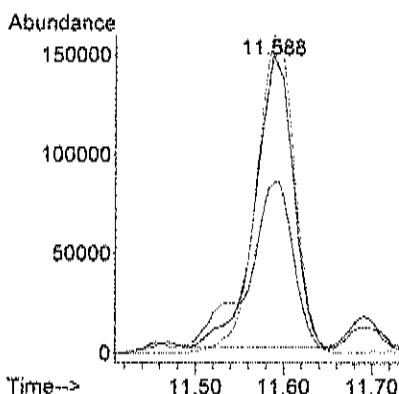
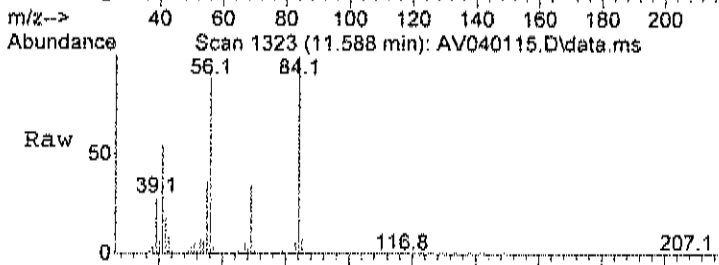
#32
Chloroform
Concen: 0.18 ppb
RT: 10.074 min Scan# 1056
Delta R.T. -0.011 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

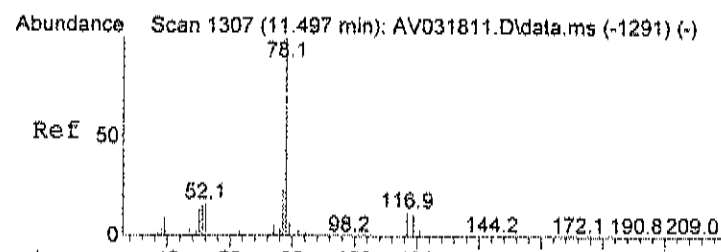
Tgt Ion: 83 Resp: 24861
Ion Ratio Lower Upper
83 100
85 108.1 44.6 84.6#



#37
Cyclohexane
Concen: 6.22 ppb
RT: 11.588 min Scan# 1323
Delta R.T. -0.006 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

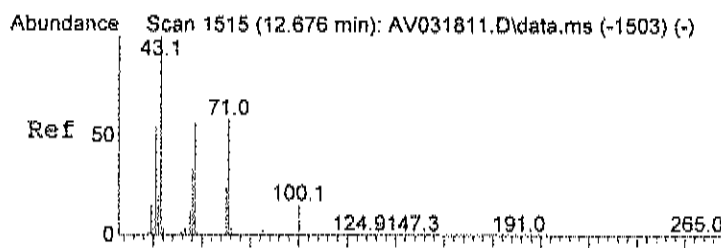
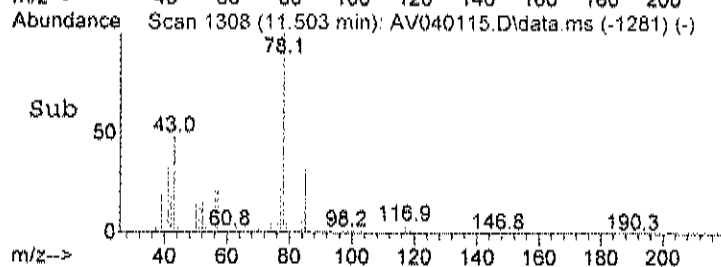
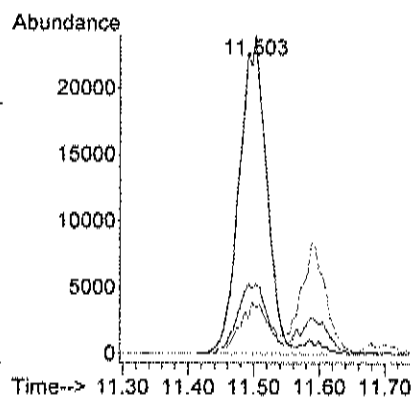
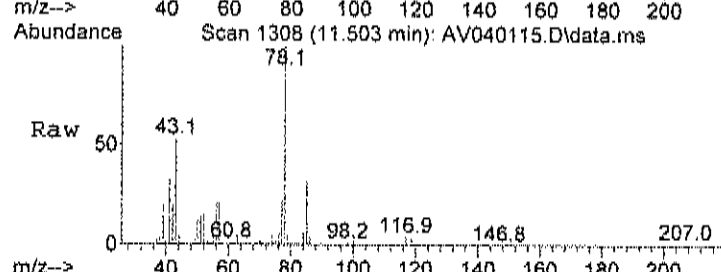
Tgt Ion: 56 Resp: 440694
Ion Ratio Lower Upper
56 100
41 69.2 36.6 76.6
84 111.3 53.8 93.8#





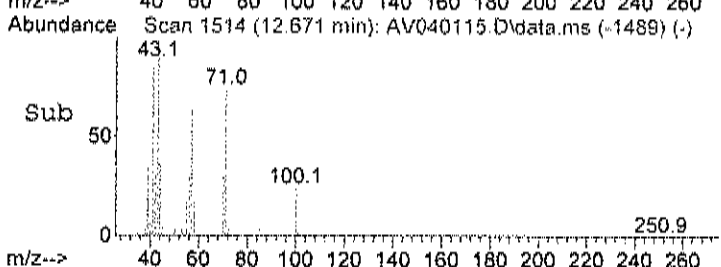
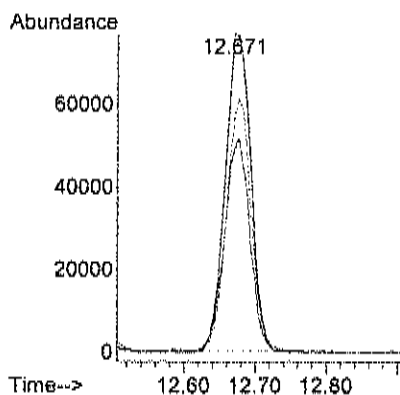
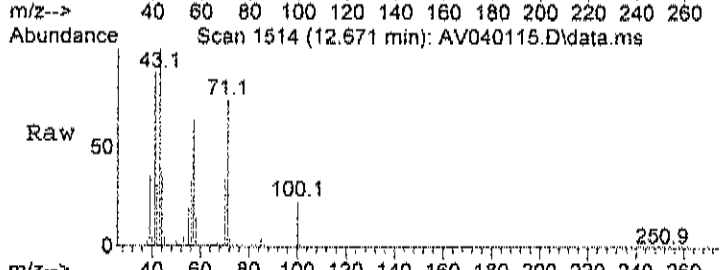
#39
Benzene
Concen: 0.41 ppb
RT: 11.503 min Scan# 1308
Delta R.T. 0.006 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

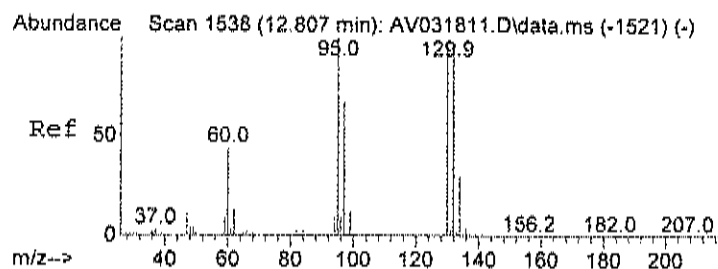
Tgt Ion	Ratio	Lower	Upper
78	100		
77	24.1	5.2	45.2
51	18.6	0.0	35.7



#43
Heptane
Concen: 2.51 ppb
RT: 12.671 min Scan# 1514
Delta R.T. -0.006 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

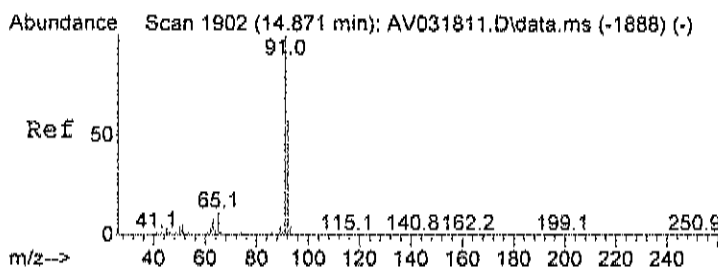
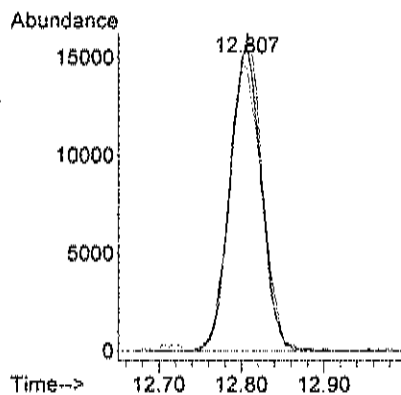
Tgt Ion	Ratio	Lower	Upper
43	100		
57	67.3	40.9	80.9
71	76.5	51.1	91.1





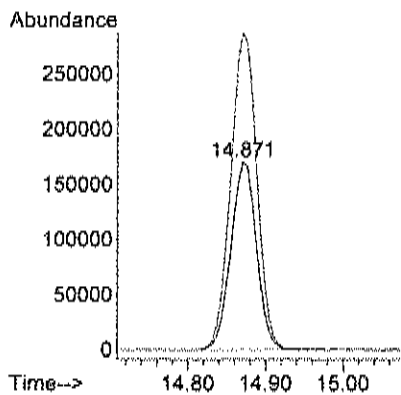
#44
Trichloroethene
Concen: 0.47 ppb
RT: 12.807 min Scan# 1538
Delta R.T. 0.006 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

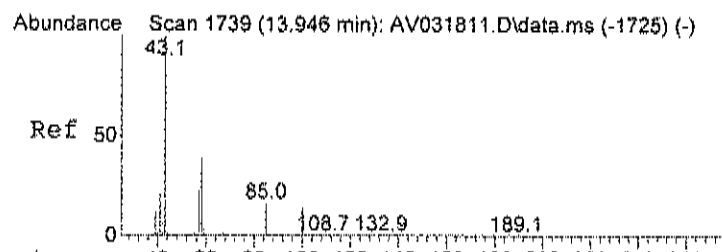
Tgt Ion	Ratio	Lower	Upper
130	100		
132	104.9	76.3	116.3
95	96.7	72.9	112.9



#51
Toluene
Concen: 2.73 ppb
RT: 14.871 min Scan# 1902
Delta R.T. -0.000 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

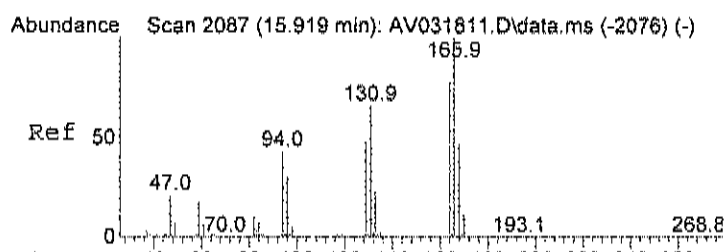
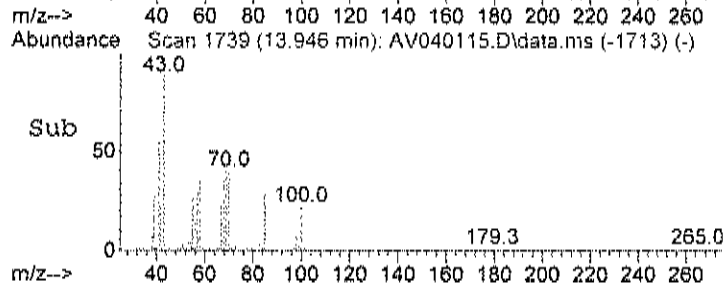
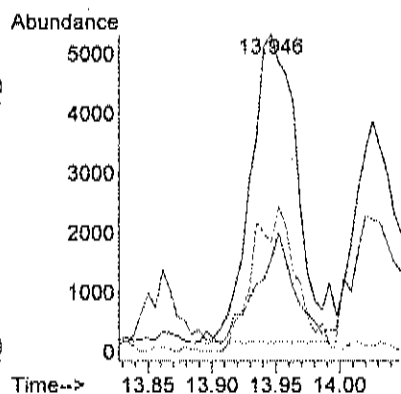
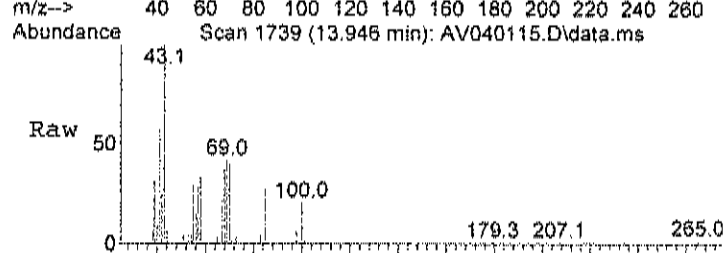
Tgt Ion	Ratio	Lower	Upper
92	100		
91	171.1	160.7	200.7





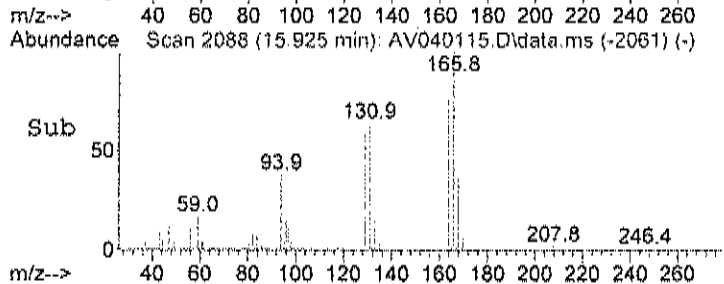
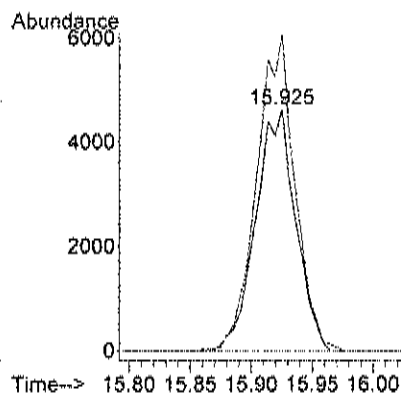
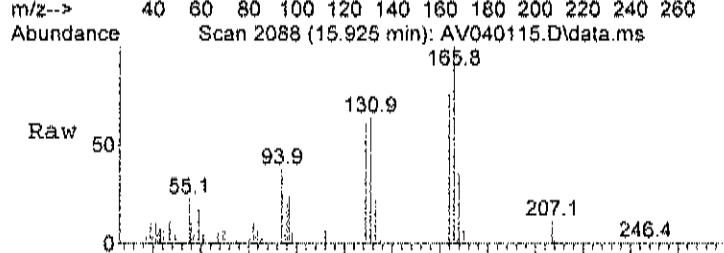
#52
Methyl isobutyl ketone
Concen: 0.12 ppb
RT: 13.946 min Scan# 1739
Delta R.T. -0.001 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

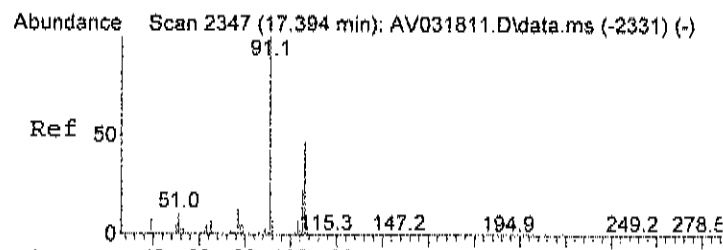
Tgt Ion	Ratio	Lower	Upper
43	100		
57	29.7	5.1	45.1
58	43.6	17.6	57.6



#56
Tetrachloroethylene
Concen: 0.11 ppb
RT: 15.925 min Scan# 2088
Delta R.T. 0.005 min
Lab File: AV040115.D
Acq: 1 Apr 2024 9:27 pm

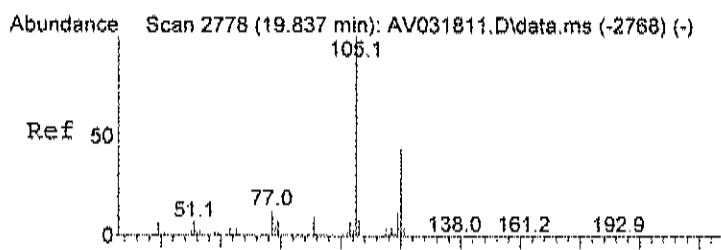
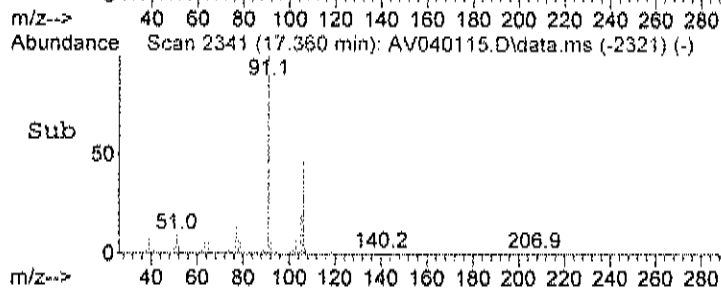
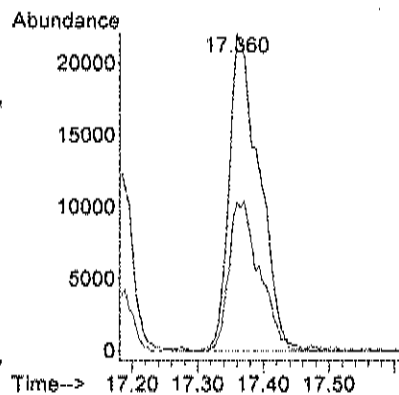
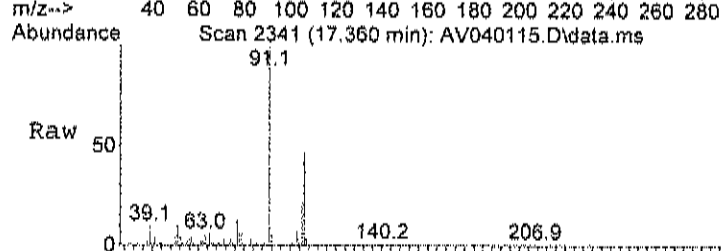
Tgt Ion	Ratio	Lower	Upper
164	100		
166	125.1	107.9	147.9





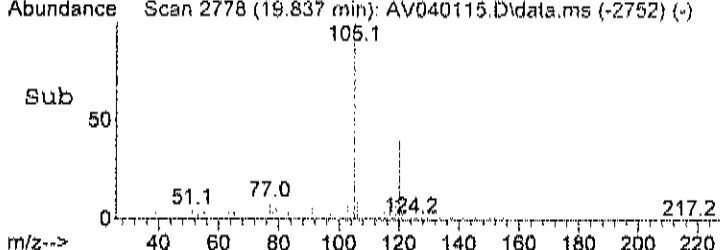
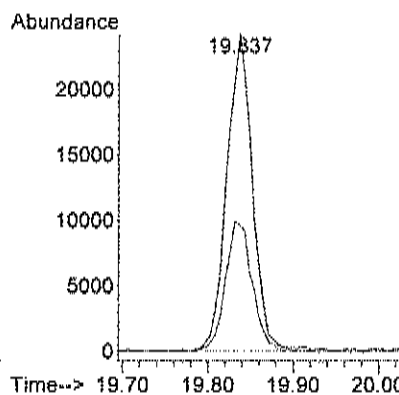
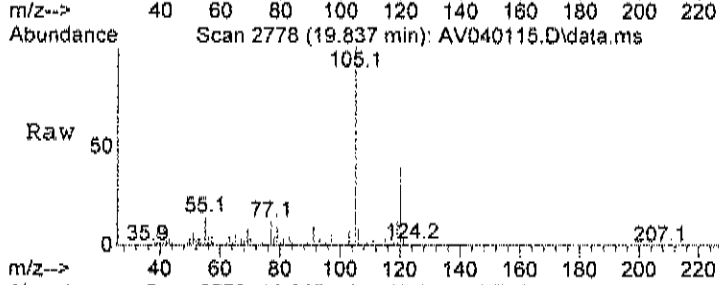
#59
 m&p-xylene
 Concen: 0.26 ppb
 RT: 17.360 min Scan# 2341
 Delta R.T. -0.034 min
 Lab File: AV040115.D
 Acq: 1 Apr 2024 9:27 pm

Tgt Ion: 91 Resp: 71177
 Ion Ratio Lower Upper
 91 100
 106 47.8 27.5 67.5



#71
 1,2,4-trimethylbenzene
 Concen: 0.15 ppb
 RT: 19.837 min Scan# 2778
 Delta R.T. 0.000 min
 Lab File: AV040115.D
 Acq: 1 Apr 2024 9:27 pm

Tgt Ion: 105 Resp: 50973
 Ion Ratio Lower Upper
 105 100
 120 42.9 25.8 65.8



Data Path : C:\msdchem\1\data\
Data File : AV040123.D
Acq On : 2 Apr 2024 3:13 am
Operator : DA
Sample : 2404002-001A 10x
Misc : A325_1UG
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 02 16:30:56 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

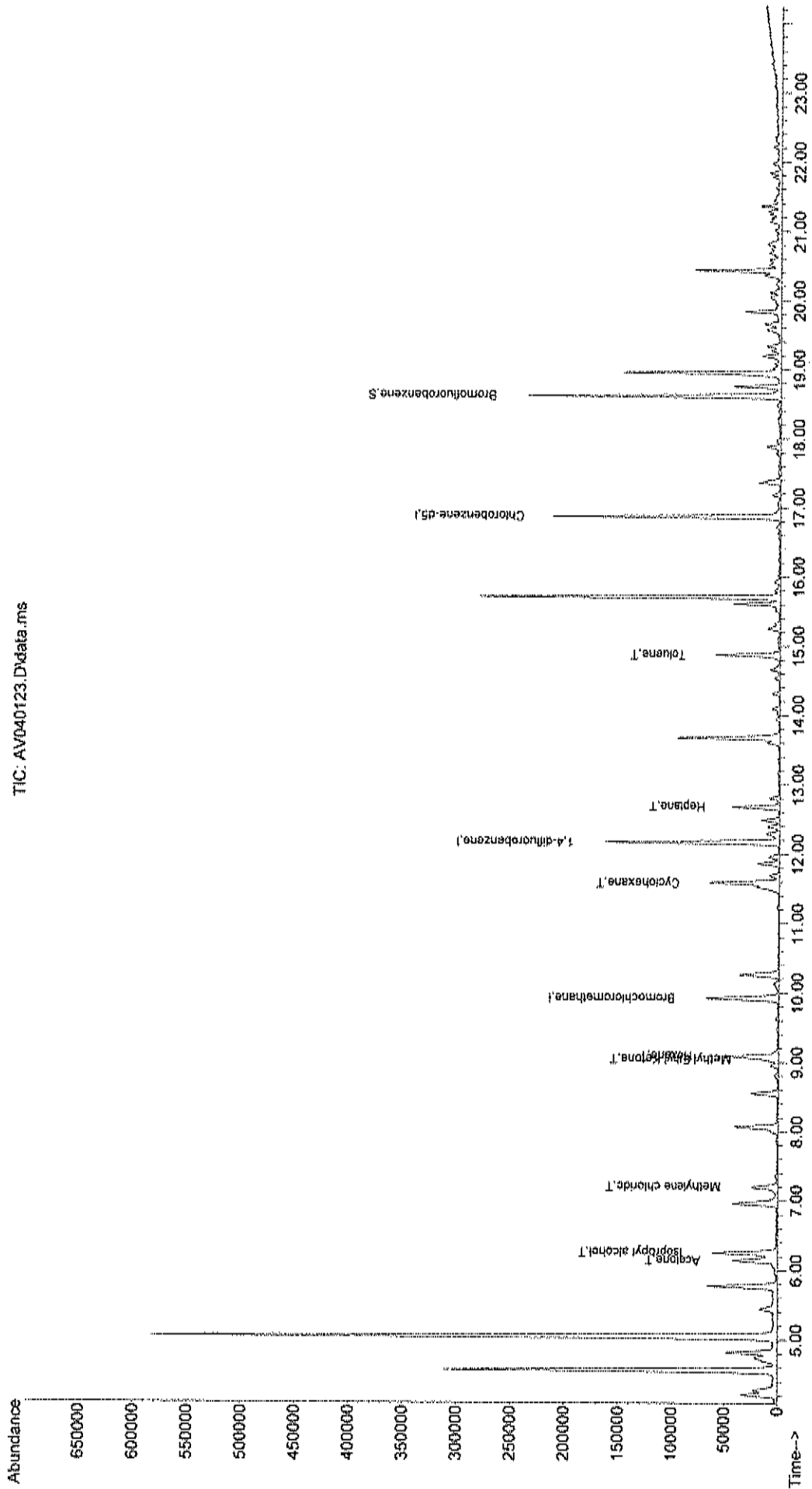
Internal Standards						
1) Bromochloromethane	9.921	128	36786	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	200971	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	171681	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	111115	0.93	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	93.00%
Target Compounds						
15) Acetone	6.139	58	22800m ^{PA}	0.96	ppb	Qvalue
17) Isopropyl alcohol	6.253	45	16556	0.23	ppb	# 1
21) Methylene chloride	7.200	84	20831	0.39	ppb	# 78
28) Methyl Ethyl Ketone	9.042	72	7847	0.25	ppb	# 1
30) Hexane	9.088	57	38681	0.45	ppb	92
37) Cyclohexane	11.582	56	37711	0.53	ppb	# 68
43) Heptane	12.682	43	17832	0.23	ppb	94
51) Toluene	14.871	92	33731	0.26	ppb	95

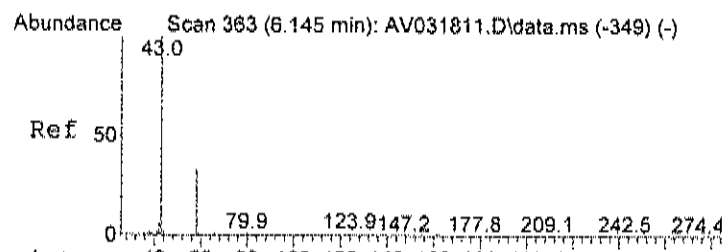
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\
Data File : AV040123.D
Acq On : 2 Apr 2024 3:13 am
Operator : DA
Sample : 2404002-001A 10x
Misc : A325 1UG
ALS Vial : 19 Sample Multiplier: 1

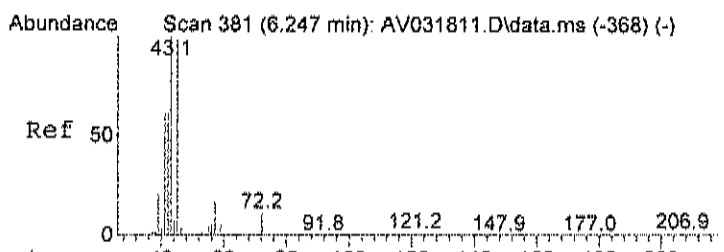
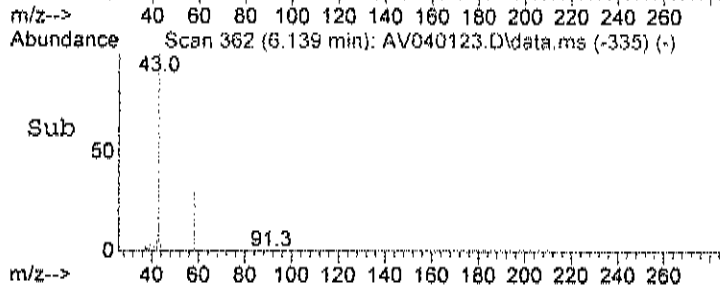
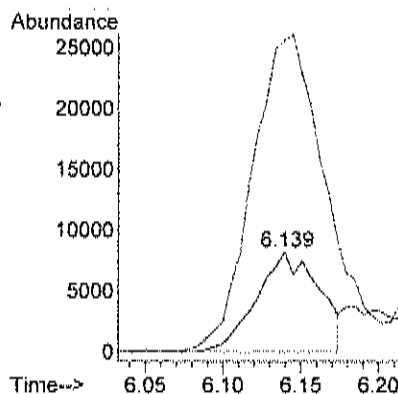
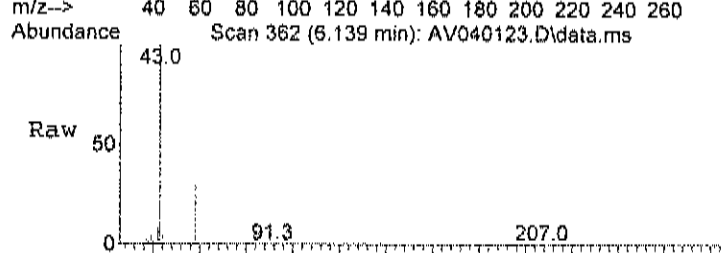
Quant Time: Apr 02 16:30:56 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : FO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





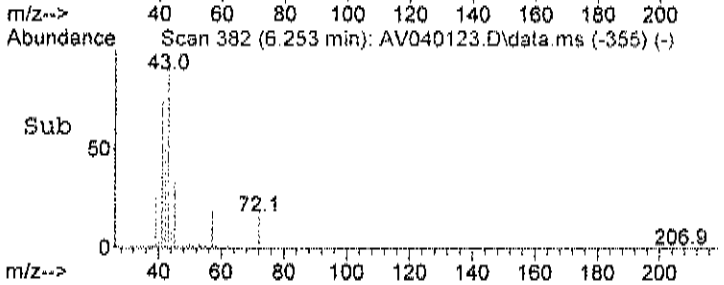
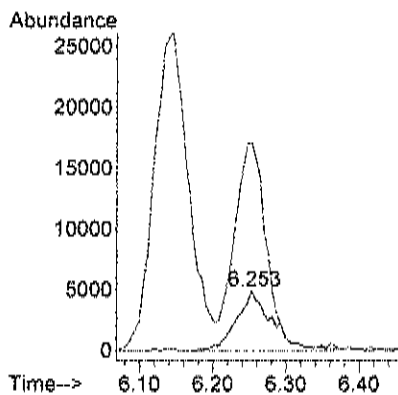
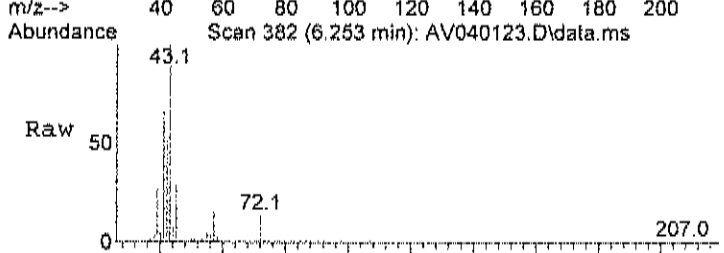
#15
Acetone
Concen: 0.96 ppb m
RT: 6.139 min Scan# 362
Delta R.T. 0.000 min
Lab File: AV040123.D
Acq: 2 Apr 2024 3:13 am

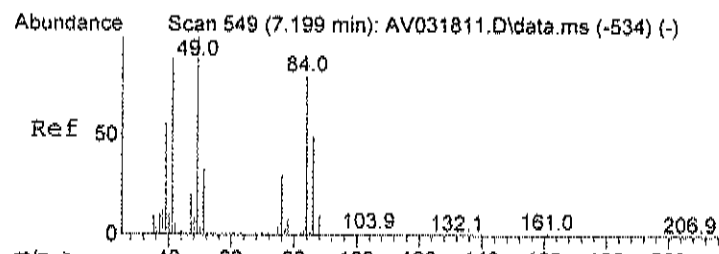
Tgt Ion: 58 Resp: 22800
Ion Ratio Lower Upper
58 100
43 379.3 257.9 317.9#



#17
Isopropyl alcohol
Concen: 0.23 ppb
RT: 6.253 min Scan# 382
Delta R.T. 0.006 min
Lab File: AV040123.D
Acq: 2 Apr 2024 3:13 am

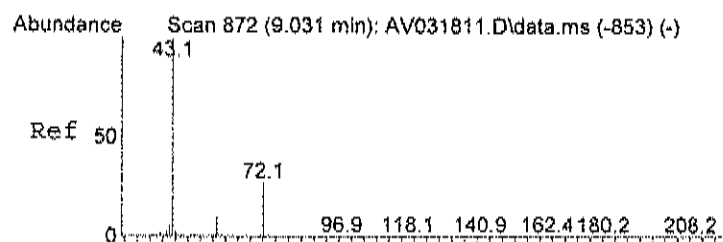
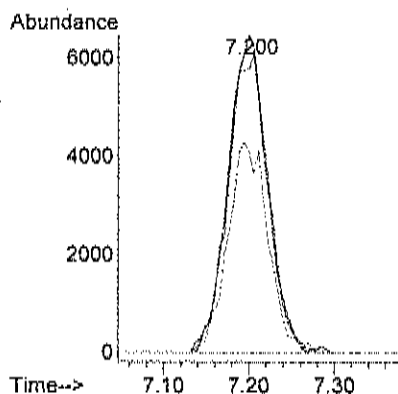
Tgt Ion: 45 Resp: 16556
Ion Ratio Lower Upper
45 100
43 302.0 118.7 158.7#





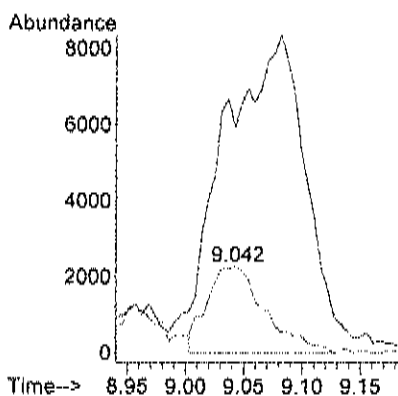
#21
Methylene chloride
Concen: 0.39 ppb
RT: 7.200 min Scan# 549
Delta R.T. -0.005 min
Lab File: AV040123.D
Acq: 2 Apr 2024 3:13 am

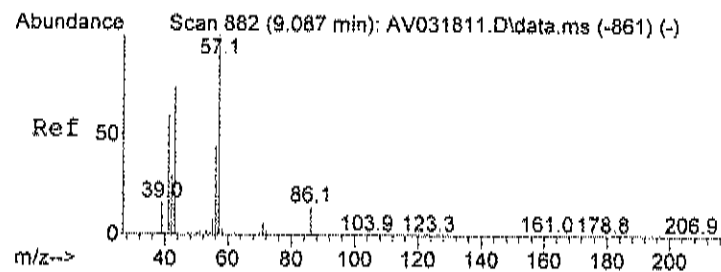
Tgt Ion	Ratio	Lower	Upper
84	100		
49	95.6	110.8	150.8#
86	68.1	44.8	84.8



#28
Methyl Ethyl Ketone
Concen: 0.25 ppb
RT: 9.042 min Scan# 874
Delta R.T. 0.017 min
Lab File: AV040123.D
Acq: 2 Apr 2024 3:13 am

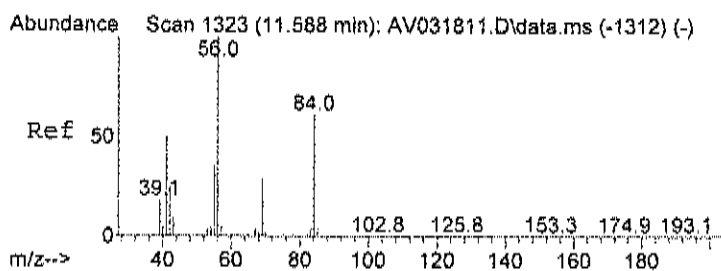
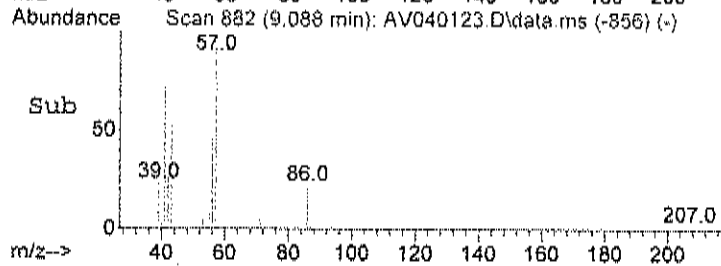
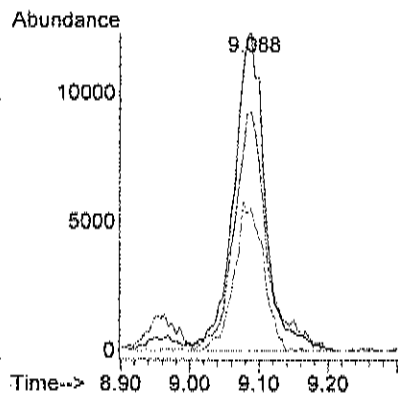
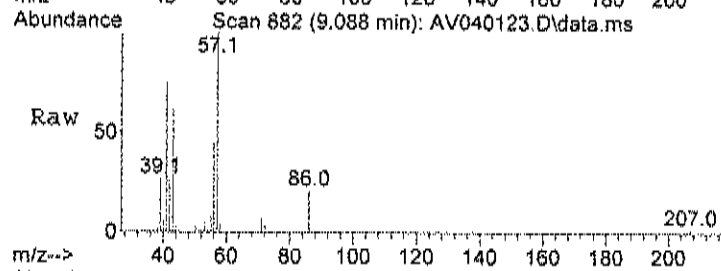
Tgt Ion	Ratio	Lower	Upper
72	100		
43	0.0	339.5	379.5#
72	100.0	80.0	120.0





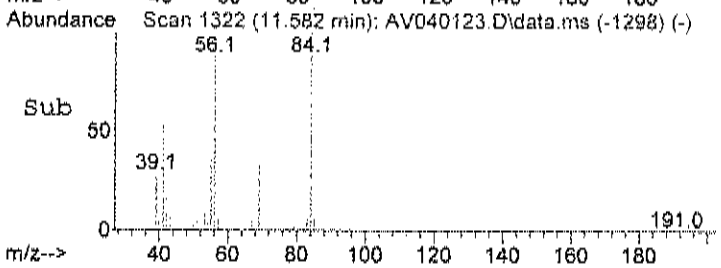
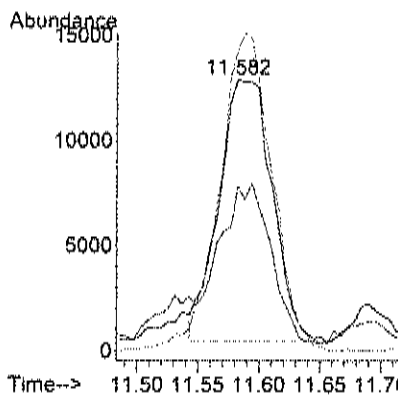
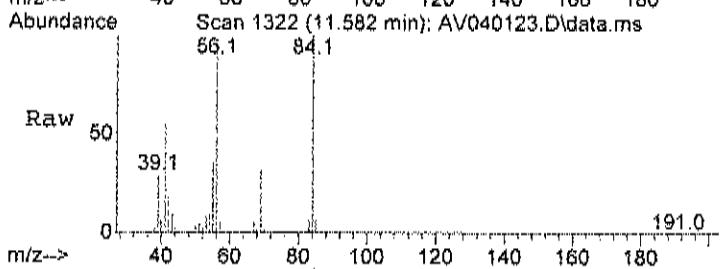
#30
Hexane
Concen: 0.45 ppb
RT: 9.088 min Scan# 882
Delta R.T. -0.000 min
Lab File: AV040123.D
Acq: 2 Apr 2024 3:13 am

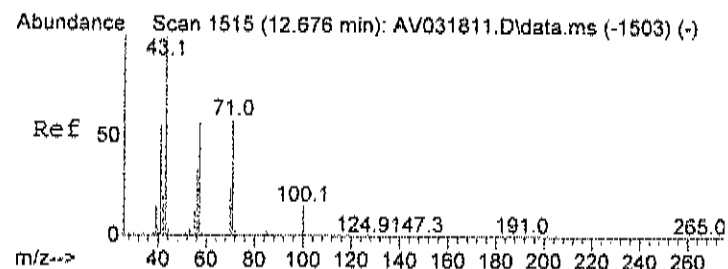
Tgt Ion	Resp	Ion Ratio	Lower	Upper
57	100			
41	78.4		53.9	93.9
56	43.6		32.6	72.6



#37
Cyclohexane
Concen: 0.53 ppb
RT: 11.582 min Scan# 1322
Delta R.T. -0.012 min
Lab File: AV040123.D
Acq: 2 Apr 2024 3:13 am

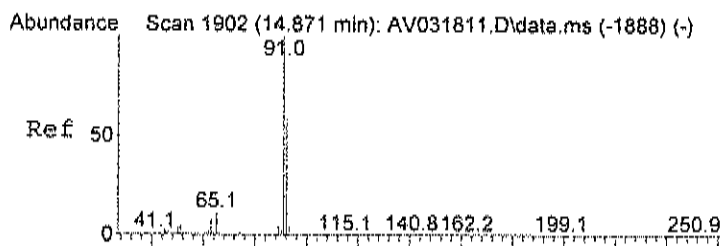
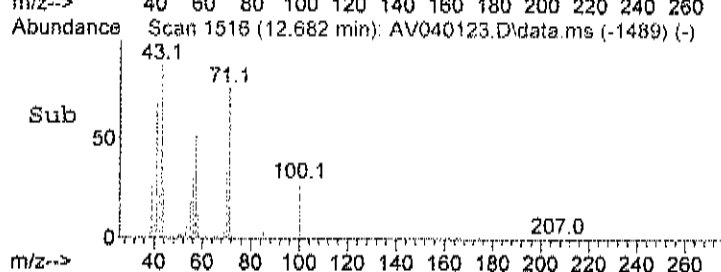
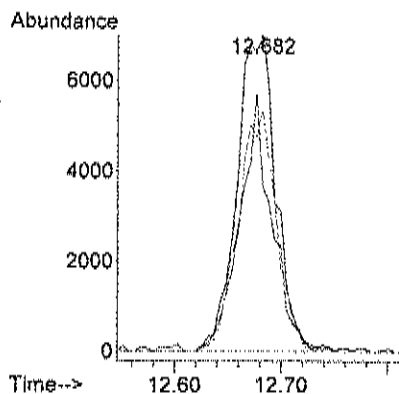
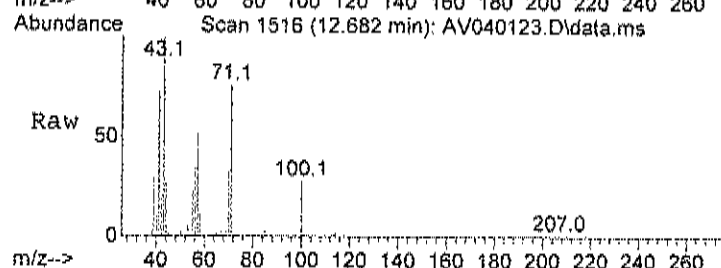
Tgt Ion	Resp	Ion Ratio	Lower	Upper
56	100			
41	57.0		36.6	76.6
84	121.1		53.8	93.8#





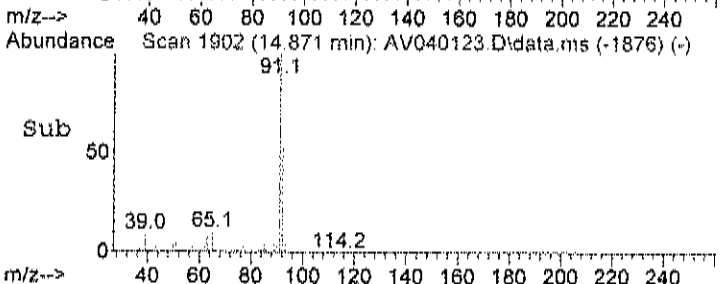
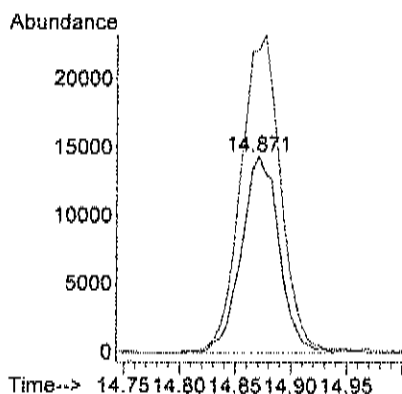
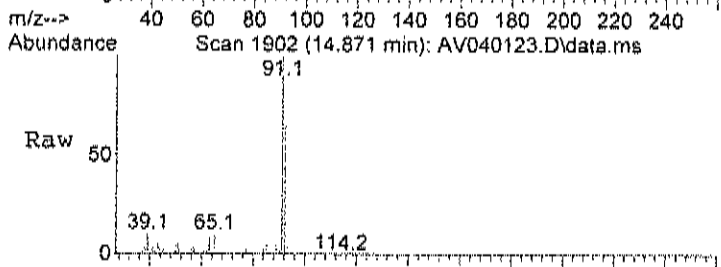
#43
Heptane
Concen: 0.23 ppb
RT: 12.682 min Scan# 1516
Delta R.T. 0.005 min
Lab File: AV040123.D
Acq: 2 Apr 2024 3:13 am

Tgt Ion	Ratio	Lower	Upper
43	100		
57	67.8	40.9	80.9
71	74.3	51.1	91.1



#51
Toluene
Concen: 0.26 ppb
RT: 14.871 min Scan# 1902
Delta R.T. -0.000 min
Lab File: AV040123.D
Acq: 2 Apr 2024 3:13 am

Tgt Ion	Ratio	Lower	Upper
92	100		
91	173.0	160.7	200.7





SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: 244-1A-01

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-002

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

Field Sampler Jesse

Lab Vacuum In -1 "Hg

Lab Vacuum Out -30 "Hg

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:14:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:14:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:14:00 PM
1,1-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:14:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:14:00 PM
1,2,4-Trimethylbenzene	0.10	0.15	ppbV	0.49	0.74	J	1	4/1/2024 7:14:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 7:14:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:14:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:14:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:14:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:14:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 7:14:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:14:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:14:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 7:14:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 7:14:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:14:00 PM
Acetone	26	12	ppbV	63	29		40	4/2/2024 12:21:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:14:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: 244-1A-01

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-002

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Benzene	0.15	0.15	ppbV	0.48	0.48		1	4/1/2024 7:14:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 7:14:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:14:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 7:14:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:14:00 PM
Carbon tetrachloride	0.070	0.030	ppbV	0.44	0.19		1	4/1/2024 7:14:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:14:00 PM
Chloroethane	0.13	0.15	ppbV	0.34	0.4	J	1	4/1/2024 7:14:00 PM
Chloroform	< 0.15	0.15	ppbV	<0.73	0.73	U	1	4/1/2024 7:14:00 PM
Chloromethane	< 0.15	0.15	ppbV	<0.31	0.31	U	1	4/1/2024 7:14:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:14:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:14:00 PM
Cyclohexane	0.53	0.15	ppbV	1.8	0.52		1	4/1/2024 7:14:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 7:14:00 PM
Ethyl acetate	0.16	0.15	ppbV	0.58	0.54		1	4/1/2024 7:14:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:14:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 7:14:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:14:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
Freon 12	0.41	0.15	ppbV	2	0.74		1	4/1/2024 7:14:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:14:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:14:00 PM
Hexane	0.39	0.15	ppbV	1.4	0.53		1	4/1/2024 7:14:00 PM
Isopropyl alcohol	1.9	0.15	ppbV	4.7	0.37		1	4/1/2024 7:14:00 PM
m&p-Xylene	0.23	0.30	ppbV	1	1.3	J	1	4/1/2024 7:14:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 7:14:00 PM
Methyl Ethyl Ketone	9.2	3.0	ppbV	27	8.8		10	4/1/2024 11:39:00 PM

Qualifiers:

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-002

Client Sample ID: 244-1A-01
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 7:14:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 7:14:00 PM
Methylene chloride	0.20	0.15	ppbV	0.69	0.52		1	4/1/2024 7:14:00 PM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:14:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 7:14:00 PM
Styrene	0.24	0.15	ppbV	1	0.64		1	4/1/2024 7:14:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
Tetrahydrofuran	7.3	1.5	ppbV	22	4.4		10	4/1/2024 11:39:00 PM
Toluene	0.70	0.15	ppbV	2.6	0.57		1	4/1/2024 7:14:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 7:14:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:14:00 PM
Trichloroethene	< 0.030	0.030	ppbV	<0.16	0.16	U	1	4/1/2024 7:14:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 7:14:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 7:14:00 PM
Vinyl chloride	< 0.040	0.040	ppbV	<0.1	0.1	U	1	4/1/2024 7:14:00 PM
Surr: Bromofluorobenzene	102	70-130	%Rec				1	4/1/2024 7:14:00 PM

Qualifiers:

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

Data Path : C:\msdchem\1\data\
 Data File : AV040112.D
 Acq On : 1 Apr 2024 7:14 pm
 Operator : DA
 Sample : 2404002-002A
 Misc : A325_1UG
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 01 20:04:04 2024
 Quant Method : C:\msdchem\1\methods\A325_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Mar 26 09:11:14 2024
 Response via : Initial Calibration

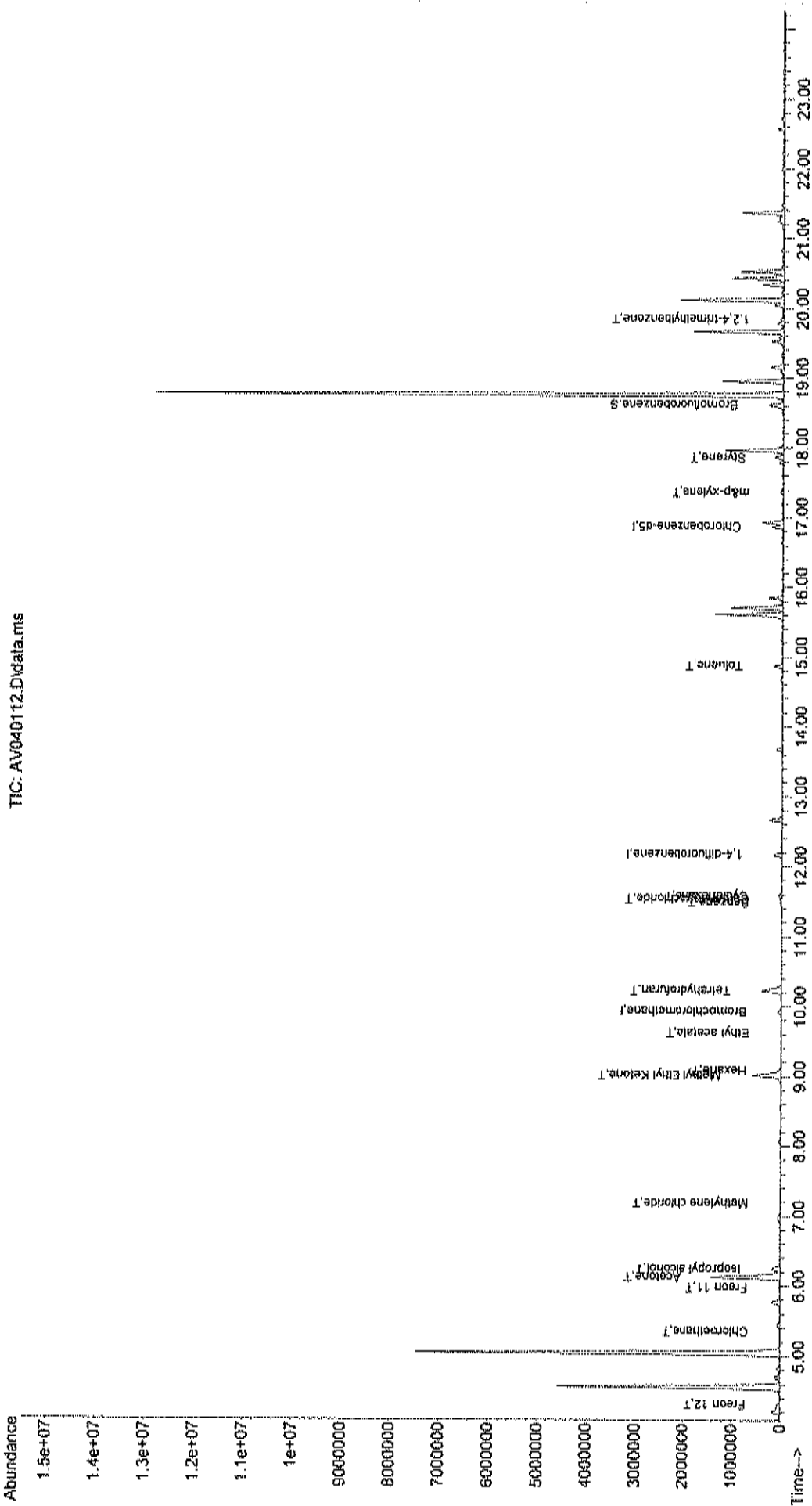
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

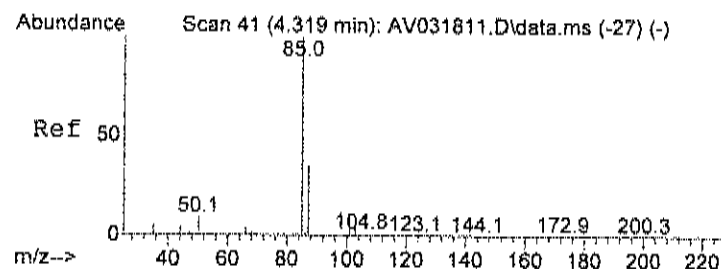
Internal Standards						
1) Bromochloromethane	9.927	128	34741	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	194034	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	185346	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	131353	1.02	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	102.00%
Target Compounds						
						Qvalue
3) Freon 12	4.319	85	71683	0.41	ppb	100
10) Chloroethane	5.351	64	3347	0.13	ppb	# 79
14) Freon 11	5.975	101	35952	0.20	ppb	95
15) Acetone	6.122	58	776894m ^{CA}	34.48	ppb	
17) Isopropyl alcohol	6.241	45	129907	1.90	ppb	# 1
21) Methylene chloride	7.183	84	10234	0.20	ppb	# 75
28) Methyl Ethyl Ketone	9.014	72	365236	12.27	ppb	# 1
30) Hexane	9.082	57	31832m ^{DA}	0.39	ppb	
31) Ethyl acetate	9.626	43	13908	0.16	ppb	99
33) Tetrahydrofuran	10.227	42	347857	7.27	ppb	88
37) Cyclohexane	11.582	56	36440	0.53	ppb	# 77
38) Carbon tetrachloride	11.537	117	7141	0.07	ppb	97
39) Benzene	11.492	78	25925	0.15	ppb	97
51) Toluene	14.871	92	96999	0.70	ppb	97
59) m&p-xylene	17.360	91	60426	0.23	ppb	98
61) Styrene	17.859	104	49063	0.24	ppb	93
71) 1,2,4-trimethylbenzene	19.837	105	33564	0.10	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040112.D
Acq On : 1 Apr 2024 7:14 pm
Operator : DA
Sample : 2404002-002A
Misc : A325 1UG
ALS Vial : 7 Sample Multiplier: 1

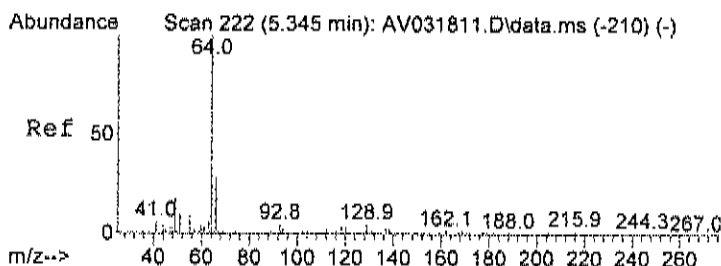
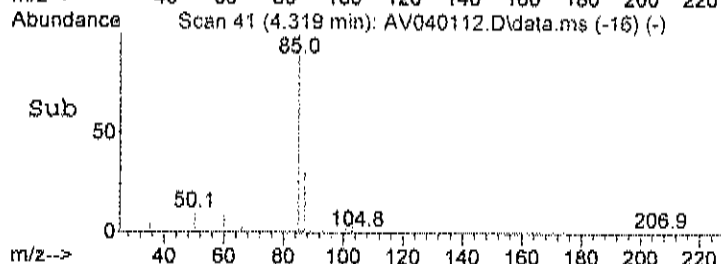
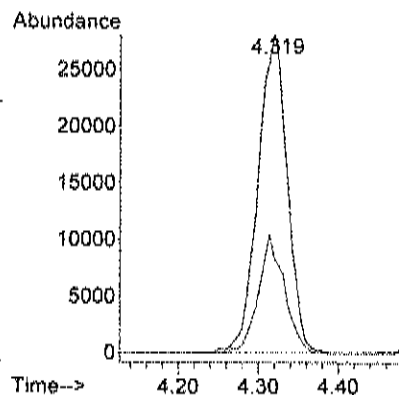
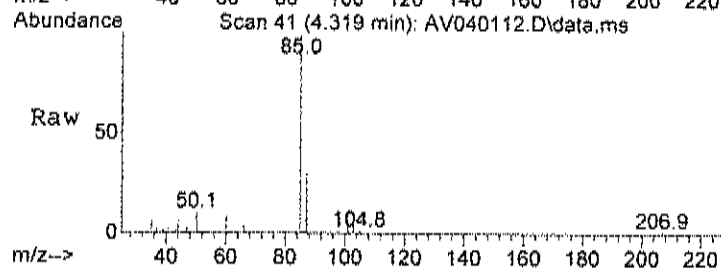
Quant Time: Apr 01 20:04:04 2024
Quant Method : C:\msdchem\1\methods\A325 1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





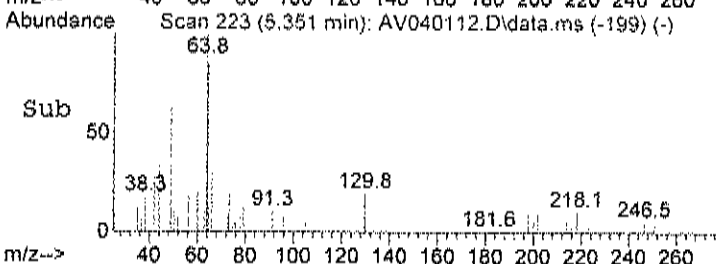
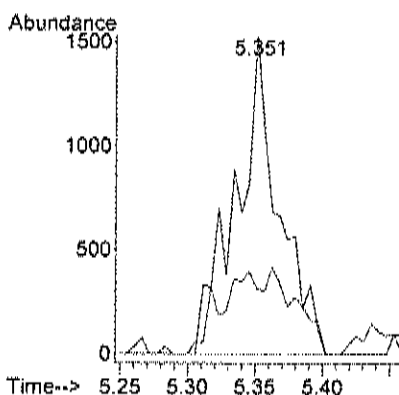
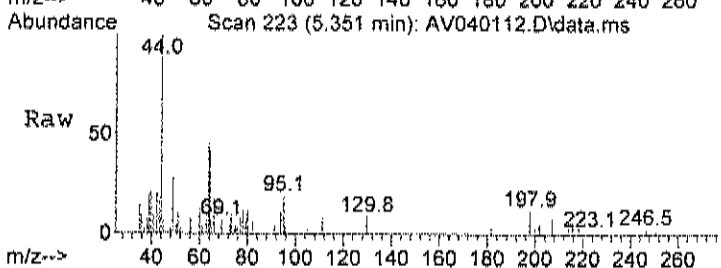
#3
 Freon 12
 Concen: 0.41 ppb
 RT: 4.319 min Scan# 41
 Delta R.T. -0.006 min
 Lab File: AV040112.D
 Acq: 1 Apr 2024 7:14 pm

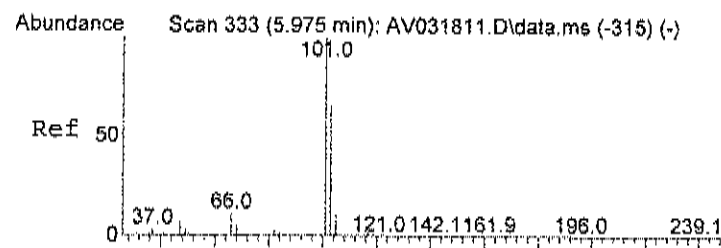
Tgt Ion: 85 Resp: 71683
 Ion Ratio Lower Upper
 85 100
 87 33.0 13.2 53.2



#10
 Chloroethane
 Concen: 0.13 ppb
 RT: 5.351 min Scan# 223
 Delta R.T. -0.012 min
 Lab File: AV040112.D
 Acq: 1 Apr 2024 7:14 pm

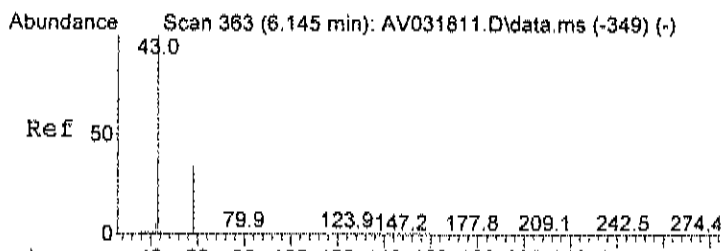
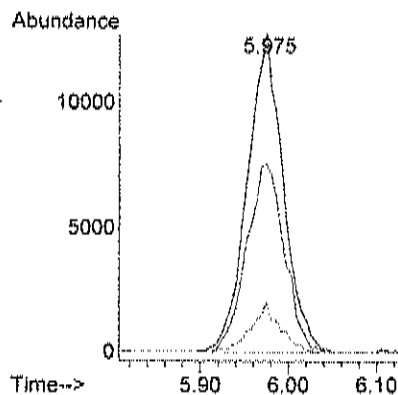
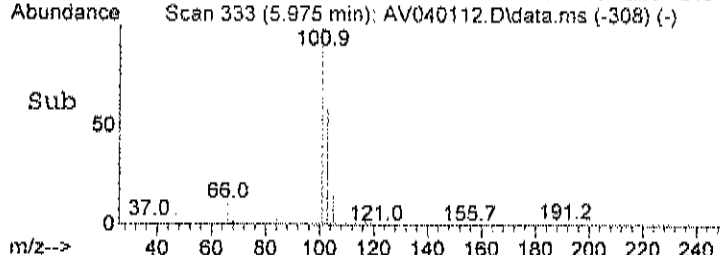
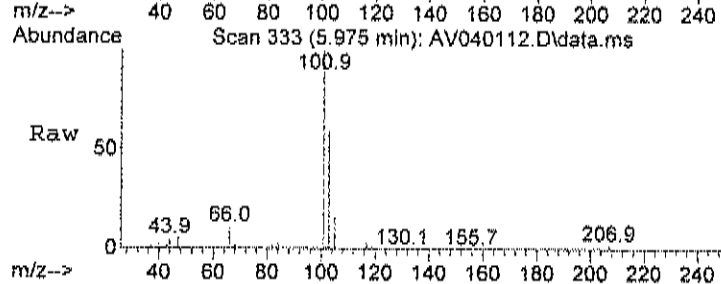
Tgt Ion: 64 Resp: 3347
 Ion Ratio Lower Upper
 64 100
 66 44.2 25.8 38.6#





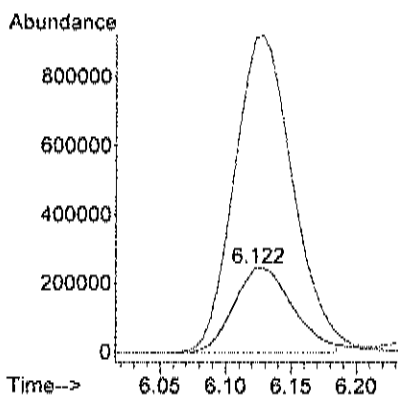
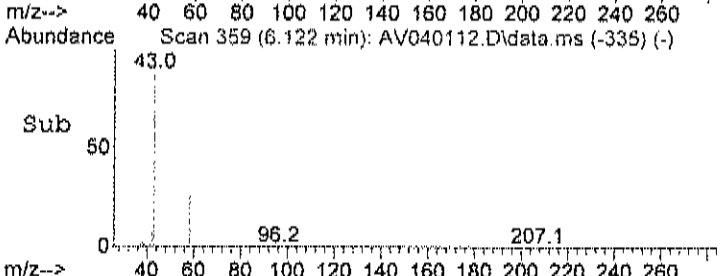
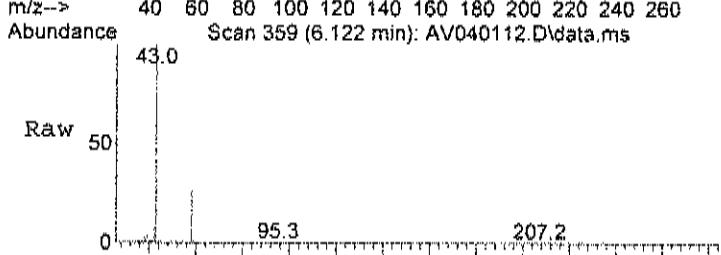
#14
 Freon 11
 Concen: 0.20 ppb
 RT: 5.975 min Scan# 333
 Delta R.T. -0.006 min
 Lab File: AV040112.D
 Acq: 1 Apr 2024 7:14 pm

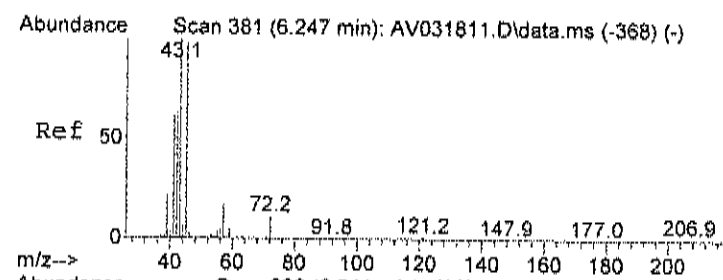
Tgt Ion	Ratio	Lower	Upper
101	100		
103	62.5	46.2	86.2
105	12.5	0.0	30.1



#15
 Acetone
 Concen: 34.48 ppb m
 RT: 6.122 min Scan# 359
 Delta R.T. -0.017 min
 Lab File: AV040112.D
 Acq: 1 Apr 2024 7:14 pm

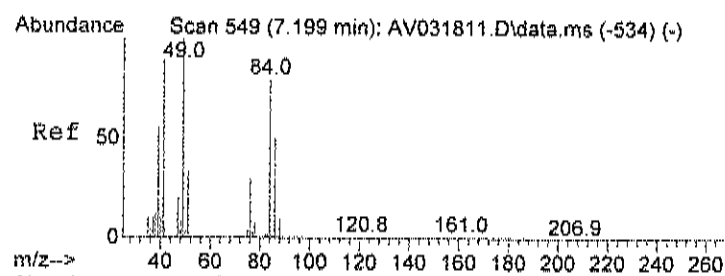
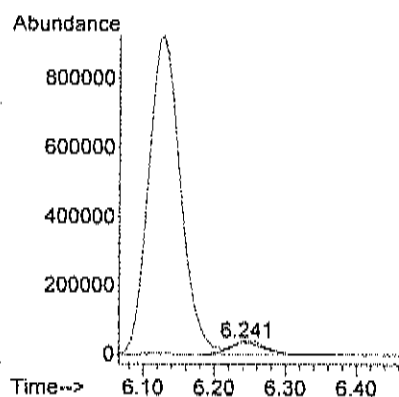
Tgt Ion	Ratio	Lower	Upper
58	100		
43	385.8	257.9	317.9#





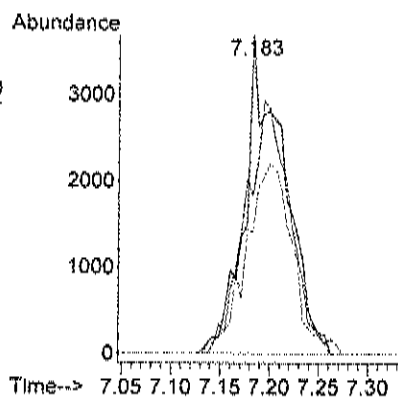
#17
Isopropyl alcohol
Concen: 1.90 ppb
RT: 6.241 min Scan# 380
Delta R.T. -0.006 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

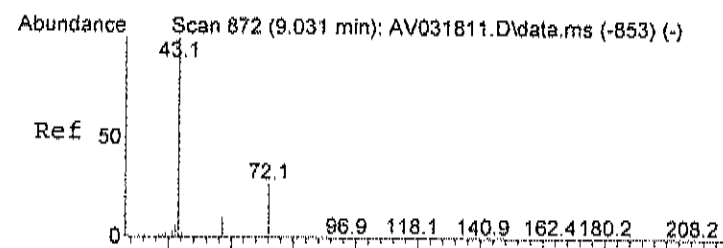
Tgt Ion	Ratio	Lower	Upper
45	100		
43	0.0	118.7	158.7#



#21
Methylene chloride
Concen: 0.20 ppb
RT: 7.183 min Scan# 546
Delta R.T. -0.022 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

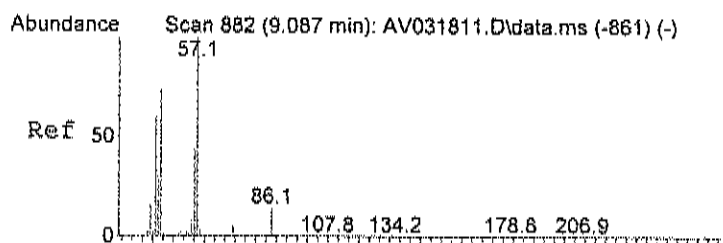
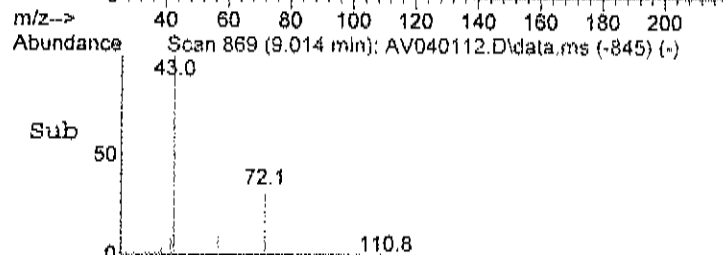
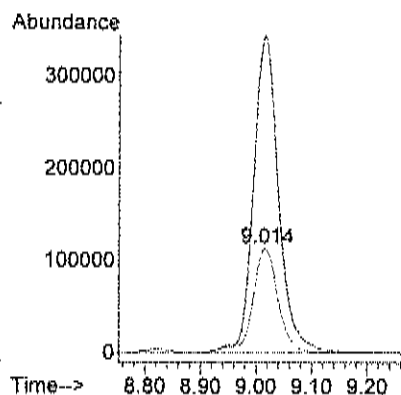
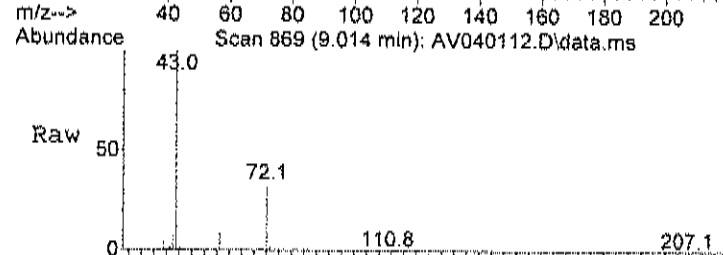
Tgt Ion	Ratio	Lower	Upper
84	100		
49	90.3	110.8	150.8#
86	69.3	44.8	84.8





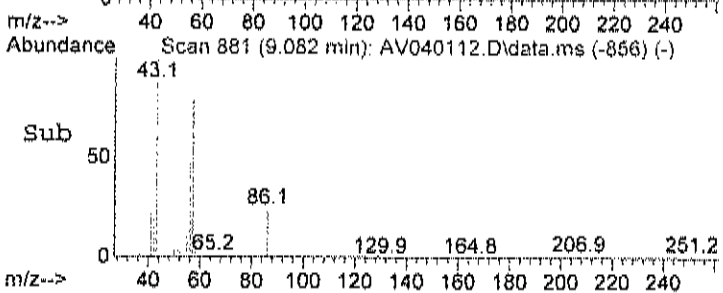
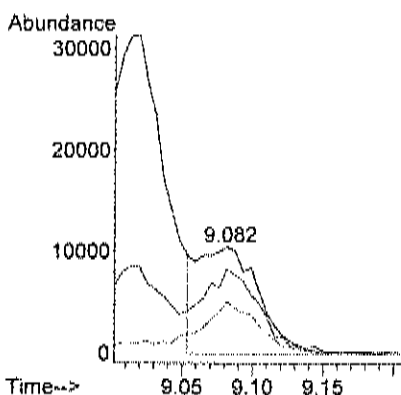
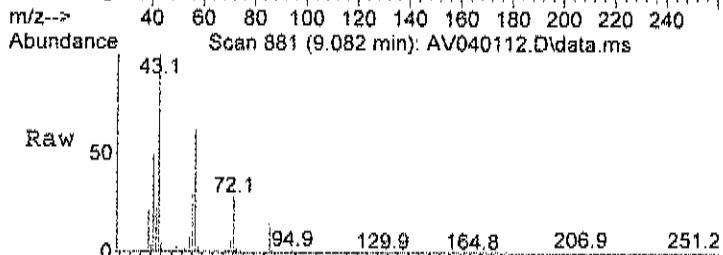
#28
Methyl Ethyl Ketone
Concen: 12.27 ppb
RT: 9.014 min Scan# 869
Delta R.T. -0.011 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

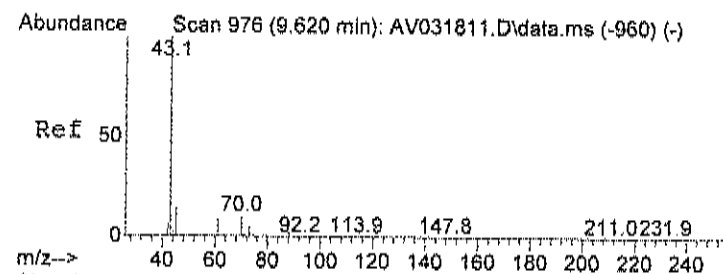
Tgt Ion:	72	Resp:	365236
Ion Ratio	Lower	Upper	
72	100		
43	0.0	339.5	379.5#
72	100.0	80.0	120.0



#30
Hexane
Concen: 0.39 ppb m
RT: 9.082 min Scan# 881
Delta R.T. -0.006 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

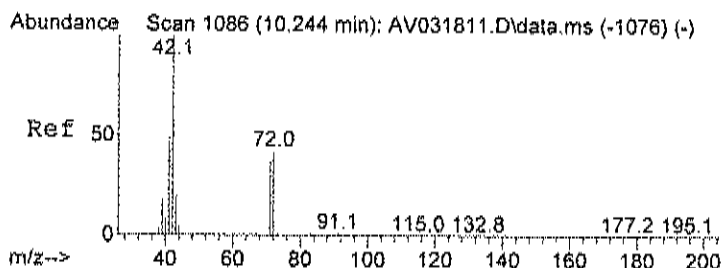
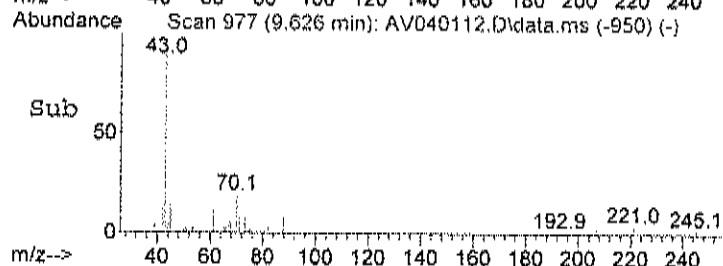
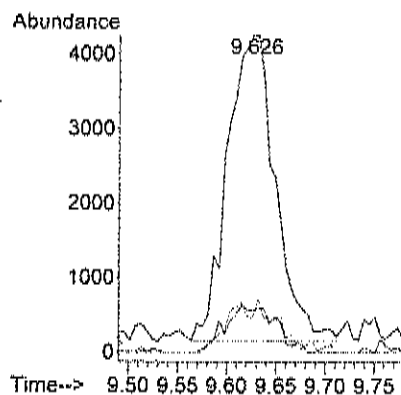
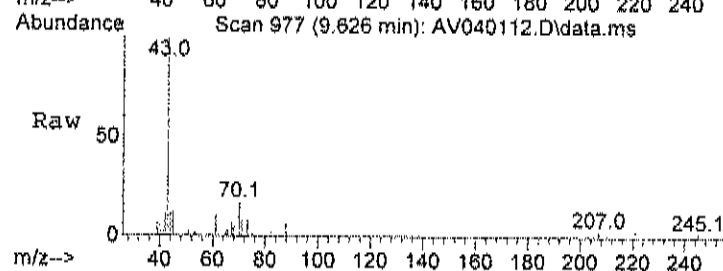
Tgt Ion:	57	Resp:	31832
Ion Ratio	Lower	Upper	
57	100		
41	153.6	53.9	93.9#
56	0.0	32.6	72.6#





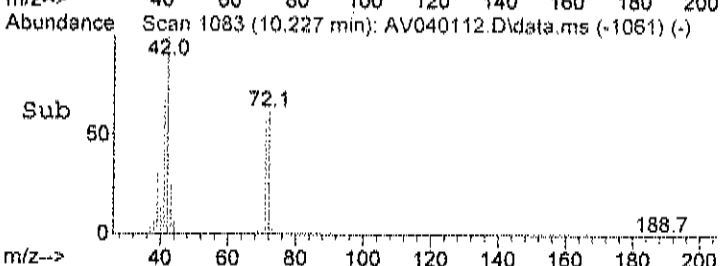
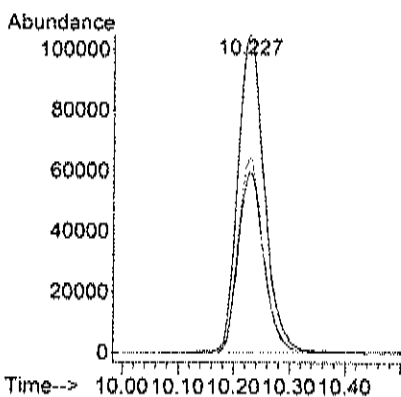
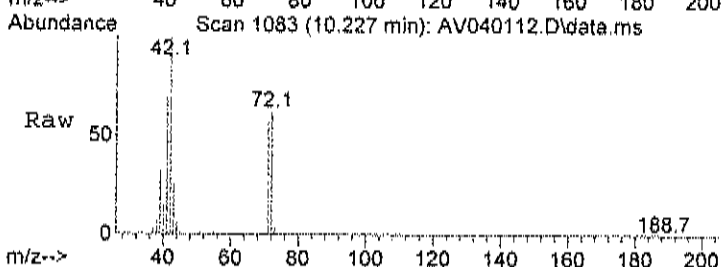
#31
Ethyl acetate
Concen: 0.16 ppb
RT: 9.626 min Scan# 977
Delta R.T. 0.005 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

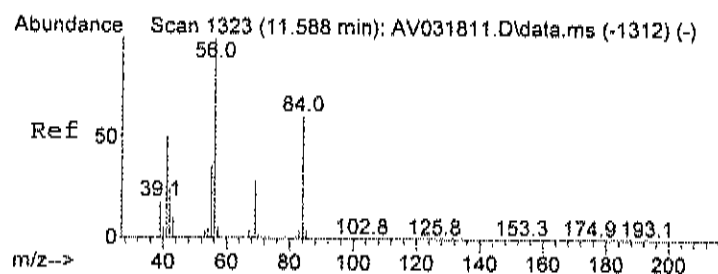
Tgt Ion:	43	Resp:	13908
Ion Ratio	Lower	Upper	
43	100		
45	16.0	0.0	35.3
61	17.1	0.0	37.0



#33
Tetrahydrofuran
Concen: 7.27 ppb
RT: 10.227 min Scan# 1083
Delta R.T. -0.023 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

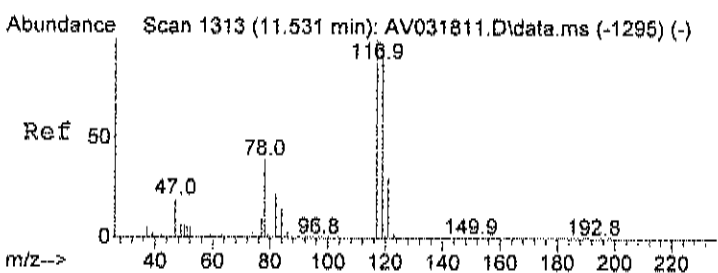
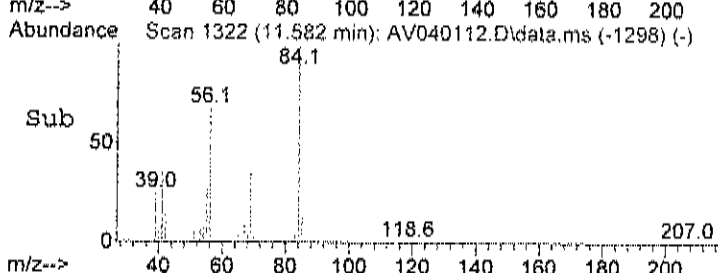
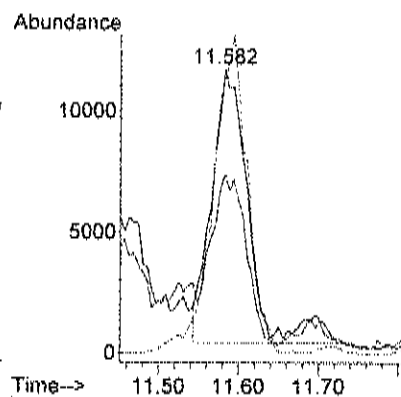
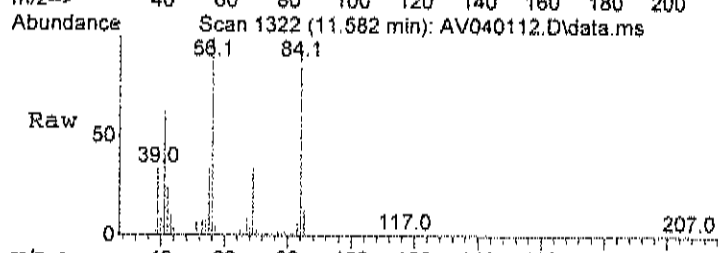
Tgt Ion:	42	Resp:	347857
Ion Ratio	Lower	Upper	
42	100		
71	55.6	27.1	67.1
72	59.3	30.8	70.8





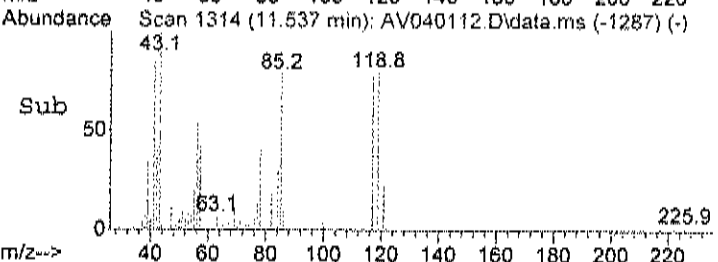
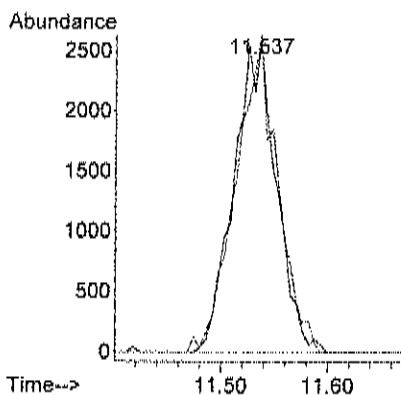
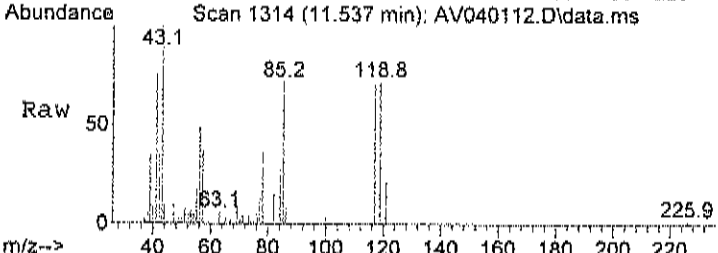
#37
Cyclohexane
Concen: 0.53 ppb
RT: 11.582 min Scan# 1322
Delta R.T. -0.012 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

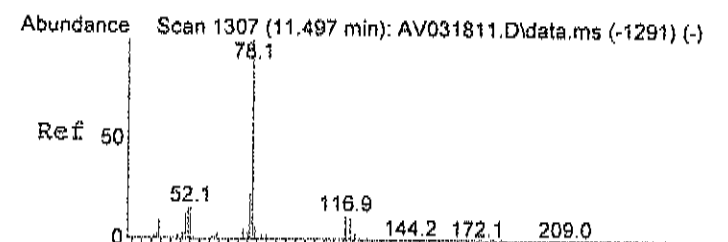
Tgt Ion	Ratio	Lower	Upper
56	100		
41	57.0	36.6	76.6
84	108.4	53.8	93.8#



#38
Carbon tetrachloride
Concen: 0.07 ppb
RT: 11.537 min Scan# 1314
Delta R.T. 0.006 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

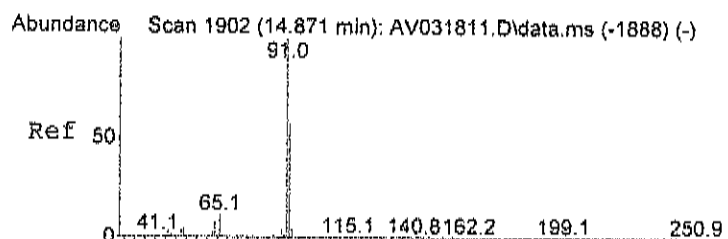
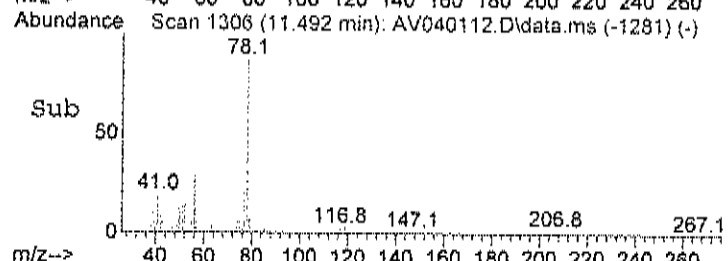
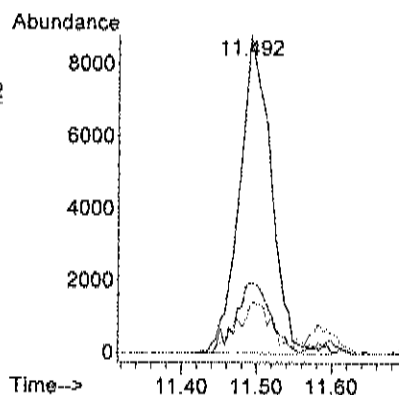
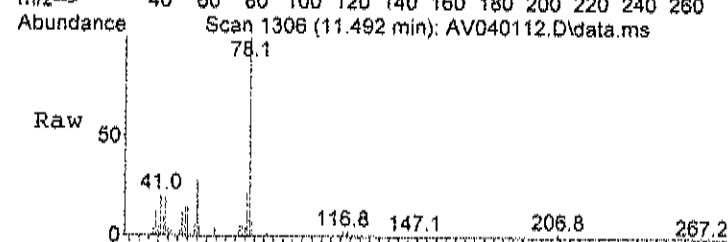
Tgt Ion	Ratio	Lower	Upper
117	100		
119	100.8	77.5	117.5





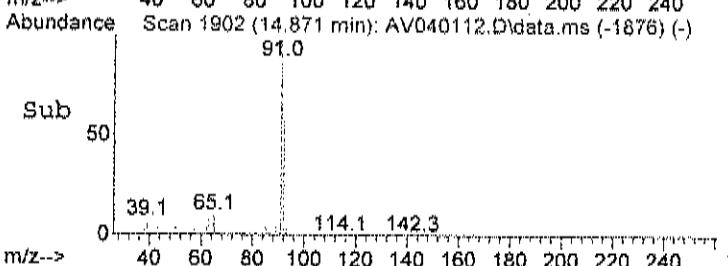
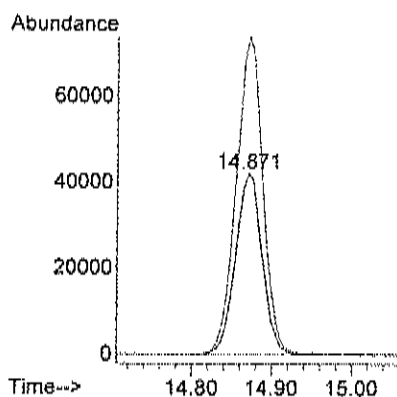
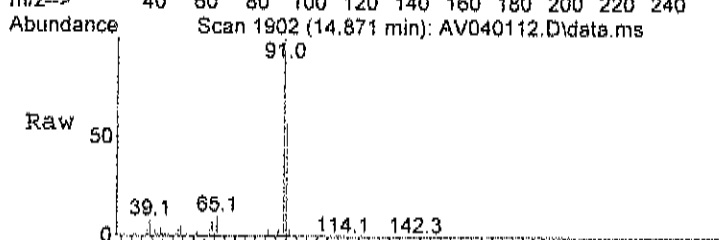
#39
Benzene
Concen: 0.15 ppb
RT: 11.492 min Scan# 1306
Delta R.T. -0.005 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

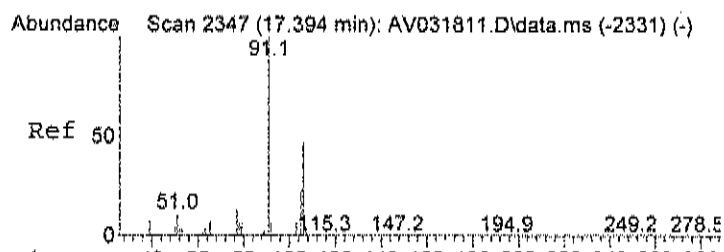
Tgt Ion:	78	Resp:	25925
Ion Ratio	Lower	Upper	
78	100		
77	24.3	5.2	45.2
51	17.9	0.0	35.7



#51
Toluene
Concen: 0.70 ppb
RT: 14.871 min Scan# 1902
Delta R.T. -0.000 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

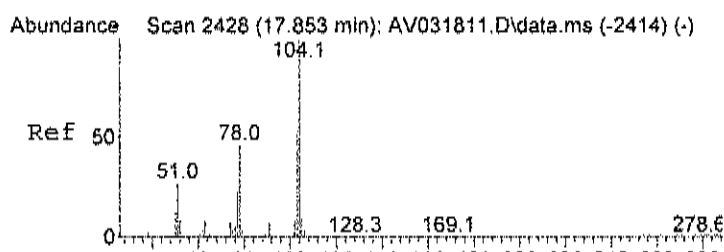
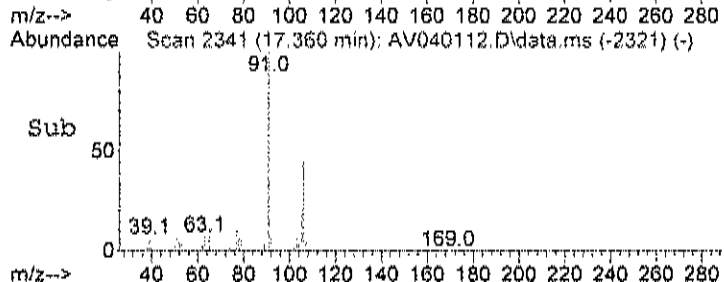
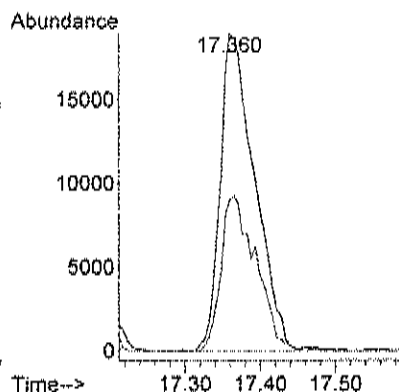
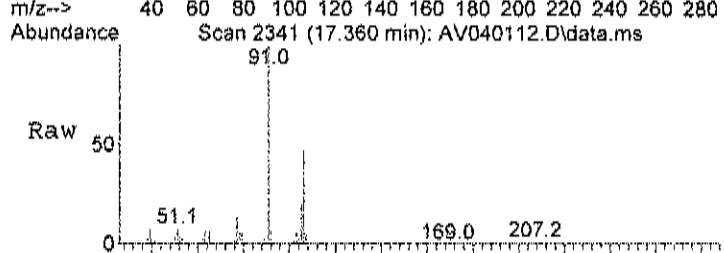
Tgt Ion:	92	Resp:	96999
Ion Ratio	Lower	Upper	
92	100		
91	176.1	160.7	200.7





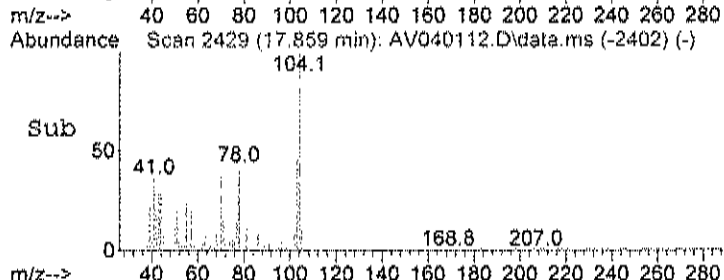
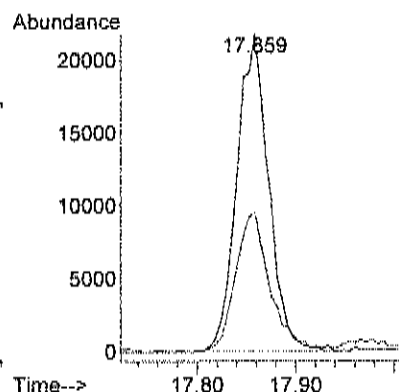
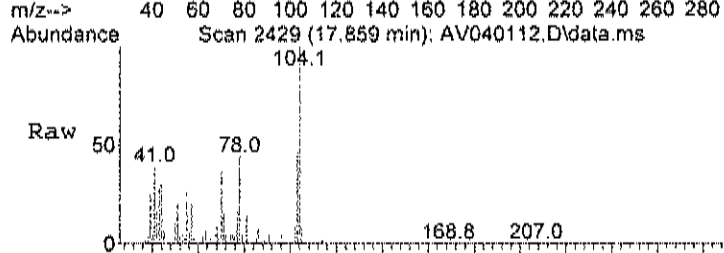
#59
m&p-xylene
Concen: 0.23 ppb
RT: 17.360 min Scan# 2341
Delta R.T. -0.034 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

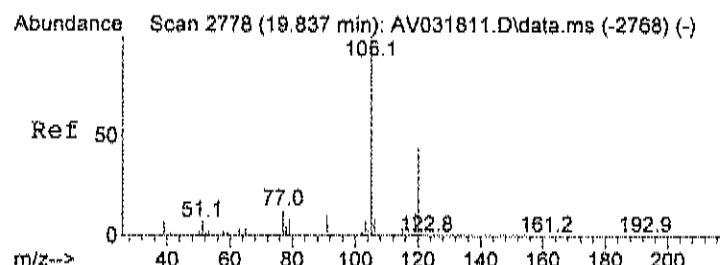
Tgt Ion: 91 Resp: 60426
Ion Ratio Lower Upper
91 100
106 49.1 27.5 67.5



#61
Styrene
Concen: 0.24 ppb
RT: 17.859 min Scan# 2429
Delta R.T. 0.006 min
Lab File: AV040112.D
Acq: 1 Apr 2024 7:14 pm

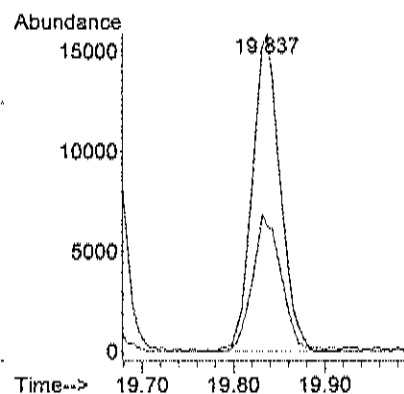
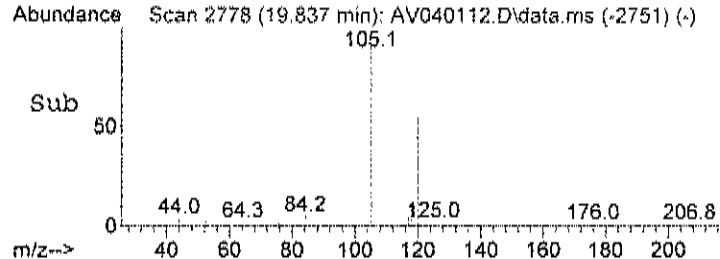
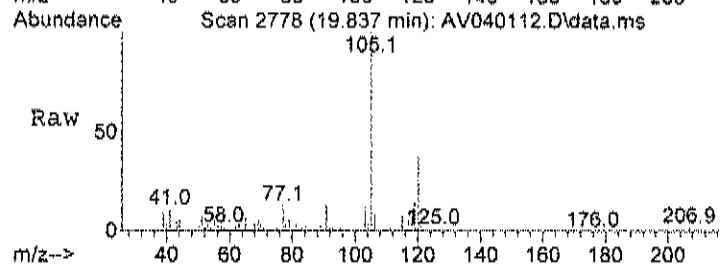
Tgt Ion: 104 Resp: 49063
Ion Ratio Lower Upper
104 100
78 50.0 25.5 65.5





#71
 1,2,4-trimethylbenzene
 Concen: 0.10 ppb
 RT: 19.837 min Scan# 2778
 Delta R.T. 0.000 min
 Lab File: AV040112.D
 Acq: 1 Apr 2024 7:14 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
120	44.4	25.8	65.8



Data Path : C:\msdchem\1\data\
Data File : AV040118.D
Acq On : 1 Apr 2024 11:39 pm
Operator : DA
Sample : 2404002-002A 10x
Misc : A325_1UG
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 02 02:53:21 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

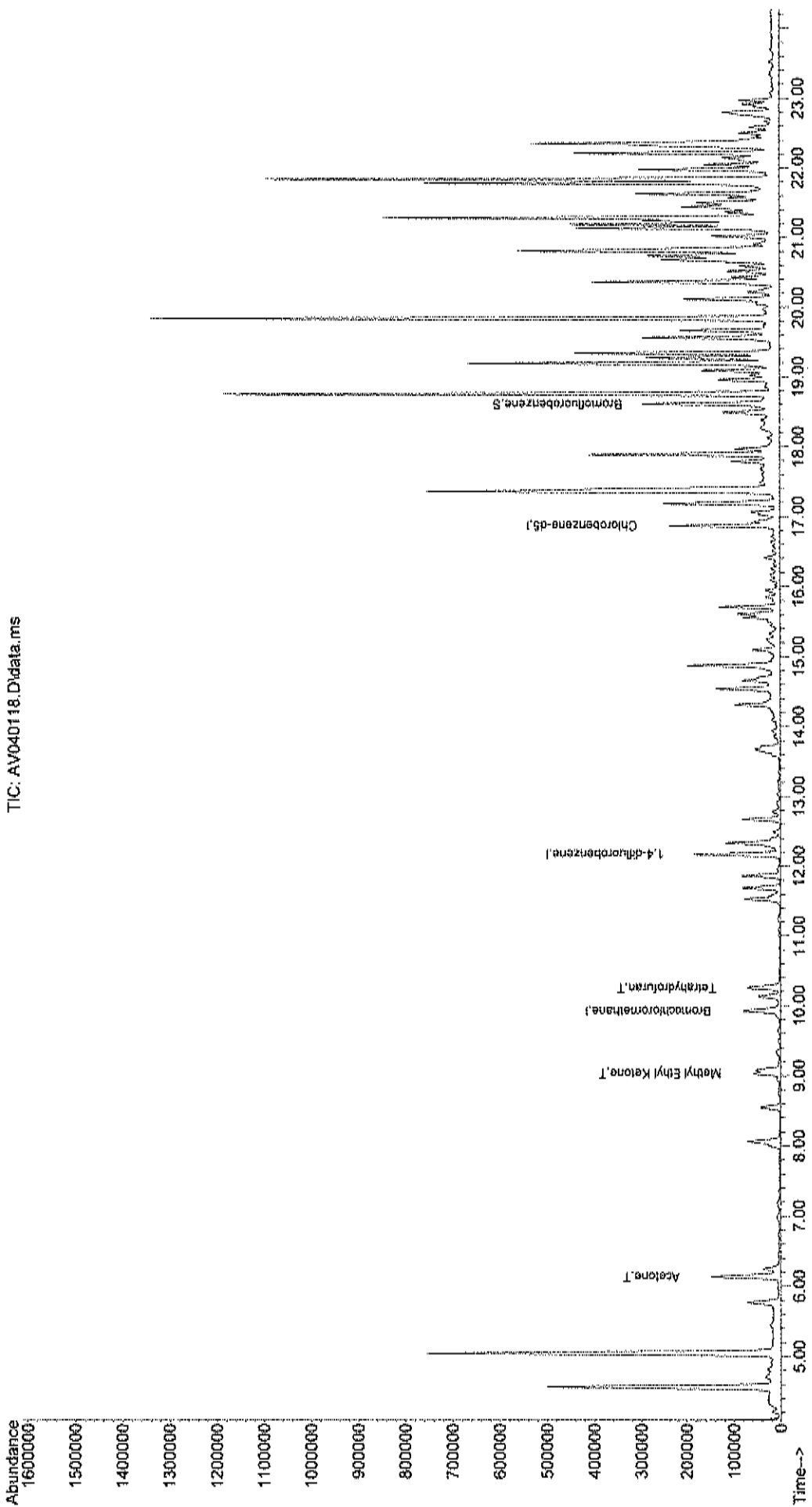
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

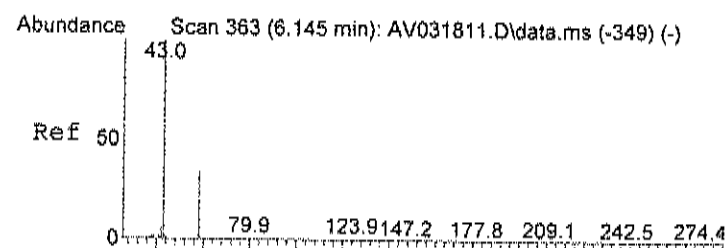
Internal Standards						
1) Bromochloromethane	9.921	128	40810	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	223245	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	193219	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.607	95	123431	0.92	ppb	0.00
Spiked Amount	1.000	Range 70 - 130	Recovery	=	92.00%	
Target Compounds						
15) Acetone	6.134	58	83890m ^{PA}	3.17	ppb	Qvalue
28) Methyl Ethyl Ketone	9.031	72	32310	0.92	ppb	100
33) Tetrahydrofuran	10.250	42	41264	0.73	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040118.D
Acq On : 1 Apr 2024 11:39 pm
Operator : DA
Sample : 2404002-002A 10x
Misc : A325_1UG
ALS Vial : 13 Sample Multiplier: 1

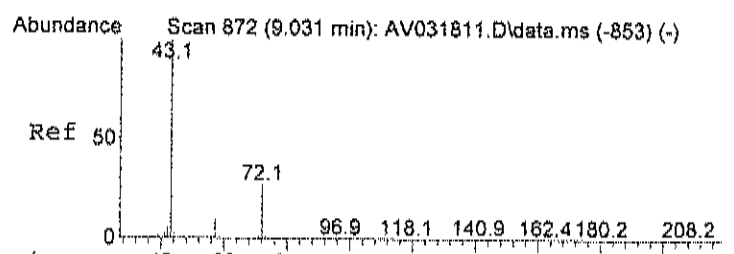
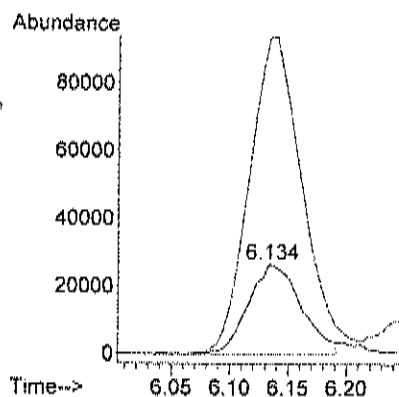
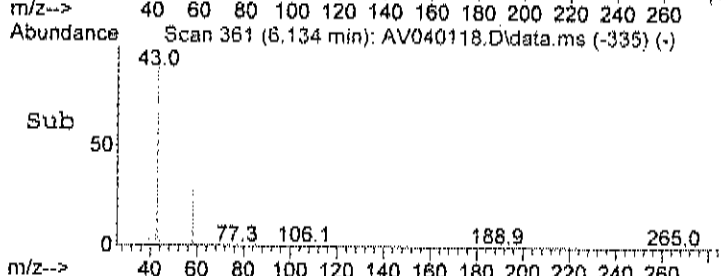
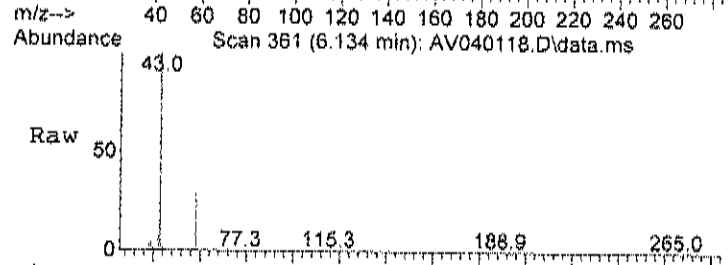
Quant Time: Apr 02 02:53:21 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





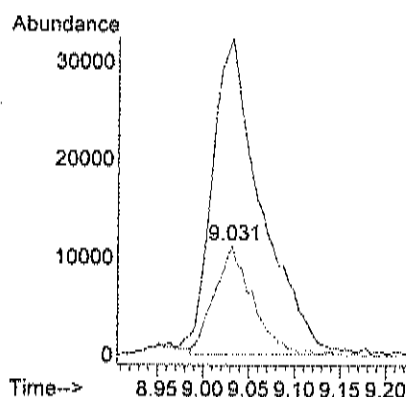
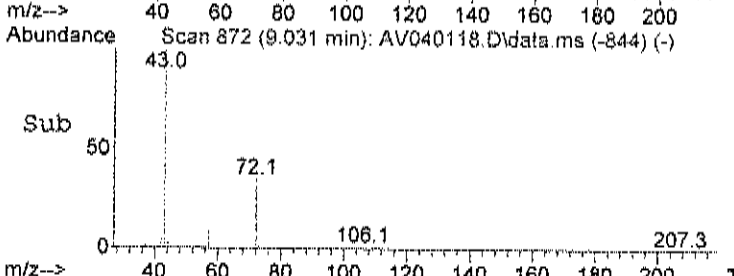
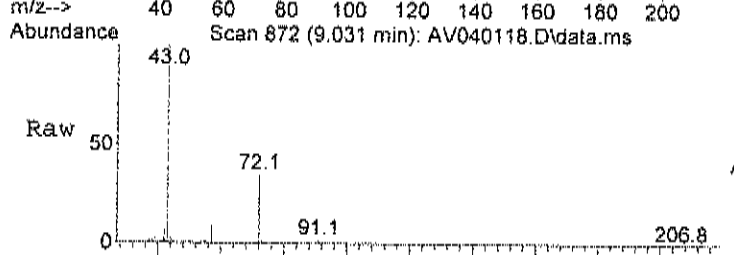
#15
Acetone
Concen: 3.17 ppb m
RT: 6.134 min Scan# 361
Delta R.T. -0.005 min
Lab File: AV040118.D
Acq: 1 Apr 2024 11:39 pm

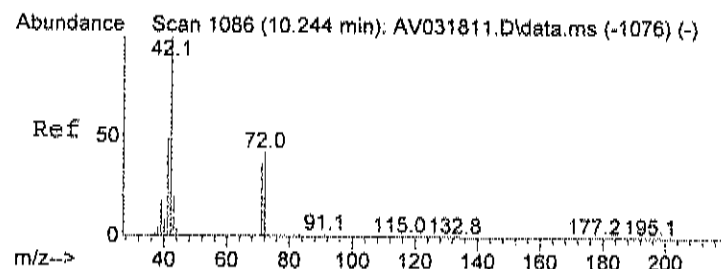
Tgt Ion: 58 Resp: 83890
Ion Ratio Lower Upper
58 100
43 384.9 257.9 317.9#



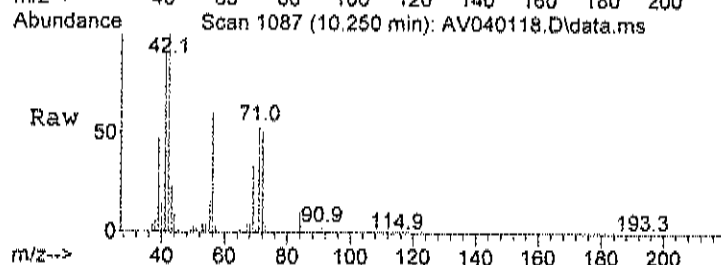
#28
Methyl Ethyl Ketone
Concen: 0.92 ppb
RT: 9.031 min Scan# 872
Delta R.T. 0.006 min
Lab File: AV040118.D
Acq: 1 Apr 2024 11:39 pm

Tgt Ion: 72 Resp: 32310
Ion Ratio Lower Upper
72 100
43 359.5 339.5 379.5
72 100.0 80.0 120.0

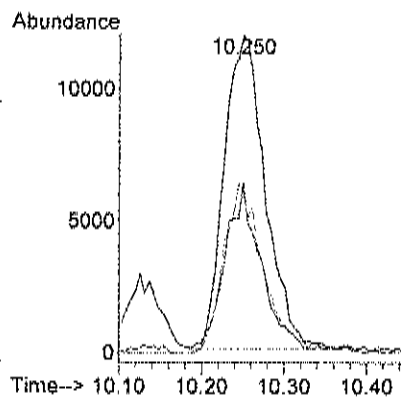
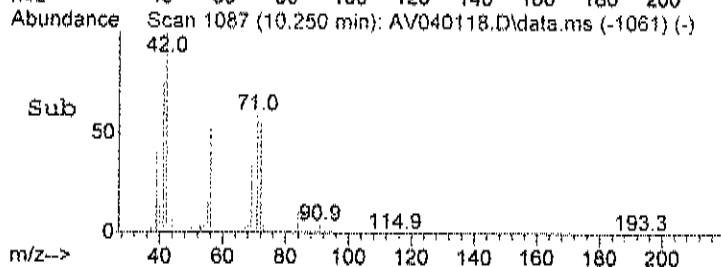




#33
Tetrahydrofuran
Concen: 0.73 ppb
RT: 10.250 min Scan# 1087
Delta R.T. -0.000 min
Lab File: AV040118.D
Acq: 1 Apr 2024 11:39 pm



Tgt Ion	Ratio	Lower	Upper
42	100		
71	49.9	27.1	67.1
72	52.6	30.8	70.8



Data Path : C:\msdchem\1\data\
Data File : AV040119.D
Acq On : 2 Apr 2024 12:21 am
Operator : DA
Sample : 2404002-002A 40x
Misc : A325_1UG
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 02 02:52:20 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

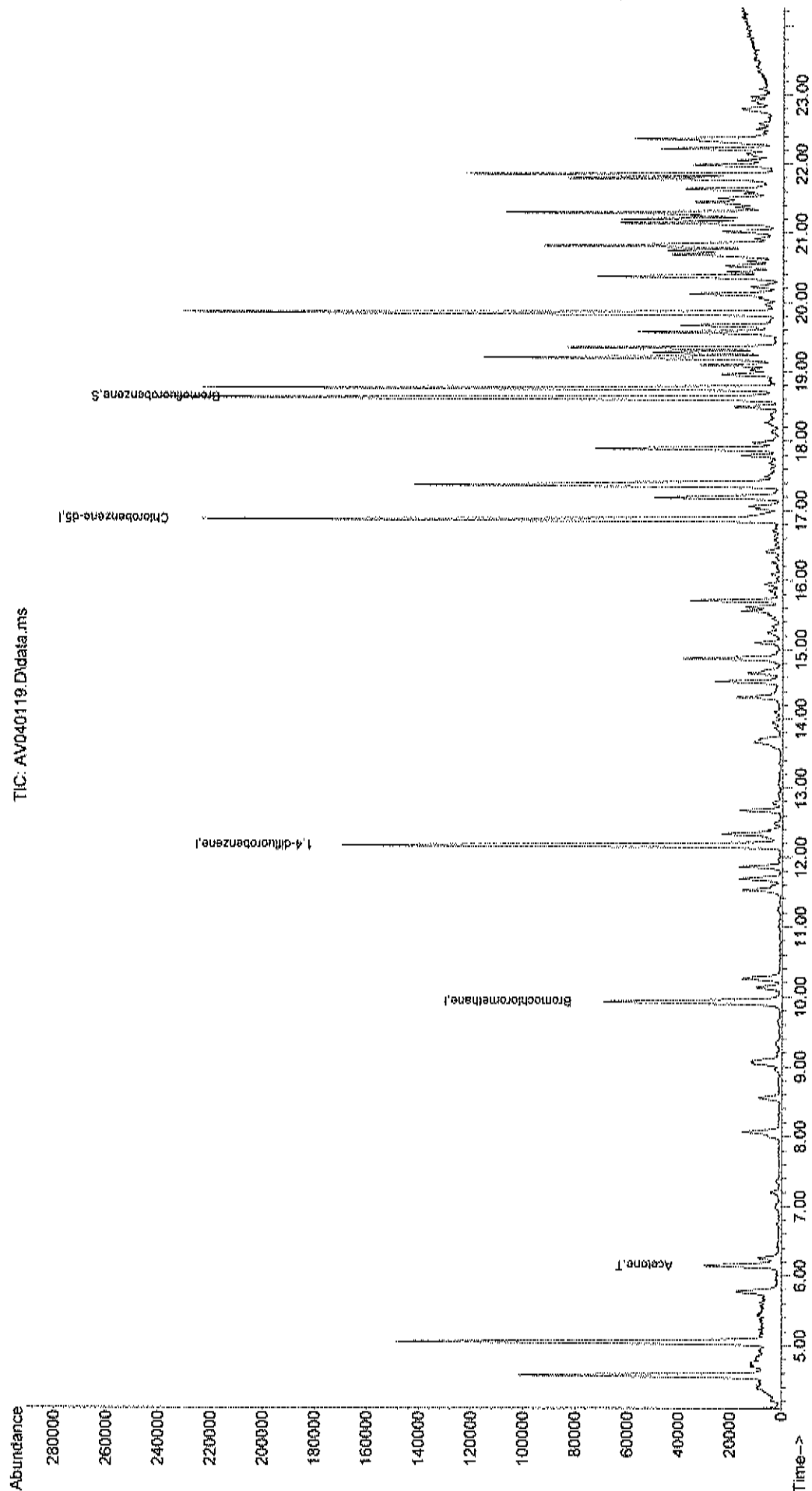
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

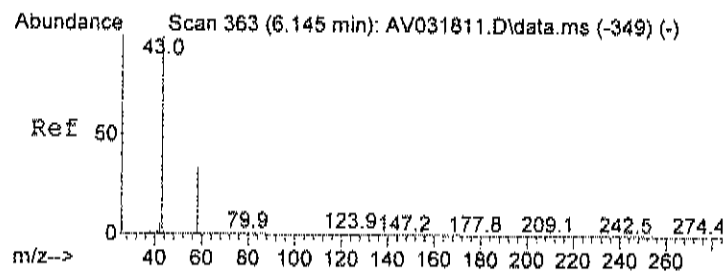
Internal Standards						
1) Bromochloromethane	9.927	128	39449	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	213246	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	182720	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	114746	0.90	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	90.00%
Target Compounds						
15) Acetone	6.145	58	16857m ^{QA}	0.66	ppb	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040119.D
Acq On : 2 Apr 2024 12:21 am
Operator : DA
Sample : 2404002-002A 40x
Misc : A325_1UG
ALS Vial : 14 Sample Multiplier: 1

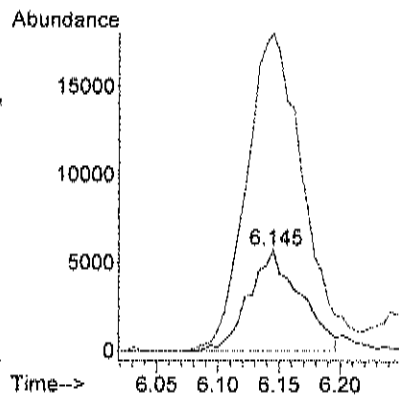
Quant Time: Apr 02 02:52:20 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : FO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





#15
 Acetone
 Concen: 0.66 ppb m
 RT: 6.145 min Scan# 363
 Delta R.T. 0.006 min
 Lab File: AV040119.D
 Acq: 2 Apr 2024 12:21 am

Tgt Ion: 58 Resp: 16857
 Ion Ratio Lower Upper
 58 100
 43 379.7 257.9 317.9#





SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-003

Client Sample ID: 252-SS-02

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

FieldSampler	Jesse		
Lab Vacuum In	-2	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 BY METHOD TO15

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 10:12:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 10:12:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 10:12:00 PM
1,1-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 10:12:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 10:12:00 PM
1,2,4-Trimethylbenzene	0.11	0.15	ppbV	0.54	0.74	J	1	4/1/2024 10:12:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 10:12:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 10:12:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 10:12:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 10:12:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 10:12:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 10:12:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 10:12:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 10:12:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 10:12:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 10:12:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 10:12:00 PM
Acetone	14	3.0	ppbV	32	7.1		10	4/2/2024 3:56:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 10:12:00 PM

Qualifiers:

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-003

Client Sample ID: 252-SS-02

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15		Analyst: DA		
Benzene	0.33	0.15	ppbV	1.1	0.48		1	4/1/2024 10:12:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 10:12:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 10:12:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 10:12:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 10:12:00 PM
Carbon tetrachloride	< 0.15	0.15	ppbV	<0.94	0.94	U	1	4/1/2024 10:12:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 10:12:00 PM
Chloroethane	< 0.15	0.15	ppbV	<0.4	0.4	U	1	4/1/2024 10:12:00 PM
Chloroform	0.13	0.15	ppbV	0.83	0.73	J	1	4/1/2024 10:12:00 PM
Chloromethane	0.10	0.15	ppbV	0.21	0.31	J	1	4/1/2024 10:12:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 10:12:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 10:12:00 PM
Cyclohexane	0.17	0.15	ppbV	0.59	0.52		1	4/1/2024 10:12:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 10:12:00 PM
Ethyl acetate	0.46	0.15	ppbV	1.7	0.54		1	4/1/2024 10:12:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 10:12:00 PM
Freon 11	0.19	0.15	ppbV	1.1	0.84		1	4/1/2024 10:12:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 10:12:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
Freon 12	0.42	0.15	ppbV	2.1	0.74		1	4/1/2024 10:12:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 10:12:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 10:12:00 PM
Hexane	0.15	0.15	ppbV	0.53	0.53		1	4/1/2024 10:12:00 PM
Isopropyl alcohol	2.1	1.5	ppbV	5.2	3.7		10	4/2/2024 3:56:00 AM
m&p-Xylene	0.29	0.30	ppbV	1.3	1.3	J	1	4/1/2024 10:12:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 10:12:00 PM
Methyl Ethyl Ketone	5.2	3.0	ppbV	15	8.8		10	4/2/2024 3:56:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-003

Client Sample ID: 252-SS-02
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15		Analyst: DA		
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 10:12:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 10:12:00 PM
Methylene chloride	3.1	1.5	ppbV	11	5.2		10	4/2/2024 3:56:00 AM
o-Xylene	0.10	0.15	ppbV	0.43	0.65	J	1	4/1/2024 10:12:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 10:12:00 PM
Styrene	0.14	0.15	ppbV	0.6	0.64	J	1	4/1/2024 10:12:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
Tetrahydrofuran	2.9	1.5	ppbV	8.6	4.4		10	4/2/2024 3:56:00 AM
Toluene	2.3	1.5	ppbV	8.7	5.7		10	4/2/2024 3:56:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 10:12:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 10:12:00 PM
Trichloroethene	0.32	0.15	ppbV	1.7	0.81		1	4/1/2024 10:12:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 10:12:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 10:12:00 PM
Vinyl chloride	< 0.15	0.15	ppbV	<0.38	0.38	U	1	4/1/2024 10:12:00 PM
Surr: Bromofluorobenzene	97.0	70-130	%Rec				1	4/1/2024 10:12:00 PM

Qualifiers:

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

Data Path : C:\msdchem\1\data\
 Data File : AV040116.D
 Acq On : 1 Apr 2024 10:12 pm
 Operator : DA
 Sample : 2404002-003A
 Misc : A325_1UG
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 02 02:48:48 2024
 Quant Method : C:\msdchem\1\methods\A325_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Mar 26 09:11:14 2024
 Response via : Initial Calibration

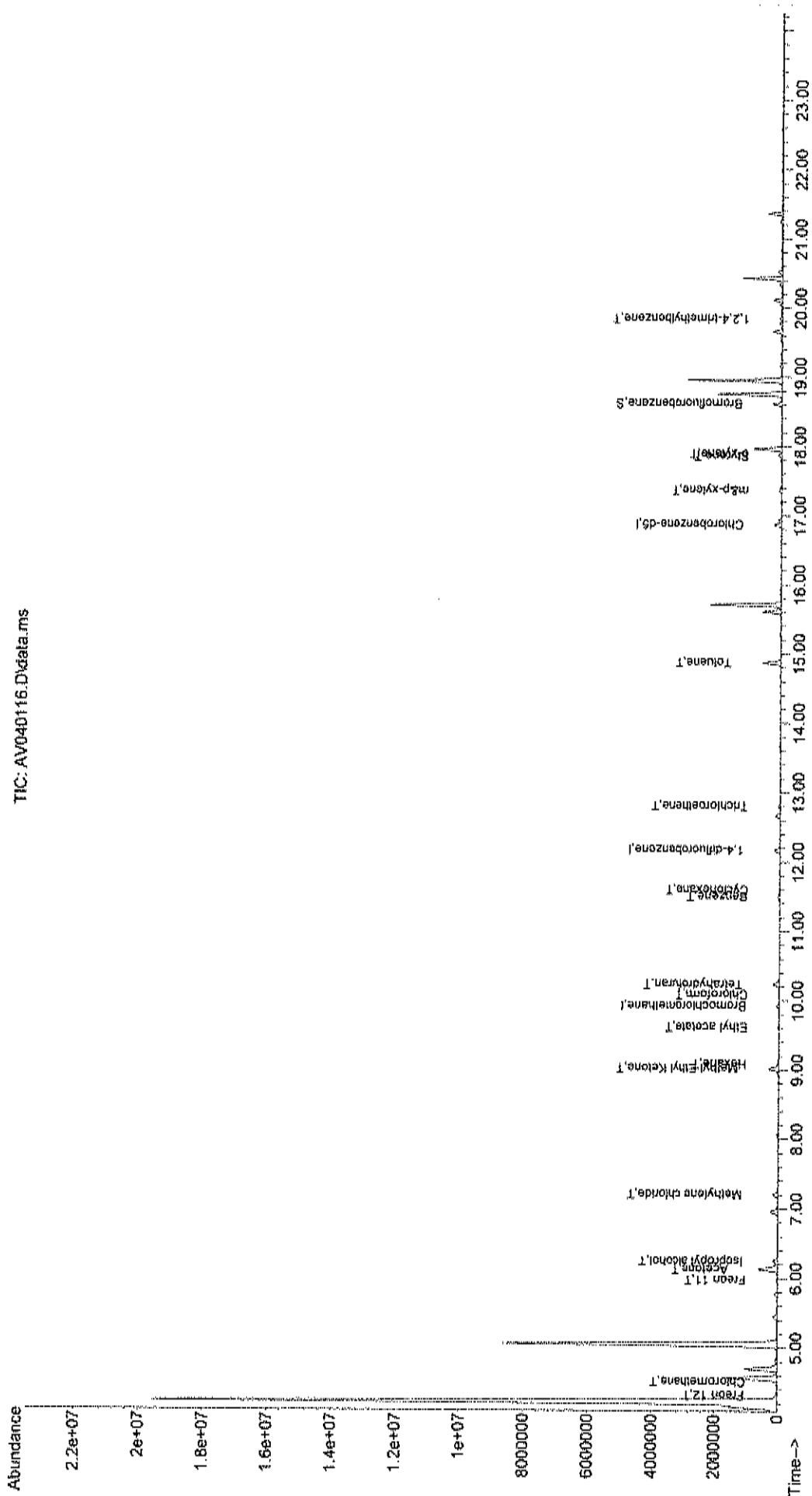
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

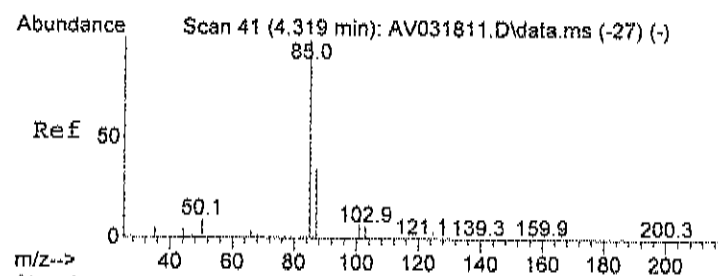
Internal Standards						
1) Bromochloromethane	9.921	128	37192	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	200904	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	191771	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	129890	0.97	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	97.00%
Target Compounds						
						Qvalue
3) Freon 12	4.319	85	78341	0.42	ppb	99
4) Chloromethane	4.512	50	5002m ^{ph}	0.10	ppb	
14) Freon 11	5.975	101	37147	0.19	ppb	99
15) Acetone	6.128	58	345535m ^{ph}	14.32	ppb	
17) Isopropyl alcohol	6.241	45	149255	2.04	ppb	# 1
21) Methylene chloride	7.200	84	139152	2.55	ppb	# 79
28) Methyl Ethyl Ketone	9.020	72	190154	5.97	ppb	# 1
30) Hexane	9.088	57	12668m ^{ph}	0.15	ppb	
31) Ethyl acetate	9.615	43	42293	0.46	ppb	98
32) Chloroform	10.085	83	17800	0.13	ppb	91
33) Tetrahydrofuran	10.233	42	155860	3.04	ppb	84
37) Cyclohexane	11.594	56	11860	0.17	ppb	# 46
39) Benzene	11.503	78	57910	0.33	ppb	96
44) Trichloroethene	12.807	130	29326	0.32	ppb	98
51) Toluene	14.871	92	329408	2.30	ppb	96
59) m&p-xylene	17.365	91	78626	0.29	ppb	100
61) Styrene	17.859	104	29649	0.14	ppb	92
63) o-xylene	17.887	91	29787	0.10	ppb	98
71) 1,2,4-trimethylbenzene	19.837	105	35429	0.11	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040116.D
Acq On : 1 Apr 2024 10:12 pm
Operator : DA
Sample : 2404002-003A
Misc : A325_1UG
ALS Vial : 11 Sample Multiplier: 1

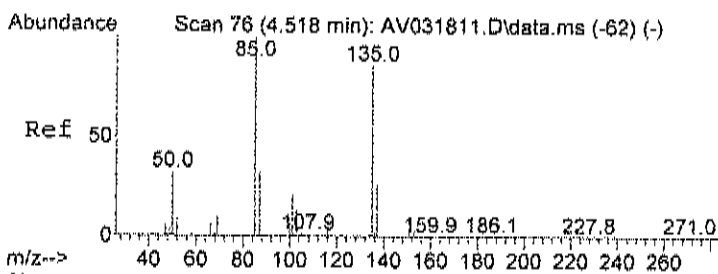
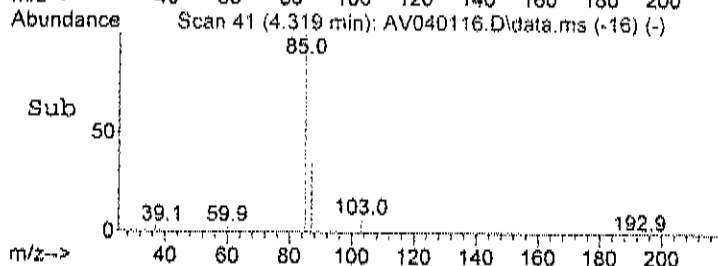
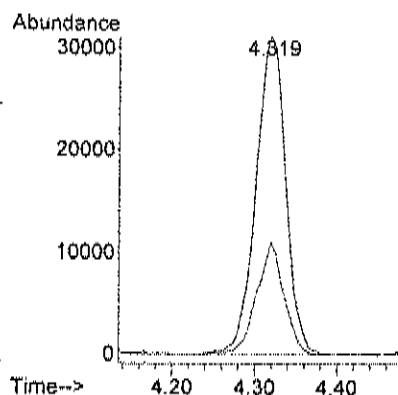
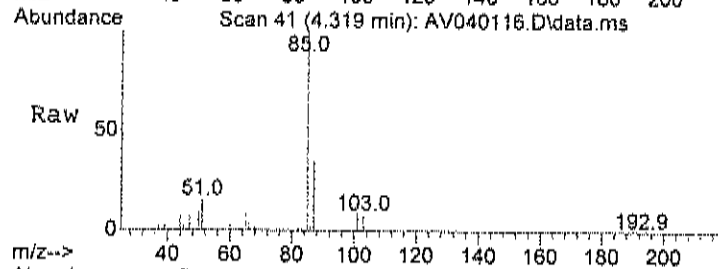
Quant Time: Apr 02 02:48:48 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





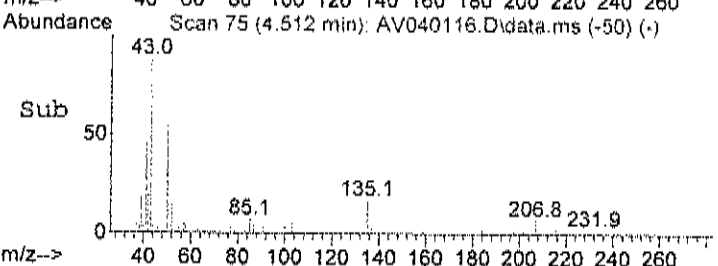
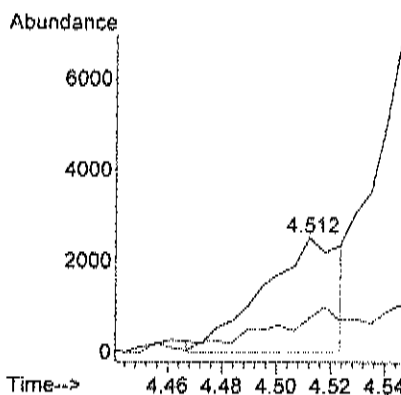
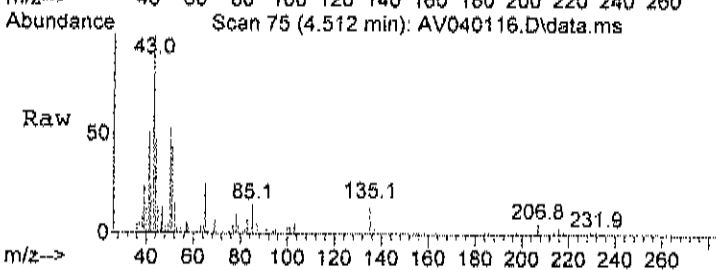
#3
 Freon 12
 Concen: 0.42 ppb
 RT: 4.319 min Scan# 41
 Delta R.T. -0.006 min
 Lab File: AV040116.D
 Acq: 1 Apr 2024 10:12 pm

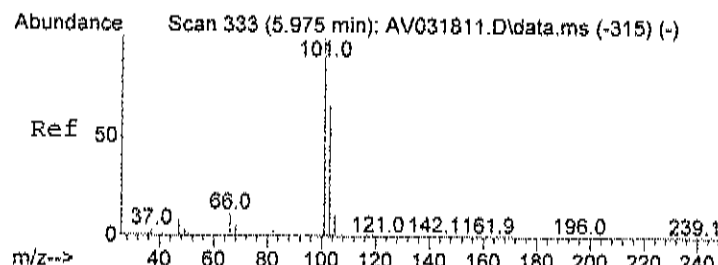
Tgt Ion: 85 Resp: 78341
 Ion Ratio Lower Upper
 85 100
 87 32.4 13.2 53.2



#4
 Chloromethane
 Concen: 0.10 ppb m
 RT: 4.512 min Scan# 75
 Delta R.T. -0.011 min
 Lab File: AV040116.D
 Acq: 1 Apr 2024 10:12 pm

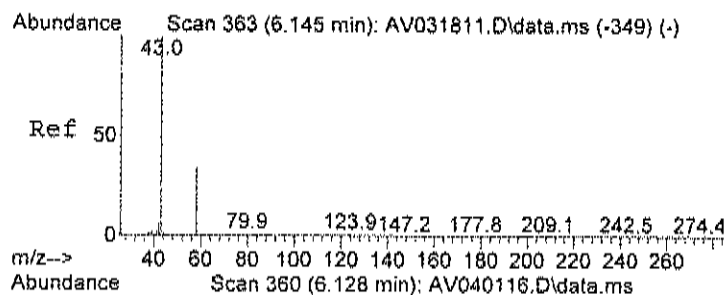
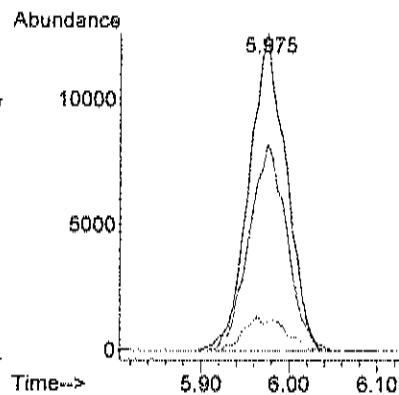
Tgt Ion: 50 Resp: 5002
 Ion Ratio Lower Upper
 50 100
 52 147.9 5.6 45.6#





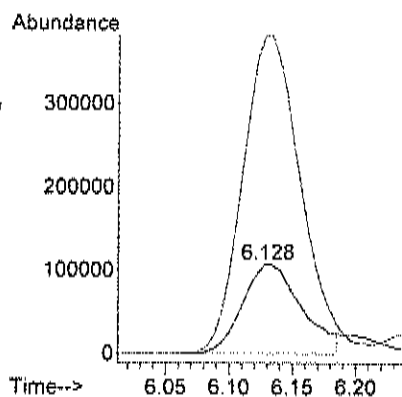
#14
Freon 11
Concen: 0.19 ppb
RT: 5.975 min Scan# 333
Delta R.T. -0.006 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

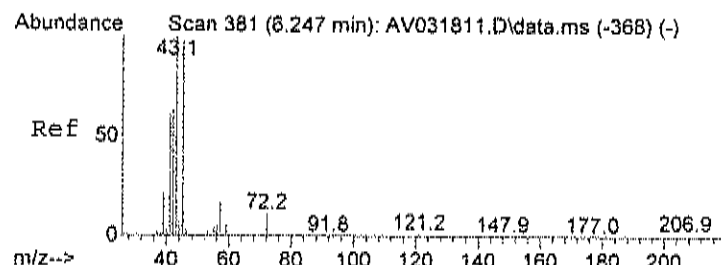
Tgt Ion	Ratio	Lower	Upper
101	100		
103	66.1	46.2	86.2
105	11.9	0.0	30.1



#15
Acetone
Concen: 14.32 ppb m
RT: 6.128 min Scan# 360
Delta R.T. -0.011 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

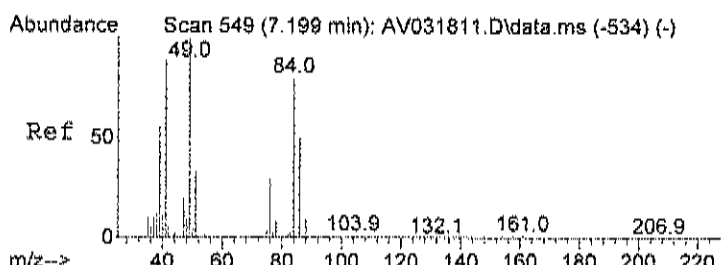
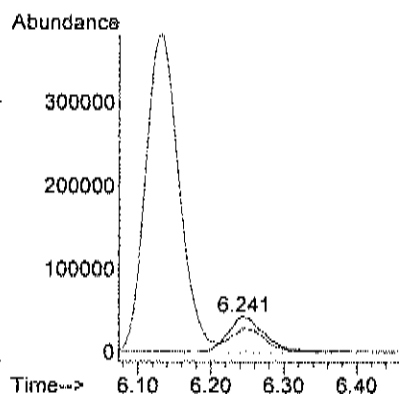
Tgt Ion	Ratio	Lower	Upper
58	100		
43	374.0	257.9	317.9#





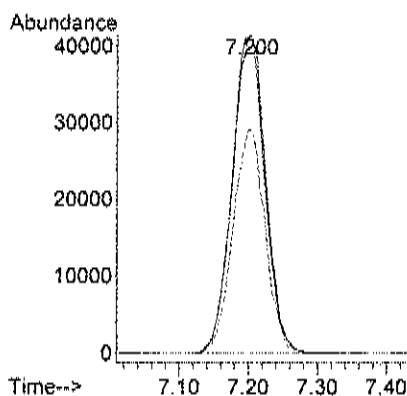
#17
Isopropyl alcohol
Concen: 2.04 ppb
RT: 6.241 min Scan# 380
Delta R.T. -0.006 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

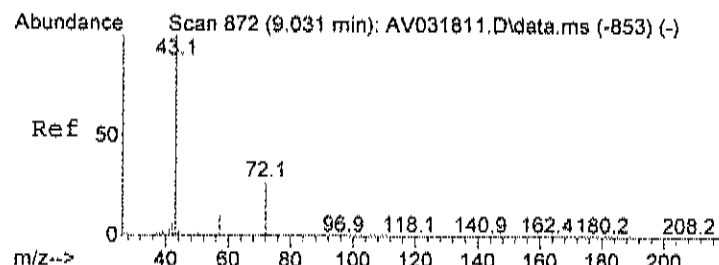
Tgt Ion: 45 Resp: 149255
Ion Ratio Lower Upper
45 100
43 0.0 118.7 158.7#



#21
Methylene chloride
Concen: 2.55 ppb
RT: 7.200 min Scan# 549
Delta R.T. -0.005 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

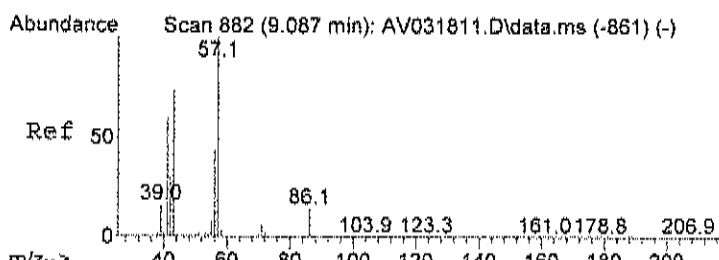
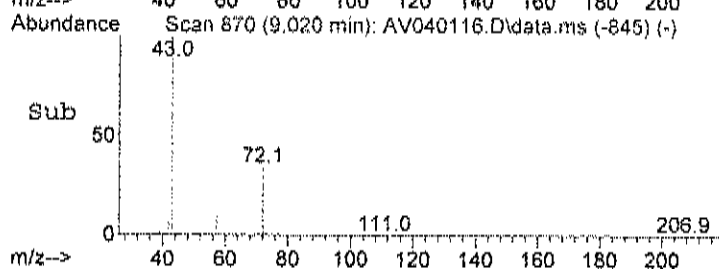
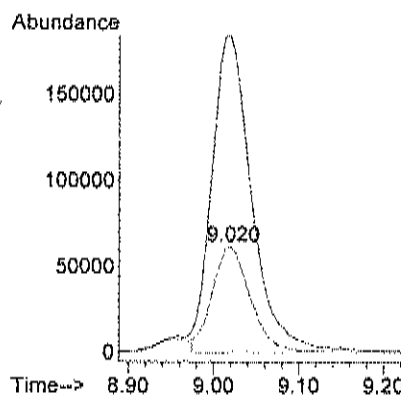
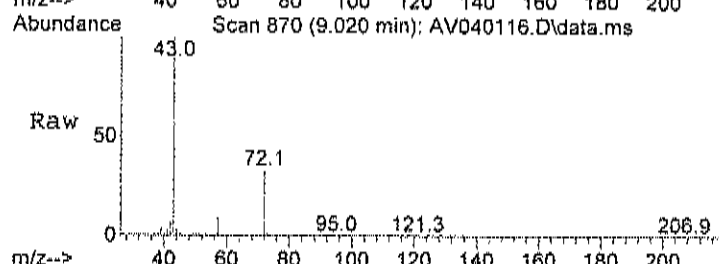
Tgt Ion: 84 Resp: 139152
Ion Ratio Lower Upper
84 100
49 96.8 110.8 150.8#
86 68.0 44.8 84.8





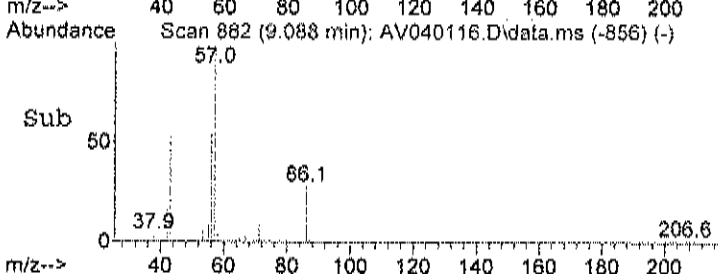
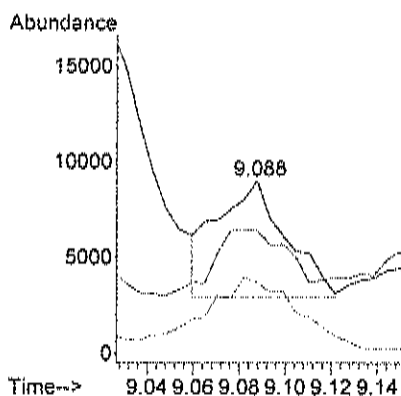
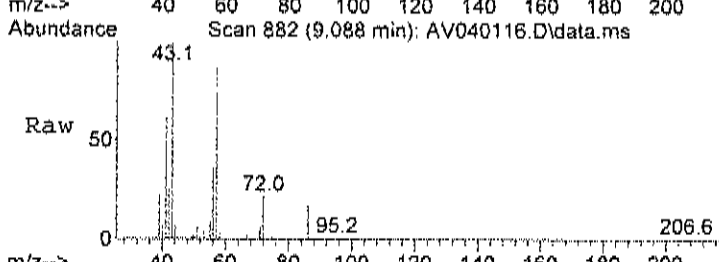
#28
Methyl Ethyl Ketone
Concen: 5.97 ppb
RT: 9.020 min Scan# 870
Delta R.T. -0.005 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

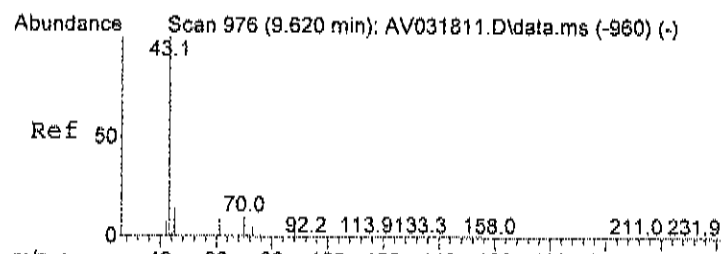
Tgt Ion	Ratio	Lower	Upper
72	100		
43	0.0	339.5	379.5#
72	100.0	80.0	120.0



#30
Hexane
Concen: 0.15 ppb m
RT: 9.088 min Scan# 882
Delta R.T. -0.000 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

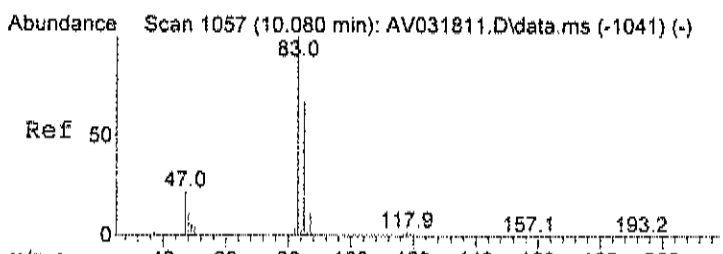
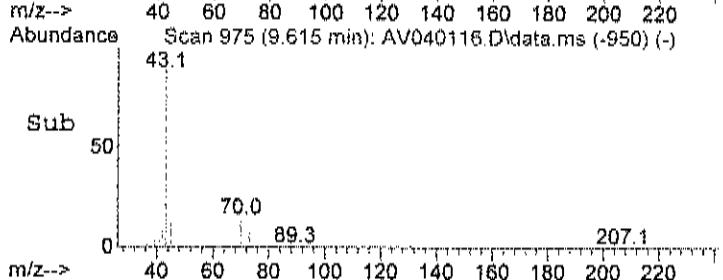
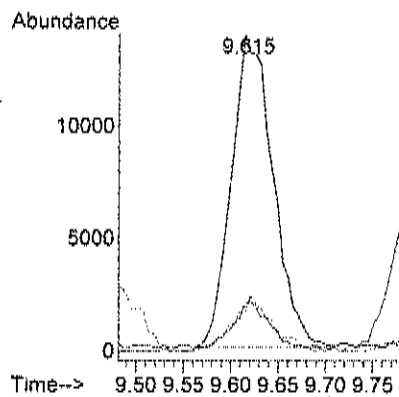
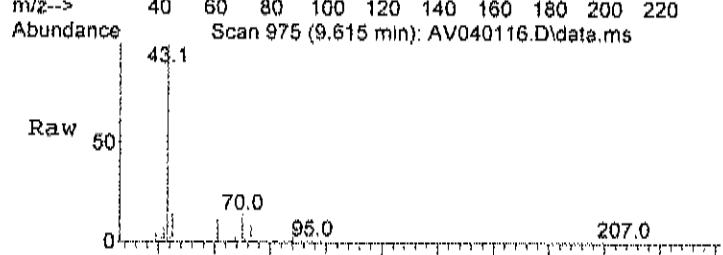
Tgt Ion	Ratio	Lower	Upper
57	100		
41	0.0	53.9	93.9#
56	0.0	32.6	72.6#





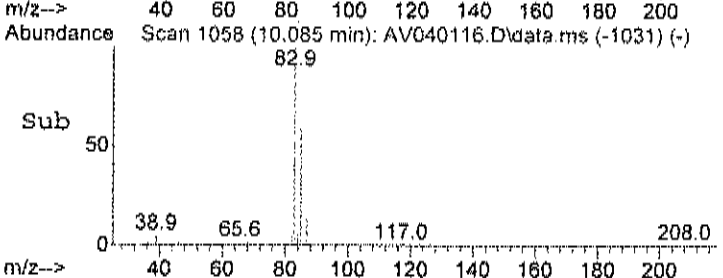
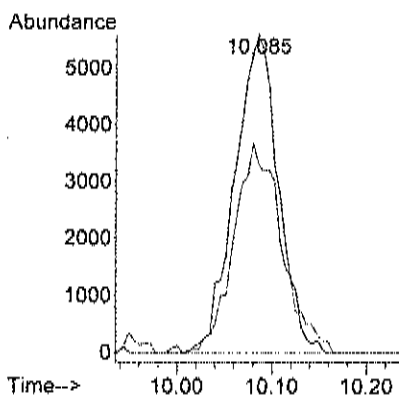
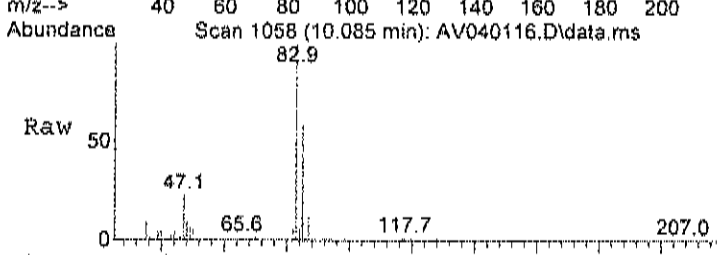
#31
Ethyl acetate
Concen: 0.46 ppb
RT: 9.615 min Scan# 975
Delta R.T. -0.006 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

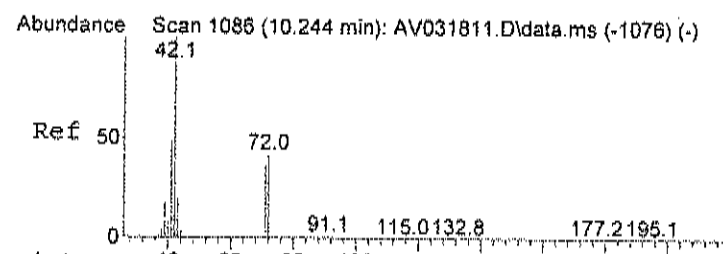
Tgt Ion	Ratio	Lower	Upper
43	100		
45	16.1	0.0	35.3
61	16.5	0.0	37.0



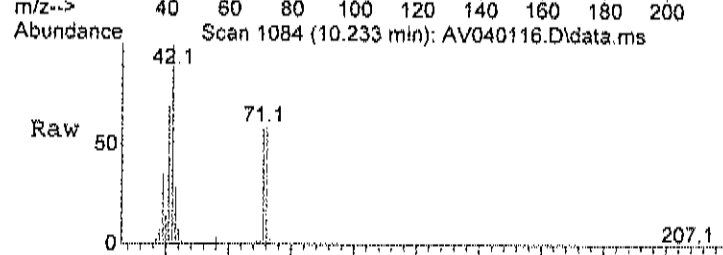
#32
Chloroform
Concen: 0.13 ppb
RT: 10.085 min Scan# 1058
Delta R.T. 0.000 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

Tgt Ion	Ratio	Lower	Upper
83	100		
85	72.0	44.6	84.6

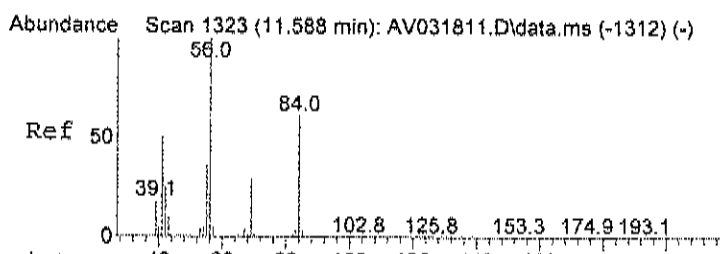
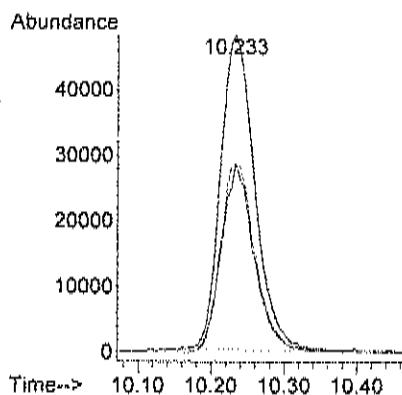
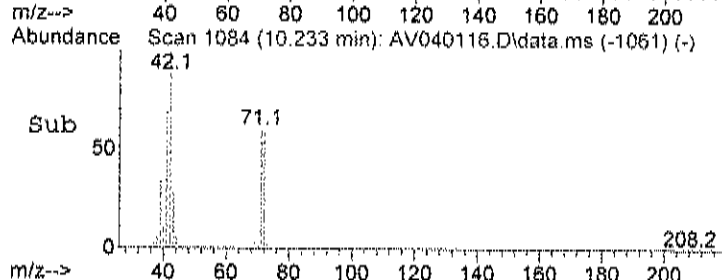




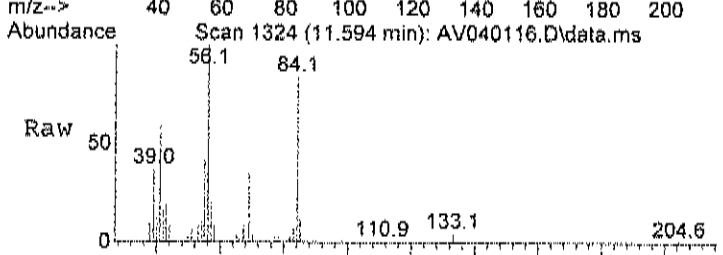
#33
Tetrahydrofuran
Concen: 3.04 ppb
RT: 10.233 min Scan# 1084
Delta R.T. -0.017 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm



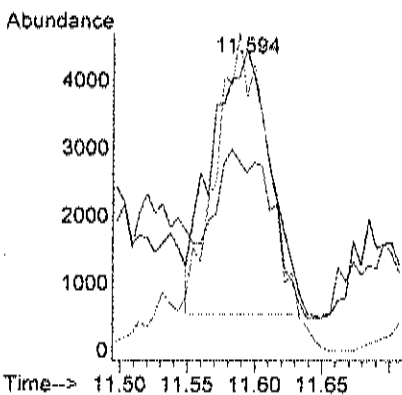
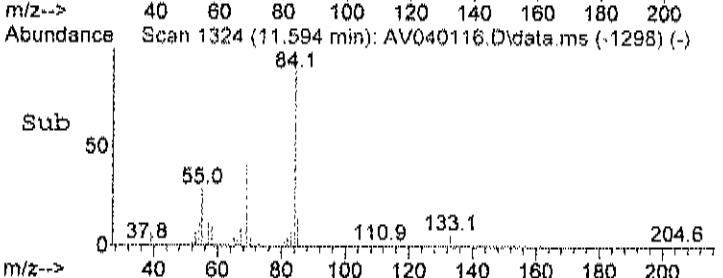
Tgt Ion: 42 Resp: 155860
Ion Ratio Lower Upper
42 100
71 58.2 27.1 67.1
72 61.5 30.8 70.8

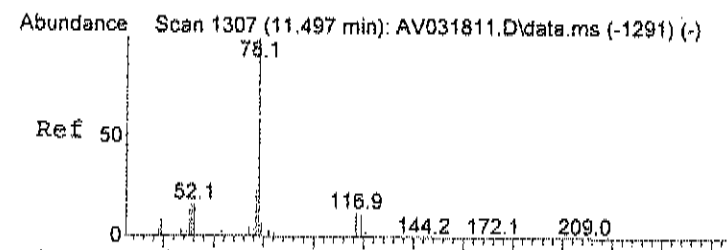


#37
Cyclohexane
Concen: 0.17 ppb
RT: 11.594 min Scan# 1324
Delta R.T. -0.000 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm



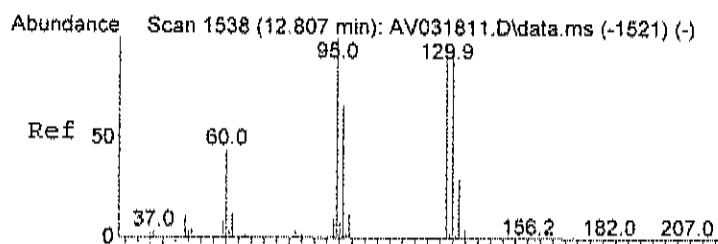
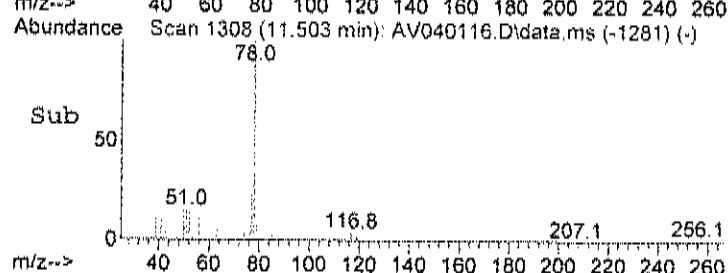
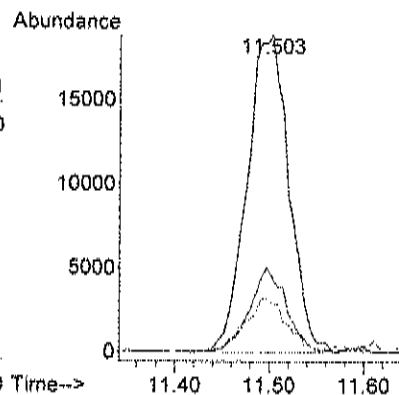
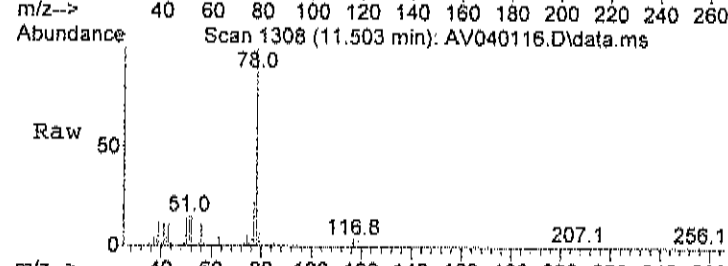
Tgt Ion: 56 Resp: 11860
Ion Ratio Lower Upper
56 100
41 99.3 36.6 76.6#
84 116.6 53.8 93.8#





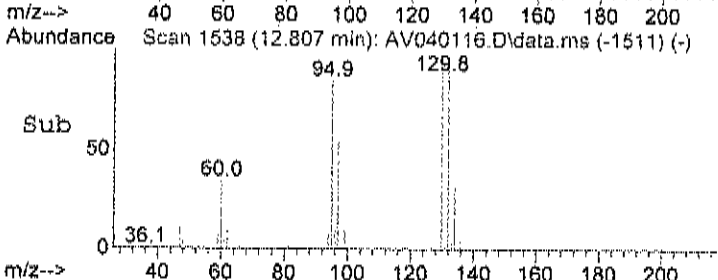
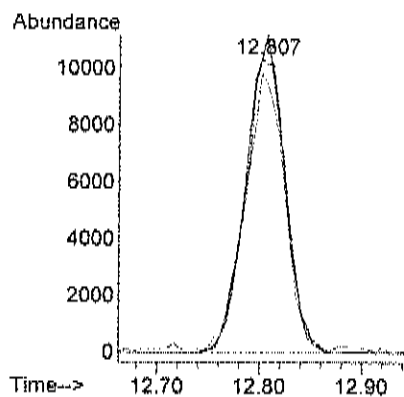
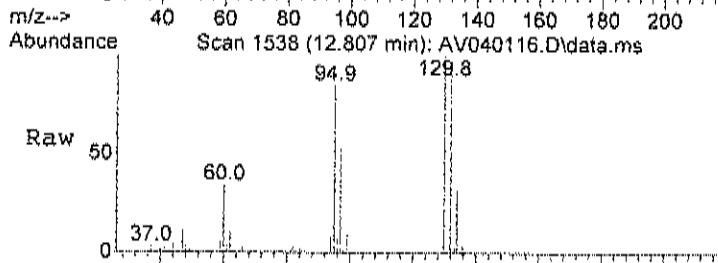
#39
Benzene
Concen: 0.33 ppb
RT: 11.503 min Scan# 1308
Delta R.T. 0.006 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

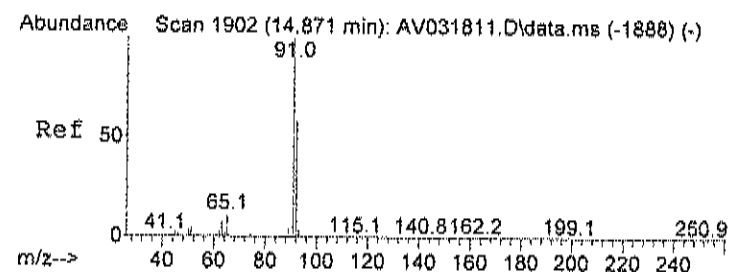
Tgt Ion:	78	Resp:	57910
Ion Ratio	Lower	Upper	
78	100		
77	23.5	5.2	45.2
51	17.6	0.0	35.7



#44
Trichloroethene
Concen: 0.32 ppb
RT: 12.807 min Scan# 1538
Delta R.T. 0.006 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

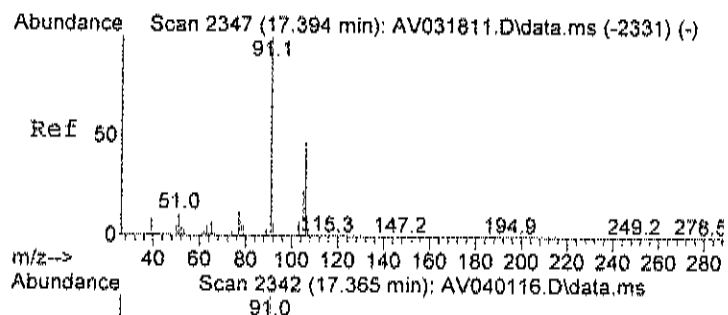
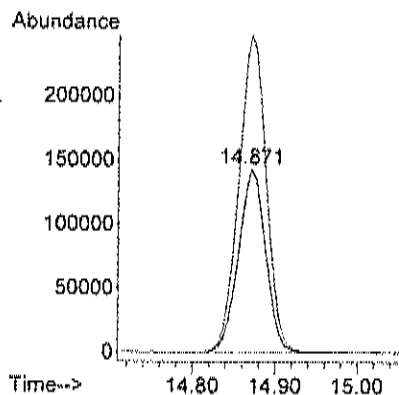
Tgt Ion:	130	Resp:	29326
Ion Ratio	Lower	Upper	
130	100		
132	97.7	76.3	116.3
95	90.5	72.9	112.9





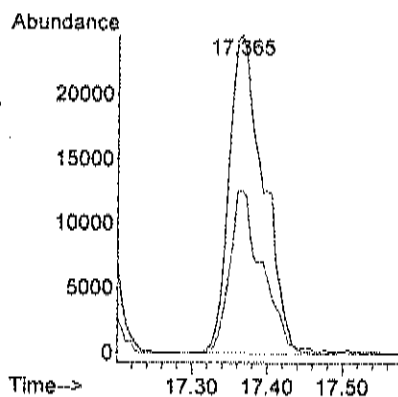
#51
Toluene
Concen: 2.30 ppb
RT: 14.871 min Scan# 1902
Delta R.T. -0.000 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

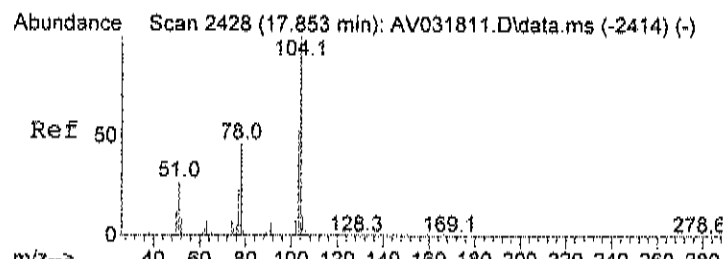
Tgt Ion: 92 Resp: 329408
Ion Ratio Lower Upper
92 100
91 174.4 160.7 200.7



#59
m&p-xylene
Concen: 0.29 ppb
RT: 17.365 min Scan# 2342
Delta R.T. -0.029 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

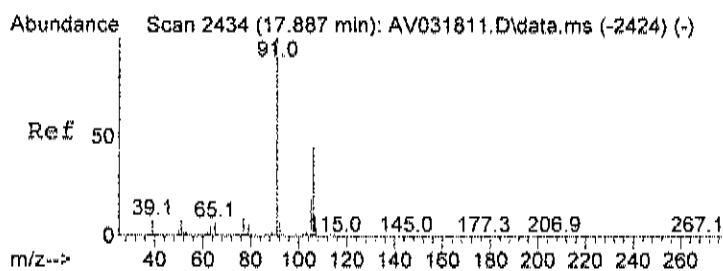
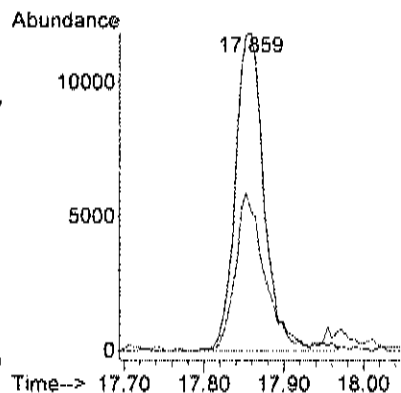
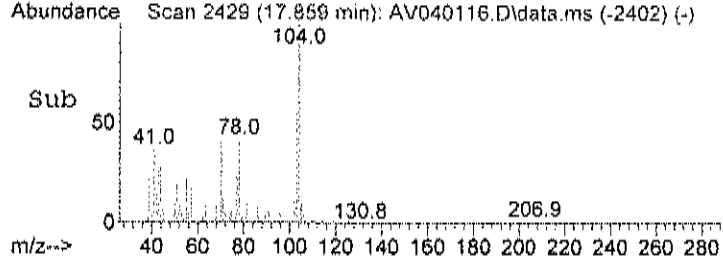
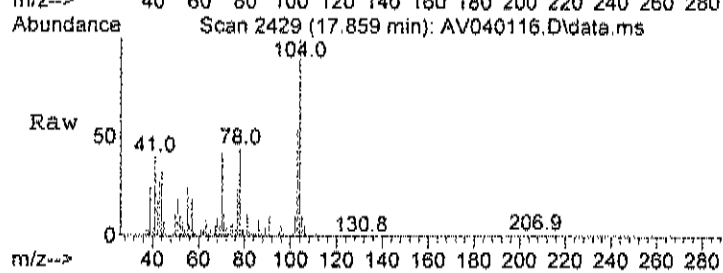
Tgt Ion: 91 Resp: 78626
Ion Ratio Lower Upper
91 100
106 47.6 27.5 67.5





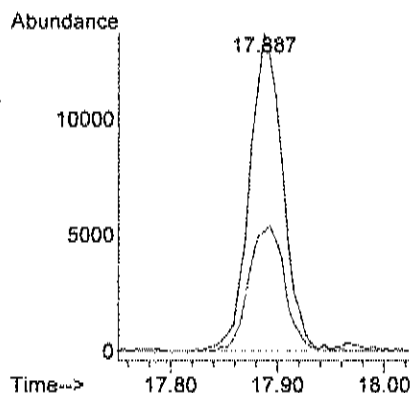
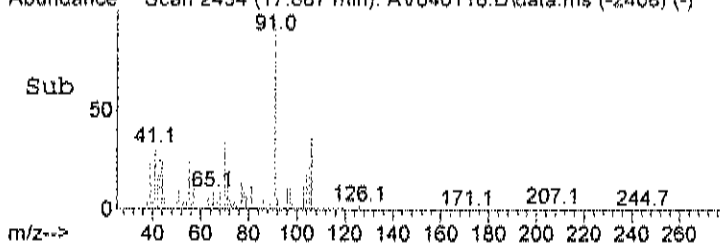
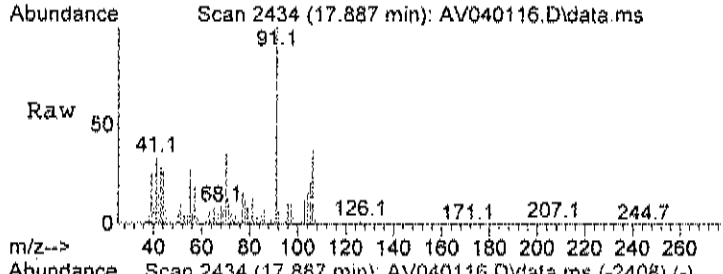
#61
Styrene
Concen: 0.14 ppb
RT: 17.859 min Scan# 2429
Delta R.T. 0.006 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

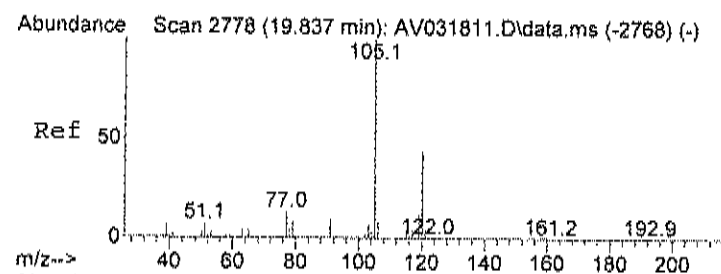
Tgt Ion: 104 Resp: 29649
Ion Ratio Lower Upper
104 100
78 50.9 25.5 65.5



#63
o-xylene
Concen: 0.10 ppb
RT: 17.887 min Scan# 2434
Delta R.T. -0.000 min
Lab File: AV040116.D
Acq: 1 Apr 2024 10:12 pm

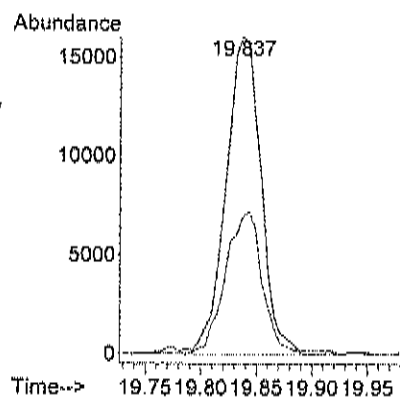
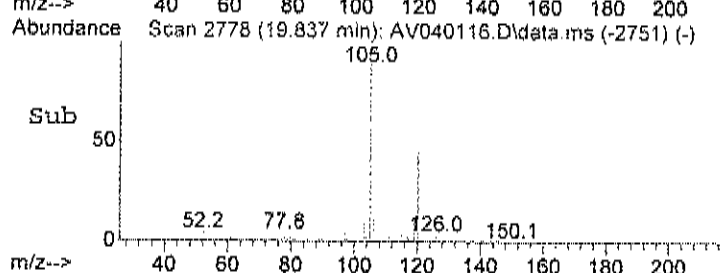
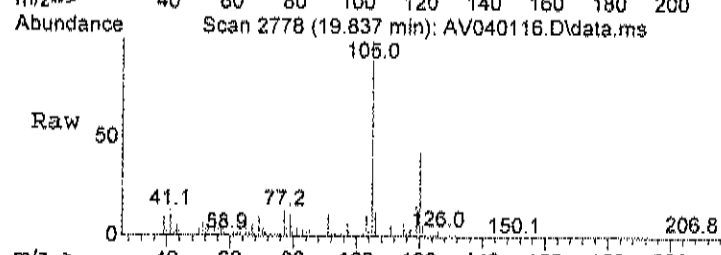
Tgt Ion: 91 Resp: 29787
Ion Ratio Lower Upper
91 100
106 43.1 24.7 64.7





#71
 1,2,4-trimethylbenzene
 Concen: 0.11 ppb
 RT: 19.837 min Scan# 2778
 Delta R.T. 0.000 min
 Lab File: AV040116.D
 Acq: 1 Apr 2024 10:12 pm

Tgt Ion:105 Resp: 35429
 Ion Ratio Lower Upper
 105 100
 120 46.6 25.8 65.8



Data Path : C:\msdchem\1\data\
Data File : AV040124.D
Acq On : 2 Apr 2024 3:56 am
Operator : DA
Sample : 2404002-003A 10x
Misc : A325_1UG
ALS Vial : 21 Sample Multiplier: 1

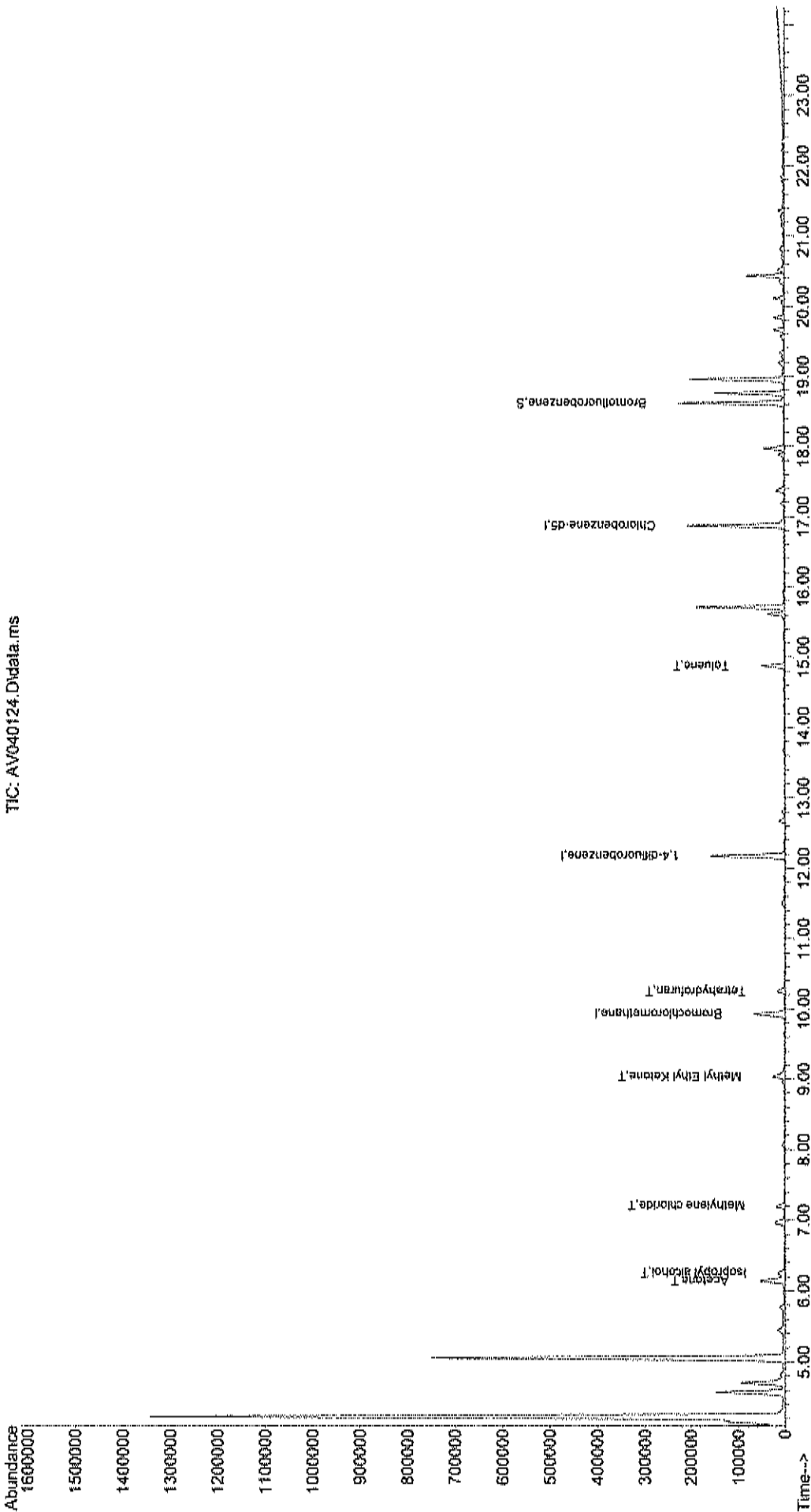
Quant Time: Apr 02 16:31:06 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

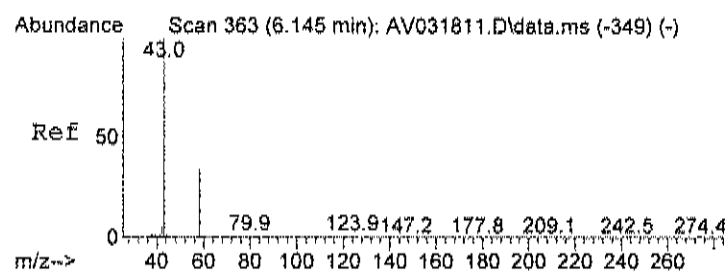
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	9.927	128	36198	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	198053	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	169884	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	107345	0.91	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	91.00%
Target Compounds						
15) Acetone	6.145	58	31722m ^{sa}	1.35	ppb	Qvalue
17) Isopropyl alcohol	6.253	45	15249	0.21	ppb	# 1
21) Methylene chloride	7.205	84	16500	0.31	ppb	# 76
28) Methyl Ethyl Ketone	9.037	72	16096	0.52	ppb	# 83
33) Tetrahydrofuran	10.250	42	14250	0.29	ppb	85
51) Toluene	14.871	92	28611	0.23	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040124.D
Acq On : 2 Apr 2024 3:56 am
Operator : DA
Sample : 2404002-003A 10x
Misc : A325_IUG
ALS Vial : 21 Sample Multiplier: 1

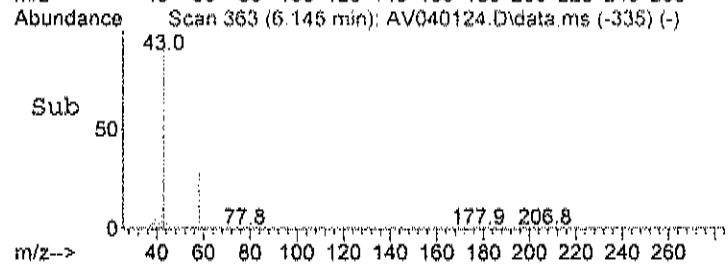
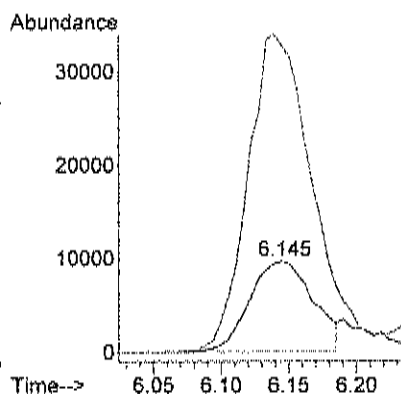
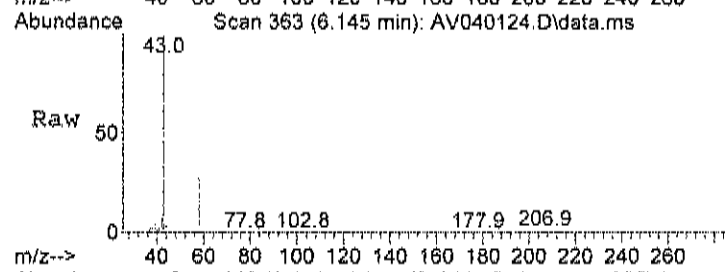
Quant Time: Apr 02 16:31:06 2024
Quant Method : C:\msdchem\1\methods\A325_IUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





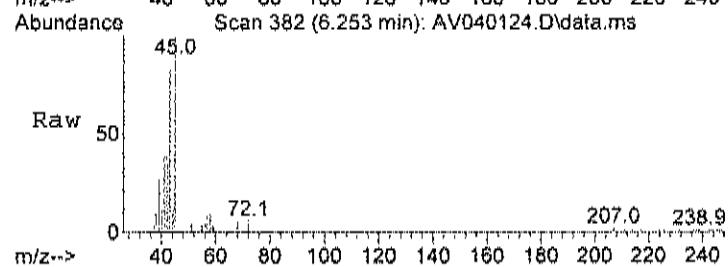
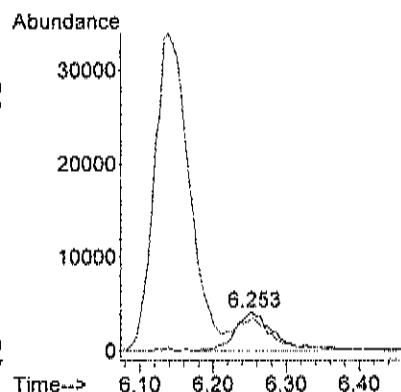
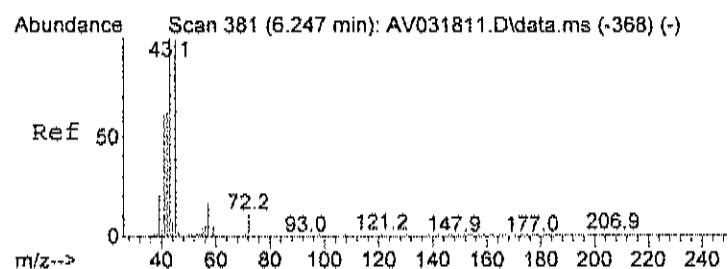
#15
Acetone
Concen: 1.35 ppb m
RT: 6.145 min Scan# 363
Delta R.T. 0.006 min
Lab File: AV040124.D
Acq: 2 Apr 2024 3:56 am

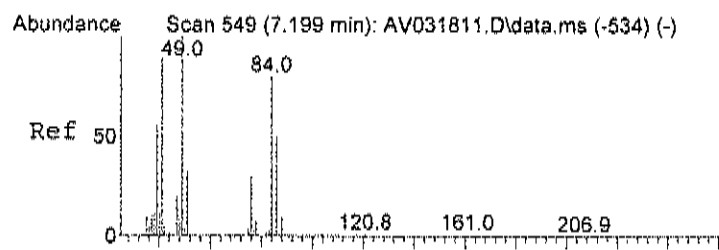
Tgt Ion: 58 Resp: 31722
Ion Ratio Lower Upper
58 100
43 381.8 257.9 317.9#



#17
Isopropyl alcohol
Concen: 0.21 ppb
RT: 6.253 min Scan# 382
Delta R.T. 0.006 min
Lab File: AV040124.D
Acq: 2 Apr 2024 3:56 am

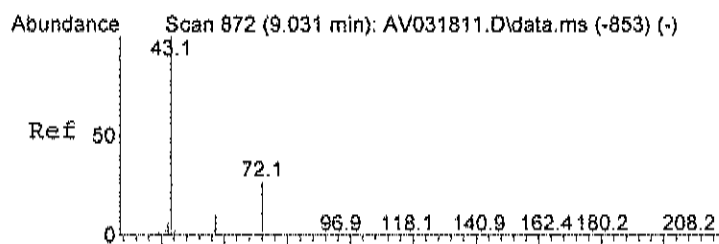
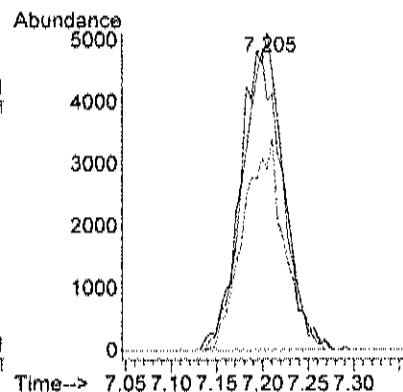
Tgt Ion: 45 Resp: 15249
Ion Ratio Lower Upper
45 100
43 0.0 118.7 158.7#





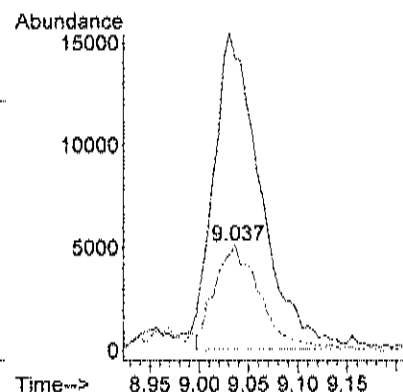
#21
Methylene chloride
Concen: 0.31 ppb
RT: 7.205 min Scan# 550
Delta R.T. 0.000 min
Lab File: AV040124.D
Acq: 2 Apr 2024 3:56 am

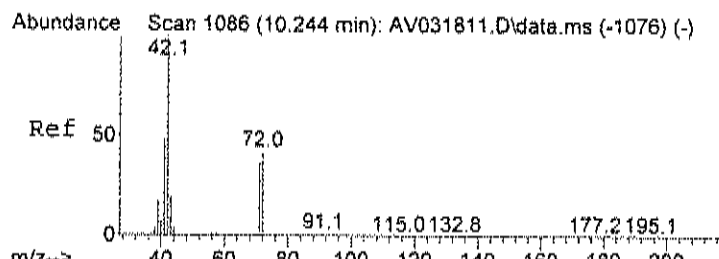
Tgt Ion	Ratio	Lower	Upper
84	100		
49	88.9	110.8	150.8#
86	63.7	44.8	84.8



#28
Methyl Ethyl Ketone
Concen: 0.52 ppb
RT: 9.037 min Scan# 873
Delta R.T. 0.012 min
Lab File: AV040124.D
Acq: 2 Apr 2024 3:56 am

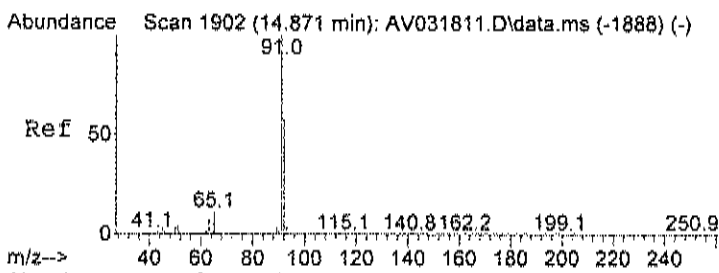
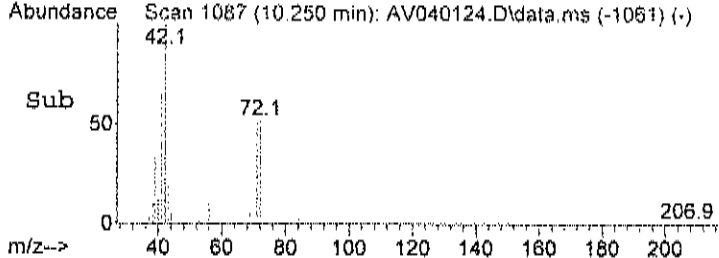
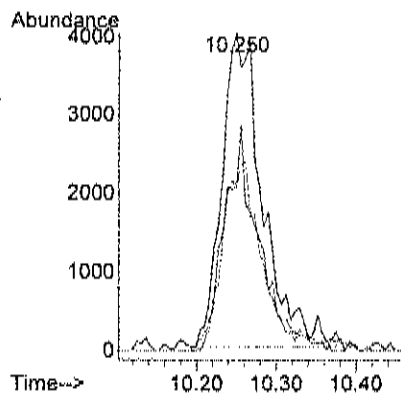
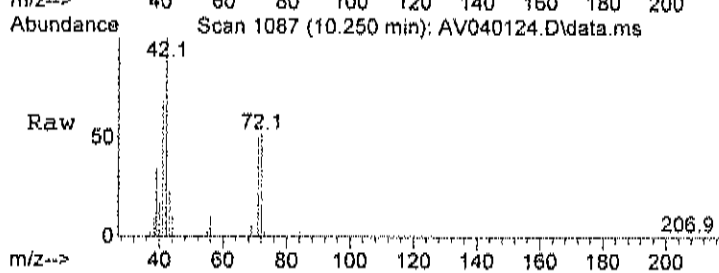
Tgt Ion	Ratio	Lower	Upper
72	100		
43	310.5	339.5	379.5#
72	100.0	80.0	120.0





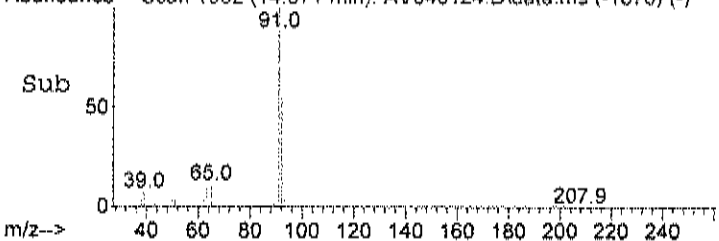
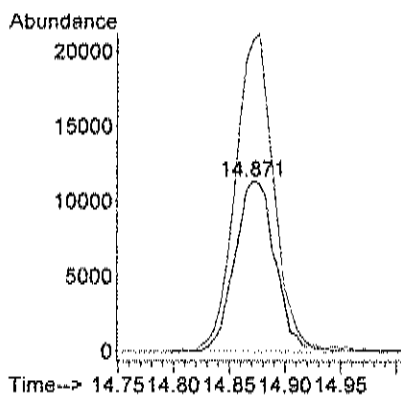
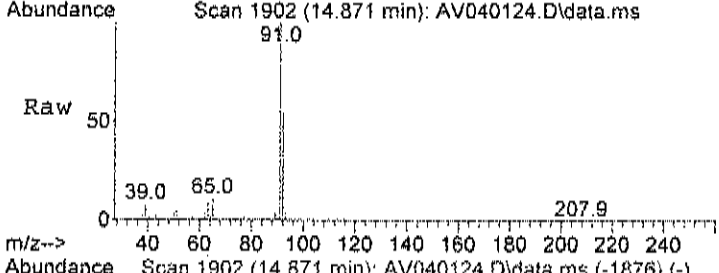
#33
Tetrahydrofuran
Concen: 0.29 ppb
RT: 10.250 min Scan# 1087
Delta R.T. -0.000 min
Lab File: AV040124.D
Acq: 2 Apr 2024 3:56 am

Tgt Ion	Ratio	Lower	Upper
42	100		
71	59.1	27.1	67.1
72	59.0	30.8	70.8



#51
Toluene
Concen: 0.23 ppb
RT: 14.871 min Scan# 1902
Delta R.T. -0.000 min
Lab File: AV040124.D
Acq: 2 Apr 2024 3:56 am

Tgt Ion	Ratio	Lower	Upper
92	100		
91	178.8	160.7	200.7





SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-004

Client Sample ID: 252-1A-02
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

FieldSampler	Jesse		
Lab Vacuum In	-1	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:59:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:59:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:59:00 PM
1,1-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:59:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:59:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:59:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 7:59:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:59:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:59:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:59:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:59:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 7:59:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:59:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:59:00 PM
1,4-Dioxane	0.11	0.30	ppbV	0.4	1.1	J	1	4/1/2024 7:59:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 7:59:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:59:00 PM
Acetone	38	12	ppbV	91	29		40	4/2/2024 1:46:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:59:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: 252-IA-02

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-004

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Benzene	0.14	0.15	ppbV	0.45	0.48	J	1	4/1/2024 7:59:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 7:59:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:59:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 7:59:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:59:00 PM
Carbon tetrachloride	0.070	0.030	ppbV	0.44	0.19		1	4/1/2024 7:59:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:59:00 PM
Chloroethane	0.19	0.15	ppbV	0.5	0.4		1	4/1/2024 7:59:00 PM
Chloroform	< 0.15	0.15	ppbV	<0.73	0.73	U	1	4/1/2024 7:59:00 PM
Chloromethane	0.25	0.15	ppbV	0.52	0.31		1	4/1/2024 7:59:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:59:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:59:00 PM
Cyclohexane	0.34	0.15	ppbV	1.2	0.52		1	4/1/2024 7:59:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 7:59:00 PM
Ethyl acetate	0.19	0.15	ppbV	0.68	0.54		1	4/1/2024 7:59:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:59:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 7:59:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:59:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
Freon 12	0.40	0.15	ppbV	2	0.74		1	4/1/2024 7:59:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:59:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:59:00 PM
Hexane	0.16	0.15	ppbV	0.56	0.53		1	4/1/2024 7:59:00 PM
Isopropyl alcohol	2.8	1.5	ppbV	6.9	3.7		10	4/2/2024 1:04:00 AM
m&p-Xylene	0.17	0.30	ppbV	0.74	1.3	J	1	4/1/2024 7:59:00 PM
Methyl Butyl Ketone	0.10	0.30	ppbV	0.41	1.2	J	1	4/1/2024 7:59:00 PM
Methyl Ethyl Ketone	20	3.0	ppbV	59	8.8		10	4/2/2024 1:04:00 AM

Qualifiers:

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively Identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-004

Client Sample ID: 252-1A-02

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 7:59:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 7:59:00 PM
Methylene chloride	0.21	0.15	ppbV	0.73	0.52		1	4/1/2024 7:59:00 PM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:59:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 7:59:00 PM
Styrene	0.59	0.15	ppbV	2.5	0.64		1	4/1/2024 7:59:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
Tetrahydrofuran	14	1.5	ppbV	40	4.4		10	4/2/2024 1:04:00 AM
Toluene	1.3	0.15	ppbV	4.9	0.57		1	4/1/2024 7:59:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 7:59:00 PM
trans-1,3-Dichloropropane	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:59:00 PM
Trichloroethene	< 0.030	0.030	ppbV	<0.16	0.16	U	1	4/1/2024 7:59:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 7:59:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 7:59:00 PM
Vinyl chloride	< 0.040	0.040	ppbV	<0.1	0.1	U	1	4/1/2024 7:59:00 PM
Surr: Bromofluorobenzene	107	70-130	%Rec				1	4/1/2024 7:59:00 PM

Qualifiers:

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

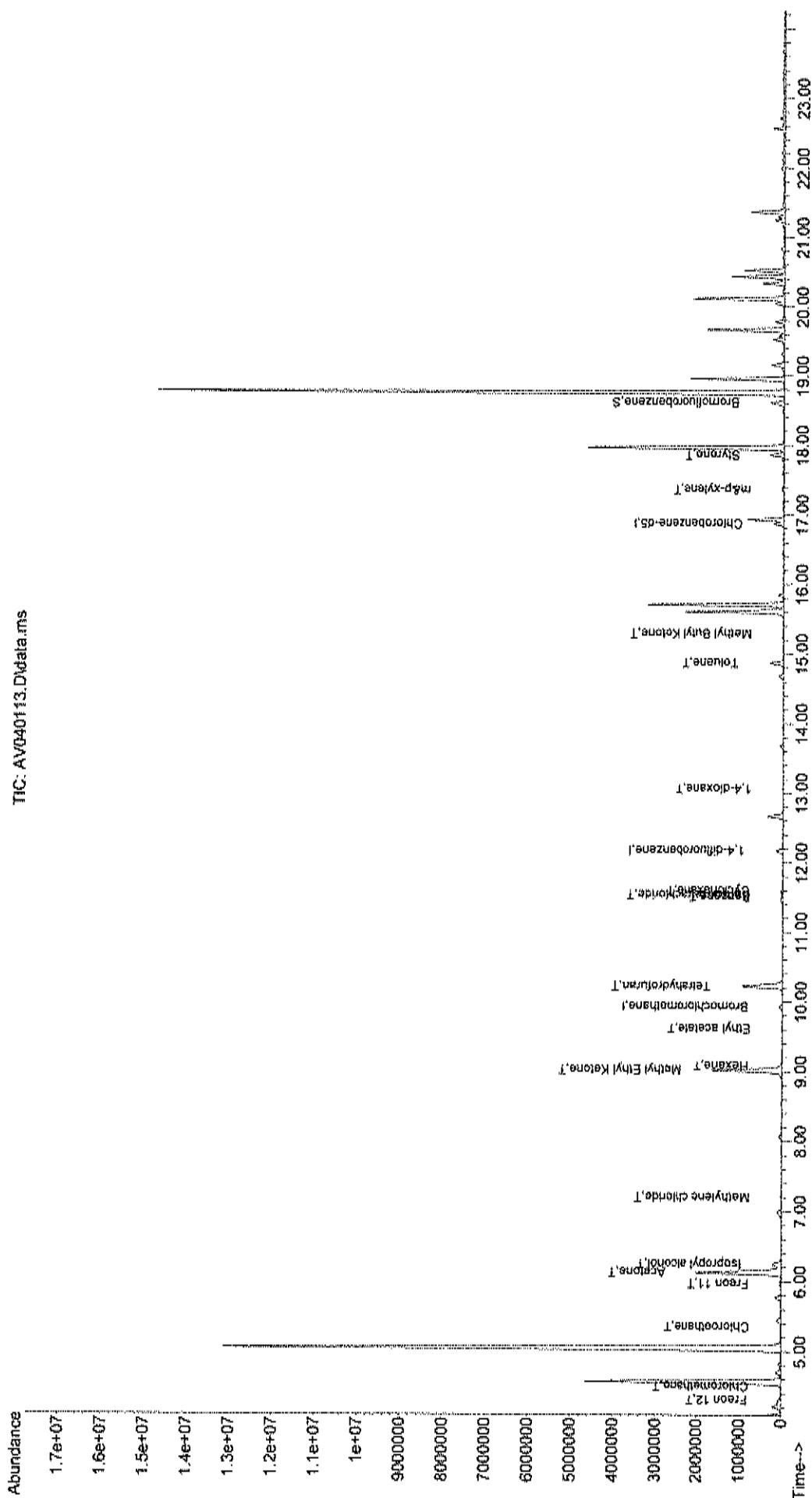
Data Path : C:\msdchem\1\data\
Data File : AV040113.D
Acq On : 1 Apr 2024 7:59 pm
Operator : DA
Sample : 2404002-004A
Misc : A325_1UG
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 01 20:26:01 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	9.927	128	37326	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	198229	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	193279	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	143555	1.07	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	107.00%
Target Compounds						
						Qvalue
3) Freon 12	4.314	85	73810	0.40	ppb	99
4) Chloromethane	4.506	50	12264m ^{PA}	0.25	ppb	
10) Chloroethane	5.351	64	5013	0.19	ppb	# 68
14) Freon 11	5.969	101	37511	0.20	ppb	97
15) Acetone	6.128	58	1111685m ^{PA}	45.92	ppb	
17) Isopropyl alcohol	6.247	45	189761	2.59	ppb	# 1
21) Methylene chloride	7.199	84	11487	0.21	ppb	# 77
28) Methyl Ethyl Ketone	9.019	72	919117	28.73	ppb	# 1
30) Hexane	9.082	57	14316m ^{PA}	0.16	ppb	
31) Ethyl acetate	9.615	43	17568	0.19	ppb	95
33) Tetrahydrofuran	10.221	42	791625	15.40	ppb	86
37) Cyclohexane	11.593	56	24061	0.34	ppb	# 56
38) Carbon tetrachloride	11.537	117	7445	0.07	ppb	97
39) Benzene	11.508	78	24853	0.14	ppb	86
41) 1,4-dioxane	13.062	88	5014	0.11	ppb	100
51) Toluene	14.871	92	185840	1.29	ppb	94
54) Methyl Butyl Ketone	15.290	43	9924	0.10	ppb	88
59) m&p-xylene	17.360	91	47034	0.17	ppb	99
61) Styrene	17.858	104	125037	0.59	ppb	98

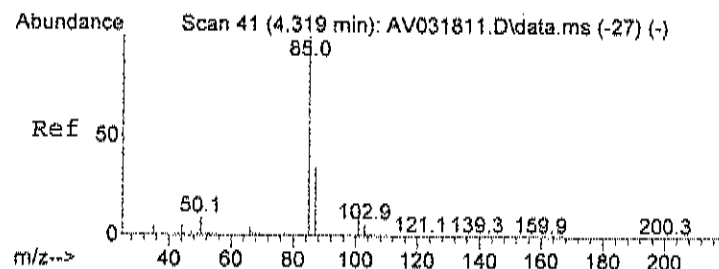
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040113.D
Acq On : 1 Apr 2024 7:59 pm
Operator : DA
Sample : 2404002-004A
Misc : A325 1UG
ALS Vial : 8 Sample Multiplier: 1
Quant Time: Apr 01 20:26:01 2024
Quant Method : C:\msdchem\1\methods\A325 1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration



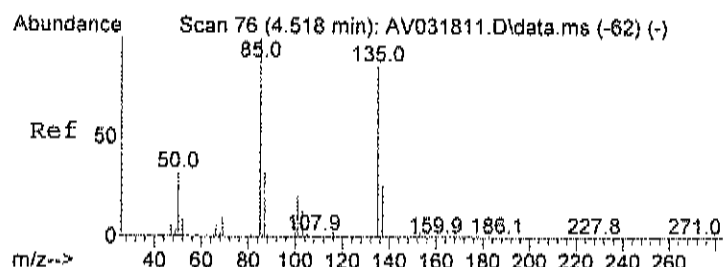
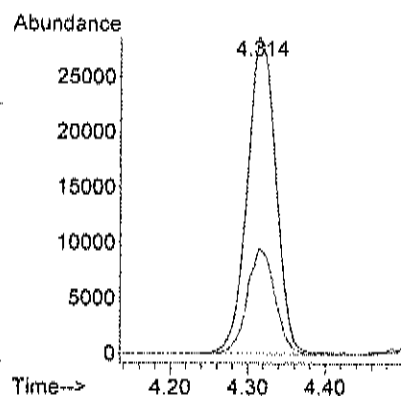
Page: 2

A325 1UG.M Wed Apr 17 10:02:10 2024



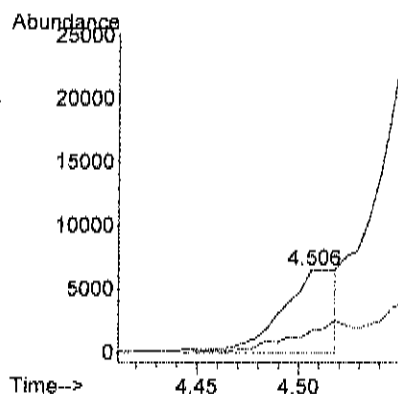
#3
 Freon 12
 Concen: 0.40 ppb
 RT: 4.314 min Scan# 40
 Delta R.T. -0.011 min
 Lab File: AV040113.D
 Acq: 1 Apr 2024 7:59 pm

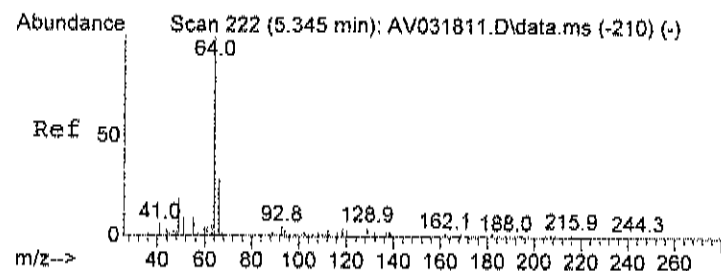
Tgt Ion: 85 Resp: 73810
 Ion Ratio Lower Upper
 85 100
 87 32.5 13.2 53.2



#4
 Chloromethane
 Concen: 0.25 ppb m
 RT: 4.506 min Scan# 74
 Delta R.T. -0.017 min
 Lab File: AV040113.D
 Acq: 1 Apr 2024 7:59 pm

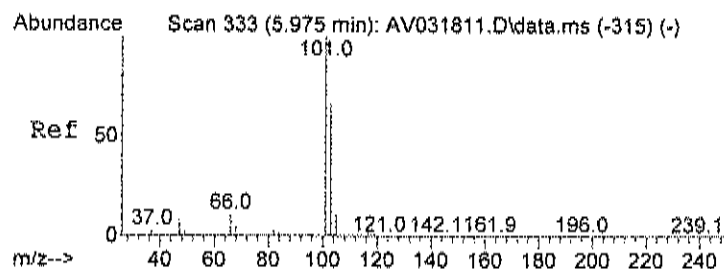
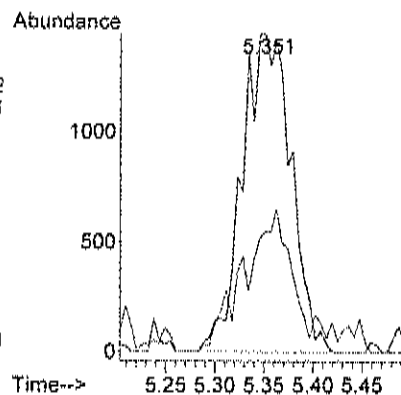
Tgt Ion: 50 Resp: 12264
 Ion Ratio Lower Upper
 50 100
 52 164.6 5.6 45.6#





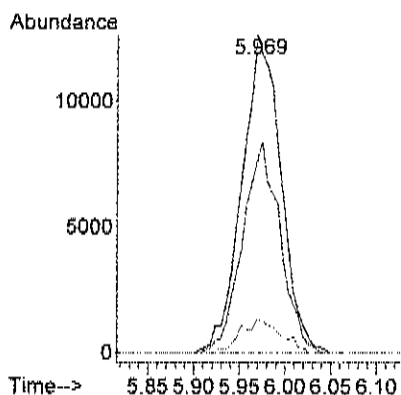
#10
Chloroethane
Concen: 0.19 ppb
RT: 5.351 min Scan# 223
Delta R.T. -0.012 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

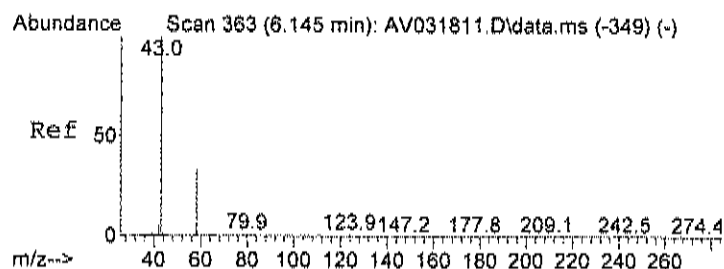
Tgt Ion: 64 Resp: 5013
Ion Ratio Lower Upper
64 100
66 50.0 25.8 38.6#



#14
Freon 11
Concen: 0.20 ppb
RT: 5.969 min Scan# 332
Delta R.T. -0.012 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

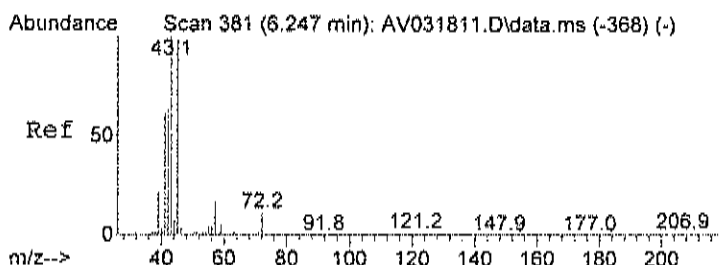
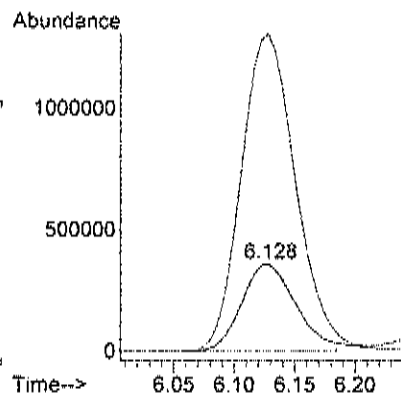
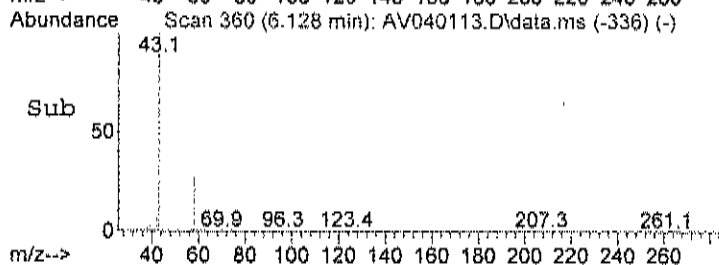
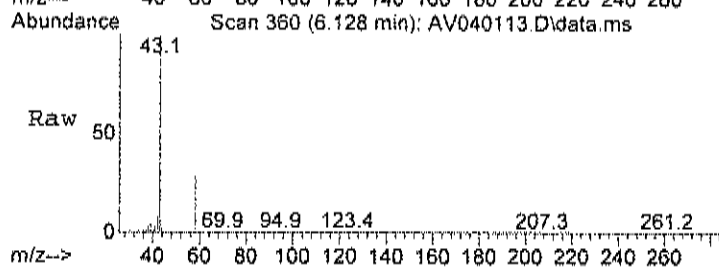
Tgt Ion: 101 Resp: 37511
Ion Ratio Lower Upper
101 100
103 64.1 46.2 86.2
105 10.9 0.0 30.1





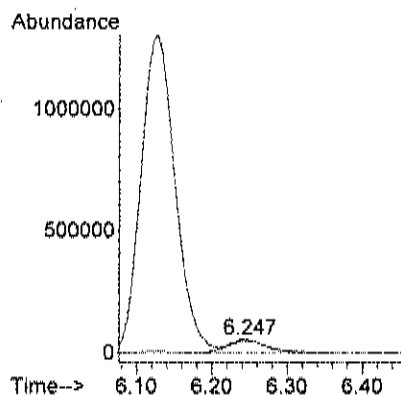
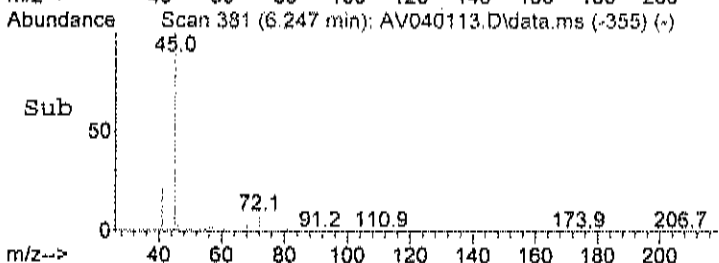
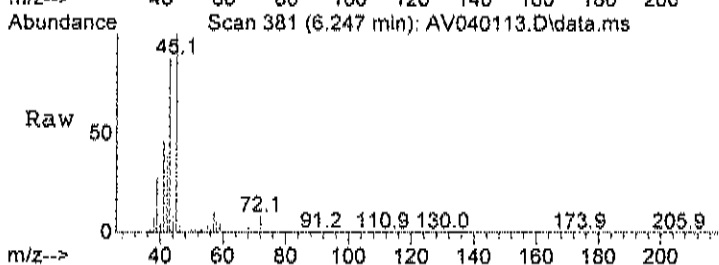
#15
Acetone
Concen: 45.92 ppb m
RT: 6.128 min Scan# 360
Delta R.T. -0.011 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

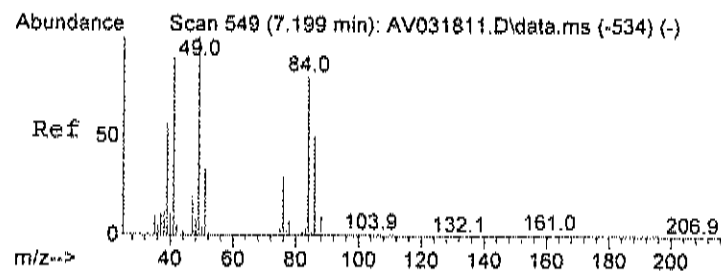
Tgt Ion: 58 Resp: 1111685
Ion Ratio Lower Upper
58 100
43 379.4 257.9 317.9#



#17
Isopropyl alcohol
Concen: 2.59 ppb
RT: 6.247 min Scan# 381
Delta R.T. -0.000 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

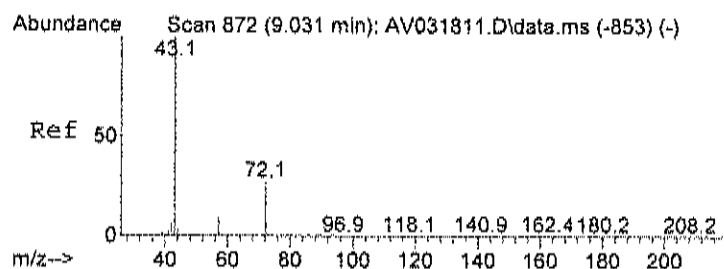
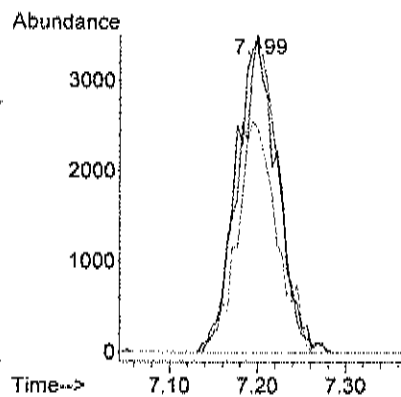
Tgt Ion: 45 Resp: 189761
Ion Ratio Lower Upper
45 100
43 0.0 118.7 158.7#





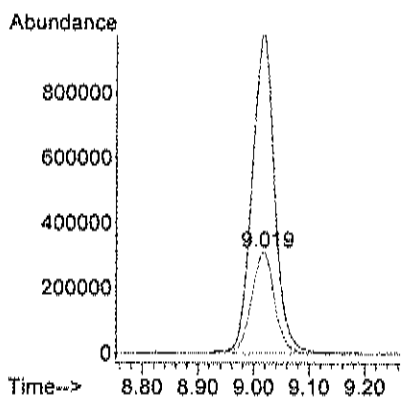
#21
Methylene chloride
Concen: 0.21 ppb
RT: 7.199 min Scan# 549
Delta R.T. -0.006 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

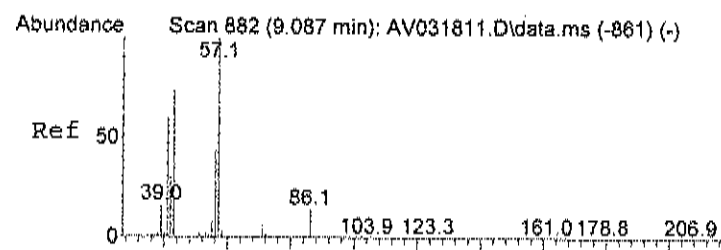
Tgt Ion	Ratio	Lower	Upper
84	100		
49	95.1	110.8	150.8#
86	69.8	44.8	84.8



#28
Methyl Ethyl Ketone
Concen: 28.73 ppb
RT: 9.019 min Scan# 870
Delta R.T. -0.006 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

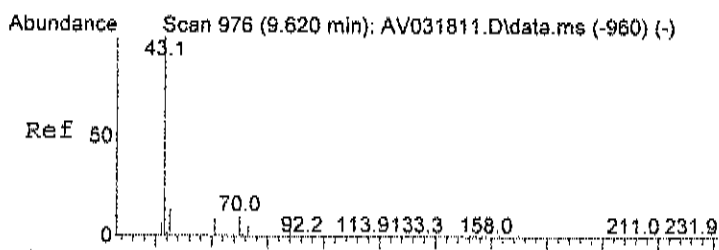
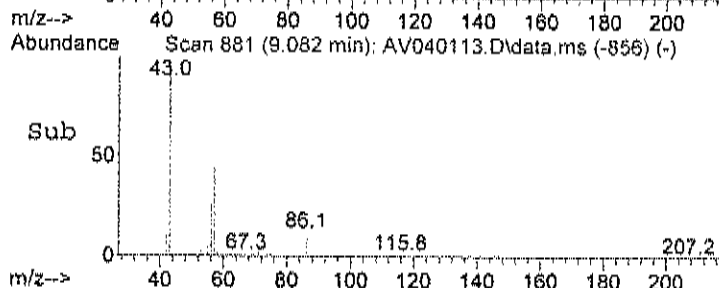
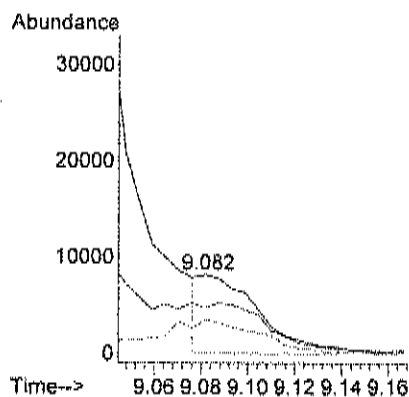
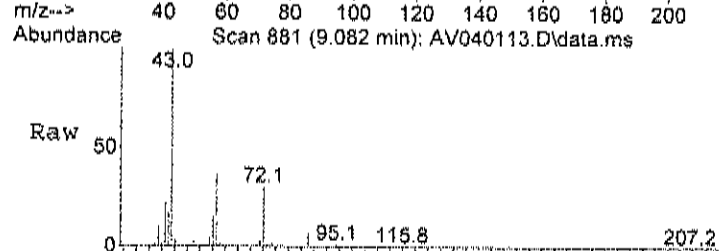
Tgt Ion	Ratio	Lower	Upper
72	100		
43	0.0	339.5	379.5#
72	100.0	80.0	120.0





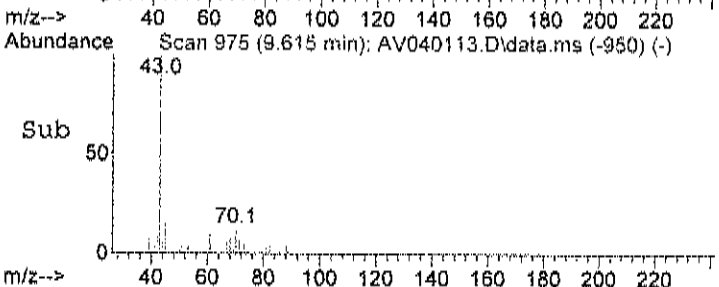
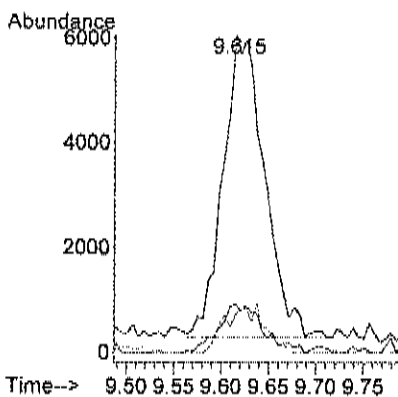
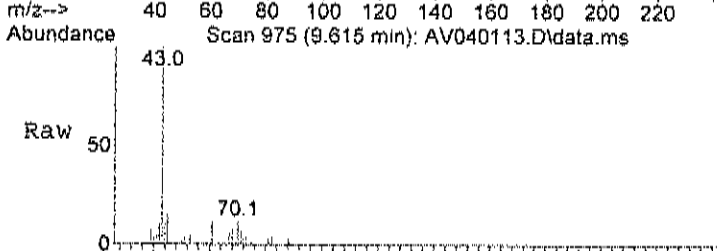
#30
Hexane
Concen: 0.16 ppb m
RT: 9.082 min Scan# 881
Delta R.T. -0.006 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

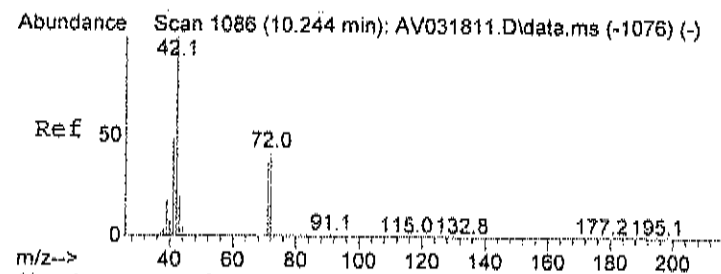
Tgt Ion	Resp	Lower	Upper
57	14316		
41	587.1	53.9	93.9#
56	134.7	32.6	72.6#



#31
Ethyl acetate
Concen: 0.19 ppb
RT: 9.615 min Scan# 975
Delta R.T. -0.006 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

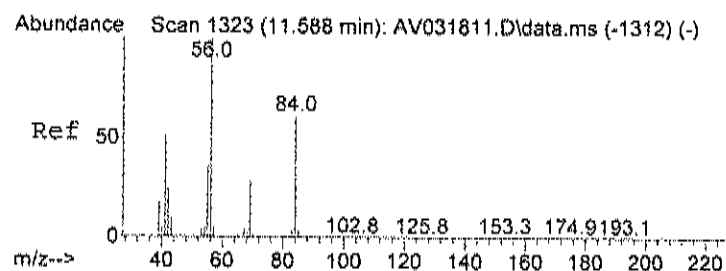
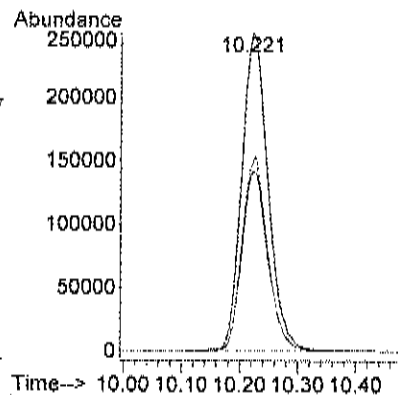
Tgt Ion	Resp	Lower	Upper
43	17568		
45	17.3	0.0	35.3
61	14.9	0.0	37.0





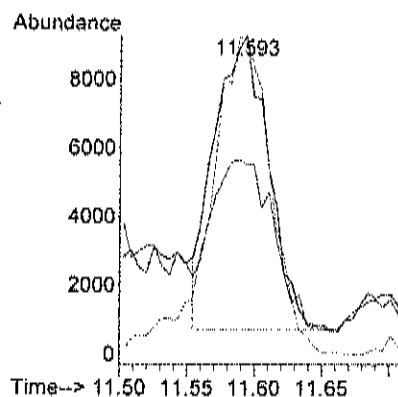
#33
Tetrahydrofuran
Concen: 15.40 ppb
RT: 10.221 min Scan# 1082
Delta R.T. -0.029 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

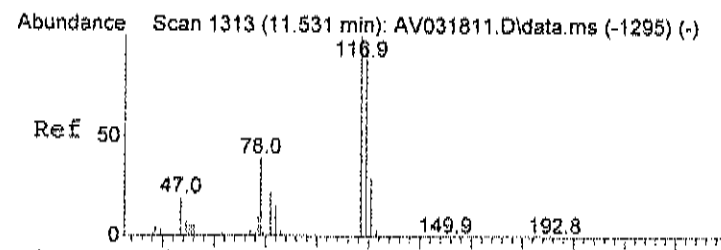
Tgt Ion	Ratio	Lower	Upper
42	100		
71	56.6	27.1	67.1
72	60.0	30.8	70.8



#37
Cyclohexane
Concen: 0.34 ppb
RT: 11.593 min Scan# 1324
Delta R.T. -0.001 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

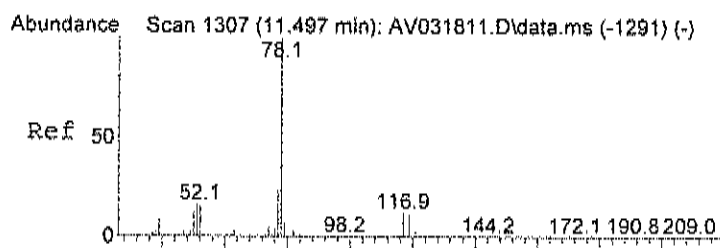
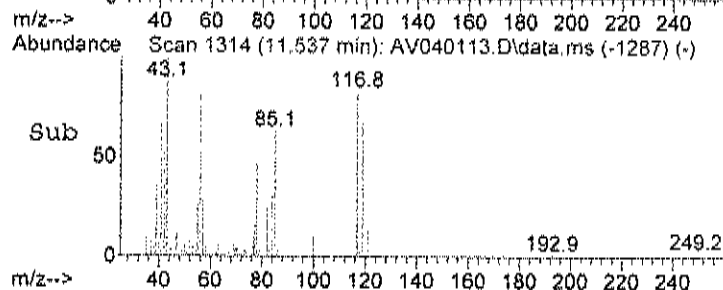
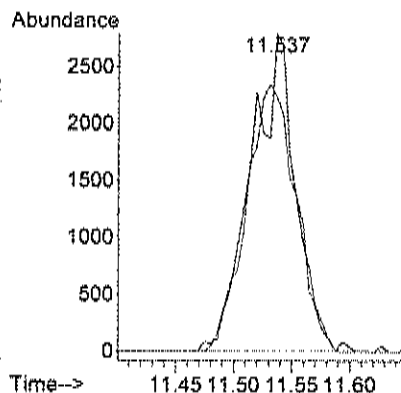
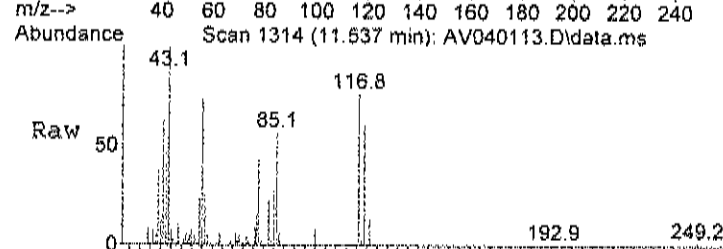
Tgt Ion	Ratio	Lower	Upper
56	100		
41	76.1	36.6	76.6
84	122.6	53.8	93.8#





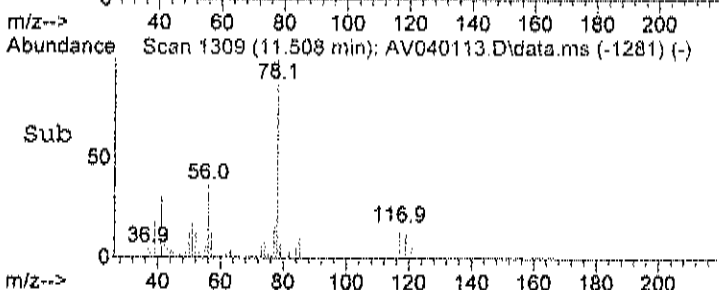
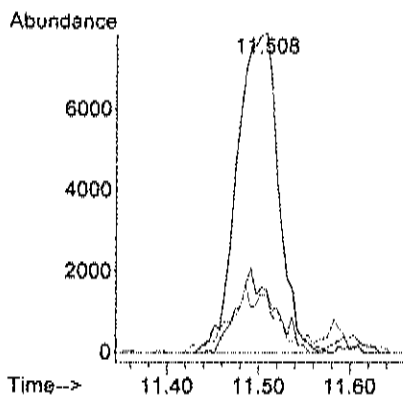
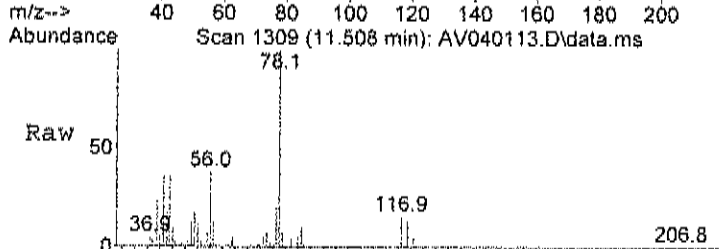
#38
Carbon tetrachloride
Concen: 0.07 ppb
RT: 11.537 min Scan# 1314
Delta R.T. 0.006 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

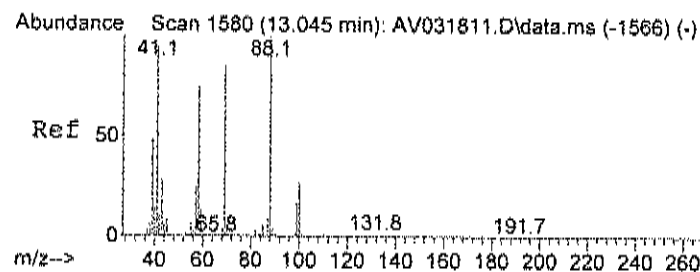
Tgt Ion: 117 Resp: 7445
Ion Ratio Lower Upper
117 100
119 94.1 77.5 117.5



#39
Benzene
Concen: 0.14 ppb
RT: 11.508 min Scan# 1309
Delta R.T. 0.011 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

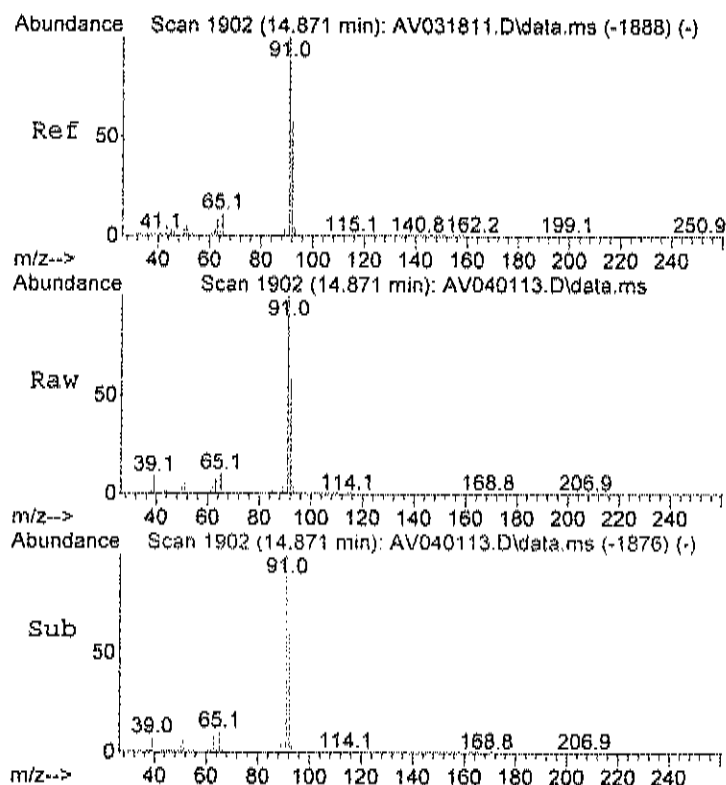
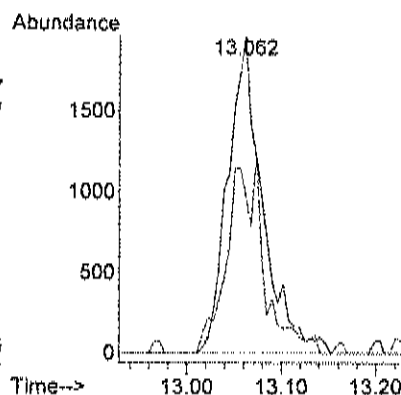
Tgt Ion: 78 Resp: 24853
Ion Ratio Lower Upper
78 100
77 23.2 5.2 45.2
51 28.7 0.0 35.7





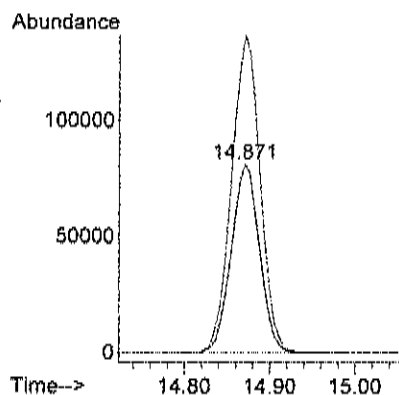
#41
1,4-dioxane
Concen: 0.11 ppb
RT: 13.062 min Scan# 1583
Delta R.T. 0.017 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

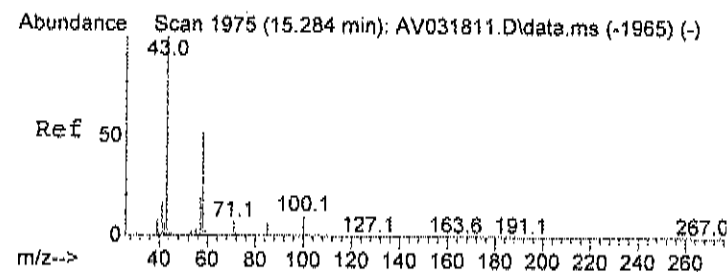
Tgt Ion: 88 Resp: S014
Ion Ratio Lower Upper
88 100
58 64.1 43.8 83.8



#51
Toluene
Concen: 1.29 ppb
RT: 14.871 min Scan# 1902
Delta R.T. -0.000 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

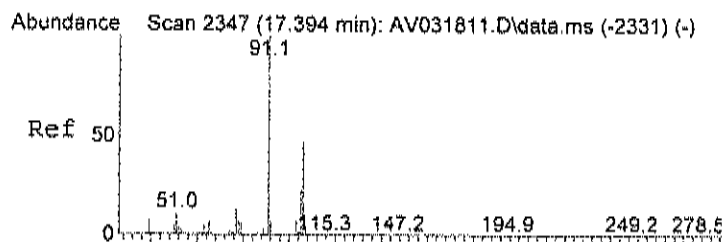
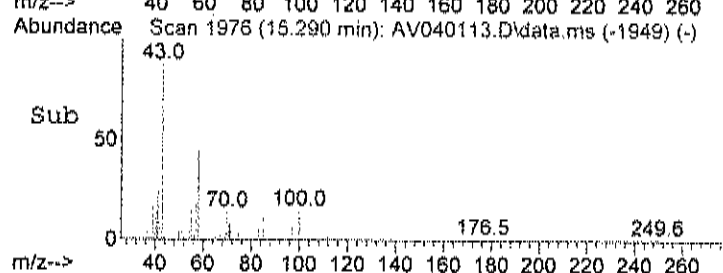
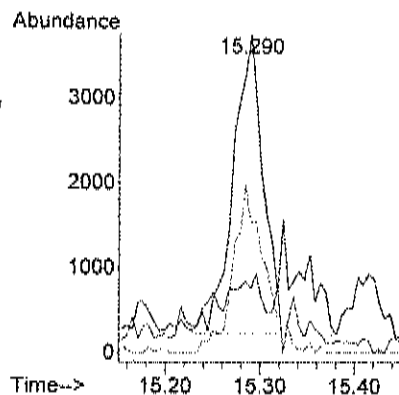
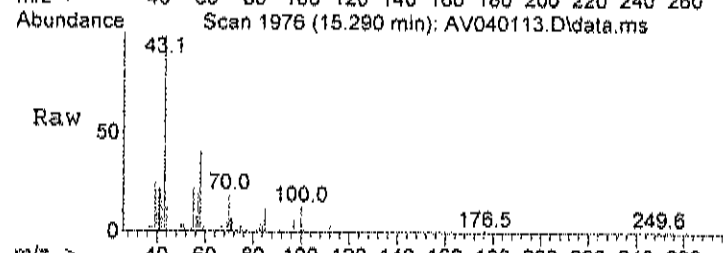
Tgt Ion: 92 Resp: 185840
Ion Ratio Lower Upper
92 100
91 171.5 160.7 200.7





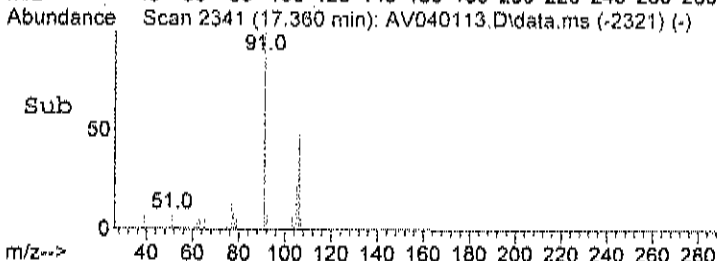
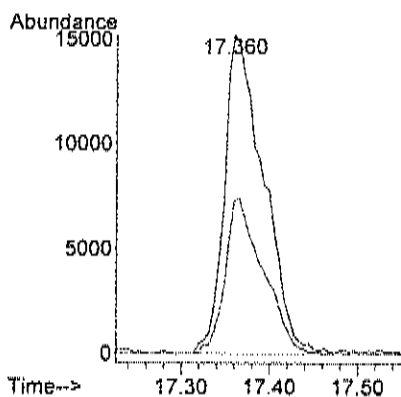
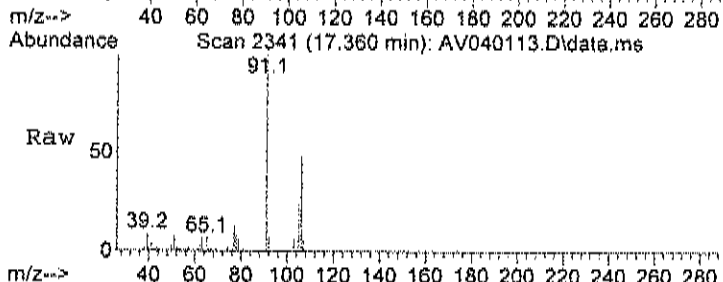
#54
Methyl Butyl Ketone
Concen: 0.10 ppb
RT: 15.290 min Scan# 1976
Delta R.T. 0.005 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

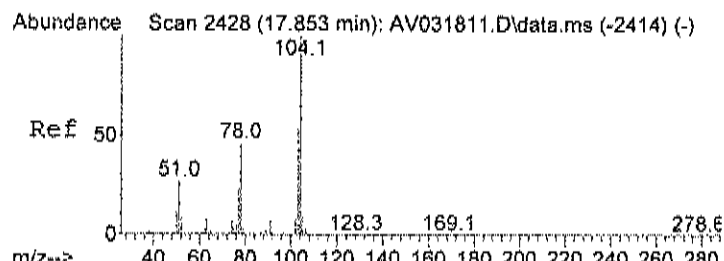
Tgt Ion	Ratio	Lower	Upper
43	100		
57	34.3	0.8	40.8
58	46.6	29.7	69.7



#59
m&p-xylene
Concen: 0.17 ppb
RT: 17.360 min Scan# 2341
Delta R.T. -0.034 min
Lab File: AV040113.D
Acq: 1 Apr 2024 7:59 pm

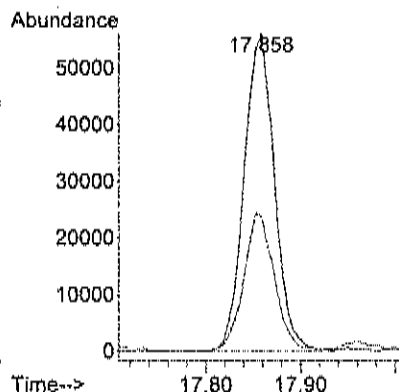
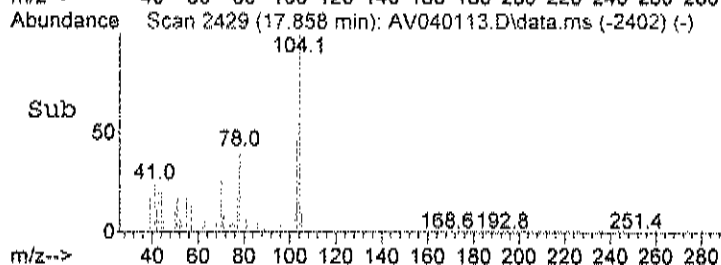
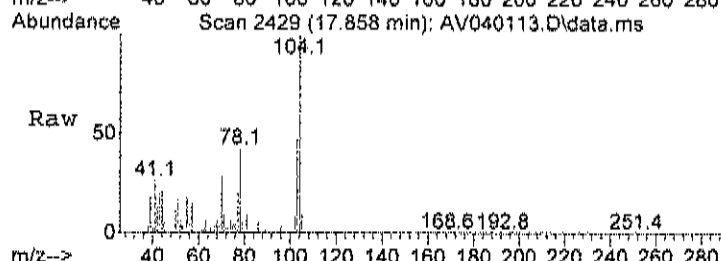
Tgt Ion	Ratio	Lower	Upper
91	100		
106	47.0	27.5	67.5





#61
 Styrene
 Concen: 0.59 ppb
 RT: 17.858 min Scan# 2429
 Delta R.T. 0.005 min
 Lab File: AV040113.D
 Acq: 1 Apr 2024 7:59 pm

Tgt Ion	Ratio	Lower	Upper
104	100		
78	44.3	25.5	65.5



Data Path : C:\msdchem\1\data\
Data File : AV040120.D
Acq On : 2 Apr 2024 1:04 am
Operator : DA
Sample : 2404002-004A 10x
Misc : A325_1UG
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 02 16:30:32 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

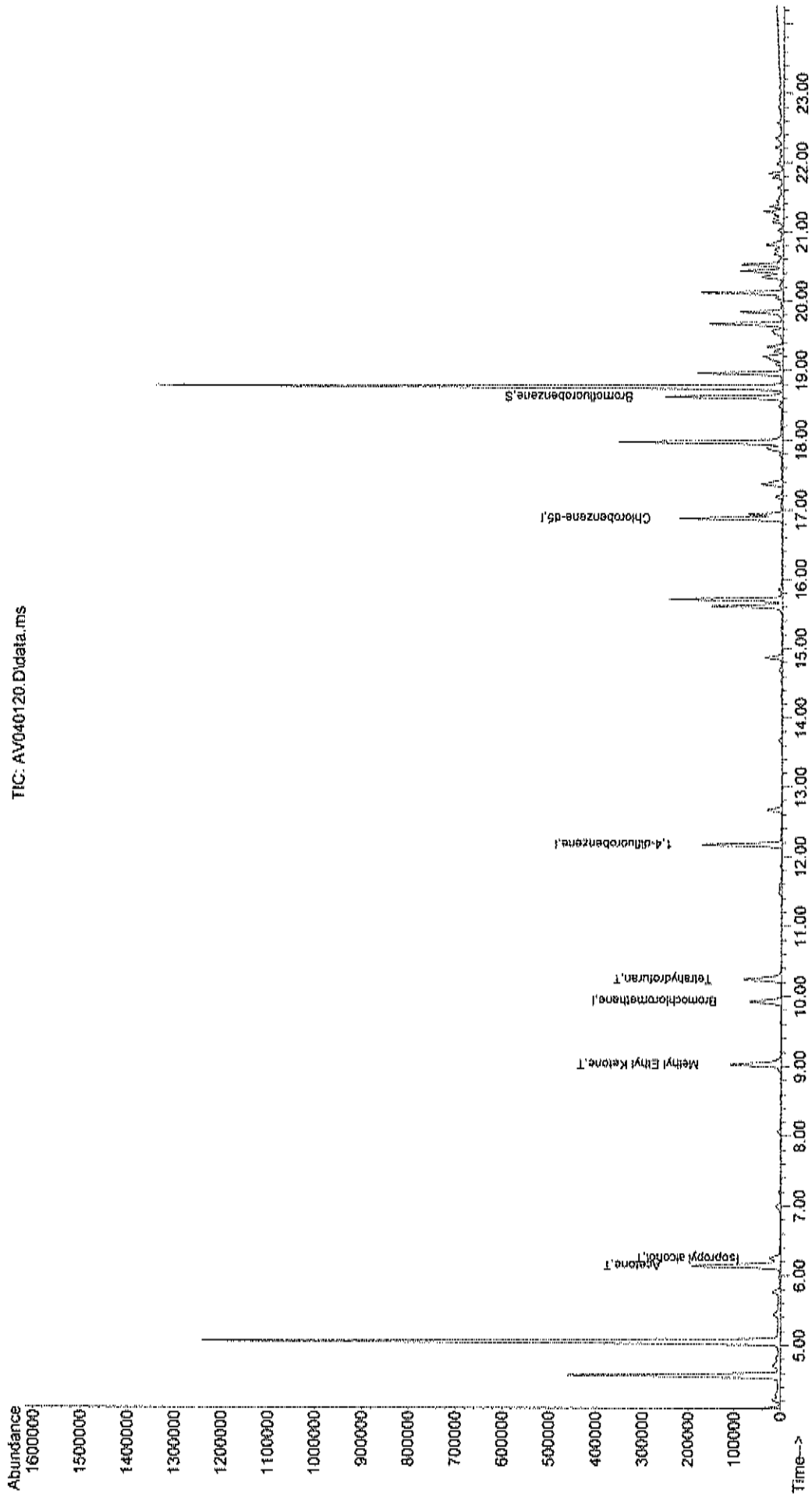
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

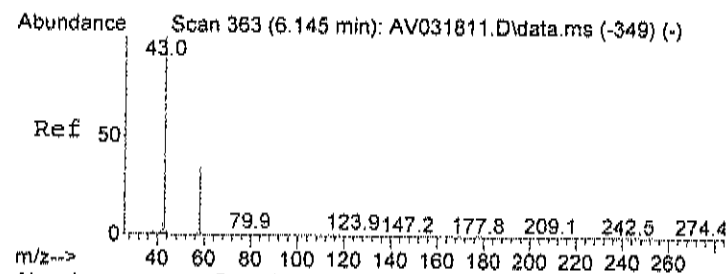
Internal Standards						
1) Bromochloromethane	9.927	128	38878	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	212062	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	184759	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	120542	0.94	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	94.00%
Target Compounds						
15) Acetone	6.139	58	120940	4.80	ppb	# 70
17) Isopropyl alcohol	6.241	45	21057	0.28	ppb	# 1
28) Methyl Ethyl Ketone	9.025	72	66711	2.00	ppb	# 1
33) Tetrahydrofuran	10.238	42	73483	1.37	ppb	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040120.D
Acq On : 2 Apr 2024 1:04 am
Operator : DA
Sample : 2404002-004A 10x
Misc : A325_IUG
ALS Vial : 15 Sample Multiplier: 1

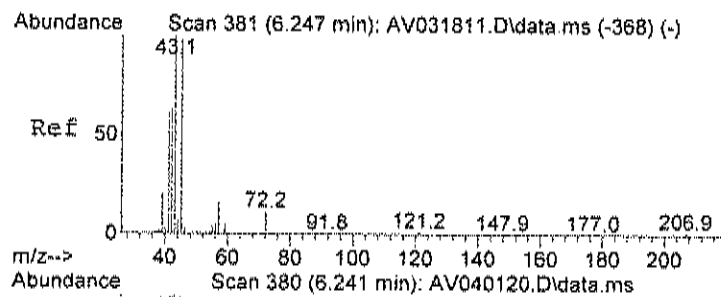
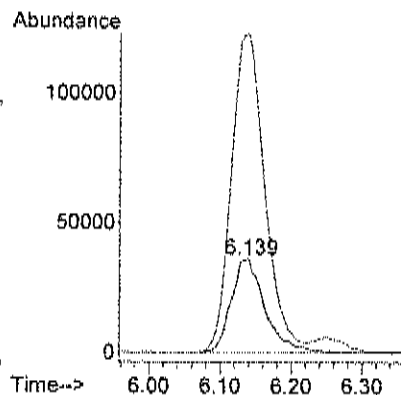
Quant Time: Apr 02 16:30:32 2024
Quant Method : C:\msdchem\1\methods\A325_IUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





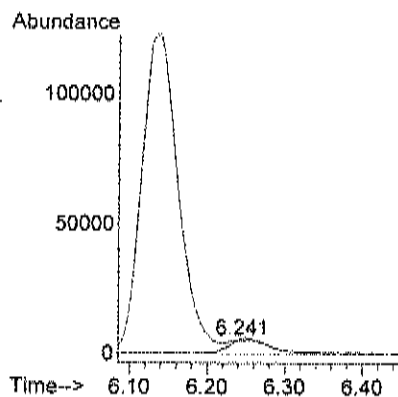
#15
Acetone
Concen: 4.80 ppb
RT: 6.139 min Scan# 362
Delta R.T. 0.000 min
Lab File: AV040120.D
Acq: 2 Apr 2024 1:04 am

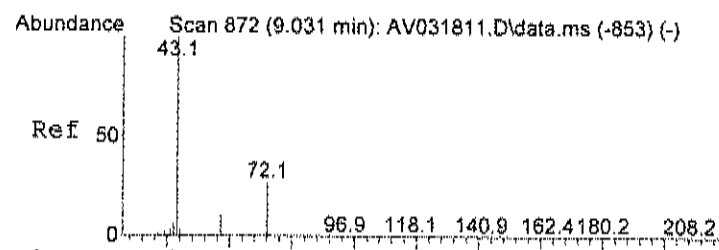
Tgt Ion: 58 Resp: 120940
Ion Ratio Lower Upper
58 100
43 345.4 257.9 317.9#



#17
Isopropyl alcohol
Concen: 0.28 ppb
RT: 6.241 min Scan# 380
Delta R.T. -0.006 min
Lab File: AV040120.D
Acq: 2 Apr 2024 1:04 am

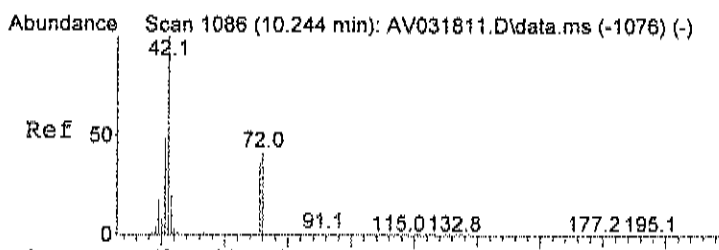
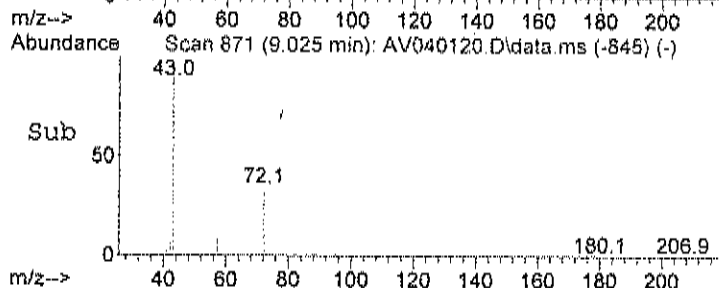
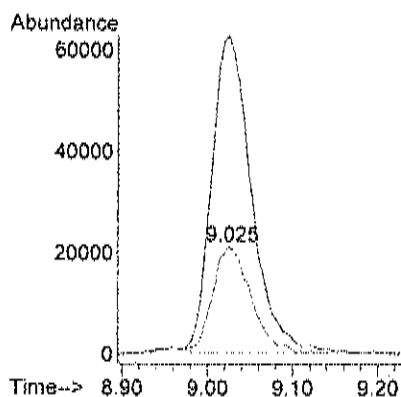
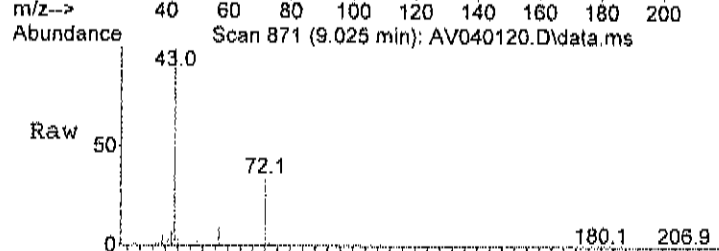
Tgt Ion: 45 Resp: 21057
Ion Ratio Lower Upper
45 100
43 0.0 118.7 158.7#





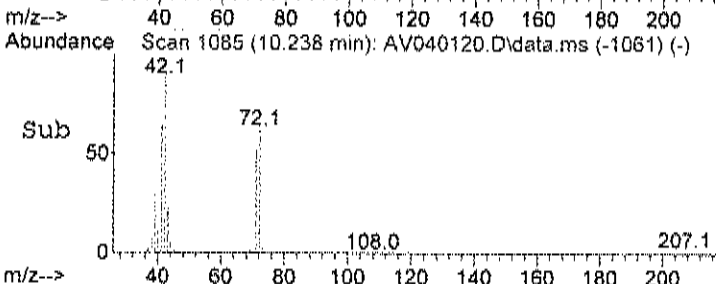
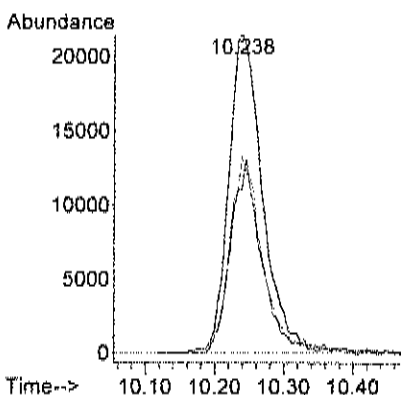
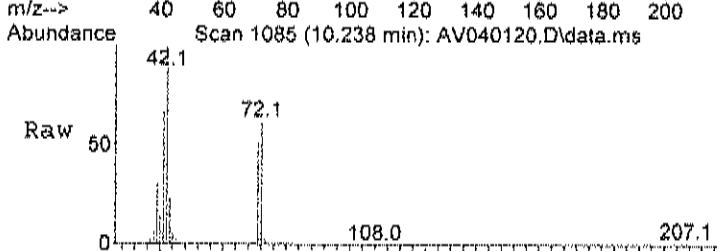
#28
Methyl Ethyl Ketone
Concen: 2.00 ppb
RT: 9.025 min Scan# 871
Delta R.T. 0.000 min
Lab File: AV040120.D
Acq: 2 Apr 2024 1:04 am

Tgt Ion: 72 Resp: 66711
Ion Ratio Lower Upper
72 100
43 0.0 339.5 379.5#
72 100.0 80.0 120.0



#33
Tetrahydrofuran
Concen: 1.37 ppb
RT: 10.238 min Scan# 1085
Delta R.T. -0.012 min
Lab File: AV040120.D
Acq: 2 Apr 2024 1:04 am

Tgt Ion: 42 Resp: 73483
Ion Ratio Lower Upper
42 100
71 56.3 27.1 67.1
72 59.5 30.8 70.8



Data Path : C:\msdchem\1\data\
Data File : AV040121.D
Acq On : 2 Apr 2024 1:46 am
Operator : DA
Sample : 2404002-004A 40x
Misc : A325_1UG
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 02 16:30:40 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

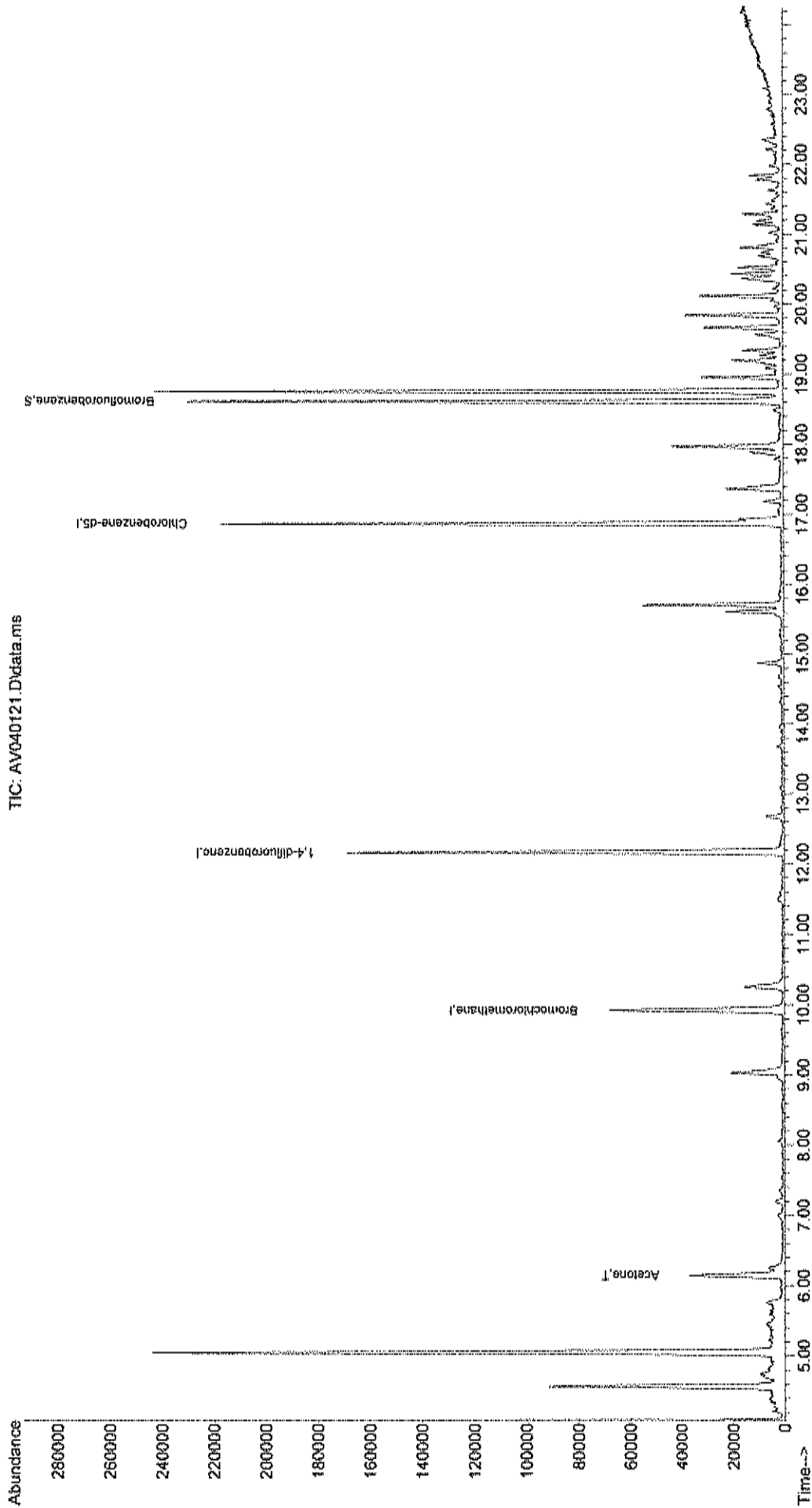
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

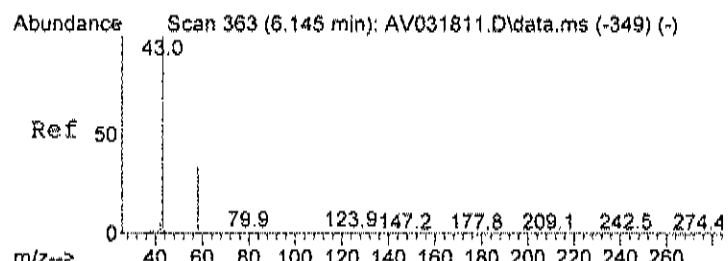
Internal Standards						
1) Bromochloromethane	9.921	128	37217	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	208722	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	179021	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	109428	0.88	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	88.00%
Target Compounds						
15) Acetone	6.145	58	23224	0.96	ppb	# 69

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040121.D
Acq On : 2 Apr 2024 1:46 am
Operator : DA
Sample : 2404002-004A 40x
Misc : A325_1UG
ALS Vial : 16 Sample Multiplier: 1

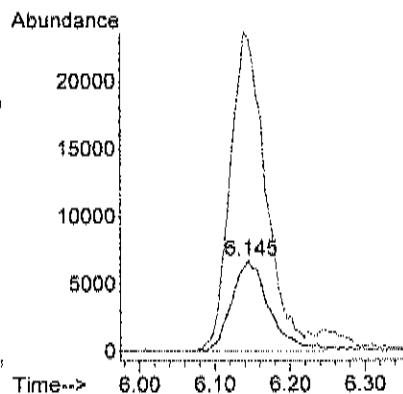
Quant Time: Apr 02 16:30:40 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





#15
 Acetone
 Concen: 0.96 ppb
 RT: 6.145 min Scan# 363
 Delta R.T. 0.006 min
 Lab File: AV040121.D
 Acq: 2 Apr 2024 1:46 am

Tgt Ion: 58 Resp: 23224
 Ion Ratio Lower Upper
 58 100
 43 347.6 257.9 317.9#





SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: OA-01

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-005

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

FieldSampler Jesse

Lab Vacuum In -1 "Hg

Lab Vacuum Out -30 "Hg

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 8:43:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 8:43:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 8:43:00 PM
1,1-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 8:43:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 8:43:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 8:43:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 8:43:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 8:43:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 8:43:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 8:43:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 8:43:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 8:43:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 8:43:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 8:43:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 8:43:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 8:43:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 8:43:00 PM
Acetone	3.1	3.0	ppbV	7.4	7.1		10	4/2/2024 2:28:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 8:43:00 PM

Qualifiers:

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: OA-01

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-005

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Benzene	< 0.15	0.15	ppbV	<0.48	0.48	U	1	4/1/2024 8:43:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 8:43:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 8:43:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 8:43:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 8:43:00 PM
Carbon tetrachloride	0.070	0.030	ppbV	0.44	0.19		1	4/1/2024 8:43:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 8:43:00 PM
Chloroethane	< 0.15	0.15	ppbV	<0.4	0.4	U	1	4/1/2024 8:43:00 PM
Chloroform	< 0.15	0.15	ppbV	<0.73	0.73	U	1	4/1/2024 8:43:00 PM
Chloromethane	0.40	0.15	ppbV	0.83	0.31		1	4/1/2024 8:43:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 8:43:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 8:43:00 PM
Cyclohexane	< 0.15	0.15	ppbV	<0.52	0.52	U	1	4/1/2024 8:43:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 8:43:00 PM
Ethyl acetate	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 8:43:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 8:43:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 8:43:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 8:43:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
Freon 12	0.40	0.15	ppbV	2	0.74		1	4/1/2024 8:43:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 8:43:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 8:43:00 PM
Hexane	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 8:43:00 PM
Isopropyl alcohol	0.45	0.15	ppbV	1.1	0.37		1	4/1/2024 8:43:00 PM
m&p-Xylene	< 0.30	0.30	ppbV	<1.3	1.3	U	1	4/1/2024 8:43:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 8:43:00 PM
Methyl Ethyl Ketone	0.18	0.30	ppbV	0.53	0.88	J	1	4/1/2024 8:43:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively Identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-005

Client Sample ID: OA-01
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 8:43:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 8:43:00 PM
Methylene chloride	0.15	0.15	ppbV	0.52	0.52		1	4/1/2024 8:43:00 PM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 8:43:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 8:43:00 PM
Styrene	< 0.15	0.15	ppbV	<0.64	0.64	U	1	4/1/2024 8:43:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
Tetrahydrofuran	< 0.15	0.15	ppbV	<0.44	0.44	U	1	4/1/2024 8:43:00 PM
Toluene	< 0.15	0.15	ppbV	<0.57	0.57	U	1	4/1/2024 8:43:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 8:43:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 8:43:00 PM
Trichloroethene	< 0.030	0.030	ppbV	<0.16	0.16	U	1	4/1/2024 8:43:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 8:43:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 8:43:00 PM
Vinyl chloride	< 0.040	0.040	ppbV	<0.1	0.1	U	1	4/1/2024 8:43:00 PM
Surr: Bromofluorobenzene	98.0	70-130	%Rec				1	4/1/2024 8:43:00 PM

Qualifiers:

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

Data Path : C:\msdchem\1\data\
Data File : AV040114.D
Acq On : 1 Apr 2024 8:43 pm
Operator : DA
Sample : 2404002-005A
Misc : A325_1UG
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 02 02:46:20 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

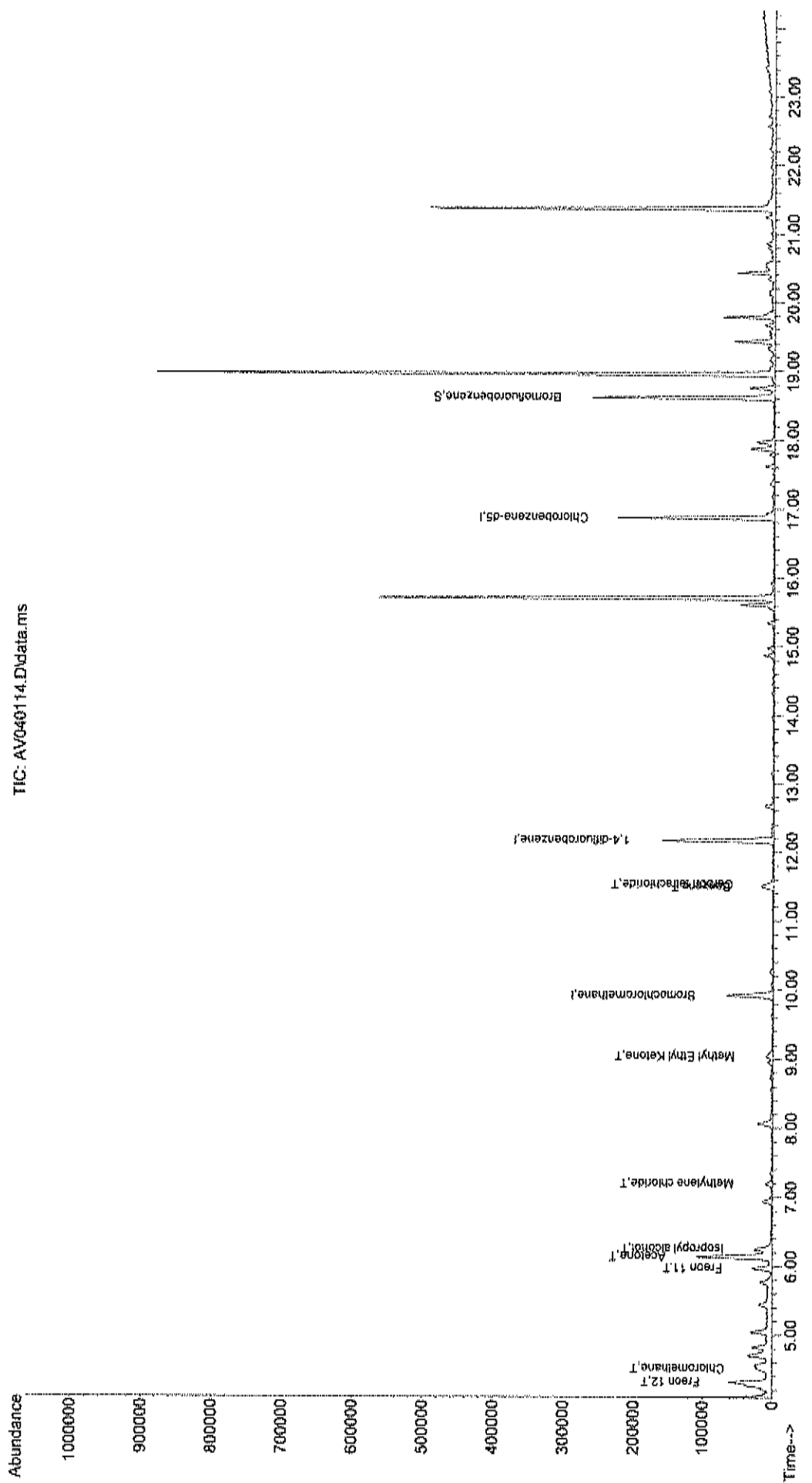
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

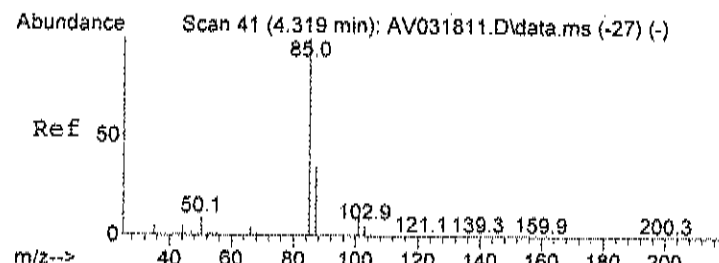
Internal Standards						
1) Bromochloromethane	9.921	128	36634	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	197793	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	183952	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	125500	0.98	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	98.00%
Target Compounds						
						Qvalue
3) Freon 12	4.319	85	73752	0.40	ppb	98
4) Chloromethane	4.518	50	19825	0.40	ppb	82
14) Freon 11	5.975	101	37385	0.20	ppb	96
15) Acetone	6.139	58	62104m ^{va}	2.61	ppb	
17) Isopropyl alcohol	6.253	45	32393	0.45	ppb	# 1
21) Methylene chloride	7.199	84	8305	0.15	ppb	# 79
28) Methyl Ethyl Ketone	9.042	72	5557	0.18	ppb	# 79
38) Carbon tetrachloride	11.531	117	7416	0.07	ppb	95
39) Benzene	11.497	78	17853	0.10	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040114.D
Acq On : 1 Apr 2024 8:43 pm
Operator : DA
Sample : 2404002-005A
Misc : A325_IUG
ALS Vial : 9 Sample Multiplier: 1

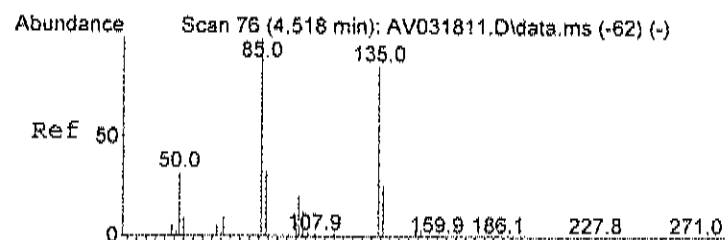
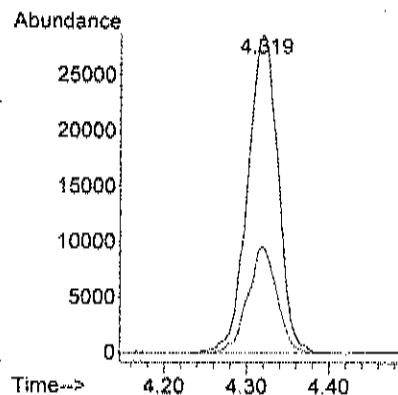
Quant Time: Apr 02 02:46:20 2024
Quant Method : C:\msdchem\1\methods\A325_IUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





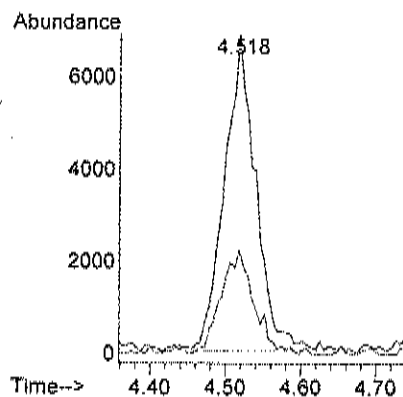
#3
 Freon 12
 Concen: 0.40 ppb
 RT: 4.319 min Scan# 41
 Delta R.T. -0.006 min
 Lab File: AV040114.D
 Acq: 1 Apr 2024 8:43 pm

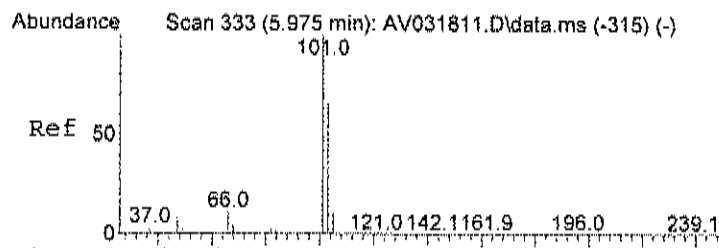
Tgt Ion	Resp	Ion Ratio	Lower	Upper
85	73752	100		
87		32.0	13.2	53.2



#4
 Chloromethane
 Concen: 0.40 ppb
 RT: 4.518 min Scan# 76
 Delta R.T. -0.005 min
 Lab File: AV040114.D
 Acq: 1 Apr 2024 8:43 pm

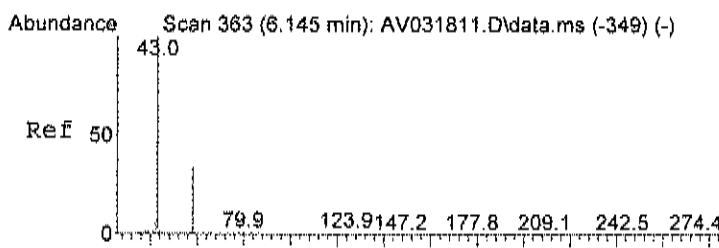
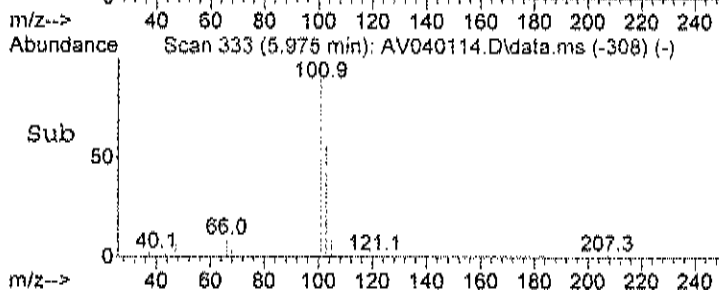
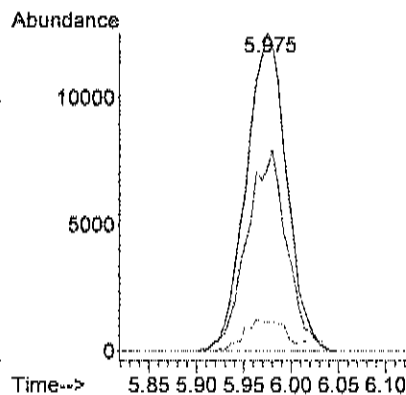
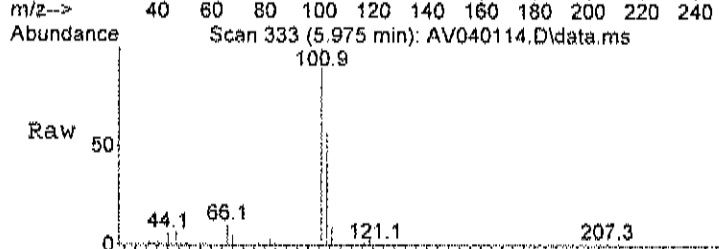
Tgt Ion	Resp	Ion Ratio	Lower	Upper
50	19825	100		
52		34.5	5.6	45.6





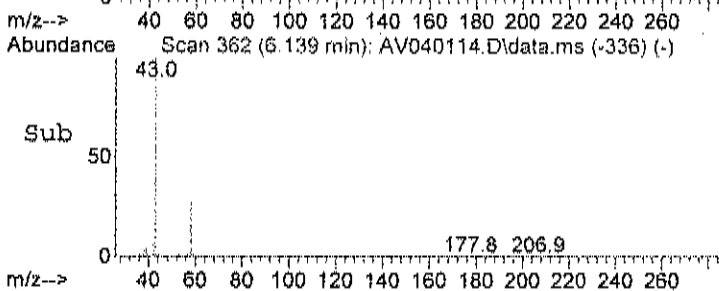
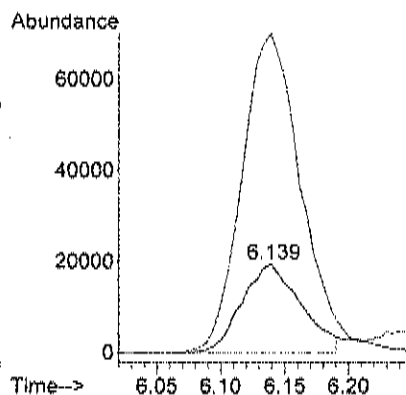
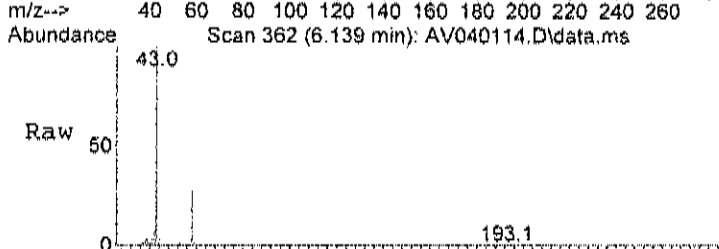
#14
Freon 11
Concen: 0.20 ppb
RT: 5.975 min Scan# 333
Delta R.T. -0.006 min
Lab File: AV040114.D
Acq: 1 Apr 2024 8:43 pm

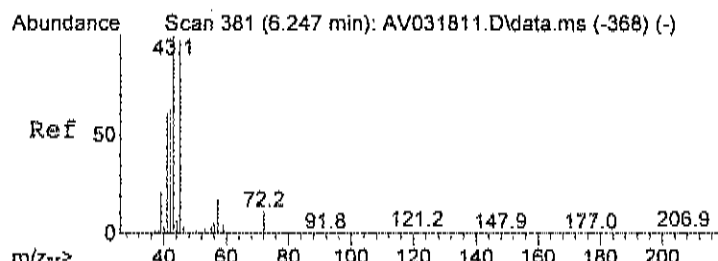
Tgt Ion	Ratio	Lower	Upper
101	100		
103	63.0	46.2	86.2
105	10.8	0.0	30.1



#15
Acetone
Concen: 2.61 ppb m
RT: 6.139 min Scan# 362
Delta R.T. 0.000 min
Lab File: AV040114.D
Acq: 1 Apr 2024 8:43 pm

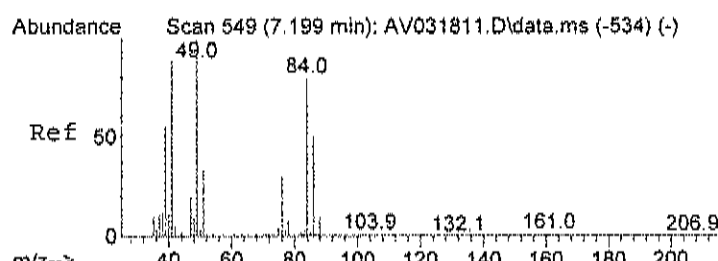
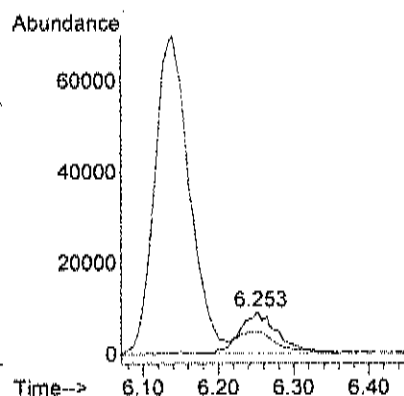
Tgt Ion	Ratio	Lower	Upper
58	100		
43	384.0	257.9	317.9#





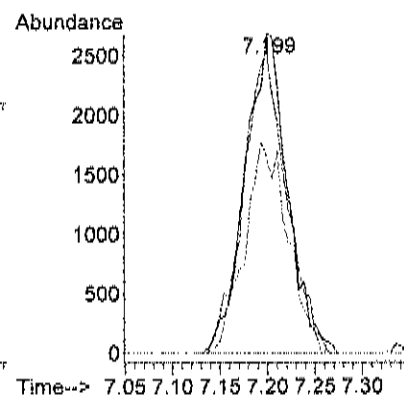
#17
Isopropyl alcohol
Concen: 0.45 ppb
RT: 6.253 min Scan# 382
Delta R.T. 0.006 min
Lab File: AV040114.D
Acq: 1 Apr 2024 8:43 pm

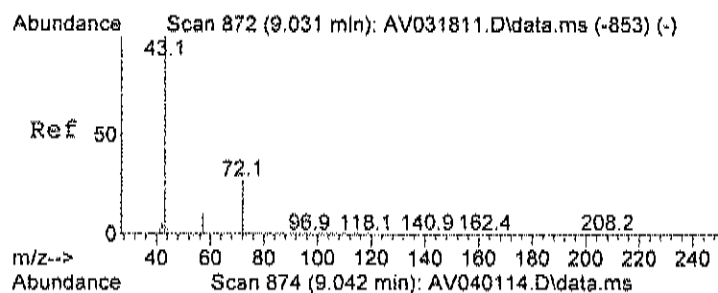
Tgt Ion	Ratio	Lower	Upper
45	100		
43	0.0	118.7	158.7#



#21
Methylene chloride
Concen: 0.15 ppb
RT: 7.199 min Scan# 549
Delta R.T. -0.006 min
Lab File: AV040114.D
Acq: 1 Apr 2024 8:43 pm

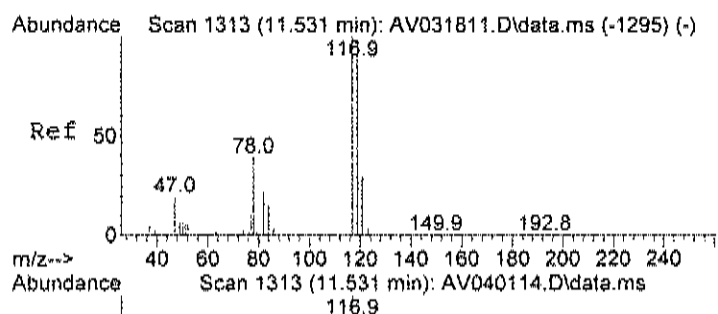
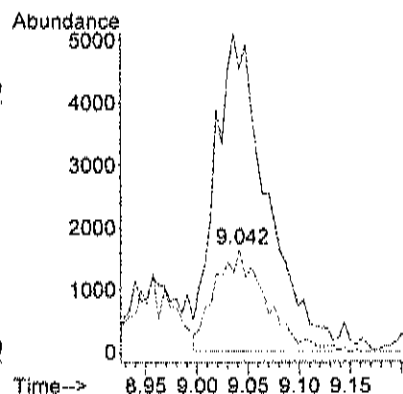
Tgt Ion	Ratio	Lower	Upper
84	100		
49	96.4	110.8	150.8#
86	67.3	44.8	84.8





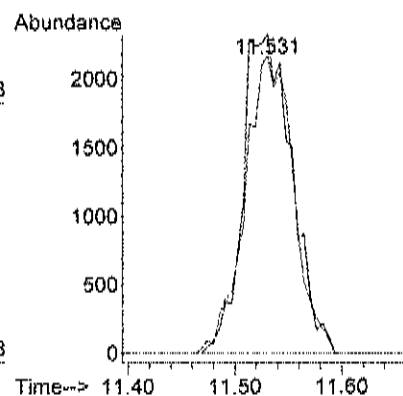
#28
Methyl Ethyl Ketone
Concen: 0.18 ppb
RT: 9.042 min Scan# 874
Delta R.T. 0.017 min
Lab File: AV040114.D
Acq: 1 Apr 2024 8:43 pm

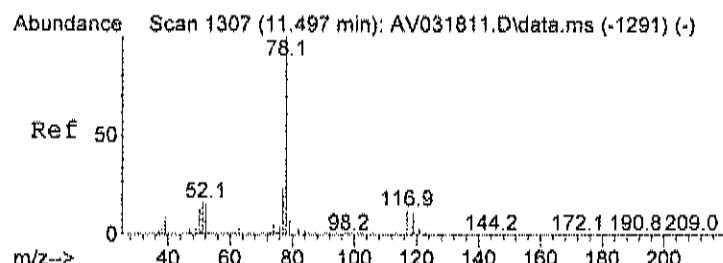
Tgt Ion	Ratio	Lower	Upper
72	100		
43	300.7	339.5	379.5#
72	100.0	80.0	120.0



#38
Carbon tetrachloride
Concen: 0.07 ppb
RT: 11.531 min Scan# 1313
Delta R.T. 0.000 min
Lab File: AV040114.D
Acq: 1 Apr 2024 8:43 pm

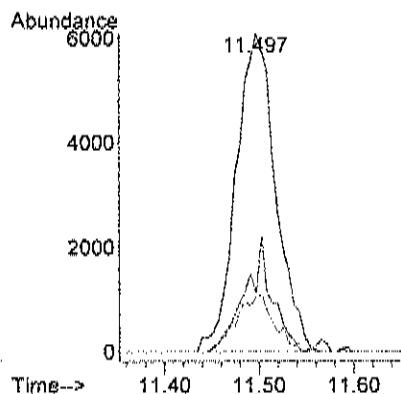
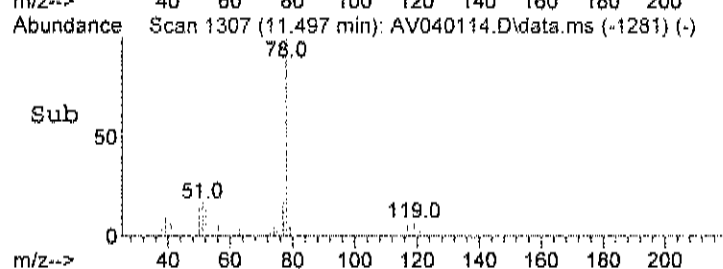
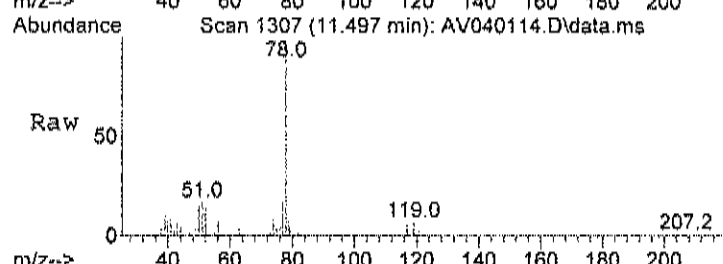
Tgt Ion	Ratio	Lower	Upper
117	100		
119	92.4	77.5	117.5





#39
Benzene
Concen: 0.10 ppb
RT: 11.497 min Scan# 1307
Delta R.T. 0.000 min
Lab File: AV040114.D
Acq: 1 Apr 2024 8:43 pm

Tgt Ion:	78	Resp:	17853
Ion	Ratio	Lower	Upper
78	100		
77	24.7	5.2	45.2
51	17.4	0.0	35.7



Data Path : C:\msdchem\1\data\
Data File : AV040122.D
Acq On : 2 Apr 2024 2:28 am
Operator : DA
Sample : 2404002-005A 10x
Misc : A325_1UG
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 02 16:30:47 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

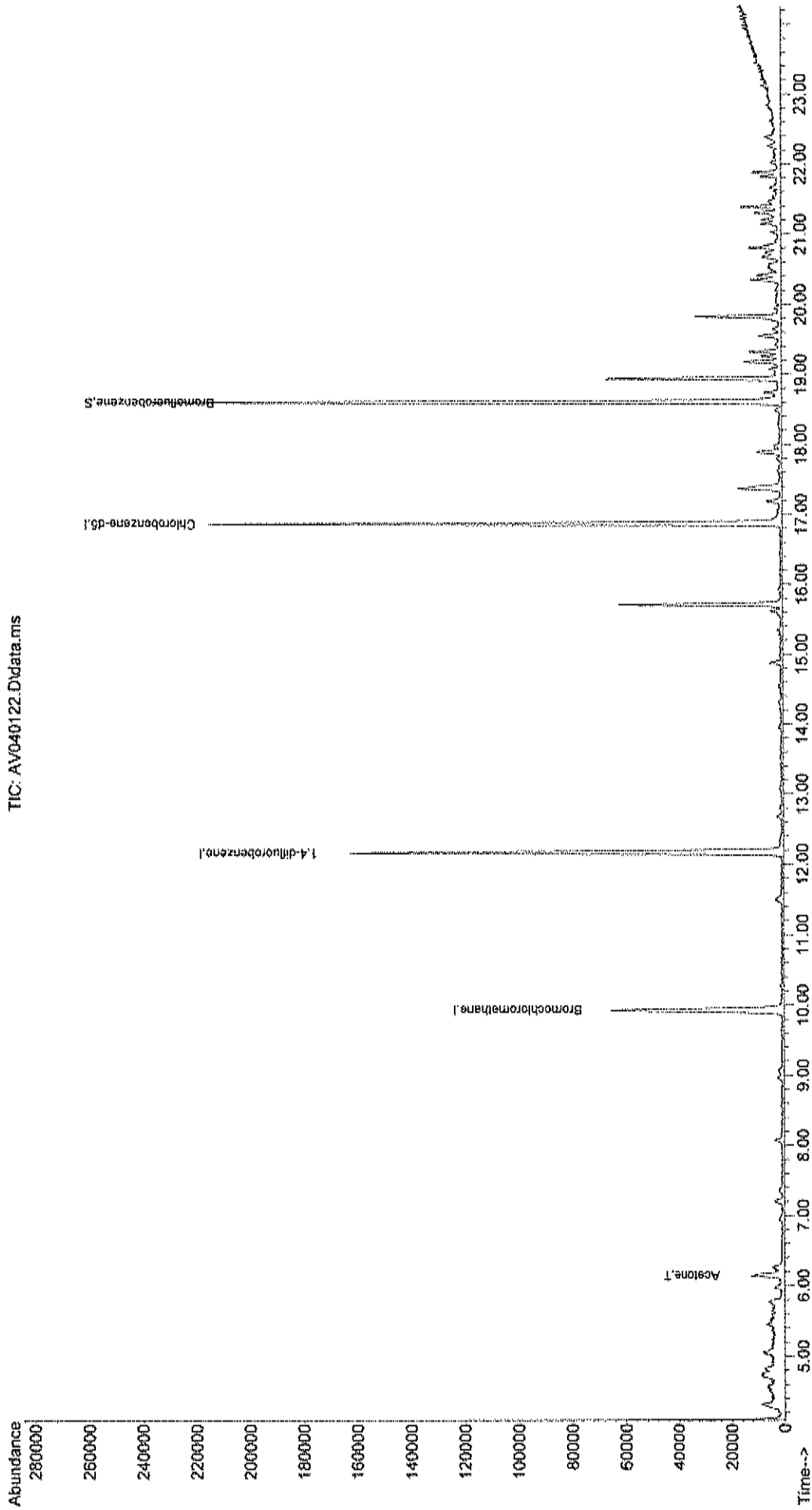
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

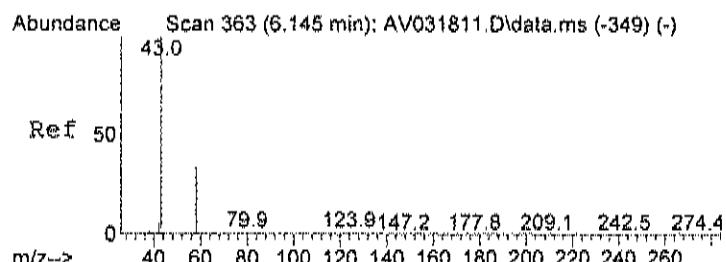
Internal Standards						
1) Bromochloromethane	9.932	128	37744	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	202266	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	178005	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.601	95	110642	0.89	ppb	-0.01
Spiked Amount	1.000	Range	70 - 130	Recovery	=	89.00%
Target Compounds						Qvalue
15) Acetone	6.139	58	7651m ⁷ *	0.31	ppb	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040122.D
Acq On : 2 Apr 2024 2:28 am
Operator : DA
Sample : 2404002-005A 10x
Misc : A325_1UG
ALS Vial : 17 Sample Multiplier: 1

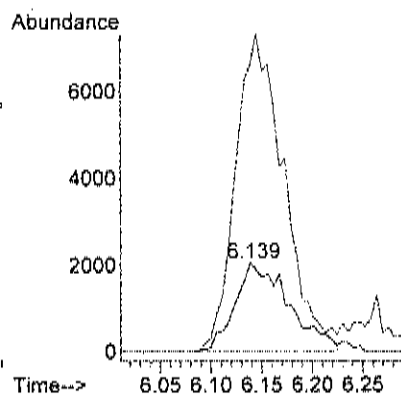
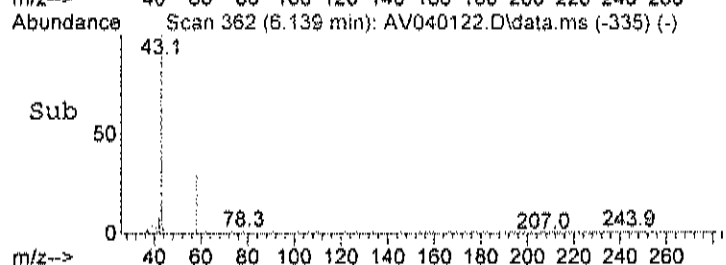
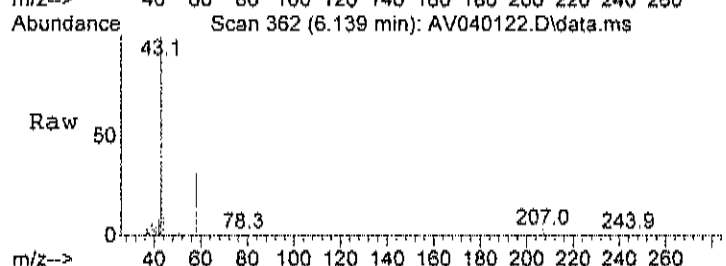
Quant Time: Apr 02 16:30:47 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





#15
 Acetone
 Concen: 0.31 ppb m
 RT: 6.139 min Scan# 362
 Delta R.T. 0.000 min
 Lab File: AV040122.D
 Acq: 2 Apr 2024 2:28 am

Tgt Ion: 58 Resp: 7651
 Ion Ratio Lower Upper
 58 100
 43 342.9 257.9 317.9#



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS DATA

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INITIAL CALIBRATION

Response Factor Report Instrument 1

Method Path : C:\msdchem\1\methods\
 Method File : A325_1UG.M
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Tue Mar 26 09:11:14 2024
 Response Via : Initial Calibration

Calibration Files

2.0 =AV032507.D 1.5 =AV032508.D 1.25=AV032509.D 1.0 =AV032510.D 0.75=AV032511.D 0.50=AV032512.D 0.30=AV032513.D
 0.15=AV032514.D 0.10=AV032515.D 0.04=AV032516.D 0.03=AV032517.D

Compound		2.0	1.5	1.25	1.0	0.75	0.50	0.30	0.15	0.10	0.04	0.03	Avg	%RSD
-----ISTD-----														
1) I Bromochloromethane														
2) T Propylene		1.018	0.986	1.038	1.089	1.045	1.039	1.217	1.357				1.099	11.44
3) T Freon 12		4.656	4.526	4.720	4.957	4.647	4.928	5.469	5.885				4.974	9.46
4) T Chloromethane		1.211	1.186	1.239	1.328	1.197	1.360	1.542	1.642				1.338	12.75
5) T Freon 114		3.907	3.703	3.937	4.154	3.878	4.076	4.520	5.049				4.153	10.49
6) T Vinyl Chloride		1.255	1.220	1.286	1.367	1.276	1.380	1.479	1.665	1.898	2.709		1.554	29.46
7) T Butane		1.635	1.593	1.612	1.744	1.625	1.759	2.100	2.444				1.814	16.72
8) T 1,3-butadiene		1.294	1.250	1.285	1.430	1.287	1.405	1.566	1.763				1.410	12.56
9) T Bromomethane		1.366	1.312	1.366	1.493	1.416	1.478	1.763	1.891				1.511	13.71
10) T Chloroethane		0.668	0.641	0.685	0.728	0.658	0.697	0.824	0.905				0.726	12.70
11) T Ethanol		0.434	0.407	0.444	0.485	0.490	0.484	0.589	0.745				0.510	21.43
12) T Acrolein		0.444	0.422	0.440	0.480	0.434	0.491	0.520	0.591				0.478	11.85
13) T Vinyl Bromide		1.535	1.477	1.502	1.629	1.480	1.621	1.914	1.968				1.641	11.86
14) T Freon 11		4.792	4.641	4.906	5.184	4.871	5.131	5.634	5.987				5.143	8.88
15) T Acetone		0.589	0.565	0.583	0.647	0.612	0.658	0.685	0.850				0.649	14.05
16) T Pentane		1.195	1.153	1.184	1.297	1.234	1.254	1.435	1.609				1.295	11.90
17) T Isopropyl alcohol		1.798	1.775	1.846	1.989	1.761	1.960	2.184	2.408				1.965	11.61
18) T 1,1-dichloroet...		1.550	1.477	1.577	1.669	1.498	1.616	1.755	1.987	2.270	3.474		1.887	32.28
19) T Freon 113		3.489	3.416	3.497	3.799	3.546	3.684	4.107	4.475				3.752	9.79
20) t t-Butyl alcohol		2.520	2.479	2.549	2.794	2.625	2.717	3.105	3.360				2.769	11.26
21) T Methylene chlo...		1.335	1.285	1.326	1.419	1.368	1.406	1.640	1.982				1.470	15.87
22) T Allyl chloride		1.386	1.389	1.370	1.452	1.443	1.474	1.598	1.950				1.508	12.78
23) T Carbon disulfide		4.015	3.927	4.022	4.270	4.028	4.179	4.686	5.565				4.336	12.71
24) T trans-1,2-dich...		2.040	1.979	2.025	2.099	1.989	2.072	2.317	2.640				2.145	10.57
25) T methyl tert-bu...		4.877	4.810	4.822	5.182	4.831	5.003	5.542	6.084				5.144	8.84
26) T 1,1-dichloroet...		2.675	2.631	2.657	2.864	2.651	2.707	3.056	3.453				2.837	10.16
27) T Vinyl acetate		2.059	2.060	2.094	2.271	2.049	2.231	2.306	2.583				2.207	8.34
28) T Methyl Ethyl K...		0.828	0.798	0.797	0.795	0.771	0.812	0.939	1.114				0.857	13.52
29) T cis-1,2-dichlo...		2.019	1.991	2.017	2.134	1.988	2.057	2.291	2.552	2.862	4.256		2.417	29.28
30) T Hexane		2.251	2.203	2.238	2.358	2.208	2.282	2.502	2.692				2.342	7.36
31) T Ethyl acetate		2.370	2.361	2.384	2.494	2.338	2.410	2.733	2.844				2.492	7.68
32) T Chloroform		3.460	3.408	3.525	3.748	3.492	3.690	3.975	4.494				3.724	9.74
33) T Tetrahydrofuran		1.315	1.282	1.288	1.367	1.263	1.322	1.534	1.644				1.377	10.01
34) T 1,2-dichloroet...		2.524	2.448	2.543	2.711	2.558	2.696	2.916	3.115				2.689	8.40
-----ISTD-----														
35) I 1,4-difluorobenzene														
36) T 1,1,1-trichlor...		0.462	0.468	0.482	0.482	0.504	0.505	0.541	0.589				0.504	8.42
37) T Cyclohexane		0.335	0.334	0.330	0.339	0.342	0.359	0.379	0.441				0.357	10.50

Response Factor Report Instrument 1

Method Path : C:\msdchem\1\methods\

Method File : A325_1UG.M

Title : TO-15 VOA Standards for 5 point calibration

38) T	Carbon tetrach...	0.361	0.368	0.368	0.362	0.375	0.378	0.404	0.460	0.467	0.696	0.846	0.462	34.73
39) T	Benzene	0.810	0.819	0.829	0.831	0.850	0.874	0.945	1.031				0.874	8.80
40) T	Methyl methacr...	0.268	0.262	0.258	0.269	0.262	0.277	0.284	0.306				0.273	5.77
41) T	1,4-dioxane	0.211	0.208	0.207	0.210	0.210	0.219	0.243	0.274				0.223	10.66
42) T	2,2,4-trimethy...	1.070	1.085	1.083	1.096	1.119	1.149	1.220	1.320				1.142	7.56
43) T	Heptane	0.361	0.362	0.362	0.362	0.380	0.387	0.400	0.483				0.387	10.64
44) T	Trichloroethene	0.412	0.411	0.418	0.426	0.423	0.443	0.480	0.520	0.573	0.872	0.992	0.543	36.99
45) T	1,2-dichloropr...	0.255	0.257	0.265	0.265	0.270	0.269	0.301	0.329				0.276	9.21
46) T	Bromodichlorom...	0.435	0.436	0.434	0.439	0.446	0.446	0.442	0.524				0.450	6.72
47) T	cis-1,3-dichlo...	0.406	0.405	0.401	0.418	0.414	0.413	0.432	0.461				0.419	4.68
48) T	trans-1,3-dich...	0.356	0.362	0.367	0.373	0.375	0.369	0.391	0.402				0.374	4.05
49) T	1,1,2-trichlor...	0.329	0.326	0.331	0.341	0.344	0.349	0.387	0.406				0.352	8.29

Chlorobenzene-d5

50) I	Toluene	0.711	0.718	0.697	0.700	0.715	0.749	0.786	0.896				0.747	9.00
51) T	Methyl Isobuty...	0.538	0.545	0.529	0.527	0.552	0.563	0.571	0.659				0.560	7.62
52) T	Dibromochlorom...	0.427	0.423	0.407	0.385	0.406	0.395	0.396	0.456				0.412	5.54
53) T	Methyl Butyl K...	0.508	0.504	0.493	0.475	0.488	0.487	0.508	0.550				0.502	4.51
54) T	1,2-dibromoethane	0.538	0.548	0.539	0.524	0.543	0.554	0.577	0.608				0.554	4.83
55) T	Tetrachloroeth...	0.475	0.475	0.469	0.466	0.495	0.507	0.536	0.604				0.503	9.33
56) T	Chlorobenzene	1.007	1.000	0.992	0.964	1.012	1.021	1.065	1.235				1.037	8.19
57) T	Ethylbenzene	1.740	1.687	1.646	1.620	1.682	1.689	1.733	1.972				1.721	6.33
58) T	m&p-xylene	1.472	1.412	1.362	1.332	1.359	1.373	1.419	1.592				1.415	5.91
59) T	Nonane	0.700	0.678	0.663	0.637	0.656	0.667	0.680	0.762				0.680	5.56
60) T	Styrene	1.163	1.122	1.077	1.033	1.058	1.072	1.078	1.182				1.098	4.78
61) T	Bromoform	0.349	0.328	0.315	0.300	0.309	0.301	0.300	0.334				0.317	5.79
62) T	o-xylene	1.613	1.589	1.499	1.428	1.461	1.468	1.530	1.769				1.545	7.16
63) T	Cumene	2.059	1.995	1.946	1.900	1.935	1.984	2.064	2.358				2.030	7.11
64) T	Bromofluoroben...	0.724	0.728	0.693	0.688	0.701	0.711	0.758	0.810	0.692	0.661	0.603	0.696	5.49
65) S	1,1,2,2-tetrac...	0.708	0.705	0.693	0.662	0.688	0.695	0.705	0.685				0.722	5.76
66) T	Propylbenzene	0.606	0.590	0.567	0.562	0.568	0.575	0.575	0.652				0.587	5.11
67) T	2-Chlorotoluene	0.563	0.549	0.520	0.492	0.513	0.511	0.526	0.606				0.535	6.79
68) T	4-ethyltoluene	2.160	2.062	2.000	1.913	1.963	1.954	2.053	2.218				2.040	5.16
69) T	1,3,5-trimethy...	1.953	1.887	1.808	1.776	1.769	1.789	1.842	2.018				1.855	4.89
70) T	1,2,4-trimethy...	1.824	1.772	1.712	1.677	1.684	1.708	1.781	1.903				1.758	4.45
71) T	1,3-dichlorobe...	1.033	1.018	1.001	0.981	0.976	0.924	0.977	0.951				0.983	3.58
72) T	benzyl chloride	0.451	0.431	0.418	0.404	0.379	0.310	0.337	0.287				0.377	15.78
73) T	1,4-dichlorobe...	1.011	0.971	0.953	0.966	0.936	0.878	0.927	0.877				0.940	4.90
74) T	1,2,3-trimethy...	1.890	1.874	1.788	1.731	1.727	1.772	1.848	1.999				1.829	5.06
75) T	1,2-dichlorobe...	1.008	0.937	0.899	0.849	0.866	0.910	0.922	1.021				0.927	6.64
76) T	1,2,4-trichlor...	0.327	0.297	0.309	0.306	0.288	0.218	0.249	0.168				0.270	20.13
77) T	Naphthalene	0.821	0.777	0.818	0.800	0.758	0.551	0.655	0.463				0.705	19.20
78) T	Hexachloro-1,3...	0.662	0.662	0.655	0.648	0.655	0.650	0.711	0.725				0.671	4.40
79) T														

(#) = Out of Range

Data Path : C:\msdchem\1\data2\3 2024MAR\
 Data File : AV032507.D
 Acq On : 25 Mar 2024 3:42 pm
 Operator : DA
 Sample : A1UG_2.0
 Misc : A318_1UG
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 26 08:06:14 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.921	128	26425	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	164833	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	154844	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.613	95	112129	1.00	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	100.00%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.263	41	53780	1.87	ppb	# 46
3) Freon 12	4.319	85	246079	1.88	ppb	98
4) Chloromethane	4.524	50	64019	1.82	ppb	99
5) Freon 114	4.524	85	206490	1.88	ppb	93
6) Vinyl Chloride	4.716	62	66336	1.84	ppb	98
7) Butane	4.824	43	86420	1.87	ppb	99
8) 1,3-butadiene	4.830	39	68373	1.81	ppb	94
9) Bromomethane	5.176	94	72172	1.83	ppb	94
10) Chloroethane	5.346	64	35326	1.84	ppb	95
11) Ethanol	5.442	45	22952	1.79	ppb	94
12) Acrolein	6.037	56	23442	1.85	ppb	100
13) Vinyl Bromide	5.691	106	81124	1.88	ppb	92
14) Freon 11	5.975	101	253277	1.85	ppb	99
15) Acetone	6.134	58	31133m*	1.82	ppb	
16) Pentane	6.253	42	63176	1.84	ppb	# 75
17) Isopropyl alcohol	6.247	45	95023	1.81	ppb	91
18) 1,1-dichloroethene	6.740	96	81900	1.86	ppb	# 87
19) Freon 113	6.939	101	184409	1.84	ppb	84
20) t-Butyl alcohol	6.956	59	133173	1.80	ppb	93
21) Methylene chloride	7.200	84	70559	1.88	ppb	# 83
22) Allyl chloride	7.183	41	73251	1.91	ppb	80
23) Carbon disulfide	7.358	76	212181	1.88	ppb	99
24) trans-1,2-dichloroethene	8.129	61	107831	1.94	ppb	88
25) methyl tert-butyl ether	8.141	73	257738	1.88	ppb	82
26) 1,1-dichloroethane	8.555	63	141372	1.87	ppb	99
27) Vinyl acetate	8.538	43	108801	1.81	ppb	94
28) Methyl Ethyl Ketone	9.020	72	43761	2.08	ppb	# 1
29) cis-1,2-dichloroethene	9.479	61	106717	1.89	ppb	86
30) Hexane	9.082	57	118989	1.91	ppb	96
31) Ethyl acetate	9.615	43	125253	1.90	ppb	97
32) Chloroform	10.080	83	182877	1.85	ppb	95
33) Tetrahydrofuran	10.233	42	69495	1.92	ppb	88
34) 1,2-dichloroethane	11.180	62	133379	1.86	ppb	96
36) 1,1,1-trichloroethane	10.896	97	152326	1.92	ppb	98
37) Cyclohexane	11.582	56	110318	1.97	ppb	# 69
38) Carbon tetrachloride	11.537	117	119044	1.99	ppb	98
39) Benzene	11.497	78	267179	1.95	ppb	98
40) Methyl methacrylate	13.022	41	88357	1.99	ppb	89
41) 1,4-dioxane	13.039	88	69566	2.01	ppb	90
42) 2,2,4-trimethylpentane	12.336	57	352624	1.95	ppb	94
43) Heptane	12.677	43	119054	1.99	ppb	92
44) Trichloroethene	12.801	130	135799	1.93	ppb	97

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032507.D
Acq On : 25 Mar 2024 3:42 pm
Operator : DA
Sample : A1UG_2.0
Misc : A318_1UG
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 26 08:06:14 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

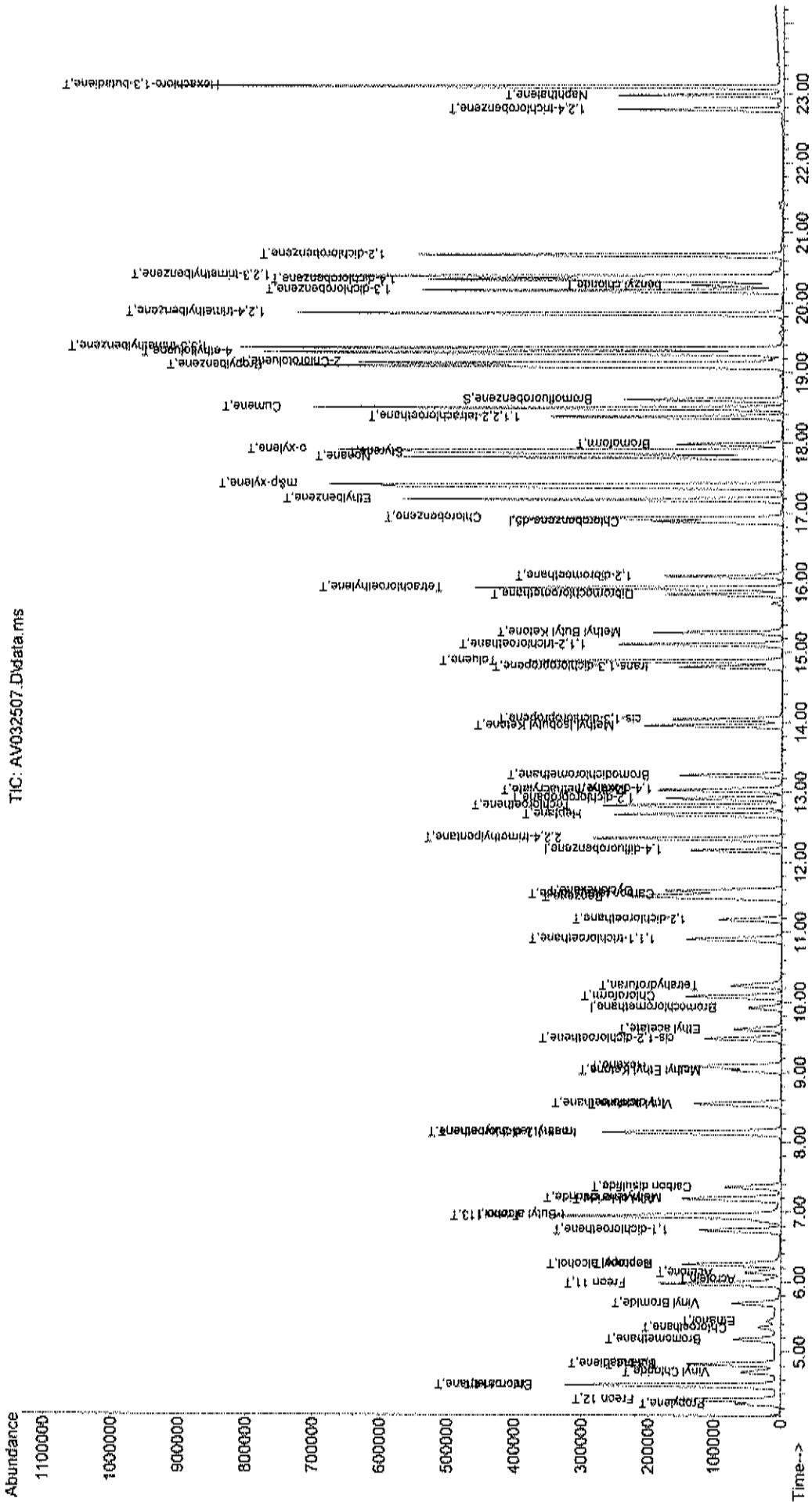
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.903	63	83963	1.92	ppb	99
46) Bromodichloromethane	13.232	83	143350	1.98	ppb	100
47) cis-1,3-dichloropropene	14.037	75	133745	1.94	ppb	94
48) trans-1,3-dichloropropene	14.791	75	117515	1.91	ppb	90
49) 1,1,2-trichloroethane	15.109	97	108462	1.93	ppb	99
51) Toluene	14.871	92	220142	2.03	ppb	96
52) Methyl Isobutyl Ketone	13.941	43	166590	2.04	ppb	93
53) Dibromochloromethane	15.829	129	132222	2.22	ppb	95
54) Methyl Butyl Ketone	15.285	43	157373	2.14	ppb	94
55) 1,2-dibromoethane	16.090	107	166607	2.05	ppb	100
56) Tetrachloroethylene	15.920	164	147139	2.04	ppb	98
57) Chlorobenzene	16.923	112	311910	2.09	ppb	99
58) Ethylbenzene	17.184	91	538936	2.15	ppb	97
59) m&p-xylene	17.394	91	911607	4.42	ppb	98
60) Nonane	17.791	43	216907	2.20	ppb	93
61) Styrene	17.853	104	360306	2.25	ppb	93
62) Bromoform	17.983	173	108223	2.33	ppb	94
63) o-xylene	17.887	91	499538	2.26	ppb	97
64) Cumene	18.494	105	637733	2.17	ppb	98
66) 1,1,2,2-tetrachloroethane	18.363	83	219128	2.06	ppb	94
67) Propylbenzene	19.089	120	187629	2.16	ppb	# 10
68) 2-Chlorotoluene	19.134	126	174220	2.29	ppb	# 1
69) 4-ethyltoluene	19.270	105	668912	2.26	ppb	99
70) 1,3,5-trimethylbenzene	19.338	105	604790	2.20	ppb	99
71) 1,2,4-trimethylbenzene	19.837	105	564723	2.18	ppb	99
72) 1,3-dichlorobenzene	20.166	146	320057	2.11	ppb	96
73) benzyl chloride	20.240	91	139587	2.23	ppb	99
74) 1,4-dichlorobenzene	20.314	146	313197	2.09	ppb	97
75) 1,2,3-trimethylbenzene	20.365	105	585257	2.18	ppb	100
76) 1,2-dichlorobenzene	20.671	146	312201	2.38	ppb	97
77) 1,2,4-trichlorobenzene	22.763	180	101402	2.14	ppb	96
78) Naphthalene	22.961	128	254407	2.05	ppb	99
79) Hexachloro-1,3-butadiene	23.086	225	204941	2.04	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032507.D
Acq On : 25 Mar 2024 3:42 pm
Operator : DA
Sample : A1UG 2.0
Misc : A318_1UG
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 26 08:06:14 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



Data Path : C:\msdchem\1\data2\3 2024MAR\
 Data File : AV032508.D
 Acq On : 25 Mar 2024 4:40 pm
 Operator : DA
 Sample : A1UG_1.5
 Misc : A318_1UG
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 26 08:09:22 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.921	128	27747	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	166082	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	153404	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.613	95	111702	1.01	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	101.00%

Target Compounds

						Qvalue
2) Propylene	4.268	41	41026	1.36	ppb	# 46
3) Freon 12	4.319	85	188392	1.37	ppb	98
4) Chloromethane	4.523	50	49362	1.34	ppb	99
5) Freon 114	4.523	85	154115	1.34	ppb	91
6) Vinyl Chloride	4.722	62	50786	1.34	ppb	98
7) Butane	4.830	43	66304	1.37	ppb	100
8) 1,3-butadiene	4.830	39	52025	1.31	ppb	94
9) Bromomethane	5.181	94	54595	1.32	ppb	94
10) Chloroethane	5.357	64	26664	1.32	ppb	91
11) Ethanol	5.453	45	16938	1.26	ppb	94
12) Acrolein	6.037	56	17568	1.32	ppb	98
13) Vinyl Bromide	5.691	106	61463	1.36	ppb	94
14) Freon 11	5.975	101	193174	1.34	ppb	100
15) Acetone	6.145	58	23514m ^{PA}	1.31	ppb	
16) Pentane	6.247	42	47997	1.33	ppb	# 72
17) Isopropyl alcohol	6.247	45	73864	1.34	ppb	89
18) 1,1-dichloroethene	6.735	96	61482	1.33	ppb	# 88
19) Freon 113	6.939	101	142191	1.35	ppb	84
20) t-Butyl alcohol	6.956	59	103197	1.33	ppb	92
21) Methylene chloride	7.199	84	53500	1.36	ppb	# 85
22) Allyl chloride	7.182	41	57816	1.44	ppb	81
23) Carbon disulfide	7.358	76	163436	1.38	ppb	99
24) trans-1,2-dichloroethene	8.129	61	82360	1.41	ppb	89
25) methyl tert-butyl ether	8.141	73	200195	1.39	ppb	82
26) 1,1-dichloroethane	8.555	63	109484	1.38	ppb	97
27) Vinyl acetate	8.538	43	85720	1.36	ppb	92
28) Methyl Ethyl Ketone	9.025	72	33199	1.50	ppb	# 66
29) cis-1,2-dichloroethene	9.479	61	82853	1.40	ppb	86
30) Hexane	9.082	57	91676	1.40	ppb	96
31) Ethyl acetate	9.615	43	98253	1.42	ppb	98
32) Chloroform	10.080	83	141830	1.36	ppb	96
33) Tetrahydrofuran	10.233	42	53361	1.41	ppb	90
34) 1,2-dichloroethane	11.174	62	101881	1.35	ppb	96
36) 1,1,1-trichloroethane	10.902	97	116639	1.46	ppb	98
37) Cyclohexane	11.593	56	83271	1.48	ppb	# 65
38) Carbon tetrachloride	11.531	117	91685	1.52	ppb	97
39) Benzene	11.497	78	204156	1.48	ppb	97
40) Methyl methacrylate	13.022	41	65216	1.46	ppb	89
41) 1,4-dioxane	13.039	88	51828	1.48	ppb	91
42) 2,2,4-trimethylpentane	12.336	57	270236	1.48	ppb	95
43) Heptane	12.676	43	90080	1.50	ppb	92
44) Trichloroethene	12.807	130	102348	1.45	ppb	96

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032508.D
Acq On : 25 Mar 2024 4:40 pm
Operator : DA
Sample : A1UG_1.5
Misc : A318_1UG
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 26 08:09:22 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

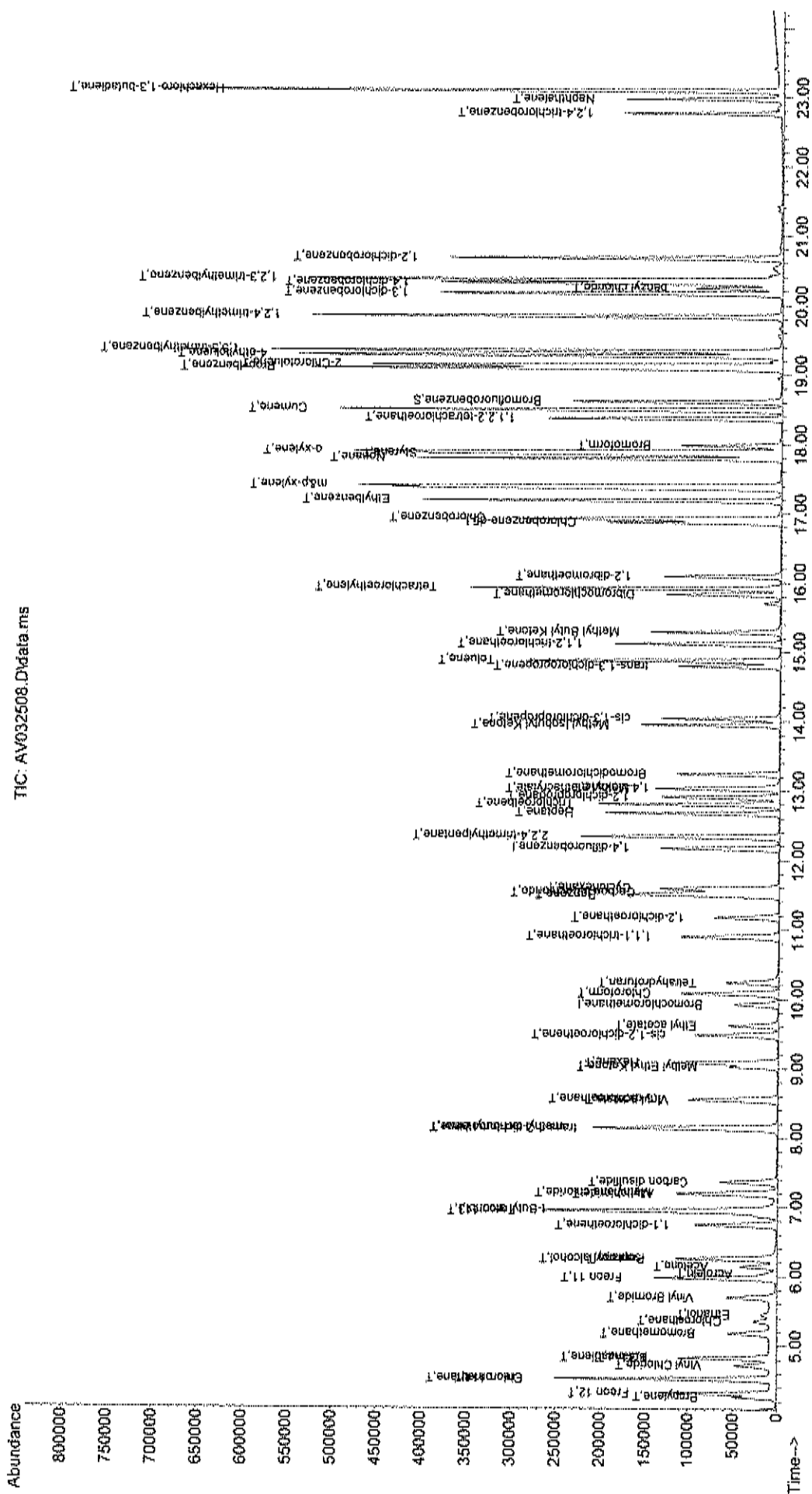
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.909	63	64118	1.46	ppb	98
46) Bromodichloromethane	13.238	83	108720	1.49	ppb	100
47) cis-1,3-dichloropropene	14.037	75	100809	1.45	ppb	93
48) trans-1,3-dichloropropene	14.791	75	90227	1.46	ppb	91
49) 1,1,2-trichloroethane	15.114	97	81213	1.43	ppb	99
51) Toluene	14.871	92	165144	1.54	ppb	95
52) Methyl Isobutyl Ketone	13.941	43	125409	1.55	ppb	93
53) Dibromochloromethane	15.829	129	97423	1.65	ppb	95
54) Methyl Butyl Ketone	15.284	43	115997	1.59	ppb	91
55) 1,2-dibromoethane	16.090	107	126127	1.57	ppb	99
56) Tetrachloroethylene	15.919	164	109271	1.53	ppb	99
57) Chlorobenzene	16.923	112	230159	1.56	ppb	99
58) Ethylbenzene	17.184	91	388127	1.56	ppb	98
59) m&p-xylene	17.394	91	649641	3.18	ppb	97
60) Nonane	17.790	43	155935	1.60	ppb	95
61) Styrene	17.853	104	258185	1.63	ppb	91
62) Bromoform	17.978	173	75517	1.64	ppb	96
63) o-xylene	17.887	91	365538	1.67	ppb	97
64) Cumene	18.494	105	459028	1.58	ppb	99
66) 1,1,2,2-tetrachloroethane	18.369	83	162229	1.54	ppb	92
67) Propylbenzene	19.089	120	135801	1.57	ppb	# 12
68) 2-Chlorotoluene	19.134	126	126392	1.67	ppb	# 1
69) 4-ethyltoluene	19.270	105	474449	1.62	ppb	100
70) 1,3,5-trimethylbenzene	19.338	105	434228	1.59	ppb	99
71) 1,2,4-trimethylbenzene	19.837	105	407860	1.59	ppb	99
72) 1,3-dichlorobenzene	20.166	146	234228	1.56	ppb	97
73) benzyl chloride	20.245	91	99065	1.60	ppb	98
74) 1,4-dichlorobenzene	20.314	146	223443	1.51	ppb	97
75) 1,2,3-trimethylbenzene	20.365	105	431185	1.62	ppb	99
76) 1,2-dichlorobenzene	20.671	146	215661	1.66	ppb	96
77) 1,2,4-trichlorobenzene	22.763	180	68233	1.45	ppb	93
78) Naphthalene	22.967	128	178802	1.46	ppb	99
79) Hexachloro-1,3-butadiene	23.086	225	152301	1.53	ppb	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032508.D
Acq On : 25 Mar 2024 4:40 pm
Operator : DA
Sample : A1UG_1.5
Misc : A318_1UG
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 26 08:09:22 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032509.D
Acq On : 25 Mar 2024 5:25 pm
Operator : DA
Sample : A1UG_1.25
Misc : A318_1UG
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 26 08:13:17 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev (Min)

Internal Standards						
1) Bromochloromethane	9.927	128	26447	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	161610	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	154513	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	114297	1.03	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	103.00%
Target Compounds						
						Qvalue
2) Propylene	4.263	41	34314	1.19	ppb	# 50
3) Freon 12	4.319	85	156025	1.19	ppb	98
4) Chloromethane	4.518	50	40944	1.17	ppb	99
5) Freon 114	4.523	85	130152	1.18	ppb	94
6) Vinyl Chloride	4.716	62	42512	1.18	ppb	99
7) Butane	4.824	43	53295	1.16	ppb	93
8) 1,3-butadiene	4.824	39	42495	1.12	ppb	95
9) Bromomethane	5.175	94	45154	1.14	ppb	92
10) Chloroethane	5.357	64	22650	1.18	ppb	93
11) Ethanol	5.442	45	14683	1.14	ppb	94
12) Acrolein	6.032	56	14543	1.14	ppb	98
13) Vinyl Bromide	5.691	106	49664	1.15	ppb	97
14) Freon 11	5.975	101	162176	1.18	ppb	98
15) Acetone	6.134	58	19280m ^{0A}	1.13	ppb	
16) Pentane	6.253	42	39126	1.14	ppb	# 72
17) Isopropyl alcohol	6.247	45	61021	1.16	ppb	89
18) 1,1-dichloroethene	6.740	96	52148	1.18	ppb	# 85
19) Freon 113	6.939	101	115595	1.15	ppb	83
20) t-Butyl alcohol	6.956	59	84269	1.14	ppb	95
21) Methylene chloride	7.200	84	43822	1.17	ppb	# 84
22) Allyl chloride	7.177	41	45299	1.18	ppb	78
23) Carbon disulfide	7.364	76	132967	1.18	ppb	99
24) trans-1,2-dichloroethene	8.129	61	66931	1.21	ppb	89
25) methyl tert-butyl ether	8.141	73	159414	1.16	ppb	83
26) 1,1-dichloroethane	8.555	63	87839	1.16	ppb	98
27) Vinyl acetate	8.538	43	69213	1.15	ppb	93
28) Methyl Ethyl Ketone	9.025	72	26363	1.25	ppb	# 1
29) cis-1,2-dichloroethene	9.473	61	66696	1.18	ppb	86
30) Hexane	9.082	57	73985	1.19	ppb	96
31) Ethyl acetate	9.621	43	78815	1.19	ppb	97
32) Chloroform	10.080	83	116539	1.18	ppb	96
33) Tetrahydrofuran	10.239	42	42594	1.18	ppb	89
34) 1,2-dichloroethane	11.174	62	84061	1.17	ppb	96
36) 1,1,1-trichloroethane	10.902	97	97455	1.25	ppb	99
37) Cyclohexane	11.588	56	66571	1.22	ppb	# 64
38) Carbon tetrachloride	11.526	117	74363	1.27	ppb	99
39) Benzene	11.497	78	167374	1.25	ppb	97
40) Methyl methacrylate	13.022	41	52145	1.20	ppb	86
41) 1,4-dioxane	13.045	88	41884	1.23	ppb	91
42) 2,2,4-trimethylpentane	12.336	57	218689	1.23	ppb	95
43) Heptane	12.676	43	73209	1.25	ppb	91
44) Trichloroethene	12.801	130	84522	1.23	ppb	97

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032509.D
Acq On : 25 Mar 2024 5:25 pm
Operator : DA
Sample : A1UG_1.25
Misc : A318_1UG
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 26 08:13:17 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

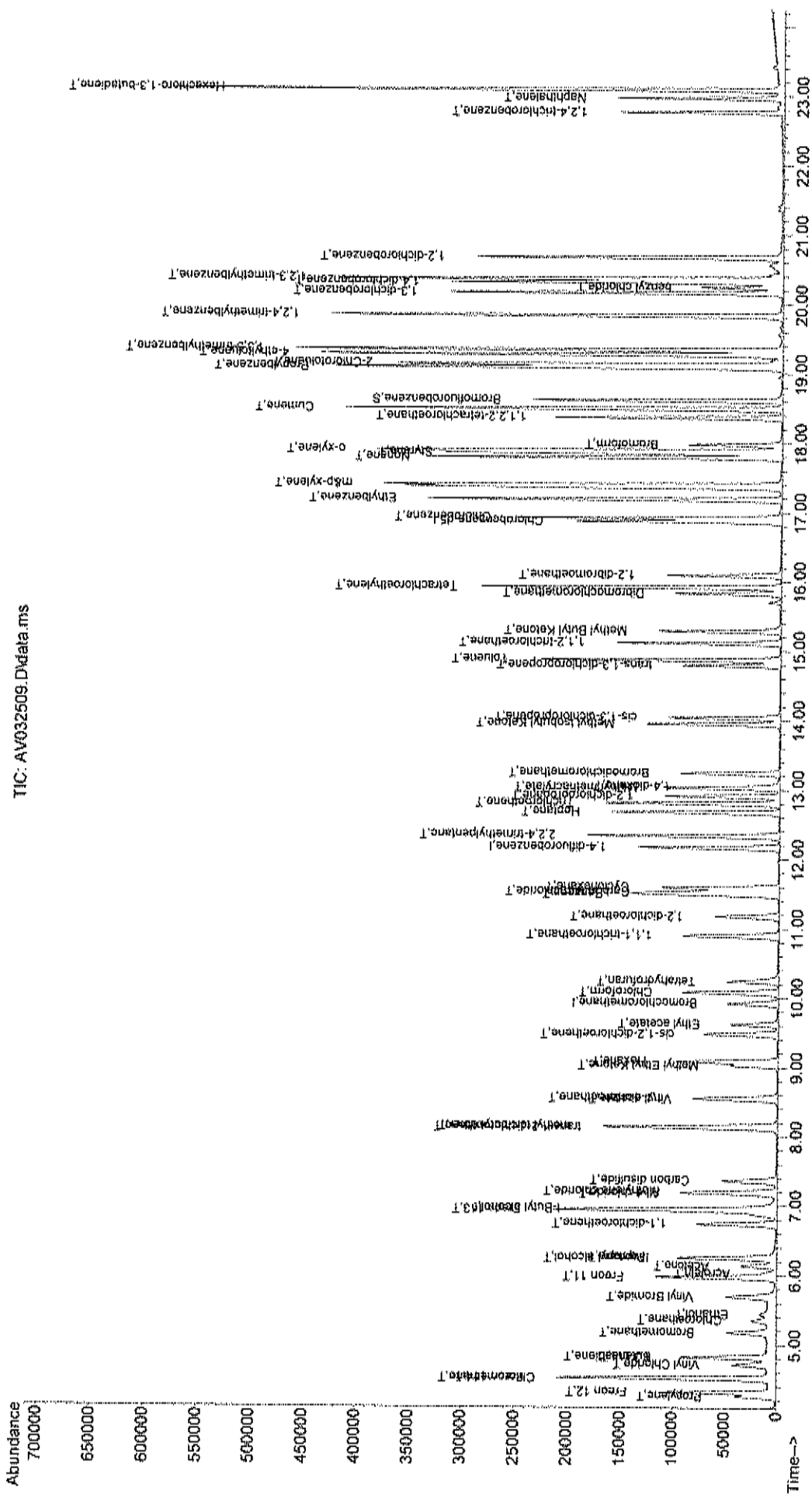
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.903	63	53447	1.25	ppb	98
46) Bromodichloromethane	13.238	83	87620	1.24	ppb	97
47) cis-1,3-dichloropropene	14.037	75	81057	1.20	ppb	93
48) trans-1,3-dichloropropene	14.791	75	74060	1.23	ppb	91
49) 1,1,2-trichloroethane	15.114	97	66959	1.21	ppb	98
51) Toluene	14.871	92	134691	1.24	ppb	95
52) Methyl Isobutyl Ketone	13.947	43	102147	1.25	ppb	92
53) Dibromochloromethane	15.829	129	78633	1.32	ppb	93
54) Methyl Butyl Ketone	15.285	43	95256	1.30	ppb	94
55) 1,2-dibromoethane	16.090	107	104110	1.29	ppb	99
56) Tetrachloroethylene	15.914	164	90592	1.26	ppb	99
57) Chlorobenzene	16.923	112	191564	1.29	ppb	99
58) Ethylbenzene	17.184	91	317963	1.27	ppb	97
59) m&p-xylene	17.394	91	526130	2.56	ppb	97
60) Nonane	17.785	43	128073	1.30	ppb	94
61) Styrene	17.853	104	207972	1.30	ppb	91
62) Bromoform	17.978	173	60850	1.31	ppb	93
63) o-xylene	17.887	91	289556	1.31	ppb	97
64) Cumene	18.494	105	375906	1.28	ppb	98
66) 1,1,2,2-tetrachloroethane	18.369	83	133914	1.26	ppb	93
67) Propylbenzene	19.083	120	109427	1.26	ppb	# 12
68) 2-Chlorotoluene	19.134	126	100489	1.32	ppb	# 1
69) 4-ethyltoluene	19.270	105	386290	1.31	ppb	99
70) 1,3,5-trimethylbenzene	19.338	105	349293	1.27	ppb	98
71) 1,2,4-trimethylbenzene	19.837	105	330711	1.28	ppb	98
72) 1,3-dichlorobenzene	20.166	146	193415	1.28	ppb	97
73) benzyl chloride	20.240	91	80733	1.29	ppb	99
74) 1,4-dichlorobenzene	20.314	146	184014	1.23	ppb	98
75) 1,2,3-trimethylbenzene	20.365	105	345276	1.29	ppb	100
76) 1,2-dichlorobenzene	20.671	146	173663	1.32	ppb	98
77) 1,2,4-trichlorobenzene	22.763	180	59765	1.26	ppb	95
78) Naphthalene	22.967	128	158039	1.28	ppb	99
79) Hexachloro-1,3-butadiene	23.086	225	126518	1.26	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032509.D
Acq On : 25 Mar 2024 5:25 pm
Operator : DA
Sample : A1UG_1.25
Misc : A318_1UG
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 26 08:13:17 2024
Quant Method : C:\msdchem\1\methods\A325 1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032510.D
Acq On : 25 Mar 2024 6:09 pm
Operator : DA
Sample : A1UG_1.0
Misc : A318_1UG
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 26 08:05:04 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.927	128	24737	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	156814	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	153633	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	110922	1.00	ppb	0.00
Spiked Amount	1.000	Range 70 - 130	Recovery	= 100.00%		
Target Compounds						
						Qvalue
2) Propylene	4.268	41	26938	1.00	ppb	# 41
3) Freon 12	4.325	85	122614	1.00	ppb	97
4) Chloromethane	4.523	50	32847	1.00	ppb	99
5) Freon 114	4.523	85	102765	1.00	ppb	93
6) Vinyl Chloride	4.728	62	33825	1.00	ppb	99
7) Butane	4.830	43	43148	1.00	ppb	100
8) 1,3-butadiene	4.830	39	35379	1.00	ppb	93
9) Bromomethane	5.181	94	36944	1.00	ppb	94
10) Chloroethane	5.363	64	18007	1.00	ppb	# 88
11) Ethanol	5.448	45	12004	1.00	ppb	99
12) Acrolein	6.037	56	11885	1.00	ppb	98
13) Vinyl Bromide	5.697	106	40307	1.00	ppb	94
14) Freon 11	5.981	101	128235	1.00	ppb	100
15) Acetone	6.139	58	16012m ^{PA}	1.00	ppb	
16) Pentane	6.258	42	32080	1.00	ppb	# 75
17) Isopropyl alcohol	6.247	45	49198	1.00	ppb	90
18) 1,1-dichloroethene	6.752	96	41297	1.00	ppb	# 84
19) Freon 113	6.939	101	93965	1.00	ppb	86
20) t-Butyl alcohol	6.961	59	69116	1.00	ppb	92
21) Methylene chloride	7.205	84	35094	1.00	ppb	# 84
22) Allyl chloride	7.188	41	35919	1.00	ppb	80
23) Carbon disulfide	7.364	76	105621	1.00	ppb	98
24) trans-1,2-dichloroethene	8.129	61	51928	1.00	ppb	88
25) methyl tert-butyl ether	8.146	73	128188	1.00	ppb	82
26) 1,1-dichloroethane	8.555	63	70858	1.00	ppb	100
27) Vinyl acetate	8.543	43	56182	1.00	ppb	93
28) Methyl Ethyl Ketone	9.025	72	19678	1.00	ppb	# 1
29) cis-1,2-dichloroethene	9.484	61	52800	1.00	ppb	86
30) Hexane	9.088	57	58320	1.00	ppb	95
31) Ethyl acetate	9.621	43	61706	1.00	ppb	97
32) Chloroform	10.085	83	92713	1.00	ppb	96
33) Tetrahydrofuran	10.250	42	33812	1.00	ppb	90
34) 1,2-dichloroethane	11.180	62	67050	1.00	ppb	96
36) 1,1,1-trichloroethane	10.896	97	75513	1.00	ppb	97
37) Cyclohexane	11.594	56	53141	1.00	ppb	# 65
38) Carbon tetrachloride	11.531	117	56788	1.00	ppb	97
39) Benzene	11.497	78	130283	1.00	ppb	99
40) Methyl methacrylate	13.028	41	42164	1.00	ppb	92
41) 1,4-dioxane	13.045	88	32989	1.00	ppb	92
42) 2,2,4-trimethylpentane	12.336	57	171909	1.00	ppb	94
43) Heptane	12.677	43	56824	1.00	ppb	92
44) Trichloroethene	12.801	130	66767	1.00	ppb	96

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032510.D
Acq On : 25 Mar 2024 6:09 pm
Operator : DA
Sample : A1UG_1.0
Misc : A318_1UG
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 26 08:05:04 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

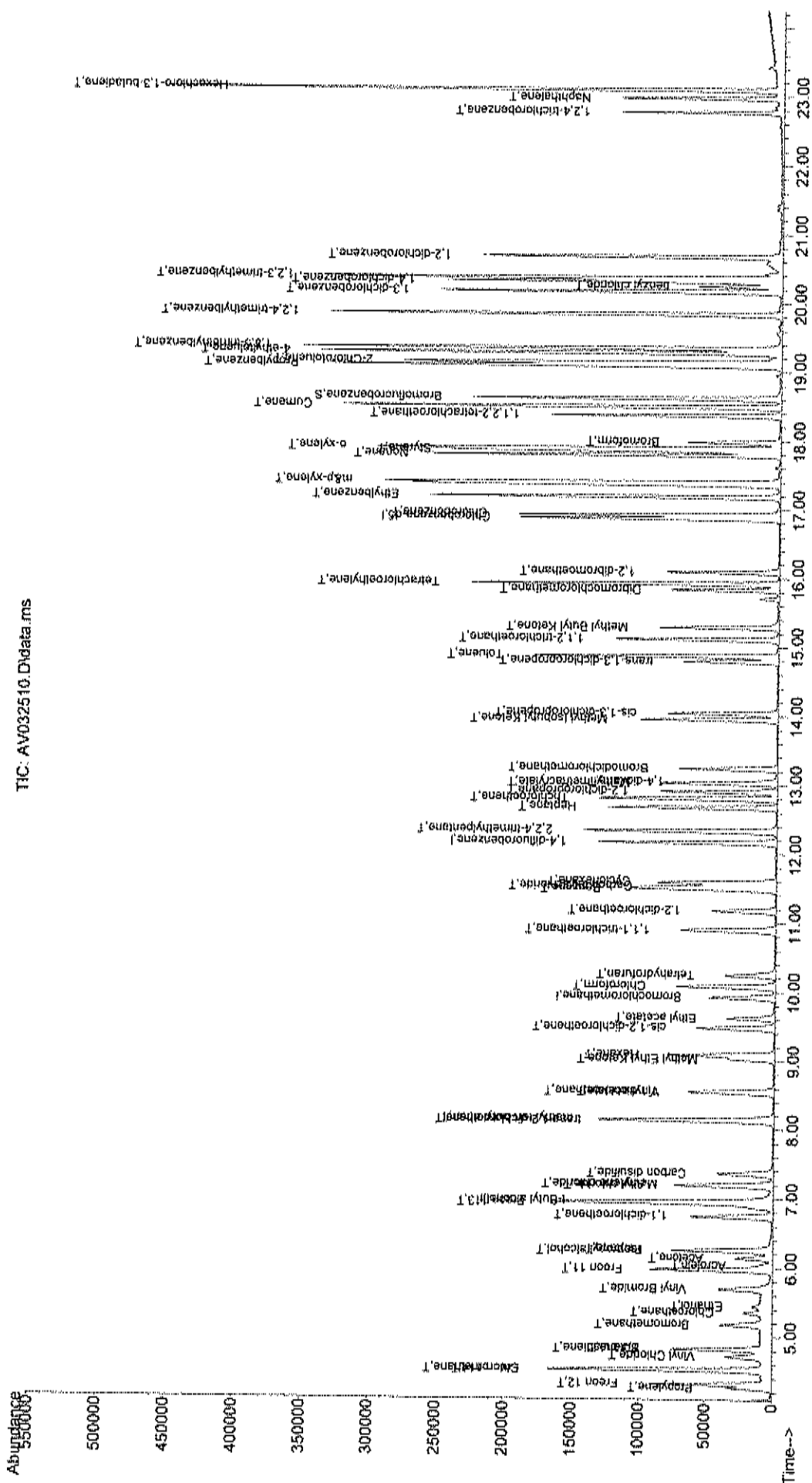
QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.909	63	41505	1.00	ppb	99
46) Bromodichloromethane	13.238	83	68798	1.00	ppb	100
47) cis-1,3-dichloropropene	14.037	75	65516	1.00	ppb	95
48) trans-1,3-dichloropropene	14.791	75	58472	1.00	ppb	99
49) 1,1,2-trichloroethane	15.114	97	53527	1.00	ppb	100
51) Toluene	14.871	92	107578	1.00	ppb	92
52) Methyl Isobutyl Ketone	13.947	43	80993	1.00	ppb	92
53) Dibromochloromethane	15.829	129	59157	1.00	ppb	98
54) Methyl Butyl Ketone	15.285	43	73010	1.00	ppb	91
55) 1,2-dibromoethane	16.090	107	80514	1.00	ppb	99
56) Tetrachloroethylene	15.920	164	71555	1.00	ppb	99
57) Chlorobenzene	16.923	112	148039	1.00	ppb	98
58) Ethylbenzene	17.184	91	248959	1.00	ppb	97
59) m&p-xylene	17.394	91	409226	2.00	ppb	98
60) Nonane	17.785	43	97856	1.00	ppb	94
61) Styrene	17.853	104	158748	1.00	ppb	89
62) Bromoform	17.983	173	46128	1.00	ppb	95
63) o-xylene	17.887	91	219367	1.00	ppb	96
64) Cumene	18.494	105	291856	1.00	ppb	98
66) 1,1,2,2-tetrachloroethane	18.369	83	105681	1.00	ppb	93
67) Propylbenzene	19.089	120	86381	1.00	ppb	# 16
68) 2-Chlorotoluene	19.134	126	75589	1.00	ppb	# 1
69) 4-ethyltoluene	19.270	105	293882	1.00	ppb	99
70) 1,3,5-trimethylbenzene	19.338	105	272852	1.00	ppb	99
71) 1,2,4-trimethylbenzene	19.837	105	257603	1.00	ppb	97
72) 1,3-dichlorobenzene	20.166	146	150752	1.00	ppb	96
73) benzyl chloride	20.246	91	62008	1.00	ppb	95
74) 1,4-dichlorobenzene	20.314	146	148375	1.00	ppb	95
75) 1,2,3-trimethylbenzene	20.365	105	265934	1.00	ppb	100
76) 1,2-dichlorobenzene	20.671	146	130400	1.00	ppb	96
77) 1,2,4-trichlorobenzene	22.763	180	47001	1.00	ppb	94
78) Naphthalene	22.967	128	122948	1.00	ppb	100
79) Hexachloro-1,3-butadiene	23.086	225	99575	1.00	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quant Time: Mar 26 08:05:04 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



Data Path : C:\msdchem\1\data2\3 2024MAR\
 Data File : AV032511.D
 Acq On : 25 Mar 2024 6:53 pm
 Operator : DA
 Sample : A1UG_0.75
 Misc : A318_1UG
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 26 08:20:39 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.921	128	27042	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	157684	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	150449	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	106105	0.98	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	98.00%
Target Compounds						
						Qvalue
2) Propylene	4.263	41	21191	0.72	ppb	# 46
3) Freon 12	4.319	85	94249	0.70	ppb	100
4) Chloromethane	4.518	50	24282	0.68	ppb	95
5) Freon 114	4.523	85	78650	0.70	ppb	94
6) Vinyl Chloride	4.722	62	25880	0.70	ppb	97
7) Butane	4.830	43	32965	0.70	ppb	95
8) 1,3-butadiene	4.824	39	26101	0.67	ppb	95
9) Bromomethane	5.175	94	28718	0.71	ppb	95
10) Chloroethane	5.357	64	13337	0.68	ppb	# 87
11) Ethanol	5.448	45	9945	0.76	ppb	94
12) Acrolein	6.037	56	8796	0.68	ppb	99
13) Vinyl Bromide	5.697	106	30017	0.68	ppb	92
14) Freon 11	5.975	101	98800	0.70	ppb	98
15) Acetone	6.139	58	12415m**	0.71	ppb	
16) Pentane	6.253	42	25024	0.71	ppb	# 78
17) Isopropyl alcohol	6.258	45	35709	0.66	ppb	94
18) 1,1-dichloroethene	6.746	96	30381	0.67	ppb	# 86
19) Freon 113	6.939	101	71917	0.70	ppb	85
20) t-Butyl alcohol	6.967	59	53230	0.70	ppb	92
21) Methylene chloride	7.200	84	27745	0.72	ppb	# 83
22) Allyl chloride	7.183	41	29269	0.75	ppb	81
23) Carbon disulfide	7.364	76	81694	0.71	ppb	99
24) trans-1,2-dichloroethene	8.135	61	40332	0.71	ppb	89
25) methyl tert-butyl ether	8.141	73	97981	0.70	ppb	82
26) 1,1-dichloroethane	8.555	63	53766	0.69	ppb	100
27) Vinyl acetate	8.538	43	41558	0.68	ppb	94
28) Methyl Ethyl Ketone	9.031	72	15646	0.73	ppb	# 1
29) cis-1,2-dichloroethene	9.479	61	40318	0.70	ppb	86
30) Hexane	9.082	57	44772	0.70	ppb	95
31) Ethyl acetate	9.620	43	47425	0.70	ppb	98
32) Chloroform	10.080	83	70818	0.70	ppb	99
33) Tetrahydrofuran	10.244	42	25606	0.69	ppb	90
34) 1,2-dichloroethane	11.185	62	51890	0.71	ppb	98
36) 1,1,1-trichloroethane	10.896	97	59566	0.78	ppb	100
37) Cyclohexane	11.588	56	40415	0.76	ppb	# 64
38) Carbon tetrachloride	11.526	117	44402	0.78	ppb	99
39) Benzene	11.497	78	100465	0.77	ppb	99
40) Methyl methacrylate	13.022	41	30949	0.73	ppb	88
41) 1,4-dioxane	13.051	88	24886	0.75	ppb	97
42) 2,2,4-trimethylpentane	12.336	57	132344	0.77	ppb	95
43) Heptane	12.676	43	44994	0.79	ppb	91
44) Trichloroethene	12.801	130	50023	0.75	ppb	95

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032511.D
Acq On : 25 Mar 2024 6:53 pm
Operator : DA
Sample : A1UG_0.75
Misc : A318_1UG
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 26 08:20:39 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

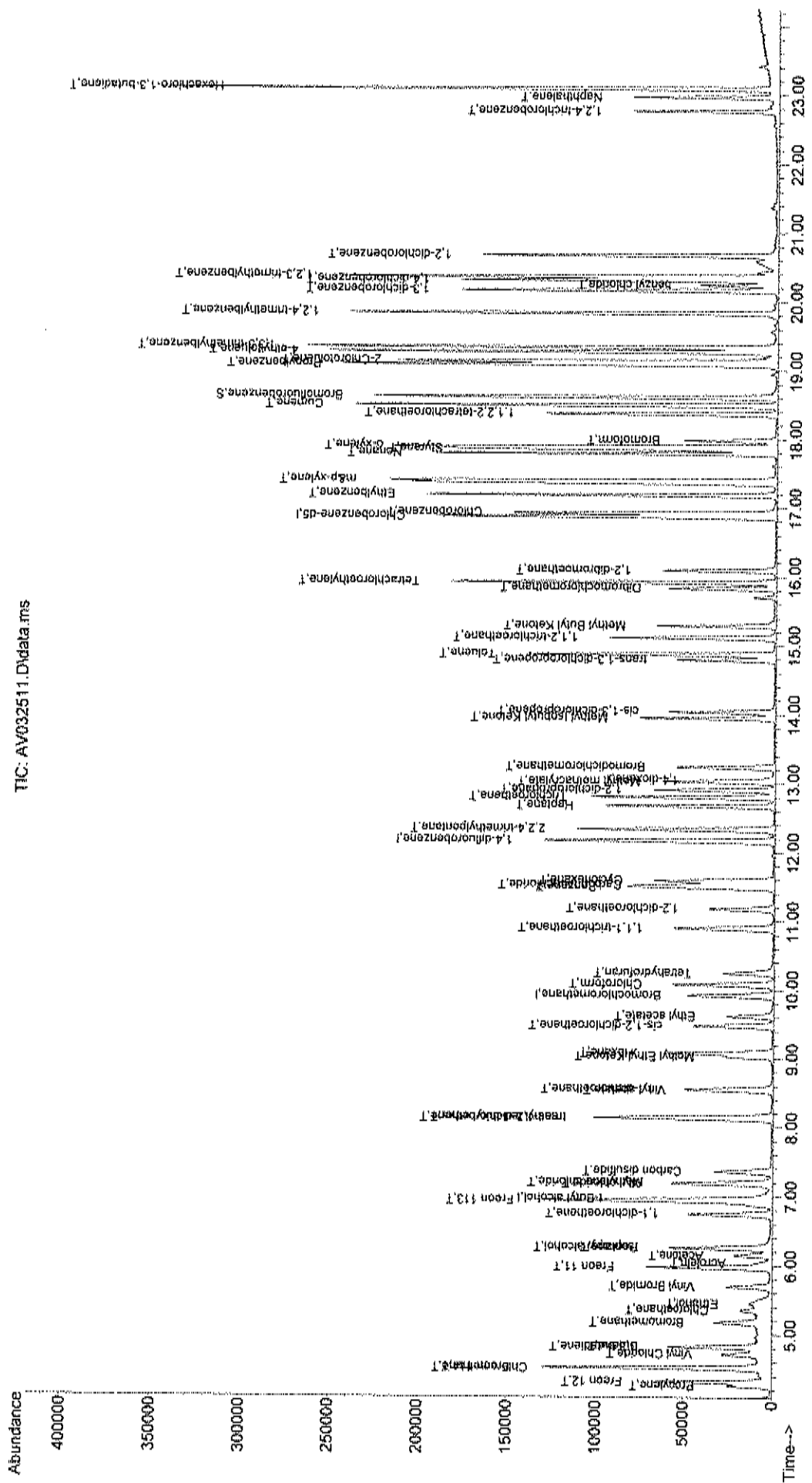
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.903	63	31976	0.77	ppb	98
46) Bromodichloromethane	13.238	83	52797	0.76	ppb	97
47) cis-1,3-dichloropropene	14.043	75	48979	0.74	ppb	94
48) trans-1,3-dichloropropene	14.791	75	44382	0.75	ppb	90
49) 1,1,2-trichloroethane	15.114	97	40676	0.76	ppb	100
51) Toluene	14.871	92	80695	0.77	ppb	94
52) Methyl Isobutyl Ketone	13.946	43	62266	0.79	ppb	95
53) Dibromochloromethane	15.835	129	45867	0.79	ppb	96
54) Methyl Butyl Ketone	15.285	43	55057	0.77	ppb	93
55) 1,2-dibromoethane	16.090	107	61258	0.78	ppb	99
56) Tetrachloroethylene	15.920	164	55810	0.80	ppb	99
57) Chlorobenzene	16.923	112	114224	0.79	ppb	98
58) Ethylbenzene	17.184	91	189834	0.78	ppb	97
59) m&p-xylene	17.394	91	306789	1.53	ppb	97
60) Nonane	17.791	43	74053	0.77	ppb	95
61) Styrene	17.853	104	119404	0.77	ppb	89
62) Bromoform	17.983	173	34901	0.77	ppb	93
63) o-xylene	17.893	91	164879	0.77	ppb	98
64) Cumene	18.494	105	218300	0.76	ppb	99
66) 1,1,2,2-tetrachloroethane	18.369	83	79062	0.76	ppb	93
67) Propylbenzene	19.083	120	64121	0.76	ppb	# 14
68) 2-Chlorotoluene	19.134	126	57918	0.78	ppb	# 1
69) 4-ethyltoluene	19.270	105	221544	0.77	ppb	99
70) 1,3,5-trimethylbenzene	19.338	105	199558	0.75	ppb	100
71) 1,2,4-trimethylbenzene	19.837	105	190053	0.75	ppb	99
72) 1,3-dichlorobenzene	20.166	146	110142	0.75	ppb	96
73) benzyl chloride	20.240	91	42772	0.70	ppb	99
74) 1,4-dichlorobenzene	20.314	146	105585	0.73	ppb	98
75) 1,2,3-trimethylbenzene	20.365	105	194849	0.75	ppb	100
76) 1,2-dichlorobenzene	20.671	146	97727	0.77	ppb	97
77) 1,2,4-trichlorobenzene	22.763	180	32450	0.71	ppb	96
78) Naphthalene	22.961	128	85490	0.71	ppb	100
79) Hexachloro-1,3-butadiene	23.086	225	73964	0.76	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032511.D
Acq On : 25 Mar 2024 6:53 pm
Operator : DA
Sample : A1UG 0.75
Misc : A318_1UG
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 26 08:20:39 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



Data Path : C:\msdchem\1\data2\3 2024MAR\
 Data File : AV032512.D
 Acq On : 25 Mar 2024 7:35 pm
 Operator : DA
 Sample : A1UG_0.50
 Misc : A318_1UG
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 26 08:23:55 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.921	128	26226	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	156756	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	147190	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	102298	0.96	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	96.00%
Target Compounds						
						Qvalue
2) Propylene	4.268	41	13630	0.48	ppb	# 21
3) Freon 12	4.325	85	64626	0.50	ppb	100
4) Chloromethane	4.518	50	17837	0.51	ppb	95
5) Freon 114	4.524	85	53453	0.49	ppb	92
6) Vinyl Chloride	4.716	62	18090	0.50	ppb	99
7) Butane	4.818	43	23063	0.50	ppb	# 80
8) 1,3-butadiene	4.824	39	18429	0.49	ppb	94
9) Bromomethane	5.181	94	19378	0.49	ppb	93
10) Chloroethane	5.357	64	9135	0.48	ppb	# 80
11) Ethanol	5.459	46	6348	0.50	ppb	85
12) Acrolein	6.032	56	6435	0.51	ppb	97
13) Vinyl Bromide	5.691	106	21262	0.50	ppb	92
14) Freon 11	5.975	101	67282	0.49	ppb	98
15) Acetone	6.145	58	8624m ^{va}	0.51	ppb	
16) Pentane	6.253	42	16447	0.48	ppb	# 76
17) Isopropyl alcohol	6.258	45	25698	0.49	ppb	86
18) 1,1-dichloroethene	6.746	96	21197	0.48	ppb	# 85
19) Freon 113	6.944	101	48310	0.48	ppb	84
20) t-Butyl alcohol	6.967	59	35631	0.49	ppb	93
21) Methylene chloride	7.200	84	18438	0.50	ppb	# 82
22) Allyl chloride	7.188	41	19333	0.51	ppb	81
23) Carbon disulfide	7.364	76	54802	0.49	ppb	97
24) trans-1,2-dichloroethene	8.129	61	27164	0.49	ppb	87
25) methyl tert-butyl ether	8.146	73	65601	0.48	ppb	83
26) 1,1-dichloroethane	8.560	63	35492	0.47	ppb	98
27) Vinyl acetate	8.538	43	29258	0.49	ppb	92
28) Methyl Ethyl Ketone	9.031	72	10653	0.51	ppb	# 1
29) cis-1,2-dichloroethene	9.485	61	26968	0.48	ppb	87
30) Hexane	9.076	57	29930	0.48	ppb	92
31) Ethyl acetate	9.621	43	31600	0.48	ppb	97
32) Chloroform	10.085	83	48392	0.49	ppb	99
33) Tetrahydrofuran	10.256	42	17338	0.48	ppb	88
34) 1,2-dichloroethane	11.174	62	35347	0.50	ppb	97
36) 1,1,1-trichloroethane	10.896	97	39543	0.52	ppb	98
37) Cyclohexane	11.588	56	28170	0.53	ppb	# 65
38) Carbon tetrachloride	11.537	117	29603	0.52	ppb	99
39) Benzene	11.497	78	68470	0.53	ppb	97
40) Methyl methacrylate	13.028	41	21711	0.52	ppb	93
41) 1,4-dioxane	13.045	88	17167	0.52	ppb	92
42) 2,2,4-trimethylpentane	12.336	57	90026	0.52	ppb	94
43) Heptane	12.671	43	30342	0.53	ppb	94
44) Trichloroethene	12.801	130	34723	0.52	ppb	97

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032512.D
Acq On : 25 Mar 2024 7:35 pm
Operator : DA
Sample : A1UG_0.50
Misc : A318_1UG
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 26 08:23:55 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

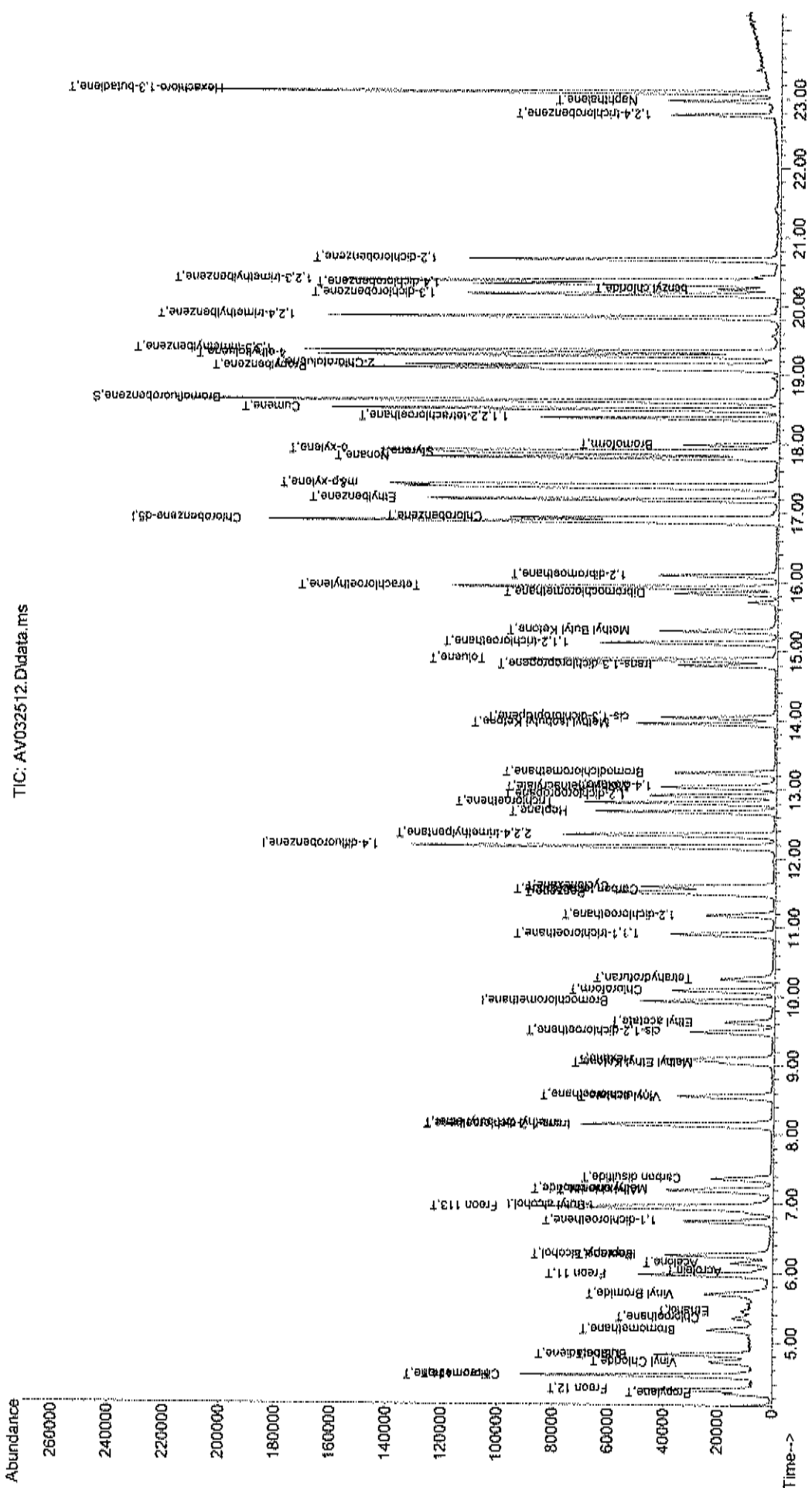
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.915	63	21064	0.51	ppb	99
46) Bromodichloromethane	13.238	83	34979	0.51	ppb	98
47) cis-1,3-dichloropropene	14.037	75	32376	0.49	ppb	93
48) trans-1,3-dichloropropene	14.797	75	28904	0.49	ppb	99
49) 1,1,2-trichloroethane	15.115	97	27340	0.51	ppb	97
51) Toluene	14.871	92	55127	0.53	ppb	93
52) Methyl Isobutyl Ketone	13.952	43	41412	0.53	ppb	93
53) Dibromochloromethane	15.835	129	29095	0.51	ppb	92
54) Methyl Butyl Ketone	15.290	43	35829	0.51	ppb	93
55) 1,2-dibromoethane	16.090	107	40800	0.53	ppb	100
56) Tetrachloroethylene	15.920	164	37324	0.54	ppb	99
57) Chlorobenzene	16.923	112	75122	0.53	ppb	96
58) Ethylbenzene	17.184	91	124335	0.52	ppb	97
59) m&p-xylene	17.394	91	202146	1.03	ppb	97
60) Nonane	17.791	43	49055	0.52	ppb	95
61) Styrene	17.853	104	78877	0.52	ppb	91
62) Bromoform	17.978	173	22140	0.50	ppb	93
63) o-xylene	17.887	91	108029	0.51	ppb	97
64) Cumene	18.494	105	146039	0.52	ppb	99
66) 1,1,2,2-tetrachloroethane	18.369	83	52326	0.52	ppb	93
67) Propylbenzene	19.089	120	42313	0.51	ppb	# 20
68) 2-Chlorotoluene	19.134	126	37624	0.52	ppb	# 1
69) 4-ethyltoluene	19.270	105	143839	0.51	ppb	100
70) 1,3,5-trimethylbenzene	19.338	105	131646	0.50	ppb	99
71) 1,2,4-trimethylbenzene	19.837	105	125670	0.51	ppb	98
72) 1,3-dichlorobenzene	20.166	146	68038	0.47	ppb	95
73) benzyl chloride	20.246	91	22804	0.38	ppb	100
74) 1,4-dichlorobenzene	20.314	146	64625	0.45	ppb	97
75) 1,2,3-trimethylbenzene	20.359	105	130414	0.51	ppb	100
76) 1,2-dichlorobenzene	20.671	146	66959	0.54	ppb	97
77) 1,2,4-trichlorobenzene	22.769	180	16013	0.36	ppb	99
78) Naphthalene	22.967	128	40558	0.34	ppb	99
79) Hexachloro-1,3-butadiene	23.086	225	47856	0.50	ppb	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032512.D
Acq On : 25 Mar 2024 7:35 pm
Operator : DA
Sample : ALUG 0.50
Misc : A318_1UG
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 26 08:23:55 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



Data Path : C:\msdchem\1\data2\3 2024MAR\
 Data File : AV032513.D
 Acq On : 25 Mar 2024 8:16 pm
 Operator : DA
 Sample : A1UG_0.30
 Misc : A318_1UG
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 26 08:27:05 2024
 Quant Method : C:\msdchem\1\methods\A325_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Mar 26 08:04:55 2024
 Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.927	128	25170	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	153978	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	147359	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.607	95	103913	0.98	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	98.00%

Target Compounds

						Qvalue
2) Propylene	4.262	41	9192	0.34	ppb	# 33
3) Freon 12	4.325	85	41298	0.33	ppb	99
4) Chloromethane	4.529	50	11647	0.35	ppb	92
5) Freon 114	4.529	85	34129	0.33	ppb	93
6) Vinyl Chloride	4.716	62	11169	0.32	ppb	92
7) Butane	4.824	43	15855	0.36	ppb	97
8) 1,3-butadiene	4.824	39	11825	0.33	ppb	98
9) Bromomethane	5.181	94	13312	0.35	ppb	100
10) Chloroethane	5.351	64	6223	0.34	ppb	# 85
11) Ethanol	5.453	45	4446	0.36	ppb	88
12) Acrolein	6.037	56	3924	0.32	ppb	95
13) Vinyl Bromide	5.691	106	14454	0.35	ppb	90
14) Freon 11	5.980	101	42546	0.33	ppb	99
15) Acetone	6.145	58	5170m ^{PA}	0.32	ppb	
16) Pentane	6.253	42	10833	0.33	ppb	# 69
17) Isopropyl alcohol	6.253	45	16491	0.33	ppb	89
18) 1,1-dichloroethene	6.746	96	13249	0.32	ppb	# 85
19) Freon 113	6.939	101	31012	0.32	ppb	84
20) t-Butyl alcohol	6.973	59	23447	0.33	ppb	94
21) Methylene chloride	7.194	84	12380	0.35	ppb	# 83
22) Allyl chloride	7.177	41	12066	0.33	ppb	78
23) Carbon disulfide	7.364	76	35383	0.33	ppb	96
24) trans-1,2-dichloroethene	8.124	61	17498	0.33	ppb	87
25) methyl tert-butyl ether	8.152	73	41851	0.32	ppb	84
26) 1,1-dichloroethane	8.554	63	23074	0.32	ppb	96
27) Vinyl acetate	8.543	43	17415	0.30	ppb	89
28) Methyl Ethyl Ketone	9.042	72	7093	0.35	ppb	# 1
29) cis-1,2-dichloroethene	9.479	61	17297	0.32	ppb	86
30) Hexane	9.087	57	18893	0.32	ppb	95
31) Ethyl acetate	9.626	43	20636	0.33	ppb	96
32) Chloroform	10.080	83	30015	0.32	ppb	95
33) Tetrahydrofuran	10.255	42	11586	0.34	ppb	92
34) 1,2-dichloroethane	11.180	62	22016	0.32	ppb	95
36) 1,1,1-trichloroethane	10.902	97	24991	0.34	ppb	99
37) Cyclohexane	11.588	56	17494	0.34	ppb	# 63
38) Carbon tetrachloride	11.531	117	18672	0.33	ppb	96
39) Benzene	11.497	78	43664	0.34	ppb	97
40) Methyl methacrylate	13.028	41	13109	0.32	ppb	91
41) 1,4-dioxane	13.051	88	11208	0.35	ppb	94
42) 2,2,4-trimethylpentane	12.330	57	56333	0.33	ppb	95
43) Heptane	12.676	43	18455	0.33	ppb	91
44) Trichloroethene	12.807	130	22158	0.34	ppb	98

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032513.D
Acq On : 25 Mar 2024 8:16 pm
Operator : DA
Sample : A1UG_0.30
Misc : A318_1UG
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 26 08:27:05 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

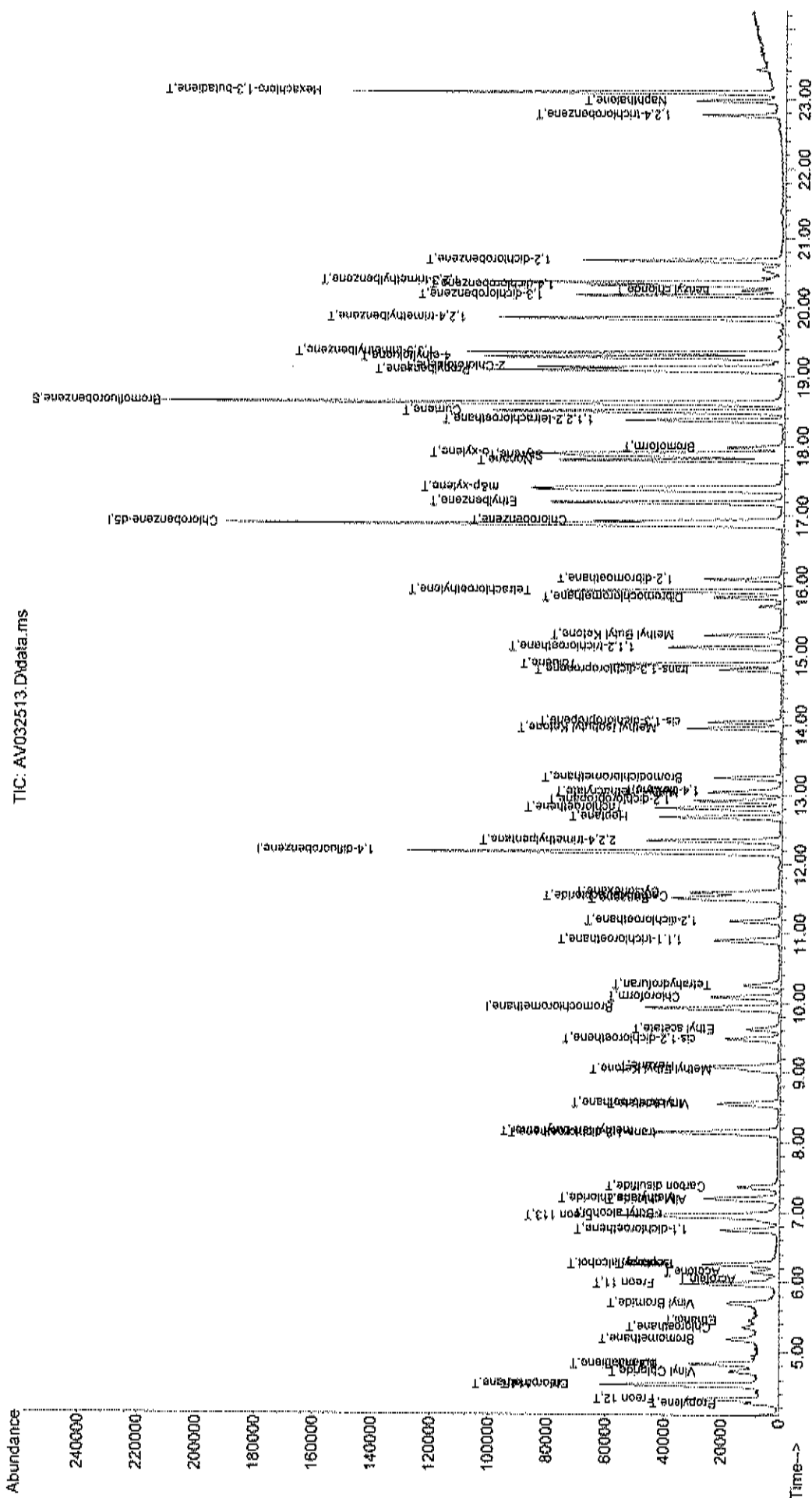
QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.914	63	13903	0.34	ppb	98
46) Bromodichloromethane	13.238	83	20416	0.30	ppb	92
47) cis-1,3-dichloropropene	14.043	75	19976	0.31	ppb	95
48) trans-1,3-dichloropropene	14.791	75	18051	0.31	ppb	97
49) 1,1,2-trichloroethane	15.114	97	17899	0.34	ppb	100
51) Toluene	14.870	92	34732	0.34	ppb	93
52) Methyl Isobutyl Ketone	13.946	43	25221	0.32	ppb	91
53) Dibromochloromethane	15.829	129	17502	0.31	ppb	98
54) Methyl Butyl Ketone	15.290	43	22471	0.32	ppb	91
55) 1,2-dibromoethane	16.089	107	25521	0.33	ppb	98
56) Tetrachloroethylene	15.919	164	23703	0.35	ppb	98
57) Chlorobenzene	16.923	112	47076	0.33	ppb	98
58) Ethylbenzene	17.184	91	76608	0.32	ppb	99
59) m&p-xylene	17.394	91	125463	0.64	ppb	98
60) Nonane	17.785	43	30046	0.32	ppb	93
61) Styrene	17.858	104	47660	0.31	ppb	89
62) Bromoform	17.983	173	13256	0.30	ppb	94
63) o-xylene	17.887	91	67647	0.32	ppb	97
64) Cumene	18.493	105	91235	0.33	ppb	99
66) 1,1,2,2-tetrachloroethane	18.369	83	33525	0.33	ppb	93
67) Propylbenzene	19.083	120	25423	0.31	ppb	# 10
68) 2-Chlorotoluene	19.134	126	23267	0.32	ppb	# 1
69) 4-ethyltoluene	19.270	105	90758	0.32	ppb	98
70) 1,3,5-trimethylbenzene	19.338	105	81416	0.31	ppb	99
71) 1,2,4-trimethylbenzene	19.837	105	78749	0.32	ppb	99
72) 1,3-dichlorobenzene	20.166	146	43189	0.30	ppb	94
73) benzyl chloride	20.240	91	14918	0.25	ppb	97
74) 1,4-dichlorobenzene	20.313	146	40982	0.29	ppb	96
75) 1,2,3-trimethylbenzene	20.364	105	81705	0.32	ppb	99
76) 1,2-dichlorobenzene	20.671	146	40773	0.33	ppb	97
77) 1,2,4-trichlorobenzene	22.763	180	11006	0.24	ppb	97
78) Naphthalene	22.967	128	28945	0.25	ppb	98
79) Hexachloro-1,3-butadiene	23.086	225	31412	0.33	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quant Time: Mar 26 08:27:05 2024
Quant Method : C:\msdchem\1\methods\A325_IUG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032514.D
Acq On : 25 Mar 2024 8:59 pm
Operator : DA
Sample : A1UG_0.15
Misc : A318_1UG
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 26 08:29:40 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.932	128	25590	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	156109	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	144327	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	98869	0.95	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	95.00%
Target Compounds						
						Qvalue
2) Propylene	4.263	41	5210	0.19	ppb	# 20
3) Freon 12	4.325	85	22590	0.18	ppb	100
4) Chloromethane	4.518	50	6303	0.19	ppb	85
5) Freon 114	4.523	85	19380	0.18	ppb	94
6) Vinyl Chloride	4.722	62	6392	0.18	ppb	94
7) Butane	4.818	43	9382	0.21	ppb	# 92
8) 1,3-butadiene	4.835	39	6769	0.18	ppb	100
9) Bromomethane	5.176	94	7258	0.19	ppb	89
10) Chloroethane	5.351	64	3473	0.19	ppb	# 57
11) Ethanol	5.459	45	2858	0.23	ppb	# 39
12) Acrolein	6.071	56	2269	0.18	ppb	90
13) Vinyl Bromide	5.703	106	7553	0.18	ppb	95
14) Freon 11	5.975	101	22982	0.17	ppb	98
15) Acetone	6.145	58	3263m ^{PA}	0.20	ppb	
16) Pentane	6.258	42	6178	0.19	ppb	# 71
17) Isopropyl alcohol	6.253	45	9242	0.18	ppb	86
18) 1,1-dichloroethene	6.746	96	7626	0.18	ppb	# 83
19) Freon 113	6.939	101	17178	0.18	ppb	85
20) t-Butyl alcohol	6.967	59	12896	0.18	ppb	95
21) Methylene chloride	7.211	84	7607	0.21	ppb	# 80
22) Allyl chloride	7.177	41	7486	0.20	ppb	84
23) Carbon disulfide	7.364	76	21362	0.20	ppb	94
24) trans-1,2-dichloroethene	8.129	61	10134	0.19	ppb	89
25) methyl tert-butyl ether	8.152	73	23352	0.18	ppb	89
26) 1,1-dichloroethane	8.555	63	13256	0.18	ppb	95
27) Vinyl acetate	8.538	43	9913	0.17	ppb	89
28) Methyl Ethyl Ketone	9.048	72	4277	0.21	ppb	# 1
29) cis-1,2-dichloroethene	9.479	61	9794	0.18	ppb	84
30) Hexane	9.088	57	10332	0.17	ppb	92
31) Ethyl acetate	9.621	43	10917	0.17	ppb	94
32) Chloroform	10.080	83	17252	0.18	ppb	99
33) Tetrahydrofuran	10.250	42	6311	0.18	ppb	87
34) 1,2-dichloroethane	11.174	62	11957	0.17	ppb	95
36) 1,1,1-trichloroethane	10.908	97	13792	0.18	ppb	97
37) Cyclohexane	11.588	56	10324	0.20	ppb	# 67
38) Carbon tetrachloride	11.531	117	10776	0.19	ppb	96
39) Benzene	11.497	78	24147	0.19	ppb	99
40) Methyl methacrylate	13.034	41	7166	0.17	ppb	96
41) 1,4-dioxane	13.051	88	6421	0.20	ppb	92
42) 2,2,4-trimethylpentane	12.336	57	30899	0.18	ppb	94
43) Heptane	12.677	43	11301	0.20	ppb	94
44) Trichloroethene	12.807	130	12188	0.18	ppb	95

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032514.D
Acq On : 25 Mar 2024 8:59 pm
Operator : DA
Sample : A1UG_0.15
Misc : A318_1UG
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 26 08:29:40 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

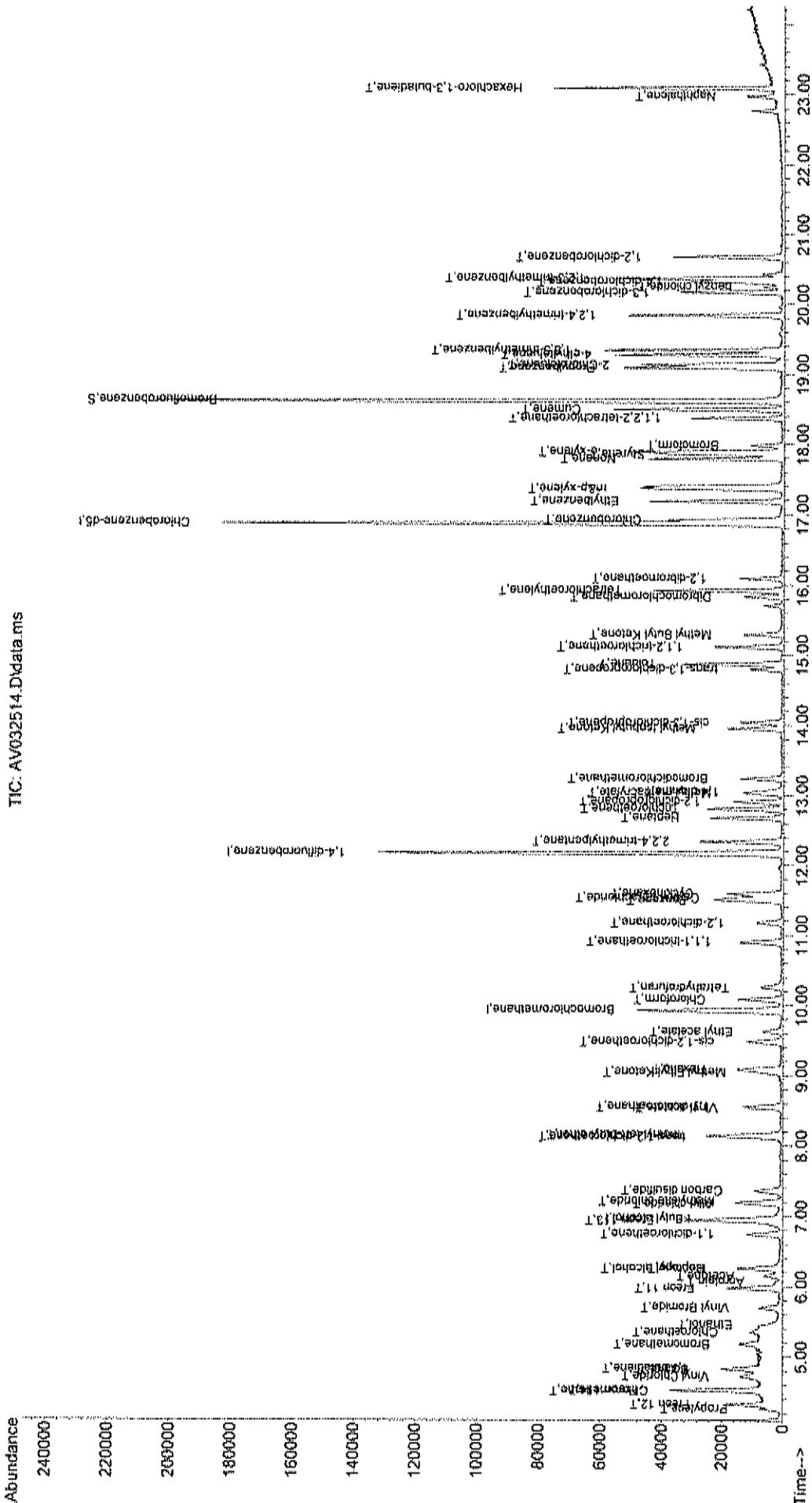
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.909	63	7693	0.19	ppb	99
46) Bromodichloromethane	13.238	83	12275	0.18	ppb	93
47) cis-1,3-dichloropropene	14.032	75	10790	0.17	ppb	91
48) trans-1,3-dichloropropene	14.797	75	9419	0.16	ppb	91
49) 1,1,2-trichloroethane	15.115	97	9499	0.18	ppb	95
51) Toluene	14.876	92	19403	0.19	ppb	89
52) Methyl Isobutyl Ketone	13.952	43	14271	0.19	ppb	91
53) Dibromochloromethane	15.829	129	9882	0.18	ppb	92
54) Methyl Butyl Ketone	15.290	43	11901	0.17	ppb	97
55) 1,2-dibromoethane	16.090	107	13166	0.17	ppb	97
56) Tetrachloroethylene	15.920	164	13071	0.19	ppb	98
57) Chlorobenzene	16.923	112	26736	0.19	ppb	94
58) Ethylbenzene	17.190	91	42702	0.18	ppb	96
59) m&p-xylene	17.365	91	68920	0.36	ppb	99
60) Nonane	17.791	43	16496	0.18	ppb	93
61) Styrene	17.853	104	25598	0.17	ppb	91
62) Bromoform	17.978	173	7226	0.17	ppb	89
63) o-xylene	17.887	91	38294	0.19	ppb	99
64) Cumene	18.494	105	51047	0.19	ppb	99
66) 1,1,2,2-tetrachloroethane	18.369	83	17535	0.18	ppb	93
67) Propylbenzene	19.089	120	14123	0.17	ppb	# 19
68) 2-Chlorotoluene	19.129	126	13129	0.18	ppb	# 1
69) 4-ethyltoluene	19.276	105	48016	0.17	ppb	100
70) 1,3,5-trimethylbenzene	19.338	105	43682	0.17	ppb	100
71) 1,2,4-trimethylbenzene	19.837	105	41199	0.17	ppb	98
72) 1,3-dichlorobenzene	20.166	146	20583	0.15	ppb	95
73) benzyl chloride	20.246	91	6224	0.11	ppb	96
74) 1,4-dichlorobenzene	20.319	146	18989	0.14	ppb	96
75) 1,2,3-trimethylbenzene	20.365	105	43270	0.17	ppb	96
76) 1,2-dichlorobenzene	20.671	146	22106	0.18	ppb	99
78) Naphthalene	22.973	128	10016	0.09	ppb	97
79) Hexachloro-1,3-butadiene	23.086	225	15699	0.17	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QF Reviewed)

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032514.D
Acq On : 25 Mar 2024 8:59 pm
Operator : DA
Sample : A1UG 0.15
Misc : A318_1UG
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 26 08:29:40 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Quant Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032515.D
Acq On : 25 Mar 2024 9:41 pm
Operator : DA
Sample : A1UG_0.10
Misc : A318_1UG
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 26 08:33:40 2024

Quant Method : C:\msdchem\1\methods\A325_1UG.M

Quant Title : TO-15 VOA Standards for 5 point calibration

QLast Update : Tue Mar 26 08:04:55 2024

Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

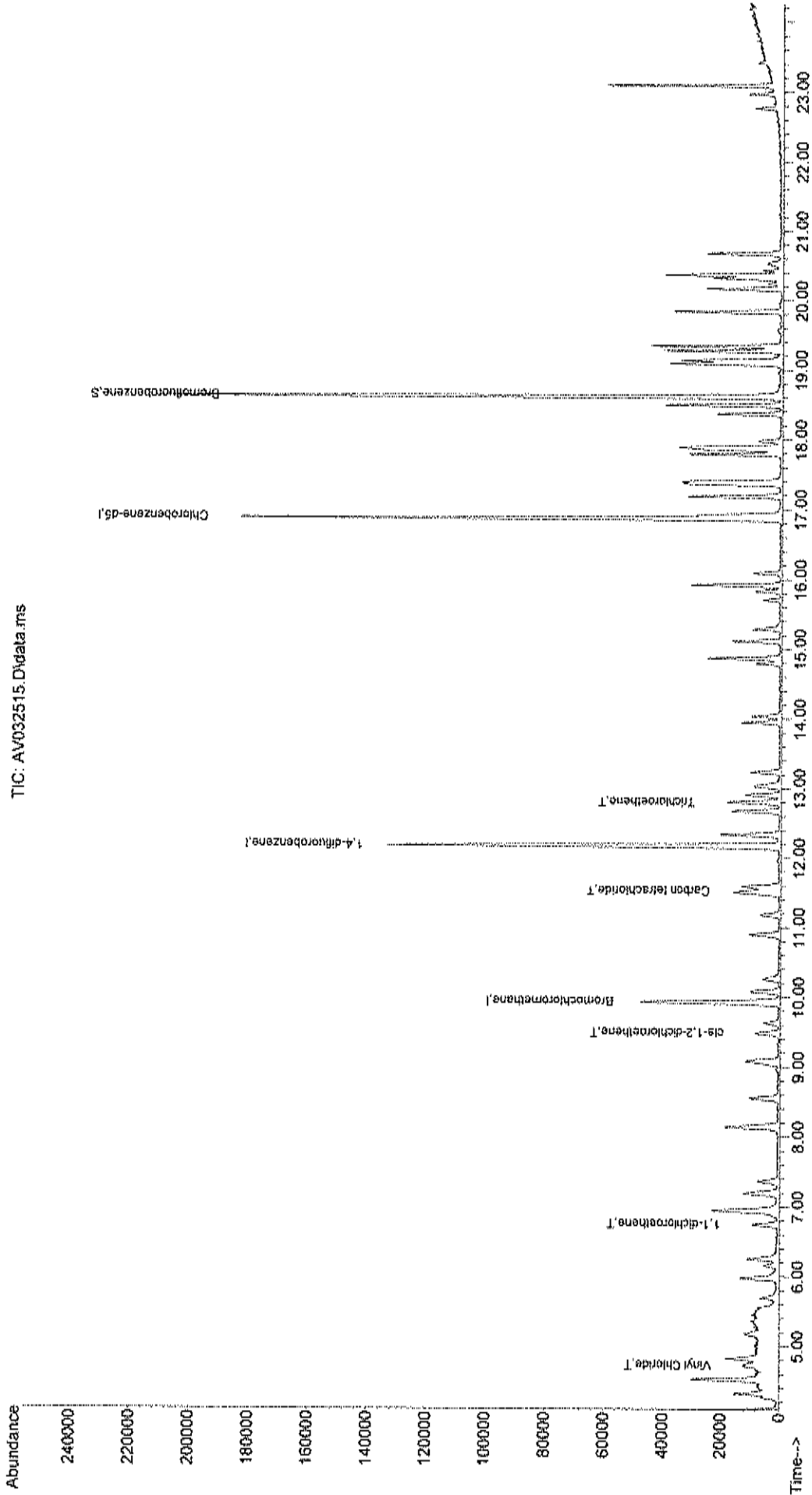
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.932	128	24836	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	158950	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	144385	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	99844	0.96	ppb	0.00
Spiked Amount	1.000	Range	70 ~ 130	Recovery	=	96.00%
Target Compounds						
6) Vinyl Chloride	4.728	62	4713	0.14	ppb	Qvalue 98
18) 1,1-dichloroethene	6.746	96	5638	0.14	ppb	# 82
29) cis-1,2-dichloroethene	9.484	61	7109	0.13	ppb	# 76
38) Carbon tetrachloride	11.526	117	7423	0.13	ppb	97
44) Trichloroethene	12.801	130	9102	0.13	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032515.D
Acq On : 25 Mar 2024 9:41 pm
Operator : DA
Sample : ALUG 0.10
Misc : A318_1UG
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 26 08:33:40 2024
Quant Method : C:\msdchem\1\methods\A325 1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Quant Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032516.D
Acq On : 25 Mar 2024 10:23 pm
Operator : DA
Sample : A1UG_0.04
Misc : A318_1UG
ALS Vial : 16 Sample Multiplier: 1

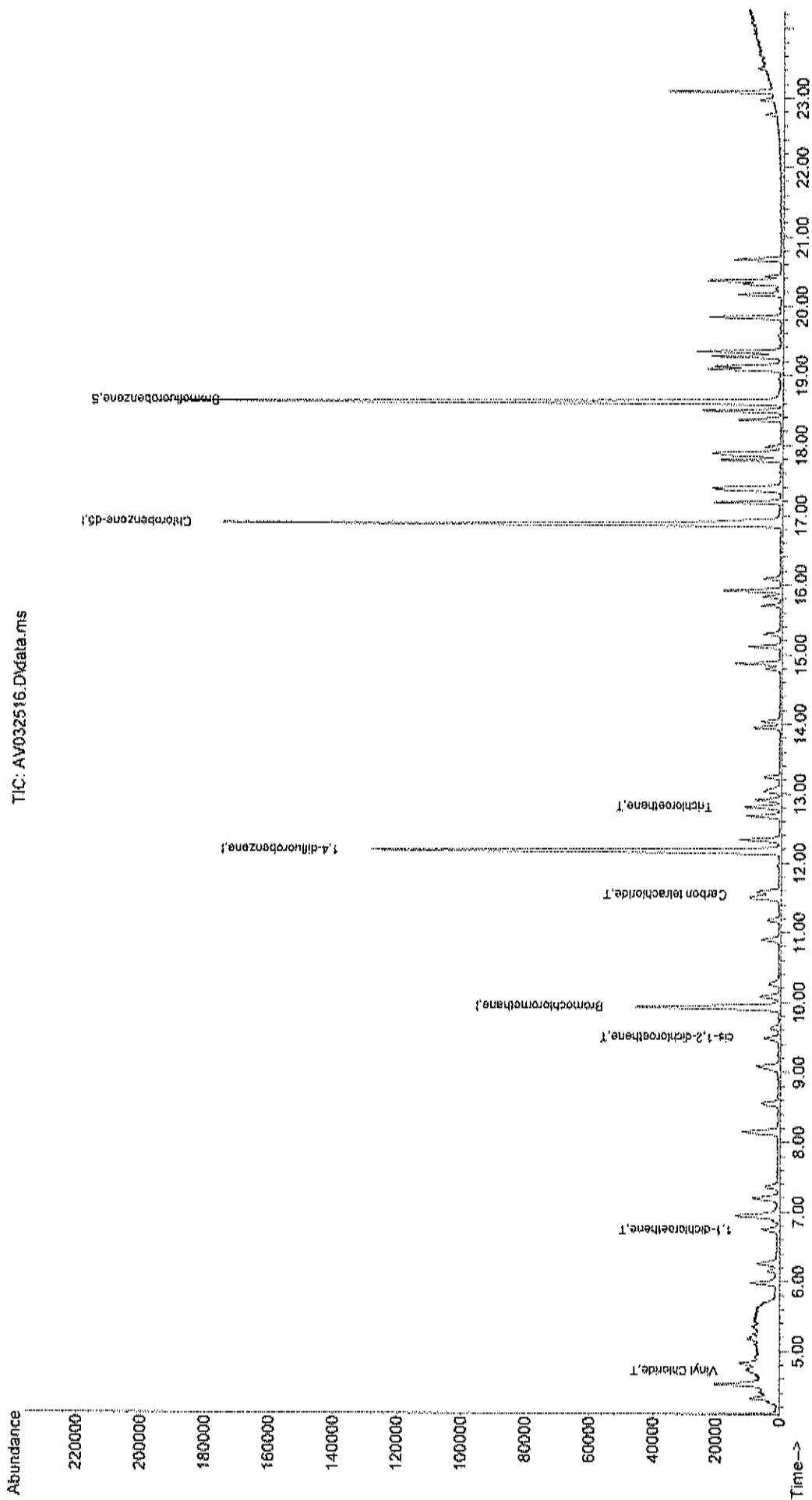
Quant Time: Mar 26 08:35:45 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.927	128	25276	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	154525	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	141815	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	93725	0.92	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	92.00%
Target Compounds						
6) Vinyl Chloride	4.716	62	2739	0.08	ppb	Qvalue 80
18) 1,1-dichloroethene	6.735	96	3512	0.08	ppb	# 78
29) cis-1,2-dichloroethene	9.490	61	4303	0.08	ppb	77
38) Carbon tetrachloride	11.537	117	4300	0.08	ppb	99
44) Trichloroethene	12.807	130	5387	0.08	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quant Time: Mar 26 08:35:45 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Quant Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032517.D
Acq On : 25 Mar 2024 11:05 pm
Operator : DA
Sample : A1UG_0.03
Misc : A318_1UG
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 26 08:37:16 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D

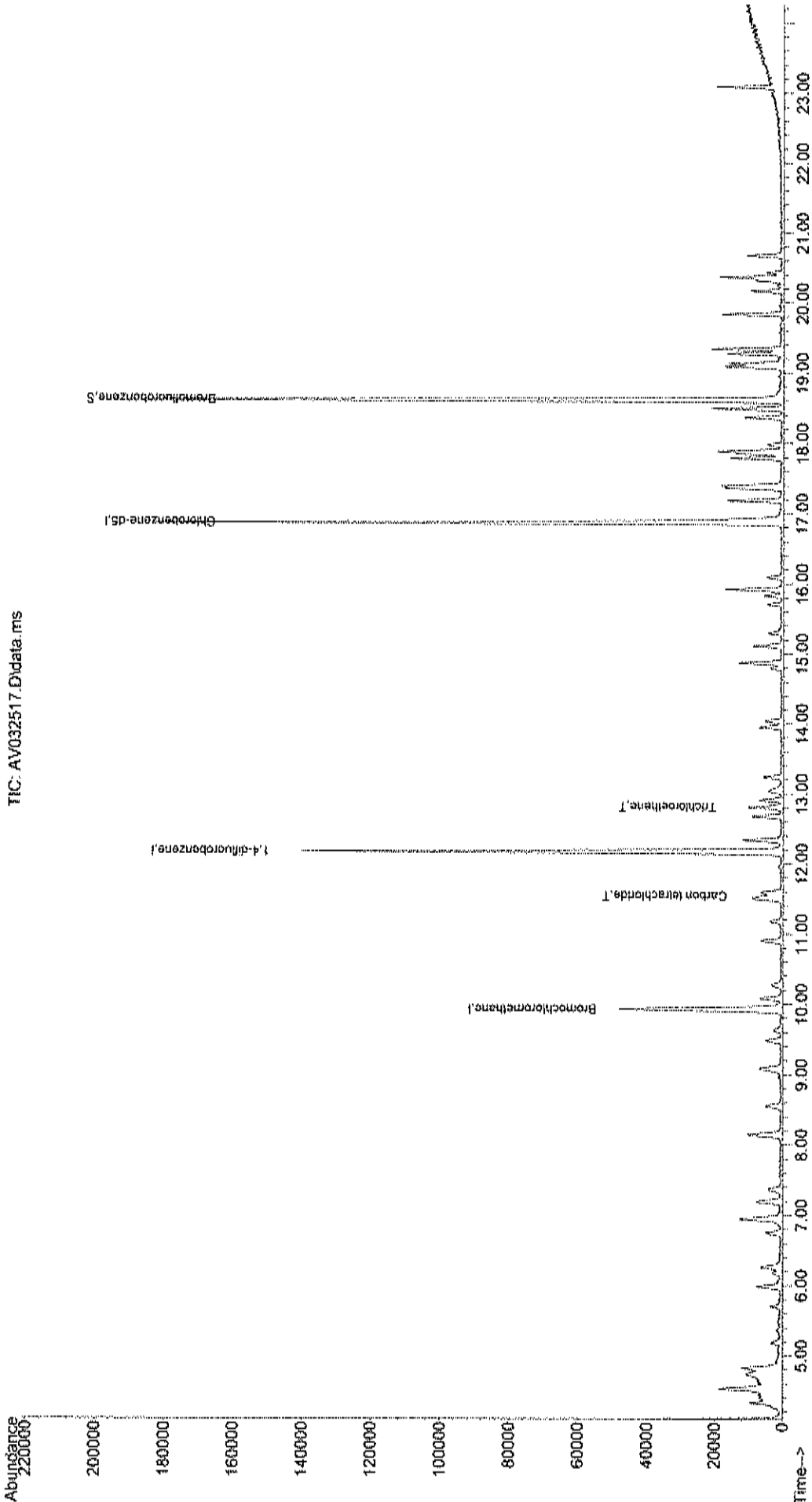
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.921	128	26018	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	164967	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	147330	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	88820	0.84	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	84.00%
Target Compounds						
38) Carbon tetrachloride	11.537	117	4187	0.07	ppb	Qvalue 99
44) Trichloroethene	12.807	130	4908	0.07	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\3 2024MAR\
Data File : AV032517.D
Acq On : 25 Mar 2024 11:05 pm
Operator : DA
Sample : A1UG 0.03
Misc : A318_1UG
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 26 08:37:16 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 08:04:55 2024
Response via : Continuing Cal File: C:\msdchem\1\data\AV032510.D



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CALIBRATION VERIFICATION

Data Path : C:\msdchem\1\data\
 Data File : AV040102.D
 Acq On : 1 Apr 2024 11:51 am
 Operator : DA
 Sample : A1UG_1.0
 Misc : A325_1UG
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 14:22:33 2024
 Quant Method : C:\msdchem\1\methods\A325_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Mar 26 09:11:14 2024
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	148	0.00
2 T	Propylene	1.099	0.855	22.2	116	0.00
3 T	Freon 12	4.974	4.330	12.9	129	0.00
4 T	Chloromethane	1.338	1.151	14.0	128	0.00
5 T	Freon 114	4.153	3.724	10.3	133	0.00
6 T	Vinyl Chloride	1.554	1.185	23.7	128	0.00
7 T	Butane	1.814	1.485	18.1	126	0.00
8 T	1,3-butadiene	1.410	1.164	17.4	121	0.00
9 T	Bromomethane	1.511	1.322	12.5	131	0.00
10 T	Chloroethane	0.726	0.644	11.3	131	-0.01
11 T	Ethanol	0.510	0.465	8.8	142	0.00
12 T	Acrolein	0.478	0.391	18.2	120	0.00
13 T	Vinyl Bromide	1.641	1.499	8.7	136	0.00
14 T	Freon 11	5.143	4.652	9.5	133	0.00
15 T	Acetone	0.649	0.540	16.8	124	0.00
16 T	Pentane	1.295	1.022	21.1	117	0.00
17 T	Isopropyl alcohol	1.965	1.561	20.6	116	0.00
18 T	1,1-dichloroethene	1.887	1.444	23.5	128	-0.01
19 T	Freon 113	3.752	3.329	11.3	130	0.00
20 t	t-Butyl alcohol	2.769	1.731	37.5#	92	0.00
21 T	Methylene chloride	1.470	1.225	16.7	128	0.00
22 T	Allyl chloride	1.508	1.263	16.2	129	0.00
23 T	Carbon disulfide	4.336	3.677	15.2	128	0.00
24 T	trans-1,2-dichloroethene	2.145	1.869	12.9	132	0.00
25 T	methyl tert-butyl ether	5.144	4.037	21.5	115	0.00
26 T	1,1-dichloroethane	2.837	2.453	13.5	127	0.00
27 T	Vinyl acetate	2.207	2.058	6.8	134	0.00
28 T	Methyl Ethyl Ketone	0.857	0.693	19.1	129	0.00
29 T	cis-1,2-dichloroethene	2.417	1.834	24.1	127	0.00
30 T	Hexane	2.342	2.035	13.1	128	0.00
31 T	Ethyl acetate	2.492	2.253	9.6	134	0.00
32 T	Chloroform	3.724	3.341	10.3	132	0.00
33 T	Tetrahydrofuran	1.377	1.123	18.4	122	-0.01
34 T	1,2-dichloroethane	2.689	2.425	9.8	133	0.00
35 I	1,4-difluorobenzene	1.000	1.000	0.0	126	0.00
36 T	1,1,1-trichloroethane	0.504	0.577	-14.5	152#	0.00
37 T	Cyclohexane	0.357	0.335	6.2	125	0.00
38 T	Carbon tetrachloride	0.462	0.556	-20.3	194#	0.00
39 T	Benzene	0.874	0.839	4.0	128	0.00
40 T	Methyl methacrylate	0.273	0.282	-3.3	133	0.00
41 T	1,4-dioxane	0.223	0.208	6.7	125	0.00
42 T	2,2,4-trimethylpentane	1.142	1.095	4.1	126	0.00
43 T	Heptane	0.387	0.358	7.5	125	0.00
44 T	Trichloroethene	0.543	0.446	17.9	132	0.00
45 T	1,2-dichloropropane	0.276	0.271	1.8	129	0.00
46 T	Bromodichloromethane	0.450	0.534	-18.7	154#	0.00
47 T	cis-1,3-dichloropropene	0.419	0.425	-1.4	129	0.00

Data Path : C:\msdchem\1\data\
 Data File : AV040102.D
 Acq On : 1 Apr 2024 11:51 am
 Operator : DA
 Sample : A1UG_1.0
 Misc : A325_1UG
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 14:22:33 2024
 Quant Method : C:\msdchem\1\methods\A325_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Mar 26 09:11:14 2024
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48 T	trans-1,3-dichloropropene	0.374	0.371	0.8	126	0.00
49 T	1,1,2-trichloroethane	0.352	0.344	2.3	128	0.00
50 I	Chlorobenzene-d5	1.000	1.000	0.0	123	0.00
51 T	Toluene	0.747	0.740	0.9	129	0.00
52 T	Methyl Isobutyl Ketone	0.560	0.514	8.2	120	0.00
53 T	Dibromochloromethane	0.412	0.520	-26.2	165#	0.00
54 T	Methyl Butyl Ketone	0.502	0.473	5.8	122	0.00
55 T	1,2-dibromoethane	0.554	0.599	-8.1	140	0.00
56 T	Tetrachloroethylene	0.503	0.514	-2.2	135	0.00
57 T	Chlorobenzene	1.037	1.021	1.5	130	0.00
58 T	Ethylbenzene	1.721	1.699	1.3	128	0.00
59 T	m&p-xylene	1.415	1.380	2.5	127	0.00
60 T	Nonane	0.680	0.627	7.8	121	0.00
61 T	Styrene	1.098	1.060	3.5	126	-0.01
62 T	Bromoform	0.317	0.412	-30.0	168#	-0.02
63 T	o-xylene	1.545	1.469	4.9	126	-0.01
64 T	Cumene	2.030	1.962	3.3	127	-0.03
65 S	Bromofluorobenzene	0.696	0.719	-3.3	122	-0.04
66 T	1,1,2,2-tetrachloroethane	0.722	0.735	-1.8	131	-0.03
67 T	Propylbenzene	0.587	0.586	0.2	128	-0.06
68 T	2-Chlorotoluene	0.535	0.525	1.9	131	-0.06
69 T	4-ethyltoluene	2.040	1.985	2.7	127	-0.06
70 T	1,3,5-trimethylbenzene	1.855	1.838	0.9	127	-0.06
71 T	1,2,4-trimethylbenzene	1.758	1.689	3.9	123	-0.08
72 T	1,3-dichlorobenzene	0.983	1.003	-2.0	125	-0.09
73 T	benzyl chloride	0.377	0.352	6.6	107	-0.09
74 T	1,4-dichlorobenzene	0.940	0.970	-3.2	123	-0.09
75 T	1,2,3-trimethylbenzene	1.829	1.767	3.4	125	-0.10
76 T	1,2-dichlorobenzene	0.927	0.961	-3.7	139	-0.09
77 T	1,2,4-trichlorobenzene	0.270	0.287	-6.3	115	0.03
78 T	Naphthalene	0.705	0.714	-1.3	109	0.04
79 T	Hexachloro-1,3-butadiene	0.671	0.666	0.7	126	0.05

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : C:\msdchem\1\data\
 Data File : AV040102.D
 Acq On : 1 Apr 2024 11:51 am
 Operator : DA
 Sample : A1UG_1.0
 Misc : A325_1UG
 ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 14:22:33 2024
 Quant Method : C:\msdchem\1\methods\A325_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Mar 26 09:11:14 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	9.927	128	36643	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	198307	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	188233	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.573	95	135419	1.03	ppb	-0.04
Spiked Amount	1.000	Range	70 - 130	Recovery	=	103.00%

Target Compounds

Compound	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.263	41	31324	0.78	ppb	# 44
3) Freon 12	4.319	85	158661	0.87	ppb	97
4) Chloromethane	4.518	50	42188	0.86	ppb	96
5) Freon 114	4.523	85	136442	0.90	ppb	93
6) Vinyl Chloride	4.722	62	43412	0.76	ppb	99
7) Butane	4.829	43	54403	0.82	ppb	96
8) 1,3-butadiene	4.824	39	42646	0.83	ppb	96
9) Bromomethane	5.175	94	48450	0.88	ppb	94
10) Chloroethane	5.351	64	23601	0.89	ppb	97
11) Ethanol	5.453	45	17052	0.91	ppb	91
12) Acrolein	6.037	56	14311	0.82	ppb	96
13) Vinyl Bromide	5.697	106	54910	0.91	ppb	92
14) Freon 11	5.975	101	170459	0.90	ppb	99
15) Acetone	6.145	58	19801m ^{va}	0.83	ppb	
16) Pentane	6.258	42	37463	0.79	ppb	# 73
17) Isopropyl alcohol	6.253	45	57213	0.79	ppb	92
18) 1,1-dichloroethene	6.740	96	52910	0.92	ppb	# 85
19) Freon 113	6.939	101	121969	0.89	ppb	85
20) t-Butyl alcohol	6.961	59	63446	0.63	ppb	# 87
21) Methylene chloride	7.199	84	44881	0.83	ppb	# 82
22) Allyl chloride	7.182	41	46290	0.84	ppb	77
23) Carbon disulfide	7.358	76	134738	0.85	ppb	98
24) trans-1,2-dichloroethene	8.129	61	68487	0.87	ppb	89
25) methyl tert-butyl ether	8.146	73	147927	0.78	ppb	86
26) 1,1-dichloroethane	8.554	63	89874	0.86	ppb	100
27) Vinyl acetate	8.537	43	75427	0.93	ppb	88
28) Methyl Ethyl Ketone	9.031	72	25391	0.81	ppb	# 1
29) cis-1,2-dichloroethene	9.479	61	67195	0.76	ppb	82
30) Hexane	9.082	57	74571	0.87	ppb	95
31) Ethyl acetate	9.620	43	82555	0.90	ppb	95
32) Chloroform	10.085	83	122417	0.90	ppb	96
33) Tetrahydrofuran	10.238	42	41151	0.82	ppb	86
34) 1,2-dichloroethane	11.180	62	88842	0.90	ppb	95
36) 1,1,1-trichloroethane	10.896	97	114520	1.15	ppb	100
37) Cyclohexane	11.588	56	66466	0.94	ppb	# 60
38) Carbon tetrachloride	11.531	117	110235	1.53	ppb	96
39) Benzene	11.497	78	166366	0.96	ppb	98
40) Methyl methacrylate	13.022	41	55913	1.03	ppb	84
41) 1,4-dioxane	13.051	88	41313	0.93	ppb	89
42) 2,2,4-trimethylpentane	12.336	57	217164	0.96	ppb	94
43) Heptane	12.676	43	71023	0.93	ppb	90
44) Trichloroethene	12.801	130	88421	1.06	ppb	98

Data Path : C:\msdchem\1\data\
Data File : AV040102.D
Acq On : 1 Apr 2024 11:51 am
Operator : DA
Sample : A1UG_1.0
Misc : A325_1UG
ALS Vial : 1 Sample Multiplier: 1

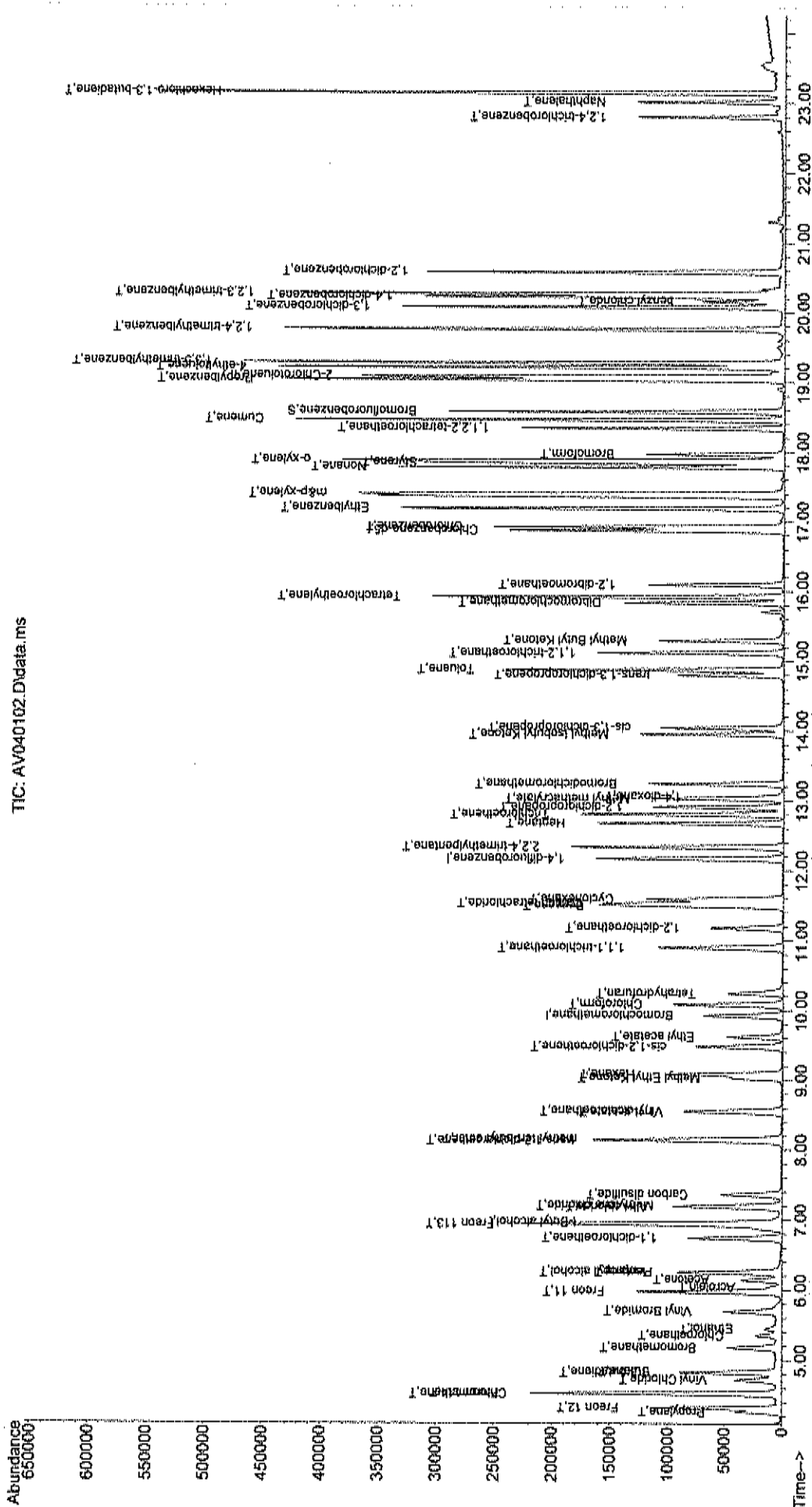
Quant Time: Apr 01 14:22:33 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.903	63	53663	0.98	ppb	100
46) Bromodichloromethane	13.238	83	105816	1.18	ppb	98
47) cis-1,3-dichloropropene	14.043	75	84304	1.02	ppb	94
48) trans-1,3-dichloropropene	14.797	75	73646	0.99	ppb	99
49) 1,1,2-trichloroethane	15.109	97	68290	0.98	ppb	98
51) Toluene	14.871	92	139286	0.99	ppb	93
52) Methyl Isobutyl Ketone	13.946	43	96796	0.92	ppb	93
53) Dibromochloromethane	15.834	129	97873m ^{sp}	1.26	ppb	
54) Methyl Butyl Ketone	15.290	43	89117	0.94	ppb	94
55) 1,2-dibromoethane	16.090	107	112807	1.08	ppb	99
56) Tetrachloroethylene	15.919	164	96693	1.02	ppb	97
57) Chlorobenzene	16.923	112	192198	0.98	ppb	99
58) Ethylbenzene	17.184	91	319723	0.99	ppb	97
59) m&p-xylene	17.394	91	519666	1.95	ppb	97
60) Nonane	17.779	43	118005	0.92	ppb	93
61) Styrene	17.841	104	199485	0.96	ppb	91
62) Bromoform	17.966	173	77554	1.30	ppb	95
63) o-xylene	17.875	91	276460	0.95	ppb	96
64) Cumene	18.459	105	369367	0.97	ppb	99
66) 1,1,2,2-tetrachloroethane	18.340	83	138358	1.02	ppb	92
67) Propylbenzene	19.032	120	110297	1.00	ppb	# 21
68) 2-Chlorotoluene	19.077	126	98795	0.98	ppb	# 1
69) 4-ethyltoluene	19.208	105	373634m ^{sp}	0.97	ppb	
70) 1,3,5-trimethylbenzene	19.276	105	345902	0.99	ppb	98
71) 1,2,4-trimethylbenzene	19.758	105	317997	0.96	ppb	100
72) 1,3-dichlorobenzene	20.075	146	188872m ^{sp}	1.02	ppb	
73) benzyl chloride	20.155	91	66341	0.93	ppb	98
74) 1,4-dichlorobenzene	20.223	146	182629	1.03	ppb	97
75) 1,2,3-trimethylbenzene	20.268	105	332605	0.97	ppb	99
76) 1,2-dichlorobenzene	20.580	146	180979	1.04	ppb	96
77) 1,2,4-trichlorobenzene	22.791	180	54090	1.06	ppb	98
78) Naphthalene	23.007	128	134389	1.01	ppb	99
79) Hexachloro-1,3-butadiene	23.131	225	125319	0.99	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040102.D
Acq On : 1 Apr 2024 11:51 am
Operator : DA
Sample : A1UG_1.0
Misc : A325_1UG
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 01 14:22:33 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration



GC/MS VOLATILES-WHOLE AIR

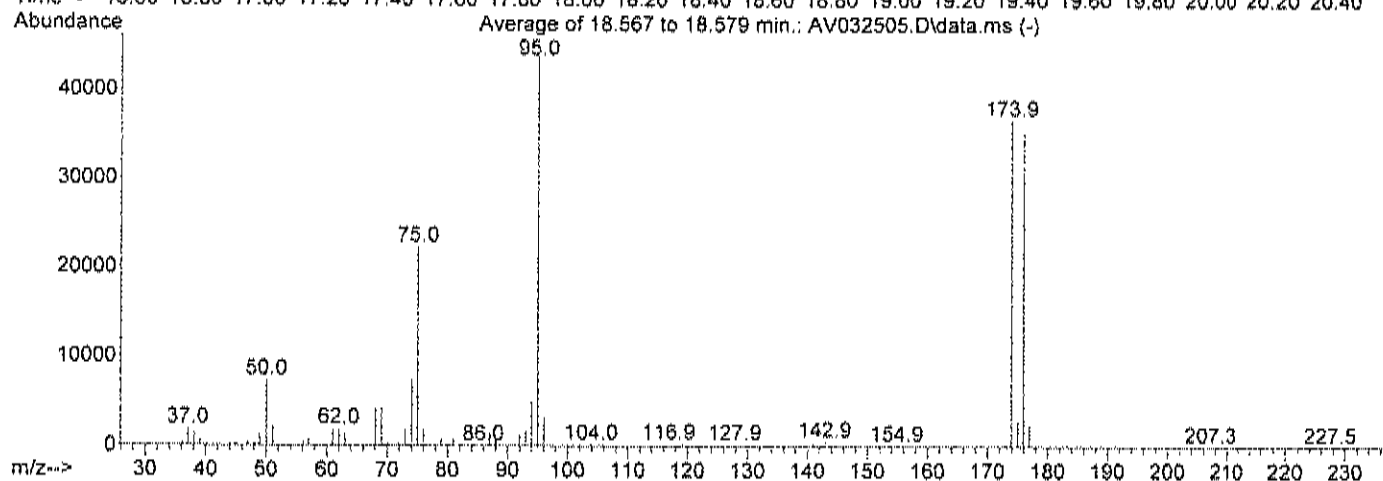
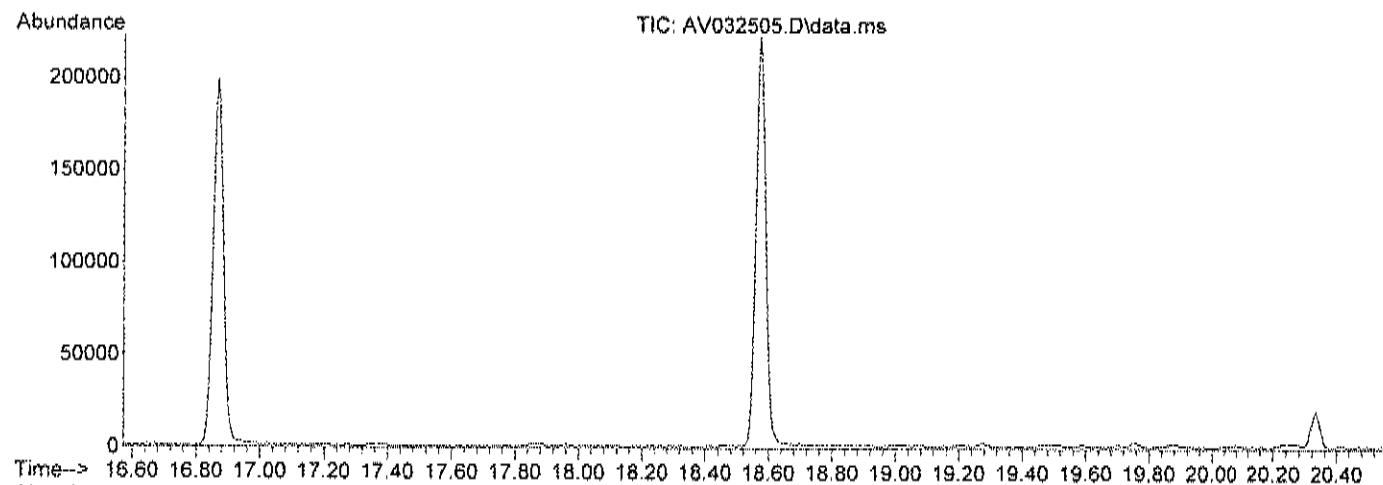
METHOD TO-15

RAW DATA

Data Path : C:\msdchem\1\data2\3 2024MAR\
 Data File : AV032505.D
 Acq On : 25 Mar 2024 1:43 pm
 Operator : DA
 Sample : BFB1UG
 Misc : A318 1UG
 ALS Vial : 5 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\A325 1UG.M
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Tue Mar 26 09:11:14 2024



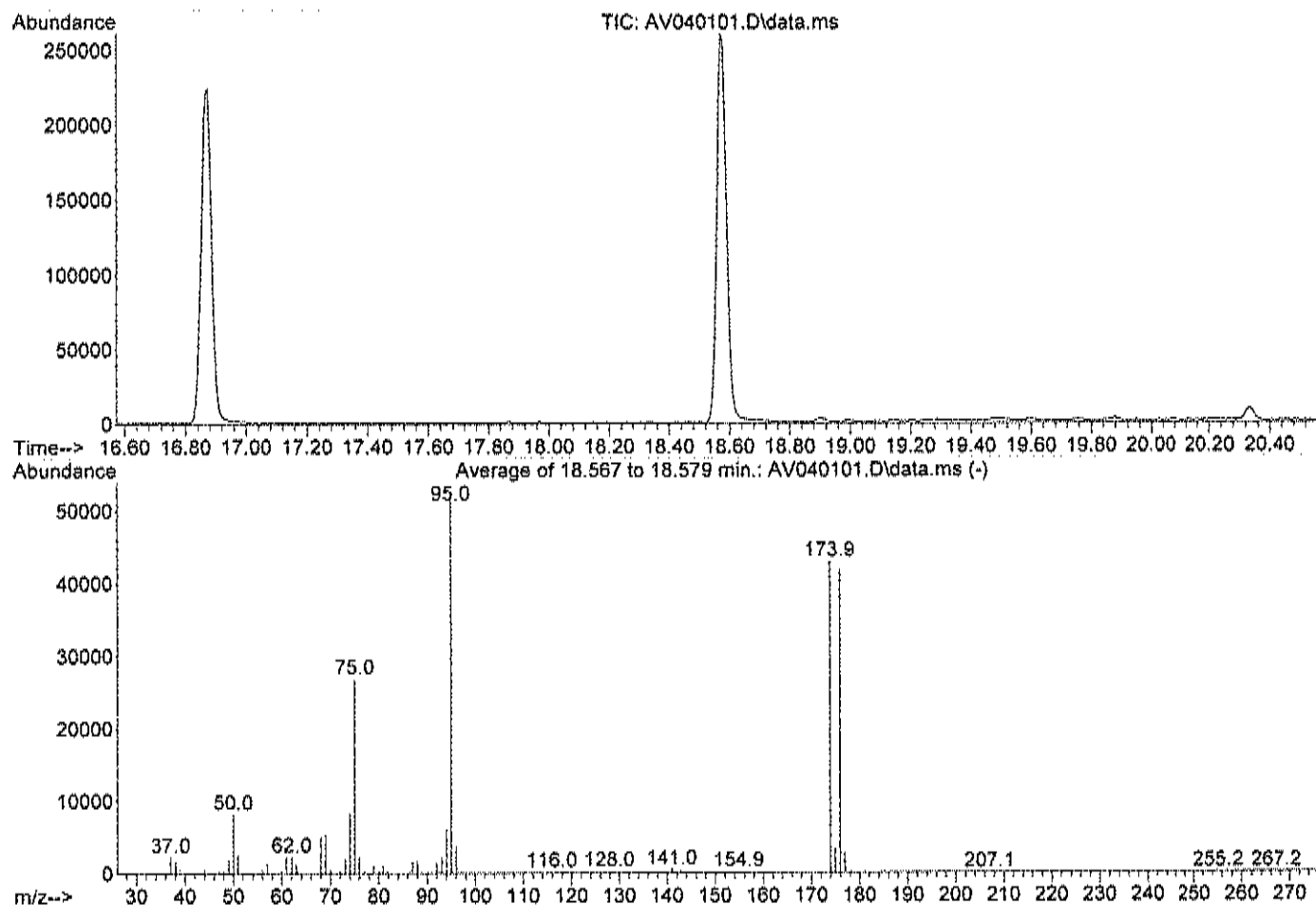
AutoFind: Scans 2554, 2555, 2556; Background Corrected with Scan 2543

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.7	7314	PASS
75	95	30	66	50.8	22280	PASS
95	95	100	100	100.0	43891	PASS
96	95	5	9	7.2	3152	PASS
173	174	0.00	2	0.6	211	PASS
174	95	50	120	83.6	36696	PASS
175	174	4	9	7.8	2846	PASS
176	174	95	101	96.5	35413	PASS
177	176	5	9	6.7	2373	PASS

Data Path : C:\msdchem\1\data\
 Data File : AV040101.D
 Acq On : 1 Apr 2024 10:56 am
 Operator : DA
 Sample : BFB1UG
 Misc : A325_1UG
 ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\methods\A325_1UG.M
 Title : TO-15 VOA Standards for 5 point calibration
 Last Update : Tue Mar 26 09:11:14 2024



AutoFind: Scans 2554, 2555, 2556; Background Corrected with Scan 2543

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	16.0	8211	PASS
75	95	30	66	52.3	26893	PASS
95	95	100	100	100.0	51419	PASS
96	95	5	9	7.2	3718	PASS
173	174	0.00	2	0.3	135	PASS
174	95	50	120	83.4	42893	PASS
175	174	4	9	7.8	3360	PASS
176	174	95	101	97.2	41677	PASS
177	176	5	9	6.6	2734	PASS

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

RAW QC DATA



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

Batch ID: R1245

Sample ID: AMB1UG-040124	Sample Type: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: PBW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11559						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	< 0.15	0.15									U
1,1,2,2-Tetrachloroethane	< 0.15	0.15									U
1,1,2-Trichloroethane	< 0.15	0.15									U
1,1-Dichloroethane	< 0.15	0.15									U
1,1-Dichloroethene	< 0.040	0.040									U
1,2,4-Trichlorobenzene	< 0.15	0.15									U
1,2,4-Trimethylbenzene	< 0.15	0.15									U
1,2-Dibromoethane	< 0.15	0.15									U
1,2-Dichlorobenzene	< 0.15	0.15									U
1,2-Dichloroethane	< 0.15	0.15									U
1,2-Dichloropropane	< 0.15	0.15									U
1,3,5-Trimethylbenzene	< 0.15	0.15									U
1,3-butadiene	< 0.15	0.15									U
1,3-Dichlorobenzene	< 0.15	0.15									U
1,4-Dichlorobenzene	< 0.15	0.15									U
1,4-Dioxane	< 0.30	0.30									U
2,2,4-trimethylpentane	< 0.15	0.15									U
4-ethyltoluene	< 0.15	0.15									U
Acetone	< 0.30	0.30									U
Allyl chloride	< 0.15	0.15									U
Benzene	< 0.15	0.15									U
Benzyl chloride	< 0.15	0.15									U
Bromodichloromethane	< 0.15	0.15									U
Bromoform	< 0.15	0.15									U
Bromomethane	< 0.15	0.15									U
Carbon disulfide	< 0.15	0.15									U

Qualifiers: B Analyte detected in the associated Method Block
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

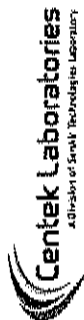
Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: AMB1UG-040124	SampType: MBLK	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: PBW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11559						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	< 0.030	0.030									U
Chlorobenzene	< 0.15	0.15									U
Chloroethane	< 0.15	0.15									U
Chloroform	< 0.15	0.15									U
Chloromethane	< 0.15	0.15									U
cis-1,2-Dichloroethene	< 0.040	0.040									U
cis-1,3-Dichloropropene	< 0.15	0.15									U
Cyclohexane	< 0.15	0.15									U
Dibromochloromethane	< 0.15	0.15									U
Ethyl acetate	< 0.15	0.15									U
Ethylbenzene	< 0.15	0.15									U
Freon 11	< 0.15	0.15									U
Freon 113	< 0.15	0.15									U
Freon 114	< 0.15	0.15									U
Freon 12	< 0.15	0.15									U
Heptane	< 0.15	0.15									U
Hexachloro-1,3-butadiene	< 0.15	0.15									U
Hexane	< 0.15	0.15									U
Isopropyl alcohol	< 0.15	0.15									U
m&p-Xylene	< 0.30	0.30									U
Methyl Butyl Ketone	< 0.30	0.30									U
Methyl Ethyl Ketone	< 0.30	0.30									U
Methyl Isobutyl Ketone	< 0.30	0.30									U
Methyl tert-butyl ether	< 0.15	0.15									U
Methylene chloride	< 0.15	0.15									U
o-Xylene	< 0.15	0.15									U

Qualifiers:							
B	Analyte detected in the associated Method Blank		E	Value above quantitation range		H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit		R	RPD outside accepted recovery limits		RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits		SC	Sub-Contracted		J	Analyte detected below quantitation limits
							Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.
Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: AMB1UG-040124		Samp Type: MBLK		TestCode: 0.20_NYS		Units: ppbV		Prep Date:		RunNo: 1245	
Client ID: PBW		Batch ID: R1245		TestNo: TO-15				Analysis Date: 4/1/2024		SeqNo: 11559	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	< 0.15	0.15									U
Styrene	< 0.15	0.15									U
Tetrachloroethylene	< 0.15	0.15									U
Tetrahydrofuran	< 0.15	0.15									U
Toluene	< 0.15	0.15									U
trans-1,2-Dichloroethene	< 0.15	0.15									U
trans-1,3-Dichloropropene	< 0.15	0.15									U
Trichloroethene	< 0.030	0.030									U
Vinyl acetate	< 0.15	0.15									U
Vinyl Bromide	< 0.15	0.15									U
Vinyl chloride	< 0.040	0.040									U
Surr: Bromofluorobenzene	0.90		1.000		90.0	70	130				S

Qualifiers:		B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparties or analysis excess
	ND		Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
	S		Spike Recovery outside accepted recovery limits	SC	Sub-Contracted	J	Analyte detected below quantitation limits
Original							

Original

Data Path : C:\msdchem\1\data\
Data File : AV040105.D
Acq On : 1 Apr 2024 2:01 pm
Operator : DA
Sample : AMB1UG-040124
Misc : A325_1UG
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 12:36:48 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

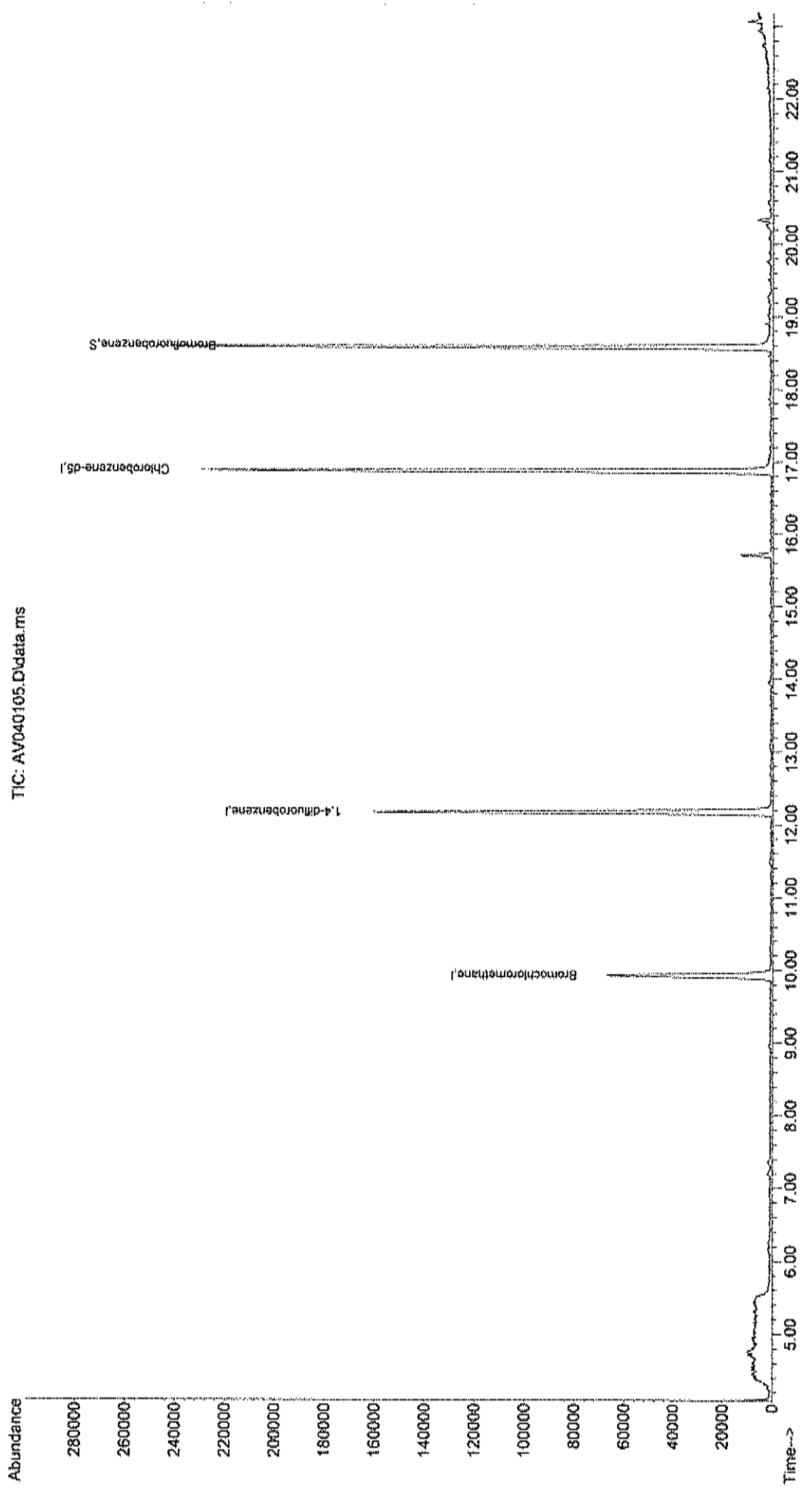
Internal Standards						
1) Bromochloromethane	9.926	128	37124	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	194036	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	184973	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.578	95	115743	0.90	ppb	-0.03
Spiked Amount	1.000	Range	70 - 130	Recovery	=	90.00%

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040105.D
Acq On : 1 Apr 2024 2:01 pm
Operator : DA
Sample : AMB1UG-040124
Misc : A325_1UG
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 04 12:36:48 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UG-040124	Samp Type: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11560						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	1.2	0.15	1.000	0	120	70	130				
1,1,2,2-Tetrachloroethane	1.1	0.15	1.000	0	107	70	130				
1,1,2-Trichloroethane	1.0	0.15	1.000	0	105	70	130				
1,1-Dichloroethane	0.83	0.15	1.000	0	83.0	70	130				
1,1-Dichloroethene	0.89	0.040	1.000	0	89.0	70	130				
1,2,4-Trichlorobenzene	1.3	0.15	1.000	0	126	70	130				
1,2,4-Trimethylbenzene	1.0	0.15	1.000	0	105	70	130				
1,2-Dibromoethane	1.1	0.15	1.000	0	106	70	130				
1,2-Dichlorobenzene	1.0	0.15	1.000	0	101	70	130				
1,2-Dichloroethane	0.86	0.15	1.000	0	86.0	70	130				
1,2-Dichloropropane	0.96	0.15	1.000	0	96.0	70	130				
1,3,5-Trimethylbenzene	1.0	0.15	1.000	0	100	70	130				
1,3-butadiene	0.86	0.15	1.000	0	86.0	70	130				
1,3-Dichlorobenzene	1.1	0.15	1.000	0	110	70	130				
1,4-Dichlorobenzene	1.1	0.15	1.000	0	109	70	130				
1,4-Dioxane	1.0	0.30	1.000	0	100	70	130				
2,2,4-trimethylpentane	0.94	0.15	1.000	0	94.0	70	130				
4-ethyltoluene	1.0	0.15	1.000	0	104	70	130				
Acetone	0.76	0.30	1.000	0	76.0	70	130				
Allyl chloride	0.80	0.15	1.000	0	80.0	70	130				
Benzene	0.99	0.15	1.000	0	99.0	70	130				
Benzyl chloride	0.82	0.15	1.000	0	82.0	70	130				
Bromodichloromethane	1.3	0.15	1.000	0	129	70	130				
Bromoform	1.4	0.15	1.000	0	139	70	130				S
Bromomethane	0.88	0.15	1.000	0	88.0	70	130				
Carbon disulfide	0.85	0.15	1.000	0	85.0	70	130				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis extend
RL Reporting Limit
J Analyte detected below quantitation limits

Original



Centek Laboratories
A Division of SanAir Technologies Laboratory

SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404082
17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

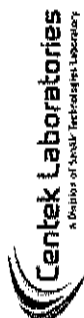
BatchID: R1245

Sample ID: ALCS1UG-040124	SampType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245
Client ID: LCSW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11560

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	1.5	0.030	1.000	0	150	70	130				S
Chlorobenzene	1.0	0.15	1.000	0	100	70	130				
Chloroethane	0.88	0.15	1.000	0	88.0	70	130				
Chloroform	0.89	0.15	1.000	0	89.0	70	130				
Chloromethane	0.90	0.15	1.000	0	90.0	70	130				
cis-1,2-Dichloroethene	0.75	0.040	1.000	0	75.0	70	130				
cis-1,3-Dichloropropene	1.0	0.15	1.000	0	103	70	130				
Cyclohexane	0.95	0.15	1.000	0	95.0	70	130				
Dibromochloromethane	1.3	0.15	1.000	0	130	70	130				
Ethyl acetate	1.2	0.15	1.000	0	123	70	130				
Ethylbenzene	1.0	0.15	1.000	0	100	70	130				
Freon 11	0.91	0.15	1.000	0	91.0	70	130				
Freon 113	0.86	0.15	1.000	0	86.0	70	130				
Freon 114	0.96	0.15	1.000	0	96.0	70	130				
Freon 12	0.87	0.15	1.000	0	87.0	70	130				
Heptane	0.95	0.15	1.000	0	95.0	70	130				
Hexachloro-1,3-butadiene	1.2	0.15	1.000	0	115	70	130				
Hexane	0.84	0.15	1.000	0	84.0	70	130				
Isopropyl alcohol	0.77	0.15	1.000	0	77.0	70	130				
m&p-Xylene	2.0	0.30	2.000	0	98.5	70	130				
Methyl Butyl Ketone	0.93	0.30	1.000	0	93.0	70	130				
Methyl Ethyl Ketone	0.80	0.30	1.000	0	80.0	70	130				
Methyl Isobutyl Ketone	0.92	0.30	1.000	0	92.0	70	130				
Methyl tert-butyl ether	0.76	0.15	1.000	0	76.0	70	130				
Methylene chloride	0.83	0.15	1.000	0	83.0	70	130				
o-Xylene	0.99	0.15	1.000	0	99.0	70	130				

Qualifiers:					
B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceed
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted	F	Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.		Batch ID: R1245		RunNo: 1245	
Project: 240-260 Lakefront Blvd		Sample Type: LCS		SeqNo: 11560	
Sample ID: ALCSIUG-040124		TestCode: 0.20_NYS		Prep Date:	
Client ID: LCSW		Batch ID: R1245		Analysis Date: 4/1/2024	
Analyte		Units: ppbV		HighLimit	
		PQL		LowLimit	
		SPK value		RPD Ref Val	
		SPK Ref Val		%RPD	
		%REC		RPDLimit	
		Qual			
Propylene		0.77		70	
Styrene		1.0		70	
Tetrachloroethylene		1.0		70	
Tetrahydrofuran		0.78		70	
Toluene		0.97		70	
trans-1,2-Dichloroethene		0.86		70	
trans-1,3-Dichloropropene		0.97		70	
Trichloroethene		1.1		70	
Vinyl acetate		0.54		70	
Vinyl Bromide		0.86		70	
Vinyl chloride		0.76		70	
Sum: Bromofluorobenzene		1.0		70	

Qualifiers:		E		H	
S		Value above quantitation range		Flagging times for preparation or analysis exceed	
ND		R		Reporting Limit	
S		SC		J	
		Spike Recovery outside accepted recovery limits		Analyze detected below quantitation limits	

Original

Data Path : C:\msdchem\1\data\
 Data File : AV040103.D
 Acq On : 1 Apr 2024 12:38 pm
 Operator : DA
 Sample : ALCS1UG-040124
 Misc : A325_1UG
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 01 14:22:48 2024
 Quant Method : C:\msdchem\1\methods\A325_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Mar 26 09:11:14 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.927	128	37087	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	196134	1.00	ppb	0.00
50) Chlorobenzene-d5	16.872	117	191254	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	136570	1.03	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	103.00%
Target Compounds						
						Qvalue
2) Propylene	4.263	41	31338	0.77	ppb	# 47
3) Freon 12	4.319	85	161203	0.87	ppb	98
4) Chloromethane	4.512	50	44421	0.90	ppb	98
5) Freon 114	4.518	85	148337	0.96	ppb	99
6) Vinyl Chloride	4.716	62	43661	0.76	ppb	99
7) Butane	4.818	43	58188	0.86	ppb	99
8) 1,3-butadiene	4.824	39	44874	0.86	ppb	91
9) Bromomethane	5.181	94	49243	0.88	ppb	96
10) Chloroethane	5.351	64	23789	0.88	ppb	98
11) Ethanol	5.447	45	11933	0.63	ppb	95
12) Acrolein	6.031	56	11085	0.63	ppb	96
13) Vinyl Bromide	5.686	106	52155	0.86	ppb	95
14) Freon 11	5.969	101	174157	0.91	ppb	97
15) Acetone	6.139	58	18357m ^{0A}	0.76	ppb	
16) Pentane	6.253	42	38249	0.80	ppb	# 78
17) Isopropyl alcohol	6.253	45	55876	0.77	ppb	91
18) 1,1-dichloroethene	6.734	96	52229	0.89	ppb	# 85
19) Freon 113	6.939	101	119480	0.86	ppb	83
20) t-Butyl alcohol	6.961	59	68757	0.67	ppb	# 87
21) Methylene chloride	7.199	84	45460	0.83	ppb	# 80
22) Allyl chloride	7.182	41	44699	0.80	ppb	75
23) Carbon disulfide	7.358	76	136010	0.85	ppb	99
24) trans-1,2-dichloroethene	8.129	61	68097	0.86	ppb	85
25) methyl tert-butyl ether	8.141	73	145786	0.76	ppb	88
26) 1,1-dichloroethane	8.549	63	87449	0.83	ppb	98
27) Vinyl acetate	8.532	43	44543	0.54	ppb	92
28) Methyl Ethyl Ketone	9.019	72	25493	0.80	ppb	# 70
29) cis-1,2-dichloroethene	9.479	61	67129	0.75	ppb	84
30) Hexane	9.087	57	72820	0.84	ppb	96
31) Ethyl acetate	9.620	43	113965	1.23	ppb	96
32) Chloroform	10.080	83	122345	0.89	ppb	98
33) Tetrahydrofuran	10.238	42	39885	0.78	ppb	87
34) 1,2-dichloroethane	11.180	62	86009	0.86	ppb	96
36) 1,1,1-trichloroethane	10.902	97	118629	1.20	ppb	98
37) Cyclohexane	11.593	56	66459	0.95	ppb	# 59
38) Carbon tetrachloride	11.525	117	107233	1.50	ppb	99
39) Benzene	11.497	78	168940	0.99	ppb	96
40) Methyl methacrylate	13.022	41	61867	1.15	ppb	85
41) 1,4-dioxane	13.051	88	43514	1.00	ppb	90
42) 2,2,4-trimethylpentane	12.330	57	211284	0.94	ppb	94
43) Heptane	12.671	43	71981	0.95	ppb	89
44) Trichloroethene	12.807	130	88652	1.08	ppb	97

Data Path : C:\msdchem\1\data\
Data File : AV040103.D
Acq On : 1 Apr 2024 12:38 pm
Operator : DA
Sample : ALCS1UG-040124
Misc : A325_1UG
ALS Vial : 2 Sample Multiplier: 1

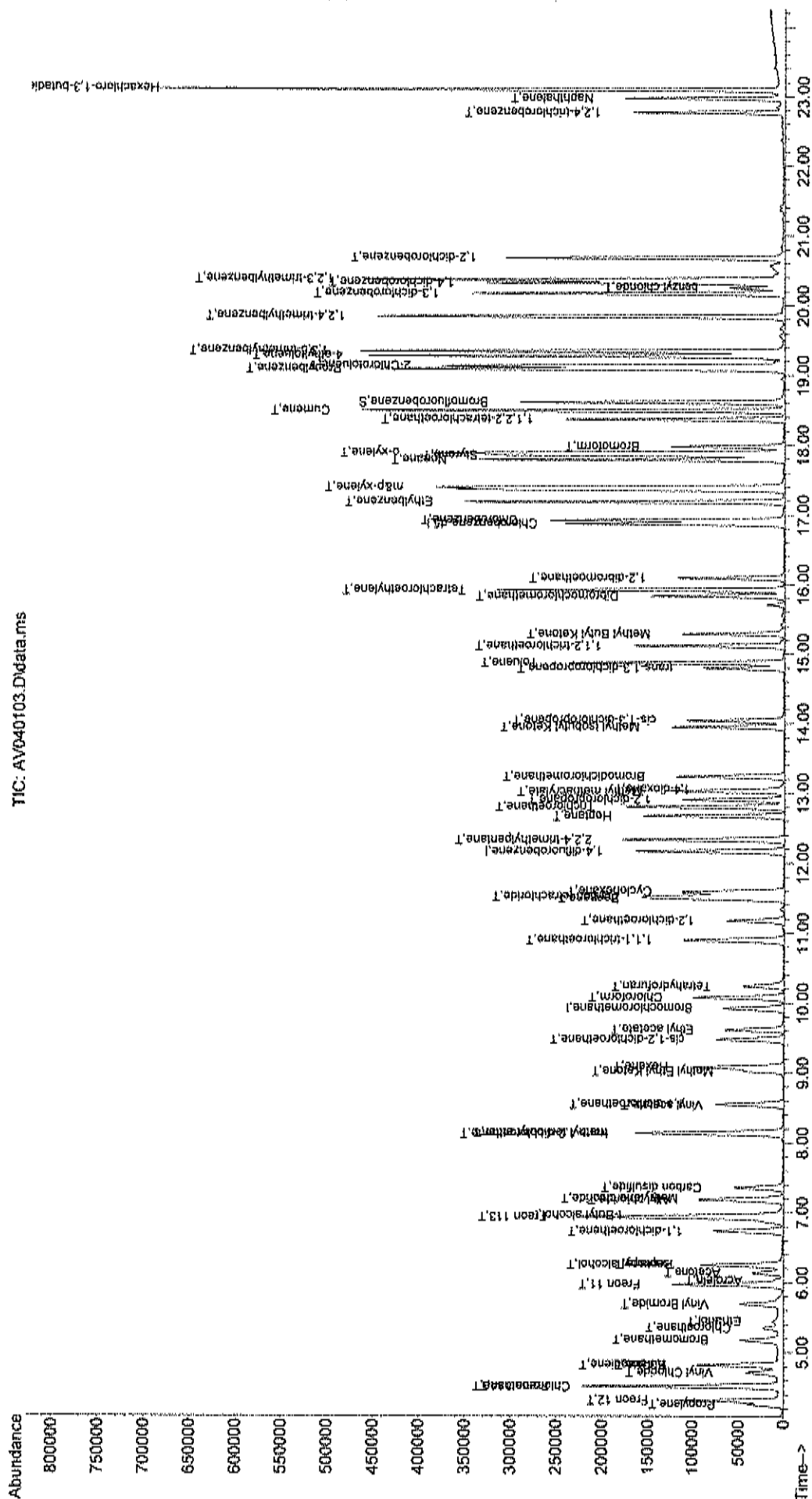
Quant Time: Apr 01 14:22:48 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.903	63	51805	0.96	ppb	99
46) Bromodichloromethane	13.238	83	113917	1.29	ppb	99
47) cis-1,3-dichloropropene	14.043	75	84306	1.03	ppb	94
48) trans-1,3-dichloropropene	14.797	75	71040	0.97	ppb	89
49) 1,1,2-trichloroethane	15.114	97	72101	1.05	ppb	100
51) Toluene	14.871	92	138479	0.97	ppb	93
52) Methyl Isobutyl Ketone	13.946	43	98951	0.92	ppb	92
53) Dibromochloromethane	15.829	129	102296m ^{PA}	1.30	ppb	
54) Methyl Butyl Ketone	15.284	43	89437	0.93	ppb	93
55) 1,2-dibromoethane	16.090	107	112633	1.06	ppb	100
56) Tetrachloroethylene	15.919	164	96416	1.00	ppb	98
57) Chlorobenzene	16.923	112	197435	1.00	ppb	99
58) Ethylbenzene	17.184	91	328874	1.00	ppb	98
59) m&p-xylene	17.394	91	534461	1.97	ppb	98
60) Nonane	17.790	43	122948	0.94	ppb	93
61) Styrene	17.853	104	210754	1.00	ppb	91
62) Bromoform	17.978	173	84139	1.39	ppb	95
63) o-xylene	17.887	91	292675	0.99	ppb	98
64) Cumene	18.493	105	419189	1.08	ppb	99
66) 1,1,2,2-tetrachloroethane	18.369	83	147976	1.07	ppb	92
67) Propylbenzene	19.089	120	116007	1.03	ppb	# 16
68) 2-Chlorotoluene	19.134	126	103602	1.01	ppb	# 1
69) 4-ethyltoluene	19.276	105	405756	1.04	ppb	100
70) 1,3,5-trimethylbenzene	19.344	105	356098	1.00	ppb	100
71) 1,2,4-trimethylbenzene	19.837	105	352340	1.05	ppb	98
72) 1,3-dichlorobenzene	20.166	146	206393	1.10	ppb	97
73) benzyl chloride	20.251	91	59151	0.82	ppb	100
74) 1,4-dichlorobenzene	20.319	146	196291	1.09	ppb	98
75) 1,2,3-trimethylbenzene	20.364	105	365937	1.05	ppb	100
76) 1,2-dichlorobenzene	20.676	146	179763	1.01	ppb	96
77) 1,2,4-trichlorobenzene	22.763	180	65225	1.26	ppb	92
78) Naphthalene	22.967	128	174190m	1.29	ppb	
79) Hexachloro-1,3-butadiene	23.092	225	147598	1.15	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

```
Data Path      : C:\msdchem\1\data\
Data File     : AV040103.D
Acq On        : 1 Apr 2024 12:38 pm
Operator      : DA
Sample        : ALCS1UG-040124
Misc          : A325 LUG
ALS Vial      : 2
Sample Multiplier: 1
```

Quant Time: Apr 01 14:22:48 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Quant Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration





SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UGD-040124	SampType: LCSD	TestCode: 020_NYS	Units: ppbV	Prep Date:	RunNo: 1245
Client ID: LCSS02	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/17/2024	SeqNo: 11561

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.2	0.15	1.000	0	122	70	130	1.200	1.65	30	
1,1,2,2-Tetrachloroethane	1.1	0.15	1.000	0	110	70	130	1.070	2.76	30	
1,1,2-Trichloroethane	1.0	0.15	1.000	0	100	70	130	1.050	4.88	30	
1,1-Dichloroethane	0.85	0.15	1.000	0	85.0	70	130	0.8300	2.38	30	
1,1-Dichloroethene	0.91	0.040	1.000	0	91.0	70	130	0.8900	2.22	30	
1,2,4-Trichlorobenzene	1.0	0.15	1.000	0	100	70	130	1.260	23.0	30	
1,2,4-Trimethylbenzene	1.0	0.15	1.000	0	105	70	130	1.050	0	30	
1,2-Dibromoethane	1.1	0.15	1.000	0	107	70	130	1.060	0.939	30	
1,2-Dichlorobenzene	1.0	0.15	1.000	0	100	70	130	1.010	0.995	30	
1,2-Dichloroethane	0.89	0.15	1.000	0	89.0	70	130	0.8600	3.43	30	
1,2-Dichloropropane	0.95	0.15	1.000	0	95.0	70	130	0.9600	1.05	30	
1,3,5-Trimethylbenzene	1.0	0.15	1.000	0	101	70	130	1.000	0.995	30	
1,3-butadiene	0.83	0.15	1.000	0	83.0	70	130	0.8600	3.55	30	
1,3-Dichlorobenzene	1.1	0.15	1.000	0	106	70	130	1.100	3.70	30	
1,4-Dichlorobenzene	1.1	0.15	1.000	0	107	70	130	1.090	1.85	30	
1,4-Dioxane	0.98	0.30	1.000	0	98.0	70	130	1.000	2.02	30	
2,2,4-trimethylpentane	0.93	0.15	1.000	0	93.0	70	130	0.9400	1.07	30	
4-ethyltoluene	1.0	0.15	1.000	0	104	70	130	1.040	0	30	
Acetone	0.85	0.30	1.000	0	85.0	70	130	0.7600	11.2	30	
Allyl chloride	0.82	0.15	1.000	0	82.0	70	130	0.8000	2.47	30	
Benzene	0.96	0.15	1.000	0	96.0	70	130	0.9900	3.08	30	
Benzyl chloride	0.78	0.15	1.000	0	78.0	70	130	0.8200	5.00	30	
Bromodichloromethane	1.3	0.15	1.000	0	128	70	130	1.290	0.778	30	
Bromoform	1.4	0.15	1.000	0	145	70	130	1.390	4.23	30	S
Bromomethane	0.86	0.15	1.000	0	86.0	70	130	0.8800	2.30	30	
Carbon disulfide	0.85	0.15	1.000	0	85.0	70	130	0.8500	0	30	

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceed	Original
	ND	Not Detected as the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit	
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted	F	Analyte detected below quantitation limits	



SanAir Technologies DBA Centek Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002
17-Apr-24

Client: C & S Engineers, Inc.
Project: 240-260 Lakewood Blvd

BatchID: R1245

Sample ID: ALCS1UGD-040124	SampType: LCSD	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSS02	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11561						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	0.81	0.15	1.000	0	81.0	70	130	0.7700	5.06	30	
Styrene	1.0	0.15	1.000	0	100	70	130	1.000	0	30	
Tetrachloroethylene	1.0	0.15	1.000	0	100	70	130	1.000	0	30	
Tetrahydrofuran	0.79	0.15	1.000	0	79.0	70	130	0.7800	1.27	30	
Toluene	0.97	0.15	1.000	0	97.0	70	130	0.9700	0	30	
trans-1,2-Dichloroethene	0.88	0.15	1.000	0	88.0	70	130	0.8600	2.30	30	
trans-1,3-Dichloropropene	0.97	0.15	1.000	0	97.0	70	130	0.9700	0	30	
Trichloroethene	1.0	0.030	1.000	0	105	70	130	1.080	2.82	30	
Vinyl acetate	0.55	0.15	1.000	0	55.0	70	130	0.5400	1.83	30	S
Vinyl Bromide	0.79	0.15	1.000	0	79.0	70	130	0.8600	8.48	30	
Vinyl chloride	0.75	0.040	1.000	0	75.0	70	130	0.7600	1.32	30	
Surr. Bromofluorobenzene	1.0		1.000		101	70	130		0	0	

Qualifiers:						
B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceed	Original
ND	Not Detected as the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit	
S	Spike Recovery outside accepted recovery limits	SC	Sub-Confirmed	J	Analyte detected below quantitation limits	

Original

Data Path : C:\msdchem\1\data\
 Data File : AV040104.D
 Acq On : 1 Apr 2024 1:22 pm
 Operator : DA
 Sample : ALCS1UGD-040124
 Misc : A325 1UG
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 01 14:23:00 2024
 Quant Method : C:\msdchem\1\methods\A325 1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Mar 26 09:11:14 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	9.927	128	36922	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	204204	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	192631	1.00	ppb	0.00

System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	135616	1.01	ppb	0.00
Spiked Amount	1.000	Range	70 - 130	Recovery	=	101.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Propylene	4.263	41	32691	0.81	ppb	# 47
3) Freon 12	4.319	85	162235	0.88	ppb	97
4) Chloromethane	4.512	50	43871	0.89	ppb	95
5) Freon 114	4.518	85	146770	0.96	ppb	98
6) Vinyl Chloride	4.716	62	43300	0.75	ppb	99
7) Butane	4.824	43	55970	0.84	ppb	96
8) 1,3-butadiene	4.818	39	43064	0.83	ppb	88
9) Bromomethane	5.181	94	47948	0.86	ppb	93
10) Chloroethane	5.351	64	22600	0.84	ppb	95
11) Ethanol	5.442	45	8965	0.48	ppb	94
12) Acrolein	6.032	56	10875	0.62	ppb	100
13) Vinyl Bromide	5.691	106	48021	0.79	ppb	93
14) Freon 11	5.975	101	172959	0.91	ppb	97
15) Acetone	6.151	58	20349m ^{DA}	0.85	ppb	
16) Pentane	6.247	42	37337	0.78	ppb	# 70
17) Isopropyl alcohol	6.253	45	55926	0.77	ppb	95
18) 1,1-dichloroethene	6.740	96	53122	0.91	ppb	# 84
19) Freon 113	6.939	101	122928	0.89	ppb	85
20) t-Butyl alcohol	6.956	59	69755	0.68	ppb	# 88
21) Methylene chloride	7.199	84	44854	0.83	ppb	# 85
22) Allyl chloride	7.177	41	45694	0.82	ppb	75
23) Carbon disulfide	7.358	76	135636	0.85	ppb	98
24) trans-1,2-dichloroethene	8.129	61	69356	0.88	ppb	84
25) methyl tert-butyl ether	8.146	73	147567	0.78	ppb	87
26) 1,1-dichloroethane	8.555	63	88587	0.85	ppb	96
27) Vinyl acetate	8.532	43	44953	0.55	ppb	89
28) Methyl Ethyl Ketone	9.025	72	28376	0.90	ppb	# 1
29) cis-1,2-dichloroethene	9.484	61	67138	0.75	ppb	82
30) Hexane	9.087	57	74494	0.86	ppb	96
31) Ethyl acetate	9.615	43	118937	1.29	ppb	95
32) Chloroform	10.080	83	124503	0.91	ppb	97
33) Tetrahydrofuran	10.238	42	40326	0.79	ppb	89
34) 1,2-dichloroethane	11.180	62	88142	0.89	ppb	94
36) 1,1,1-trichloroethane	10.902	97	126013	1.22	ppb	100
37) Cyclohexane	11.588	56	69094	0.95	ppb	# 60
38) Carbon tetrachloride	11.531	117	117713	1.58	ppb	98
39) Benzene	11.497	78	170960	0.96	ppb	100
40) Methyl methacrylate	13.022	41	64331	1.15	ppb	85
41) 1,4-dioxane	13.045	88	44520	0.98	ppb	89
42) 2,2,4-trimethylpentane	12.336	57	217840	0.93	ppb	95
43) Heptane	12.676	43	76548	0.97	ppb	91
44) Trichloroethene	12.807	130	90107	1.05	ppb	97

Data Path : C:\msdchem\1\data\
 Data File : AV040104.D
 Acq On : 1 Apr 2024 1:22 pm
 Operator : DA
 Sample : ALCS1UGD-040124
 Misc : A325_1UG
 ALS Vial : 3 Sample Multiplier: 1

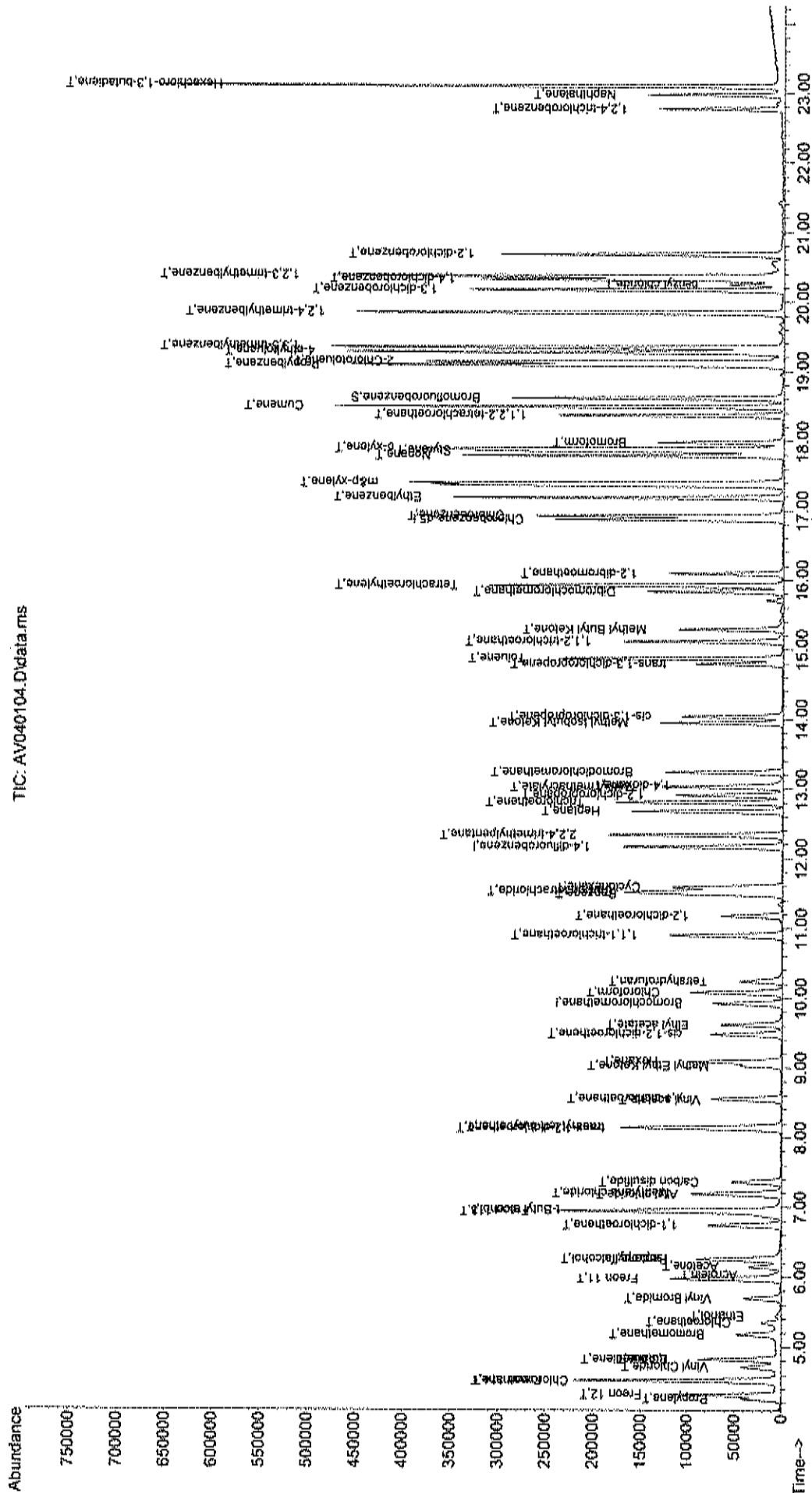
Quant Time: Apr 01 14:23:00 2024
 Quant Method : C:\msdchem\1\methods\A325_1UG.M
 Quant Title : TO-15 VOA Standards for 5 point calibration
 QLast Update : Tue Mar 26 09:11:14 2024
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) 1,2-dichloropropane	12.909	63	53363	0.95	ppb	99
46) Bromodichloromethane	13.238	83	118029	1.28	ppb	99
47) cis-1,3-dichloropropene	14.037	75	87819	1.03	ppb	95
48) trans-1,3-dichloropropene	14.791	75	74066	0.97	ppb	99
49) 1,1,2-trichloroethane	15.114	97	72127	1.00	ppb	99
51) Toluene	14.871	92	139748	0.97	ppb	95
52) Methyl Isobutyl Ketone	13.946	43	101839	0.94	ppb	93
53) Dibromochloromethane	15.829	129	114387	1.44	ppb	94
54) Methyl Butyl Ketone	15.284	43	90793	0.94	ppb	94
55) 1,2-dibromoethane	16.090	107	113838	1.07	ppb	99
56) Tetrachloroethylene	15.919	164	96811	1.00	ppb	100
57) Chlorobenzene	16.923	112	202658	1.01	ppb	100
58) Ethylbenzene	17.184	91	339306	1.02	ppb	97
59) m&p-xylene	17.394	91	555712	2.04	ppb	99
60) Nonane	17.790	43	125034	0.95	ppb	92
61) Styrene	17.858	104	210994	1.00	ppb	90
62) Bromoform	17.978	173	88405	1.45	ppb	95
63) o-xylene	17.893	91	301264	1.01	ppb	96
64) Cumene	18.494	105	424343	1.09	ppb	98
66) 1,1,2,2-tetrachloroethane	18.369	83	152553	1.10	ppb	92
67) Propylbenzene	19.089	120	116173	1.03	ppb	# 12
68) 2-Chlorotoluene	19.134	126	104474	1.01	ppb	# 1
69) 4-ethyltoluene	19.276	105	408083	1.04	ppb	99
70) 1,3,5-trimethylbenzene	19.344	105	360612	1.01	ppb	99
71) 1,2,4-trimethylbenzene	19.837	105	356957	1.05	ppb	97
72) 1,3-dichlorobenzene	20.166	146	199871	1.06	ppb	95
73) benzyl chloride	20.245	91	56931	0.78	ppb	99
74) 1,4-dichlorobenzene	20.319	146	193125	1.07	ppb	96
75) 1,2,3-trimethylbenzene	20.365	105	373006	1.06	ppb	99
76) 1,2-dichlorobenzene	20.676	146	177846	1.00	ppb	97
77) 1,2,4-trichlorobenzene	22.763	180	51823	1.00	ppb	94
78) Naphthalene	22.967	128	146154	1.08	ppb	99
79) Hexachloro-1,3-butadiene	23.092	225	141863	1.10	ppb	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\
Data File : AV040104.D
Acq On : 1 Apr 2024 1:22 pm
Operator : DA
Sample : ALC51UGD-040124
Misc : A325 1UG
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 01 14:23:00 2024
Quant Method : C:\msdchem\1\methods\A325_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Mar 26 09:11:14 2024
Response via : Initial Calibration



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INJECTION LOG

Instrument # MSD #6
 Internal Standard Stock # A-6276
 Standard Stock # A-6277
 LCS Stock # A-6278
 Method Ref: EPA TO-15 / Jan. 1999

2403038-001A 10X	A318_1UG	17	1.000	22 Mar 2024	9:47 pm

216) AV032218.D					
2403038-003A 10X	A318_1UG	18	1.000	22 Mar 2024	10:30 pm

217) AV032219.D					
2403038-003A 40X	A318_1UG	19	1.000	22 Mar 2024	11:12 pm

218) AV032220.D					
2403038-004A 9X	A318_1UG	20	1.000	22 Mar 2024	11:56 pm

219) AV032221.D					
2403038-004A 90X	A318_1UG	21	1.000	23 Mar 2024	12:39 am

220) AV032222.D					
2403038-006A 10X	A318_1UG	22	1.000	23 Mar 2024	1:21 am

221) AV032223.D					
2403038-006A 40X	A318_1UG	23	1.000	23 Mar 2024	2:03 am

222) AV032224.D					
2403038-007A 10X	A318_1UG	23	1.000	23 Mar 2024	2:46 am

223) AV032225.D					
2403038-008A 10X	A318_1UG	24	1.000	23 Mar 2024	3:29 am

224) AV032226.D					
2403038-009A 10X	A318_1UG	25	1.000	23 Mar 2024	4:12 am

225) AV032227.D					
2403038-010A 10X	A318_1UG	26	1.000	23 Mar 2024	4:54 am

226) AV032228.D					
2403038-011A 10X	A318_1UG	27	1.000	23 Mar 2024	5:37 am

227) AV032229.D					
2403038-012A 10X	A318_1UG	28	1.000	23 Mar 2024	6:20 am

228) AV032230.D					
2403038-013A 10X	A318_1UG	29	1.000	23 Mar 2024	7:03 am

229) AV032231.D					
2403037	A318_1UG-001A 10X	30	1.000	23 Mar 2024	7:45 am

230) AV032232.D					
2403037	A318_1UG-003A 10X	31	1.000	23 Mar 2024	8:28 am

231) AV032501.D					
BFB1UG	A318_1UG	1	1.000	25 Mar 2024	8:31 am

232) AV032502.D					
A1UG	A318_1UG	2	1.000	25 Mar 2024	9:27 am

233) AV032503.D					
A1UG	A318_1UG	3	1.000	25 Mar 2024	10:38 am

234) AV032504.D					
A1UG	A318_1UG	4	1.000	25 Mar 2024	12:17 pm

235) AV032505.D					
BFB1UG	A318_1UG	5	1.000	25 Mar 2024	1:43 pm

236) AV032506.D					
A1UG_3.0	A318_1UG	6	1.000	25 Mar 2024	2:54 pm

Instrument # MSD #6
 Internal Standard Stock # A-6276
 Standard Stock # A-6277
 LCS Stock # A-6278
 Method Ref: EPA TO-15 / Jan. 1999

237) AV032507.D	A318_1UG	7	1.000	25 Mar 2024	3:42 pm
238) AV032508.D	A318_1UG	8	1.000	25 Mar 2024	4:40 pm
239) AV032509.D	A318_1UG	9	1.000	25 Mar 2024	5:25 pm
240) AV032510.D	A318_1UG	10	1.000	25 Mar 2024	6:09 pm
241) AV032511.D	A318_1UG	11	1.000	25 Mar 2024	6:53 pm
242) AV032512.D	A318_1UG	12	1.000	25 Mar 2024	7:35 pm
243) AV032513.D	A318_1UG	13	1.000	25 Mar 2024	8:16 pm
244) AV032514.D	A318_1UG	14	1.000	25 Mar 2024	8:59 pm
245) AV032515.D	A318_1UG	15	1.000	25 Mar 2024	9:41 pm
246) AV032516.D	A318_1UG	16	1.000	25 Mar 2024	10:23 pm
247) AV032517.D	A318_1UG	17	1.000	25 Mar 2024	11:05 pm
248) AV032518.D	A325_1UG	18	1.000	25 Mar 2024	11:44 pm
249) AV032519.D	A325_1UG	19	1.000	26 Mar 2024	12:28 am
250) AV032520.D	A325_1UG	20	1.000	26 Mar 2024	1:12 am
251) AV032521.D	A325_1UG	21	1.000	26 Mar 2024	1:56 am
252) AV032522.D	A325_1UG	22	1.000	26 Mar 2024	2:40 am
253) AV032523.D	A325_1UG	23	1.000	26 Mar 2024	3:24 am
254) AV032524.D	A325_1UG	24	1.000	26 Mar 2024	4:08 am
255) AV032525.D	A325_1UG	25	1.000	26 Mar 2024	4:52 am
256) AV032526.D	A325_1UG	26	1.000	26 Mar 2024	5:36 am
257) AV032527.D	A325_1UG	27	1.000	26 Mar 2024	6:20 am
258) AV032601.D	A325_1UG	1	1.000	26 Mar 2024	8:40 am

Injection Log

Data Directory: C:\msdchem\1\data\

Instrument # MSD 6
 Internal Standard Stock # A6289
 Standard Stock # A6290
 LCS Stock # A6291
 Method Ref: EPA TO-15 / Jan. 1999

SampleName	MiscInfo	Vial	Multiplier	Injection Time
1) AV040133.D				
No data found			0.000	N/A
2) AV041003.D				
No data found			0.000	N/A
3) evaldemo.d				
demoscan sample	10 ng per component	1	1.000	7 Sep 1989 1:59 pm
4) AV040101.D				
BFB1UG	A325_1UG	1	1.000	1 Apr 2024 10:56 am
5) AV040102.D				
A1UG_1.0	A325_1UG	1	1.000	1 Apr 2024 11:51 am
6) AV040103.D				
ALCS1UG-040124	A325_1UG	2	1.000	1 Apr 2024 12:38 pm
7) AV040104.D				
ALCS1UGD-040124	A325_1UG	3	1.000	1 Apr 2024 1:22 pm
8) AV040105.D				
AMB1UG-040124	A325_1UG	4	1.000	1 Apr 2024 2:01 pm
9) AV040106.D				
WAC040124A	A325_1UG	1	1.000	1 Apr 2024 2:50 pm
10) AV040107.D				
WAC040124B	A325_1UG	2	1.000	1 Apr 2024 3:34 pm
11) AV040108.D				
WAC040124C	A325_1UG	3	1.000	1 Apr 2024 4:18 pm
12) AV040109.D				
WAC040124D	A325_1UG	4	1.000	1 Apr 2024 5:02 pm
13) AV040110.D				
WAC040124E	A325_1UG	5	1.000	1 Apr 2024 5:46 pm
14) AV040111.D				
WAC040124F	A325_1UG	6	1.000	1 Apr 2024 6:30 pm
15) AV040112.D				
2404002-002A	A325_1UG	7	1.000	1 Apr 2024 7:14 pm
16) AV040113.D				
2404002-004A	A325_1UG	8	1.000	1 Apr 2024 7:59 pm
17) AV040114.D				
2404002-005A	A325_1UG	9	1.000	1 Apr 2024 8:43 pm
18) AV040115.D				
2404002-001A	A325_1UG	10	1.000	1 Apr 2024 9:27 pm
19) AV040116.D				
2404002-003A	A325_1UG	11	1.000	1 Apr 2024 10:12 pm
20) AV040117.D				
2404001-001A	A325_1UG	12	1.000	1 Apr 2024 10:56 pm
21) AV040118.D				

Instrument ID: MSD6
 Internal Operator Stock # A 6289
 Operator Stock # A 6290
 LMS Stock # A 6291
 Method Ref: EPA 10-15 / Rev. 1009

2404002-002A	10x	A325_1UG	13	1.000	1 Apr 2024	11:39 pm

22) AV040119.D						
2404002-002A	40x	A325_1UG	14	1.000	2 Apr 2024	12:21 am

23) AV040120.D						
2404002-004A	10x	A325_1UG	15	1.000	2 Apr 2024	1:04 am

24) AV040121.D						
2404002-004A	40x	A325_1UG	16	1.000	2 Apr 2024	1:46 am

25) AV040122.D						
2404002-005A	10x	A325_1UG	17	1.000	2 Apr 2024	2:28 am

26) AV040123.D						
2404002-001A	10x	A325_1UG	19	1.000	2 Apr 2024	3:13 am

27) AV040124.D						
2404002-003A	10x	A325_1UG	21	1.000	2 Apr 2024	3:56 am

28) AV040125.D						
2404001-001A	10x	A325_1UG	23	1.000	2 Apr 2024	4:39 am

29) AV040126.D						
2404001-001A	540x	A325_1UG	24	1.000	2 Apr 2024	5:21 am

30) AV040127.D						
2404001-001A	2916x	A325_1UG	25	1.000	2 Apr 2024	6:11 am

31) AV040128.D						
2404001-001A	7290x	A325_1UG	26	1.000	2 Apr 2024	7:05 am

32) AV040129.D						
WAC040124G		A325_1UG	27	1.000	2 Apr 2024	7:52 am

33) AV040130.D						
WAC040124H N		A325_1UG	28	1.000	2 Apr 2024	8:36 am

34) AV040131.D						
WAC040124I N		A325_1UG	29	1.000	2 Apr 2024	9:20 am

35) AV040132.D						
WAC040124J		A325_1UG	30	1.000	2 Apr 2024	10:04 am

36) AV040201.D						
BFB1UG		A325_1UG	1	1.000	2 Apr 2024	11:02 am

37) AV040202.D						
ALUG_1.0		A325_1UG	2	1.000	2 Apr 2024	11:57 am

38) AV040203.D						
ALCS1UG-040224		A325_1UG	3	1.000	2 Apr 2024	12:51 pm

39) AV040204.D						
ALCS1UGD-040224		A325_1UG	4	1.000	2 Apr 2024	1:35 pm

40) AV040205.D						
AMB1UG		A325_1UG	5	1.000	2 Apr 2024	2:18 pm

41) AV040206.D						
AMB1UG-040224		A325_1UG	6	1.000	2 Apr 2024	2:58 pm

42) AV040207.D						
2404009-001A		A325_1UG	6	1.000	2 Apr 2024	3:42 pm

43) AV040208.D						
2404009-002A		A325_1UG	7	1.000	2 Apr 2024	4:26 pm

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS LOG

Centek Laboratories, LLC

GC/MS Calibration Standards Logbook

Std #	Date Prep	Date Exp	Description	Stock #	Stock Conc	Initial Vol (psig)	Final Vol (psia)	Final Conc (ppb)	Prep by	Chkd by
A-6246	3/6/24	3/13/24	TO15	H2S50	A6245	500ppb	3.0	30	50	LL
A-6247			TO15	IUG IS	A6237	50ppb	0.9	45		
A-6248			STD	A6238						
A-6249			LCS	A6239						
A-6250	3/13/24	3/20/24	TO15	IS	A5617	1ppm	1.5	30	50	LL
A-6251			STD	A5644						
A-6252			LCS	A5645						
A-6253			4PCH	A5934	0.774ppm	1.94	30	50		
A-6254			4RCH	A6253	50ppb	3.0	30	5		
A-6255			FORM	A6176	10.6ppm	0.21	45	50		
A-6256			STLOX	A5356	443ppb	3.8	30	50		
A-6257			SULF	A5790	1ppm	1.5	30	50		
A-6258			H2S	A5685	10ppm	1.5	30	500		
A-6259			H2S50	A6258	500ppb	3.0	30	50		
A-6260			TO15	IUG IS	A6250	50ppb	0.9	45		
A-6261			STD	A6251						
A-6262			LCS	A6252						
A-6263	3/19/24	3/19/25	TRIMETHYL SILANOL	16-42055A24-1	AIR GAS	2015psig		0.407ppm	WLD	
A-6264	3/13/24	3/13/25	TO-15	Lot #	160-40271546-1	AIR GAS	2216psig	1.0ppm	LL	
A-6265	3/20/24	3/20/25	TO-15	LCS	A5644	1ppm	A5644 IS NOW	LCS	LL	
A-6266	3/20/24	3/27/24	TO15	IS	A5617	1ppm	1.5	30	50	LL

FORM 153

GC/MS Calibration Standards Logbook

Centek Laboratories, LLC

Std #	Date Prep	Date Exp	Description	Stock #	Stock Conc	Initial Vol (psig)	Final Vol (psia)	Final Conc (ppb)	Prep by	Chkd by
A-62667	3/20/24	3/27/24	TO15	STD	AG264	1 ppm	1.5	30	50	LL
A-62668			LCS	AG265	↓	↓	↓	↓		
A-62669			4PCH	A5934	0.774 ppm	1.94	30	50		
A-6270			4PCH	A6269	50 ppb	3.0	30	5		
A-6271			FORM	AG176	10.65 ppm	0.21	45	50		
A-6272			STLOX	A5356	493 ppb	3.0	30	50		
A-6273			SULF	A5790	1 ppm	1.5	30	50		
A-6274			H2S	10 ppm	A5685	1.5	30	500		
A-6275			↓	H2S	AG274	500 ppb	3.0	50		
A-6276			TO15	UGIS	AG266	50 ppb	0.9	45		
A-6277			STD	AG267	↓	↓	↓	↓		
A-6278			LCS	AG268	↓	↓	↓	↓		
A-6279	3/27/24	4/3/24	TO15	IS	A5617	1 ppm	1.5	30	50	LL
A-6280			STD	AG264	↓	↓	↓	↓		
A-6281			LCS	AG265	↓	↓	↓	↓		
A-6282			4PCH	A5934	0.774 ppm	1.94	30	50		
A-6283			4PCH	A6282	50 ppb	3.0	30	5		
A-6284			FORM	AG176	10.65 ppm	0.21	45	50		
A-6285			STLOX	AG266	500 ppb	3.0	30	50		
A-6286			SULF	A5790	1 ppm	1.5	30	50		
A-6287			H2S	A5685	10 ppm	1.5	30	500		

FORM 153

Page # 59

Centek Laboratories, LLC

GC/MS Calibration Standards Logbook

Std #	Date Prep	Date Exp	Description	Stock #	Stock Conc	Initial Vol (psig)	Final Vol (psia)	Final Conc (ppb)	Prep by	Chkd by
A-6288	3/27/24	4/3/24	TO15 H2S50	A6287	500ppb	3.0	30	50	LL	
A-6289			TO15 IUG IS	A6279	50ppb	0.9	45			
A-6290			STD	A6280						
A-6291			LCS	A6281						
A-6292	4/3/24	4/10/24	TO15 IS	A5617	1ppm	1.5	30	50	LL	
A-6293			STD	A6264						
A-6294			LCS	A6265						
A-6295			HPCH	A5934	0.774ppm	1.94	30	50		
A-6296			HPCH	A6295	50ppb	3.0	30	5		
A-6297			FORM	A6176	10.65ppm	0.21	45	50		
A-6298			STD	A6066	500ppb	3.0	30	50		
A-6299			SULF	A5790	407ppb	3.7	30	50		
A-6300			H2S	A5685	1ppm	1.5	30	50		
A-6301			H2S50	A6300	10ppm	1.5	30	500		
A-6302			TO15 IUG IS	A6292	500ppb	3.0	30	50		
A-6303			STD	A6293	50ppb	0.9	45			
A-6304			LCS	A6294						
A-6305										
A-6306										
A-6307										
A-6308										

FORM 153

GC/MS Calibration Standards Logbook

Centek Laboratories, LLC

Std #	Date Prep	Date Exp	Description	Stock #	Stock Conc	Initial Vol (psig)	Final Vol (psia)	Final Conc (ppb)	Prep by	Chkd by
A-5602	3/28/23	4/4/23	TO15 10g STD	A5592	50 ppb	0.5	45	1	WD	
A-5603	↓	↓	↓	A5593	↓	↓	↓	↓	↓	
A-5604	4/4/23	4/11/23	TO15 IS	A4946	1 ppm	1.5	30	50	WD	
A-5605	↓	↓	↓	A4947	↓	↓	↓	↓	↓	
A-5606	↓	↓	↓	A4948	↓	↓	↓	↓	↓	
A-5607	↓	↓	4PCH	A3992	1.025 ppm	1.47	30	50	↓	
A-5608	↓	↓	4PCHS	A5607	50 ppb	3.0	30	5	↓	
A-5609	↓	↓	Fullm	A5355	11.5 ppm	0.20	45	50	↓	
A-5610	↓	↓	SILUX	A5356 A2623	403 ppb 500 ppb	3.0 3.0	30	50	↓	
A-5611	↓	↓	SULF	A5053	1 ppm	1.5	30	50	↓	
A-5612	↓	↓	H2S	A5054	8.05 ppm	1.87	30	500	↓	
A-5613	↓	↓	↓	A5612	500 ppb	3.0	30	50	↓	
A-5614	↓	↓	TO15 14g IS	A5604	50 ppb	0.9	45	1	↓	
A-5615	↓	↓	↓	A5605	↓	↓	↓	↓	↓	
A-5616	↓	↓	↓	A5606	↓	↓	↓	↓	↓	
A-5617	4/5/23	3/30/25	TO15 IS	FF-10088	AIR GAS	2217 psia		1.0 ppm	WD	
A-5618	4/12/23	4/11/23	TO15 IS	A5617	1 ppm	1.5	30	50	WD	
A-5619	↓	↓	↓	A4947	↓	↓	↓	↓	↓	
A-5620	↓	↓	↓	A4948	↓	↓	↓	↓	↓	
A-5621	↓	↓	4PCH	A3922	1.025 ppm	1.47	30	50	↓	
A-5622	↓	↓	4PCHS	A5621	50 ppb	3.0	30	5	↓	

FORM 153

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CANISTER CLEANING LOG



Certificate of Analysis

ADDRESS
SanAir Technologies DBA Centek Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
FAX:
Website: www.CentekLabs.us

Batch ID: 84 **Start Date:** 2/13/2024 9:00:00 AM **End Date:** 2/15/2024 9:29:30 AM
Comment: 1ug/m3 +0.20

Cleaning Batch Members:

Canister ID	BarcodeID	Canister Type	Volume (Liters)	QC WAC Number	# of Cycles	LeakInt	LeakEnd
1L Mini-Can - 1250 VI - 1183	1183	1L ppt VI	1	WAC021424A,B,C, D,EA	20	+30 "Hg	+30 "Hg
1 L Mini-Can - 0108 VI - 1318	1318	1L ppt VI	1	WAC021424A,B,C, D,EA	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1090 VI - 0089	89	1L ppt VI	1	WAC021424A,B,C, D,EA	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1128 VI - 0158	158	1L ppt VI	1	WAC021424A,B,C, D,EA	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1234 VI - 1173	1173	1L ppt VI	1	WAC021424A,B,C, D,EAQC	20	+30 "Hg	+30 "Hg
1L Mini-Can - 130 VI - 0561	561	1L ppt VI	1	WAC021424A,B,C, D,EB	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1173 VI - 0241	241	1L ppt VI	1	WAC021424A,B,C, D,EB	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1288 VI - 0325	325	1L ppt VI	1	WAC021424A,B,C, D,EB	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1087 VI - 0095	95	1L ppt VI	1	WAC021424A,B,C, D,EB	20	+30 "Hg	+30 "Hg
1 L Mini-Can - 1289 VI - 1289	1289	1L ppt VI	1	WAC021424A,B,C, D,EBQC	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1185 VI - 0223	223	1L ppt VI	1	WAC021424A,B,C, D,EC	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1054 VI - 1545	1545	1L ppt VI	1	WAC021424A,B,C, D,EC	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1082 VI - 0133	133	1L ppt VI	1	WAC021424A,B,C, D,EC	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1299 VI - 0336	336	1L ppt VI	1	WAC021424A,B,C, D,EC	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1296 VI - 0333	333	1L ppt VI	1	WAC021424A,B,C, D,ECQC	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1167 VI - 0236	236	1L ppt VI	1	WAC021424A,B,C, D,ED	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1160 VI - 0205	205	1L ppt VI	1	WAC021424A,B,C, D,ED	20	+30 "Hg	+30 "Hg

Canister ID	BarcodeID	Canister Type	Volume (Liters)	QC WAC Number	# of Cycles	LeakInt	LeakEnd
1L Mini-Can - 1107 VI - 0088	88	1L ppt VI	1	WAC021424A,B,C, D,ED	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1162 VI - 0207	207	1L ppt VI	1	WAC021424A,B,C, D,ED	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1252 VI - 1174	1174	1L ppt VI	1	WAC021424A,B,C, D,EDQC	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1261 VI - 1187	1187	1L ppt VI	1	WAC021424A,B,C, D,EE	20	+30 "Hg	+30 "Hg
1L Mini-Can - 138 VI - 0567	567	1L ppt VI	1	WAC021424A,B,C, D,EE	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1368 VI - 0471	471	1L ppt VI	1	WAC021424A,B,C, D,EE	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1175 VI - 0243	243	1L ppt VI	1	WAC021424A,B,C, D,EE	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1098 VI - 0085	85	1L ppt VI	1	WAC021424A,B,C, D,EEQC	20	+30 "Hg	+30 "Hg

Sincerely,



Derek Arneson
Chemist



ADDRESS
SanAir Technologies DBA Centek Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
FAX:
Website: www.CentekLabs.us

Certificate of Analysis

Batch ID: 85 **Start Date:** 2/14/2024 9:30:00 AM **End Date:** 2/15/2024 9:47:30 AM
Comment: fug/m3 +0.20

Cleaning Batch Members:

Canister ID	BarcodeID	Canister Type	Volume (Liters)	QC WAC Number	# of Cycles	LeakInt	LeakEnd
1L Mini-Can - 1264 VI - 0288	288	1L ppt VI	1	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1132 VI - 0162	162	1L ppt VI	1	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1381 VI - 0479	479	1L ppt VI	1	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1319 VI - 0370	370	1L ppt VI	1	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1349 VI - 0422	422	1L ppt VI	1	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1168 VI - 0237	237	1L ppt VI	1	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1L Mini-Can - 112 VI - 0544	544	1L ppt VI	1	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1141 VI - 0170	170	1L ppt VI	1	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1109 VI - 0093	93	1L ppt VI	1	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1L Mini-Can - 1174 VI - 0242	242	1L ppt VI	1	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1.4L Mini-Can - 1121 VI - 0215	215	1.4L ppt VI	1.4	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1.4L Mini-Can - 1364 VI - 0482	482	1.4L ppt VI	1.4	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1.4L Mini-Can - 1107 VI - 1202	1202	1.4L ppt VI	1.4	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1.4L Mini-Can - 1355 VI - 1200	1200	1.4L ppt VI	1.4	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1.4L Mini-Can - 1124 VI - 0218	218	1.4L ppt VI	1.4	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1.4L Mini-Can - 0238 VI - 1319	1319	1.4L ppt VI	1.4	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg
1.4L Mini-Can - 1371 VI - 1198	1198	1.4L ppt VI	1.4	WAC021424I,J,K,L	20	+30 "Hg	+30 "Hg

Canister ID	BarcodeID	Canister Type	Volume (Liters)	QC WAC Number	# of Cycles	LeakIn	LeakEnd
1.4L Mini-Can - 1056 VI - 1205	1205	1.4L ppt VI	1.4	WAC021424 J,K,L	20	+30 "Hg	+30 "Hg
1.4L Mini-Can - 1370 VI - 0487	487	1.4L ppt VI	1.4	WAC021424 J,K,L	20	+30 "Hg	+30 "Hg
1.4L Mini-Can - 0252 VI - 1321	1321	1.4L ppt VI	1.4	WAC021424 J,K,L	20	+30 "Hg	+30 "Hg
				LQC			

Sincerely,



Derek Aronson
Chemist

Data Path : C:\msdchem\1\data2\2 2024FEB\
Data File : AV021409.D
Acq On : 14 Feb 2024 3:31 pm
Operator : DA
Sample : WAC021424D
Misc : A212 1UG
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 07:51:47 2024
Quant Method : C:\msdchem\1\methods\A212 1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Feb 13 07:57:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.927	128	43918	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	277408	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	228257	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.613	95	141075	0.90	ppb	0.01
Spiked Amount	1.000	Range	70 - 130	Recovery	=	90.00%

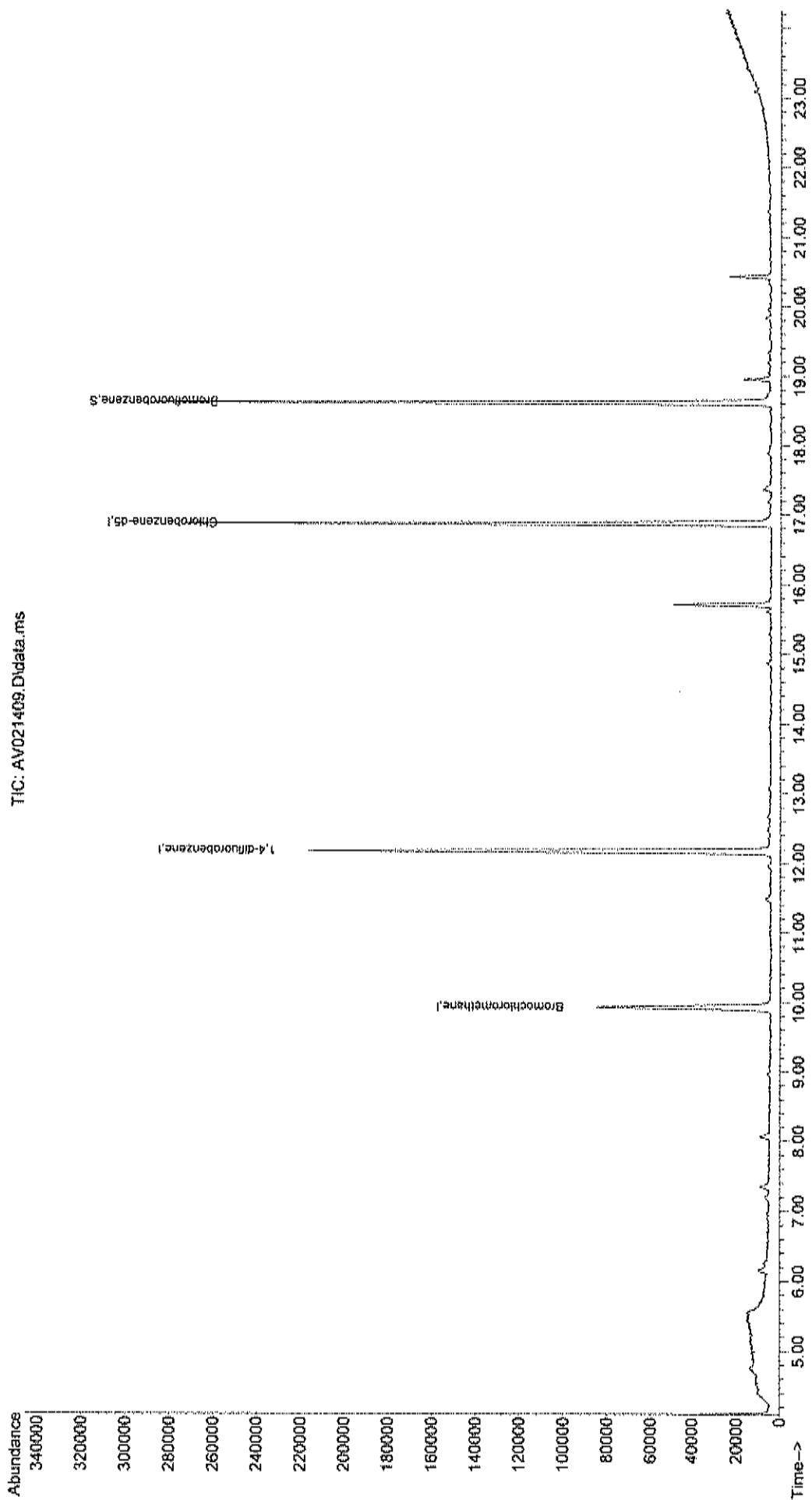
Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\2 2024FEB\
Data File : AV021409.D
Acq On : 14 Feb 2024 3:31 pm
Operator : DA
Sample : WAC021424D
Misc : A212_1UG
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 15 07:51:47 2024
Quant Method : C:\msdchem\1\methods\A212_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
Qlast Update : Tue Feb 13 07:57:33 2024
Response via : Initial Calibration



Data Path : C:\msdchem\1\data2\2 2024FEB\
Data File : AV021410.D
Acq On : 14 Feb 2024 4:15 pm
Operator : DA
Sample : WAC021424E
Misc : A212_1UG
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 15 07:51:50 2024
Quant Method : C:\msdchem\1\methods\A212_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Feb 13 07:57:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

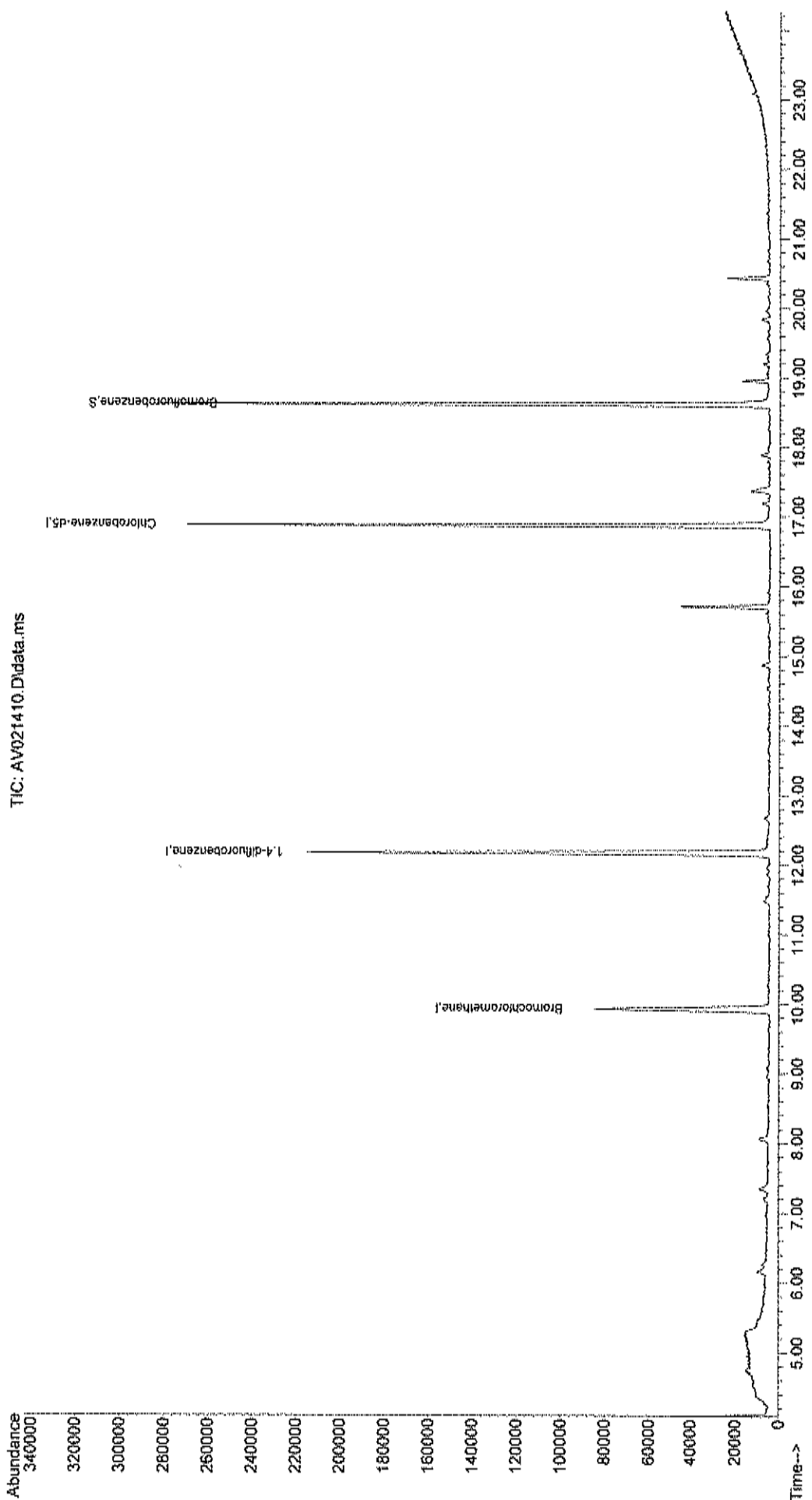
Internal Standards						
1) Bromochloromethane	9.927	128	44405	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	276497	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	224316	1.00	ppb	0.00
System Monitoring Compounds						
65) Bromofluorobenzene	18.613	95	138632	0.90	ppb	0.01
Spiked Amount	1.000	Range	70 - 130	Recovery	=	90.00%

Target Compounds	Qvalue
-----	-----

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\2 2024FEB\
Data File : AV021410.D
Acq On : 14 Feb 2024 4:15 pm
Operator : DA
Sample : WAC021424E
Misc : A212_1UG
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 15 07:51:50 2024
Quant Method : C:\msdchem\1\methods\A212_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Feb 13 07:57:33 2024
Response via : Initial Calibration



Data Path : C:\msdchem\1\data2\2 2024FEB\
Data File : AV021414.D
Acq On : 14 Feb 2024 7:11 pm
Operator : DA
Sample : WAC021424I
Misc : A212_1UG
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 15 07:52:02 2024
Quant Method : C:\msdchem\1\methods\A212_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Feb 13 07:57:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.927	128	44836	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.172	114	280700	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	227345	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.613	95	137304	0.87	ppb	0.01
Spiked Amount	1.000	Range	70 ~ 130	Recovery	=	87.00%

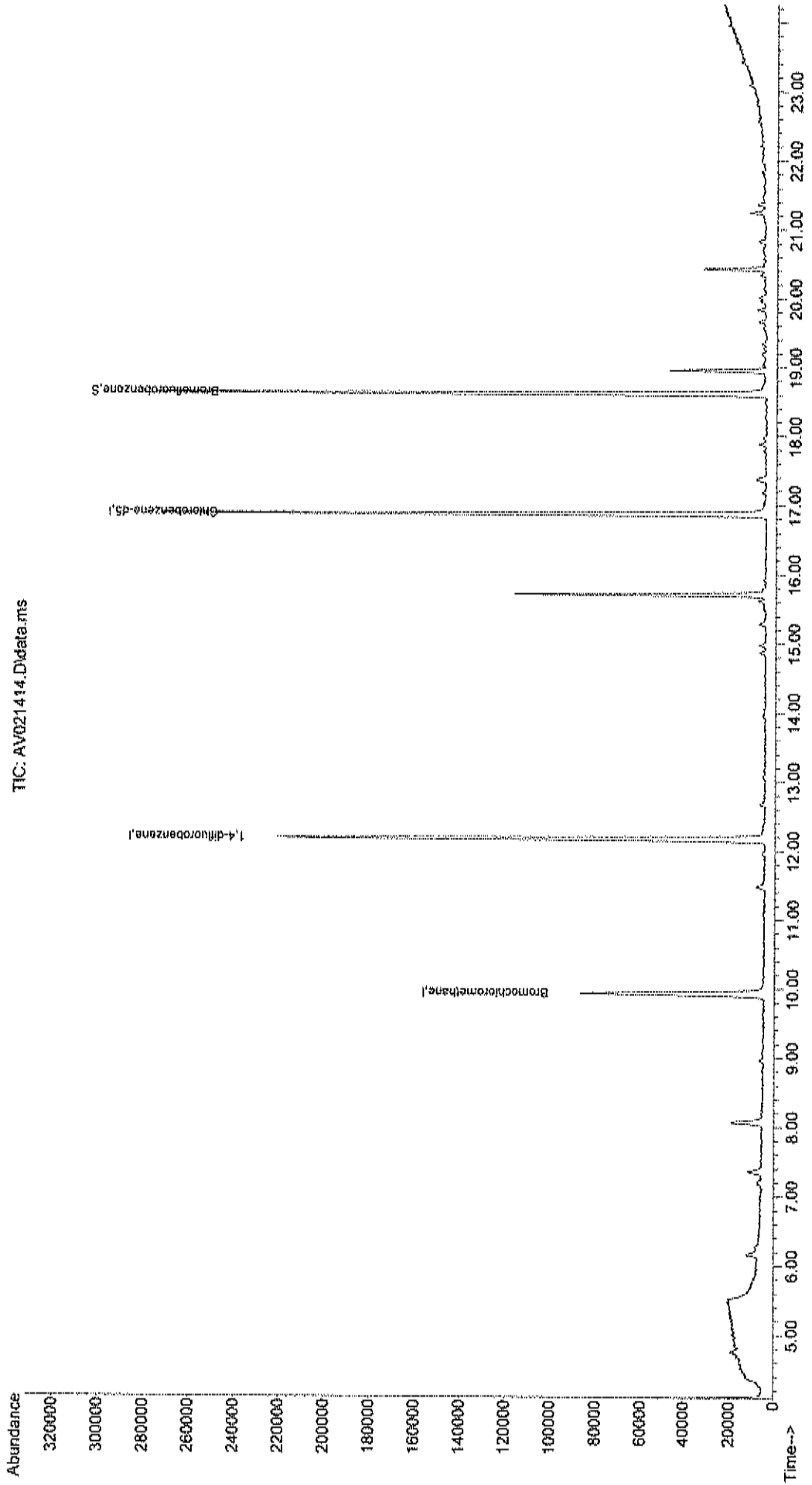
Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\2 2024FEB\
Data File : AV021414.D
Acq On : 14 Feb 2024 7:11 pm
Operator : DA
Sample : WAC021424I
Misc : A212_1UG
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 15 07:52:02 2024
Quant Method : C:\msdchem\1\methods\A212_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Feb 13 07:57:33 2024
Response via : Initial Calibration



Data Path : C:\msdchem\1\data2\2 2024FEB\
Data File : AV021415.D
Acq On : 14 Feb 2024 7:55 pm
Operator : DA
Sample : WAC021424J
Misc : A212_1UG
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 15 07:52:04 2024
Quant Method : C:\msdchem\1\methods\A212_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Feb 13 07:57:33 2024
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	9.921	128	44969	1.00	ppb	# 0.00
35) 1,4-difluorobenzene	12.166	114	282713	1.00	ppb	0.00
50) Chlorobenzene-d5	16.866	117	231426	1.00	ppb	0.00

System Monitoring Compounds

65) Bromofluorobenzene	18.612	95	145138	0.91	ppb	0.01
Spiked Amount	1.000	Range	70 - 130	Recovery	=	91.00%

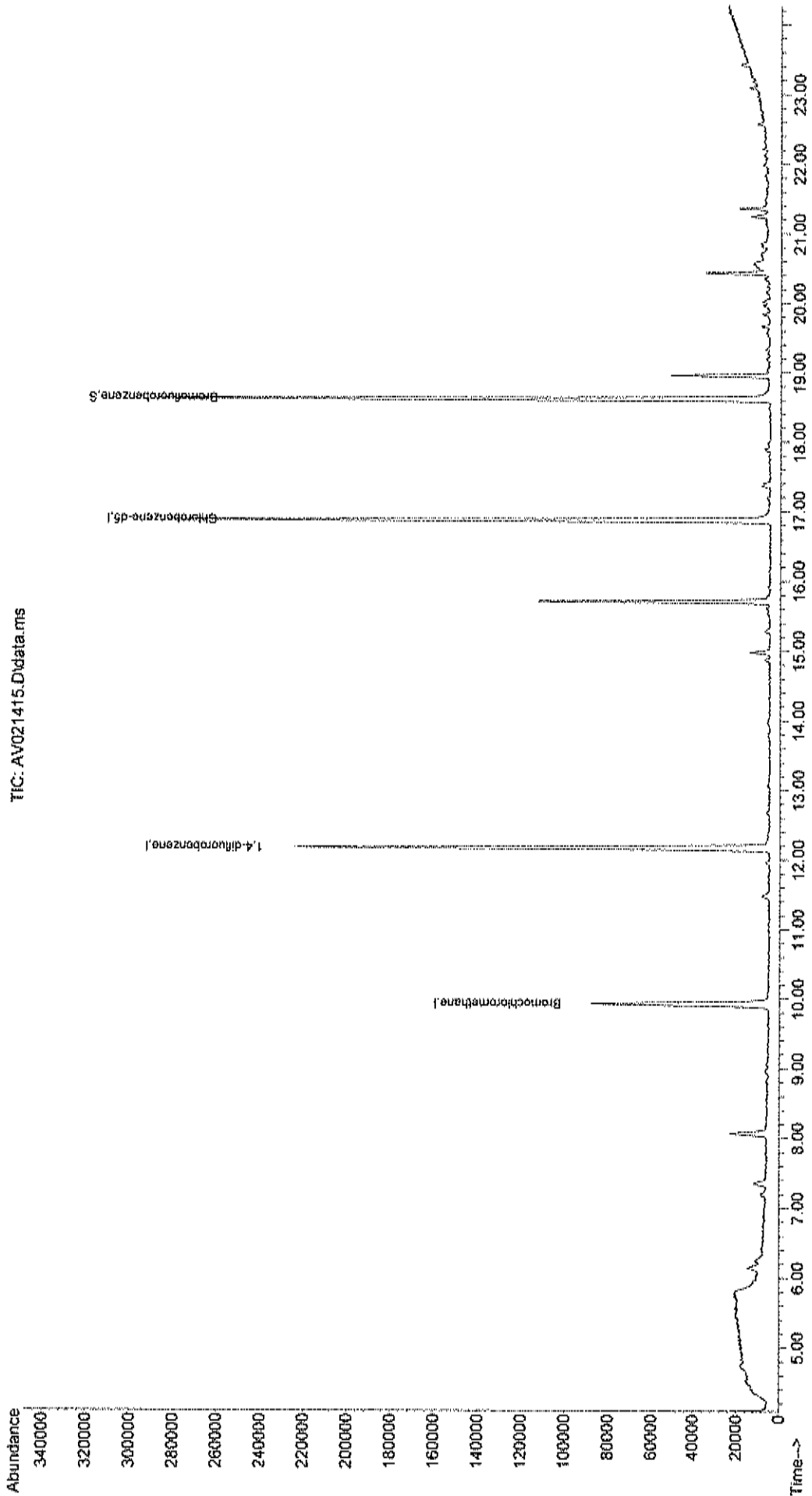
Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data2\2 2024FEB\
Data File : AV021415.D
Acq On : 14 Feb 2024 7:55 pm
Operator : DA
Sample : WAC021424J
Misc : A212_1UG
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Feb 15 07:52:04 2024
Quant Method : C:\msdchem\1\methods\A212_1UG.M
Quant Title : TO-15 VOA Standards for 5 point calibration
QLast Update : Tue Feb 13 07:57:33 2024
Response via : Initial Calibration



Appendix A

Validated Analytical Results

DATA USABILITY SUMMARY REPORT (DUSR)

**240-260 Lakefront Blvd
Building B SVI Sampling
Buffalo, NY**

SDG: L2371495
5 Air Samples

Prepared for:

**C&S Companies
141 Elm Street, Suite 100
Buffalo, NY 14203
Attention: Cody Martin**

June 2024



Environmental Data Usability 10028 Deer Park Dr. Dansville, NY 14437 585-991-9156

Table of Contents

	<u>Page No.</u>
REVIEWER'S NARRATIVE	
1.0 SUMMARY	1
2.0 INTRODUCTION	1
3.0 SAMPLE AND ANALYSIS SUMMARY	2
4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA	2
5.0 DATA VALIDATION QUALIFIERS	3
6.0 RESULTS OF THE DATA REVIEW	4
7.0 TOTAL USABLE DATA	4

APPENDIX A	Validated Analytical Results
APPENDIX B	Laboratory QC Documentation
APPENDIX C	Validator Qualifications

Tables

Table 4-1	Data Validation Guidance Documents
Table 4-2	Quality Control Criteria for Validating Laboratory Analytical Data

Summaries of Validated Results

Table 6-1	TO-15
Table 6-2	TO-15-SIM

REVIEWER'S NARRATIVE

C&S Companies SDG L2371495 - 240-260 Lakefront Blvd

The data associated with this Sample Delivery Groups (SDG) L2371495, analyzed by Alpha Analytical, Westborough, MA have been reviewed in accordance with assessment criteria provided by the New York State Department of Environmental Conservation following the review procedures provided in the USEPA Functional Guidelines for evaluating organic and inorganic data.

All analytical results reported by the laboratory are considered valid and acceptable except results that have been qualified as rejected, "R". Results qualified as estimated "J", or as non-detects, "U", are considered usable for the purpose of evaluating water and/or soil quality. However, these qualifiers indicate that the accuracy and/or precision of the analytical result is questionable. A summary of all data that have been qualified and the reasons for qualification are provided in the following data usability summary report (DUSR).

Two facts should be noted by all data users. First, the "R" qualifier means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Values qualified with an "R" should not appear on the final data tables because they cannot be relied upon, even as the last resort. Second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

Reviewer's Signature: Michael K. Perry Date: 6/28/2024
Michael K. Perry
Chemist

1.0 EVENT SUMMARY

SITE: 240-260 Lakefront Blvd
Building B SVI Sampling
Buffalo, NY

SAMPLING DATES: December 05, 2023

SAMPLE TYPE: 5 air samples

LABORATORY: Alpha Analytical
Westborough, MA

SDG No.: SDG L2371495

2.0 INTRODUCTION

This data usability summary report (DUSR) was prepared in accordance with guidance provided by the New York State Department of Environmental Conservation (NYSDEC). The DUSR is based on a review and evaluation of the laboratory analytical data package. Specifically, the NYSDEC guidance recommends review and evaluation of the following elements of the data package:

- Completeness of the data package as defined under the requirements of the NYSDEC Analytical Services Protocols (ASP) Category B or the United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) deliverables,
- Compliance with established analyte holding times,
- Adherence to quality control (QC) limits and specifications for blanks, instrument tuning and calibration, surrogate recoveries, spike recoveries, laboratory duplicate analyses, and other QC criteria,
- Adherence to established analytical protocols,
- Conformance of data summary sheets with raw analytical data, and
- Use of correct data qualifiers.

Data deficiencies, analytical protocol deviations, and quality control problems identified using the review criteria above and their effect on the analytical results are discussed in this report.

3.0 SAMPLE AND ANALYSIS SUMMARY

The data package consists of analytical results for 5 air samples collected on December 05, 2023. These samples were analyzed for Volatile Organics by TO-15 and TO-15-SIM.

All laboratory analyses were submitted to Alpha Analytical, Westborough, MA and analyzed as SDG L2371495. The analytical results were provided in NYSDEC ASP Category B format, which includes all raw analytical data and laboratory QC data.

4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA

The guidance documents appropriate for reviewing laboratory quality control (QC) data and assigning data qualifiers (flags) to analytical results were selected from those listed in Table 4-1. The QC limits established in the documents applicable to this data review were used to assess the quality of the analytical results. In some cases, however, QC limits established internally by the laboratory were taken into account to determine data quality.

The QC criteria considered for assessing the usability of the reported analytical results provided for each analyte type (i.e. VOCs, SVOCs, metals, etc.) are listed in Table 4-2. These criteria may vary with the analytical method utilized by the laboratory. These criteria comply with the guidance recommended in Section 2.0 above.

5.0 DATA VALIDATION QUALIFIERS

The letter qualifiers (flags) used to define data usability are described briefly below. These letters are assigned by the data validator to analytical results having questionable accuracy and/or precision as determined by reviewing the laboratory QC data associated with the analytical results.

TABLE 4-1**Guidance Used For Validating Laboratory Analytical Data**

Analyte Group	Guidance	Date
Metals (ICP-AES)	USEPA SOP HW-3a, Rev. 1	September 2016
Metals (Hg & CN)	USEPA SOP HW-3c, Rev. 1	September 2016
Volatile Organic Compounds (by Methods 8260B & 8260C)	USEPA SOP HW-24, Rev. 4	September 2014
Semi-Volatile Organic Compounds (by Method 8270D)	USEPA SOP HW-22 Rev. 5	December 2010
Pesticides (by Method 8181B)	USEPA SOP HW-44, Rev. 1.1	December 2010
Chlorinated Herbicides (by Method 8151A)	USEPA SOP HW-17, Rev. 3.1	December 2010
Polychlorinated Biphenyls (PCBs)	USEPA SOP HW-37A, Rev. 0	June 2015
Volatile Organic Compounds (Air) (by Method TO-15)	USEPA SOP HW-31, Rev. 6	September 2016
Per- and PolyFluoroAlkyl Substances (PFAS)	* NYSDEC ** US Dept. of Defense	January 2021 November 2022
Radiological Analysis Uranium	USEPA Method 908.0	June 1999
Radium-226	USEPA Method 903.1	1980
General Chemistry Parameters	per NYSDEC ASP	July 2005

* Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, Appendix I

** Data Validation Guidelines Module 6: Data Validation Procedures for Per- and Polyfluoroalkyl Substances Analysis by QSM Table B-24

TABLE 4-2

**QUALITY CONTROL CRITERIA USED FOR VALIDATING
LABORATORY ANALYTICAL DATA**

VOCs	SVOCs	Pesticides/PCBs	Metals	Gen Chemistry	PFAS
Completeness of Pkg Sample Preservation Holding Time System Monitoring Compounds Lab Control Sample Matrix Spikes Blanks Instrument Tuning Internal Standards Initial Calibration Continuing Calibration Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Surrogate Recoveries Lab Control Sample Matrix Spikes Blanks Instrument Tuning Internal Standards Initial Calibration Continuing Calibration Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Surrogate Recoveries Matrix Spikes Blanks Instrument Calibration & Verification Comparison of duplicate GC column results Analyte ID Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Initial/Continuing Calibration CRDL Standards Blanks Interference Check Sample Spike Recoveries Lab Duplicate Lab Control Sample ICP Serial Dilutions Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Times Calibration Lab Control Samples Blanks Spike Recoveries Lab Duplicates	Completeness of Pkg Sample Preservation Holding Time Instr Performance Check Initial Calibration Continuing Calibration Blanks Surrogates Lab Fortified Blank Matrix Spikes Internal Standards

Method TO-15 (Air)	Radiological (U and Ra)
Completeness of Pkg Sample Preservation Holding Time Canister Certification Instrument Tuning Initial Calibration and Instrument Performance Daily Calibration Blanks Lab Control Sample Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Sample Specific Yield Required Detection Limit Laboratory Control Sample Matrix Spikes Method Blank Instrument Calibration

The laboratory may also use various letters and symbols to flag analytical results generated when QC limits were exceeded. The meanings of these flags may differ from those used by the independent data validator. Those used by the laboratory are provided with the analytical results.

NOTE: The assignment of data qualifiers by the data reviewer (validator) to laboratory analytical results should not necessarily be interpreted by the data user as a measure of laboratory ability or proficiency. Rather, the qualifiers are intended to provide a measure of data accuracy and precision to the data user, which, for example, may provide a level of confidence in determining whether or not standards or cleanup objectives have been met.

- U** The analyte was analyzed for but was not detected at or above the sample quantitation limit.
- J** The analyte was positively identified; the associated numerical value is the *approximate* concentration of the analyte in the sample. (The magnitude of any $\pm$ value associated with the result is not determined by data validation).
- J+** The result is an estimated quantity and may be biased high.
- J-** The result is an estimated quantity and may be biased low.
- UJ** The analyte was analyzed for but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R** The sample result is rejected (i.e., is unusable) due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- NJ** The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.

The validated analytical results are attached to this report. Validation qualifiers (flags) are indicated in red print. Data sheets having qualified data are signed and dated by the data reviewer.

6.0 RESULTS OF THE DATA REVIEW

The results of the data review are summarized in Tables 6-1 through 6-2. The tables list the samples where QC criteria were found to exceed acceptable limits and the actions taken to qualify the associated analytical results.

7.0 TOTAL USABLE DATA

For SDG L2371495, five samples were analyzed and results were reported for 320 analytes. Even though some results were flagged with a “J” as estimated, all results (100 %) are considered usable. See the summary table for the analyses that have been rejected and qualified and the associated QC reasons.

Note 1) The canister pressure upon receipt in the laboratory for samples 260-IA-01 and 256-SS-02 was “0”. The final pressure taken in the field after sampling was low enough (< 5 psi) that the canister integrity for proper preservation (pressure inside the canister maintained within +/- 5 psi from sampling to laboratory check in or analysis) that all data should be considered as estimated.

Table 6-1 TO-15

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
260-SS01 260-IA-01 256-SS-02 256-IA-02	Hexane	NJ detects	Relative intensity of characteristic ions not +/- 30 %	Compound is tentatively identified and results are estimated
260-IA-01 256-SS-02	All analytes	J detects UJ non-detects	Canister pressure could not be verified	Data are estimated

Table 6-2 TO-15-SIM

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
260-IA-01	All analytes	J detects UJ non-detects	Canister pressure could not be verified	Data are estimated

ACRONYMS

BSP	Blank Spike
CCAL	Continuing Calibration
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
%D	Percent Difference
ICAL	Initial Calibration
ICB	Initial Calibration Blank
IS	Internal Standard
LCS	Laboratory Control Sample
MS/MSD	Matrix Spike/Matrix Spike Duplicate
QA	Quality Assurance
QC	Quality Control
%R	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
%RSD	Percent Relative Standard Deviation
TAL	Target Analyte List (metals)
TCL	Target Compound List (organics)

DATA USABILITY SUMMARY REPORT (DUSR)

**240-260 Lakefront Blvd
Building B SVI Sampling
Buffalo, NY**

SDG: 2404002
5 Air Samples

Prepared for:

**C&S Companies
141 Elm Street, Suite 100
Buffalo, NY 14203
Attention: Cody Martin**

June 2024



Environmental Data Usability 10028 Deer Park Dr. Dansville, NY 14437 585-991-9156

Table of Contents

	<u>Page No.</u>
REVIEWER'S NARRATIVE	
1.0 SUMMARY	1
2.0 INTRODUCTION	1
3.0 SAMPLE AND ANALYSIS SUMMARY	2
4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA	2
5.0 DATA VALIDATION QUALIFIERS	3
6.0 RESULTS OF THE DATA REVIEW	4
7.0 TOTAL USABLE DATA	4

APPENDIX A	Validated Analytical Results
APPENDIX B	Laboratory QC Documentation
APPENDIX C	Validator Qualifications

Tables

Table 4-1	Data Validation Guidance Documents
Table 4-2	Quality Control Criteria for Validating Laboratory Analytical Data

Summaries of Validated Results

Table 6-1	TO-15
-----------	-------

REVIEWER'S NARRATIVE

C&S Companies SDG 2404002 - 240-260 Lakefront Blvd

The data associated with this Sample Delivery Groups (SDG) 2404002, analyzed by Centek Laboratoies, LLC, Syracuse, NY ave been reviewed in accordance with assessment criteria provided by the New York State Department of Environmental Conservation following the review procedures provided in the USEPA Functional Guidelines for evaluating organic and inorganic data.

All analytical results reported by the laboratory are considered valid and acceptable except results that have been qualified as rejected, "R". Results qualified as estimated "J", or as non-detects, "U", are considered usable for the purpose of evaluating water and/or soil quality. However, these qualifiers indicate that the accuracy and/or precision of the analytical result is questionable. A summary of all data that have been qualified and the reasons for qualification are provided in the following data usability summary report (DUSR).

Two facts should be noted by all data users. First, the "R" qualifier means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Values qualified with an "R" should not appear on the final data tables because they cannot be relied upon, even as the last resort. Second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

Reviewer's Signature: Michael K. Perry Date: 6/24/2024
Michael K. Perry
Chemist

1.0 EVENT SUMMARY

SITE: 240-260 Lakefront Blvd
Building B SVI Sampling
Buffalo, NY

SAMPLING DATES: March 29, 2024

SAMPLE TYPE: 5 air samples

LABORATORY: Centek Laboratories, LLC
Syracuse, NY 13206

SDG No.: SDG 2404002

2.0 INTRODUCTION

This data usability summary report (DUSR) was prepared in accordance with guidance provided by the New York State Department of Environmental Conservation (NYSDEC). The DUSR is based on a review and evaluation of the laboratory analytical data package. Specifically, the NYSDEC guidance recommends review and evaluation of the following elements of the data package:

- Completeness of the data package as defined under the requirements of the NYSDEC Analytical Services Protocols (ASP) Category B or the United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) deliverables,
- Compliance with established analyte holding times,
- Adherence to quality control (QC) limits and specifications for blanks, instrument tuning and calibration, surrogate recoveries, spike recoveries, laboratory duplicate analyses, and other QC criteria,
- Adherence to established analytical protocols,
- Conformance of data summary sheets with raw analytical data, and
- Use of correct data qualifiers.

Data deficiencies, analytical protocol deviations, and quality control problems identified using the review criteria above and their effect on the analytical results are discussed in this report.

3.0 SAMPLE AND ANALYSIS SUMMARY

The data package consists of analytical results for five air samples collected on March 29, 2024. These samples were analyzed for TO-15 Volatile Organic Compounds (VOCs).

All analyses were performed by Centek Laboratories, LLC, Syracuse, NY and analyzed as SDG 2404022. The analytical results were provided in NYSDEC ASP Category B format, which includes all raw analytical data and laboratory QC data.

4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA

The guidance documents appropriate for reviewing laboratory quality control (QC) data and assigning data qualifiers (flags) to analytical results were selected from those listed in Table 4-1. The QC limits established in the documents applicable to this data review were used to assess the quality of the analytical results. In some cases, however, QC limits established internally by the laboratory were taken into account to determine data quality.

The QC criteria considered for assessing the usability of the reported analytical results provided for each analyte type (i.e. VOCs, SVOCs, metals, etc.) are listed in Table 4-2. These criteria may vary with the analytical method utilized by the laboratory. These criteria comply with the guidance recommended in Section 2.0 above.

5.0 DATA VALIDATION QUALIFIERS

The letter qualifiers (flags) used to define data usability are described briefly below. These letters are assigned by the data validator to analytical results having questionable accuracy and/or precision as determined by reviewing the laboratory QC data associated with the analytical results.

TABLE 4-1

Guidance Used For Validating Laboratory Analytical Data

Analyte Group	Guidance	Date
Metals (ICP-AES)	USEPA SOP HW-3a, Rev. 1	September 2016
Metals (Hg & CN)	USEPA SOP HW-3c, Rev. 1	September 2016
Volatile Organic Compounds (by Methods 8260B & 8260C)	USEPA SOP HW-24, Rev. 4	September 2014
Semi-Volatile Organic Compounds (by Method 8270D)	USEPA SOP HW-22 Rev. 5	December 2010
Pesticides (by Method 8181B)	USEPA SOP HW-44, Rev. 1.1	December 2010
Chlorinated Herbicides (by Method 8151A)	USEPA SOP HW-17, Rev. 3.1	December 2010
Polychlorinated Biphenyls (PCBs)	USEPA SOP HW-37A, Rev. 0	June 2015
Volatile Organic Compounds (Air) (by Method TO-15)	USEPA SOP HW-31, Rev. 6	September 2016
Per- and PolyFluoroAlkyl Substances (PFAS)	* NYSDEC ** US Dept. of Defense	January 2021 November 2022
Radiological Analysis Uranium	USEPA Method 908.0	June 1999
Radium-226	USEPA Method 903.1	1980
General Chemistry Parameters	per NYSDEC ASP	July 2005

* Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, Appendix I

** Data Validation Guidelines Module 6: Data Validation Procedures for Per- and Polyfluoroalkyl Substances Analysis by QSM Table B-24

TABLE 4-2

**QUALITY CONTROL CRITERIA USED FOR VALIDATING
LABORATORY ANALYTICAL DATA**

VOCs	SVOCs	Pesticides/PCBs	Metals	Gen Chemistry	PFAS
Completeness of Pkg Sample Preservation Holding Time System Monitoring Compounds Lab Control Sample Matrix Spikes Blanks Instrument Tuning Internal Standards Initial Calibration Continuing Calibration Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Surrogate Recoveries Lab Control Sample Matrix Spikes Blanks Instrument Tuning Internal Standards Initial Calibration Continuing Calibration Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Surrogate Recoveries Matrix Spikes Blanks Instrument Calibration & Verification Comparison of duplicate GC column results Analyte ID Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Initial/Continuing Calibration CRDL Standards Blanks Interference Check Sample Spike Recoveries Lab Duplicate Lab Control Sample ICP Serial Dilutions Lab Qualifiers Field Duplicate	Completeness of Pkg Sample Preservation Holding Times Calibration Lab Control Samples Blanks Spike Recoveries Lab Duplicates	Completeness of Pkg Sample Preservation Holding Time Instr Performance Check Initial Calibration Continuing Calibration Blanks Surrogates Lab Fortified Blank Matrix Spikes Internal Standards

Method TO-15 (Air)	Radiological (U and Ra)
Completeness of Pkg Sample Preservation Holding Time Canister Certification Instrument Tuning Initial Calibration and Instrument Performance Daily Calibration Blanks Lab Control Sample Field Duplicate	Completeness of Pkg Sample Preservation Holding Time Sample Specific Yield Required Detection Limit Laboratory Control Sample Matrix Spikes Method Blank Instrument Calibration

The laboratory may also use various letters and symbols to flag analytical results generated when QC limits were exceeded. The meanings of these flags may differ from those used by the independent data validator. Those used by the laboratory are provided with the analytical results.

NOTE: The assignment of data qualifiers by the data reviewer (validator) to laboratory analytical results should not necessarily be interpreted by the data user as a measure of laboratory ability or proficiency. Rather, the qualifiers are intended to provide a measure of data accuracy and precision to the data user, which, for example, may provide a level of confidence in determining whether or not standards or cleanup objectives have been met.

- U** The analyte was analyzed for but was not detected at or above the sample quantitation limit.
- J** The analyte was positively identified; the associated numerical value is the *approximate* concentration of the analyte in the sample. (The magnitude of any $\pm$ value associated with the result is not determined by data validation).
- J+** The result is an estimated quantity and may be biased high.
- J-** The result is an estimated quantity and may be biased low.
- UJ** The analyte was analyzed for but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
- R** The sample result is rejected (i.e., is unusable) due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- NJ** The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.

The validated analytical results are attached to this report. Validation qualifiers (flags) are indicated in red print. Data sheets having qualified data are signed and dated by the data reviewer.

6.0 RESULTS OF THE DATA REVIEW

The results of the data review are summarized in Table 6-1. The table lists the samples where QC criteria were found to exceed acceptable limits and the actions taken to qualify the associated analytical results.

7.0 TOTAL USABLE DATA

For SDG 2404022, five samples were analyzed and results were reported for 320 analytes. Even though some results were flagged with a “J” as estimated, all results (100 %) are considered usable. See the summary table for the analyses that have been rejected and qualified and the associated QC reasons.

Table 6-1 TO-15 VOCs

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
All samples	Vinyl acetate	J detects	LCS recs < QC limit	Data may be biased low
All samples	Carbon tetrachloride	J detects UJ non-detects	LCS recs > QC limit	Data are estimated
All samples	Carbon tetrachloride Trichloroethene	J detects UJ non-detects	ICAL % RSD > 30 %	Data are estimated
All samples	Isopropyl alcohol	NJ detects	Relative intensity of characteristic ions not +/- 30 %	Compound is tentatively identified and results are estimated

ACRONYMS

BSP	Blank Spike
CCAL	Continuing Calibration
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
%D	Percent Difference
ICAL	Initial Calibration
ICB	Initial Calibration Blank
IS	Internal Standard
LCS	Laboratory Control Sample
MS/MSD	Matrix Spike/Matrix Spike Duplicate
QA	Quality Assurance
QC	Quality Control
%R	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
%RSD	Percent Relative Standard Deviation
TAL	Target Analyte List (metals)
TCL	Target Compound List (organics)

Appendix A

Validated Analytical Results



*SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us*

Alexander Brennen
C & S Engineers, Inc.
141 Elm St., Suite 100
Buffalo, NY 14203
TEL: (716) 847-1630
FAX:

RE: 240-260 Lakefront Blvd

Order No.: 2404002

Dear Alexander Brennen:

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness. Release of the data contained in this hardcopy data package and/or in the computer readable data submitted has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times.

Test results are not Method Blank (MB) corrected for contamination.

Centek/SanAir Laboratories is distinctively qualified to meet your needs for precise and timely volatile organic compound analysis. We perform all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.
Centek/SanAir Laboratories SOP TS-80

Analytical results relate to samples as received at laboratory.

We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services.

Please contact your client service representative at (315) 431-9730 or myself, if you would like any additional information regarding this report.

This report cannot be reproduced except in its entirety, without prior written authorization.

Original



SanAir Technologies DBA Centek
Laboratories

143 Midler Park Drive

Syracuse, NY 13206

TEL: (315) 431-9730

Website: CentekLabs.us

Case Narrative

WO#: 2404002

Date: 4/23/2024

CLIENT: C & S Engineers, Inc.
Project: 240-260 Lakefront Blvd

All documents contain the SanAir Technologies DBA Centek Laboratories Work Order Number assigned to this report.

Samples were analyzed using the methods outlined in the following references:

Centek Laboratories, LLC SOP TS-80

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the corrective action report(s). All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

NYSDEC ASP samples:

Canisters should be evacuated to a reading of less than or equal to 50 millitorr prior to shipment to sampling personnel. The vacuum in the canister will be field checked prior to sampling, and must read 28" of Hg (± 2 ", vacuum, absolute) before a sample can be collected. After the sample has been collected, the pressure of the canister will be read and recorded again, and must be 5" of Hg (± 1 ", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg, ± 1 ". Please record and report the pressure/vacuum of received canisters on the sample receipt paperwork. A pressure/vacuum reading should also be taken just prior to the withdrawal of sample from the canister, and recorded on the sample preparation log sheet. All regulators are calibrated to meet these requirements before they leave the laboratory. However, due to environmental conditions and use of the equipment Centek cannot guarantee that these criteria can always be achieved.

Any comments or problems with the analytical events associated with this report are noted below.

See Corrective Action: [209] CC did not meet criteria.

See Corrective Action: [210] LCS/LCSD did not meet criteria.

Original

***Chain of Custody must be completed in full. Lack of any missing information will affect your Turn Around Times (TAT)

*** By signing Centek/SanAir Labs Chain of Custody, you are accepting the Terms and Conditions listed on the reverse side.



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730

Workorder Sample Summary

WO#: 2404002

17-Apr-24

CLIENT: C & S Engineers, Inc.
Project: 240-260 Lakefront Blvd

Lab SampleID	Client Sample ID	TDTube	CanisterID	FlowCon ID	Equip ID	Date Collected	Date Received	Matrix
2404002-001	244-SS-01		1L Mini- Can - 1162 VI - 0207	Time-Set Reg - 759 VI - 0385		3/29/2024	4/1/2024	Air
2404002-002	244-IA-01		1L Mini- Can - 1264 VI - 0288	Time-Set Reg - 833 VI - 0454		3/29/2024	4/1/2024	Air
2404002-003	252-SS-02		1L Mini- Can - 1381 VI - 0479	Time-Set Reg - 825 VI - 0446		3/29/2024	4/1/2024	Air
2404002-004	252-IA-02		1L Mini- Can - 1349 VI - 0422	Time-Set Reg - 760 VI - 0386		3/29/2024	4/1/2024	Air
2404002-005	OA-01		1L Mini- Can - 1174 VI - 0242	Time-Set Reg - 774 VI - 0395		3/29/2024	4/1/2024	Air

Original

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

ANALYTICAL RESULTS



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: 244-SS-01

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-001

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

FieldSampler	Jesse		
Lab Vacuum In	-1	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 BY METHOD TO15

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 9:27:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 9:27:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 9:27:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 9:27:00 PM
1,1-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 9:27:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 9:27:00 PM
1,2,4-Trimethylbenzene	0.15	0.15	ppbV	0.74	0.74		1	4/1/2024 9:27:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 9:27:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 9:27:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 9:27:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 9:27:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 9:27:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 9:27:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 9:27:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 9:27:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 9:27:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 9:27:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 9:27:00 PM
Acetone	9.6	3.0	ppbV	23	7.1		10	4/2/2024 3:13:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 9:27:00 PM

Qualifiers:
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 RL Reporting Limit
 U Samples with CalcVal < MDL

E Value above quantitation range
 N Tentatively identified compounds
 R RPD outside accepted recovery limits
 SC Sub-Contracted
 J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Lab Order: 2404002

Project: 240-260 Lakefront Blvd

Lab ID: 2404002-001

Client Sample ID: 244-SS-01

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15				Analyst: DA
Benzene	0.41	0.15	ppbV	1.3	0.48		1	4/1/2024 9:27:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 9:27:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 9:27:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 9:27:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 9:27:00 PM
Carbon disulfide	0.12	0.15	ppbV	0.37	0.47	J	1	4/1/2024 9:27:00 PM
Carbon tetrachloride	< 0.15	0.15	ppbV	<0.94	0.94	U	1	4/1/2024 9:27:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 9:27:00 PM
Chloroethane	< 0.15	0.15	ppbV	<0.4	0.4	U	1	4/1/2024 9:27:00 PM
Chloroform	0.18	0.15	ppbV	0.88	0.73		1	4/1/2024 9:27:00 PM
Chloromethane	< 0.15	0.15	ppbV	<0.31	0.31	U	1	4/1/2024 9:27:00 PM
cis-1,2-Dichloroethene	0.13	0.15	ppbV	0.52	0.59	J	1	4/1/2024 9:27:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 9:27:00 PM
Cyclohexane	5.3	1.5	ppbV	18	5.2		10	4/2/2024 3:13:00 AM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 9:27:00 PM
Ethyl acetate	0.38	0.15	ppbV	1.4	0.54		1	4/1/2024 9:27:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 9:27:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 9:27:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 9:27:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 9:27:00 PM
Freon 12	0.41	0.15	ppbV	2	0.74		1	4/1/2024 9:27:00 PM
Heptane	2.3	1.5	ppbV	9.4	6.1		10	4/2/2024 3:13:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 9:27:00 PM
Hexane	4.5	1.5	ppbV	16	5.3		10	4/2/2024 3:13:00 AM
Isopropyl alcohol	2.3	1.5	ppbV	5.7	3.7		10	4/2/2024 3:13:00 AM
m&p-Xylene	0.26	0.30	ppbV	1.1	1.3	J	1	4/1/2024 9:27:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 9:27:00 PM
Methyl Ethyl Ketone	2.5	3.0	ppbV	7.4	8.8	J	10	4/2/2024 3:13:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

MKP 6/24/2024



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-001

Client Sample ID: 244-SS-01
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15				Analyst: DA
Methyl Isobutyl Ketone	0.12	0.30	ppbV	0.49	1.2	J	1	4/1/2024 9:27:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 9:27:00 PM
Methylene chloride	3.9	1.5	ppbV	14	5.2		10	4/2/2024 3:13:00 AM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 9:27:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 9:27:00 PM
Styrene	< 0.15	0.15	ppbV	<0.64	0.64	U	1	4/1/2024 9:27:00 PM
Tetrachloroethylene	0.11	0.15	ppbV	0.75	1	J	1	4/1/2024 9:27:00 PM
Tetrahydrofuran	< 0.15	0.15	ppbV	<0.44	0.44	U	1	4/1/2024 9:27:00 PM
Toluene	2.6	1.5	ppbV	9.8	5.7		10	4/2/2024 3:13:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 9:27:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 9:27:00 PM
Trichloroethene	0.47	0.15	ppbV	2.5	0.81		1	4/1/2024 9:27:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 9:27:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 9:27:00 PM
Vinyl chloride	< 0.15	0.15	ppbV	<0.38	0.38	U	1	4/1/2024 9:27:00 PM
Surr: Bromofluorobenzene	101	70-130	%Rec				1	4/1/2024 9:27:00 PM

MKP 6/24/2024

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-002

Client Sample ID: 244-IA-01
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

FieldSampler	Jesse		
Lab Vacuum In	-1	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:14:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:14:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:14:00 PM
1,1-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:14:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:14:00 PM
1,2,4-Trimethylbenzene	0.10	0.15	ppbV	0.49	0.74	J	1	4/1/2024 7:14:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 7:14:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:14:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:14:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:14:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:14:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 7:14:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:14:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:14:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 7:14:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 7:14:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:14:00 PM
Acetone	26	12	ppbV	63	29		40	4/2/2024 12:21:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:14:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-002

Client Sample ID: 244-1A-01

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Benzene	0.15	0.15	ppbV	0.48	0.48		1	4/1/2024 7:14:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 7:14:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:14:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 7:14:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:14:00 PM
Carbon tetrachloride	0.070	0.030	ppbV	0.44	0.19		1	4/1/2024 7:14:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:14:00 PM
Chloroethane	0.13	0.15	ppbV	0.34	0.4	J	1	4/1/2024 7:14:00 PM
Chloroform	< 0.15	0.15	ppbV	<0.73	0.73	U	1	4/1/2024 7:14:00 PM
Chloromethane	< 0.15	0.15	ppbV	<0.31	0.31	U	1	4/1/2024 7:14:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:14:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:14:00 PM
Cyclohexane	0.53	0.15	ppbV	1.8	0.52		1	4/1/2024 7:14:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 7:14:00 PM
Ethyl acetate	0.16	0.15	ppbV	0.58	0.54		1	4/1/2024 7:14:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:14:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 7:14:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:14:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
Freon 12	0.41	0.15	ppbV	2	0.74		1	4/1/2024 7:14:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:14:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:14:00 PM
Hexane	0.39	0.15	ppbV	1.4	0.53		1	4/1/2024 7:14:00 PM
Isopropyl alcohol	1.9	0.15	ppbV	4.7	0.37		1	4/1/2024 7:14:00 PM
m&p-Xylene	0.23	0.30	ppbV	1	1.3	J	1	4/1/2024 7:14:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 7:14:00 PM
Methyl Ethyl Ketone	9.2	3.0	ppbV	27	8.8		10	4/1/2024 11:39:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

MKP 6/24/2024



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-002

Client Sample ID: 244-1A-01
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15		Analyst: DA		
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 7:14:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 7:14:00 PM
Methylene chloride	0.20	0.15	ppbV	0.69	0.52		1	4/1/2024 7:14:00 PM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:14:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 7:14:00 PM
Styrene	0.24	0.15	ppbV	1	0.64		1	4/1/2024 7:14:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:14:00 PM
Tetrahydrofuran	7.3	1.5	ppbV	22	4.4		10	4/1/2024 11:39:00 PM
Toluene	0.70	0.15	ppbV	2.6	0.57		1	4/1/2024 7:14:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 7:14:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:14:00 PM
Trichloroethene	< 0.030	0.030	ppbV	<0.16	0.16	U	1	4/1/2024 7:14:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 7:14:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 7:14:00 PM
Vinyl chloride	< 0.040	0.040	ppbV	<0.1	0.1	U	1	4/1/2024 7:14:00 PM
Surr: Bromofluorobenzene	102	70-130	%Rec				1	4/1/2024 7:14:00 PM

UJ

UJ

MKP 6/24/2024

Qualifiers: B Analyte detected in the Associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-003

Client Sample ID: 252-SS-02

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

Field Sampler	Jesse		
Lab Vacuum In	-2	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 BY METHOD TO15

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 10:12:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 10:12:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 10:12:00 PM
1,1-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 10:12:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 10:12:00 PM
1,2,4-Trimethylbenzene	0.11	0.15	ppbV	0.54	0.74	J	1	4/1/2024 10:12:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 10:12:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 10:12:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 10:12:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 10:12:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 10:12:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 10:12:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 10:12:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 10:12:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 10:12:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 10:12:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 10:12:00 PM
Acetone	14	3.0	ppbV	32	7.1		10	4/2/2024 3:56:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 10:12:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: 252-SS-02

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-003

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15		Analyst: DA		
Benzene	0.33	0.15	ppbV	1.1	0.48		1	4/1/2024 10:12:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 10:12:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 10:12:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 10:12:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 10:12:00 PM
Carbon tetrachloride	< 0.15	0.15	ppbV	<0.94	0.94	U	1	4/1/2024 10:12:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 10:12:00 PM
Chloroethane	< 0.15	0.15	ppbV	<0.4	0.4	U	1	4/1/2024 10:12:00 PM
Chloroform	0.13	0.15	ppbV	0.63	0.73	J	1	4/1/2024 10:12:00 PM
Chloromethane	0.10	0.15	ppbV	0.21	0.31	J	1	4/1/2024 10:12:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 10:12:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 10:12:00 PM
Cyclohexane	0.17	0.15	ppbV	0.59	0.52		1	4/1/2024 10:12:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 10:12:00 PM
Ethyl acetate	0.46	0.15	ppbV	1.7	0.54		1	4/1/2024 10:12:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 10:12:00 PM
Freon 11	0.19	0.15	ppbV	1.1	0.84		1	4/1/2024 10:12:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 10:12:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
Freon 12	0.42	0.15	ppbV	2.1	0.74		1	4/1/2024 10:12:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 10:12:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 10:12:00 PM
Hexane	0.15	0.15	ppbV	0.53	0.53		1	4/1/2024 10:12:00 PM
Isopropyl alcohol	2.1	1.5	ppbV	5.2	3.7		10	4/2/2024 3:56:00 AM
m&p-Xylene	0.29	0.30	ppbV	1.3	1.3	J	1	4/1/2024 10:12:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 10:12:00 PM
Methyl Ethyl Ketone	5.2	3.0	ppbV	15	8.8		10	4/2/2024 3:56:00 AM

Qualifiers:
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

MKP 6/24/2024



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-003

Client Sample ID: 252-SS-02
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 BY METHOD TO15				TO-15		Analyst: DA		
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 10:12:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 10:12:00 PM
Methylene chloride	3.1	1.5	ppbV	11	5.2		10	4/2/2024 3:56:00 AM
o-Xylene	0.10	0.15	ppbV	0.43	0.65	J	1	4/1/2024 10:12:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 10:12:00 PM
Styrene	0.14	0.15	ppbV	0.6	0.64	J	1	4/1/2024 10:12:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 10:12:00 PM
Tetrahydrofuran	2.9	1.5	ppbV	8.6	4.4		10	4/2/2024 3:56:00 AM
Toluene	2.3	1.5	ppbV	8.7	5.7		10	4/2/2024 3:56:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 10:12:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 10:12:00 PM
Trichloroethene	0.32	0.15	ppbV	1.7	0.81		1	4/1/2024 10:12:00 PM
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 10:12:00 PM
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 10:12:00 PM
Vinyl chloride	< 0.15	0.15	ppbV	<0.38	0.38	U	1	4/1/2024 10:12:00 PM
Surr: Bromofluorobenzene	97.0	70-130	%Rec				1	4/1/2024 10:12:00 PM

J
UJ

MKP 6/24/2024

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-004

Client Sample ID: 252-1A-02

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

Field Sampler	Jesse		
Lab Vacuum In	-1	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:59:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 7:59:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:59:00 PM
1,1-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:59:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:59:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:59:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 7:59:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:59:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:59:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:59:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:59:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 7:59:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:59:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 7:59:00 PM
1,4-Dioxane	0.11	0.30	ppbV	0.4	1.1	J	1	4/1/2024 7:59:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 7:59:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 7:59:00 PM
Acetone	38	12	ppbV	91	29		40	4/2/2024 1:46:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:59:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: 252-IA-02

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-004

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15				Analyst: DA
Benzene	0.14	0.15	ppbV	0.45	0.48	J	1	4/1/2024 7:59:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 7:59:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:59:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 7:59:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 7:59:00 PM
Carbon tetrachloride	0.070	0.030	ppbV	0.44	0.19		1	4/1/2024 7:59:00 PM
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 7:59:00 PM
Chloroethane	0.19	0.15	ppbV	0.5	0.4		1	4/1/2024 7:59:00 PM
Chloroform	< 0.15	0.15	ppbV	<0.73	0.73	U	1	4/1/2024 7:59:00 PM
Chloromethane	0.25	0.15	ppbV	0.52	0.31		1	4/1/2024 7:59:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 7:59:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:59:00 PM
Cyclohexane	0.34	0.15	ppbV	1.2	0.52		1	4/1/2024 7:59:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 7:59:00 PM
Ethyl acetate	0.19	0.15	ppbV	0.68	0.54		1	4/1/2024 7:59:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:59:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 7:59:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 7:59:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
Freon 12	0.40	0.15	ppbV	2	0.74		1	4/1/2024 7:59:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 7:59:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 7:59:00 PM
Hexane	0.16	0.15	ppbV	0.56	0.53		1	4/1/2024 7:59:00 PM
Isopropyl alcohol	2.8	1.5	ppbV	6.9	3.7		10	4/2/2024 1:04:00 AM
m&p-Xylene	0.17	0.30	ppbV	0.74	1.3	J	1	4/1/2024 7:59:00 PM
Methyl Butyl Ketone	0.10	0.30	ppbV	0.41	1.2	J	1	4/1/2024 7:59:00 PM
Methyl Ethyl Ketone	20	3.0	ppbV	59	8.8		10	4/2/2024 1:04:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

MKP 6/24/2024



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Client Sample ID: 252-1A-02

Lab Order: 2404002

TagNo:

Project: 240-260 Lakefront Blvd

Collection Date: 3/29/2024

Lab ID: 2404002-004

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 7:59:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 7:59:00 PM
Methylene chloride	0.21	0.15	ppbV	0.73	0.52		1	4/1/2024 7:59:00 PM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 7:59:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 7:59:00 PM
Styrene	0.59	0.15	ppbV	2.5	0.64		1	4/1/2024 7:59:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 7:59:00 PM
Tetrahydrofuran	14	1.5	ppbV	40	4.4		10	4/2/2024 1:04:00 AM
Toluene	1.3	0.15	ppbV	4.9	0.57		1	4/1/2024 7:59:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 7:59:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 7:59:00 PM
Trichloroethene	< 0.030	0.030	ppbV	<0.16	0.16	U	1	4/1/2024 7:59:00 PM UJ
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 7:59:00 PM UJ
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 7:59:00 PM
Vinyl chloride	< 0.040	0.040	ppbV	<0.1	0.1	U	1	4/1/2024 7:59:00 PM
Surr: Bromofluorobenzene	107	70-130	%Rec				1	4/1/2024 7:59:00 PM

MKP 6/24/2024

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.
Lab Order: 2404002
Project: 240-260 Lakefront Blvd
Lab ID: 2404002-005

Client Sample ID: OA-01
TagNo:
Collection Date: 3/29/2024
Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

FIELD PARAMETERS

FLD

Analyst:

Field Sampler	Jesse		
Lab Vacuum In	-1	"Hg	
Lab Vacuum Out	-30	"Hg	

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
----------	--------	----	-------	-------------------	---------------	------	----	---------------

1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE

TO-15

Analyst: DA

1,1,1-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 8:43:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
1,1,2-Trichloroethane	< 0.15	0.15	ppbV	<0.82	0.82	U	1	4/1/2024 8:43:00 PM
1,1-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 8:43:00 PM
1,1-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 8:43:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 8:43:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 8:43:00 PM
1,2-Dibromoethane	< 0.15	0.15	ppbV	<1.2	1.2	U	1	4/1/2024 8:43:00 PM
1,2-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 8:43:00 PM
1,2-Dichloroethane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 8:43:00 PM
1,2-Dichloropropane	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 8:43:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 8:43:00 PM
1,3-butadiene	< 0.15	0.15	ppbV	<0.33	0.33	U	1	4/1/2024 8:43:00 PM
1,3-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 8:43:00 PM
1,4-Dichlorobenzene	< 0.15	0.15	ppbV	<0.9	0.9	U	1	4/1/2024 8:43:00 PM
1,4-Dioxane	< 0.30	0.30	ppbV	<1.1	1.1	U	1	4/1/2024 8:43:00 PM
2,2,4-trimethylpentane	< 0.15	0.15	ppbV	<0.7	0.7	U	1	4/1/2024 8:43:00 PM
4-ethyltoluene	< 0.15	0.15	ppbV	<0.74	0.74	U	1	4/1/2024 8:43:00 PM
Acetone	3.1	3.0	ppbV	7.4	7.1		10	4/2/2024 2:28:00 AM
Allyl chloride	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 8:43:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report

(consolidated)

WO#: 2404002

Date Reported:

CLIENT: C & S Engineers, Inc.

Lab Order: 2404002

Project: 240-260 Lakefront Blvd

Lab ID: 2404002-005

Client Sample ID: OA-01

TagNo:

Collection Date: 3/29/2024

Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15		Analyst: DA		
Benzene	< 0.15	0.15	ppbV	<0.48	0.48	U	1	4/1/2024 8:43:00 PM
Benzyl chloride	< 0.15	0.15	ppbV	<0.86	0.86	U	1	4/1/2024 8:43:00 PM
Bromodichloromethane	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
Bromoform	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 8:43:00 PM
Bromomethane	< 0.15	0.15	ppbV	<0.58	0.58	U	1	4/1/2024 8:43:00 PM
Carbon disulfide	< 0.15	0.15	ppbV	<0.47	0.47	U	1	4/1/2024 8:43:00 PM
Carbon tetrachloride	0.070	0.030	ppbV	0.44	0.19		1	4/1/2024 8:43:00 PM J
Chlorobenzene	< 0.15	0.15	ppbV	<0.69	0.69	U	1	4/1/2024 8:43:00 PM
Chloroethane	< 0.15	0.15	ppbV	<0.4	0.4	U	1	4/1/2024 8:43:00 PM
Chloroform	< 0.15	0.15	ppbV	<0.73	0.73	U	1	4/1/2024 8:43:00 PM
Chloromethane	0.40	0.15	ppbV	0.83	0.31		1	4/1/2024 8:43:00 PM
cis-1,2-Dichloroethene	< 0.040	0.040	ppbV	<0.16	0.16	U	1	4/1/2024 8:43:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 8:43:00 PM
Cyclohexane	< 0.15	0.15	ppbV	<0.52	0.52	U	1	4/1/2024 8:43:00 PM
Dibromochloromethane	< 0.15	0.15	ppbV	<1.3	1.3	U	1	4/1/2024 8:43:00 PM
Ethyl acetate	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 8:43:00 PM
Ethylbenzene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 8:43:00 PM
Freon 11	0.20	0.15	ppbV	1.1	0.84		1	4/1/2024 8:43:00 PM
Freon 113	< 0.15	0.15	ppbV	<1.1	1.1	U	1	4/1/2024 8:43:00 PM
Freon 114	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
Freon 12	0.40	0.15	ppbV	2	0.74		1	4/1/2024 8:43:00 PM
Heptane	< 0.15	0.15	ppbV	<0.61	0.61	U	1	4/1/2024 8:43:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15	ppbV	<1.6	1.6	U	1	4/1/2024 8:43:00 PM
Hexane	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 8:43:00 PM
Isopropyl alcohol	0.45	0.15	ppbV	1.1	0.37		1	4/1/2024 8:43:00 PM NJ
m&p-Xylene	< 0.30	0.30	ppbV	<1.3	1.3	U	1	4/1/2024 8:43:00 PM
Methyl Butyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 8:43:00 PM
Methyl Ethyl Ketone	0.18	0.30	ppbV	0.53	0.88	J	1	4/1/2024 8:43:00 PM

Qualifiers:

B Analyte detected in the associated Method Blank
R Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL

E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

MKP 6/24/2024



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: www.CentekLabs.us

Analytical Report
(consolidated)
WO#: 2404002
Date Reported:

CLIENT: C & S Engineers, Inc. Client Sample ID: OA-01
Lab Order: 2404002 TagNo:
Project: 240-260 Lakefront Blvd Collection Date: 3/29/2024
Lab ID: 2404002-005 Matrix: AIR

Analyses	Result	RL	Units	Result (ug/M3)	RL (ug/M3)	Qual	DF	Date Analyzed
1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE				TO-15			Analyst: DA	
Methyl Isobutyl Ketone	< 0.30	0.30	ppbV	<1.2	1.2	U	1	4/1/2024 8:43:00 PM
Methyl tert-butyl ether	< 0.15	0.15	ppbV	<0.54	0.54	U	1	4/1/2024 8:43:00 PM
Methylene chloride	0.15	0.15	ppbV	0.52	0.52		1	4/1/2024 8:43:00 PM
o-Xylene	< 0.15	0.15	ppbV	<0.65	0.65	U	1	4/1/2024 8:43:00 PM
Propylene	< 0.15	0.15	ppbV	<0.26	0.26	U	1	4/1/2024 8:43:00 PM
Styrene	< 0.15	0.15	ppbV	<0.64	0.64	U	1	4/1/2024 8:43:00 PM
Tetrachloroethylene	< 0.15	0.15	ppbV	<1	1	U	1	4/1/2024 8:43:00 PM
Tetrahydrofuran	< 0.15	0.15	ppbV	<0.44	0.44	U	1	4/1/2024 8:43:00 PM
Toluene	< 0.15	0.15	ppbV	<0.57	0.57	U	1	4/1/2024 8:43:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15	ppbV	<0.59	0.59	U	1	4/1/2024 8:43:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15	ppbV	<0.68	0.68	U	1	4/1/2024 8:43:00 PM
Trichloroethene	< 0.030	0.030	ppbV	<0.16	0.16	U	1	4/1/2024 8:43:00 PM UJ
Vinyl acetate	< 0.15	0.15	ppbV	<0.53	0.53	U	1	4/1/2024 8:43:00 PM UJ
Vinyl Bromide	< 0.15	0.15	ppbV	<0.66	0.66	U	1	4/1/2024 8:43:00 PM
Vinyl chloride	< 0.040	0.040	ppbV	<0.1	0.1	U	1	4/1/2024 8:43:00 PM
Surr: Bromofluorobenzene	98.0	70-130	%Rec				1	4/1/2024 8:43:00 PM

MKP 6/24/2024

Qualifiers: B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
RL Reporting Limit
U Samples with CalcVal < MDL
E Value above quantitation range
N Tentatively identified compounds
R RPD outside accepted recovery limits
SC Sub-Contracted
J Analyte detected below quantitation limits

Original

Appendix B

Laboratory QC Documentation



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002

17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UG-040124	SampType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11560						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.2	0.15	1.000	0	120	70	130				
1,1,2,2-Tetrachloroethane	1.1	0.15	1.000	0	107	70	130				
1,1,2-Trichloroethane	1.0	0.15	1.000	0	105	70	130				
1,1-Dichloroethane	0.83	0.15	1.000	0	83.0	70	130				
1,1-Dichloroethene	0.89	0.040	1.000	0	89.0	70	130				
1,2,4-Trichlorobenzene	1.3	0.15	1.000	0	126	70	130				
1,2,4-Trimethylbenzene	1.0	0.15	1.000	0	105	70	130				
1,2-Dibromoethane	1.1	0.15	1.000	0	106	70	130				
1,2-Dichlorobenzene	1.0	0.15	1.000	0	101	70	130				
1,2-Dichloroethane	0.86	0.15	1.000	0	86.0	70	130				
1,2-Dichloropropane	0.96	0.15	1.000	0	96.0	70	130				
1,3,5-Trimethylbenzene	1.0	0.15	1.000	0	100	70	130				
1,3-butadiene	0.86	0.15	1.000	0	86.0	70	130				
1,3-Dichlorobenzene	1.1	0.15	1.000	0	110	70	130				
1,4-Dichlorobenzene	1.1	0.15	1.000	0	109	70	130				
1,4-Dioxane	1.0	0.30	1.000	0	100	70	130				
2,2,4-trimethylpentane	0.94	0.15	1.000	0	94.0	70	130				
4-ethyltoluene	1.0	0.15	1.000	0	104	70	130				
Acetone	0.76	0.30	1.000	0	76.0	70	130				
Allyl chloride	0.80	0.15	1.000	0	80.0	70	130				
Benzene	0.99	0.15	1.000	0	99.0	70	130				
Benzyl chloride	0.82	0.15	1.000	0	82.0	70	130				
Bromodichloromethane	1.3	0.15	1.000	0	129	70	130				
Bromoform	1.4	0.15	1.000	0	139	70	130				S
Bromomethane	0.88	0.15	1.000	0	88.0	70	130				
Carbon disulfide	0.85	0.15	1.000	0	85.0	70	130				

Qualifiers: B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002

17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UG-040124	SampType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11560						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	1.5	0.030	1.000	0	150	70	130				S
Chlorobenzene	1.0	0.15	1.000	0	100	70	130				
Chloroethane	0.88	0.15	1.000	0	88.0	70	130				
Chloroform	0.89	0.15	1.000	0	89.0	70	130				
Chloromethane	0.90	0.15	1.000	0	90.0	70	130				
cis-1,2-Dichloroethene	0.75	0.040	1.000	0	75.0	70	130				
cis-1,3-Dichloropropene	1.0	0.15	1.000	0	103	70	130				
Cyclohexane	0.95	0.15	1.000	0	95.0	70	130				
Dibromochloromethane	1.3	0.15	1.000	0	130	70	130				
Ethyl acetate	1.2	0.15	1.000	0	123	70	130				
Ethylbenzene	1.0	0.15	1.000	0	100	70	130				
Freon 11	0.91	0.15	1.000	0	91.0	70	130				
Freon 113	0.86	0.15	1.000	0	86.0	70	130				
Freon 114	0.96	0.15	1.000	0	96.0	70	130				
Freon 12	0.87	0.15	1.000	0	87.0	70	130				
Heptane	0.95	0.15	1.000	0	95.0	70	130				
Hexachloro-1,3-butadiene	1.2	0.15	1.000	0	115	70	130				
Hexane	0.84	0.15	1.000	0	84.0	70	130				
Isopropyl alcohol	0.77	0.15	1.000	0	77.0	70	130				
m&p-Xylene	2.0	0.30	2.000	0	98.5	70	130				
Methyl Butyl Ketone	0.93	0.30	1.000	0	93.0	70	130				
Methyl Ethyl Ketone	0.80	0.30	1.000	0	80.0	70	130				
Methyl Isobutyl Ketone	0.92	0.30	1.000	0	92.0	70	130				
Methyl tert-butyl ether	0.76	0.15	1.000	0	76.0	70	130				
Methylene chloride	0.83	0.15	1.000	0	83.0	70	130				
o-Xylene	0.99	0.15	1.000	0	99.0	70	130				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
J Analyte detected below quantitation limits

Original



SanAir Technologies DBA Centek
Laboratories
143 Midler Park Drive
Syracuse, NY 13206
TEL: (315) 431-9730
Website: CentekLabs.us

QC SUMMARY REPORT

WO#: 2404002

17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UG-040124	SampType: LCS	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSW	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11560						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	0.77	0.15	1.000	0	77.0	70	130				
Styrene	1.0	0.15	1.000	0	100	70	130				
Tetrachloroethylene	1.0	0.15	1.000	0	100	70	130				
Tetrahydrofuran	0.78	0.15	1.000	0	78.0	70	130				
Toluene	0.97	0.15	1.000	0	97.0	70	130				
trans-1,2-Dichloroethene	0.86	0.15	1.000	0	86.0	70	130				
trans-1,3-Dichloropropene	0.97	0.15	1.000	0	97.0	70	130				
Trichloroethene	1.1	0.030	1.000	0	108	70	130				
Vinyl acetate	0.54	0.15	1.000	0	54.0	70	130				S
Vinyl Bromide	0.86	0.15	1.000	0	86.0	70	130				
Vinyl chloride	0.76	0.040	1.000	0	76.0	70	130				
Surr: Bromofluorobenzene	1.0		1.000		103	70	130				

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
J Analyte detected below quantitation limits

Original

QC SUMMARY REPORT

WO#: 2404002

17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UGD-040124	SampType: LCSD	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSS02	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11561						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.2	0.15	1.000	0	122	70	130	1.200	1.65	30	
1,1,2,2-Tetrachloroethane	1.1	0.15	1.000	0	110	70	130	1.070	2.76	30	
1,1,2-Trichloroethane	1.0	0.15	1.000	0	100	70	130	1.050	4.88	30	
1,1-Dichloroethane	0.85	0.15	1.000	0	85.0	70	130	0.8300	2.38	30	
1,1-Dichloroethene	0.91	0.040	1.000	0	91.0	70	130	0.8900	2.22	30	
1,2,4-Trichlorobenzene	1.0	0.15	1.000	0	100	70	130	1.260	23.0	30	
1,2,4-Trimethylbenzene	1.0	0.15	1.000	0	105	70	130	1.050	0	30	
1,2-Dibromoethane	1.1	0.15	1.000	0	107	70	130	1.060	0.939	30	
1,2-Dichlorobenzene	1.0	0.15	1.000	0	100	70	130	1.010	0.995	30	
1,2-Dichloroethane	0.89	0.15	1.000	0	89.0	70	130	0.8600	3.43	30	
1,2-Dichloropropane	0.95	0.15	1.000	0	95.0	70	130	0.9600	1.05	30	
1,3,5-Trimethylbenzene	1.0	0.15	1.000	0	101	70	130	1.000	0.995	30	
1,3-butadiene	0.83	0.15	1.000	0	83.0	70	130	0.8600	3.55	30	
1,3-Dichlorobenzene	1.1	0.15	1.000	0	106	70	130	1.100	3.70	30	
1,4-Dichlorobenzene	1.1	0.15	1.000	0	107	70	130	1.090	1.85	30	
1,4-Dioxane	0.98	0.30	1.000	0	98.0	70	130	1.000	2.02	30	
2,2,4-trimethylpentane	0.93	0.15	1.000	0	93.0	70	130	0.9400	1.07	30	
4-ethyltoluene	1.0	0.15	1.000	0	104	70	130	1.040	0	30	
Acetone	0.85	0.30	1.000	0	85.0	70	130	0.7600	11.2	30	
Allyl chloride	0.82	0.15	1.000	0	82.0	70	130	0.8000	2.47	30	
Benzene	0.96	0.15	1.000	0	96.0	70	130	0.9900	3.08	30	
Benzyl chloride	0.78	0.15	1.000	0	78.0	70	130	0.8200	5.00	30	
Bromodichloromethane	1.3	0.15	1.000	0	128	70	130	1.290	0.778	30	
Bromoform	1.4	0.15	1.000	0	145	70	130	1.390	4.23	30	S
Bromomethane	0.86	0.15	1.000	0	86.0	70	130	0.8800	2.30	30	
Carbon disulfide	0.85	0.15	1.000	0	85.0	70	130	0.8500	0	30	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Extracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
F Analyte detected below quantitation limits

Original

QC SUMMARY REPORT

WO#: 2404002

17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UGD-040124	SampType: LCSD	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSS02	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11561						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	1.6	0.030	1.000	0	158	70	130	1.500	5.19	30	S
Chlorobenzene	1.0	0.15	1.000	0	101	70	130	1.000	0.995	30	
Chloroethane	0.84	0.15	1.000	0	84.0	70	130	0.8800	4.65	30	
Chloroform	0.91	0.15	1.000	0	91.0	70	130	0.8900	2.22	30	
Chloromethane	0.89	0.15	1.000	0	89.0	70	130	0.9000	1.12	30	
cis-1,2-Dichloroethene	0.75	0.040	1.000	0	75.0	70	130	0.7500	0	30	
cis-1,3-Dichloropropene	1.0	0.15	1.000	0	103	70	130	1.030	0	30	
Cyclohexane	0.95	0.15	1.000	0	95.0	70	130	0.9500	0	30	
Dibromochloromethane	1.4	0.15	1.000	0	144	70	130	1.300	10.2	30	S
Ethyl acetate	1.3	0.15	1.000	0	129	70	130	1.230	4.76	30	
Ethylbenzene	1.0	0.15	1.000	0	102	70	130	1.000	1.98	30	
Freon 11	0.91	0.15	1.000	0	91.0	70	130	0.9100	0	30	
Freon 113	0.89	0.15	1.000	0	89.0	70	130	0.8600	3.43	30	
Freon 114	0.96	0.15	1.000	0	96.0	70	130	0.9600	0	30	
Freon 12	0.88	0.15	1.000	0	88.0	70	130	0.8700	1.14	30	
Heptane	0.97	0.15	1.000	0	97.0	70	130	0.9500	2.08	30	
Hexachloro-1,3-butadiene	1.1	0.15	1.000	0	110	70	130	1.150	4.44	30	
Hexane	0.86	0.15	1.000	0	86.0	70	130	0.8400	2.35	30	
Isopropyl alcohol	0.77	0.15	1.000	0	77.0	70	130	0.7700	0	30	
m&p-Xylene	2.0	0.30	2.000	0	102	70	130	1.970	3.49	30	
Methyl Butyl Ketone	0.94	0.30	1.000	0	94.0	70	130	0.9300	1.07	30	
Methyl Ethyl Ketone	0.90	0.30	1.000	0	90.0	70	130	0.8000	11.8	30	
Methyl Isobutyl Ketone	0.94	0.30	1.000	0	94.0	70	130	0.9200	2.15	30	
Methyl tert-butyl ether	0.78	0.15	1.000	0	78.0	70	130	0.7600	2.60	30	
Methylene chloride	0.83	0.15	1.000	0	83.0	70	130	0.8300	0	30	
o-Xylene	1.0	0.15	1.000	0	101	70	130	0.9900	2.00	30	

Qualifiers:	B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceed
	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	RL	Reporting Limit
	S	Spike Recovery outside accepted recovery limits	SC	Sub-Contracted	J	Analyte detected below quantitation limits

Original

QC SUMMARY REPORT

WO#: 2404002

17-Apr-24

Client: C & S Engineers, Inc.

Project: 240-260 Lakefront Blvd

BatchID: R1245

Sample ID: ALCS1UGD-040124	SampType: LCSD	TestCode: 0.20_NYS	Units: ppbV	Prep Date:	RunNo: 1245						
Client ID: LCSS02	Batch ID: R1245	TestNo: TO-15		Analysis Date: 4/1/2024	SeqNo: 11561						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Propylene	0.81	0.15	1.000	0	81.0	70	130	0.7700	5.06	30	
Styrene	1.0	0.15	1.000	0	100	70	130	1.000	0	30	
Tetrachloroethylene	1.0	0.15	1.000	0	100	70	130	1.000	0	30	
Tetrahydrofuran	0.79	0.15	1.000	0	79.0	70	130	0.7800	1.27	30	
Toluene	0.97	0.15	1.000	0	97.0	70	130	0.9700	0	30	
trans-1,2-Dichloroethene	0.88	0.15	1.000	0	88.0	70	130	0.8600	2.30	30	
trans-1,3-Dichloropropene	0.97	0.15	1.000	0	97.0	70	130	0.9700	0	30	
Trichloroethene	1.0	0.030	1.000	0	105	70	130	1.080	2.82	30	
Vinyl acetate	0.55	0.15	1.000	0	55.0	70	130	0.5400	1.83	30	S
Vinyl Bromide	0.79	0.15	1.000	0	79.0	70	130	0.8600	8.48	30	
Vinyl chloride	0.75	0.040	1.000	0	75.0	70	130	0.7600	1.32	30	
Surr: Bromofluorobenzene	1.0		1.000		101	70	130		0	0	

Qualifiers:

B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits

E Value above quantitation range
R RPD outside accepted recovery limits
SC Sub-Contracted

H Holding times for preparation or analysis exceed
RL Reporting Limit
I Analyte detected below quantitation limits

Original

Method Path : C:\msdchem\1\methods\

Method File : A325_1UG.M

Title : TO-15 VOA Standards for 5 point calibration

38)	T	Carbon tetrach...	0.361	0.368	0.368	0.362	0.375	0.378	0.404	0.460	0.467	0.696	0.846	0.462	34.73
39)	T	Benzene	0.810	0.819	0.829	0.831	0.850	0.874	0.945	1.031				0.874	8.80
40)	T	Methyl methacr...	0.268	0.262	0.258	0.269	0.262	0.277	0.284	0.306				0.273	5.77
41)	T	1,4-dioxane	0.211	0.208	0.207	0.210	0.210	0.219	0.243	0.274				0.223	10.66
42)	T	2,2,4-trimethy...	1.070	1.085	1.083	1.096	1.119	1.149	1.220	1.320				1.142	7.56
43)	T	Heptane	0.361	0.362	0.362	0.362	0.380	0.387	0.400	0.483				0.387	10.64
44)	T	Trichloroethene	0.412	0.411	0.418	0.426	0.423	0.443	0.480	0.520	0.573	0.872	0.992	0.543	36.99
45)	T	1,2-dichloropr...	0.255	0.257	0.265	0.265	0.270	0.269	0.301	0.329				0.276	9.21
46)	T	Bromodichlorom...	0.435	0.436	0.434	0.439	0.446	0.446	0.442	0.524				0.450	6.72
47)	T	cis-1,3-dichlo...	0.406	0.405	0.401	0.418	0.414	0.413	0.432	0.461				0.419	4.68
48)	T	trans-1,3-dich...	0.356	0.362	0.367	0.373	0.375	0.369	0.391	0.402				0.374	4.05
49)	T	1,1,2-trichlor...	0.329	0.326	0.331	0.341	0.344	0.349	0.387	0.406				0.352	8.29
50)	I	Chlorobenzene-d5	-----ISTD-----												
51)	T	Toluene	0.711	0.718	0.697	0.700	0.715	0.749	0.786	0.896				0.747	9.00
52)	T	Methyl Isobuty...	0.538	0.545	0.529	0.527	0.552	0.563	0.571	0.659				0.560	7.62
53)	T	Dibromochlorom...	0.427	0.423	0.407	0.385	0.406	0.395	0.396	0.456				0.412	5.54
54)	T	Methyl Butyl K...	0.508	0.504	0.493	0.475	0.488	0.487	0.508	0.550				0.502	4.51
55)	T	1,2-dibromoethane	0.538	0.548	0.539	0.524	0.543	0.554	0.577	0.608				0.554	4.83
56)	T	Tetrachloroeth...	0.475	0.475	0.469	0.466	0.495	0.507	0.536	0.604				0.503	9.33
57)	T	Chlorobenzene	1.007	1.000	0.992	0.964	1.012	1.021	1.065	1.235				1.037	8.19
58)	T	Ethylbenzene	1.740	1.687	1.646	1.620	1.682	1.689	1.733	1.972				1.721	6.33
59)	T	m&p-xylene	1.472	1.412	1.362	1.332	1.359	1.373	1.419	1.592				1.415	5.91
60)	T	Nonane	0.700	0.678	0.663	0.637	0.656	0.667	0.680	0.762				0.680	5.56
61)	T	Styrene	1.163	1.122	1.077	1.033	1.058	1.072	1.078	1.182				1.098	4.78
62)	T	Bromoform	0.349	0.328	0.315	0.300	0.309	0.301	0.300	0.334				0.317	5.79
63)	T	o-xylene	1.613	1.589	1.499	1.428	1.461	1.468	1.530	1.769				1.545	7.16
64)	T	Cumene	2.059	1.995	1.946	1.900	1.935	1.984	2.064	2.358				2.030	7.11
65)	S	Bromofluoroben...	0.724	0.728	0.740	0.722	0.705	0.695	0.705	0.685	0.692	0.661	0.603	0.696	5.49
66)	T	1,1,2,2-tetrac...	0.708	0.705	0.693	0.688	0.701	0.711	0.758	0.810				0.722	5.76
67)	T	Propylbenzene	0.606	0.590	0.567	0.562	0.568	0.575	0.575	0.652				0.587	5.11
68)	T	2-Chlorotoluene	0.563	0.549	0.520	0.492	0.513	0.511	0.526	0.606				0.535	6.79
69)	T	4-ethyltoluene	2.160	2.062	2.000	1.913	1.963	1.954	2.053	2.218				2.040	5.16
70)	T	1,3,5-trimethy...	1.953	1.887	1.808	1.776	1.769	1.789	1.842	2.018				1.855	4.89
71)	T	1,2,4-trimethy...	1.824	1.772	1.712	1.677	1.684	1.708	1.781	1.903				1.758	4.45
72)	T	1,3-dichlorobe...	1.033	1.018	1.001	0.981	0.976	0.924	0.977	0.951				0.983	3.58
73)	T	benzyl chloride	0.451	0.431	0.418	0.404	0.379	0.310	0.337	0.287				0.377	15.78
74)	T	1,4-dichlorobe...	1.011	0.971	0.953	0.966	0.936	0.878	0.927	0.877				0.940	4.90
75)	T	1,2,3-trimethy...	1.890	1.874	1.788	1.731	1.727	1.772	1.848	1.999				1.829	5.06
76)	T	1,2-dichlorobe...	1.008	0.937	0.899	0.849	0.866	0.910	0.922	1.021				0.927	6.64
77)	T	1,2,4-trichlor...	0.327	0.297	0.309	0.306	0.288	0.218	0.249	0.168				0.270	20.13
78)	T	Naphthalene	0.821	0.777	0.818	0.800	0.758	0.551	0.655	0.463				0.705	19.20
79)	T	Hexachloro-1,3...	0.662	0.662	0.655	0.648	0.655	0.650	0.711	0.725				0.671	4.40

(#) = Out of Range

GC/MS-Whole Air Calculations

Relative Response Factor (RRF)

$$RRF = \frac{A_x * C_{is}}{A_{is} * C_x}$$

where: A_x = area of the characteristic ion for the compound being measured
 A_{is} = area of the characteristic ion for the specific internal standard of the compound being measured
 C_x = concentration of the compound being measured (ppbv)
 C_{is} = concentration of the internal standard (ppbv)

Percent Relative Standard Deviation (%RSD)

$$\% RSD = \frac{\text{Standard deviation of RRF values} * 100}{\text{mean RRF}}$$

Percent Difference (%D)

$$\% D = \frac{(RRF_c - \text{mean } RRF_i) * 100}{\text{mean } RRF_i}$$

where: RRF_c = relative response factor from the continuing calibration
 $\text{mean } RRF_i$ = mean relative response factor from the initial calibration

Sample Calculations

$$ppbv = \frac{A_x * I_s * D_f}{A_{is} * RRF}$$

where: A_x = area of the characteristic ion for the compound being measured
 A_{is} = area of the characteristic ion for the specific internal standard of the compound being measured
 I_s = Concentration of the internal standard injected (ppbv)
 RRF = relative response factor for the compound being measured
 D_f = Dilution factor

Appendix C

Validator Qualifications

KENNETH R. APPLIN

Geochemist/Data Validator

Ph.D., Geochemistry and Mineralogy, The Pennsylvania State University

M.S., Geochemistry and Mineralogy, The Pennsylvania State University

B.A., Geological Sciences, SUNY at Geneseo, NY

Dr. Applin has over 35 years of experience working with the geochemistry of natural waters. His prior experience includes working as an Assistant Professor of Geology at the University of Missouri-Columbia and as Chief Hydrogeologist and Geochemist with a leading engineering firm in Rochester, NY. In 1993, he established KR Applin and Associates, a small consulting business that focuses on the geochemistry of natural waters, especially as applied to problems involving the contamination of groundwater and surface water.

Dr. Applin is also an experienced analytical data validator and has provided data validation services since 1994 to a variety of clients performing brownfield cleanup projects, hazardous waste remediation, groundwater monitoring at solid waste facilities, and other projects requiring third-party data validation. Dr. Applin has several years of hands-on experience with the laboratory analysis of natural waters and has successfully completed the USEPA Region II certification courses for performing inorganic and organic analytical data validation.

MICHAEL K. PERRY

Chemist/Data Validator

B.S. Chemistry, Georgia State University, Atlanta, GA

A.A.S., Chemical Technology, Alfred State College, Alfred, NY

Mr. Perry has over 30 years of experience in the analytical laboratory business. During his early career, he spent several years as a laboratory analyst performing the analysis of soil, water, and air samples for inorganic and organic chemical parameters. During his last 20 years in the environmental laboratory business, he managed and directed two major analytical laboratories in Rochester, NY. His management responsibilities included oversight of the daily operations of the lab, staff training and supervision, the selection, purchase, and maintenance of analytical instruments, the introduction of new laboratory methods, analytical quality assurance and quality control, data acquisition and management, and other business-related activities.

Mr. Perry has an extensive working knowledge of the methods and procedures used for sampling and analyzing both inorganic and organic analytes in soil, water, and air. He is an accomplished laboratory chemist and is familiar with the analytical methods and procedures established under the USEPA Contract Laboratory Protocols (CLP), the NYSDEC Analytical Services Protocols (ASP), and the NYSDOH Environmental Laboratory Approval Program (ELAP).

Appendix A

Validated Analytical Results



www.alphalab.com



Alpha Analytical

Laboratory Code: 11148

SDG Number: L2371495

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2371495-01	260-SS-01	SOIL_VAPOR	Not Specified	12/05/23 13:02	12/05/23
L2371495-02	260-IA-01	AIR	Not Specified	12/05/23 13:01	12/05/23
L2371495-03	256-SS-02	SOIL_VAPOR	Not Specified	12/05/23 13:15	12/05/23
L2371495-04	256-IA-02	AIR	Not Specified	12/05/23 13:17	12/05/23
L2371495-05	OA-01-120423	AIR	Not Specified	12/05/23 13:27	12/05/23
L2371495-06	UNUSED CAN #2446	SOIL_VAPOR	Not Specified		12/05/23
L2371495-07	UNUSED CAN #3582	SOIL_VAPOR	Not Specified		12/05/23
L2371495-08	UNUSED CAN #2523	AIR	Not Specified		12/05/23
L2371495-09	UNUSED CAN #3322	AIR	Not Specified		12/05/23

Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on November 29, 2023. The canister certification results are provided as an addendum.

The WG1862125-3 LCS recovery for bromoform (141%), associated with L2371495-02, -04, and -05, is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

The WG1862126-3 LCS recovery for bromoform (146%), associated with L2371495-02, -04, and -05, is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

The WG1864611-3 LCS recovery for bromoform (138%), associated with L2371495-01D and -03D, is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

L2371495-01D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2371495-03D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Report Date: 12/19/23

Title: Technical Director/Representative

Project Name: 240 LAKEFRONT BLVD

Lab Number: L2371495

Project Number: E67.022.009

Report Date: 12/19/23

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2371495-01	260-SS-01	01122	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.3	10
L2371495-01	260-SS-01	3486	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-11.8	-	-	-	-
L2371495-02	260-IA-01	2447	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	0.0	-	-	-	-
L2371495-03	256-SS-02	0982	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.7	21
L2371495-03	256-SS-02	1936	6.0L Can	11/29/23	445465	L2369115-05	Pass	-29.6	0.0	-	-	-	-
L2371495-04	256-IA-02	0240	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.2	6
L2371495-04	256-IA-02	2840	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-6.7	-	-	-	-
L2371495-05	OA-01-120423	01246	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.8	24
L2371495-05	OA-01-120423	3365	6.0L Can	11/29/23	445465	L2369115-05	Pass	-29.5	-1.0	-	-	-	-
L2371495-06	UNUSED CAN #2446	02191	Flow 5	11/29/23	445465		-	-	-	Pass	3.0	3.1	3
L2371495-06	UNUSED CAN #2446	3582	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-29.4	-	-	-	-
L2371495-07	UNUSED CAN #3582	01480	Flow 3	11/29/23	445465		-	-	-	Pass	3.0	4.5	40
L2371495-07	UNUSED CAN #3582	2446	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-29.4	-	-	-	-
L2371495-08	UNUSED CAN #2523	0765	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	5.0	50
L2371495-08	UNUSED CAN #2523	2523	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.5	-29.4	-	-	-	-

Project Name: 240 LAKEFRONT BLVD

Lab Number: L2371495

Project Number: E67.022.009

Report Date: 12/19/23

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2371495-09	UNUSED CAN #3322	0958	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	4.2	33
L2371495-09	UNUSED CAN #3322	3322	6.0L Can	11/29/23	445465	L2369115-10	Pass	-29.6	-29.4	-	-	-	-

Volatile Organics in Air TO-15 Low Level

Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-01D
 Client ID : 260-SS-01
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737165
 Sample Amount : 80.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:02
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 22:38
 Dilution Factor : 3.125
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.625	--	ND	3.09	--	U
74-87-3	Chloromethane	ND	0.625	--	ND	1.29	--	U
76-14-2	Freon-114	ND	0.625	--	ND	4.37	--	U
75-01-4	Vinyl chloride	ND	0.625	--	ND	1.60	--	U
106-99-0	1,3-Butadiene	ND	0.625	--	ND	1.38	--	U
74-83-9	Bromomethane	ND	0.625	--	ND	2.43	--	U
75-00-3	Chloroethane	ND	0.625	--	ND	1.65	--	U
64-17-5	Ethanol	29.9	15.6	--	56.3	29.4	--	
593-60-2	Vinyl bromide	ND	0.625	--	ND	2.73	--	U
67-64-1	Acetone	146	3.12	--	347	7.41	--	
75-69-4	Trichlorofluoromethane	ND	0.625	--	ND	3.51	--	U
67-63-0	Isopropanol	3.26	1.56	--	8.01	3.83	--	
75-35-4	1,1-Dichloroethene	ND	0.625	--	ND	2.48	--	U
75-65-0	Tertiary butyl Alcohol	ND	1.56	--	ND	4.73	--	U
75-09-2	Methylene chloride	3.14	1.56	--	10.9	5.42	--	
107-05-1	3-Chloropropene	ND	0.625	--	ND	1.96	--	U
75-15-0	Carbon disulfide	ND	0.625	--	ND	1.95	--	U
76-13-1	Freon-113	ND	0.625	--	ND	4.79	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.625	--	ND	2.48	--	U
75-34-3	1,1-Dichloroethane	ND	0.625	--	ND	2.53	--	U
1634-04-4	Methyl tert butyl ether	ND	0.625	--	ND	2.25	--	U
78-93-3	2-Butanone	7.38	1.56	--	21.8	4.60	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.625	--	ND	2.48	--	U
141-78-6	Ethyl Acetate	ND	1.56	--	ND	5.62	--	U
67-66-3	Chloroform	ND	0.625	--	ND	3.05	--	U
109-99-9	Tetrahydrofuran	30.7	1.56	--	90.5	4.60	--	



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-01D
 Client ID : 260-SS-01
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737165
 Sample Amount : 80.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:02
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 22:38
 Dilution Factor : 3.125
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.625	--	ND	2.53	--	U
110-54-3	n-Hexane	175	0.625	--	617	2.20	--	NJ
71-55-6	1,1,1-Trichloroethane	ND	0.625	--	ND	3.41	--	U
71-43-2	Benzene	14.8	0.625	--	47.3	2.00	--	
56-23-5	Carbon tetrachloride	ND	0.625	--	ND	3.93	--	U
110-82-7	Cyclohexane	201	0.625	--	692	2.15	--	
78-87-5	1,2-Dichloropropane	ND	0.625	--	ND	2.89	--	U
75-27-4	Bromodichloromethane	ND	0.625	--	ND	4.19	--	U
123-91-1	1,4-Dioxane	ND	0.625	--	ND	2.25	--	U
79-01-6	Trichloroethene	ND	0.625	--	ND	3.36	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.625	--	ND	2.92	--	U
142-82-5	Heptane	154	0.625	--	631	2.56	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.625	--	ND	2.84	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.56	--	ND	6.39	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.625	--	ND	2.84	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.625	--	ND	3.41	--	U
108-88-3	Toluene	67.7	0.625	--	255	2.36	--	
591-78-6	2-Hexanone	ND	0.625	--	ND	2.56	--	U
124-48-1	Dibromochloromethane	ND	0.625	--	ND	5.32	--	U
106-93-4	1,2-Dibromoethane	ND	0.625	--	ND	4.80	--	U
127-18-4	Tetrachloroethene	ND	0.625	--	ND	4.24	--	U
108-90-7	Chlorobenzene	ND	0.625	--	ND	2.88	--	U
100-41-4	Ethylbenzene	14.7	0.625	--	63.9	2.71	--	
179601-23-1	p/m-Xylene	66.2	1.25	--	288	5.43	--	
75-25-2	Bromoform	ND	0.625	--	ND	6.46	--	U
100-42-5	Styrene	ND	0.625	--	ND	2.66	--	U

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-01D
 Client ID : 260-SS-01
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737165
 Sample Amount : 80.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:02
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 22:38
 Dilution Factor : 3.125
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.625	--	ND	4.29	--	U
95-47-6	o-Xylene	22.5	0.625	--	97.7	2.71	--	
622-96-8	4-Ethyltoluene	1.53	0.625	--	7.52	3.07	--	
108-67-8	1,3,5-Trimethylbenzene	4.42	0.625	--	21.7	3.07	--	
95-63-6	1,2,4-Trimethylbenzene	8.22	0.625	--	40.4	3.07	--	
100-44-7	Benzyl chloride	ND	0.625	--	ND	3.24	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.625	--	ND	3.76	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.625	--	ND	3.76	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.625	--	ND	3.76	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.625	--	ND	4.64	--	U
87-68-3	Hexachlorobutadiene	ND	0.625	--	ND	6.67	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-02
 Client ID : 260-IA-01
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737048
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:01
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:06
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.456	0.200	--	2.25	0.989	--	J
74-87-3	Chloromethane	0.454	0.200	--	0.938	0.413	--	J
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	21.5	5.00	--	40.5	9.42	--	J
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	40.7	1.00	--	96.7	2.38	--	J
75-69-4	Trichlorofluoromethane	0.203	0.200	--	1.14	1.12	--	J
67-63-0	Isopropanol	2.13	0.500	--	5.24	1.23	--	J
75-65-0	Tertiary butyl Alcohol	0.651	0.500	--	1.97	1.52	--	J
75-09-2	Methylene chloride	0.522	0.500	--	1.81	1.74	--	J
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	1.94	0.500	--	5.72	1.47	--	J
141-78-6	Ethyl Acetate	0.800	0.500	--	2.88	1.80	--	J
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	9.61	0.500	--	28.3	1.47	--	J
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.616	0.200	--	2.17	0.705	--	NJ
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
110-82-7	Cyclohexane	0.470	0.200	--	1.62	0.688	--	J

MKP 6/28/2024



Results Summary Form 1 Volatile Organics in Air

Client : C&S Companies
Project Name : 240 LAKEFRONT BLVD
Lab ID : L2371495-02
Client ID : 260-IA-01
Sample Location :
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R1737048
Sample Amount : 250 ml

Lab Number : L2371495
Project Number : E67.022.009
Date Collected : 12/05/23 13:01
Date Received : 12/05/23
Date Analyzed : 12/10/23 21:06
Dilution Factor : 1
Analyst : RAY
Instrument ID : AIRLAB17
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier	
		Results	RL	MDL	Results	RL	MDL		
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U	UJ
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U	UJ
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U	UJ
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U	UJ
142-82-5	Heptane	0.473	0.200	--	1.94	0.820	--		J
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U	UJ
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U	UJ
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U	UJ
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U	UJ
108-88-3	Toluene	2.09	0.200	--	7.88	0.754	--		J
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U	UJ
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U	UJ
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U	UJ
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U	UJ
100-41-4	Ethylbenzene	0.219	0.200	--	0.951	0.869	--		J
179601-23-1	p/m-Xylene	0.878	0.400	--	3.81	1.74	--		J
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U	UJ
100-42-5	Styrene	0.562	0.200	--	2.39	0.852	--		J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U	UJ
95-47-6	o-Xylene	0.395	0.200	--	1.72	0.869	--		J
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U	UJ
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U	UJ
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U	UJ
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U	UJ
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U	UJ
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U	UJ

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-02
 Client ID : 260-IA-01
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737048
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:01
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:06
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier	
		Results	RL	MDL	Results	RL	MDL		
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U	UJ
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U	UJ
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U	UJ

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-03D
 Client ID : 256-SS-02
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737167
 Sample Amount : 90.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:15
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 23:53
 Dilution Factor : 2.778
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.556	--	ND	2.75	--	U
74-87-3	Chloromethane	ND	0.556	--	ND	1.15	--	U
76-14-2	Freon-114	ND	0.556	--	ND	3.89	--	U
75-01-4	Vinyl chloride	ND	0.556	--	ND	1.42	--	U
106-99-0	1,3-Butadiene	ND	0.556	--	ND	1.23	--	U
74-83-9	Bromomethane	ND	0.556	--	ND	2.16	--	U
75-00-3	Chloroethane	ND	0.556	--	ND	1.47	--	U
64-17-5	Ethanol	ND	13.9	--	ND	26.2	--	U
593-60-2	Vinyl bromide	ND	0.556	--	ND	2.43	--	U
67-64-1	Acetone	107	2.78	--	254	6.60	--	J
75-69-4	Trichlorofluoromethane	ND	0.556	--	ND	3.12	--	U
67-63-0	Isopropanol	2.23	1.39	--	5.48	3.42	--	J
75-35-4	1,1-Dichloroethene	ND	0.556	--	ND	2.20	--	U
75-65-0	Tertiary butyl Alcohol	1.52	1.39	--	4.61	4.21	--	J
75-09-2	Methylene chloride	ND	1.39	--	ND	4.83	--	U
107-05-1	3-Chloropropene	ND	0.556	--	ND	1.74	--	U
75-15-0	Carbon disulfide	1.55	0.556	--	4.83	1.73	--	J
76-13-1	Freon-113	ND	0.556	--	ND	4.26	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.556	--	ND	2.20	--	U
75-34-3	1,1-Dichloroethane	ND	0.556	--	ND	2.25	--	U
1634-04-4	Methyl tert butyl ether	ND	0.556	--	ND	2.00	--	U
78-93-3	2-Butanone	4.40	1.39	--	13.0	4.10	--	J
156-59-2	cis-1,2-Dichloroethene	ND	0.556	--	ND	2.20	--	U
141-78-6	Ethyl Acetate	4.15	1.39	--	15.0	5.01	--	J
67-66-3	Chloroform	ND	0.556	--	ND	2.72	--	U
109-99-9	Tetrahydrofuran	20.9	1.39	--	61.6	4.10	--	J

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-03D
 Client ID : 256-SS-02
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737167
 Sample Amount : 90.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:15
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 23:53
 Dilution Factor : 2.778
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.556	--	ND	2.25	--	U
110-54-3	n-Hexane	53.8	0.556	--	190	1.96	--	NJ
71-55-6	1,1,1-Trichloroethane	ND	0.556	--	ND	3.03	--	U
71-43-2	Benzene	3.65	0.556	--	11.7	1.78	--	J
56-23-5	Carbon tetrachloride	ND	0.556	--	ND	3.50	--	U
110-82-7	Cyclohexane	68.4	0.556	--	235	1.91	--	J
78-87-5	1,2-Dichloropropane	ND	0.556	--	ND	2.57	--	U
75-27-4	Bromodichloromethane	ND	0.556	--	ND	3.72	--	U
123-91-1	1,4-Dioxane	ND	0.556	--	ND	2.00	--	U
79-01-6	Trichloroethene	ND	0.556	--	ND	2.99	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.556	--	ND	2.60	--	U
142-82-5	Heptane	47.2	0.556	--	193	2.28	--	J
10061-01-5	cis-1,3-Dichloropropene	ND	0.556	--	ND	2.52	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.39	--	ND	5.70	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.556	--	ND	2.52	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.556	--	ND	3.03	--	U
108-88-3	Toluene	16.0	0.556	--	60.3	2.10	--	J
591-78-6	2-Hexanone	ND	0.556	--	ND	2.28	--	U
124-48-1	Dibromochloromethane	ND	0.556	--	ND	4.74	--	U
106-93-4	1,2-Dibromoethane	ND	0.556	--	ND	4.27	--	U
127-18-4	Tetrachloroethene	ND	0.556	--	ND	3.77	--	U
108-90-7	Chlorobenzene	ND	0.556	--	ND	2.56	--	U
100-41-4	Ethylbenzene	2.84	0.556	--	12.3	2.42	--	J
179601-23-1	p/m-Xylene	11.5	1.11	--	50.0	4.82	--	J
75-25-2	Bromoform	ND	0.556	--	ND	5.75	--	U
100-42-5	Styrene	ND	0.556	--	ND	2.37	--	U

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-03D
 Client ID : 256-SS-02
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737167
 Sample Amount : 90.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:15
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 23:53
 Dilution Factor : 2.778
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.556	--	ND	3.82	--	U UJ
95-47-6	o-Xylene	3.92	0.556	--	17.0	2.42	--	J
622-96-8	4-Ethyltoluene	ND	0.556	--	ND	2.73	--	U UJ
108-67-8	1,3,5-Trimethylbenzene	ND	0.556	--	ND	2.73	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.556	--	ND	2.73	--	U
100-44-7	Benzyl chloride	ND	0.556	--	ND	2.88	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.556	--	ND	3.34	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.556	--	ND	3.34	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.556	--	ND	3.34	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.556	--	ND	4.13	--	U
87-68-3	Hexachlorobutadiene	ND	0.556	--	ND	5.93	--	U

MKP 6/28/2024



Results Summary Form 1 Volatile Organics in Air

Client : C&S Companies
Project Name : 240 LAKEFRONT BLVD
Lab ID : L2371495-04
Client ID : 256-IA-02
Sample Location :
Sample Matrix : AIR
Analytical Method : 48,TO-15
Lab File ID : R1737049
Sample Amount : 250 ml

Lab Number : L2371495
Project Number : E67.022.009
Date Collected : 12/05/23 13:17
Date Received : 12/05/23
Date Analyzed : 12/10/23 21:46
Dilution Factor : 1
Analyst : RAY
Instrument ID : AIRLAB17
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.464	0.200	--	2.29	0.989	--	
74-87-3	Chloromethane	0.468	0.200	--	0.966	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	32.0	5.00	--	60.3	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	37.8	1.00	--	89.8	2.38	--	
75-69-4	Trichlorofluoromethane	0.202	0.200	--	1.14	1.12	--	
67-63-0	Isopropanol	3.08	0.500	--	7.57	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.559	0.500	--	1.94	1.74	--	
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	2.04	0.500	--	6.02	1.47	--	
141-78-6	Ethyl Acetate	0.612	0.500	--	2.21	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	10.1	0.500	--	29.8	1.47	--	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.602	0.200	--	2.12	0.705	--	NJ
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
110-82-7	Cyclohexane	0.370	0.200	--	1.27	0.688	--	

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-04
 Client ID : 256-IA-02
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737049
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:17
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:46
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.316	0.200	--	1.30	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.73	0.200	--	6.52	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	0.537	0.400	--	2.33	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	0.449	0.200	--	1.91	0.852	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.217	0.200	--	0.943	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-04
 Client ID : 256-IA-02
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737049
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:17
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:46
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-05
 Client ID : OA-01-120423
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737047
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:27
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 20:27
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.455	0.200	--	2.25	0.989	--	
74-87-3	Chloromethane	0.442	0.200	--	0.913	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	1.49	1.00	--	3.54	2.38	--	
75-69-4	Trichlorofluoromethane	0.209	0.200	--	1.17	1.12	--	
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.602	0.500	--	2.09	1.74	--	
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-05
 Client ID : OA-01-120423
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737047
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:27
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 20:27
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-05
 Client ID : OA-01-120423
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737047
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:27
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 20:27
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

GC/MS VOA
Air Analysis
Selective Ion Monitoring

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-02
 Client ID : 260-IA-01
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1737048_EV2
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:01
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:06
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier	
		Results	RL	MDL	Results	RL	MDL		
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U	UJ
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U	UJ
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U	UJ
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U	UJ
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U	UJ
56-23-5	Carbon tetrachloride	0.068	0.020	--	0.428	0.126	--		J
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U	UJ
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U	UJ

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air by SIM

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-04
 Client ID : 256-IA-02
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1737049_EV2
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:17
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:46
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-05
 Client ID : OA-01-120423
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1737047_EV2
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:27
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 20:27
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

Appendix B

Laboratory QC Documentation

Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Matrix (Level) : AIR (LOW)
 LCS Sample ID : WG1862125-3
 LCSD Sample ID :

Lab Number : L2371495
 Project Number : E67.022.009
 Analysis Date : 12/10/23 14:13
 File ID : r1737042
 Analysis Date :
 File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,2-Dichloroethane	10	8.98	90				-	70-130	-
n-Hexane	10	9.30	93				-	70-130	-
1,1,1-Trichloroethane	10	9.17	92				-	70-130	-
Benzene	10	8.90	89				-	70-130	-
Carbon tetrachloride	10	10.6	106				-	70-130	-
Cyclohexane	10	9.52	95				-	70-130	-
1,2-Dichloropropane	10	9.30	93				-	70-130	-
Bromodichloromethane	10	10.8	108				-	70-130	-
1,4-Dioxane	10	9.66	97				-	70-130	-
Trichloroethene	10	9.40	94				-	70-130	-
2,2,4-Trimethylpentane	10	9.57	96				-	70-130	-
Heptane	10	9.44	94				-	70-130	-
cis-1,3-Dichloropropene	10	9.26	93				-	70-130	-
4-Methyl-2-pentanone	10	9.45	94				-	70-130	-
trans-1,3-Dichloropropene	10	8.83	88				-	70-130	-
1,1,2-Trichloroethane	10	9.50	95				-	70-130	-
Toluene	10	9.59	96				-	70-130	-
2-Hexanone	10	9.37	94				-	70-130	-
Dibromochloromethane	10	12.6	126				-	70-130	-
1,2-Dibromoethane	10	10.1	101				-	70-130	-
Tetrachloroethene	10	9.55	96				-	70-130	-
Chlorobenzene	10	9.81	98				-	70-130	-
Ethylbenzene	10	9.98	100				-	70-130	-
p/m-Xylene	20	20.2	101				-	70-130	-
Bromoform	10	14.1	141 Q				-	70-130	-
Styrene	10	9.91	99				-	70-130	-



Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Matrix (Level) : AIR (LOW)
 LCS Sample ID : WG1864611-3
 LCSD Sample ID :

Lab Number : L2371495
 Project Number : E67.022.009
 Analysis Date : 12/15/23 13:26
 File ID : r1737156
 Analysis Date :
 File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,2-Dichloroethane	10	11.7	117				-	70-130	-
n-Hexane	10	9.62	96				-	70-130	-
1,1,1-Trichloroethane	10	10.5	105				-	70-130	-
Benzene	10	8.43	84				-	70-130	-
Carbon tetrachloride	10	11.2	112				-	70-130	-
Cyclohexane	10	9.64	96				-	70-130	-
1,2-Dichloropropane	10	10.6	106				-	70-130	-
Bromodichloromethane	10	11.2	112				-	70-130	-
1,4-Dioxane	10	10.3	103				-	70-130	-
Trichloroethene	10	10.1	101				-	70-130	-
2,2,4-Trimethylpentane	10	10.0	100				-	70-130	-
Heptane	10	10.4	104				-	70-130	-
cis-1,3-Dichloropropene	10	9.04	90				-	70-130	-
4-Methyl-2-pentanone	10	10.6	106				-	70-130	-
trans-1,3-Dichloropropene	10	8.78	88				-	70-130	-
1,1,2-Trichloroethane	10	10.5	105				-	70-130	-
Toluene	10	9.78	98				-	70-130	-
2-Hexanone	10	9.86	99				-	70-130	-
Dibromochloromethane	10	13.0	130				-	70-130	-
1,2-Dibromoethane	10	9.73	97				-	70-130	-
Tetrachloroethene	10	9.48	95				-	70-130	-
Chlorobenzene	10	9.18	92				-	70-130	-
Ethylbenzene	10	10.1	101				-	70-130	-
p/m-Xylene	20	20.6	103				-	70-130	-
Bromoform	10	13.8	138 Q				-	70-130	-
Styrene	10	9.20	92				-	70-130	-



Appendix C

Validator Qualifications

KENNETH R. APPLIN

Geochemist/Data Validator

Ph.D., Geochemistry and Mineralogy, The Pennsylvania State University

M.S., Geochemistry and Mineralogy, The Pennsylvania State University

B.A., Geological Sciences, SUNY at Geneseo, NY

Dr. Applin has over 35 years of experience working with the geochemistry of natural waters. His prior experience includes working as an Assistant Professor of Geology at the University of Missouri-Columbia and as Chief Hydrogeologist and Geochemist with a leading engineering firm in Rochester, NY. In 1993, he established KR Applin and Associates, a small consulting business that focuses on the geochemistry of natural waters, especially as applied to problems involving the contamination of groundwater and surface water.

Dr. Applin is also an experienced analytical data validator and has provided data validation services since 1994 to a variety of clients performing brownfield cleanup projects, hazardous waste remediation, groundwater monitoring at solid waste facilities, and other projects requiring third-party data validation. Dr. Applin has several years of hands-on experience with the laboratory analysis of natural waters and has successfully completed the USEPA Region II certification courses for performing inorganic and organic analytical data validation.

MICHAEL K. PERRY

Chemist/Data Validator

B.S. Chemistry, Georgia State University, Atlanta, GA

A.A.S., Chemical Technology, Alfred State College, Alfred, NY

Mr. Perry has over 30 years of experience in the analytical laboratory business. During his early career, he spent several years as a laboratory analyst performing the analysis of soil, water, and air samples for inorganic and organic chemical parameters. During his last 20 years in the environmental laboratory business, he managed and directed two major analytical laboratories in Rochester, NY. His management responsibilities included oversight of the daily operations of the lab, staff training and supervision, the selection, purchase, and maintenance of analytical instruments, the introduction of new laboratory methods, analytical quality assurance and quality control, data acquisition and management, and other business-related activities.

Mr. Perry has an extensive working knowledge of the methods and procedures used for sampling and analyzing both inorganic and organic analytes in soil, water, and air. He is an accomplished laboratory chemist and is familiar with the analytical methods and procedures established under the USEPA Contract Laboratory Protocols (CLP), the NYSDEC Analytical Services Protocols (ASP), and the NYSDOH Environmental Laboratory Approval Program (ELAP).



www.alphalab.com



Alpha Analytical

Laboratory Code: 11148

SDG Number: L2371495

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2371495-01	260-SS-01	SOIL_VAPOR	Not Specified	12/05/23 13:02	12/05/23
L2371495-02	260-IA-01	AIR	Not Specified	12/05/23 13:01	12/05/23
L2371495-03	256-SS-02	SOIL_VAPOR	Not Specified	12/05/23 13:15	12/05/23
L2371495-04	256-IA-02	AIR	Not Specified	12/05/23 13:17	12/05/23
L2371495-05	OA-01-120423	AIR	Not Specified	12/05/23 13:27	12/05/23
L2371495-06	UNUSED CAN #2446	SOIL_VAPOR	Not Specified		12/05/23
L2371495-07	UNUSED CAN #3582	SOIL_VAPOR	Not Specified		12/05/23
L2371495-08	UNUSED CAN #2523	AIR	Not Specified		12/05/23
L2371495-09	UNUSED CAN #3322	AIR	Not Specified		12/05/23

Project Name: 240 LAKEFRONT BLVD
Project Number: E67.022.009

Lab Number: L2371495
Report Date: 12/19/23

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on November 29, 2023. The canister certification results are provided as an addendum.

The WG1862125-3 LCS recovery for bromoform (141%), associated with L2371495-02, -04, and -05, is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

The WG1862126-3 LCS recovery for bromoform (146%), associated with L2371495-02, -04, and -05, is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

The WG1864611-3 LCS recovery for bromoform (138%), associated with L2371495-01D and -03D, is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

L2371495-01D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2371495-03D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Report Date: 12/19/23

Title: Technical Director/Representative

AIR ANALYSIS

PAGE 1 OF 1

Date Rec'd in Lab: 12/6/23

ALPHA Job #: L2371495



CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: CES Engineers
Address: 141 Elm Street

Phone:

Fax:

Email: Cmartin@cesros.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 240 Lakefront Blvd

Project Location:

Project #: EL07.022.009

Project Manager: Cady Martin

ALPHA Quote #:

Turn-Around Time

☒ Standard

☐ RUSH (only confirmed if pre-approved!)

Date Due:

Time:

Report Information - Data Deliverables

☐ FAX

☒ ADEx

Criteria Checker:

(Default based on Regulatory Criteria Indicated)

Other Formats:

☒ EMAIL (standard pdf report)

☐ Additional Deliverables:

Report to: (if different than Project Manager)

Cady Martin

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program Res / Comm

NY NYDOT

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION						Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
		End Date	Start Time	End Time	Initial Vacuum	Final Vacuum												
71495-01	260-SS-01	12/5/23	12:44	1:02	-29.44	-11.42	SV	CM	6L	3486	0112	X	X					Indoor/Ambient
02	260-IA-01		12:45	1:01	-29.40	0.00	AA			2447	0215	+	+					APC
03	256-SS-02		12:47	1:15	-29.34	-0.11	SV			1936	0982	+	+					
04	256-IA-02		12:49	1:17	-30.65	-6.19	AA			2840	0240	+	+					
05	0A-01-126423		12:57	1:27	-29.65	-1.99	AA			5315	0124	+	+					

4 canisters not used

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

CSCS

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:

Date/Time

Received By:

Date/Time:

Cady Martin (AAL)
12/6/23 06:20

12/5/23 205
12/5/23 14:05

12/5/23 14:05
AAL

12/5/23 14:05
12/6/23 0240
12/6/23 0500
12/6/23 0620

Project Name: 240 LAKEFRONT BLVD

Lab Number: L2371495

Project Number: E67.022.009

Report Date: 12/19/23

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2371495-01	260-SS-01	01122	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.3	10
L2371495-01	260-SS-01	3486	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-11.8	-	-	-	-
L2371495-02	260-IA-01	2447	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	0.0	-	-	-	-
L2371495-03	256-SS-02	0982	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.7	21
L2371495-03	256-SS-02	1936	6.0L Can	11/29/23	445465	L2369115-05	Pass	-29.6	0.0	-	-	-	-
L2371495-04	256-IA-02	0240	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.2	6
L2371495-04	256-IA-02	2840	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-6.7	-	-	-	-
L2371495-05	OA-01-120423	01246	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	3.8	24
L2371495-05	OA-01-120423	3365	6.0L Can	11/29/23	445465	L2369115-05	Pass	-29.5	-1.0	-	-	-	-
L2371495-06	UNUSED CAN #2446	02191	Flow 5	11/29/23	445465		-	-	-	Pass	3.0	3.1	3
L2371495-06	UNUSED CAN #2446	3582	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-29.4	-	-	-	-
L2371495-07	UNUSED CAN #3582	01480	Flow 3	11/29/23	445465		-	-	-	Pass	3.0	4.5	40
L2371495-07	UNUSED CAN #3582	2446	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.6	-29.4	-	-	-	-
L2371495-08	UNUSED CAN #2523	0765	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	5.0	50
L2371495-08	UNUSED CAN #2523	2523	6.0L Can	11/29/23	445465	L2369115-07	Pass	-29.5	-29.4	-	-	-	-

Project Name: 240 LAKEFRONT BLVD

Lab Number: L2371495

Project Number: E67.022.009

Report Date: 12/19/23

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2371495-09	UNUSED CAN #3322	0958	Flow 4	11/29/23	445465		-	-	-	Pass	3.0	4.2	33
L2371495-09	UNUSED CAN #3322	3322	6.0L Can	11/29/23	445465	L2369115-10	Pass	-29.6	-29.4	-	-	-	-

Volatile Organics in Air TO-15 Low Level

Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-01D
 Client ID : 260-SS-01
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737165
 Sample Amount : 80.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:02
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 22:38
 Dilution Factor : 3.125
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.625	--	ND	3.09	--	U
74-87-3	Chloromethane	ND	0.625	--	ND	1.29	--	U
76-14-2	Freon-114	ND	0.625	--	ND	4.37	--	U
75-01-4	Vinyl chloride	ND	0.625	--	ND	1.60	--	U
106-99-0	1,3-Butadiene	ND	0.625	--	ND	1.38	--	U
74-83-9	Bromomethane	ND	0.625	--	ND	2.43	--	U
75-00-3	Chloroethane	ND	0.625	--	ND	1.65	--	U
64-17-5	Ethanol	29.9	15.6	--	56.3	29.4	--	
593-60-2	Vinyl bromide	ND	0.625	--	ND	2.73	--	U
67-64-1	Acetone	146	3.12	--	347	7.41	--	
75-69-4	Trichlorofluoromethane	ND	0.625	--	ND	3.51	--	U
67-63-0	Isopropanol	3.26	1.56	--	8.01	3.83	--	
75-35-4	1,1-Dichloroethene	ND	0.625	--	ND	2.48	--	U
75-65-0	Tertiary butyl Alcohol	ND	1.56	--	ND	4.73	--	U
75-09-2	Methylene chloride	3.14	1.56	--	10.9	5.42	--	
107-05-1	3-Chloropropene	ND	0.625	--	ND	1.96	--	U
75-15-0	Carbon disulfide	ND	0.625	--	ND	1.95	--	U
76-13-1	Freon-113	ND	0.625	--	ND	4.79	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.625	--	ND	2.48	--	U
75-34-3	1,1-Dichloroethane	ND	0.625	--	ND	2.53	--	U
1634-04-4	Methyl tert butyl ether	ND	0.625	--	ND	2.25	--	U
78-93-3	2-Butanone	7.38	1.56	--	21.8	4.60	--	
156-59-2	cis-1,2-Dichloroethene	ND	0.625	--	ND	2.48	--	U
141-78-6	Ethyl Acetate	ND	1.56	--	ND	5.62	--	U
67-66-3	Chloroform	ND	0.625	--	ND	3.05	--	U
109-99-9	Tetrahydrofuran	30.7	1.56	--	90.5	4.60	--	



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-01D
 Client ID : 260-SS-01
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737165
 Sample Amount : 80.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:02
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 22:38
 Dilution Factor : 3.125
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.625	--	ND	2.53	--	U
110-54-3	n-Hexane	175	0.625	--	617	2.20	--	NJ
71-55-6	1,1,1-Trichloroethane	ND	0.625	--	ND	3.41	--	U
71-43-2	Benzene	14.8	0.625	--	47.3	2.00	--	
56-23-5	Carbon tetrachloride	ND	0.625	--	ND	3.93	--	U
110-82-7	Cyclohexane	201	0.625	--	692	2.15	--	
78-87-5	1,2-Dichloropropane	ND	0.625	--	ND	2.89	--	U
75-27-4	Bromodichloromethane	ND	0.625	--	ND	4.19	--	U
123-91-1	1,4-Dioxane	ND	0.625	--	ND	2.25	--	U
79-01-6	Trichloroethene	ND	0.625	--	ND	3.36	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.625	--	ND	2.92	--	U
142-82-5	Heptane	154	0.625	--	631	2.56	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.625	--	ND	2.84	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.56	--	ND	6.39	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.625	--	ND	2.84	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.625	--	ND	3.41	--	U
108-88-3	Toluene	67.7	0.625	--	255	2.36	--	
591-78-6	2-Hexanone	ND	0.625	--	ND	2.56	--	U
124-48-1	Dibromochloromethane	ND	0.625	--	ND	5.32	--	U
106-93-4	1,2-Dibromoethane	ND	0.625	--	ND	4.80	--	U
127-18-4	Tetrachloroethene	ND	0.625	--	ND	4.24	--	U
108-90-7	Chlorobenzene	ND	0.625	--	ND	2.88	--	U
100-41-4	Ethylbenzene	14.7	0.625	--	63.9	2.71	--	
179601-23-1	p/m-Xylene	66.2	1.25	--	288	5.43	--	
75-25-2	Bromoform	ND	0.625	--	ND	6.46	--	U
100-42-5	Styrene	ND	0.625	--	ND	2.66	--	U

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-01D
 Client ID : 260-SS-01
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737165
 Sample Amount : 80.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:02
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 22:38
 Dilution Factor : 3.125
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.625	--	ND	4.29	--	U
95-47-6	o-Xylene	22.5	0.625	--	97.7	2.71	--	
622-96-8	4-Ethyltoluene	1.53	0.625	--	7.52	3.07	--	
108-67-8	1,3,5-Trimethylbenzene	4.42	0.625	--	21.7	3.07	--	
95-63-6	1,2,4-Trimethylbenzene	8.22	0.625	--	40.4	3.07	--	
100-44-7	Benzyl chloride	ND	0.625	--	ND	3.24	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.625	--	ND	3.76	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.625	--	ND	3.76	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.625	--	ND	3.76	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.625	--	ND	4.64	--	U
87-68-3	Hexachlorobutadiene	ND	0.625	--	ND	6.67	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-02
 Client ID : 260-IA-01
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737048
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:01
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:06
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.456	0.200	--	2.25	0.989	--	J
74-87-3	Chloromethane	0.454	0.200	--	0.938	0.413	--	J
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U UJ
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U UJ
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U UJ
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U UJ
64-17-5	Ethanol	21.5	5.00	--	40.5	9.42	--	J
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U UJ
67-64-1	Acetone	40.7	1.00	--	96.7	2.38	--	J
75-69-4	Trichlorofluoromethane	0.203	0.200	--	1.14	1.12	--	J
67-63-0	Isopropanol	2.13	0.500	--	5.24	1.23	--	J
75-65-0	Tertiary butyl Alcohol	0.651	0.500	--	1.97	1.52	--	J
75-09-2	Methylene chloride	0.522	0.500	--	1.81	1.74	--	J
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U UJ
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U UJ
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U UJ
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U UJ
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U UJ
78-93-3	2-Butanone	1.94	0.500	--	5.72	1.47	--	J
141-78-6	Ethyl Acetate	0.800	0.500	--	2.88	1.80	--	J
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U UJ
109-99-9	Tetrahydrofuran	9.61	0.500	--	28.3	1.47	--	J
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U UJ
110-54-3	n-Hexane	0.616	0.200	--	2.17	0.705	--	NJ
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U UJ
110-82-7	Cyclohexane	0.470	0.200	--	1.62	0.688	--	J

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-02
 Client ID : 260-IA-01
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737048
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:01
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:06
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier	
		Results	RL	MDL	Results	RL	MDL		
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U	UJ
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U	UJ
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U	UJ
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U	UJ
142-82-5	Heptane	0.473	0.200	--	1.94	0.820	--		J
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U	UJ
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U	UJ
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U	UJ
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U	UJ
108-88-3	Toluene	2.09	0.200	--	7.88	0.754	--		J
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U	UJ
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U	UJ
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U	UJ
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U	UJ
100-41-4	Ethylbenzene	0.219	0.200	--	0.951	0.869	--		J
179601-23-1	p/m-Xylene	0.878	0.400	--	3.81	1.74	--		J
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U	UJ
100-42-5	Styrene	0.562	0.200	--	2.39	0.852	--		J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U	UJ
95-47-6	o-Xylene	0.395	0.200	--	1.72	0.869	--		J
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U	UJ
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U	UJ
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U	UJ
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U	UJ
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U	UJ
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U	UJ

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-02
 Client ID : 260-IA-01
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737048
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:01
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:06
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier	
		Results	RL	MDL	Results	RL	MDL		
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U	UJ
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U	UJ
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U	UJ

MKP 6/28/2024



Results Summary Form 1 Volatile Organics in Air

Client : C&S Companies
Project Name : 240 LAKEFRONT BLVD
Lab ID : L2371495-03D
Client ID : 256-SS-02
Sample Location :
Sample Matrix : SOIL_VAPOR
Analytical Method : 48,TO-15
Lab File ID : R1737167
Sample Amount : 90.0 ml

Lab Number : L2371495
Project Number : E67.022.009
Date Collected : 12/05/23 13:15
Date Received : 12/05/23
Date Analyzed : 12/15/23 23:53
Dilution Factor : 2.778
Analyst : KJD
Instrument ID : AIRLAB17
GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	ND	0.556	--	ND	2.75	--	U
74-87-3	Chloromethane	ND	0.556	--	ND	1.15	--	U
76-14-2	Freon-114	ND	0.556	--	ND	3.89	--	U
75-01-4	Vinyl chloride	ND	0.556	--	ND	1.42	--	U
106-99-0	1,3-Butadiene	ND	0.556	--	ND	1.23	--	U
74-83-9	Bromomethane	ND	0.556	--	ND	2.16	--	U
75-00-3	Chloroethane	ND	0.556	--	ND	1.47	--	U
64-17-5	Ethanol	ND	13.9	--	ND	26.2	--	U
593-60-2	Vinyl bromide	ND	0.556	--	ND	2.43	--	U
67-64-1	Acetone	107	2.78	--	254	6.60	--	J
75-69-4	Trichlorofluoromethane	ND	0.556	--	ND	3.12	--	U
67-63-0	Isopropanol	2.23	1.39	--	5.48	3.42	--	J
75-35-4	1,1-Dichloroethene	ND	0.556	--	ND	2.20	--	U
75-65-0	Tertiary butyl Alcohol	1.52	1.39	--	4.61	4.21	--	J
75-09-2	Methylene chloride	ND	1.39	--	ND	4.83	--	U
107-05-1	3-Chloropropene	ND	0.556	--	ND	1.74	--	U
75-15-0	Carbon disulfide	1.55	0.556	--	4.83	1.73	--	J
76-13-1	Freon-113	ND	0.556	--	ND	4.26	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.556	--	ND	2.20	--	U
75-34-3	1,1-Dichloroethane	ND	0.556	--	ND	2.25	--	U
1634-04-4	Methyl tert butyl ether	ND	0.556	--	ND	2.00	--	U
78-93-3	2-Butanone	4.40	1.39	--	13.0	4.10	--	J
156-59-2	cis-1,2-Dichloroethene	ND	0.556	--	ND	2.20	--	U
141-78-6	Ethyl Acetate	4.15	1.39	--	15.0	5.01	--	J
67-66-3	Chloroform	ND	0.556	--	ND	2.72	--	U
109-99-9	Tetrahydrofuran	20.9	1.39	--	61.6	4.10	--	J

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-03D
 Client ID : 256-SS-02
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737167
 Sample Amount : 90.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:15
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 23:53
 Dilution Factor : 2.778
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
107-06-2	1,2-Dichloroethane	ND	0.556	--	ND	2.25	--	U
110-54-3	n-Hexane	53.8	0.556	--	190	1.96	--	NJ
71-55-6	1,1,1-Trichloroethane	ND	0.556	--	ND	3.03	--	U
71-43-2	Benzene	3.65	0.556	--	11.7	1.78	--	J
56-23-5	Carbon tetrachloride	ND	0.556	--	ND	3.50	--	U
110-82-7	Cyclohexane	68.4	0.556	--	235	1.91	--	J
78-87-5	1,2-Dichloropropane	ND	0.556	--	ND	2.57	--	U
75-27-4	Bromodichloromethane	ND	0.556	--	ND	3.72	--	U
123-91-1	1,4-Dioxane	ND	0.556	--	ND	2.00	--	U
79-01-6	Trichloroethene	ND	0.556	--	ND	2.99	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.556	--	ND	2.60	--	U
142-82-5	Heptane	47.2	0.556	--	193	2.28	--	J
10061-01-5	cis-1,3-Dichloropropene	ND	0.556	--	ND	2.52	--	U
108-10-1	4-Methyl-2-pentanone	ND	1.39	--	ND	5.70	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.556	--	ND	2.52	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.556	--	ND	3.03	--	U
108-88-3	Toluene	16.0	0.556	--	60.3	2.10	--	J
591-78-6	2-Hexanone	ND	0.556	--	ND	2.28	--	U
124-48-1	Dibromochloromethane	ND	0.556	--	ND	4.74	--	U
106-93-4	1,2-Dibromoethane	ND	0.556	--	ND	4.27	--	U
127-18-4	Tetrachloroethene	ND	0.556	--	ND	3.77	--	U
108-90-7	Chlorobenzene	ND	0.556	--	ND	2.56	--	U
100-41-4	Ethylbenzene	2.84	0.556	--	12.3	2.42	--	J
179601-23-1	p/m-Xylene	11.5	1.11	--	50.0	4.82	--	J
75-25-2	Bromoform	ND	0.556	--	ND	5.75	--	U
100-42-5	Styrene	ND	0.556	--	ND	2.37	--	U

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-03D
 Client ID : 256-SS-02
 Sample Location :
 Sample Matrix : SOIL_VAPOR
 Analytical Method : 48,TO-15
 Lab File ID : R1737167
 Sample Amount : 90.0 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:15
 Date Received : 12/05/23
 Date Analyzed : 12/15/23 23:53
 Dilution Factor : 2.778
 Analyst : KJD
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.556	--	ND	3.82	--	U UJ
95-47-6	o-Xylene	3.92	0.556	--	17.0	2.42	--	J
622-96-8	4-Ethyltoluene	ND	0.556	--	ND	2.73	--	U UJ
108-67-8	1,3,5-Trimethylbenzene	ND	0.556	--	ND	2.73	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.556	--	ND	2.73	--	U
100-44-7	Benzyl chloride	ND	0.556	--	ND	2.88	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.556	--	ND	3.34	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.556	--	ND	3.34	--	U
95-50-1	1,2-Dichlorobenzene	ND	0.556	--	ND	3.34	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.556	--	ND	4.13	--	U
87-68-3	Hexachlorobutadiene	ND	0.556	--	ND	5.93	--	U

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-04
 Client ID : 256-IA-02
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737049
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:17
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:46
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.464	0.200	--	2.29	0.989	--	
74-87-3	Chloromethane	0.468	0.200	--	0.966	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	32.0	5.00	--	60.3	9.42	--	
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	37.8	1.00	--	89.8	2.38	--	
75-69-4	Trichlorofluoromethane	0.202	0.200	--	1.14	1.12	--	
67-63-0	Isopropanol	3.08	0.500	--	7.57	1.23	--	
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.559	0.500	--	1.94	1.74	--	
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	2.04	0.500	--	6.02	1.47	--	
141-78-6	Ethyl Acetate	0.612	0.500	--	2.21	1.80	--	
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	10.1	0.500	--	29.8	1.47	--	
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	0.602	0.200	--	2.12	0.705	--	NJ
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
110-82-7	Cyclohexane	0.370	0.200	--	1.27	0.688	--	

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-04
 Client ID : 256-IA-02
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737049
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:17
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:46
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	0.316	0.200	--	1.30	0.820	--	
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	1.73	0.200	--	6.52	0.754	--	
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	0.537	0.400	--	2.33	1.74	--	
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	0.449	0.200	--	1.91	0.852	--	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	0.217	0.200	--	0.943	0.869	--	
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-04
 Client ID : 256-IA-02
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737049
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:17
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:46
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-05
 Client ID : OA-01-120423
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737047
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:27
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 20:27
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-71-8	Dichlorodifluoromethane	0.455	0.200	--	2.25	0.989	--	
74-87-3	Chloromethane	0.442	0.200	--	0.913	0.413	--	
76-14-2	Freon-114	ND	0.200	--	ND	1.40	--	U
106-99-0	1,3-Butadiene	ND	0.200	--	ND	0.442	--	U
74-83-9	Bromomethane	ND	0.200	--	ND	0.777	--	U
75-00-3	Chloroethane	ND	0.200	--	ND	0.528	--	U
64-17-5	Ethanol	ND	5.00	--	ND	9.42	--	U
593-60-2	Vinyl bromide	ND	0.200	--	ND	0.874	--	U
67-64-1	Acetone	1.49	1.00	--	3.54	2.38	--	
75-69-4	Trichlorofluoromethane	0.209	0.200	--	1.17	1.12	--	
67-63-0	Isopropanol	ND	0.500	--	ND	1.23	--	U
75-65-0	Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	U
75-09-2	Methylene chloride	0.602	0.500	--	2.09	1.74	--	
75-15-0	Carbon disulfide	ND	0.200	--	ND	0.623	--	U
76-13-1	Freon-113	ND	0.200	--	ND	1.53	--	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	U
75-34-3	1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	U
1634-04-4	Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	U
78-93-3	2-Butanone	ND	0.500	--	ND	1.47	--	U
141-78-6	Ethyl Acetate	ND	0.500	--	ND	1.80	--	U
67-66-3	Chloroform	ND	0.200	--	ND	0.977	--	U
109-99-9	Tetrahydrofuran	ND	0.500	--	ND	1.47	--	U
107-06-2	1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	U
110-54-3	n-Hexane	ND	0.200	--	ND	0.705	--	U
71-43-2	Benzene	ND	0.200	--	ND	0.639	--	U
110-82-7	Cyclohexane	ND	0.200	--	ND	0.688	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-05
 Client ID : OA-01-120423
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737047
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:27
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 20:27
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
78-87-5	1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	U
75-27-4	Bromodichloromethane	ND	0.200	--	ND	1.34	--	U
123-91-1	1,4-Dioxane	ND	0.200	--	ND	0.721	--	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	U
142-82-5	Heptane	ND	0.200	--	ND	0.820	--	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	U
108-88-3	Toluene	ND	0.200	--	ND	0.754	--	U
591-78-6	2-Hexanone	ND	0.200	--	ND	0.820	--	U
124-48-1	Dibromochloromethane	ND	0.200	--	ND	1.70	--	U
106-93-4	1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	U
108-90-7	Chlorobenzene	ND	0.200	--	ND	0.921	--	U
100-41-4	Ethylbenzene	ND	0.200	--	ND	0.869	--	U
179601-23-1	p/m-Xylene	ND	0.400	--	ND	1.74	--	U
75-25-2	Bromoform	ND	0.200	--	ND	2.07	--	U
100-42-5	Styrene	ND	0.200	--	ND	0.852	--	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	U
95-47-6	o-Xylene	ND	0.200	--	ND	0.869	--	U
622-96-8	4-Ethyltoluene	ND	0.200	--	ND	0.983	--	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	U
100-44-7	Benzyl chloride	ND	0.200	--	ND	1.04	--	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U



Results Summary

Form 1

Volatile Organics in Air

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-05
 Client ID : OA-01-120423
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15
 Lab File ID : R1737047
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:27
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 20:27
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
95-50-1	1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	U
87-68-3	Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	U

GC/MS VOA
Air Analysis
Selective Ion Monitoring

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-02
 Client ID : 260-IA-01
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1737048_EV2
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:01
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:06
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier	
		Results	RL	MDL	Results	RL	MDL		
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U	UJ
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U	UJ
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U	UJ
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U	UJ
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U	UJ
56-23-5	Carbon tetrachloride	0.068	0.020	--	0.428	0.126	--		J
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U	UJ
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U	UJ

MKP 6/28/2024



Results Summary

Form 1

Volatile Organics in Air by SIM

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-04
 Client ID : 256-IA-02
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1737049_EV2
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:17
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 21:46
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.071	0.020	--	0.447	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

Results Summary

Form 1

Volatile Organics in Air by SIM

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Lab ID : L2371495-05
 Client ID : OA-01-120423
 Sample Location :
 Sample Matrix : AIR
 Analytical Method : 48,TO-15-SIM
 Lab File ID : R1737047_EV2
 Sample Amount : 250 ml

Lab Number : L2371495
 Project Number : E67.022.009
 Date Collected : 12/05/23 13:27
 Date Received : 12/05/23
 Date Analyzed : 12/10/23 20:27
 Dilution Factor : 1
 Analyst : RAY
 Instrument ID : AIRLAB17
 GC Column : RTX-1

CAS NO.	Parameter	ppbV			ug/m3			Qualifier
		Results	RL	MDL	Results	RL	MDL	
75-01-4	Vinyl chloride	ND	0.020	--	ND	0.051	--	U
75-35-4	1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	U
107-05-1	3-Chloropropene	ND	0.200	--	ND	0.626	--	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	U
56-23-5	Carbon tetrachloride	0.072	0.020	--	0.453	0.126	--	
79-01-6	Trichloroethene	ND	0.020	--	ND	0.107	--	U
127-18-4	Tetrachloroethene	ND	0.020	--	ND	0.136	--	U

Appendix B

Laboratory QC Documentation

Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Matrix (Level) : AIR (LOW)
 LCS Sample ID : WG1862125-3
 LCSD Sample ID :

Lab Number : L2371495
 Project Number : E67.022.009
 Analysis Date : 12/10/23 14:13
 File ID : r1737042
 Analysis Date :
 File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,2-Dichloroethane	10	8.98	90				-	70-130	-
n-Hexane	10	9.30	93				-	70-130	-
1,1,1-Trichloroethane	10	9.17	92				-	70-130	-
Benzene	10	8.90	89				-	70-130	-
Carbon tetrachloride	10	10.6	106				-	70-130	-
Cyclohexane	10	9.52	95				-	70-130	-
1,2-Dichloropropane	10	9.30	93				-	70-130	-
Bromodichloromethane	10	10.8	108				-	70-130	-
1,4-Dioxane	10	9.66	97				-	70-130	-
Trichloroethene	10	9.40	94				-	70-130	-
2,2,4-Trimethylpentane	10	9.57	96				-	70-130	-
Heptane	10	9.44	94				-	70-130	-
cis-1,3-Dichloropropene	10	9.26	93				-	70-130	-
4-Methyl-2-pentanone	10	9.45	94				-	70-130	-
trans-1,3-Dichloropropene	10	8.83	88				-	70-130	-
1,1,2-Trichloroethane	10	9.50	95				-	70-130	-
Toluene	10	9.59	96				-	70-130	-
2-Hexanone	10	9.37	94				-	70-130	-
Dibromochloromethane	10	12.6	126				-	70-130	-
1,2-Dibromoethane	10	10.1	101				-	70-130	-
Tetrachloroethene	10	9.55	96				-	70-130	-
Chlorobenzene	10	9.81	98				-	70-130	-
Ethylbenzene	10	9.98	100				-	70-130	-
p/m-Xylene	20	20.2	101				-	70-130	-
Bromoform	10	14.1	141 Q				-	70-130	-
Styrene	10	9.91	99				-	70-130	-

Laboratory Control Sample Summary

Form 3

Air Volatiles

Client : C&S Companies
 Project Name : 240 LAKEFRONT BLVD
 Matrix (Level) : AIR (LOW)
 LCS Sample ID : WG1864611-3
 LCSD Sample ID :

Lab Number : L2371495
 Project Number : E67.022.009
 Analysis Date : 12/15/23 13:26
 File ID : r1737156
 Analysis Date :
 File ID :

Parameter	Laboratory Control Sample			Laboratory Control Duplicate			RPD	Recovery Limits	RPD Limit
	True (ppbV)	Found (ppbV)	%R	True (ppbV)	Found (ppbV)	%R			
1,2-Dichloroethane	10	11.7	117				-	70-130	-
n-Hexane	10	9.62	96				-	70-130	-
1,1,1-Trichloroethane	10	10.5	105				-	70-130	-
Benzene	10	8.43	84				-	70-130	-
Carbon tetrachloride	10	11.2	112				-	70-130	-
Cyclohexane	10	9.64	96				-	70-130	-
1,2-Dichloropropane	10	10.6	106				-	70-130	-
Bromodichloromethane	10	11.2	112				-	70-130	-
1,4-Dioxane	10	10.3	103				-	70-130	-
Trichloroethene	10	10.1	101				-	70-130	-
2,2,4-Trimethylpentane	10	10.0	100				-	70-130	-
Heptane	10	10.4	104				-	70-130	-
cis-1,3-Dichloropropene	10	9.04	90				-	70-130	-
4-Methyl-2-pentanone	10	10.6	106				-	70-130	-
trans-1,3-Dichloropropene	10	8.78	88				-	70-130	-
1,1,2-Trichloroethane	10	10.5	105				-	70-130	-
Toluene	10	9.78	98				-	70-130	-
2-Hexanone	10	9.86	99				-	70-130	-
Dibromochloromethane	10	13.0	130				-	70-130	-
1,2-Dibromoethane	10	9.73	97				-	70-130	-
Tetrachloroethene	10	9.48	95				-	70-130	-
Chlorobenzene	10	9.18	92				-	70-130	-
Ethylbenzene	10	10.1	101				-	70-130	-
p/m-Xylene	20	20.6	103				-	70-130	-
Bromoform	10	13.8	138 Q				-	70-130	-
Styrene	10	9.20	92				-	70-130	-



Appendix C

Validator Qualifications

KENNETH R. APPLIN

Geochemist/Data Validator

Ph.D., Geochemistry and Mineralogy, The Pennsylvania State University

M.S., Geochemistry and Mineralogy, The Pennsylvania State University

B.A., Geological Sciences, SUNY at Geneseo, NY

Dr. Applin has over 35 years of experience working with the geochemistry of natural waters. His prior experience includes working as an Assistant Professor of Geology at the University of Missouri-Columbia and as Chief Hydrogeologist and Geochemist with a leading engineering firm in Rochester, NY. In 1993, he established KR Applin and Associates, a small consulting business that focuses on the geochemistry of natural waters, especially as applied to problems involving the contamination of groundwater and surface water.

Dr. Applin is also an experienced analytical data validator and has provided data validation services since 1994 to a variety of clients performing brownfield cleanup projects, hazardous waste remediation, groundwater monitoring at solid waste facilities, and other projects requiring third-party data validation. Dr. Applin has several years of hands-on experience with the laboratory analysis of natural waters and has successfully completed the USEPA Region II certification courses for performing inorganic and organic analytical data validation.

MICHAEL K. PERRY

Chemist/Data Validator

B.S. Chemistry, Georgia State University, Atlanta, GA

A.A.S., Chemical Technology, Alfred State College, Alfred, NY

Mr. Perry has over 30 years of experience in the analytical laboratory business. During his early career, he spent several years as a laboratory analyst performing the analysis of soil, water, and air samples for inorganic and organic chemical parameters. During his last 20 years in the environmental laboratory business, he managed and directed two major analytical laboratories in Rochester, NY. His management responsibilities included oversight of the daily operations of the lab, staff training and supervision, the selection, purchase, and maintenance of analytical instruments, the introduction of new laboratory methods, analytical quality assurance and quality control, data acquisition and management, and other business-related activities.

Mr. Perry has an extensive working knowledge of the methods and procedures used for sampling and analyzing both inorganic and organic analytes in soil, water, and air. He is an accomplished laboratory chemist and is familiar with the analytical methods and procedures established under the USEPA Contract Laboratory Protocols (CLP), the NYSDEC Analytical Services Protocols (ASP), and the NYSDOH Environmental Laboratory Approval Program (ELAP).

Attachment C

Field Logs

Air Sampling Field Sheet



Site Name: 240-260 Lakefront Boulevard
Site Address:
C&S Staff: Cary Martin
C&S Project #: E67.022.008

Sample ID	Sample Location	Canister ID	Regulator ID	Date / Time Deployed	Pressure at Deployment	PID at Deployment	Date / Time Retrieved	Pressure at Retrieval	PID at Retrieval
260-SS-01	Building A	3486	01122	12/4/23 12:44	-29.44		12/5/23 1:02	-11.42	
260-IA-01		2447	02154	12:45	-29.40		1:01	0.00	
256-SS-02		1936	0982	12:47	-29.34		1:15	-0.11	
256-IA-02		2840	0240	12:49	-30.65		1:17	-6.19	
OA-01-120423		3365	01240	12:57	-29.65		1:27	-1.49	

Sample IDs: SSA- for subslab air, BM- for basement air, IA- for indoor air, and OA- for outdoor air

Location	Date / Time	Air Pressure	Wind Direction	Wind Speed	Temperature	Precipitation	Cloud Cover	Dew Point
	Attached							

Comments on building layout, construction, HVAC, or other features (e.g. open doors or windows, sumps, cracked flooring, etc.) that may affect intrusion or air flow:
HVAC system operational; located on the first floor. Doors and windows closed. No floor cracks

Comments on building activities / functions (e.g. painting, recent construction, new furniture, etc.) or material storage that could affect sample results:
Newly constructed townhome. Drywall contractor working inside building. Various interior building materials stored inside garage. No construction materials inside the building will affect the sample results.

Sample Location Sketch:
See Figures Section

Search Locations

Log In (/login)

Go Ad Free



Recent Cities

Buffalo, NY (/weather/us/ny/buffalo/42.93,-78.88) Boston, NY (14025) (/weather/us/ny/boston/42.63,-78.74) Niagara Falls, NY (/weather/

42.91 °N, 78.78 °W

Cheektowaga, NY Weather History ★ 🏠

☀️ 83° BUFFALO NIAGARA INTL AIRPORT STATION (/DASHBOARD/PWS/KNYBUFFA100?CM_VEN=LOCALWX_PWSDASH) | CHANGE ✓

HISTORY (/HISTORY/DAILY/US/NY/CHEEKTOWAGA/KBUF)

- TODAY (/WEATHER/US/NY/CHEEKTOWAGA/KBUF)
- HOURLY (/HOURLY/US/NY/CHEEKTOWAGA/KBUF)
- 10-DAY (/FORECAST/US/NY/CHEEKTOWAGA/KBUF)
- CALENDAR (/CALENDAR/US/NY/CHEEKTOWAGA/KBUF)
- HISTORY (/HISTORY/DAILY/US/NY/CHEEKTOWAGA/KBUF)
- WUNDERMAP (/WUNDERMAP?LAT=42.913&LON=-78.784)

Daily

Weekly

Monthly

(/history/daily/us/ny/cheektowaga/kbuf/date/2023-12-4) (/history/daily/us/ny/cheektowaga/kbuf/date/2023-12-4) (/history/daily/us/ny/cheektowaga/kbuf/date/2023-12-4)

12-4)

12-4)

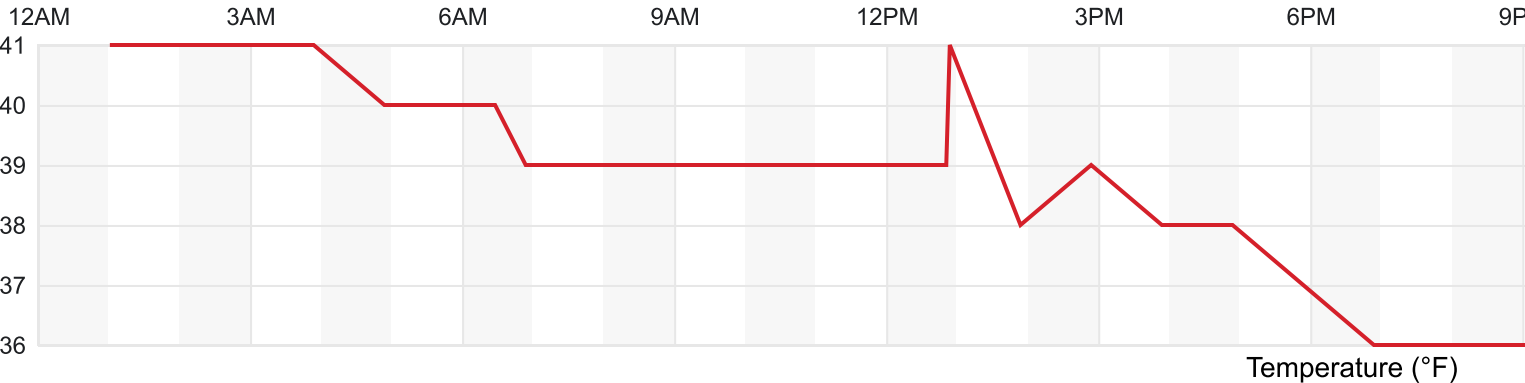
12)

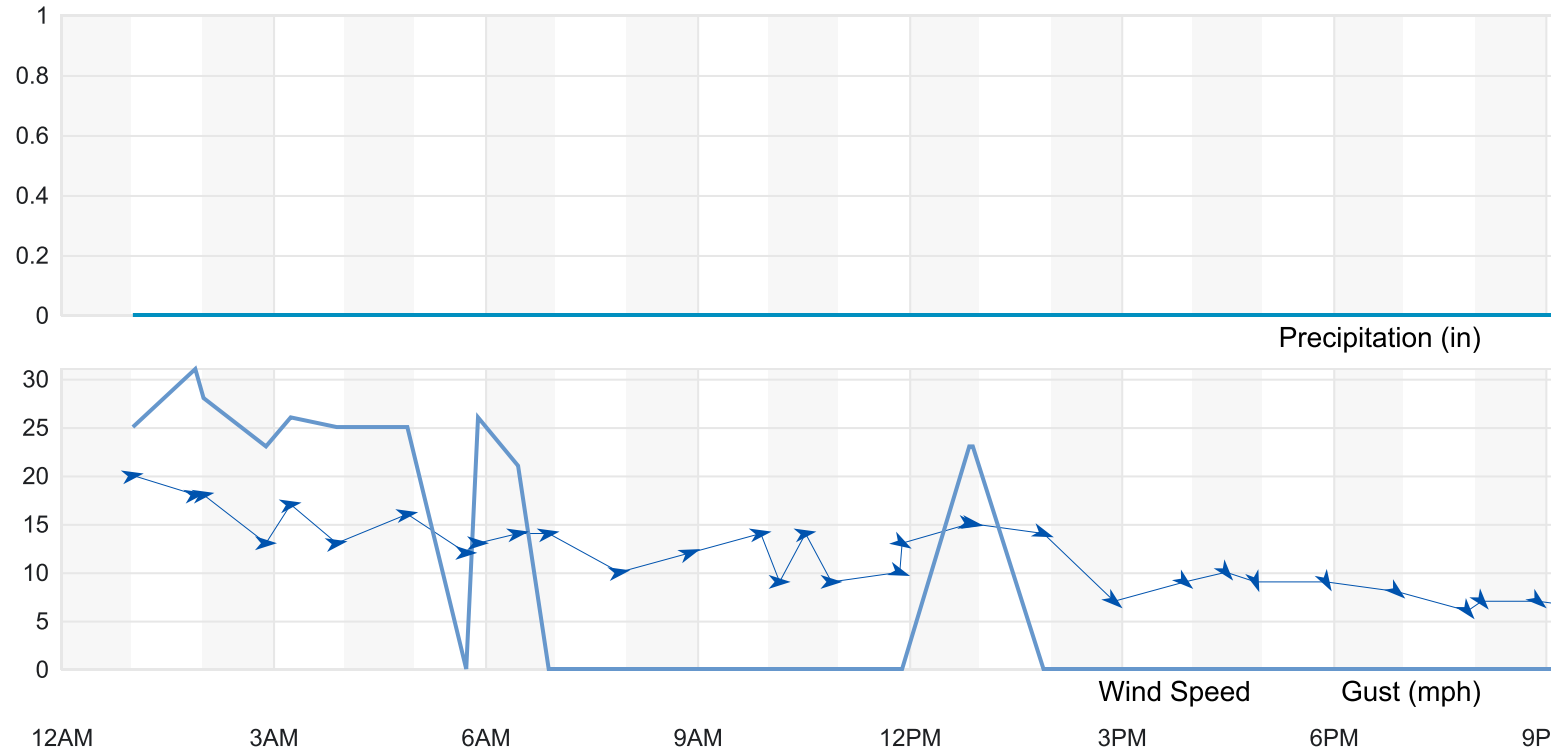
December

4

2023

View





Summary

Temperature (°F)	Actual	Historic Avg.	Record	▲
High Temp	41	40.6	70	
Low Temp	36	28.7	-2	
Day Average Temp	38.51	34.7	-	
Precipitation (in)	Actual	Historic Avg.	Record	▲
Precipitation (past 24 hours from 11:54:00)	0.29	5.50	-	
Dew Point (°F)	Actual	Historic Avg.	Record	▲
Dew Point	32.89	-	-	
High	37	-	-	
Low	28	-	-	
Average	32.89	-	-	
Wind (mph)	Actual	Historic Avg.	Record	▲
Max Wind Speed	20	-	-	
Visibility	10	-	-	

Temperature (°F)	Actual	Historic Avg.	Record	▲
Sea Level Pressure (in)	Actual	Historic Avg.	Record	▲
Sea Level Pressure	29.2	-	-	
Astronomy	Day Length	Rise	Set	▲
Actual Time	9h 12m	7:30 AM	4:42 PM	
Civil Twilight		6:58 AM	5:14 PM	
Nautical Twilight		6:23 AM	5:49 PM	
Astronomical Twilight		5:49 AM	6:24 PM	
Moon: waning gibbous		11:43 PM	12:49 PM	

Daily Observations

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Prec
1:01 AM	41 °F	37 °F	86 %	W	20 mph	25 mph	28.88 in	0.0 ir
1:54 AM	41 °F	36 °F	82 %	W	18 mph	31 mph	28.88 in	0.0 ir
2:01 AM	41 °F	36 °F	82 %	W	18 mph	28 mph	28.88 in	0.0 ir
2:54 AM	41 °F	37 °F	86 %	W	13 mph	23 mph	28.90 in	0.0 ir
3:15 AM	41 °F	37 °F	86 %	W	17 mph	26 mph	28.91 in	0.0 ir
3:54 AM	41 °F	36 °F	82 %	W	13 mph	25 mph	28.92 in	0.0 ir
4:54 AM	40 °F	35 °F	83 %	W	16 mph	25 mph	28.93 in	0.0 ir
5:44 AM	40 °F	36 °F	86 %	W	12 mph	0 mph	28.94 in	0.0 ir
5:54 AM	40 °F	35 °F	83 %	W	13 mph	26 mph	28.93 in	0.0 ir
6:28 AM	40 °F	35 °F	83 %	W	14 mph	21 mph	28.94 in	0.0 ir
6:54 AM	39 °F	35 °F	86 %	W	14 mph	0 mph	28.95 in	0.0 ir
7:54 AM	39 °F	36 °F	89 %	W	10 mph	0 mph	28.96 in	0.0 ir
8:54 AM	39 °F	36 °F	89 %	WSW	12 mph	0 mph	28.97 in	0.0 ir
9:54 AM	39 °F	36 °F	89 %	W	14 mph	0 mph	28.99 in	0.0 ir
10:10 AM	39 °F	35 °F	86 %	W	9 mph	0 mph	29.00 in	0.0 ir
10:32 AM	39 °F	35 °F	86 %	W	14 mph	0 mph	29.00 in	0.0 ir
10:54 AM	39 °F	35 °F	86 %	W	9 mph	0 mph	29.00 in	0.0 ir

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Prec
11:52 AM	39 °F	32 °F	75 %	WNW	10 mph	0 mph	29.00 in	0.0 ir
11:54 AM	39 °F	32 °F	76 %	WNW	13 mph	0 mph	29.00 in	0.0 ir
12:51 PM	39 °F	32 °F	75 %	W	15 mph	23 mph	28.99 in	0.0 ir
12:54 PM	41 °F	32 °F	70 %	W	15 mph	23 mph	28.99 in	0.0 ir
1:54 PM	38 °F	31 °F	76 %	WNW	14 mph	0 mph	29.00 in	0.0 ir
2:54 PM	39 °F	31 °F	73 %	NW	7 mph	0 mph	29.00 in	0.0 ir
3:54 PM	38 °F	30 °F	73 %	NW	9 mph	0 mph	29.03 in	0.0 ir
4:29 PM	38 °F	31 °F	76 %	NW	10 mph	0 mph	29.04 in	0.0 ir
4:54 PM	38 °F	31 °F	76 %	NNW	9 mph	0 mph	29.06 in	0.0 ir
5:54 PM	37 °F	31 °F	79 %	NNW	9 mph	0 mph	29.08 in	0.0 ir
6:54 PM	36 °F	31 °F	82 %	NW	8 mph	0 mph	29.11 in	0.0 ir
7:54 PM	36 °F	31 °F	82 %	NW	6 mph	0 mph	29.14 in	0.0 ir
8:06 PM	36 °F	31 °F	82 %	NW	7 mph	0 mph	29.14 in	0.0 ir
8:54 PM	36 °F	30 °F	79 %	NW	7 mph	0 mph	29.16 in	0.0 ir
9:54 PM	36 °F	30 °F	79 %	WNW	6 mph	0 mph	29.16 in	0.0 ir
10:54 PM	36 °F	29 °F	76 %	WNW	5 mph	0 mph	29.17 in	0.0 ir
11:22 PM	36 °F	29 °F	76 %	NW	6 mph	0 mph	29.17 in	0.0 ir
11:54 PM	36 °F	29 °F	76 %	WNW	8 mph	0 mph	29.18 in	0.0 ir
12:46 AM	36 °F	28 °F	73 %	WNW	9 mph	0 mph	29.20 in	0.0 ir
12:54 AM	36 °F	28 °F	73 %	WNW	8 mph	0 mph	29.20 in	0.0 ir

[Our Apps \(/download\)](#)

[About Us \(/about/our-company\)](#)

[Contact \(/about/contact-us\)](#)

[Careers \(https://www.weathercompany.com/careers\)](https://www.weathercompany.com/careers)

[PWS Network \(/pws/overview\)](#)

[WunderMap \(/wundermap\)](#)

[Feedback & Support \(https://www.wunderground.com/feedback\)](https://www.wunderground.com/feedback)

[Terms of Use \(/company/legal\)](/company/legal)

[Privacy Policy \(/company/privacy-policy\)](/company/privacy-policy)

[Accessibility Statement \(/accessibility-statement\)](/accessibility-statement)

[AdChoices \(/company/ad-choices\)](/company/ad-choices)

[Data Vendors \(/data-vendors\)](/data-vendors)



[https://www.essentialaccessibility.com/the-weather-channel?
utm_source=theweatherchannelhomepage&utm_medium=iconlarge&utm_term=eachannelpage&utm_content=header&utm_campaign=](https://www.essentialaccessibility.com/the-weather-channel?utm_source=theweatherchannelhomepage&utm_medium=iconlarge&utm_term=eachannelpage&utm_content=header&utm_campaign=)

We recognize our responsibility to use data and technology for good. We may use or share your data with our data vendors. Take control of your data.

[Review All Privacy and Ad Settings \(/privacy-settings\)](/privacy-settings)

[Choose how my information is shared \(/privacy-settings#do-not-sell\)](/privacy-settings#do-not-sell)

[Data Rights \(/data-rights\)](/data-rights)



© Copyright TWC Product and Technology LLC 2014, 2024

Search Locations

Log In (/login)

Go Ad Free



Recent Cities

Buffalo, NY (/weather/us/ny/buffalo/42.93,-78.88) Boston, NY (14025) (/weather/us/ny/boston/42.63,-78.74) Niagara Falls, NY (/weather/

42.91 °N, 78.78 °W

Cheektowaga, NY Weather History ★ 🏠

☀️ 83° BUFFALO NIAGARA INTL AIRPORT STATION (/DASHBOARD/PWS/KNYBUFFA100?CM_VEN=LOCALWX_PWSDASH) | CHANGE ✓

HISTORY (/HISTORY/DAILY/US/NY/CHEEKTOWAGA/KBUF)

- TODAY (/WEATHER/US/NY/CHEEKTOWAGA/KBUF)
- HOURLY (/HOURLY/US/NY/CHEEKTOWAGA/KBUF)
- 10-DAY (/FORECAST/US/NY/CHEEKTOWAGA/KBUF)
- CALENDAR (/CALENDAR/US/NY/CHEEKTOWAGA/KBUF)
- HISTORY (/HISTORY/DAILY/US/NY/CHEEKTOWAGA/KBUF)
- WUNDERMAP (/WUNDERMAP?LAT=42.913&LON=-78.784)

Daily

Weekly

Monthly

(/history/daily/us/ny/cheektowaga/kbuf/date/2023-12-05) (/history/daily/us/ny/cheektowaga/kbuf/date/2023-12-05) (/history/daily/us/ny/cheektowaga/kbuf/date/2023-12-05)

12-5)

12-5)

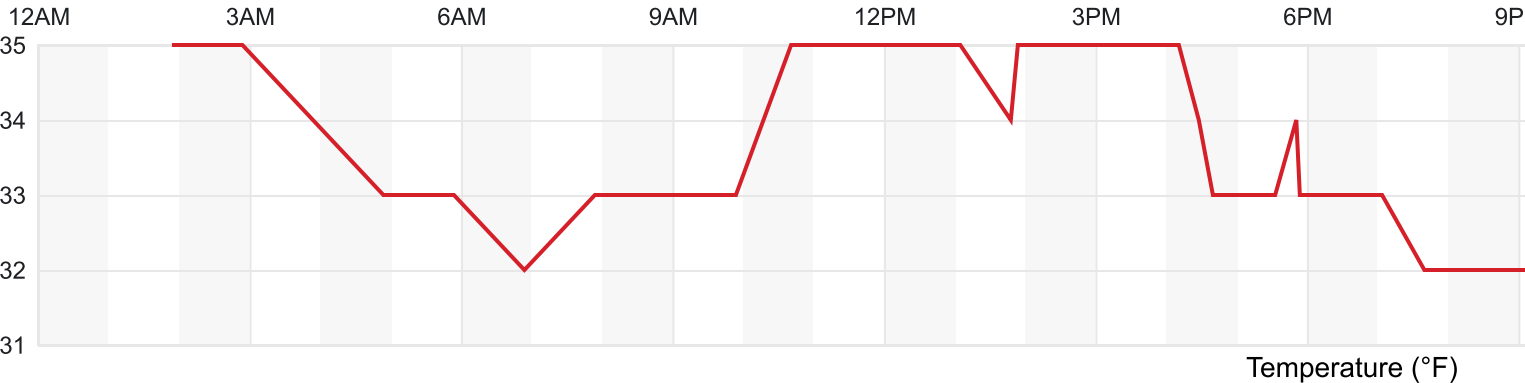
12)

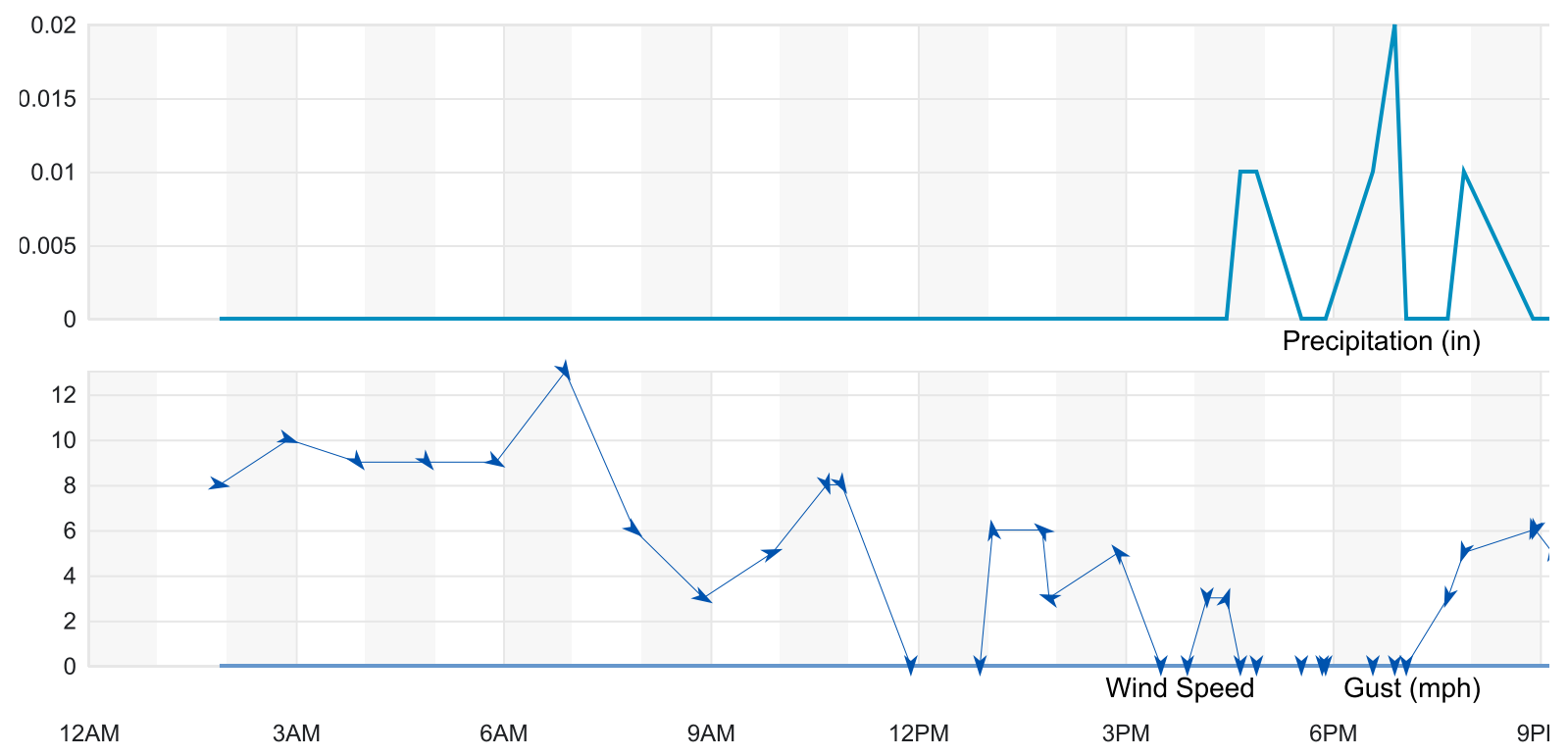
December

5

2023

View





Summary

Temperature (°F)	Actual	Historic Avg.	Record	▲
High Temp	35	40.3	66	
Low Temp	31	28.5	-3	
Day Average Temp	33.16	34.4	-	
Precipitation (in)	Actual	Historic Avg.	Record	▲
Precipitation (past 24 hours from 05:54:00)	0.00	5.50	-	
Dew Point (°F)	Actual	Historic Avg.	Record	▲
Dew Point	28.23	-	-	
High	31	-	-	
Low	24	-	-	
Average	28.23	-	-	
Wind (mph)	Actual	Historic Avg.	Record	▲
Max Wind Speed	13	-	-	
Visibility	10	-	-	

Temperature (°F)	Actual	Historic Avg.	Record	▲
Sea Level Pressure (in)	Actual	Historic Avg.	Record	▲
Sea Level Pressure	29.27	-	-	
Astronomy	Day Length	Rise	Set	▲
Actual Time	9h 10m	7:31 AM	4:42 PM	
Civil Twilight		6:59 AM	5:14 PM	
Nautical Twilight		6:24 AM	5:49 PM	
Astronomical Twilight		5:50 AM	6:24 PM	
Moon: waning crescent		-	1:08 PM	

Daily Observations

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Prec
1:54 AM	35 °F	27 °F	72 %	W	8 mph	0 mph	29.21 in	0.0 ir
2:54 AM	35 °F	27 °F	72 %	WNW	10 mph	0 mph	29.23 in	0.0 ir
3:54 AM	34 °F	26 °F	73 %	NW	9 mph	0 mph	29.23 in	0.0 ir
4:54 AM	33 °F	24 °F	70 %	NW	9 mph	0 mph	29.23 in	0.0 ir
5:54 AM	33 °F	25 °F	72 %	WNW	9 mph	0 mph	29.24 in	0.0 ir
6:54 AM	32 °F	25 °F	75 %	NNW	13 mph	0 mph	29.23 in	0.0 ir
7:54 AM	33 °F	25 °F	72 %	NW	6 mph	0 mph	29.24 in	0.0 ir
8:54 AM	33 °F	25 °F	72 %	WNW	3 mph	0 mph	29.25 in	0.0 ir
9:54 AM	33 °F	25 °F	72 %	WSW	5 mph	0 mph	29.27 in	0.0 ir
10:41 AM	35 °F	26 °F	70 %	NNW	8 mph	0 mph	29.26 in	0.0 ir
10:54 AM	35 °F	26 °F	70 %	NNW	8 mph	0 mph	29.27 in	0.0 ir
11:54 AM	35 °F	26 °F	70 %	CALM	0 mph	0 mph	29.27 in	0.0 ir
12:54 PM	35 °F	25 °F	67 %	CALM	0 mph	0 mph	29.24 in	0.0 ir
1:05 PM	35 °F	26 °F	70 %	S	6 mph	0 mph	29.24 in	0.0 ir
1:48 PM	34 °F	27 °F	75 %	SE	6 mph	0 mph	29.23 in	0.0 ir
1:54 PM	35 °F	27 °F	72 %	ESE	3 mph	0 mph	29.23 in	0.0 ir
2:54 PM	35 °F	27 °F	72 %	SE	5 mph	0 mph	29.22 in	0.0 ir

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Prec
3:31 PM	35 °F	27 °F	72 %	CALM	0 mph	0 mph	29.20 in	0.0 ir
3:54 PM	35 °F	27 °F	72 %	CALM	0 mph	0 mph	29.20 in	0.0 ir
4:11 PM	35 °F	27 °F	72 %	VAR	3 mph	0 mph	29.21 in	0.0 ir
4:28 PM	34 °F	28 °F	79 %	SSW	3 mph	0 mph	29.21 in	0.0 ir
4:40 PM	33 °F	29 °F	85 %	CALM	0 mph	0 mph	29.22 in	0.0 ir
4:54 PM	33 °F	30 °F	89 %	CALM	0 mph	0 mph	29.22 in	0.0 ir
5:33 PM	33 °F	30 °F	89 %	CALM	0 mph	0 mph	29.22 in	0.0 ir
5:51 PM	34 °F	30 °F	87 %	CALM	0 mph	0 mph	29.23 in	0.0 ir
5:54 PM	33 °F	30 °F	89 %	CALM	0 mph	0 mph	29.23 in	0.0 ir
6:35 PM	33 °F	31 °F	92 %	CALM	0 mph	0 mph	29.23 in	0.0 ir
6:54 PM	33 °F	31 °F	92 %	CALM	0 mph	0 mph	29.23 in	0.0 ir
7:04 PM	33 °F	31 °F	92 %	CALM	0 mph	0 mph	29.24 in	0.0 ir
7:40 PM	32 °F	31 °F	96 %	NNE	3 mph	0 mph	29.24 in	0.0 ir
7:54 PM	32 °F	31 °F	96 %	NNE	5 mph	0 mph	29.24 in	0.0 ir
8:54 PM	32 °F	31 °F	96 %	NNE	6 mph	0 mph	29.24 in	0.0 ir
8:56 PM	32 °F	31 °F	96 %	NNE	6 mph	0 mph	29.24 in	0.0 ir
9:11 PM	32 °F	30 °F	92 %	NNE	5 mph	0 mph	29.24 in	0.0 ir
9:54 PM	32 °F	30 °F	92 %	NNE	5 mph	0 mph	29.24 in	0.0 ir
10:12 PM	31 °F	30 °F	96 %	NNE	5 mph	0 mph	29.24 in	0.0 ir
10:54 PM	31 °F	30 °F	96 %	NE	3 mph	0 mph	29.24 in	0.0 ir
11:25 PM	31 °F	30 °F	96 %	NNE	5 mph	0 mph	29.24 in	0.0 ir
11:54 PM	31 °F	30 °F	96 %	NNE	3 mph	0 mph	29.24 in	0.0 ir
12:01 AM	31 °F	30 °F	96 %	NNE	3 mph	0 mph	29.24 in	0.0 ir
12:26 AM	31 °F	30 °F	96 %	NNE	5 mph	0 mph	29.25 in	0.0 ir
12:54 AM	32 °F	30 °F	92 %	NE	5 mph	0 mph	29.25 in	0.0 ir
12:58 AM	32 °F	30 °F	92 %	NE	5 mph	0 mph	29.25 in	0.0 ir

[Our Apps \(/download\).](#)

[About Us \(/about/our-company\).](#)

[Contact \(/about/contact-us\)](/about/contact-us)

[Careers \(https://www.weathercompany.com/careers\)](https://www.weathercompany.com/careers)

[PWS Network \(/pws/overview\)](/pws/overview)

[WunderMap \(/wundermap\)](/wundermap)

[Feedback & Support \(https://www.wunderground.com/feedback\)](https://www.wunderground.com/feedback)

[Terms of Use \(/company/legal\)](/company/legal)

[Privacy Policy \(/company/privacy-policy\)](/company/privacy-policy)

[Accessibility Statement \(/accessibility-statement\)](/accessibility-statement)

[AdChoices \(/company/ad-choices\)](/company/ad-choices)

[Data Vendors \(/data-vendors\)](/data-vendors)



[Access Logo \(https://www.essentialaccessibility.com/the-weather-channel?](https://www.essentialaccessibility.com/the-weather-channel?utm_source=theweatherchannelhomepage&utm_medium=iconlarge&utm_term=eachannelpage&utm_content=header&utm_c)

[utm_source=theweatherchannelhomepage&utm_medium=iconlarge&utm_term=eachannelpage&utm_content=header&utm_c](https://www.essentialaccessibility.com/the-weather-channel?utm_source=theweatherchannelhomepage&utm_medium=iconlarge&utm_term=eachannelpage&utm_content=header&utm_c)

We recognize our responsibility to use data and technology for good. We may use or share your data with our data vendors. Take control of your data.

[Review All Privacy and Ad Settings \(/privacy-settings\)](/privacy-settings)

[Choose how my information is shared \(/privacy-settings#do-not-sell\)](/privacy-settings#do-not-sell)

[Data Rights \(/data-rights\)](/data-rights)



© Copyright TWC Product and Technology LLC 2014, 2024

Air Sampling Field Sheet



Site Name: 240-260 Lakefront Boulevard
Site Address:
C&S Staff: Jesse Alt-Winzig
C&S Project #:

Sample ID	Sample Location	Canister ID	Regulator ID	Date / Time Deployed	Pressure at Deployment	PID at Deployment	Date / Time Retrieved	Pressure at Retrieval	PID at Retrieval
244-SS-01	Building B	207	385	3/29/24 10:00	29.0		3/29/24 10:40	0.0	
244-IA-01		288	454	10:00	31.5		10:40	3.1	
252-SS-02		479	446	10:10	31.0		10:50	5.9	
252-IA-02		472	380	10:10	31.5		10:50	3.1	
OA-01		242	395	10:30	31.5		11:00	2.2	
Sample IDs: SSA-- for subslab air, BM-- for basement air, IA-- for indoor air, and OA-- for outdoor air									

Location	Date / Time	Air Pressure	Wind Direction	Wind Speed	Temperature	Precipitation	Cloud Cover	Dew Point
	Attached							

Comments on building layout, construction, HVAC, or other features (e.g. open doors or windows, sumps, cracked flooring, etc.) that may affect intrusion or air flow:
HVAC system operational; located on the first floor. Doors and windows closed. No floor cracks.

Comments on building activities / functions (e.g. painting, recent construction, new furniture, etc.) or material storage that could affect sample results:
Newly constructed townhome. Various interior building materials stored inside garage. No construction materials inside the building will affect the sample results.

Sample Location Sketch:
See figures section.

★

Recent Cities

Buffalo, NY (/weather/us/ny/buffalo/42.93,-78.88)

Boston, NY (14025) (/weather/us/ny/boston/42.63,-78.74)

Niagara Falls, NY (/weather/

42.91 °N, 78.78 °W

Cheektowaga, NY Weather History★🏠

☀️ 83° BUFFALO NIAGARA INTL AIRPORT STATION (/DASHBOARD/PWS/KNYBUFFA100?CM_VEN=LOCALWX_PWSDASH) | CHANGE ✓

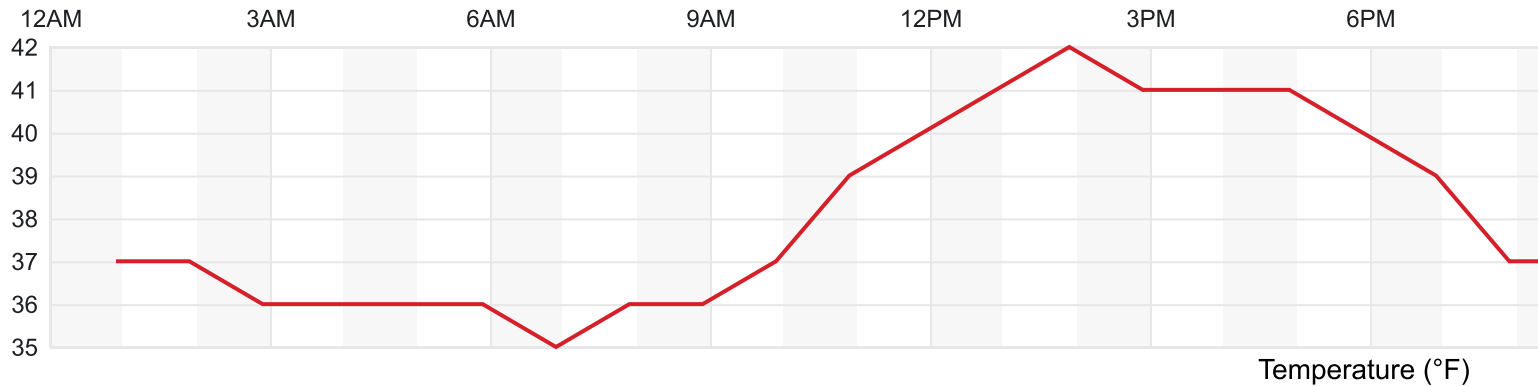
HISTORY (/HISTORY/DAILY/US/NY/CHEEKTOWAGA/KBUF)

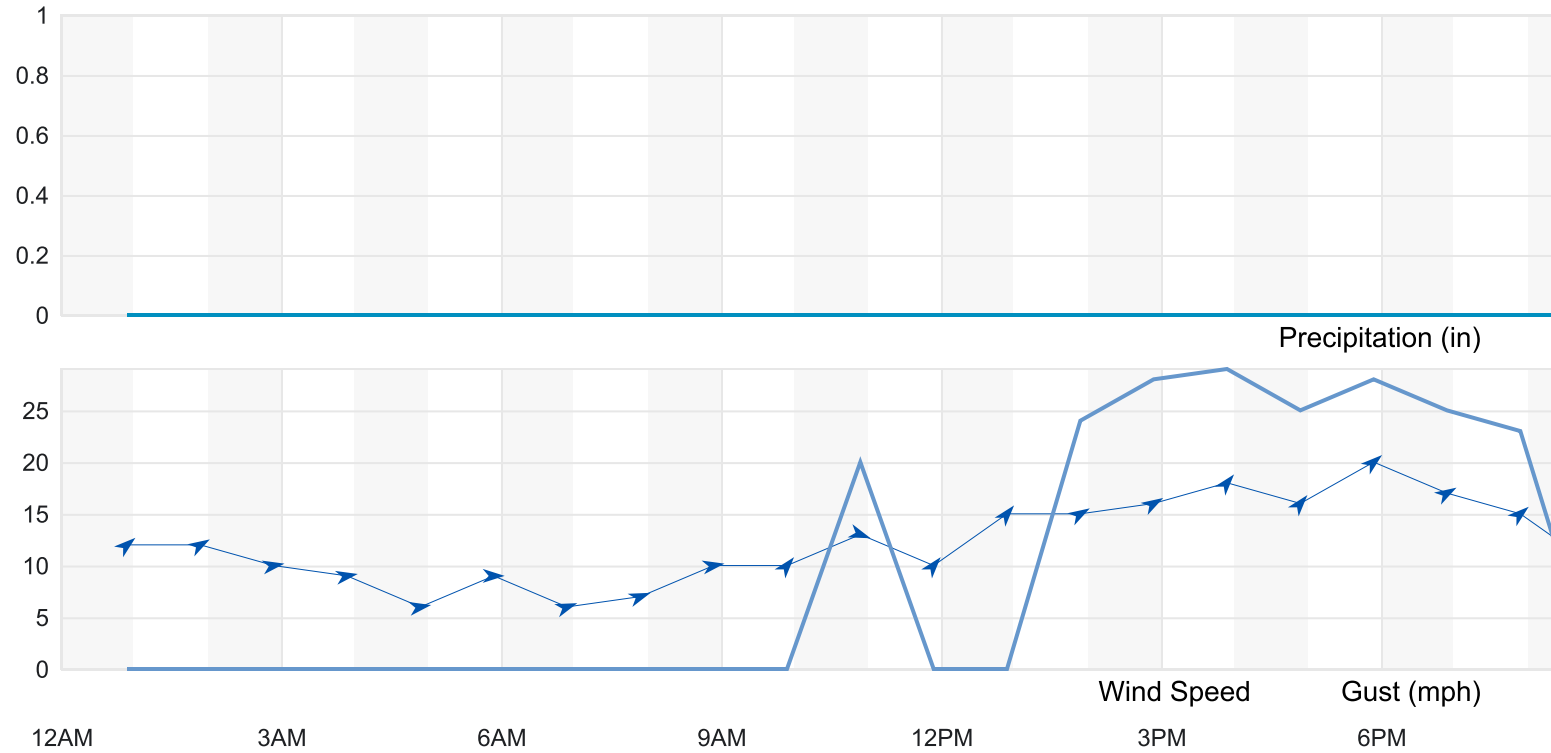
- TODAY (/WEATHER/US/NY/CHEEKTOWAGA/KBUF)
- HOURLY (/HOURLY/US/NY/CHEEKTOWAGA/KBUF)
- 10-DAY (/FORECAST/US/NY/CHEEKTOWAGA/KBUF)
- CALENDAR (/CALENDAR/US/NY/CHEEKTOWAGA/KBUF)
- HISTORY (/HISTORY/DAILY/US/NY/CHEEKTOWAGA/KBUF)
- WUNDERMAP (/WUNDERMAP?LAT=42.913&LON=-78.784)

DailyWeeklyMonthly

(/history/daily/US/ny/Cheektowaga/KBUF/date/2024-3-28) (/history/daily/US/ny/Cheektowaga/KBUF/date/2024-3-28) (/history/daily/US/ny/Cheektowaga/KBUF/date/2024-3)

March282024View





Summary

Temperature (°F)	Actual	Historic Avg.	Record	▲
High Temp	42	46.3	77	
Low Temp	35	29.8	5	
Day Average Temp	37.92	38	-	
Precipitation (in)	Actual	Historic Avg.	Record	▲
Precipitation (past 24 hours from 04:54:00)	0.00	4.70	-	
Dew Point (°F)	Actual	Historic Avg.	Record	▲
Dew Point	26.13	-	-	
High	30	-	-	
Low	24	-	-	
Average	26.13	-	-	
Wind (mph)	Actual	Historic Avg.	Record	▲
Max Wind Speed	20	-	-	
Visibility	10	-	-	

Temperature (°F)	Actual	Historic Avg.	Record	▲
Sea Level Pressure (in)	Actual	Historic Avg.	Record	▲
Sea Level Pressure	29.34	-	-	
Astronomy	Day Length	Rise	Set	▲
Actual Time	12h 33m	7:04 AM	7:37 PM	
Civil Twilight		6:36 AM	8:06 PM	
Nautical Twilight		6:02 AM	8:39 PM	
Astronomical Twilight		5:27 AM	9:14 PM	
Moon: waning gibbous		11:25 PM	8:19 AM	

Daily Observations

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Prec
12:54 AM	37 °F	29 °F	73 %	SW	12 mph	0 mph	29.31 in	0.0 ir
1:54 AM	37 °F	30 °F	76 %	WSW	12 mph	0 mph	29.33 in	0.0 ir
2:54 AM	36 °F	26 °F	67 %	W	10 mph	0 mph	29.33 in	0.0 ir
3:54 AM	36 °F	24 °F	62 %	W	9 mph	0 mph	29.33 in	0.0 ir
4:54 AM	36 °F	24 °F	62 %	W	6 mph	0 mph	29.33 in	0.0 ir
5:54 AM	36 °F	24 °F	62 %	W	9 mph	0 mph	29.33 in	0.0 ir
6:54 AM	35 °F	24 °F	64 %	WSW	6 mph	0 mph	29.32 in	0.0 ir
7:54 AM	36 °F	24 °F	62 %	WSW	7 mph	0 mph	29.32 in	0.0 ir
8:54 AM	36 °F	24 °F	62 %	W	10 mph	0 mph	29.34 in	0.0 ir
9:54 AM	37 °F	25 °F	62 %	SW	10 mph	0 mph	29.34 in	0.0 ir
10:54 AM	39 °F	24 °F	55 %	WNW	13 mph	20 mph	29.32 in	0.0 ir
11:54 AM	40 °F	27 °F	60 %	SW	10 mph	0 mph	29.31 in	0.0 ir
12:54 PM	41 °F	27 °F	57 %	SW	15 mph	0 mph	29.30 in	0.0 ir
1:54 PM	42 °F	25 °F	51 %	WSW	15 mph	24 mph	29.30 in	0.0 ir
2:54 PM	41 °F	27 °F	57 %	WSW	16 mph	28 mph	29.26 in	0.0 ir
3:54 PM	41 °F	27 °F	57 %	SW	18 mph	29 mph	29.25 in	0.0 ir
4:54 PM	41 °F	25 °F	53 %	SW	16 mph	25 mph	29.23 in	0.0 ir

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Prec
5:54 PM	40 °F	24 °F	53 %	SW	20 mph	28 mph	29.23 in	0.0 ir
6:54 PM	39 °F	26 °F	60 %	WSW	17 mph	25 mph	29.21 in	0.0 ir
7:54 PM	37 °F	26 °F	65 %	SW	15 mph	23 mph	29.21 in	0.0 ir
8:54 PM	37 °F	28 °F	70 %	SW	10 mph	0 mph	29.21 in	0.0 ir
9:54 PM	36 °F	29 °F	76 %	SSW	8 mph	0 mph	29.21 in	0.0 ir
10:54 PM	37 °F	29 °F	73 %	SW	9 mph	0 mph	29.20 in	0.0 ir
11:54 PM	37 °F	29 °F	73 %	SW	8 mph	0 mph	29.18 in	0.0 ir

[Our Apps \(/download\)](#)

[About Us \(/about/our-company\)](#)

[Contact \(/about/contact-us\)](#)

[Careers \(https://www.weathercompany.com/careers\)](https://www.weathercompany.com/careers)

[PWS Network \(/pws/overview\)](#)

[WunderMap \(/wundermap\)](#)

[Feedback & Support \(https://www.wunderground.com/feedback\)](https://www.wunderground.com/feedback)

[Terms of Use \(/company/legal\)](#)

[Privacy Policy \(/company/privacy-policy\)](#)

[Accessibility Statement \(/accessibility-statement\)](#)

[AdChoices \(/company/ad-choices\)](#)

[Data Vendors \(/data-vendors\)](#)

 [Access Logo \(https://www.essentialaccessibility.com/the-weather-channel?\)](https://www.essentialaccessibility.com/the-weather-channel?)

We recognize our responsibility to use data and technology for good. We may use or share your data with our data vendors. Take control of your data.

[Review All Privacy and Ad Settings \(/privacy-settings\)](#)

[Choose how my information is shared \(/privacy-settings#do-not-sell\)](#)

[Data Rights \(/data-rights\)](#)



© Copyright TWC Product and Technology LLC 2014, 2024

Search Locations

Log In (/login)

Go Ad Free



Recent Cities
Buffalo, NY (/weather/us/ny/buffalo/42.93,-78.88) Boston, NY (14025) (/weather/us/ny/boston/42.63,-78.74) Niagara Falls, NY (/weather/

42.91 °N, 78.78 °W

Cheektowaga, NY Weather History ★ 🏠

☀️ 83° BUFFALO NIAGARA INTL AIRPORT STATION (/DASHBOARD/PWS/KNYBUFFA100?CM_VEN=LOCALWX_PWSDASH) | CHANGE ✓

HISTORY (/HISTORY/DAILY/US/NY/CHEEKTOWAGA/KBUF)

- TODAY (/WEATHER/US/NY/CHEEKTOWAGA/KBUF)
- HOURLY (/HOURLY/US/NY/CHEEKTOWAGA/KBUF)
- 10-DAY (/FORECAST/US/NY/CHEEKTOWAGA/KBUF)
- CALENDAR (/CALENDAR/US/NY/CHEEKTOWAGA/KBUF)
- HISTORY (/HISTORY/DAILY/US/NY/CHEEKTOWAGA/KBUF)
- WUNDERMAP (/WUNDERMAP?LAT=42.913&LON=-78.784)

Daily

Weekly

Monthly

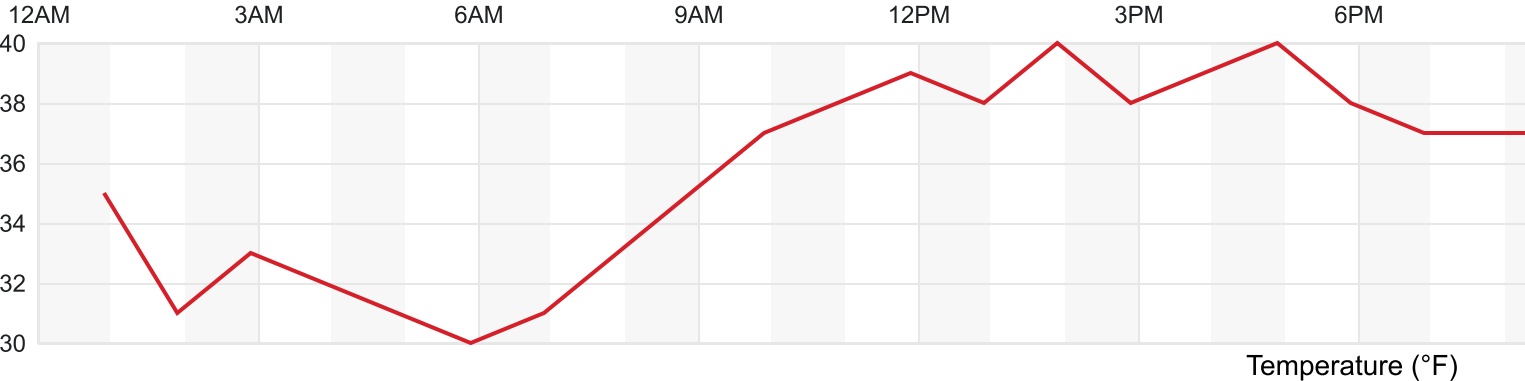
(/history/daily/us/ny/cheektowaga/kbuf/date/2024-3-29) (/history/daily/us/ny/cheektowaga/kbuf/date/2024-3-29) (/history/daily/us/ny/cheektowaga/kbuf/date/2024-3-29)

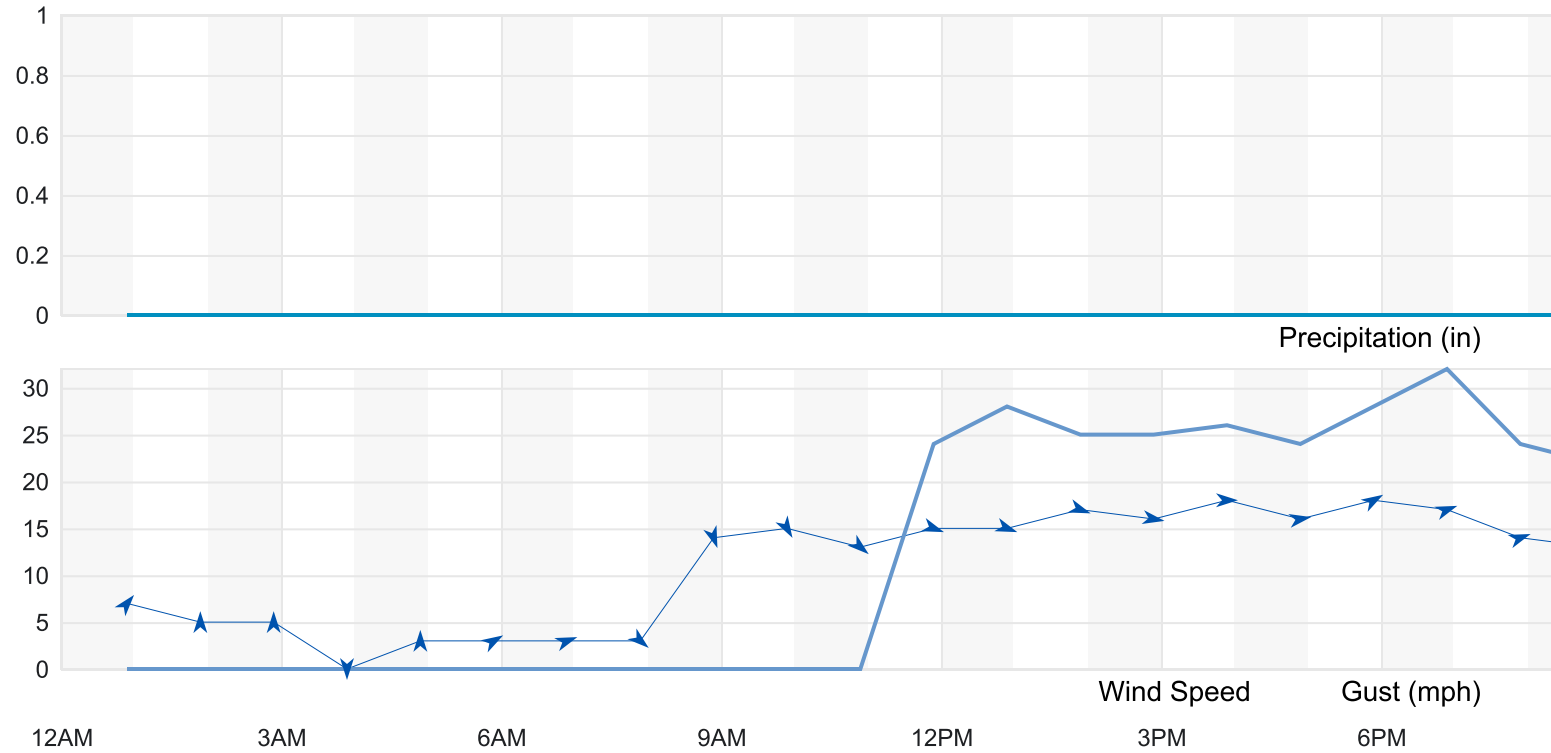
March

29

2024

View





Summary

Temperature (°F)	Actual	Historic Avg.	Record	▲
High Temp	40	46.7	79	
Low Temp	30	30.1	5	
Day Average Temp	35.54	38.4	-	
Precipitation (in)	Actual	Historic Avg.	Record	▲
Precipitation (past 24 hours from 04:54:00)	0.00	4.70	-	
Dew Point (°F)	Actual	Historic Avg.	Record	▲
Dew Point	26.29	-	-	
High	30	-	-	
Low	23	-	-	
Average	26.29	-	-	
Wind (mph)	Actual	Historic Avg.	Record	▲
Max Wind Speed	18	-	-	
Visibility	10	-	-	

Temperature (°F)	Actual	Historic Avg.	Record	▲
Sea Level Pressure (in)	Actual	Historic Avg.	Record	▲
Sea Level Pressure	29.21	-	-	
Astronomy	Day Length	Rise	Set	▲
Actual Time	12h 36m	7:02 AM	7:38 PM	
Civil Twilight		6:34 AM	8:07 PM	
Nautical Twilight		6:00 AM	8:41 PM	
Astronomical Twilight		5:25 AM	9:15 PM	
Moon: waning gibbous		-	8:45 AM	

Daily Observations

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Prec
12:54 AM	35 °F	28 °F	76 %	SW	7 mph	0 mph	29.18 in	0.0 ir
1:54 AM	31 °F	25 °F	79 %	S	5 mph	0 mph	29.17 in	0.0 ir
2:54 AM	33 °F	26 °F	75 %	S	5 mph	0 mph	29.16 in	0.0 ir
3:54 AM	32 °F	26 °F	79 %	CALM	0 mph	0 mph	29.15 in	0.0 ir
4:54 AM	31 °F	25 °F	79 %	S	3 mph	0 mph	29.14 in	0.0 ir
5:54 AM	30 °F	25 °F	82 %	WSW	3 mph	0 mph	29.14 in	0.0 ir
6:54 AM	31 °F	27 °F	85 %	WSW	3 mph	0 mph	29.15 in	0.0 ir
7:54 AM	33 °F	28 °F	82 %	NW	3 mph	0 mph	29.16 in	0.0 ir
8:54 AM	35 °F	28 °F	76 %	NNW	14 mph	0 mph	29.18 in	0.0 ir
9:54 AM	37 °F	26 °F	65 %	NNW	15 mph	0 mph	29.18 in	0.0 ir
10:54 AM	38 °F	25 °F	60 %	NW	13 mph	0 mph	29.18 in	0.0 ir
11:54 AM	39 °F	25 °F	57 %	WNW	15 mph	24 mph	29.18 in	0.0 ir
12:54 PM	38 °F	23 °F	55 %	WNW	15 mph	28 mph	29.19 in	0.0 ir
1:54 PM	40 °F	25 °F	55 %	WNW	17 mph	25 mph	29.18 in	0.0 ir
2:54 PM	38 °F	24 °F	57 %	W	16 mph	25 mph	29.18 in	0.0 ir
3:54 PM	39 °F	24 °F	55 %	W	18 mph	26 mph	29.18 in	0.0 ir
4:54 PM	40 °F	24 °F	53 %	W	16 mph	24 mph	29.17 in	0.0 ir

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Prec
5:54 PM	38 °F	29 °F	70 %	WSW	18 mph	28 mph	29.17 in	0.0 ir
6:54 PM	37 °F	29 °F	73 %	WSW	17 mph	32 mph	29.17 in	0.0 ir
7:54 PM	37 °F	29 °F	73 %	WSW	14 mph	24 mph	29.17 in	0.0 ir
8:54 PM	37 °F	30 °F	76 %	WSW	13 mph	22 mph	29.19 in	0.0 ir
9:54 PM	37 °F	30 °F	76 %	W	12 mph	0 mph	29.19 in	0.0 ir
10:54 PM	34 °F	26 °F	73 %	WNW	10 mph	0 mph	29.20 in	0.0 ir
11:54 PM	33 °F	24 °F	70 %	W	8 mph	0 mph	29.21 in	0.0 ir

[Our Apps \(/download\)](#)

[About Us \(/about/our-company\)](#)

[Contact \(/about/contact-us\)](#)

[Careers \(https://www.weathercompany.com/careers\)](https://www.weathercompany.com/careers)

[PWS Network \(/pws/overview\)](#)

[WunderMap \(/wundermap\)](#)

[Feedback & Support \(https://www.wunderground.com/feedback\)](https://www.wunderground.com/feedback)

[Terms of Use \(/company/legal\)](#)

[Privacy Policy \(/company/privacy-policy\)](#)

[Accessibility Statement \(/accessibility-statement\)](#)

[AdChoices \(/company/ad-choices\)](#)

[Data Vendors \(/data-vendors\)](#)

 [Access Logo \(https://www.essentialaccessibility.com/the-weather-channel?\)](https://www.essentialaccessibility.com/the-weather-channel?)

We recognize our responsibility to use data and technology for good. We may use or share your data with our data vendors. Take control of your data.

[Review All Privacy and Ad Settings \(/privacy-settings\)](#)

[Choose how my information is shared \(/privacy-settings#do-not-sell\)](#)

[Data Rights \(/data-rights\)](#)



© Copyright TWC Product and Technology LLC 2014, 2024