



SHIPPING DOCUMENTS

Client Contact Information				Bottle Order ID : B2509030				Courier : F Galdun				1 of 2 COCs					
Client ID : GFE01				Project ID : All Projects				Sampler Name(s) : FRANK GALDUN				Analysis		Matrix			
Customer Name : GFE LLC Address : 58 Nokomis Ave City : Lake Hiawatha State : NJ Zip Code : 07034 Country :				Project Manager : Frank galdun				AIR ANALYSIS CHAIN-OF-CUSTODY Batch Certified									
				Phone Number : 646-542-3465													
				Fax Number : 973-334-1692													
				Site Details: 28 RT. 46 PINE BROOK NJ													
				Analysis Turnaround Time 5 DAY				Data Package Type : RESULTS ONLY									
				Standard : 10 business days OR				EDD Type : PDF									
				Rush (Specify): 5 Days													
Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15	Indoor/Ambient Air	Soil Gas
SV1	9/16/25 9:49	11:49	OVER 30	6	75	15	-30	-5.5	10616	10331	6 L	50	VL042829.D				
Temperature (Fahrenheit)										GC/MS Analyst Signature (TO-15) [Signature]							
		Ambient	Maximum	Minimum													
Start																	
Stop																	
Pressure (Inches of Hg)										** Submittal of this COC indicates approval of the analysis based on existing conditions. Please follow the instructions on the back of this COC.							
		Ambient	Maximum	Minimum													
Start																	
Stop																	
Special Instructions/QC Requirements & Comments :																	
Suspected Contamination: High Medium Low PID Readings: 0 , 0																	
Sampling site (State):																	
Quick Connector required : N																	
Canisters Shipped by: Sam				Date/Time: 9/16/25				Canisters Received by: de				Date/Time: 9/16/25 11:18				B2509030 - 2	
Samples Relinquished by: [Signature]				Date/Time:				Received by:				Date/Time:					
Relinquished by:				Date/Time:				Received by:				Date/Time:					

Client Contact Information				Bottle Order ID : B2509030				Courier : F. GALDUN				2 of 2 COCs			
Client ID : GFEL01 Project ID : All Projects				Sampler Name(s) : FRANK GALDUN				Analysis				Matrix			
Customer Name : GFE LLC Address : 58 Nokomis Ave City : Lake Hiawatha State : NJ Zip Code : 07034 Country :				Project Manager : Frank galdun				AIR ANALYSIS CHAIN-OF-CUSTODY Batch Certified							
				Phone Number : 646-542-3465											
				Fax Number : 973-334-1692											
				Site Details: 28 Rt 46 PINE BROOK NJ											
Analysis Turnaround Time 5 DAY				Standard : 10 business days OR				Data Package Type : Results only							
Rush (Specify): 5 Days				EDD Type : PID											

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15	Indoor Ambient Air	Soil Gas
IA1	9/13/25	11:50	11:50	OVER 30	6	75	75	-30	-5.5	10649	10281	6 L	50	VL042829.D	1	1	

Temperature (Fahrenheit)				
	Ambient	Maximum	Minimum	
Start				
Stop				

Pressure (Inches of Hg)				
	Ambient	Maximum	Minimum	
Start				
Stop				

GC/MS Analyst Signature (TO-15) [Signature]

** Submittal of this COC indicates approval of the analysis based on existing conditions.

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: **0.2**

Sampling site (State):

Quick Connector required : **NO**

Canisters Shipped by: See [Signature]	Date/Time: 09/11/25	Canisters Received by: CR	Date/Time: 9/16/25 11:18
Samples Relinquished by: [Signature]	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

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Laboratory Certification

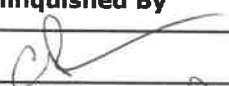
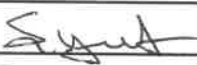
Certified By	License No.
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255425
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	TX-C25-00189
Virginia	460312

Internal Chain of Custody

Instructions: Use 1 form for each 20 samples of aliquot

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample			
Laboratory: <u>Chemtech</u>		Location: <u>284 Sheffield Street, Mountainside, NJ 7092</u>	
NAME:		Title: <u>Sample Custodian</u>	
Field Sample Seal No. <u>Q3111</u>		Date Broken <u>9/16/2025</u>	Military Time Seal Broken: <u>11:18:00</u>
Case No.: <u>28 RT 46 PINE BROOK</u>		Analytical Parameter/Fraction: <u>TO-15</u>	

Sample No.	Aliquot/Extract No.	Sample No.	Aliquot/Extract No.
Q3111-01	SV1		
Q3111-02	IA1		

Date	Time	Relinquished By	Received By	Purpose of Change of Custody
9/16/25	13:03	Signature 	Signature 	
		Printed Name <u>Castaneda Rene</u>	Printed Name <u>Sample Custodian</u>	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	

Distribution: White - Original (Sent With Report) Yellow - Contractor Archive Pink - Sample Custodian - Interim Copy

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following "Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

LAB CHRONICLE

OrderID: Q3111
Client: GFE LLC
Contact: Frank Galdun

OrderDate: 9/16/2025 12:15:36 PM
Project: 28 RT 46 PINE BROOK
Location: Air Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q3111-01	SV1	Air	TO-15	TO-15	09/13/25		09/22/25	09/16/25
Q3111-01DL	SV1DL	Air	TO-15	TO-15	09/13/25		09/22/25	09/16/25
Q3111-02	IA1	Air	TO-15	TO-15	09/13/25		09/18/25	09/16/25
Q3111-02DL	IA1DL	Air	TO-15	TO-15	09/13/25		09/18/25	09/16/25

Hit Summary Sheet
SW-846

SDG No.: Q3111
Client: GFE LLC

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	SV1							
Q3111-01	SV1	Air	Tetrahydrofuran	6.19		0.94	5.90	ug/m3
Q3111-01	SV1	Air	tert-Butyl alcohol	2.06	J	1.94	6.06	ug/m3
Q3111-01	SV1	Air	Heptane	7.38	J	2.79	8.20	ug/m3
Q3111-01	SV1	Air	Acetone	499	E	1.71	4.75	ug/m3
Q3111-01	SV1	Air	Carbon Disulfide	9.97		1.00	6.23	ug/m3
Q3111-01	SV1	Air	Methylene Chloride	7.64		3.20	6.95	ug/m3
Q3111-01	SV1	Air	Cyclohexane	3.03	J	3.03	6.88	ug/m3
Q3111-01	SV1	Air	2-Butanone	9.73		0.65	5.90	ug/m3
Q3111-01	SV1	Air	2,2,4-Trimethylpentane	7.94	J	2.62	9.34	ug/m3
Q3111-01	SV1	Air	Benzene	4.47	J	1.02	6.39	ug/m3
Q3111-01	SV1	Air	Toluene	16.6		2.41	7.54	ug/m3
Q3111-01	SV1	Air	Tetrachloroethene	38.6		0.41	0.81	ug/m3
Q3111-01	SV1	Air	m/p-Xylene	7.38	J	6.95	17.4	ug/m3
Q3111-01	SV1	Air	Styrene	3.41	J	2.72	8.52	ug/m3
Q3111-01	SV1	Air	Naphthalene	2.10		0.26	2.10	ug/m3
Q3111-01	SV1	Air	Hexane	28.2		2.26	7.05	ug/m3
Total Voc :				654				
Total Concentration:				654				
Client ID:	SV1DL							
Q3111-01DL	SV1DL	Air	Acetone	618	D	17.1	47.5	ug/m3
Q3111-01DL	SV1DL	Air	2-Butanone	13.6	JD	6.49	59.0	ug/m3
Q3111-01DL	SV1DL	Air	Tetrachloroethene	43.4	D	4.07	8.14	ug/m3
Q3111-01DL	SV1DL	Air	Hexane	35.2	JD	22.6	70.5	ug/m3
Total Voc :				710				
Total Concentration:				710				
Client ID:	IA1							
Q3111-02	IA1	Air	Dichlorodifluoromethane	2.32	J	0.54	2.47	ug/m3
Q3111-02	IA1	Air	Chloromethane	1.24		0.21	1.03	ug/m3
Q3111-02	IA1	Air	Tetrahydrofuran	8.55		0.24	1.47	ug/m3
Q3111-02	IA1	Air	Trichlorofluoromethane	1.35	J	0.96	2.81	ug/m3
Q3111-02	IA1	Air	tert-Butyl alcohol	0.76	J	0.49	1.52	ug/m3
Q3111-02	IA1	Air	Heptane	3.32		0.70	2.05	ug/m3
Q3111-02	IA1	Air	Acetone	356	E	0.43	1.19	ug/m3
Q3111-02	IA1	Air	Methylene Chloride	7.30		0.80	1.74	ug/m3
Q3111-02	IA1	Air	Cyclohexane	1.96		0.76	1.72	ug/m3
Q3111-02	IA1	Air	2-Butanone	11.8		0.18	1.47	ug/m3

Hit Summary Sheet
SW-846

SDG No.: Q3111

Client: GFE LLC

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q3111-02	IA1	Air	Carbon Tetrachloride	0.57		0.19	0.19	ug/m3
Q3111-02	IA1	Air	Chloroform	1.71	J	0.49	2.44	ug/m3
Q3111-02	IA1	Air	2,2,4-Trimethylpentane	24.8		0.65	2.34	ug/m3
Q3111-02	IA1	Air	Benzene	2.65		0.26	1.60	ug/m3
Q3111-02	IA1	Air	1,2-Dichloroethane	2.55		0.36	2.02	ug/m3
Q3111-02	IA1	Air	Toluene	23.0		0.60	1.88	ug/m3
Q3111-02	IA1	Air	Tetrachloroethene	0.34		0.14	0.20	ug/m3
Q3111-02	IA1	Air	Ethyl Benzene	1.95	JQ	0.83	2.17	ug/m3
Q3111-02	IA1	Air	m/p-Xylene	6.52		1.78	4.34	ug/m3
Q3111-02	IA1	Air	o-Xylene	2.08	J	0.91	2.17	ug/m3
Q3111-02	IA1	Air	Styrene	5.11		0.68	2.13	ug/m3
Q3111-02	IA1	Air	1,2,4-Trimethylbenzene	0.93	J	0.88	2.46	ug/m3
Q3111-02	IA1	Air	1,2,4-Trichlorobenzene	3.56	J	1.56	3.71	ug/m3
Q3111-02	IA1	Air	Naphthalene	2.20		0.050	0.52	ug/m3
Q3111-02	IA1	Air	4-Ethyltoluene	2.02	J	1.03	2.46	ug/m3
Q3111-02	IA1	Air	Hexane	10.9		0.56	1.76	ug/m3
Q3111-02	IA1	Air	Methyl Methacrylate	2.62		0.57	2.05	ug/m3
Total Voc :					488			
Total Concentration:					488			
Client ID:	IA1DL							
Q3111-02DL	IA1DL	Air	Acetone	831	D	17.1	47.5	ug/m3
Total Voc :					831			
Total Concentration:					831			



QC SUMMARY

Surrogate Summary

SDG No.: Q3111

Client: GFE LLC

Analytical Method: SWTO-15

Lab Sample ID	Client ID	Parameter	Spike	Result	Recovery (%)	Qual	Limits (%)	
							Low	High
Q3111-01	SV1	1-Bromo-4-Fluorobenzene	10	10.1	101		65	135
Q3111-01DL	SV1DL	1-Bromo-4-Fluorobenzene	10	9.81	98		65	135
Q3111-02	IA1	1-Bromo-4-Fluorobenzene	10	10.0	100		65	135
Q3111-02DL	IA1DL	1-Bromo-4-Fluorobenzene	10	9.42	94		65	135
Q3111-02DUP	IA1DUP	1-Bromo-4-Fluorobenzene	10	10.3	103		65	135
VL0918ABL01	VL0918ABL01	1-Bromo-4-Fluorobenzene	10	9.59	96		65	135
VL0918ABS02	VL0918ABS02	1-Bromo-4-Fluorobenzene	10	10.5	105		65	135
VL0922ABL01	VL0922ABL01	1-Bromo-4-Fluorobenzene	10	10.0	100		65	135
VL0922ABS01	VL0922ABS01	1-Bromo-4-Fluorobenzene	10	10.0	100		65	135

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q3111

Analytical Method: SWTO-15

Client: GFE LLC

Datafile : VL042943.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VL0918ABS02	Dichlorodifluoromethane	10	9.90	ppbv	99			70	130	
	Chloromethane	10	9.80	ppbv	98			70	130	
	Vinyl Chloride	10	8.90	ppbv	89			70	130	
	Bromomethane	10	9.70	ppbv	97			70	130	
	Chloroethane	10	9.80	ppbv	98			70	130	
	Tetrahydrofuran	10	11.8	ppbv	118			70	130	
	Trichlorofluoromethane	10	9.70	ppbv	97			70	130	
	1,1,2-Trichlorotrifluoroethane	10	9.70	ppbv	97			70	130	
	Dichlorotetrafluoroethane	10	9.80	ppbv	98			70	130	
	tert-Butyl Alcohol	10	9.70	ppbv	97			70	130	
	Heptane	10	11.6	ppbv	116			70	130	
	1,1-Dichloroethene	10	9.90	ppbv	99			70	130	
	Acetone	10	8.50	ppbv	85			70	130	
	Carbon disulfide	10	9.80	ppbv	98			70	130	
	Methyl tert-butyl Ether	10	9.50	ppbv	95			70	130	
	Methylene Chloride	10	7.80	ppbv	78			70	130	
	trans-1,2-Dichloroethene	10	9.90	ppbv	99			70	130	
	1,1-Dichloroethane	10	9.80	ppbv	98			70	130	
	Cyclohexane	10	11.8	ppbv	118			70	130	
	2-Butanone	10	10.7	ppbv	107			70	130	
	Carbon Tetrachloride	10	9.80	ppbv	98			70	130	
	cis-1,2-Dichloroethene	10	10.5	ppbv	105			70	130	
	Chloroform	10	10.1	ppbv	101			70	130	
	1,1,1-Trichloroethane	10	9.90	ppbv	99			70	130	
	2,2,4-Trimethylpentane	10	11.7	ppbv	117			70	130	
	Benzene	10	10.8	ppbv	108			70	130	
	1,2-Dichloroethane	10	10.5	ppbv	105			70	130	
	Trichloroethene	10	10.5	ppbv	105			70	130	
	1,2-Dichloropropane	10	10.5	ppbv	105			70	130	
	Bromodichloromethane	10	10.4	ppbv	104			70	130	
	4-Methyl-2-Pentanone	10	12.4	ppbv	124			70	130	
	Toluene	10	12.5	ppbv	125			70	130	
	t-1,3-Dichloropropene	10	11.7	ppbv	117			70	130	
	cis-1,3-Dichloropropene	10	11.4	ppbv	114			70	130	
	1,1,2-Trichloroethane	10	10.3	ppbv	103			70	130	
	Dibromochloromethane	10	10.6	ppbv	106			70	130	
	1,2-Dibromoethane	10	11.0	ppbv	110			70	130	
	Tetrachloroethene	10	10.4	ppbv	104			70	130	
	Chlorobenzene	10	10.5	ppbv	105			70	130	
	Ethyl Benzene	10	13.1	ppbv	131		*	70	130	
	m/p-Xylene	20	25.8	ppbv	129			70	130	
	o-Xylene	10	13.0	ppbv	130			70	130	
	Styrene	10	9.90	ppbv	99			70	130	
	Bromoform	10	10.9	ppbv	109			70	130	
	1,1,2,2-Tetrachloroethane	10	10.4	ppbv	104			70	130	
	2-Chlorotoluene	10	12.8	ppbv	128			70	130	
	1,3,5-Trimethylbenzene	10	13.0	ppbv	130			70	130	
	1,2,4-Trimethylbenzene	10	12.7	ppbv	127			70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q3111</u>	Analytical Method:	<u>SWTO-15</u>
Client:	<u>GFE LLC</u>	Datafile :	<u>VL042943.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VL0918ABS02	1,3-Dichlorobenzene	10	11.4	ppbv	114			70	130	
	1,4-Dichlorobenzene	10	11.7	ppbv	117			70	130	
	1,2-Dichlorobenzene	10	11.1	ppbv	111			70	130	
	1,2,4-Trichlorobenzene	10	10.1	ppbv	101			70	130	
	Hexachloro-1,3-butadiene	10	10.2	ppbv	102			70	130	
	Naphthalene	10	10.2	ppbv	102			70	130	
	1,3-Butadiene	10	9.40	ppbv	94			70	130	
	4-Ethyltoluene	10	10.2	ppbv	102			70	130	
	Hexane	10	11.1	ppbv	111			70	130	
	Allyl Chloride	10	9.60	ppbv	96			70	130	
	1,4-Dioxane	10	11.6	ppbv	116			70	130	
	Methyl methacrylate	10	12.2	ppbv	122			70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	Q3111	Analytical Method:	SWTO-15
Client:	GFE LLC	Datafile :	VL042959.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VL0922ABS01	Dichlorodifluoromethane	10	9.30	ppbv	93			70	130	
	Chloromethane	10	8.70	ppbv	87			70	130	
	Vinyl Chloride	10	8.40	ppbv	84			70	130	
	Bromomethane	10	8.30	ppbv	83			70	130	
	Chloroethane	10	8.80	ppbv	88			70	130	
	Tetrahydrofuran	10	9.30	ppbv	93			70	130	
	Trichlorofluoromethane	10	9.10	ppbv	91			70	130	
	1,1,2-Trichlorotrifluoroethane	10	9.00	ppbv	90			70	130	
	Dichlorotetrafluoroethane	10	9.00	ppbv	90			70	130	
	tert-Butyl Alcohol	10	9.00	ppbv	90			70	130	
	Heptane	10	9.00	ppbv	90			70	130	
	1,1-Dichloroethene	10	9.00	ppbv	90			70	130	
	Acetone	10	7.40	ppbv	74			70	130	
	Carbon disulfide	10	8.80	ppbv	88			70	130	
	Methyl tert-butyl Ether	10	7.80	ppbv	78			70	130	
	Methylene Chloride	10	9.80	ppbv	98			70	130	
	trans-1,2-Dichloroethene	10	8.90	ppbv	89			70	130	
	1,1-Dichloroethane	10	9.00	ppbv	90			70	130	
	Cyclohexane	10	9.30	ppbv	93			70	130	
	2-Butanone	10	9.20	ppbv	92			70	130	
	Carbon Tetrachloride	10	9.70	ppbv	97			70	130	
	cis-1,2-Dichloroethene	10	9.30	ppbv	93			70	130	
	Chloroform	10	9.50	ppbv	95			70	130	
	1,1,1-Trichloroethane	10	9.00	ppbv	90			70	130	
	2,2,4-Trimethylpentane	10	9.40	ppbv	94			70	130	
	Benzene	10	9.60	ppbv	96			70	130	
	1,2-Dichloroethane	10	9.90	ppbv	99			70	130	
	Trichloroethene	10	9.20	ppbv	92			70	130	
	1,2-Dichloropropane	10	9.70	ppbv	97			70	130	
	Bromodichloromethane	10	9.90	ppbv	99			70	130	
	4-Methyl-2-Pentanone	10	9.60	ppbv	96			70	130	
	Toluene	10	9.50	ppbv	95			70	130	
	t-1,3-Dichloropropene	10	9.50	ppbv	95			70	130	
	cis-1,3-Dichloropropene	10	9.70	ppbv	97			70	130	
	1,1,2-Trichloroethane	10	9.60	ppbv	96			70	130	
	Dibromochloromethane	10	10.0	ppbv	100			70	130	
	1,2-Dibromoethane	10	9.70	ppbv	97			70	130	
	Tetrachloroethene	10	8.70	ppbv	87			70	130	
	Chlorobenzene	10	9.40	ppbv	94			70	130	
	Ethyl Benzene	10	9.50	ppbv	95			70	130	
	m/p-Xylene	20	18.9	ppbv	95			70	130	
	o-Xylene	10	9.40	ppbv	94			70	130	
	Styrene	10	9.60	ppbv	96			70	130	
	Bromoform	10	9.80	ppbv	98			70	130	
	1,1,2,2-Tetrachloroethane	10	8.90	ppbv	89			70	130	
	2-Chlorotoluene	10	9.30	ppbv	93			70	130	
	1,3,5-Trimethylbenzene	10	9.50	ppbv	95			70	130	
	1,2,4-Trimethylbenzene	10	9.30	ppbv	93			70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q3111</u>	Analytical Method:	<u>SWTO-15</u>
Client:	<u>GFE LLC</u>	Datafile :	<u>VL042959.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VL0922ABS01	1,3-Dichlorobenzene	10	9.30	ppbv	93			70	130	
	1,4-Dichlorobenzene	10	9.40	ppbv	94			70	130	
	1,2-Dichlorobenzene	10	9.30	ppbv	93			70	130	
	1,2,4-Trichlorobenzene	10	10.0	ppbv	100			70	130	
	Hexachloro-1,3-butadiene	10	8.40	ppbv	84			70	130	
	Naphthalene	10	10.3	ppbv	103			70	130	
	1,3-Butadiene	10	8.10	ppbv	81			70	130	
	4-Ethyltoluene	10	9.30	ppbv	93			70	130	
	Hexane	10	9.10	ppbv	91			70	130	
	Allyl Chloride	10	9.00	ppbv	90			70	130	
	1,4-Dioxane	10	9.30	ppbv	93			70	130	
	Methyl methacrylate	10	9.30	ppbv	93			70	130	

Duplicate Sample Summary

Lab Sample Id :	Q3111-02DUP	Q3111-02
Client Id :	IA1DUP	IA1
DF :	1	1
Datafile :	VL042946.D	VL042945.D
Anal Date & Time :	09/18/2025 15:13	09/18/2025 14:37

Parameter	Result	Result	RPD
1,1,1-Trichloroethane	0	0	0
1,1,2,2-Tetrachloroethane	0	0	0
1,1,2-Trichloroethane	0	0	0
1,1,2-Trichlorotrifluoroethane	0	0	0
1,1-Dichloroethane	0	0	0
1,1-Dichloroethene	0	0	0
1,2,4-Trichlorobenzene	0.48	0.48	0
1,2,4-Trimethylbenzene	0.19	0.19	0
1,2-Dibromoethane	0	0	0
1,2-Dichlorobenzene	0	0	0
1,2-Dichloroethane	0.63	0.63	0
1,2-Dichloropropane	0	0	0
1,3,5-Trimethylbenzene	0	0	0
1,3-Butadiene	0	0	0
1,3-Dichlorobenzene	0	0	0
1,4-Dichlorobenzene	0	0	0
1,4-Dioxane	0	0	0
2,2,4-Trimethylpentane	5.3	5.3	0
2-Butanone	4	4	0
2-Chlorotoluene	0	0	0
4-Ethyltoluene	0.41	0.41	0
4-Methyl-2-Pentanone	0	0	0
Acetone	150	150	0
Allyl Chloride	0	0	0
Benzene	0.84	0.83	1.2
Bromodichloromethane	0	0	0
Bromoform	0	0	0
Bromomethane	0	0	0
Carbon Disulfide	0	0	0
Carbon Tetrachloride	0.07	0.09	25 *

Duplicate Sample Summary

Lab Sample Id :	Q3111-02DUP	Q3111-02
Client Id :	IA1DUP	IA1
DF :	1	1
Datafile :	VL042946.D	VL042945.D
Anal Date & Time :	09/18/2025 15:13	09/18/2025 14:37

Parameter	Result	Result	RPD
Chlorobenzene	0	0	0
Chloroethane	0	0	0
Chloroform	0.35	0.35	0
Chloromethane	0.54	0.6	10.5
cis-1,2-Dichloroethene	0	0	0
cis-1,3-Dichloropropene	0	0	0
Cyclohexane	0.62	0.57	8.4
Dibromochloromethane	0	0	0
Dichlorodifluoromethane	0.46	0.47	2.2
Dichlorotetrafluoroethane	0	0	0
Ethyl Benzene	0.45	0.45	0
Heptane	0.82	0.81	1.2
Hexachloro-1,3-Butadiene	0	0	0
Hexane	3.1	3.1	0
m/p-Xylene	1.5	1.5	0
Methyl Methacrylate	0.65	0.64	1.6
Methyl tert-Butyl Ether	0	0	0
Methylene Chloride	2.2	2.1	4.7
Naphthalene	0.42	0.42	0
o-Xylene	0.49	0.48	2.1
Styrene	1.2	1.2	0
t-1,3-Dichloropropene	0	0	0
tert-Butyl alcohol	0.24	0.25	4.1
Tetrachloroethene	0.06	0.05	18.2
Tetrahydrofuran	3	2.9	3.4
Toluene	6.2	6.1	1.6
trans-1,2-Dichloroethene	0	0	0
Trichloroethene	0	0	0
Trichlorofluoromethane	0.22	0.24	8.7
Vinyl Chloride	0	0	0

VOLATILE METHOD BLANK SUMMARY

Client ID

IA1DUP

Lab Name: Alliance

Contract: GFEL01

Lab Code: ACE

SDG NO.: Q3111

Lab File ID: VL042946.D

Lab Sample ID: Q3111-02DUP

Date Analyzed: 09/18/2025

Time Analyzed: 15:13

GC Column: RTX-1 ID: 0.32 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOA_L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
IA1DUP	Q3111-02DUP	VL042946.D	09/18/2025

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

Client ID

VL0918ABL01

Lab Name: Alliance

Contract: GFEL01

Lab Code: ACE

SDG NO.: Q3111

Lab File ID: VL042940.D

Lab Sample ID: VL0918ABL01

Date Analyzed: 09/18/2025

Time Analyzed: 11:01

GC Column: RTX-1 ID: 0.32 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOA_L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VL0918ABS02	VL0918ABS02	VL042943.D	09/18/2025
IA1	Q3111-02	VL042945.D	09/18/2025
IA1DL	Q3111-02DL	VL042947.D	09/18/2025

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

Client ID

VL0922ABL01

Lab Name: Alliance

Contract: GFEL01

Lab Code: ACE

SDG NO.: Q3111

Lab File ID: VL042958.D

Lab Sample ID: VL0922ABL01

Date Analyzed: 09/22/2025

Time Analyzed: 15:06

GC Column: RTX-1 ID: 0.32 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOA_L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VL0922ABS01	VL0922ABS01	VL042959.D	09/22/2025
SV1	Q3111-01	VL042960.D	09/22/2025
SV1DL	Q3111-01DL	VL042961.D	09/22/2025

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance

Contract: GFEL01

Lab Code: ACE

SDG NO.: Q3111

Lab File ID: VL042928.D

BFB Injection Date: 09/17/2025

Instrument ID: MSVOA_L

BFB Injection Time: 07:51

GC Column: RTX-1 ID: 0.32 (mm)

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.9
75	30.0 - 66.0% of mass 95	56.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.5 (1) 1
174	50.0 - 120.0% of mass 95	55.3
175	4.0 - 9.0% of mass 174	4 (7.3) 1
176	93.0 - 101.0% of mass 174	54.1 (97.8) 1
177	5.0 - 9.0% of mass 176	4 (7.4) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC002	VSTDIC002	VL042930.D	09/17/2025	10:48
VSTDIC001	VSTDIC001	VL042931.D	09/17/2025	11:23
VSTDIC0.5	VSTDIC0.5	VL042932.D	09/17/2025	11:58
VSTDIC0.1	VSTDIC0.1	VL042933.D	09/17/2025	12:32
VSTDIC0.03	VSTDIC0.03	VL042934.D	09/17/2025	13:07
VSTDIC0010	VSTDIC0010	VL042935.D	09/17/2025	13:42
VSTDIC015	VSTDIC015	VL042936.D	09/17/2025	14:17

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance

Contract: GFEL01

Lab Code: ACE

SDG NO.: Q3111

Lab File ID: VL042938.D

BFB Injection Date: 09/18/2025

Instrument ID: MSVOA_L

BFB Injection Time: 07:46

GC Column: RTX-1 ID: 0.32 (mm)

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.5
75	30.0 - 66.0% of mass 95	56.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.6 (1.1) 1
174	50.0 - 120.0% of mass 95	54.1
175	4.0 - 9.0% of mass 174	3.9 (7.2) 1
176	93.0 - 101.0% of mass 174	52.7 (97.4) 1
177	5.0 - 9.0% of mass 176	3.3 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC010	VSTDCCC010	VL042939.D	09/18/2025	09:38
VL0918ABL01	VL0918ABL01	VL042940.D	09/18/2025	11:01
VL0918ABS02	VL0918ABS02	VL042943.D	09/18/2025	12:49
IA1	Q3111-02	VL042945.D	09/18/2025	14:37
IA1DUP	Q3111-02DUP	VL042946.D	09/18/2025	15:13
IA1DL	Q3111-02DL	VL042947.D	09/18/2025	15:50

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alliance

Contract: GFEL01

Lab Code: ACE

SDG NO.: Q3111

Lab File ID: VL042949.D

BFB Injection Date: 09/22/2025

Instrument ID: MSVOA_L

BFB Injection Time: 08:55

GC Column: RTX-1 ID: 0.32 (mm)

Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	22.5
75	30.0 - 66.0% of mass 95	54.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 120.0% of mass 95	66.2
175	4.0 - 9.0% of mass 174	4.9 (7.4) 1
176	93.0 - 101.0% of mass 174	64 (96.6) 1
177	5.0 - 9.0% of mass 176	4.2 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICCC010	VSTDICCC010	VL042950.D	09/22/2025	09:39
VSTDICCC002	VSTDICCC002	VL042951.D	09/22/2025	10:14
VSTDICCC001	VSTDICCC001	VL042952.D	09/22/2025	10:48
VSTDICCC0.5	VSTDICCC0.5	VL042953.D	09/22/2025	11:22
VSTDICCC0.1	VSTDICCC0.1	VL042954.D	09/22/2025	11:56
VSTDICCC0.03	VSTDICCC0.03	VL042955.D	09/22/2025	12:30
VSTDICCC015	VSTDICCC015	VL042956.D	09/22/2025	13:05
VL0922ABL01	VL0922ABL01	VL042958.D	09/22/2025	15:06
VL0922ABS01	VL0922ABS01	VL042959.D	09/22/2025	15:52
SV1	Q3111-01	VL042960.D	09/22/2025	16:53
SV1DL	Q3111-01DL	VL042961.D	09/22/2025	17:28

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: GFEL01
 Lab Code: ACE SDG NO.: Q3111
 Lab File ID: VL042939.D Date Analyzed: 09/18/2025
 Instrument ID: MSVOA_L Time Analyzed: 09:38
 GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	157654	2.79	416196	3.97	350205	8.89
UPPER LIMIT	220716	3.12	582674	4.30	490287	9.22
LOWER LIMIT	94592.4	2.46	249718	3.64	210123	8.56
EPA SAMPLE NO.						
IA1	171978	2.79	434311	3.96	375912	8.89
IA1DL	162782	2.80	398877	3.97	323651	8.90
IA1DUP	170806	2.79	427405	3.97	360089	8.89
VL0918ABL01	148160	2.79	363124	3.97	306480	8.89
VL0918ABS02	157147	2.79	398112	3.96	342230	8.89

IS1 = Bromochloromethane
 IS2 = 1,4-Difluorobenzene
 IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +40% of internal standard area
 AREA LOWER LIMIT = -40% of internal standard area
 RT UPPER LIMIT = +0.33 minutes of internal standard RT
 RT LOWER LIMIT = -0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance Contract: GFEL01
 Lab Code: ACE SDG NO.: Q3111
 Lab File ID: VL042950.D Date Analyzed: 09/22/2025
 Instrument ID: MSVOA_L Time Analyzed: 09:39
 GC Column: RTX-1 ID: 0.32 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	170899	2.78	526679	3.95	486724	8.88
UPPER LIMIT	239259	3.11	737351	4.28	681414	9.21
LOWER LIMIT	102539	2.45	316007	3.62	292034	8.55
EPA SAMPLE NO.						
SV1	158433	2.79	482456	3.96	431460	8.89
SV1DL	156230	2.79	475755	3.97	424779	8.89
VL0922ABL01	157278	2.79	497068	3.96	444461	8.88
VL0922ABS01	157611	2.79	475789	3.96	440323	8.88

IS1 = Bromochloromethane

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +40% of internal standard area

AREA LOWER LIMIT = -40% of internal standard area

RT UPPER LIMIT = +0.33 minutes of internal standard RT

RT LOWER LIMIT = -0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.



SAMPLE DATA

Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	SV1	SDG No.:	Q3111
Lab Sample ID:	Q3111-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042960.D	4		09/22/25 16:53	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	0.44	2.18	U	2.18	9.89
74-87-3	Chloromethane	0.39	0.81	U	0.81	4.13
75-01-4	Vinyl Chloride	0.10	0.26	U	0.26	0.31
74-83-9	Bromomethane	0.31	1.20	U	1.20	7.77
75-00-3	Chloroethane	0.60	1.58	U	1.58	5.28
109-99-9	Tetrahydrofuran	2.10	6.19		0.94	5.90
75-69-4	Trichlorofluoromethane	0.68	3.82	U	3.82	11.2
76-13-1	1,1,2-Trichlorotrifluoroethane	0.56	4.29	U	4.29	15.3
76-14-2	Dichlorotetrafluoroethane	0.60	4.19	U	4.19	14.0
75-65-0	tert-Butyl alcohol	0.68	2.06	J	1.94	6.06
142-82-5	Heptane	1.80	7.38	J	2.79	8.20
75-35-4	1,1-Dichloroethene	0.60	2.38	U	2.38	7.93
67-64-1	Acetone	210	499	E	1.71	4.75
75-15-0	Carbon Disulfide	3.20	9.97		1.00	6.23
1634-04-4	Methyl tert-Butyl Ether	0.92	3.32	U	3.32	7.21
75-09-2	Methylene Chloride	2.20	7.64		3.20	6.95
156-60-5	trans-1,2-Dichloroethene	0.48	1.90	U	1.90	7.93
75-34-3	1,1-Dichloroethane	0.52	2.10	U	2.10	8.09
110-82-7	Cyclohexane	0.88	3.03	J	3.03	6.88
78-93-3	2-Butanone	3.30	9.73		0.65	5.90
56-23-5	Carbon Tetrachloride	0.10	0.63	U	0.63	0.75
156-59-2	cis-1,2-Dichloroethene	0.40	1.59	U	1.59	7.93
67-66-3	Chloroform	0.38	1.86	U	1.86	9.77
71-55-6	1,1,1-Trichloroethane	0.060	0.33	U	0.33	0.65
540-84-1	2,2,4-Trimethylpentane	1.70	7.94	J	2.62	9.34
71-43-2	Benzene	1.40	4.47	J	1.02	6.39
107-06-2	1,2-Dichloroethane	0.37	1.50	U	1.50	8.09
79-01-6	Trichloroethene	0.10	0.54	U	0.54	0.64
78-87-5	1,2-Dichloropropane	0.52	2.40	U	2.40	9.24
75-27-4	Bromodichloromethane	0.25	1.67	U	1.67	13.4
108-10-1	4-Methyl-2-Pentanone	0.39	1.60	U	1.60	8.20
108-88-3	Toluene	4.40	16.6		2.41	7.54
10061-02-6	t-1,3-Dichloropropene	0.60	2.72	U	2.72	9.08
10061-01-5	cis-1,3-Dichloropropene	0.44	2.00	U	2.00	9.08
79-00-5	1,1,2-Trichloroethane	0.32	1.75	U	1.75	10.9

Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	SV1	SDG No.:	Q3111
Lab Sample ID:	Q3111-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042960.D	4		09/22/25 16:53	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
124-48-1	Dibromochloromethane	0.34	2.90	U	2.90	17.0
106-93-4	1,2-Dibromoethane	0.34	2.61	U	2.61	3.07
127-18-4	Tetrachloroethene	5.70	38.6		0.41	0.81
108-90-7	Chlorobenzene	0.31	1.43	U	1.43	9.21
100-41-4	Ethyl Benzene	0.76	3.30	U	3.30	8.69
179601-23-1	m/p-Xylene	1.70	7.38	J	6.95	17.4
95-47-6	o-Xylene	0.84	3.65	U	3.65	8.69
100-42-5	Styrene	0.80	3.41	J	2.72	8.52
75-25-2	Bromoform	0.19	1.96	U	1.96	20.7
79-34-5	1,1,2,2-Tetrachloroethane	0.070	0.48	U	0.48	0.82
95-49-8	2-Chlorotoluene	0.68	3.52	U	3.52	10.4
108-67-8	1,3,5-Trimethylbenzene	0.72	3.54	U	3.54	9.83
95-63-6	1,2,4-Trimethylbenzene	0.72	3.54	U	3.54	9.83
541-73-1	1,3-Dichlorobenzene	0.22	1.32	U	1.32	12.0
106-46-7	1,4-Dichlorobenzene	0.52	3.13	U	3.13	12.0
95-50-1	1,2-Dichlorobenzene	0.52	3.13	U	3.13	12.0
120-82-1	1,2,4-Trichlorobenzene	0.84	6.24	U	6.24	14.8
87-68-3	Hexachloro-1,3-Butadiene	0.52	5.55	U	5.55	21.3
106-99-0	1,3-Butadiene	0.20	0.44	U	0.44	4.42
91-20-3	Naphthalene	0.40	2.10		0.26	2.10
622-96-8	4-Ethyltoluene	0.84	4.13	U	4.13	9.83
110-54-3	Hexane	8.00	28.2		2.26	7.05
107-05-1	Allyl Chloride	0.44	1.38	U	1.38	6.26
123-91-1	1,4-Dioxane	0.88	3.17	U	3.17	7.21
80-62-6	Methyl Methacrylate	0.56	2.29	U	2.29	8.19
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	10.1			65 - 135	101% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	158000		2.79		
540-36-3	1,4-Difluorobenzene	482000		3.962		
3114-55-4	Chlorobenzene-d5	431000		8.885		

Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	SV1	SDG No.:	Q3111
Lab Sample ID:	Q3111-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042960.D	4		09/22/25 16:53	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL
------------	-----------	---------------	----------------	-----------	-----	------------

U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042960.D
 Acq On : 22 Sep 2025 16:53
 Operator : SY/MD
 Sample : Q3111-01 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:51:56 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LFri Aug 2

QLast Update : Tue Sep 23 02:39:16 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	158433	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	482456	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	431460	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	325029	10.092	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	= 100.900%	
Target Compounds						
					Qvalue	
10) Heptane	4.981	43	13468m	0.437	ppbv	
13) Ethanol	1.722	45	77444	69.094	ppbv	97
15) Acetone	1.835	43	1106296	53.612	ppbv	99
17) tert-Butyl alcohol	2.042	59	3795m	0.168	ppbv	
19) Isopropyl Alcohol	1.887	45	935425	75.407	ppbv	89
20) Methylene Chloride	2.062	84	7193	0.535	ppbv	92
25) Ethyl Acetate	2.839	43	77893	1.494	ppbv #	98
26) Hexane	2.829	57	47310	1.990	ppbv #	77
27) Carbon Disulfide	2.149	76	16744	0.785	ppbv #	51
30) Cyclohexane	3.861	84	4439	0.223	ppbv	85
34) 2-Butanone	2.560	43	27893	0.825	ppbv	99
36) Benzene	3.661	78	15599	0.344	ppbv #	94
41) Tetrahydrofuran	3.065	42	10186m	0.524	ppbv	
44) 2,2,4-Trimethylpentane	4.648	57	33245m	0.425	ppbv	
52) Tetrachloroethene	8.228	164	24925	1.422	ppbv	93
53) Toluene	6.936	91	58424	1.090	ppbv	99
58) Ethyl Benzene	9.361	91	10574	0.149	ppbv	92
59) m/p-Xylene	9.535	91	24283	0.435	ppbv #	100
60) o-Xylene	9.966	91	10347	0.185	ppbv	95
61) Styrene	9.872	104	5354	0.203	ppbv	98
74) 1,2,4-Trimethylbenzene	11.539	105	8215	0.131	ppbv #	60
79) Naphthalene	13.516	128	5583	0.101	ppbv #	96

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

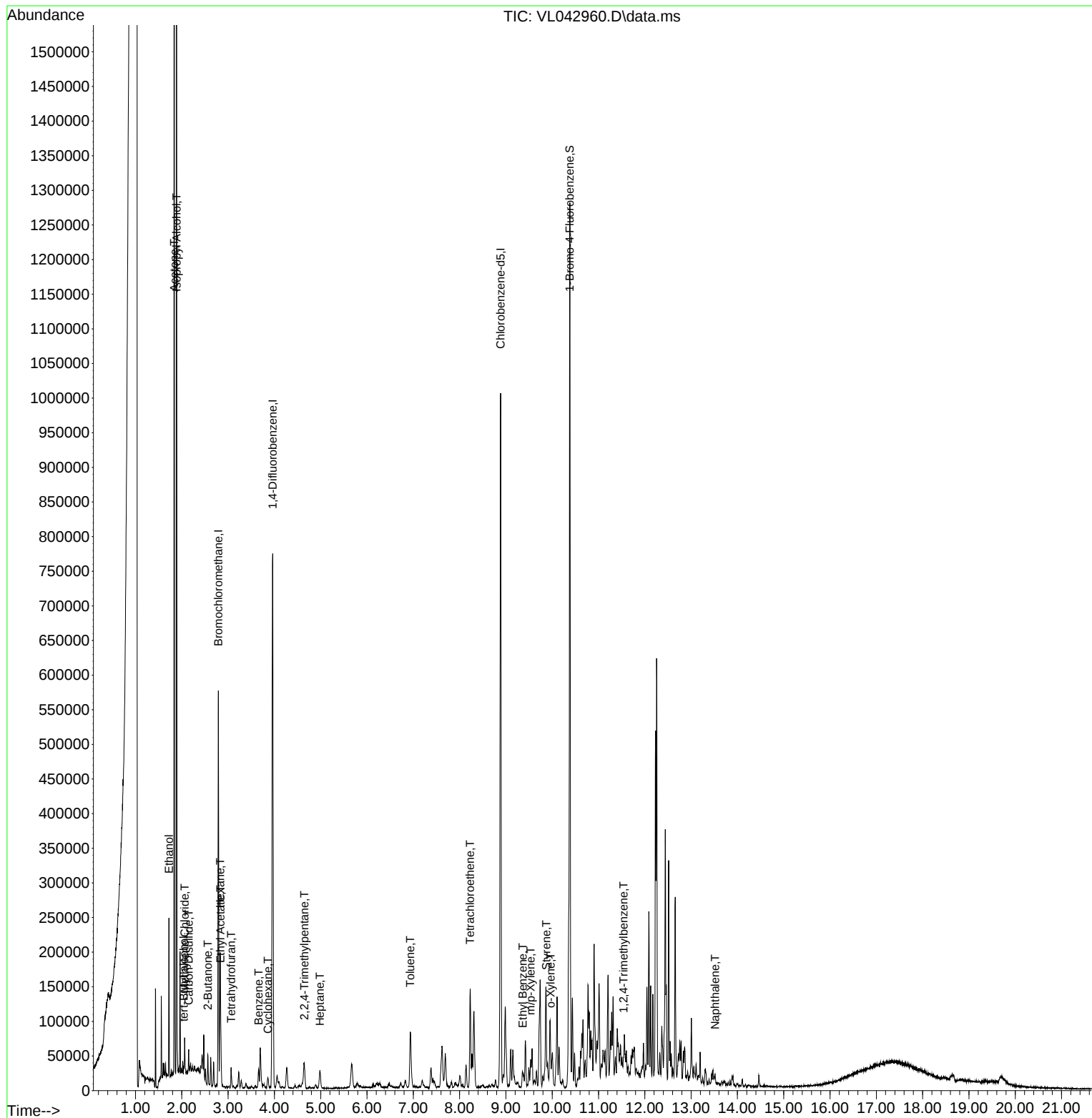
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Data File : VL042960.D
Acq On : 22 Sep 2025 16:53
Operator : SY/MD
Sample : Q3111-01 4X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

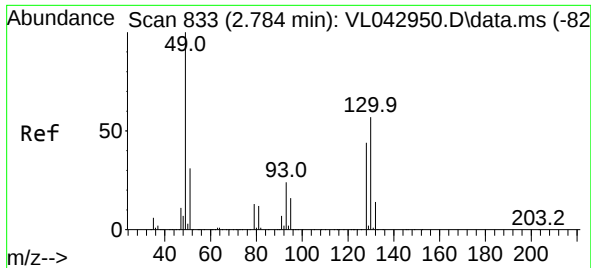
Instrument :
MSVOA_L
ClientSampleId :
SV1

Quant Time: Sep 23 02:51:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

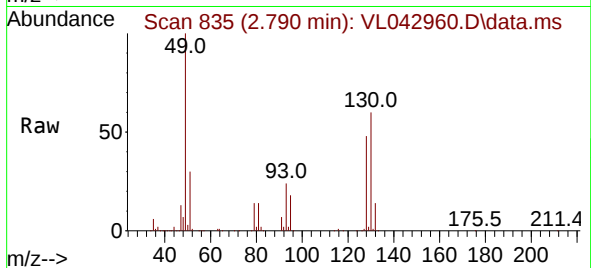
Reviewed By : Semsettin Yesilyurt 09/23/2025
Supervised By : Mahesh Dadoda 09/24/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 81
Delta R.T. 0.006 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

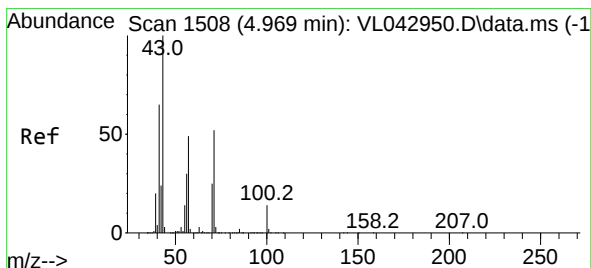
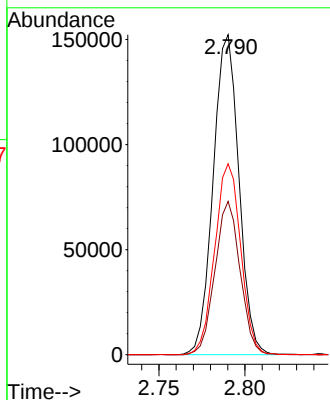
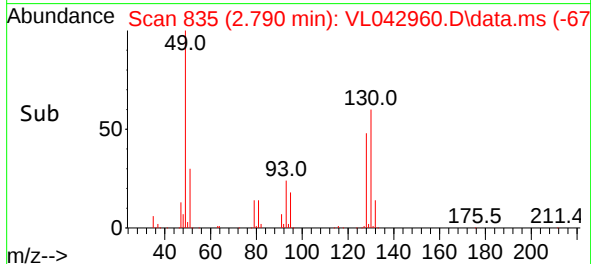
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion: 49 Resp: 15843
Ion Ratio Lower Upper
49 100
128 46.9 22.9 68.8
130 60.3 29.1 87.3

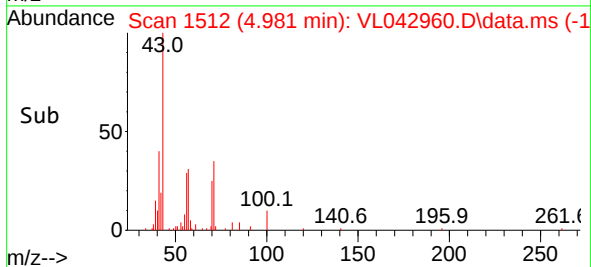
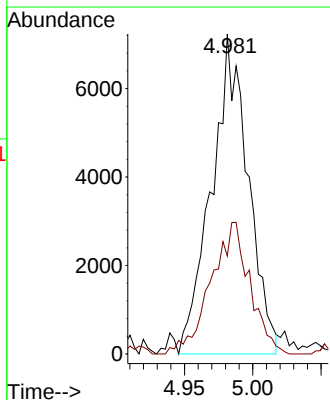
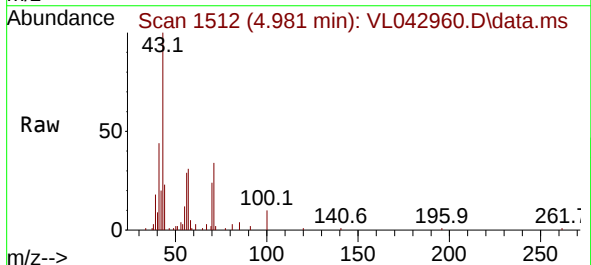
Manual Integrations
APPROVED

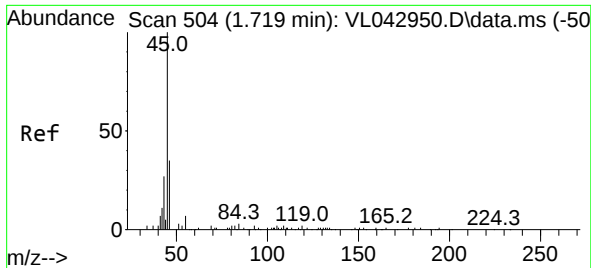
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#10
Heptane
Concen: 0.437 ppbv m
RT: 4.981 min Scan# 1512
Delta R.T. 0.013 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

Tgt Ion: 43 Resp: 13468
Ion Ratio Lower Upper
43 100
57 0.0 38.6 57.8#





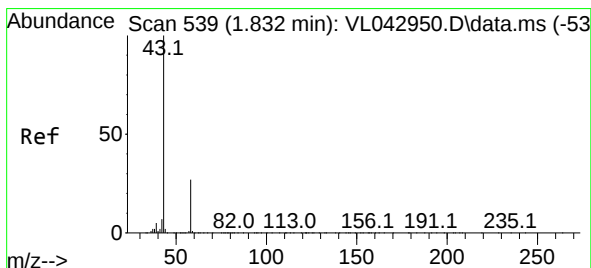
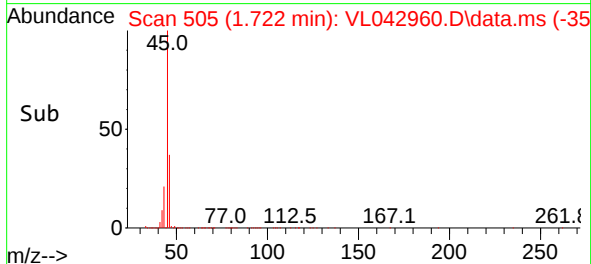
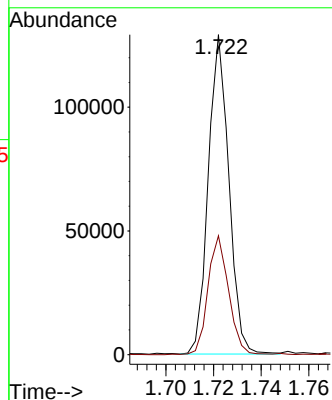
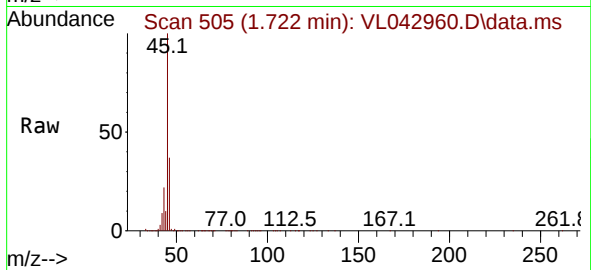
#13
Ethanol
Concen: 69.094 ppbv
RT: 1.722 min Scan# 504
Delta R.T. 0.003 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 45 Resp: 77444
Ion Ratio Lower Upper
45 100
46 38.3 16.2 64.6

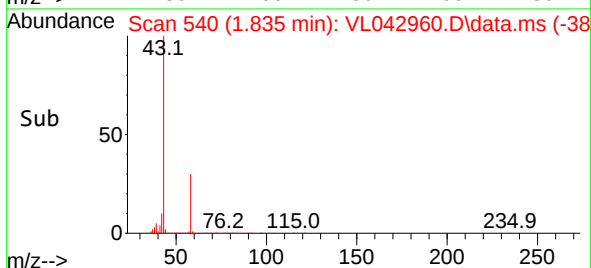
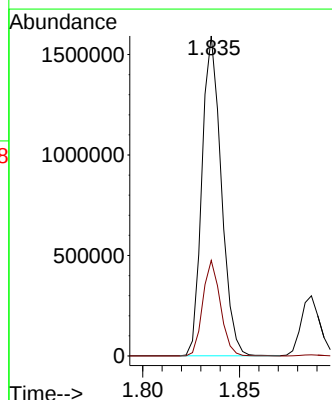
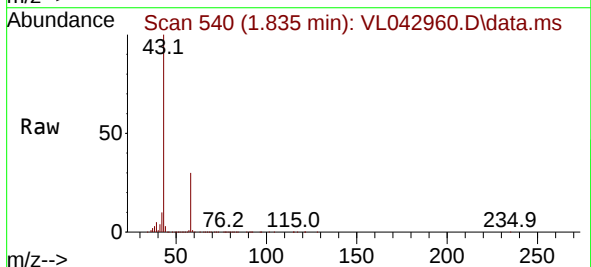
Manual Integrations
APPROVED

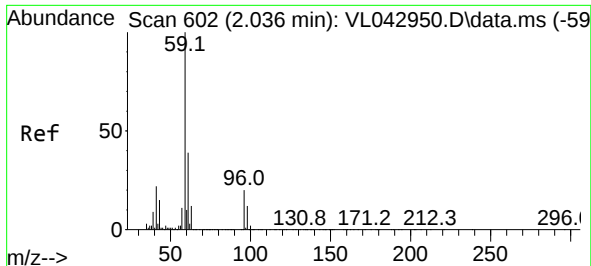
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#15
Acetone
Concen: 53.612 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

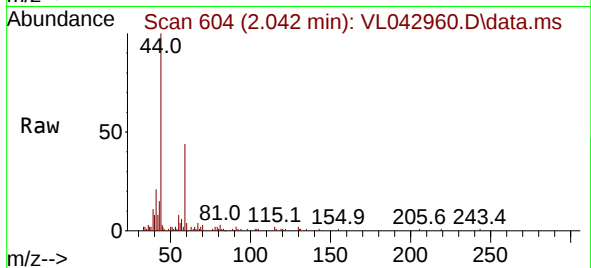
Tgt Ion: 43 Resp: 1106296
Ion Ratio Lower Upper
43 100
58 27.2 22.3 33.5





#17
tert-Butyl alcohol
Concen: 0.168 ppbv m
RT: 2.042 min Scan# 602
Delta R.T. 0.006 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

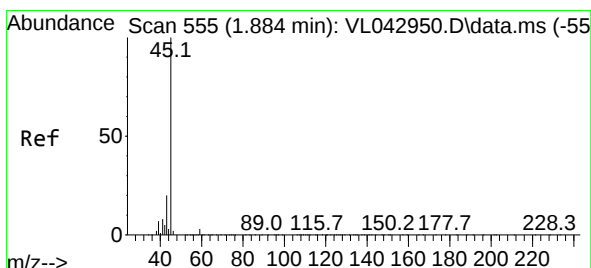
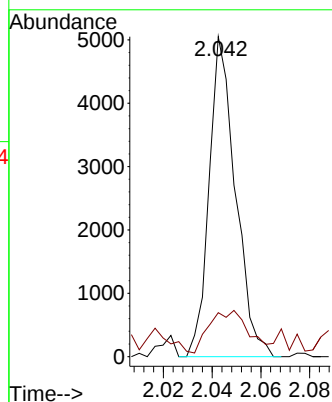
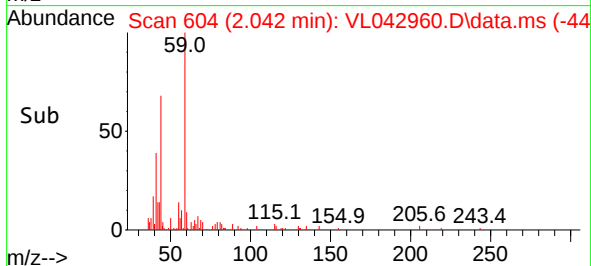
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion: 59 Resp: 379
Ion Ratio Lower Upper
59 100
57 82.8 8.6 12.8

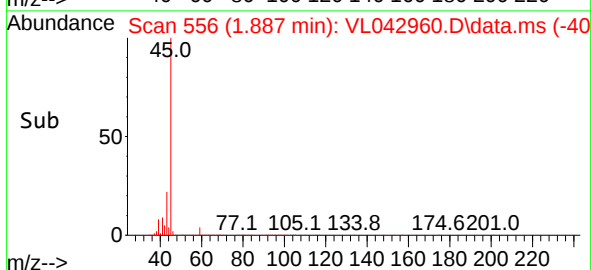
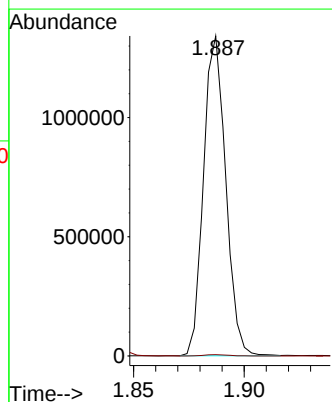
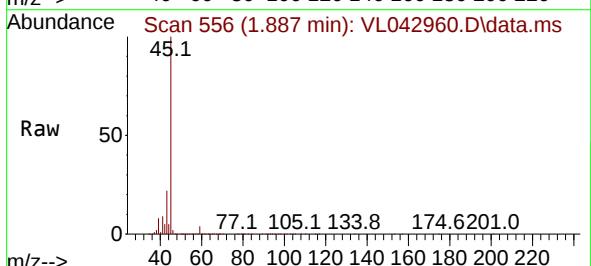
Manual Integrations
APPROVED

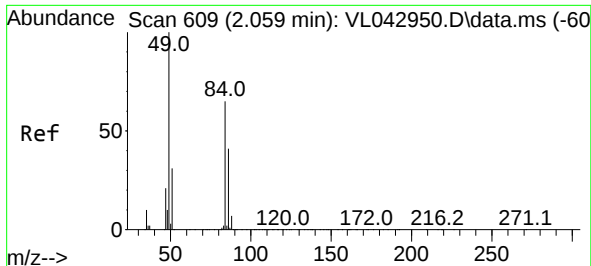
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#19
Isopropyl Alcohol
Concen: 75.407 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

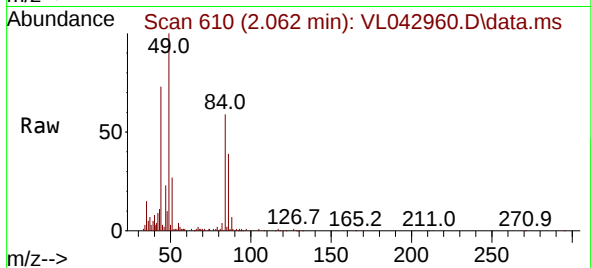
Tgt Ion: 45 Resp: 935425
Ion Ratio Lower Upper
45 100
58 32.2 31.0 46.6





#20
Methylene Chloride
Concen: 0.535 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

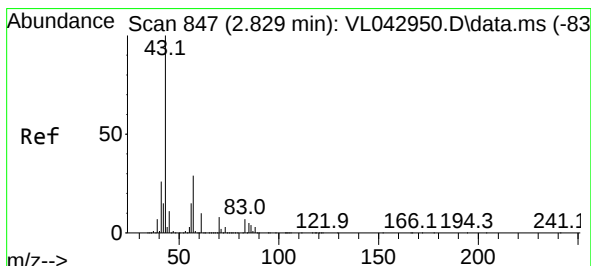
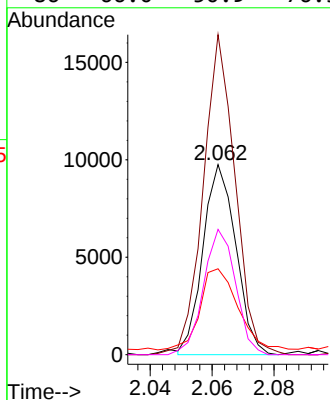
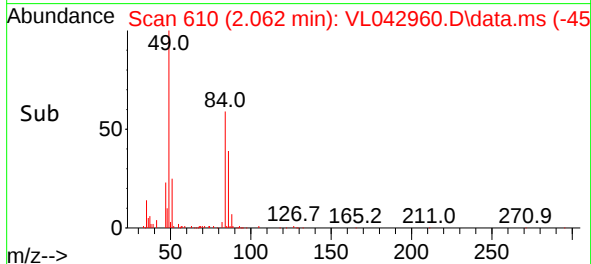
Instrument :
MSVOA_L
ClientSampleId :
SV1



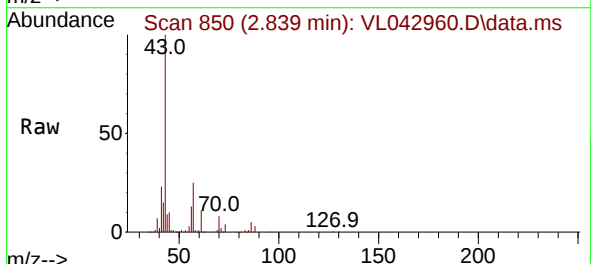
Tgt Ion: 84 Resp: 7193
Ion Ratio Lower Upper
84 100
49 166.9 124.1 186.1
51 40.9 39.8 59.8
86 66.0 50.9 76.3

Manual Integrations
APPROVED

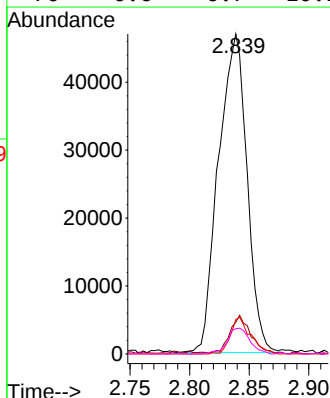
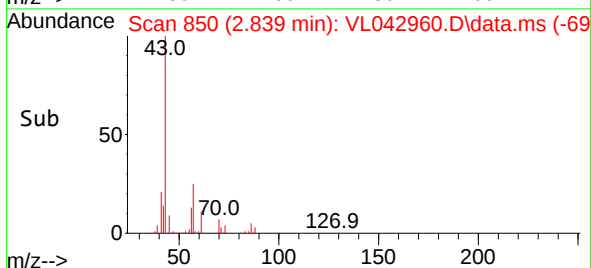
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

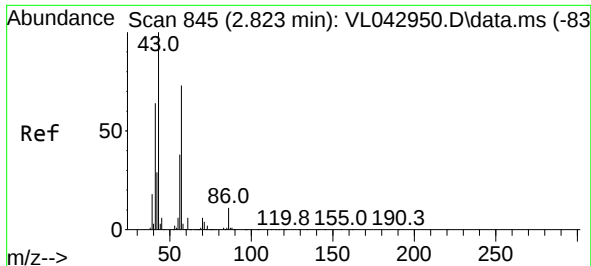


#25
Ethyl Acetate
Concen: 1.494 ppbv
RT: 2.839 min Scan# 850
Delta R.T. 0.010 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53



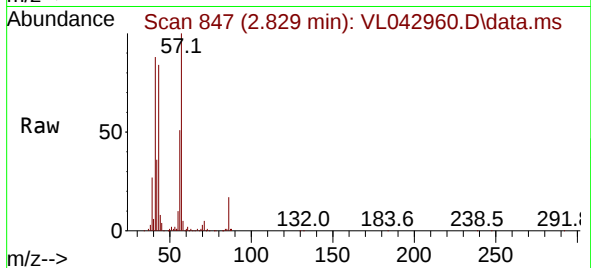
Tgt Ion: 43 Resp: 77893
Ion Ratio Lower Upper
43 100
45 9.7 7.7 11.5
61 8.1 7.1 10.7
70 6.6 6.7 10.1





#26
Hexane
Concen: 1.990 ppbv
RT: 2.829 min Scan# 845
Delta R.T. 0.006 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

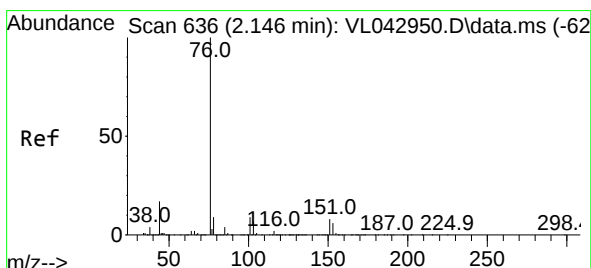
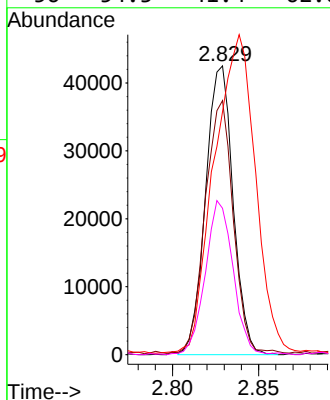
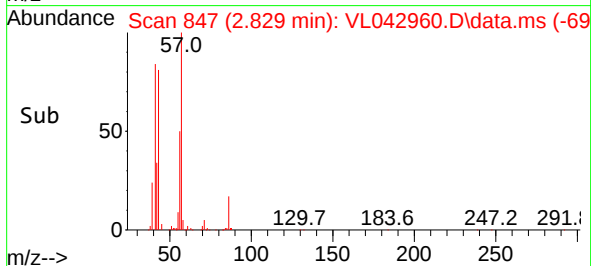
Instrument :
MSVOA_L
ClientSampleId :
SV1



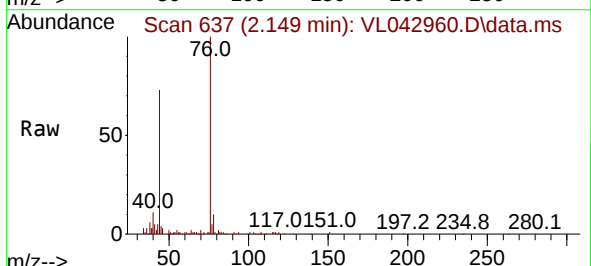
Tgt Ion: 57 Resp: 47310
Ion Ratio Lower Upper
57 100
41 90.4 71.7 107.5
43 166.2 180.8 271.2
56 54.3 41.4 62.0

Manual Integrations
APPROVED

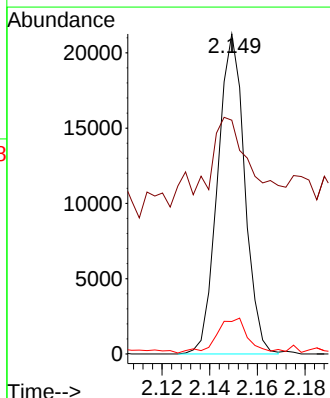
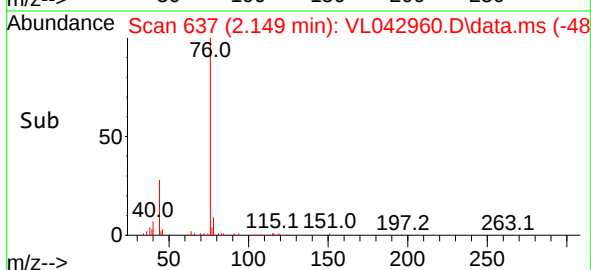
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

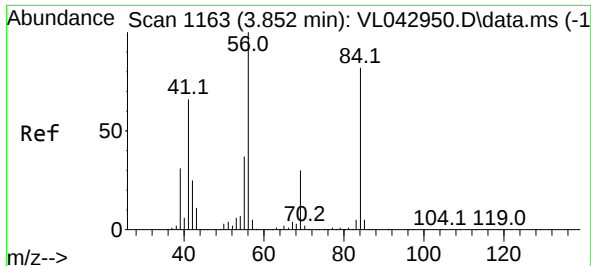


#27
Carbon Disulfide
Concen: 0.785 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.003 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53



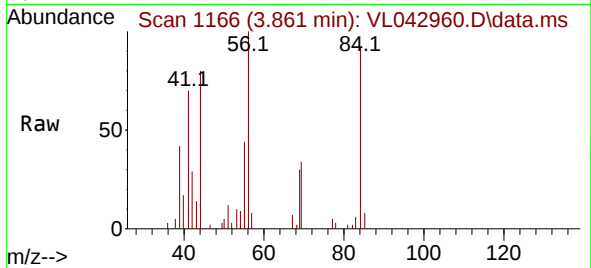
Tgt Ion: 76 Resp: 16744
Ion Ratio Lower Upper
76 100
44 51.1 15.6 23.4#
78 15.9 8.9 13.3#





#30
Cyclohexane
Concen: 0.223 ppbv
RT: 3.861 min Scan# 1166
Delta R.T. 0.010 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

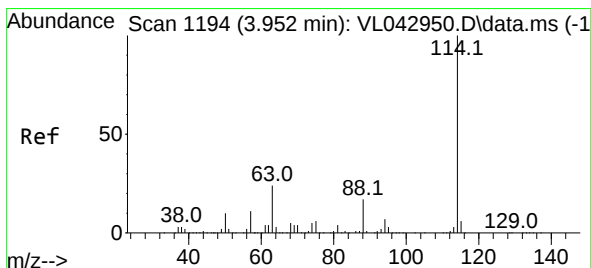
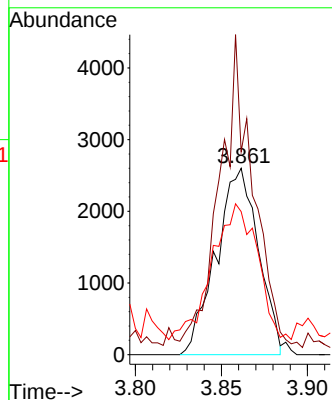
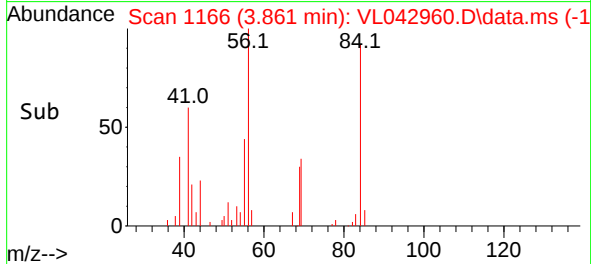
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion: 84 Resp: 4439
Ion Ratio Lower Upper
84 100
56 148.5 102.2 153.4
41 71.8 65.6 98.4

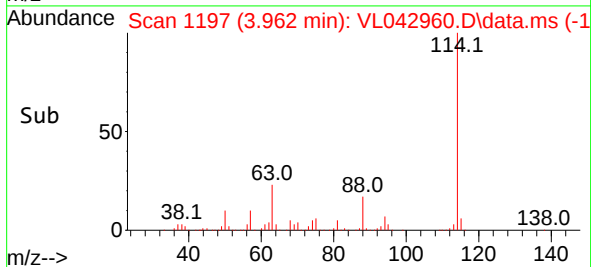
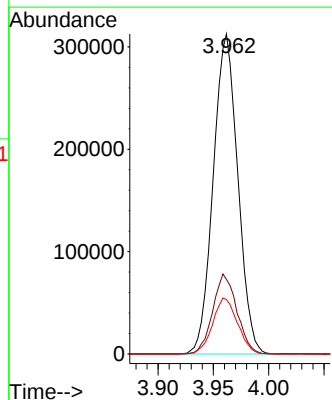
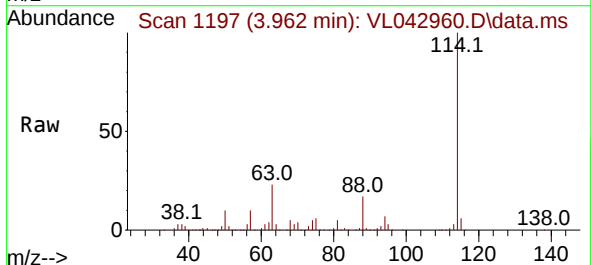
Manual Integrations
APPROVED

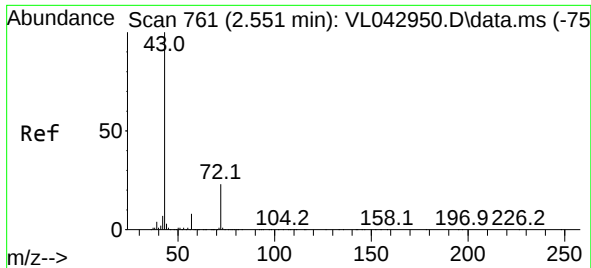
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

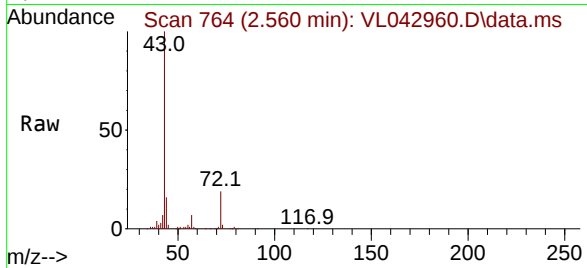
Tgt Ion:114 Resp: 482456
Ion Ratio Lower Upper
114 100
63 24.6 19.4 29.2
88 17.7 14.2 21.2





#34
2-Butanone
Concen: 0.825 ppbv
RT: 2.560 min Scan# 70
Delta R.T. 0.010 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

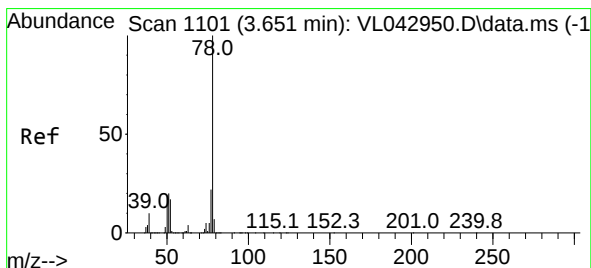
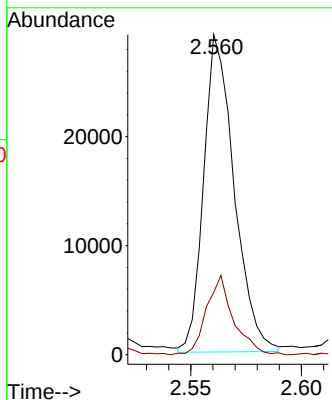
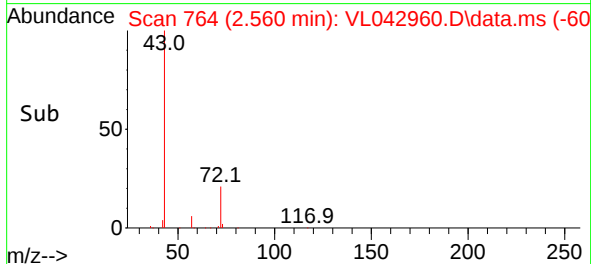
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion: 43 Resp: 2789
Ion Ratio Lower Upper
43 100
72 22.3 17.7 26.5

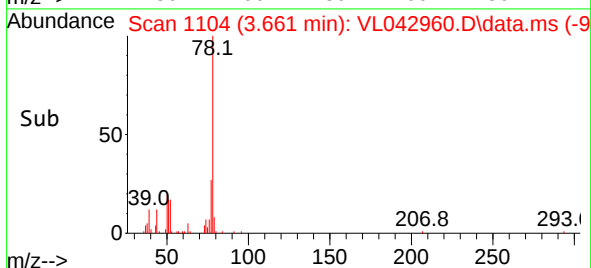
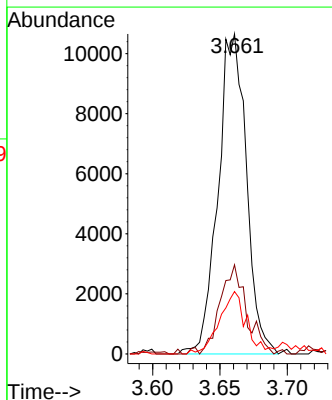
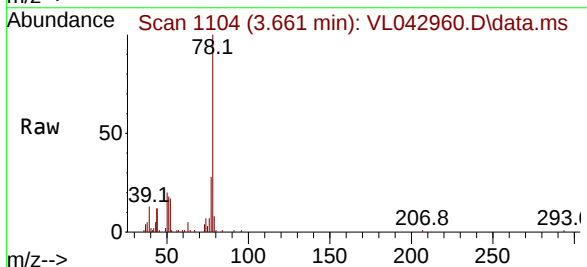
Manual Integrations
APPROVED

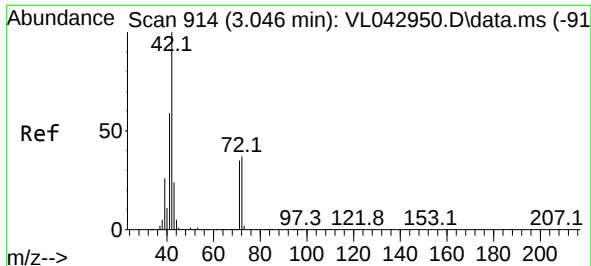
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#36
Benzene
Concen: 0.344 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.010 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

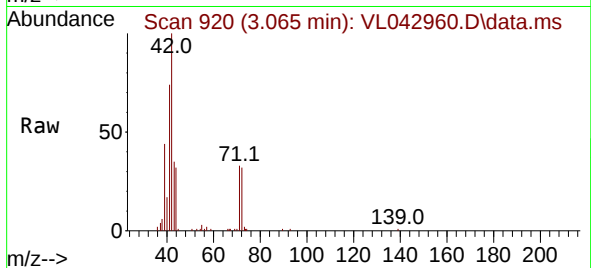
Tgt Ion: 78 Resp: 15599
Ion Ratio Lower Upper
78 100
77 27.0 17.8 26.6#
50 19.5 15.0 22.4





#41
Tetrahydrofuran
Concen: 0.524 ppbv m
RT: 3.065 min Scan# 914
Delta R.T. 0.019 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

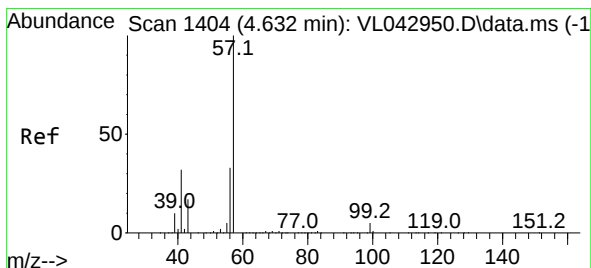
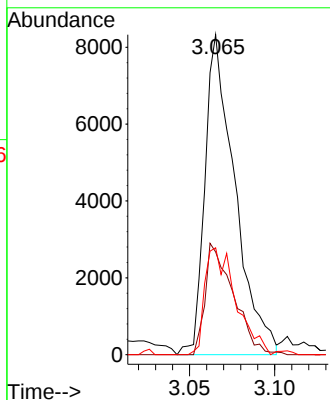
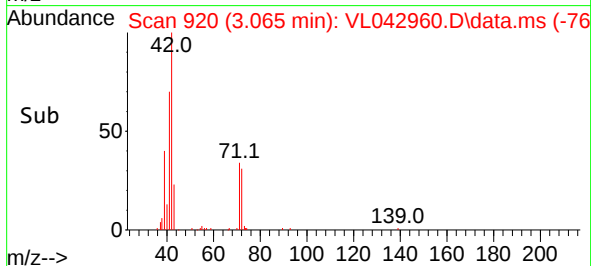
Instrument :
MSVOA_L
ClientSampleId :
SV1



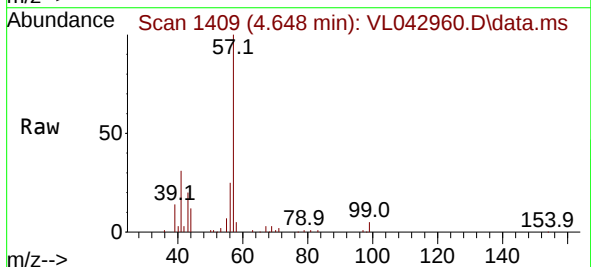
Tgt Ion: 42 Resp: 10180
Ion Ratio Lower Upper
42 100
72 32.8 30.0 45.0
71 35.1 28.8 43.2

Manual Integrations
APPROVED

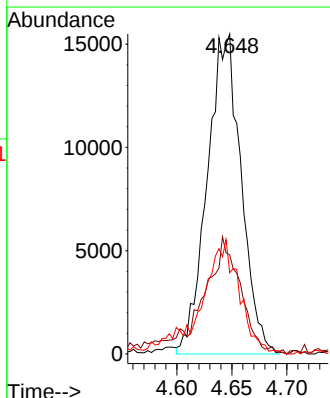
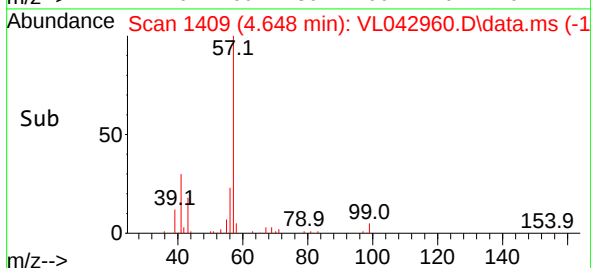
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

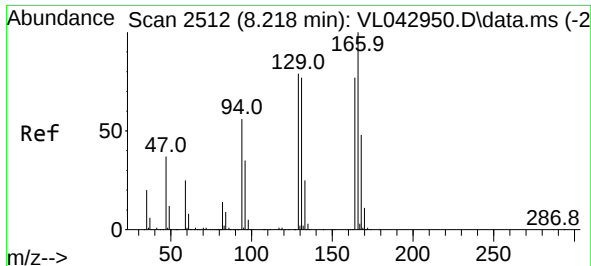


#44
2,2,4-Trimethylpentane
Concen: 0.425 ppbv m
RT: 4.648 min Scan# 1409
Delta R.T. 0.016 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53



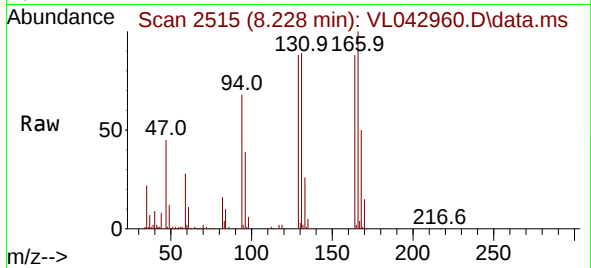
Tgt Ion: 57 Resp: 33245
Ion Ratio Lower Upper
57 100
41 38.3 25.5 38.3
56 41.4 25.8 38.8#





#52
Tetrachloroethene
Concen: 1.422 ppbv
RT: 8.228 min Scan# 2116
Delta R.T. 0.010 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

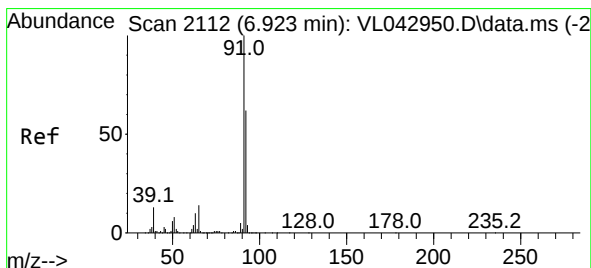
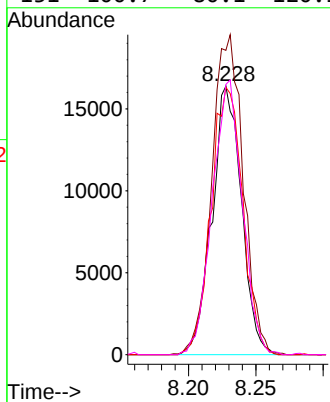
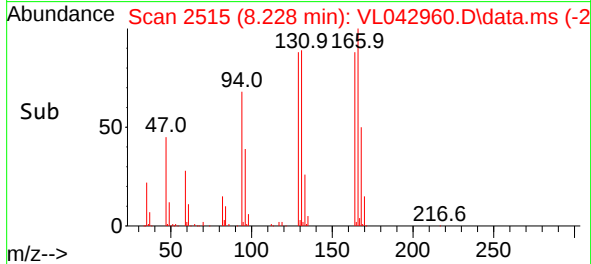
Instrument :
MSVOA_L
ClientSampleId :
SV1



Tgt Ion:164 Resp: 2492
Ion Ratio Lower Upper
164 100
166 113.0 103.5 155.3
129 99.6 82.2 123.4
131 100.7 80.1 120.1

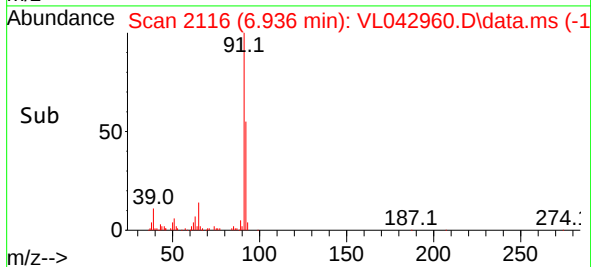
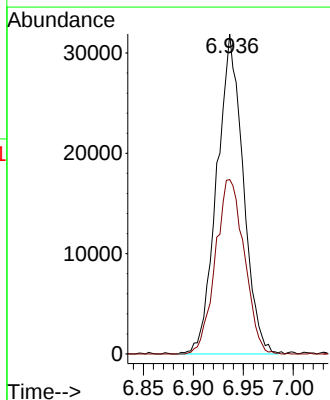
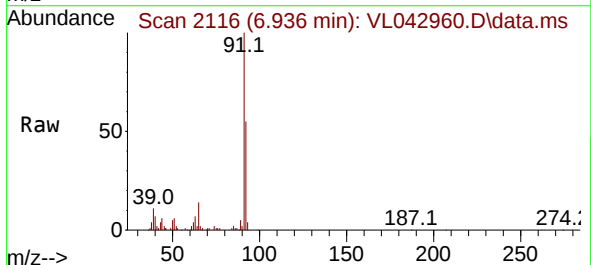
Manual Integrations
APPROVED

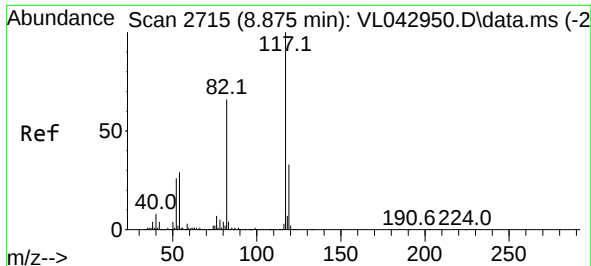
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#53
Toluene
Concen: 1.090 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. 0.013 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

Tgt Ion: 91 Resp: 58424
Ion Ratio Lower Upper
91 100
92 59.8 48.2 72.2





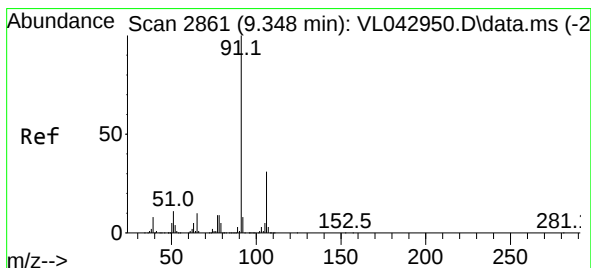
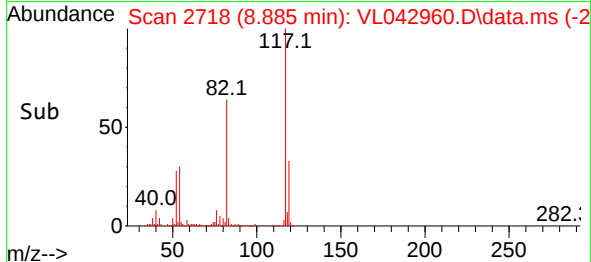
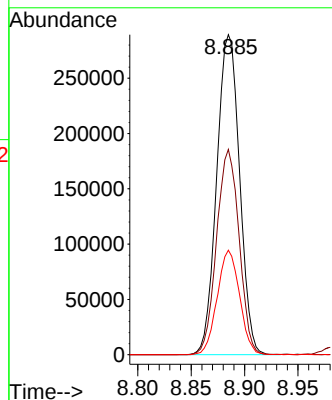
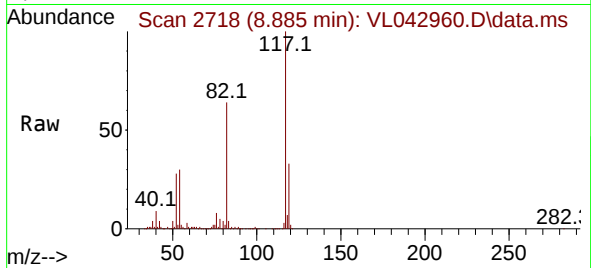
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2715
Delta R.T. 0.010 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion: 117 Resp: 431460
Ion Ratio Lower Upper
117 100
82 63.1 52.8 79.2
119 32.1 26.5 39.7

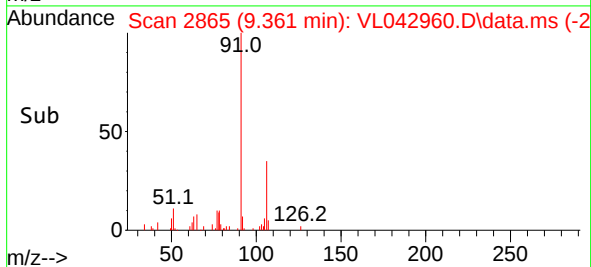
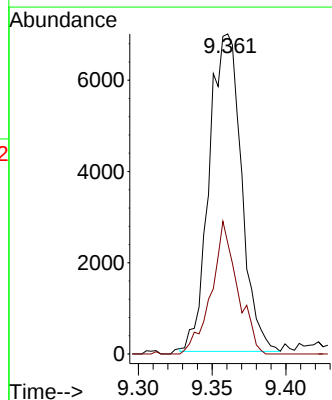
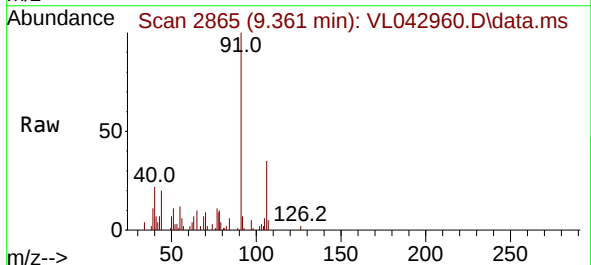
Manual Integrations
APPROVED

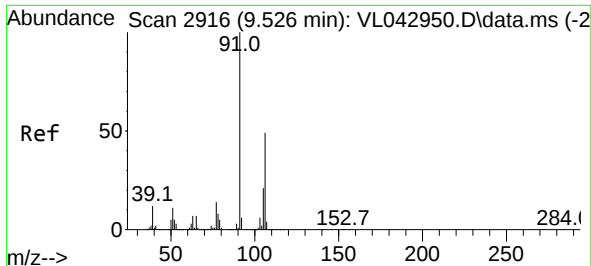
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#58
Ethyl Benzene
Concen: 0.149 ppbv
RT: 9.361 min Scan# 2865
Delta R.T. 0.013 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

Tgt Ion: 91 Resp: 10574
Ion Ratio Lower Upper
91 100
106 35.0 24.6 37.0





#59

m/p-Xylene

Concen: 0.435 ppbv

RT: 9.535 min Scan# 2916

Delta R.T. 0.010 min

Lab File: VL042960.D

Acq: 22 Sep 2025 16:53

Instrument :

MSVOA_L

ClientSampleId :

SV1

Tgt Ion: 91 Resp: 2428

Ion Ratio Lower Upper

91 100

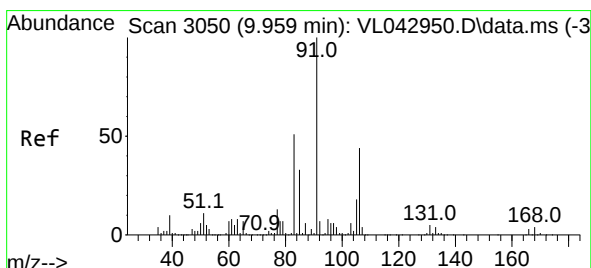
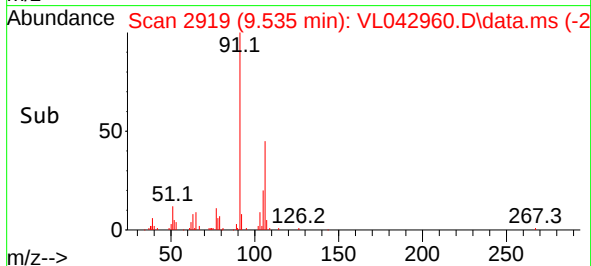
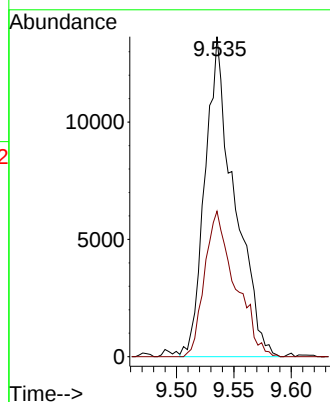
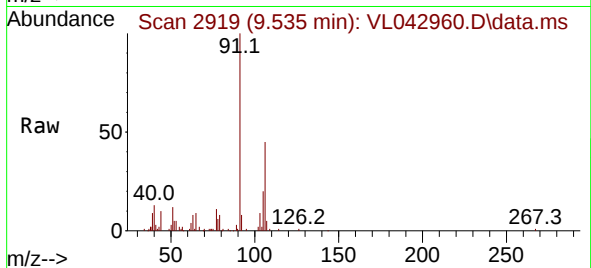
106 47.5 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025

Supervised By :Mahesh Dadoda 09/24/2025



#60

o-Xylene

Concen: 0.185 ppbv

RT: 9.966 min Scan# 3052

Delta R.T. 0.006 min

Lab File: VL042960.D

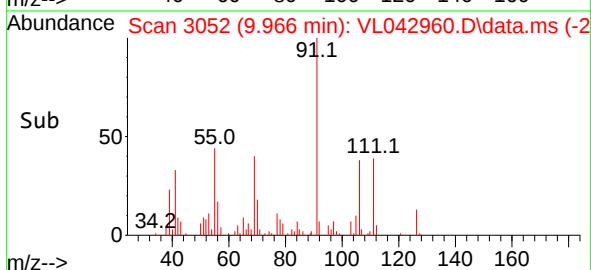
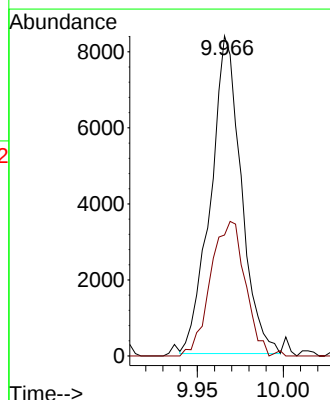
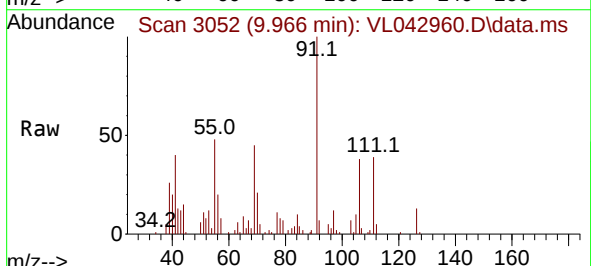
Acq: 22 Sep 2025 16:53

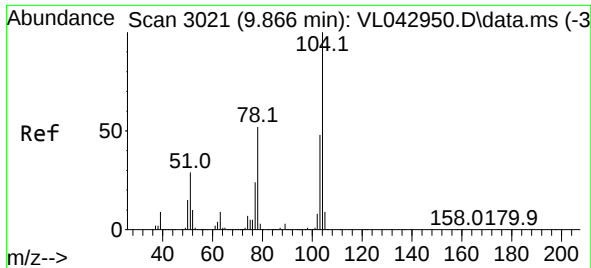
Tgt Ion: 91 Resp: 10347

Ion Ratio Lower Upper

91 100

106 48.0 22.4 67.0





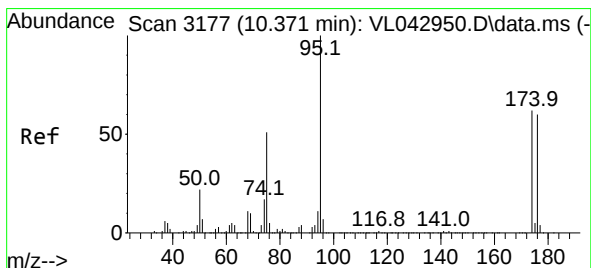
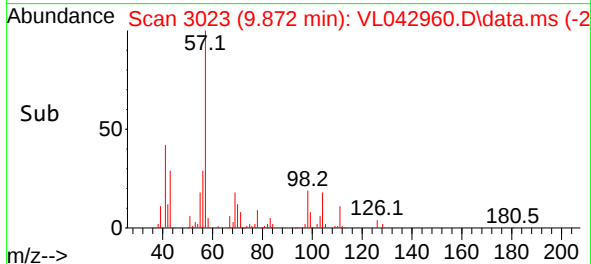
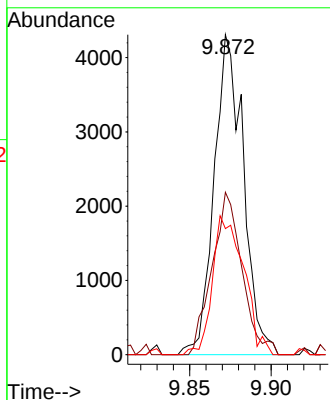
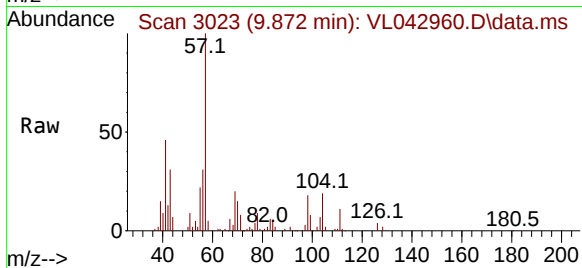
#61
Styrene
Concen: 0.203 ppbv
RT: 9.872 min Scan# 3021
Delta R.T. 0.006 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

Instrument :
MSVOA_L
ClientSampleId :
SV1

Tgt Ion:104 Resp: 5354
Ion Ratio Lower Upper
104 100
78 52.2 39.9 59.9
103 46.5 36.9 55.3

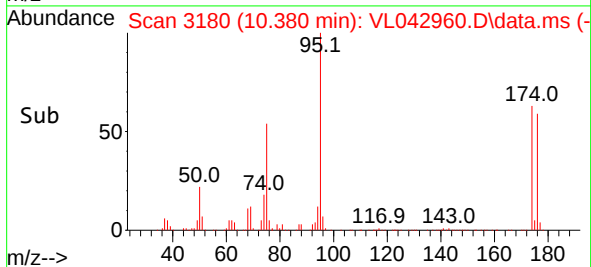
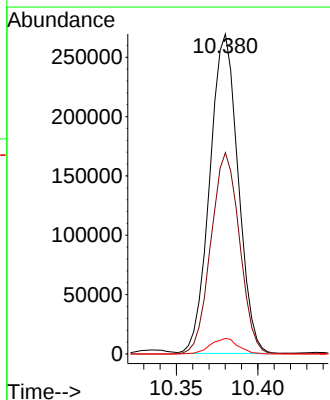
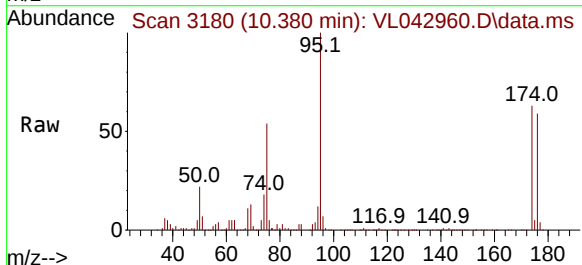
Manual Integrations
APPROVED

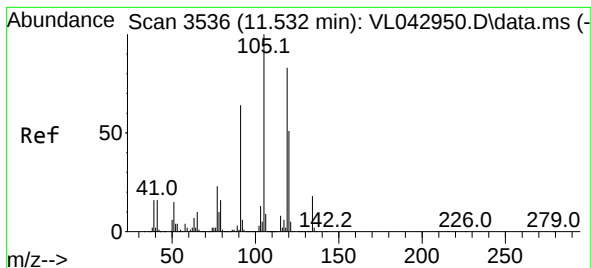
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 10.092 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.010 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

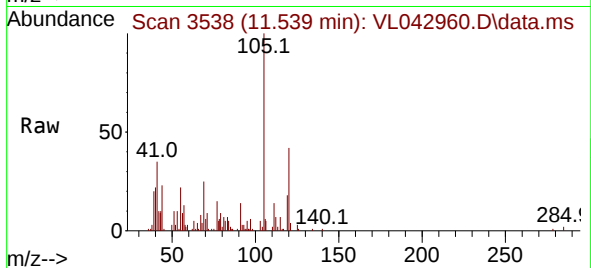
Tgt Ion: 95 Resp: 325029
Ion Ratio Lower Upper
95 100
174 63.7 51.4 77.2
175 4.8 4.0 6.0





#74
1,2,4-Trimethylbenzene
Concen: 0.131 ppbv
RT: 11.539 min Scan# 3536
Delta R.T. 0.006 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53

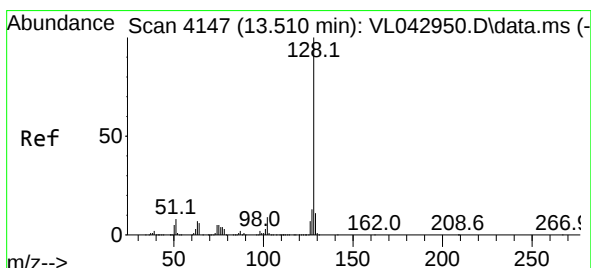
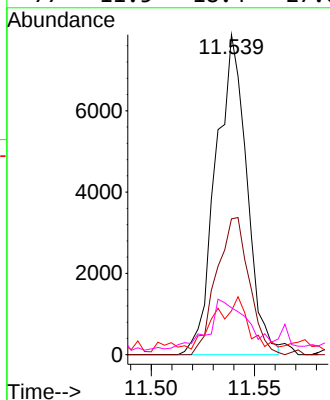
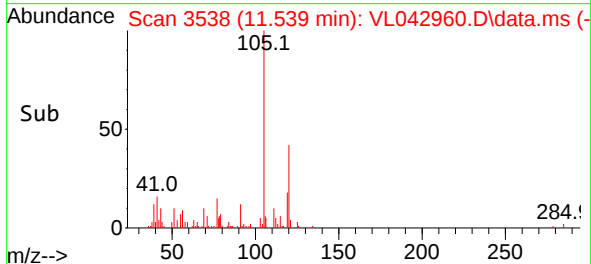
Instrument :
MSVOA_L
ClientSampleId :
SV1



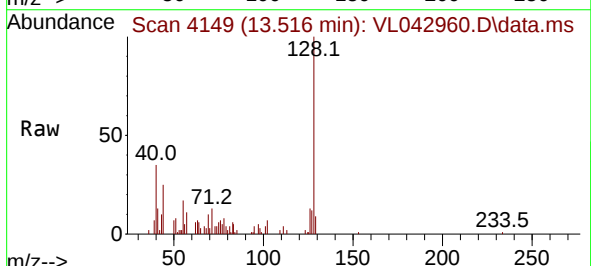
Tgt Ion:105 Resp: 821
Ion Ratio Lower Upper
105 100
120 42.4 40.9 61.3
91 11.3 51.2 76.8
77 11.5 18.4 27.6#

Manual Integrations
APPROVED

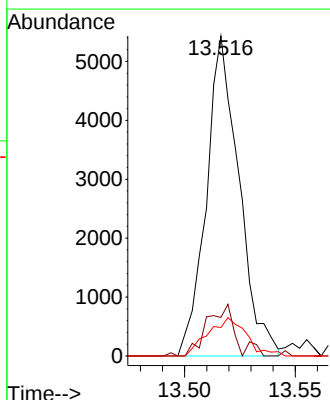
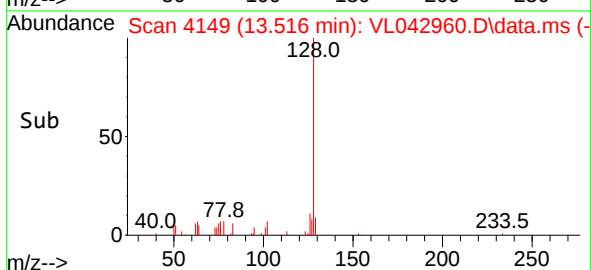
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#79
Naphthalene
Concen: 0.101 ppbv
RT: 13.516 min Scan# 4149
Delta R.T. 0.006 min
Lab File: VL042960.D
Acq: 22 Sep 2025 16:53



Tgt Ion:128 Resp: 5583
Ion Ratio Lower Upper
128 100
127 12.0 10.6 15.8
129 8.9 9.0 13.6#



Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	SV1DL	SDG No.:	Q3111
Lab Sample ID:	Q3111-01DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042961.D	40		09/22/25 17:28	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	4.40	21.8	UD	21.8	98.9
74-87-3	Chloromethane	3.90	8.05	UD	8.05	41.3
75-01-4	Vinyl Chloride	1.00	2.56	UD	2.56	3.07
74-83-9	Bromomethane	3.10	12.0	UD	12.0	77.7
75-00-3	Chloroethane	6.00	15.8	UD	15.8	52.8
109-99-9	Tetrahydrofuran	3.20	9.44	UD	9.44	59.0
75-69-4	Trichlorofluoromethane	6.80	38.2	UD	38.2	112
76-13-1	1,1,2-Trichlorotrifluoroethane	5.60	42.9	UD	42.9	153
76-14-2	Dichlorotetrafluoroethane	6.00	41.9	UD	41.9	140
75-65-0	tert-Butyl alcohol	6.40	19.4	UD	19.4	60.6
142-82-5	Heptane	6.80	27.9	UD	27.9	82.0
75-35-4	1,1-Dichloroethene	6.00	23.8	UD	23.8	79.3
67-64-1	Acetone	260	618	D	17.1	47.5
75-15-0	Carbon Disulfide	3.20	9.97	UD	9.97	62.3
1634-04-4	Methyl tert-Butyl Ether	9.20	33.2	UD	33.2	72.1
75-09-2	Methylene Chloride	9.20	32.0	UD	32.0	69.5
156-60-5	trans-1,2-Dichloroethene	4.80	19.0	UD	19.0	79.3
75-34-3	1,1-Dichloroethane	5.20	21.1	UD	21.1	81.0
110-82-7	Cyclohexane	8.80	30.3	UD	30.3	68.8
78-93-3	2-Butanone	4.60	13.6	JD	6.49	59.0
56-23-5	Carbon Tetrachloride	1.00	6.29	UD	6.29	7.55
156-59-2	cis-1,2-Dichloroethene	4.00	15.9	UD	15.9	79.3
67-66-3	Chloroform	3.80	18.6	UD	18.6	97.7
71-55-6	1,1,1-Trichloroethane	0.64	3.49	UD	3.49	6.55
540-84-1	2,2,4-Trimethylpentane	5.60	26.2	UD	26.2	93.4
71-43-2	Benzene	3.20	10.2	UD	10.2	63.9
107-06-2	1,2-Dichloroethane	3.70	15.0	UD	15.0	81.0
79-01-6	Trichloroethene	0.96	5.16	UD	5.16	6.45
78-87-5	1,2-Dichloropropane	5.20	24.0	UD	24.0	92.4
75-27-4	Bromodichloromethane	2.50	16.8	UD	16.8	134
108-10-1	4-Methyl-2-Pentanone	3.90	16.0	UD	16.0	82.0
108-88-3	Toluene	6.40	24.1	UD	24.1	75.4
10061-02-6	t-1,3-Dichloropropene	6.00	27.2	UD	27.2	90.8
10061-01-5	cis-1,3-Dichloropropene	4.40	20.0	UD	20.0	90.8
79-00-5	1,1,2-Trichloroethane	3.20	17.5	UD	17.5	109

Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	SV1DL	SDG No.:	Q3111
Lab Sample ID:	Q3111-01DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042961.D	40		09/22/25 17:28	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
124-48-1	Dibromochloromethane	3.40	29.0	UD	29.0	170
106-93-4	1,2-Dibromoethane	3.40	26.1	UD	26.1	30.7
127-18-4	Tetrachloroethene	6.40	43.4	D	4.07	8.14
108-90-7	Chlorobenzene	3.10	14.3	UD	14.3	92.1
100-41-4	Ethyl Benzene	7.60	33.0	UD	33.0	86.9
179601-23-1	m/p-Xylene	16.4	71.2	UD	71.2	174
95-47-6	o-Xylene	8.40	36.5	UD	36.5	86.9
100-42-5	Styrene	6.40	27.3	UD	27.3	85.2
75-25-2	Bromoform	1.90	19.6	UD	19.6	207
79-34-5	1,1,2,2-Tetrachloroethane	0.72	4.94	UD	4.94	8.24
95-49-8	2-Chlorotoluene	6.80	35.2	UD	35.2	104
108-67-8	1,3,5-Trimethylbenzene	7.20	35.4	UD	35.4	98.3
95-63-6	1,2,4-Trimethylbenzene	7.20	35.4	UD	35.4	98.3
541-73-1	1,3-Dichlorobenzene	2.20	13.2	UD	13.2	120
106-46-7	1,4-Dichlorobenzene	5.20	31.3	UD	31.3	120
95-50-1	1,2-Dichlorobenzene	5.20	31.3	UD	31.3	120
120-82-1	1,2,4-Trichlorobenzene	8.40	62.4	UD	62.4	148
87-68-3	Hexachloro-1,3-Butadiene	5.20	55.5	UD	55.5	213
106-99-0	1,3-Butadiene	2.00	4.42	UD	4.42	44.3
91-20-3	Naphthalene	0.52	2.73	UD	2.73	21.0
622-96-8	4-Ethyltoluene	8.40	41.3	UD	41.3	98.3
110-54-3	Hexane	10.0	35.2	JD	22.6	70.5
107-05-1	Allyl Chloride	4.40	13.8	UD	13.8	62.6
123-91-1	1,4-Dioxane	8.80	31.7	UD	31.7	72.1
80-62-6	Methyl Methacrylate	5.60	22.9	UD	22.9	81.9

SURROGATES

460-00-4	1-Bromo-4-Fluorobenzene	9.80		65 - 135	98%	SPK: 10
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INTERNAL STANDARDS

74-97-5	Bromochloromethane	156000	2.79
540-36-3	1,4-Difluorobenzene	476000	3.965
3114-55-4	Chlorobenzene-d5	425000	8.888

Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	SV1DL	SDG No.:	Q3111
Lab Sample ID:	Q3111-01DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042961.D	40		09/22/25 17:28	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL
------------	-----------	---------------	----------------	-----------	-----	------------

U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range
 D = Dilution

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042961.D
 Acq On : 22 Sep 2025 17:28
 Operator : SY/MD
 Sample : Q3111-01DL 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:52:38 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 2
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	156230	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	475755	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.888	117	424779	10.000	ppbv	0.01
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	311114	9.812	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.100%
Target Compounds						
					Qvalue	
13) Ethanol	1.722	45	8742	7.909	ppbv	100
15) Acetone	1.839	43	133763	6.574	ppbv	95
19) Isopropyl Alcohol	1.890	45	108806	8.895	ppbv	88
25) Ethyl Acetate	2.839	43	9064m	0.176	ppbv	
26) Hexane	2.826	57	5865	0.250	ppbv #	78
34) 2-Butanone	2.570	43	3852	0.116	ppbv	100
52) Tetrachloroethene	8.234	164	2743m	0.159	ppbv	
53) Toluene	6.949	91	6544m	0.124	ppbv	

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

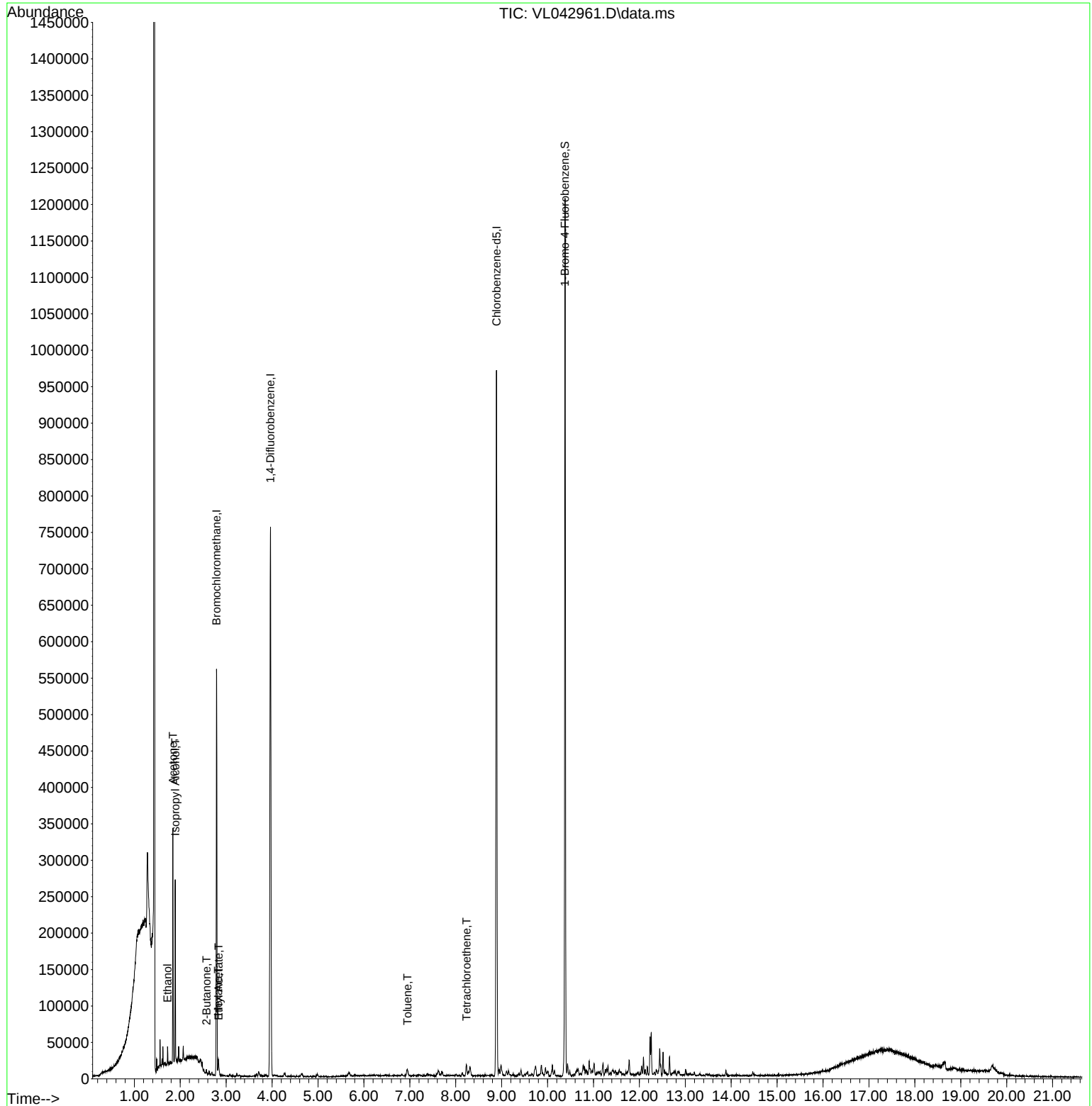
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Data File : VL042961.D
Acq On : 22 Sep 2025 17:28
Operator : SY/MD
Sample : Q3111-01DL 40X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

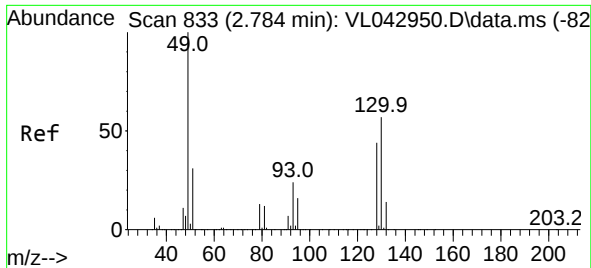
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

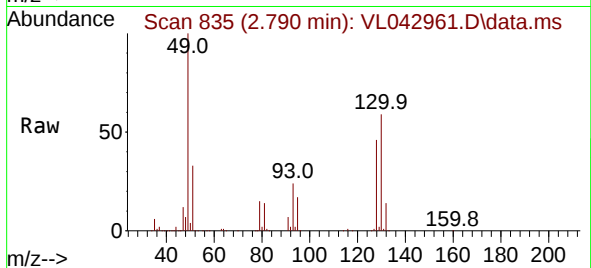
Quant Time: Sep 23 02:52:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 833
Delta R.T. 0.006 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

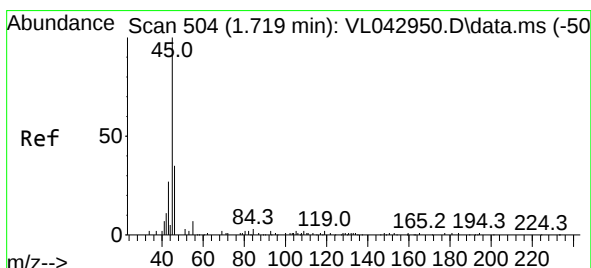
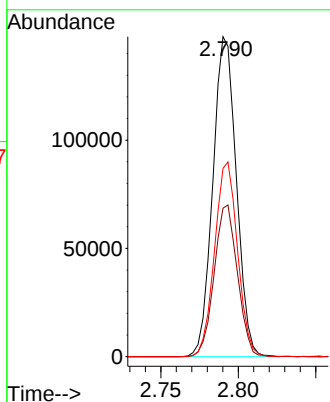
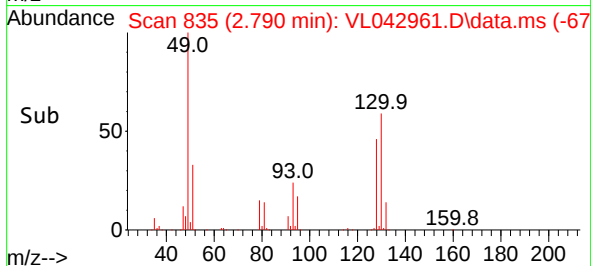
Instrument :
MSVOA_L
ClientSampleId :
SV1DL



Tgt Ion: 49 Resp: 156230
Ion Ratio Lower Upper
49 100
128 46.9 22.9 68.8
130 59.5 29.1 87.3

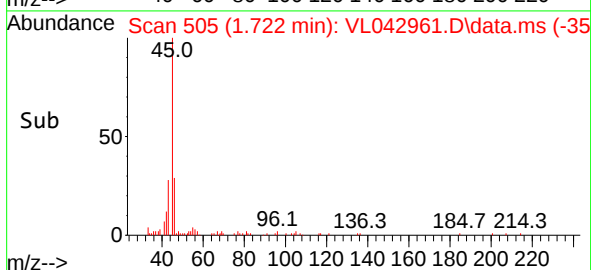
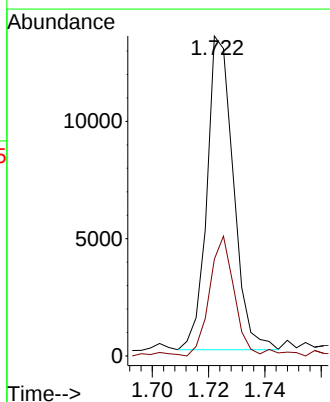
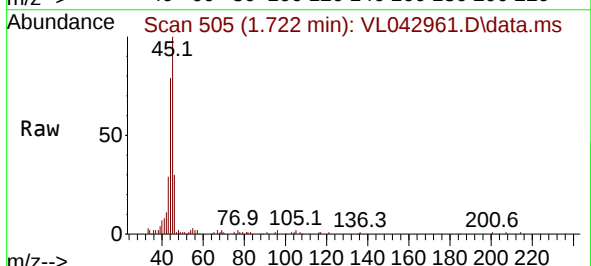
Manual Integrations
APPROVED

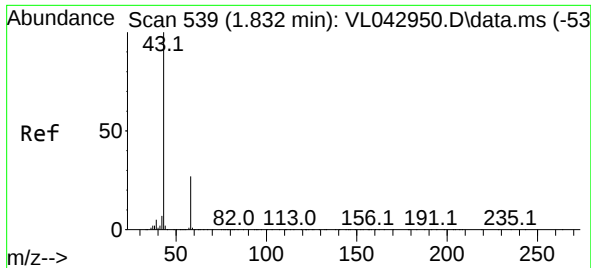
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#13
Ethanol
Concen: 7.909 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

Tgt Ion: 45 Resp: 8742
Ion Ratio Lower Upper
45 100
46 40.7 16.2 64.6





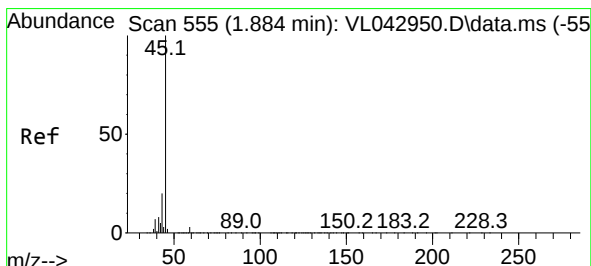
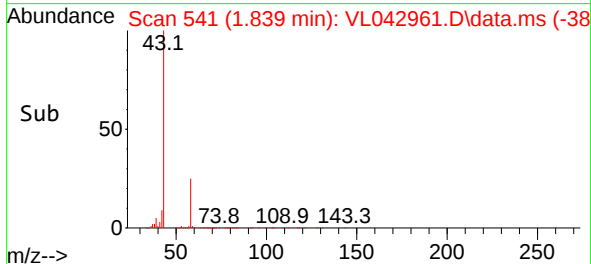
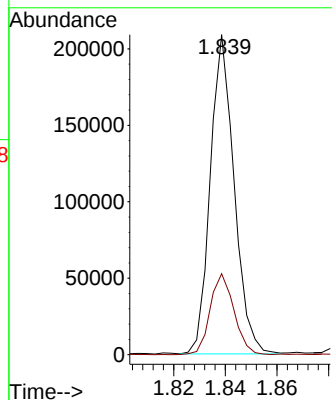
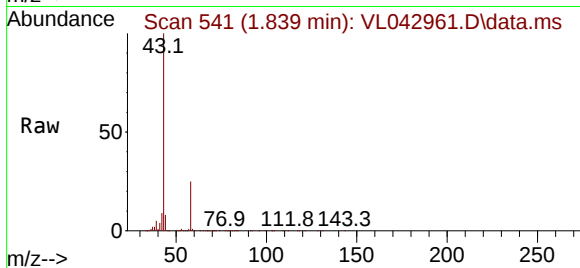
#15
Acetone
Concen: 6.574 ppbv
RT: 1.839 min Scan# 541
Delta R.T. 0.006 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

Instrument :
MSVOA_L
ClientSampleId :
SV1DL

Tgt Ion: 43 Resp: 13376
Ion Ratio Lower Upper
43 100
58 25.3 22.3 33.5

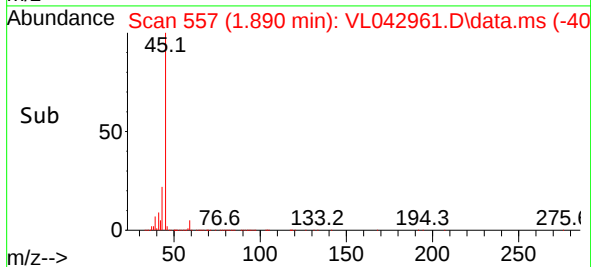
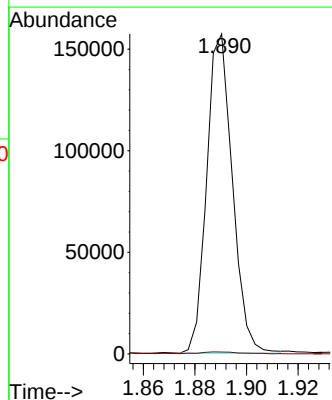
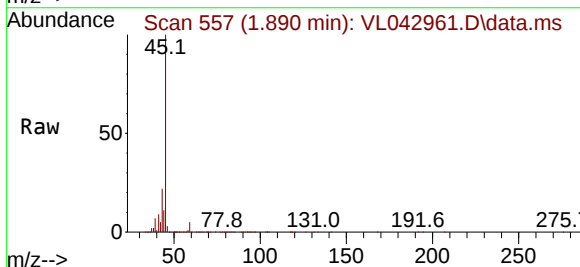
Manual Integrations
APPROVED

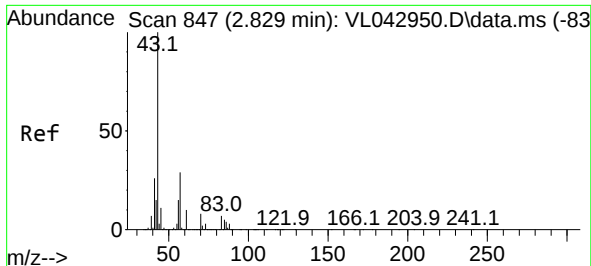
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#19
Isopropyl Alcohol
Concen: 8.895 ppbv
RT: 1.890 min Scan# 557
Delta R.T. 0.006 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

Tgt Ion: 45 Resp: 108806
Ion Ratio Lower Upper
45 100
58 31.6 31.0 46.6





#25

Ethyl Acetate

Concen: 0.176 ppbv m

RT: 2.839 min Scan# 847

Delta R.T. 0.010 min

Lab File: VL042961.D

Acq: 22 Sep 2025 17:28

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

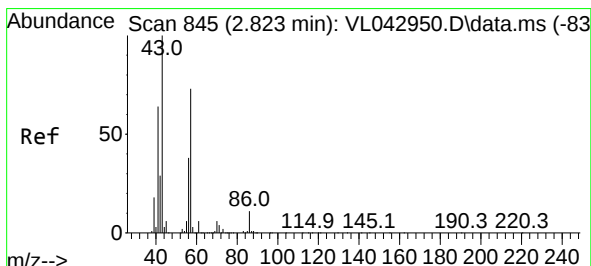
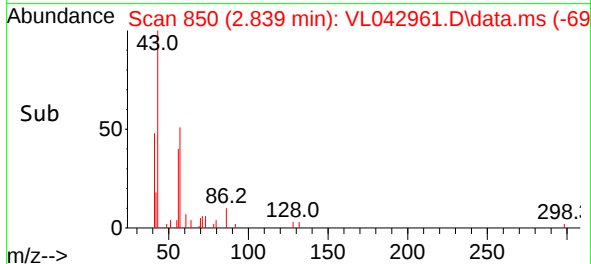
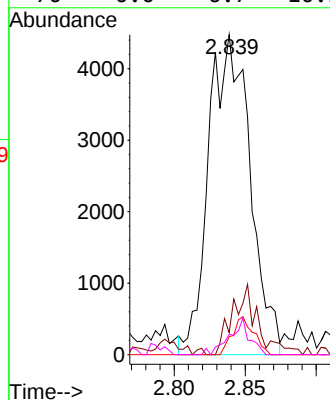
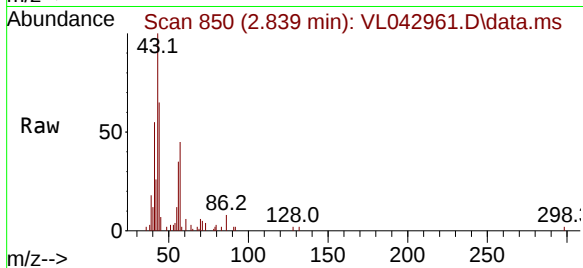
Tgt Ion: 43	Resp: 9064
Ion Ratio	Lower Upper
43 100	
45 0.0	7.7 11.5
61 0.0	7.1 10.7
70 0.0	6.7 10.1

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025

Supervised By :Mahesh Dadoda 09/24/2025



#26

Hexane

Concen: 0.250 ppbv

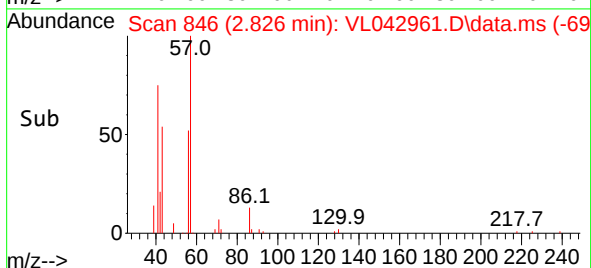
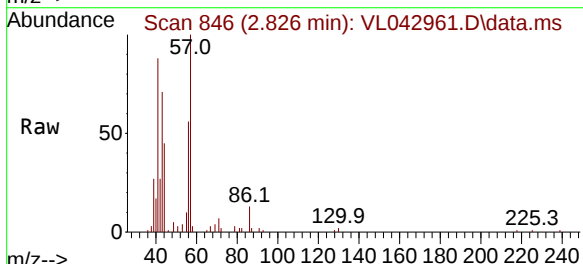
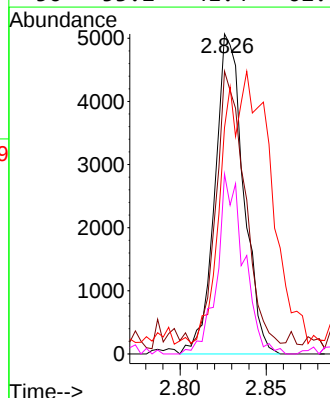
RT: 2.826 min Scan# 846

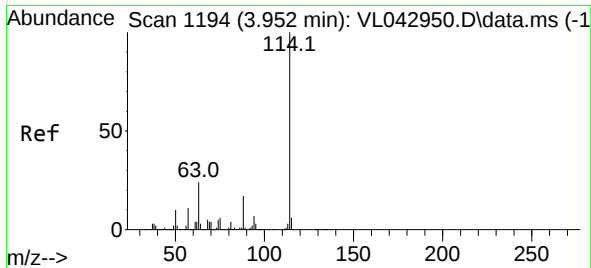
Delta R.T. 0.003 min

Lab File: VL042961.D

Acq: 22 Sep 2025 17:28

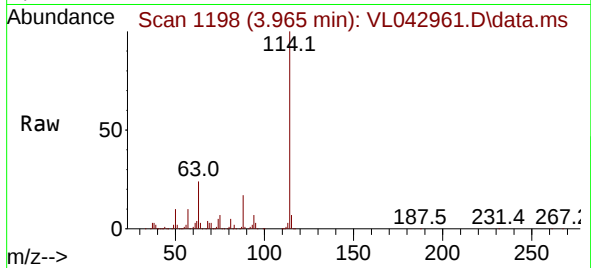
Tgt	Ion: 57	Resp:	5865
Ion	Ratio	Lower	Upper
57	100		
41	95.1	71.7	107.5
43	171.6	180.8	271.2#
56	53.2	41.4	62.0





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. 0.013 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

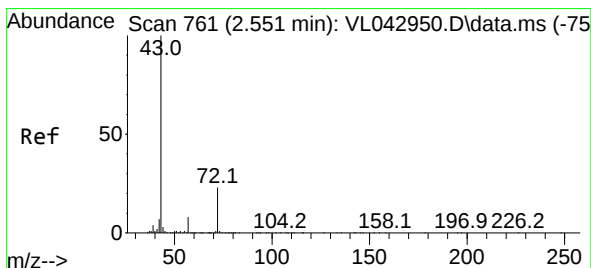
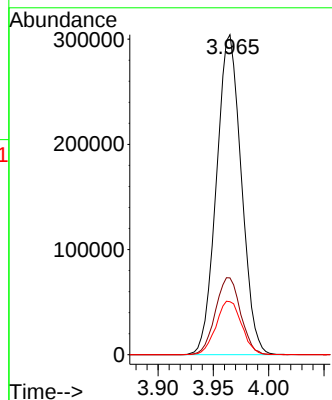
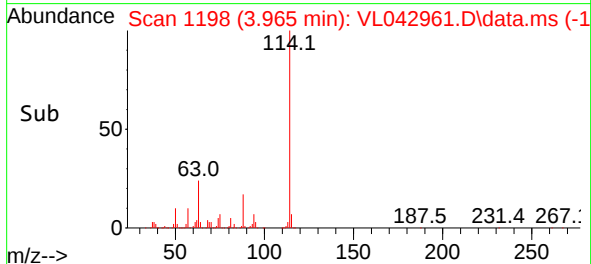
Instrument :
MSVOA_L
ClientSampleId :
SV1DL



Tgt Ion:114 Resp: 47575
Ion Ratio Lower Upper
114 100
63 24.4 19.4 29.2
88 17.3 14.2 21.2

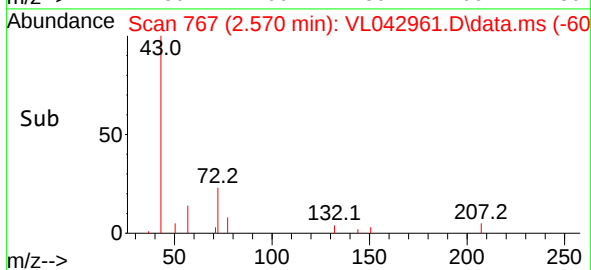
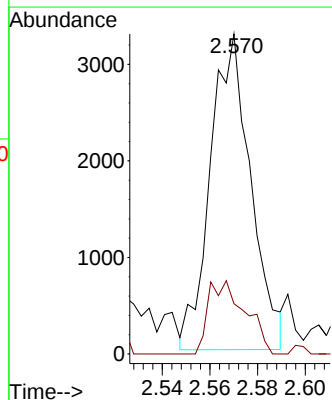
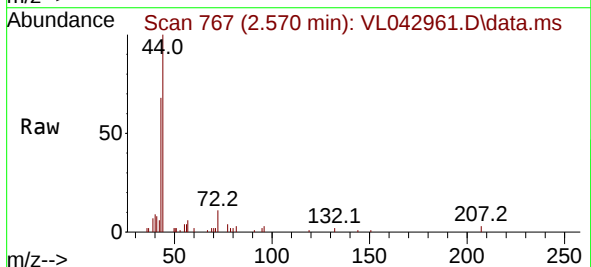
Manual Integrations
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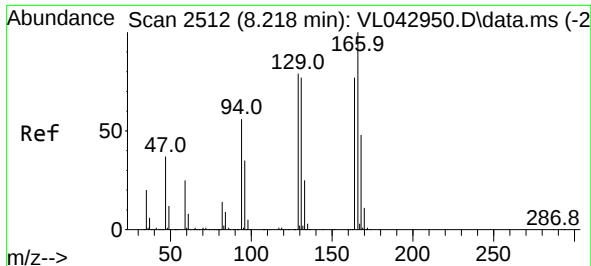
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#34
2-Butanone
Concen: 0.116 ppbv
RT: 2.570 min Scan# 767
Delta R.T. 0.019 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

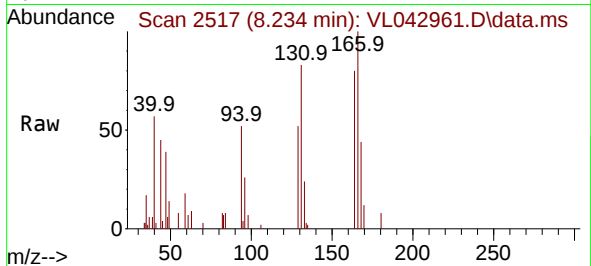
Tgt Ion: 43 Resp: 3852
Ion Ratio Lower Upper
43 100
72 22.1 17.7 26.5





#52
Tetrachloroethene
Concen: 0.159 ppbv m
RT: 8.234 min Scan# 2117
Delta R.T. 0.016 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

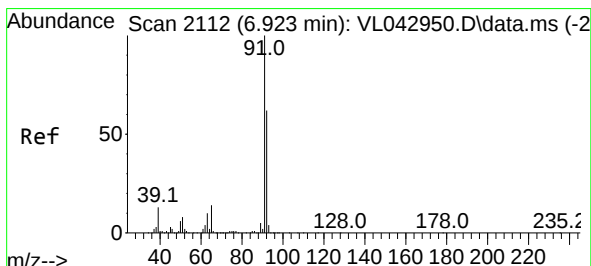
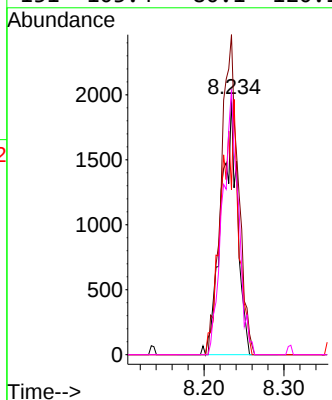
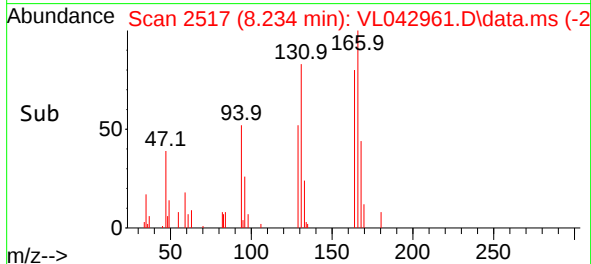
Instrument :
MSVOA_L
ClientSampleId :
SV1DL



Tgt Ion:164 Resp: 274
Ion Ratio Lower Upper
164 100
166 124.9 103.5 155.3
129 64.5 82.2 123.4
131 103.4 80.1 120.1

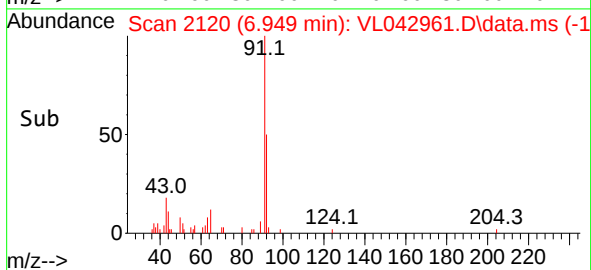
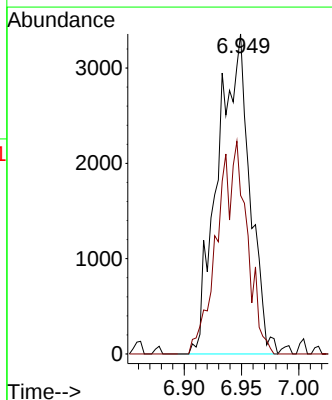
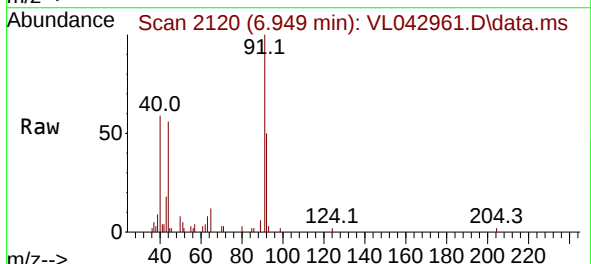
Manual Integrations
APPROVED

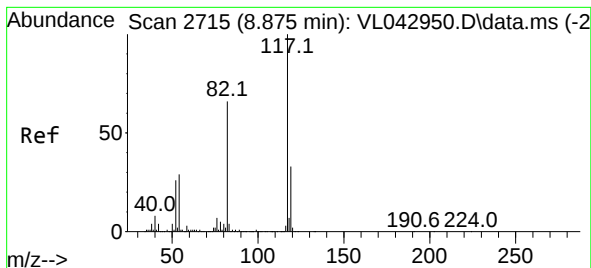
Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



#53
Toluene
Concen: 0.124 ppbv m
RT: 6.949 min Scan# 2120
Delta R.T. 0.026 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

Tgt Ion: 91 Resp: 6544
Ion Ratio Lower Upper
91 100
92 61.5 48.2 72.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.888 min Scan# 21

Delta R.T. 0.013 min

Lab File: VL042961.D

Acq: 22 Sep 2025 17:28

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

Tgt Ion:117 Resp: 424779

Ion Ratio Lower Upper

117 100

82 63.0 52.8 79.2

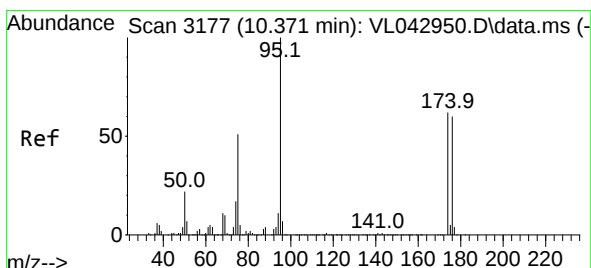
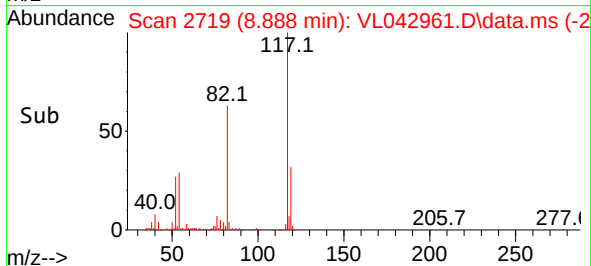
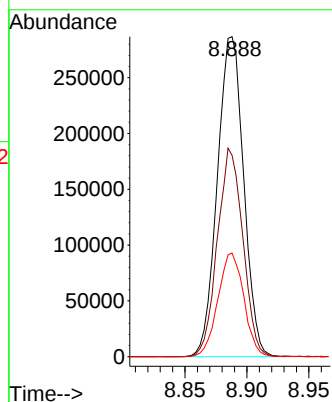
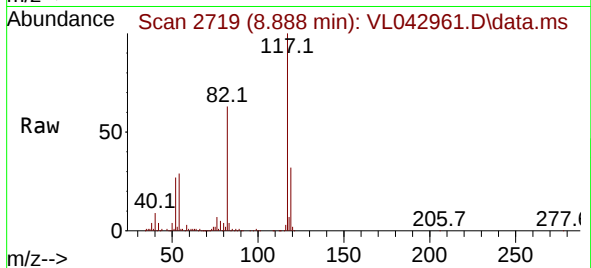
119 31.9 26.5 39.7

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025

Supervised By :Mahesh Dadoda 09/24/2025



#68

1-Bromo-4-Fluorobenzene

Concen: 9.812 ppbv

RT: 10.380 min Scan# 3180

Delta R.T. 0.010 min

Lab File: VL042961.D

Acq: 22 Sep 2025 17:28

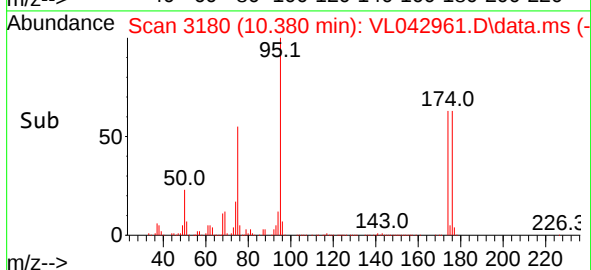
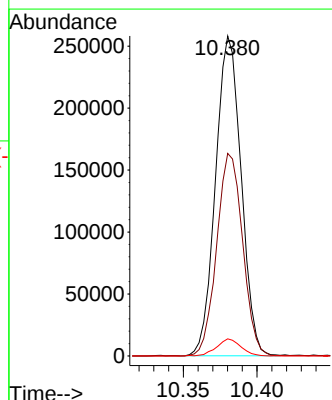
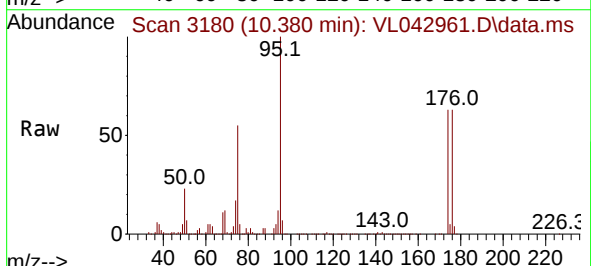
Tgt Ion: 95 Resp: 311114

Ion Ratio Lower Upper

95 100

174 64.4 51.4 77.2

175 5.1 4.0 6.0



Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	IA1	SDG No.:	Q3111
Lab Sample ID:	Q3111-02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042945.D	1		09/18/25 14:37	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	0.47	2.32	J	0.54	2.47
74-87-3	Chloromethane	0.60	1.24		0.21	1.03
75-01-4	Vinyl Chloride	0.030	0.080	U	0.080	0.080
74-83-9	Bromomethane	0.080	0.31	U	0.31	1.94
75-00-3	Chloroethane	0.15	0.40	U	0.40	1.32
109-99-9	Tetrahydrofuran	2.90	8.55		0.24	1.47
75-69-4	Trichlorofluoromethane	0.24	1.35	J	0.96	2.81
76-13-1	1,1,2-Trichlorotrifluoroethane	0.14	1.07	U	1.07	3.83
76-14-2	Dichlorotetrafluoroethane	0.15	1.05	U	1.05	3.49
75-65-0	tert-Butyl alcohol	0.25	0.76	J	0.49	1.52
142-82-5	Heptane	0.81	3.32		0.70	2.05
75-35-4	1,1-Dichloroethene	0.15	0.59	U	0.59	1.98
67-64-1	Acetone	150	356	E	0.43	1.19
75-15-0	Carbon Disulfide	0.080	0.25	U	0.25	1.56
1634-04-4	Methyl tert-Butyl Ether	0.23	0.83	U	0.83	1.80
75-09-2	Methylene Chloride	2.10	7.30		0.80	1.74
156-60-5	trans-1,2-Dichloroethene	0.12	0.48	U	0.48	1.98
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02
110-82-7	Cyclohexane	0.57	1.96		0.76	1.72
78-93-3	2-Butanone	4.00	11.8		0.18	1.47
56-23-5	Carbon Tetrachloride	0.090	0.57		0.19	0.19
156-59-2	cis-1,2-Dichloroethene	0.10	0.40	U	0.40	1.98
67-66-3	Chloroform	0.35	1.71	J	0.49	2.44
71-55-6	1,1,1-Trichloroethane	0.020	0.11	U	0.11	0.16
540-84-1	2,2,4-Trimethylpentane	5.30	24.8		0.65	2.34
71-43-2	Benzene	0.83	2.65		0.26	1.60
107-06-2	1,2-Dichloroethane	0.63	2.55		0.36	2.02
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16
78-87-5	1,2-Dichloropropane	0.13	0.60	U	0.60	2.31
75-27-4	Bromodichloromethane	0.060	0.40	U	0.40	3.35
108-10-1	4-Methyl-2-Pentanone	0.10	0.41	U	0.41	2.05
108-88-3	Toluene	6.10	23.0		0.60	1.88
10061-02-6	t-1,3-Dichloropropene	0.15	0.68	U	0.68	2.27
10061-01-5	cis-1,3-Dichloropropene	0.11	0.50	U	0.50	2.27
79-00-5	1,1,2-Trichloroethane	0.080	0.44	U	0.44	2.73

Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	IA1	SDG No.:	Q3111
Lab Sample ID:	Q3111-02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042945.D	1		09/18/25 14:37	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
124-48-1	Dibromochloromethane	0.090	0.77	U	0.77	4.26
106-93-4	1,2-Dibromoethane	0.090	0.69	U	0.69	0.77
127-18-4	Tetrachloroethene	0.050	0.34		0.14	0.20
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30
100-41-4	Ethyl Benzene	0.45	1.95	JQ	0.83	2.17
179601-23-1	m/p-Xylene	1.50	6.52		1.78	4.34
95-47-6	o-Xylene	0.48	2.08	J	0.91	2.17
100-42-5	Styrene	1.20	5.11		0.68	2.13
75-25-2	Bromoform	0.050	0.52	U	0.52	5.17
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21
95-49-8	2-Chlorotoluene	0.17	0.88	U	0.88	2.59
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	U	0.88	2.46
95-63-6	1,2,4-Trimethylbenzene	0.19	0.93	J	0.88	2.46
541-73-1	1,3-Dichlorobenzene	0.050	0.30	U	0.30	3.01
106-46-7	1,4-Dichlorobenzene	0.13	0.78	U	0.78	3.01
95-50-1	1,2-Dichlorobenzene	0.13	0.78	U	0.78	3.01
120-82-1	1,2,4-Trichlorobenzene	0.48	3.56	J	1.56	3.71
87-68-3	Hexachloro-1,3-Butadiene	0.13	1.39	U	1.39	5.33
106-99-0	1,3-Butadiene	0.050	0.11	U	0.11	1.11
91-20-3	Naphthalene	0.42	2.20		0.050	0.52
622-96-8	4-Ethyltoluene	0.41	2.02	J	1.03	2.46
110-54-3	Hexane	3.10	10.9		0.56	1.76
107-05-1	Allyl Chloride	0.11	0.34	U	0.34	1.57
123-91-1	1,4-Dioxane	0.22	0.79	U	0.79	1.80
80-62-6	Methyl Methacrylate	0.64	2.62		0.57	2.05
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	10.0			65 - 135	100% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	172000		2.79		
540-36-3	1,4-Difluorobenzene	434000		3.962		
3114-55-4	Chlorobenzene-d5	376000		8.888		

Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	IA1	SDG No.:	Q3111
Lab Sample ID:	Q3111-02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042945.D	1		09/18/25 14:37	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL
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U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042945.D
 Acq On : 18 Sep 2025 14:37
 Operator : SY/MD
 Sample : Q3111-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

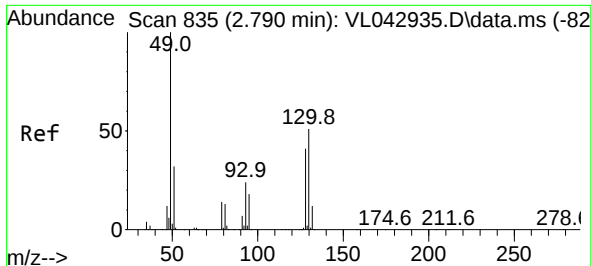
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Quant Time: Sep 19 01:25:52 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	171978	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	434311	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	375912	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	294177	10.012	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.100%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	11604	0.472	ppbv	93
3) Chlorodifluoromethane	1.476	51	14019m	0.542	ppbv	
4) Chloromethane	1.534	50	5930	0.601	ppbv	92
9) Propene	1.489	41	159929m	16.932	ppbv	
10) Heptane	4.985	43	18926	0.809	ppbv #	28
11) Trichlorofluoromethane	1.881	101	5787m	0.238	ppbv	
13) Ethanol	1.725	45	522414	542.469	ppbv	94
15) Acetone	1.835	43	3201270	151.550	ppbv #	71
17) tert-Butyl alcohol	2.046	59	5120	0.252	ppbv #	1
19) Isopropyl Alcohol	1.890	45	3190461	281.710	ppbv #	1
20) Methylene Chloride	2.065	84	19046	2.071	ppbv #	88
25) Ethyl Acetate	2.839	43	330462	7.326	ppbv #	94
26) Hexane	2.832	57	60432	3.122	ppbv #	1
29) Chloroform	2.852	83	11080	0.350	ppbv	90
30) Cyclohexane	3.861	84	8371m	0.574	ppbv	
34) 2-Butanone	2.560	43	112773	4.006	ppbv	99
35) Carbon Tetrachloride	3.771	117	2651m	0.086	ppbv	
36) Benzene	3.661	78	31276	0.826	ppbv	97
37) 1,2-Dichloroethane	3.224	62	14184	0.625	ppbv	97
41) Tetrahydrofuran	3.062	42	40679	2.920	ppbv	100
43) Methyl Methacrylate	4.894	69	8101m	0.639	ppbv	
44) 2,2,4-Trimethylpentane	4.645	57	333951	5.285	ppbv	97
52) Tetrachloroethene	8.228	164	584m	0.050	ppbv	
53) Toluene	6.939	91	213911	6.055	ppbv	99
58) Ethyl Benzene	9.361	91	21939	0.453	ppbv	92
59) m/p-Xylene	9.535	91	60921m	1.489	ppbv	
60) o-Xylene	9.969	91	19505	0.479	ppbv	100
61) Styrene	9.875	104	14267	1.184	ppbv	97
72) 4-Ethyltoluene	11.131	105	2902	0.407	ppbv #	62
74) 1,2,4-Trimethylbenzene	11.542	105	9091	0.192	ppbv #	58
79) Naphthalene	13.516	128	2794	0.418	ppbv #	88
81) 1,2,4-Trichlorobenzene	13.448	180	1426m	0.482	ppbv	

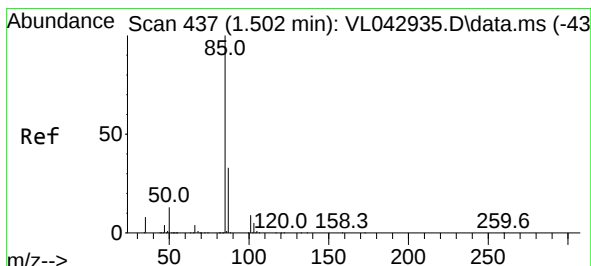
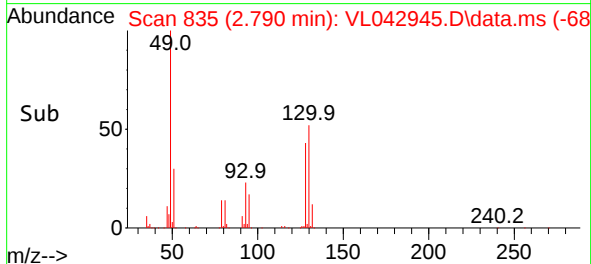
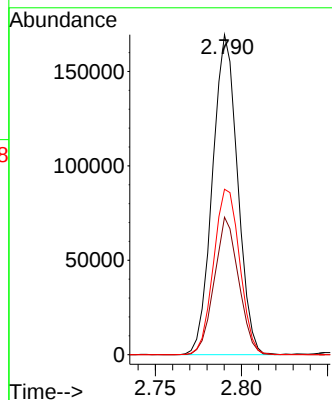
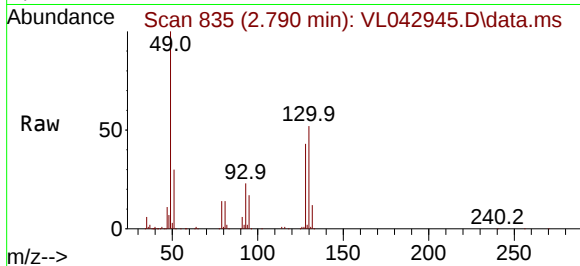
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.790 min Scan# 835
 Delta R.T. 0.000 min
 Lab File: VL042945.D
 Acq: 18 Sep 2025 14:37

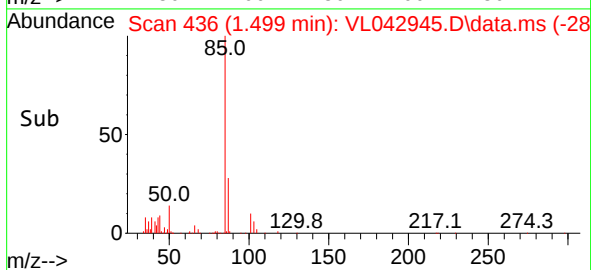
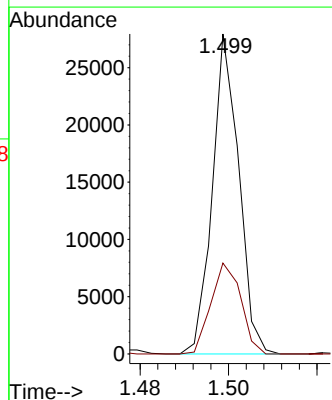
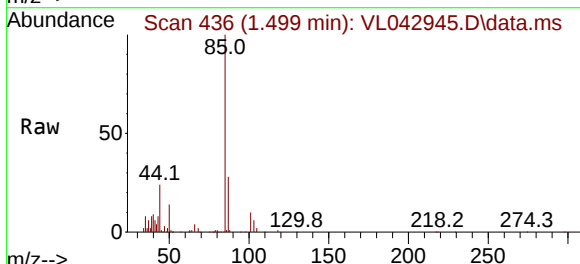
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

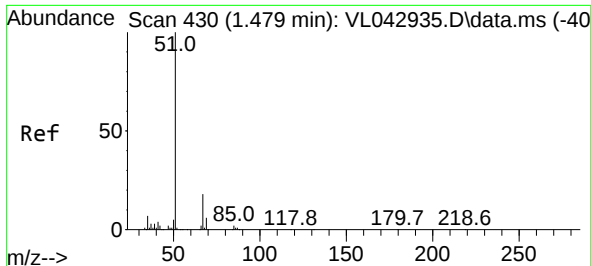
Tgt Ion: 49 Resp: 171978
 Ion Ratio Lower Upper
 49 100
 128 41.7 21.1 63.4
 130 53.9 26.4 79.2



#2
 Dichlorodifluoromethane
 Concen: 0.472 ppbv
 RT: 1.499 min Scan# 436
 Delta R.T. -0.003 min
 Lab File: VL042945.D
 Acq: 18 Sep 2025 14:37

Tgt Ion: 85 Resp: 11604
 Ion Ratio Lower Upper
 85 100
 87 28.4 26.1 39.1

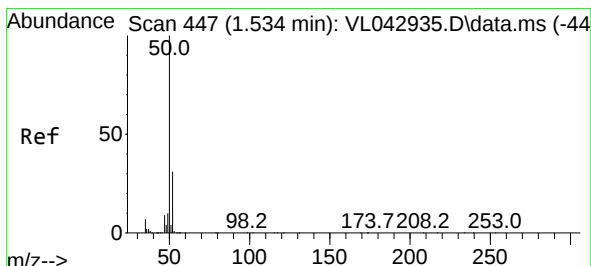
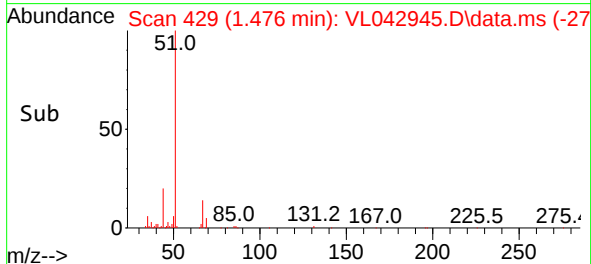
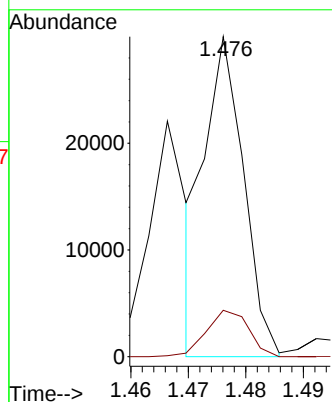
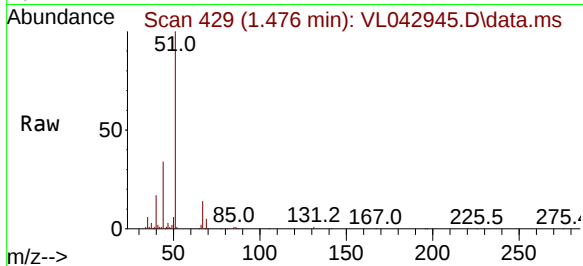




#3
Chlorodifluoromethane
Concen: 0.542 ppbv m
RT: 1.476 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

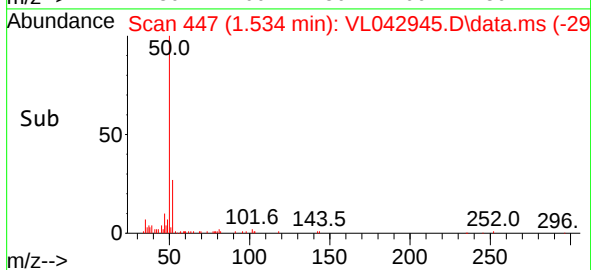
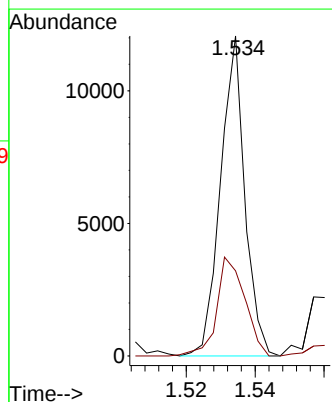
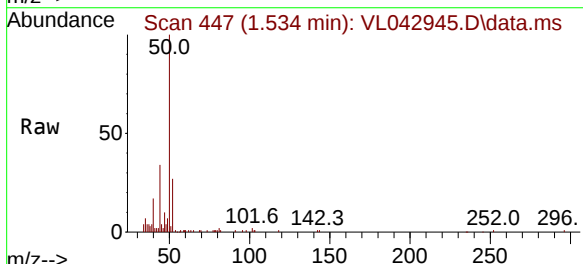
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MSVOA_L
ClientSampleId :
IA1

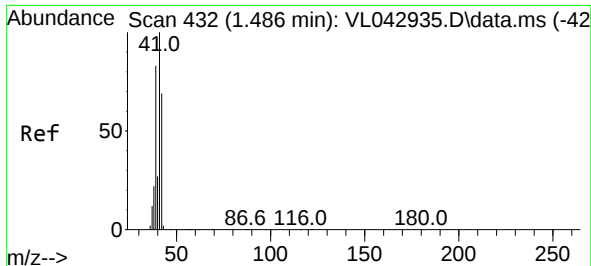
Tgt Ion: 51 Resp: 14019
Ion Ratio Lower Upper
51 100
67 15.9 14.1 21.1



#4
Chloromethane
Concen: 0.601 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.000 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

Tgt Ion: 50 Resp: 5930
Ion Ratio Lower Upper
50 100
52 26.6 24.6 36.8

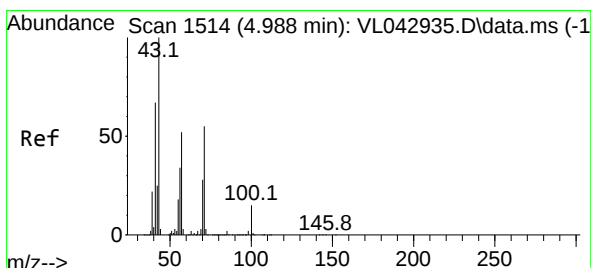
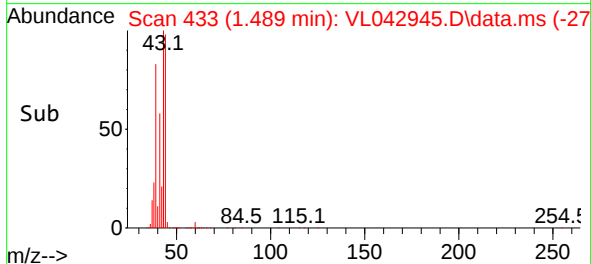
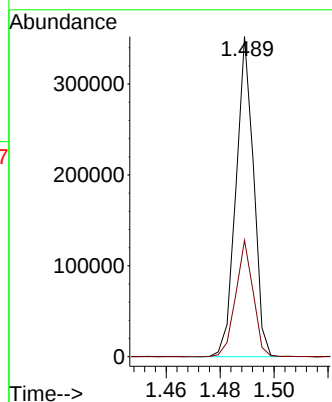
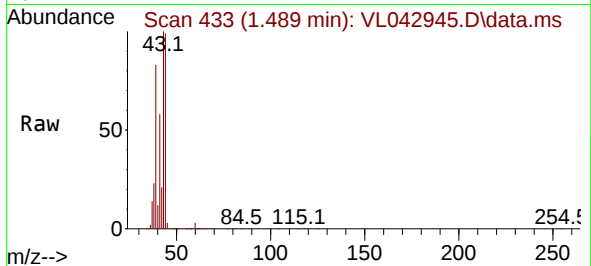




#9
 Propene
 Concen: 16.932 ppbv m
 RT: 1.489 min Scan# 41
 Delta R.T. 0.003 min
 Lab File: VL042945.D
 Acq: 18 Sep 2025 14:37

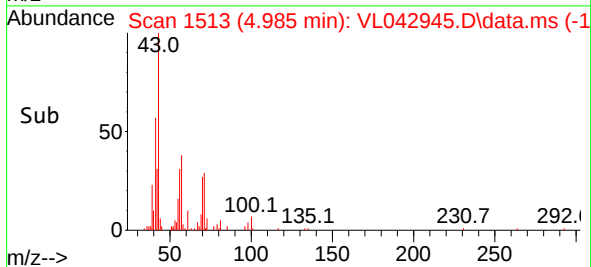
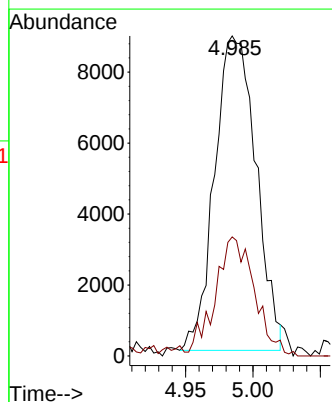
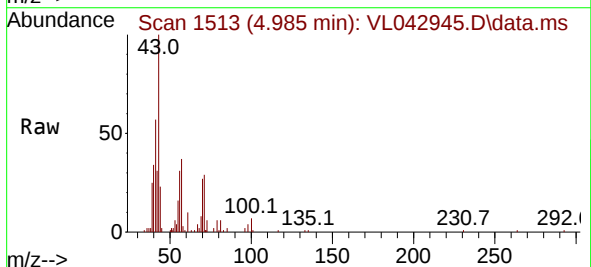
Instrument :
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 ClientSampleId :
 IA1

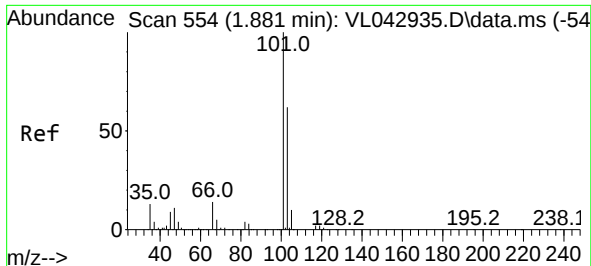
Tgt Ion: 41 Resp: 159929
 Ion Ratio Lower Upper
 41 100
 42 24.3 55.0 82.4#



#10
 Heptane
 Concen: 0.809 ppbv
 RT: 4.985 min Scan# 1513
 Delta R.T. -0.003 min
 Lab File: VL042945.D
 Acq: 18 Sep 2025 14:37

Tgt Ion: 43 Resp: 18926
 Ion Ratio Lower Upper
 43 100
 57 0.0 39.8 59.8#

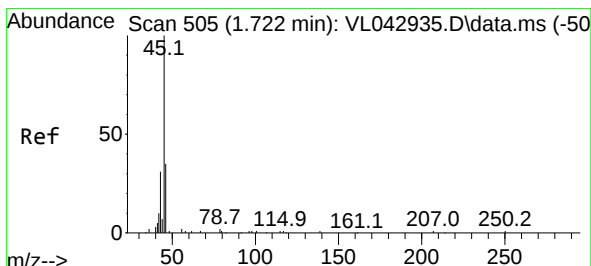
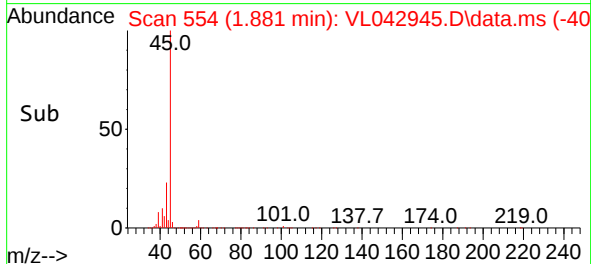
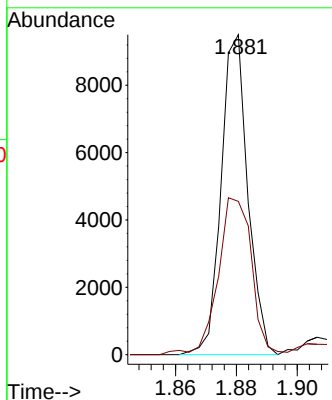
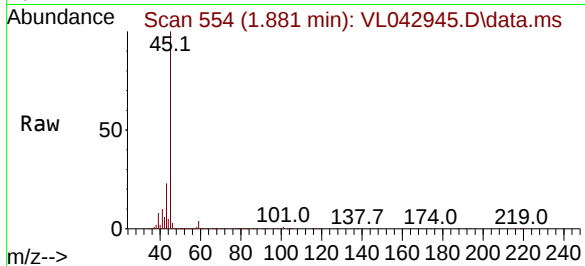




#11
Trichlorofluoromethane
Concen: 0.238 ppbv m
RT: 1.881 min Scan# 51
Delta R.T. 0.000 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

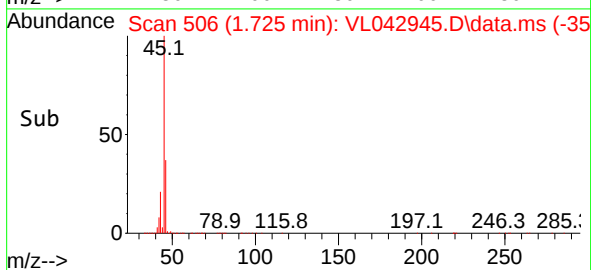
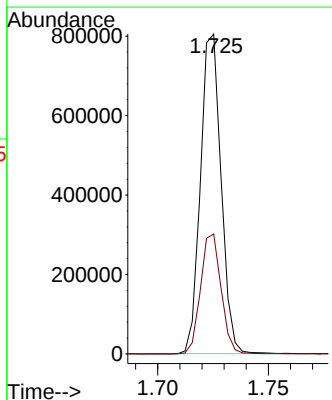
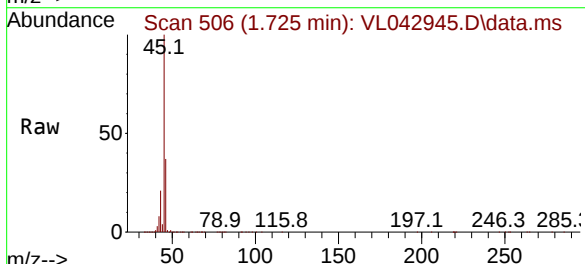
Instrument :
MSVOA_L
ClientSampleId :
IA1

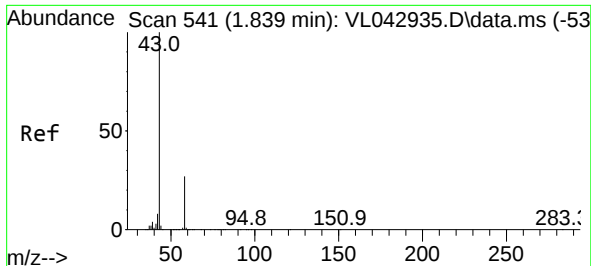
Tgt Ion:101 Resp: 5787
Ion Ratio Lower Upper
101 100
103 47.9 49.6 74.4#



#13
Ethanol
Concen: 542.469 ppbv
RT: 1.725 min Scan# 506
Delta R.T. 0.003 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

Tgt Ion: 45 Resp: 522414
Ion Ratio Lower Upper
45 100
46 37.6 16.5 66.1

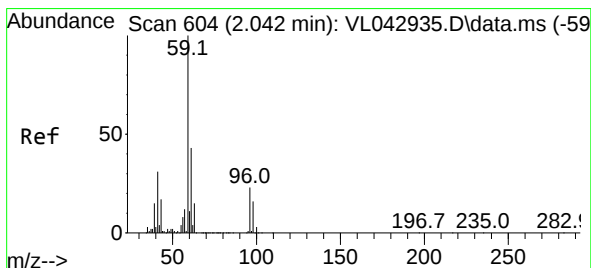
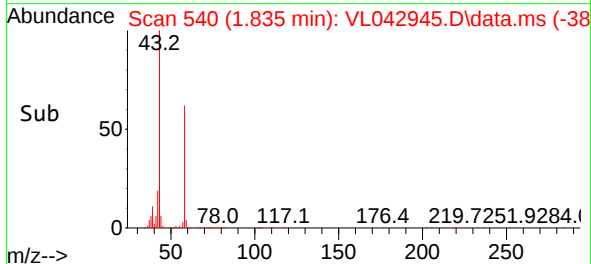
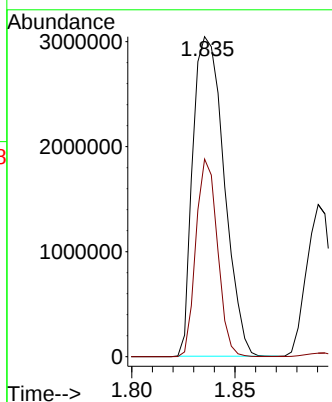
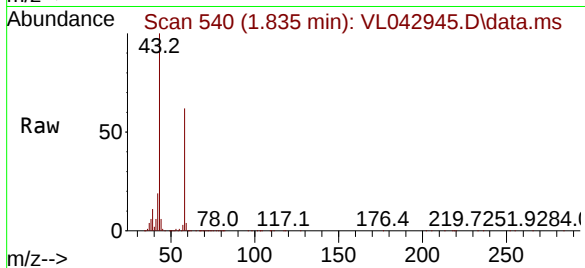




#15
Acetone
Concen: 151.550 ppbv
RT: 1.835 min Scan# 541
Delta R.T. -0.003 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

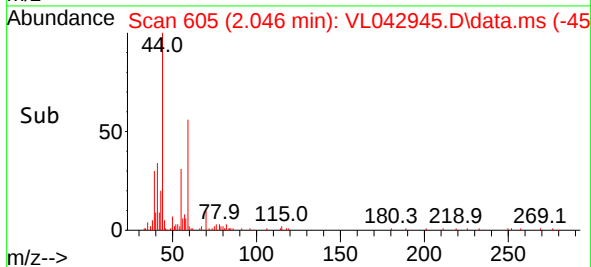
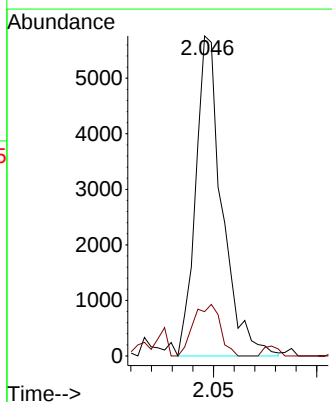
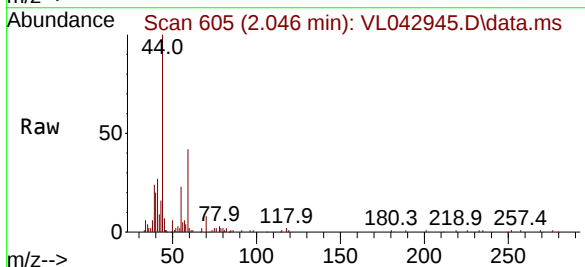
Instrument :
MSVOA_L
ClientSampleId :
IA1

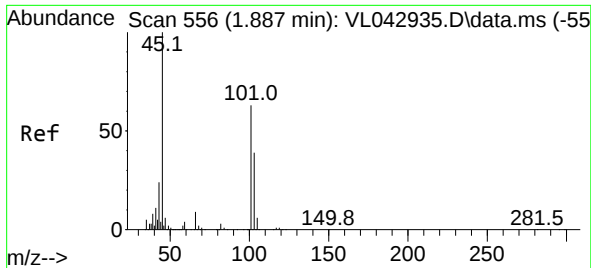
Tgt Ion: 43 Resp: 3201270
Ion Ratio Lower Upper
43 100
58 42.7 22.2 33.2#



#17
tert-Butyl alcohol
Concen: 0.252 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.003 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

Tgt Ion: 59 Resp: 5120
Ion Ratio Lower Upper
59 100
57 917.9 9.0 13.6#





#19

Isopropyl Alcohol

Concen: 281.710 ppbv

RT: 1.890 min Scan# 556

Delta R.T. 0.003 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

Instrument :

MSVOA_L

ClientSampleId :

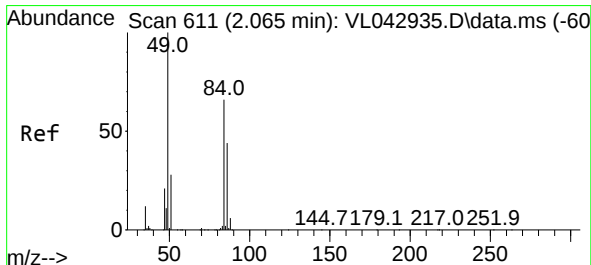
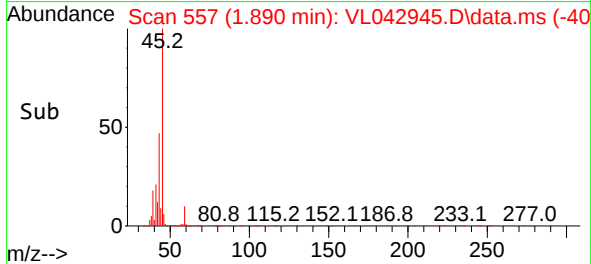
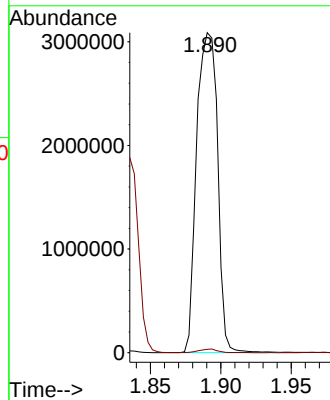
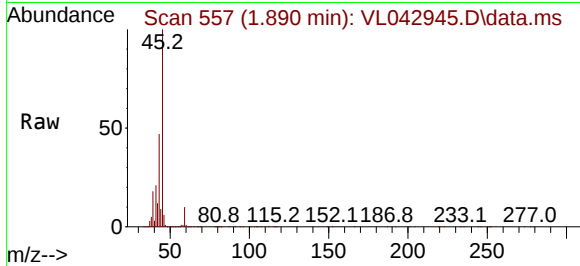
IA1

Tgt Ion: 45 Resp: 3190461

Ion Ratio Lower Upper

45 100

58 42.8 2.0 3.0#



#20

Methylene Chloride

Concen: 2.071 ppbv

RT: 2.065 min Scan# 611

Delta R.T. 0.000 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

Tgt Ion: 84 Resp: 19046

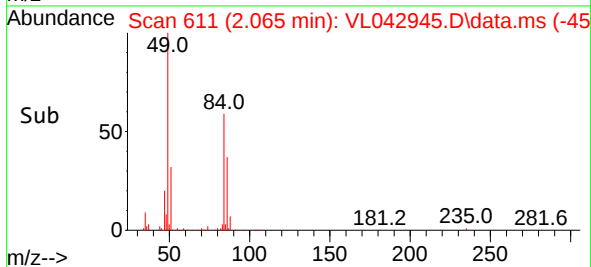
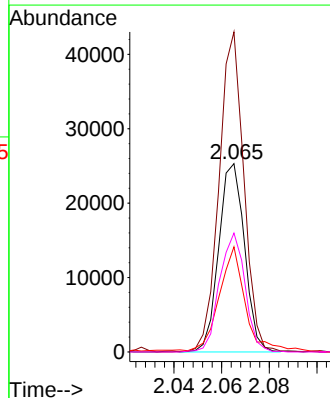
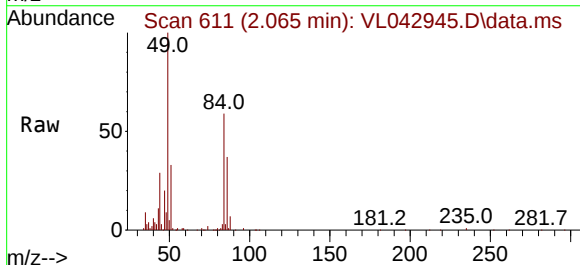
Ion Ratio Lower Upper

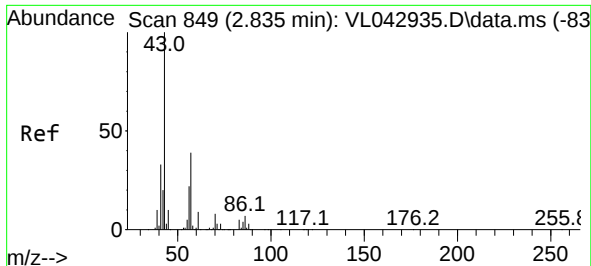
84 100

49 169.7 121.8 182.6

51 54.7 35.6 53.4#

86 63.1 53.4 80.2

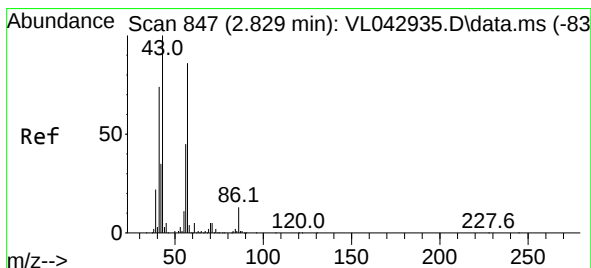
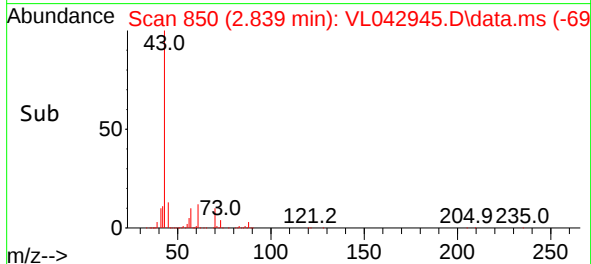
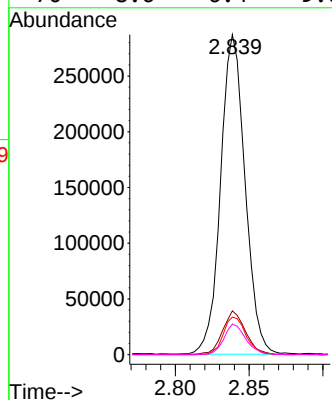
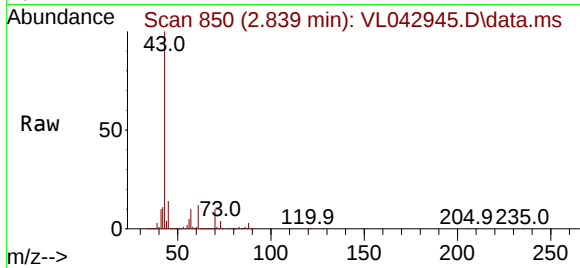




#25
Ethyl Acetate
Concen: 7.326 ppbv
RT: 2.839 min Scan# 849
Delta R.T. 0.003 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

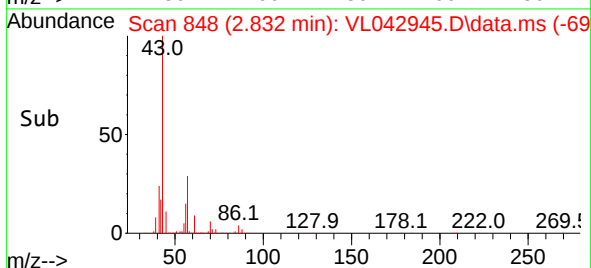
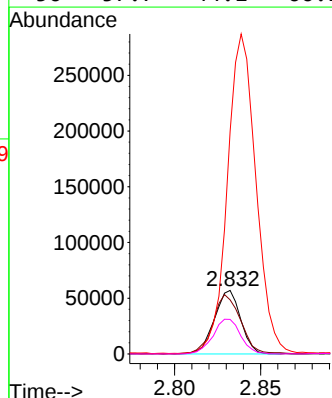
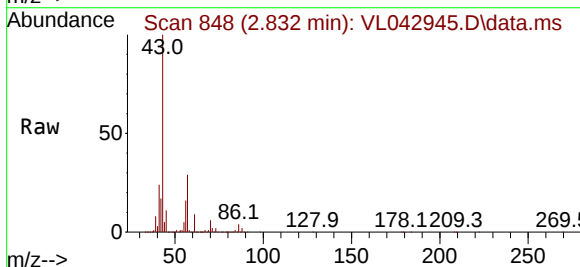
Instrument :
MSVOA_1
ClientSampleId :
IA1

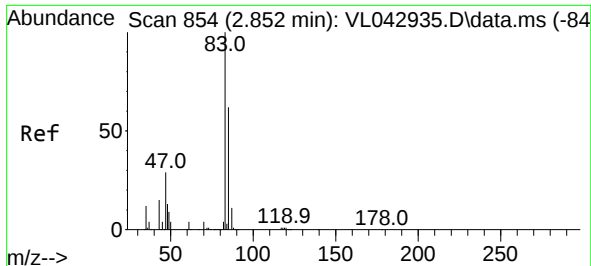
Tgt Ion: 43 Resp: 330462
Ion Ratio Lower Upper
43 100
45 13.3 7.8 11.8#
61 11.1 7.2 10.8#
70 8.6 6.4 9.6



#26
Hexane
Concen: 3.122 ppbv
RT: 2.832 min Scan# 848
Delta R.T. 0.003 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

Tgt Ion: 57 Resp: 60432
Ion Ratio Lower Upper
57 100
41 97.9 71.3 106.9
43 555.5 183.9 275.9#
56 57.7 44.1 66.1





#29

Chloroform

Concen: 0.350 ppbv

RT: 2.852 min Scan# 854

Delta R.T. 0.000 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

Instrument :

MSVOA_L

ClientSampleId :

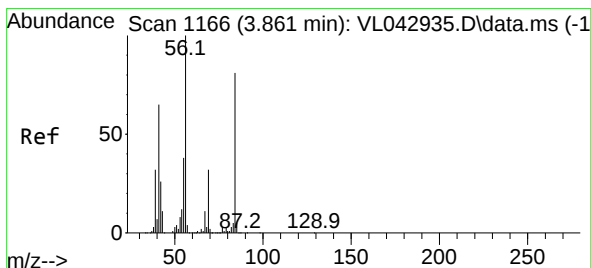
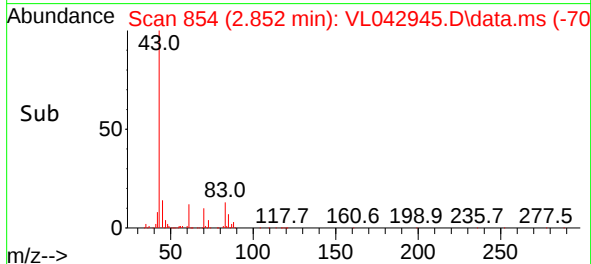
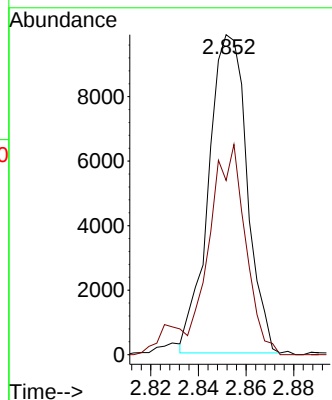
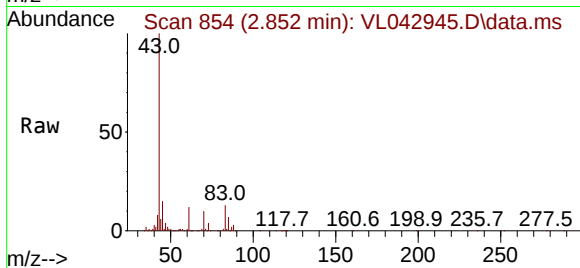
IA1

Tgt Ion: 83 Resp: 11080

Ion Ratio Lower Upper

83 100

85 54.7 49.7 74.5



#30

Cyclohexane

Concen: 0.574 ppbv m

RT: 3.861 min Scan# 1166

Delta R.T. 0.000 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

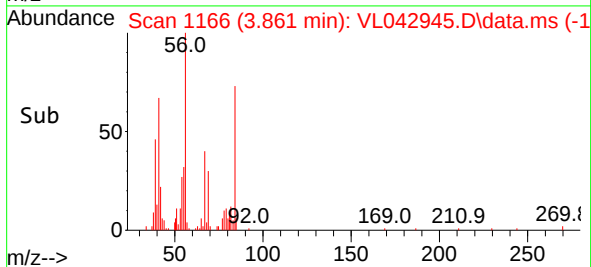
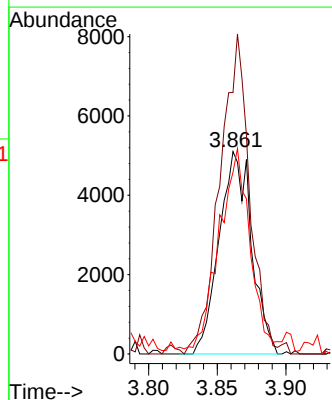
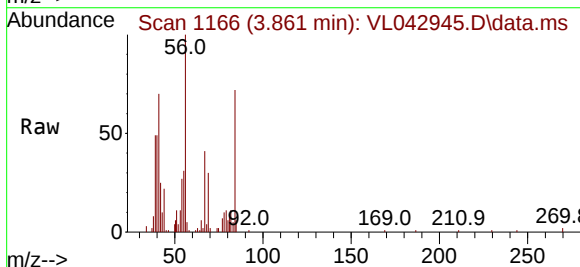
Tgt Ion: 84 Resp: 8371

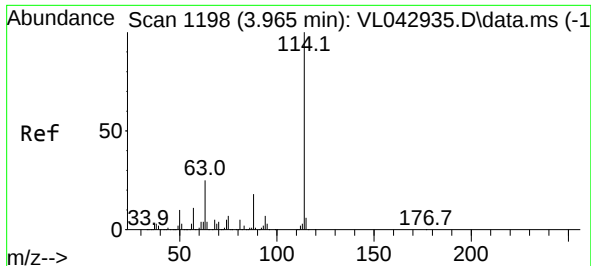
Ion Ratio Lower Upper

84 100

56 147.5 100.6 150.8

41 107.0 65.4 98.0#

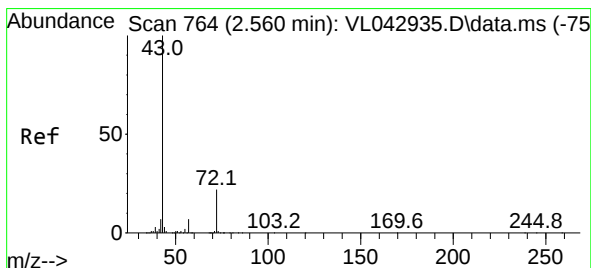
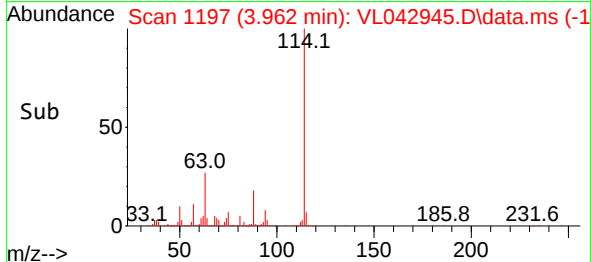
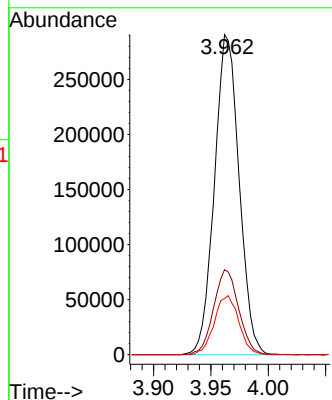
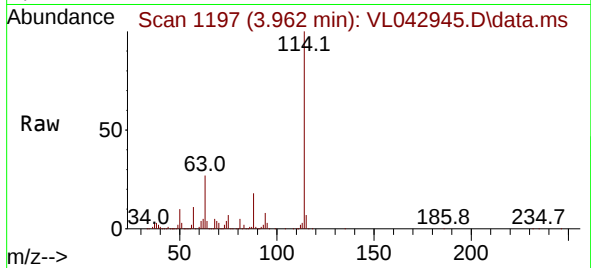




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 3.962 min Scan# 1197
 Delta R.T. -0.003 min
 Lab File: VL042945.D
 Acq: 18 Sep 2025 14:37

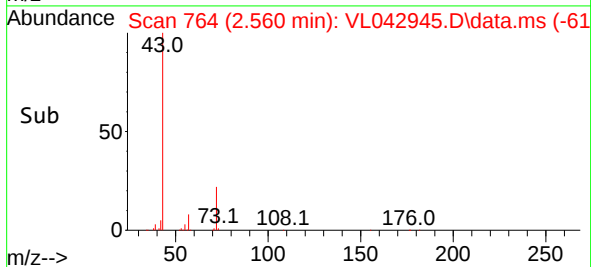
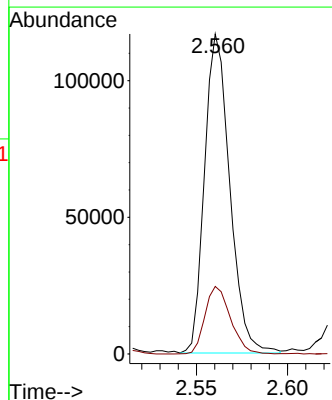
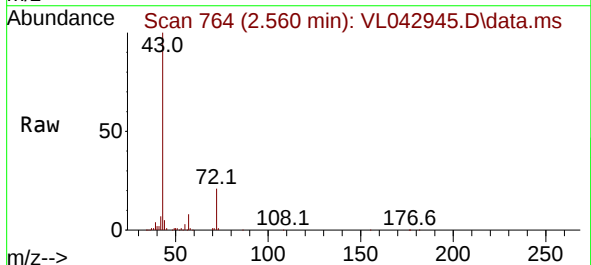
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

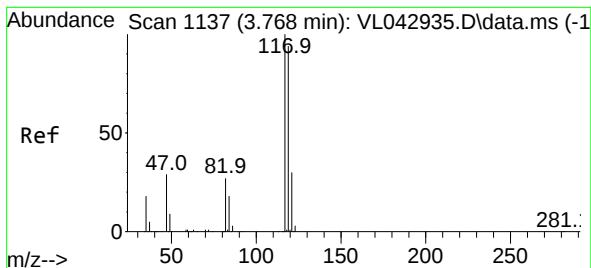
Tgt Ion:114 Resp: 434311
 Ion Ratio Lower Upper
 114 100
 63 27.0 21.1 31.7
 88 18.3 14.6 22.0



#34
 2-Butanone
 Concen: 4.006 ppbv
 RT: 2.560 min Scan# 764
 Delta R.T. 0.000 min
 Lab File: VL042945.D
 Acq: 18 Sep 2025 14:37

Tgt Ion: 43 Resp: 112773
 Ion Ratio Lower Upper
 43 100
 72 21.8 17.2 25.8





#35

Carbon Tetrachloride

Concen: 0.086 ppbv m

RT: 3.771 min Scan# 1137

Delta R.T. 0.003 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

Instrument :

MSVOA_L

ClientSampleId :

IA1

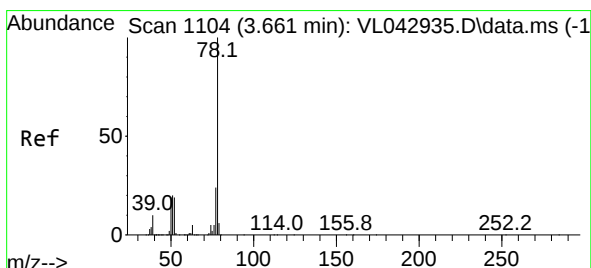
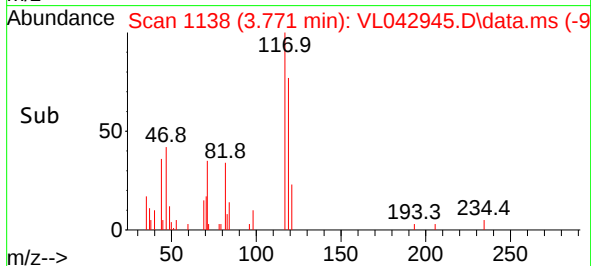
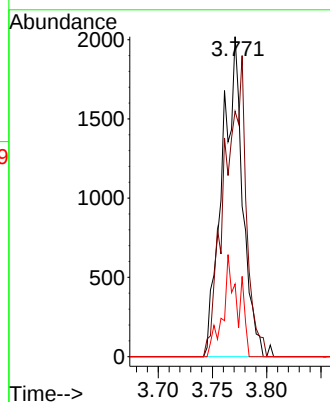
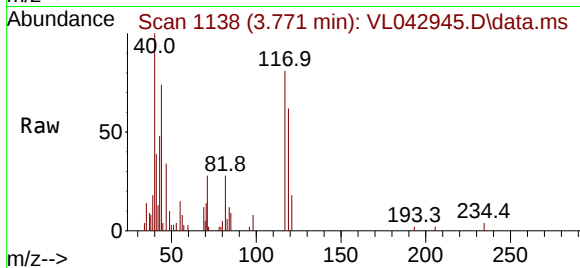
Tgt Ion:117 Resp: 2651

Ion Ratio Lower Upper

117 100

119 76.7 74.9 112.3

121 22.7 24.0 36.0#



#36

Benzene

Concen: 0.826 ppbv

RT: 3.661 min Scan# 1104

Delta R.T. 0.000 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

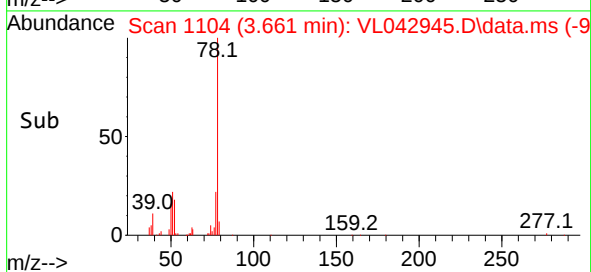
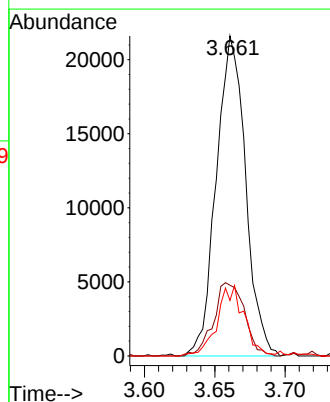
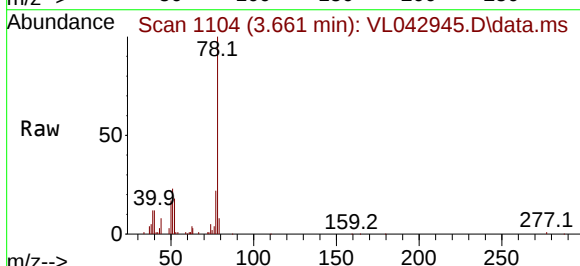
Tgt Ion: 78 Resp: 31276

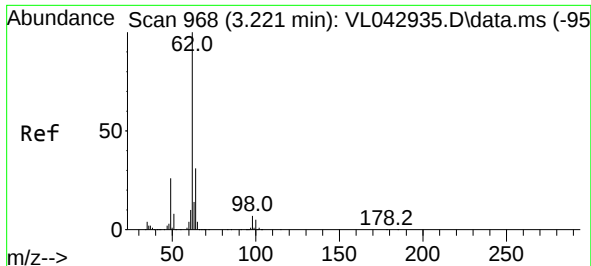
Ion Ratio Lower Upper

78 100

77 22.1 19.2 28.8

50 17.4 14.8 22.2





#37

1,2-Dichloroethane

Concen: 0.625 ppbv

RT: 3.224 min Scan# 919

Delta R.T. 0.003 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

Instrument :

MSVOA_L

ClientSampleId :

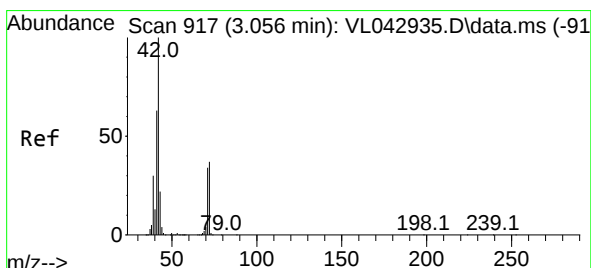
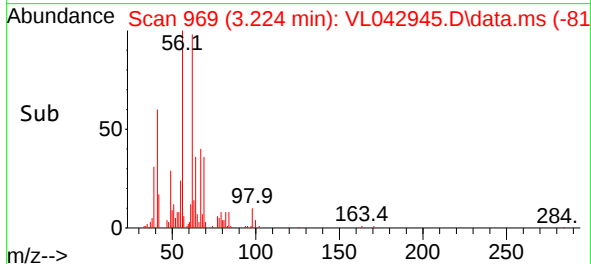
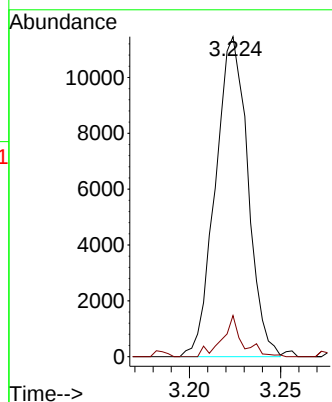
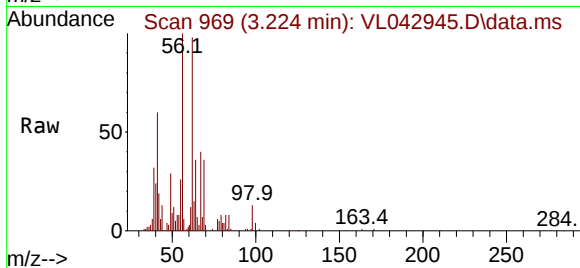
IA1

Tgt Ion: 62 Resp: 14184

Ion Ratio Lower Upper

62 100

98 8.0 5.5 8.3



#41

Tetrahydrofuran

Concen: 2.920 ppbv

RT: 3.062 min Scan# 919

Delta R.T. 0.006 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

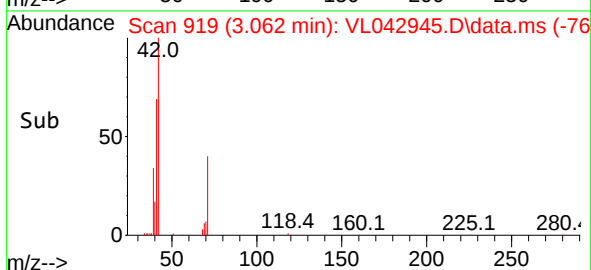
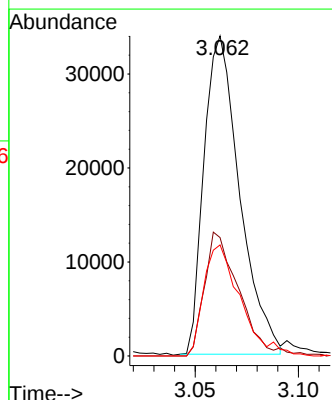
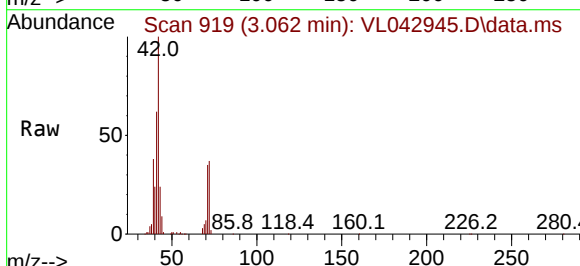
Tgt Ion: 42 Resp: 40679

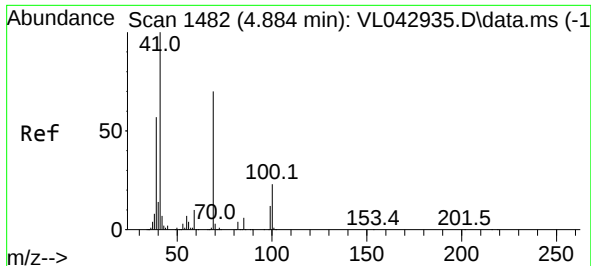
Ion Ratio Lower Upper

42 100

72 37.8 30.4 45.6

71 35.7 28.3 42.5

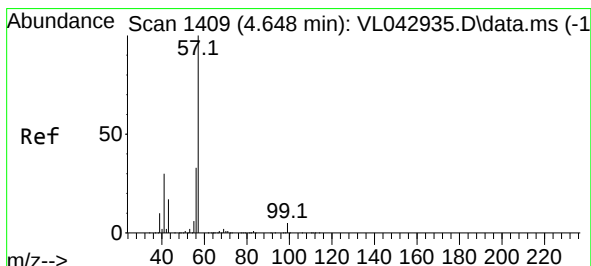
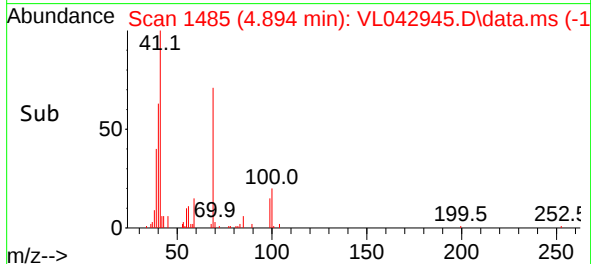
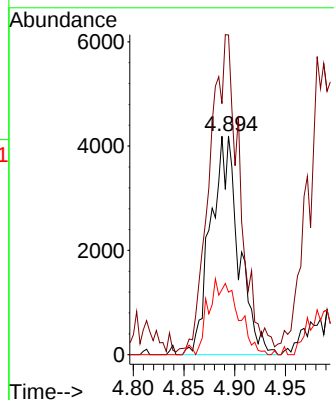
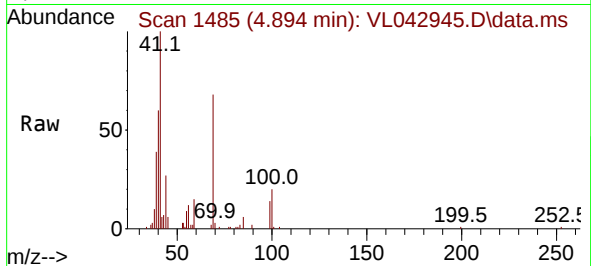




#43
Methyl Methacrylate
Concen: 0.639 ppbv m
RT: 4.894 min Scan# 1485
Delta R.T. 0.010 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

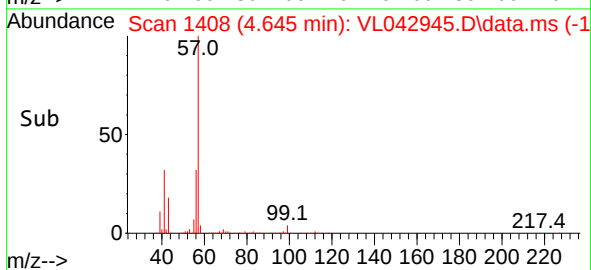
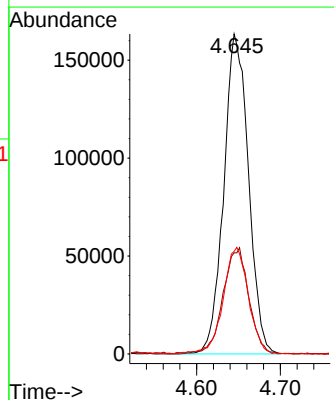
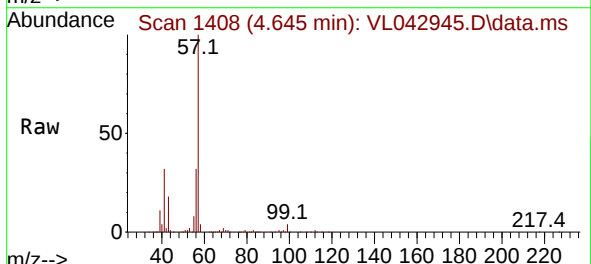
Instrument :
MSVOA_L
ClientSampleId :
IA1

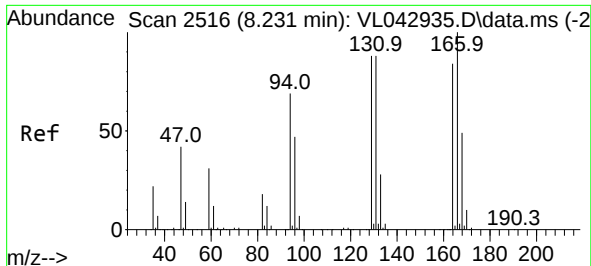
Tgt Ion: 69 Resp: 8101
Ion Ratio Lower Upper
69 100
41 0.0 118.6 178.0#
100 36.7 26.2 39.4



#44
2,2,4-Trimethylpentane
Concen: 5.285 ppbv
RT: 4.645 min Scan# 1408
Delta R.T. -0.003 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

Tgt Ion: 57 Resp: 333951
Ion Ratio Lower Upper
57 100
41 34.4 25.8 38.6
56 34.4 26.2 39.4

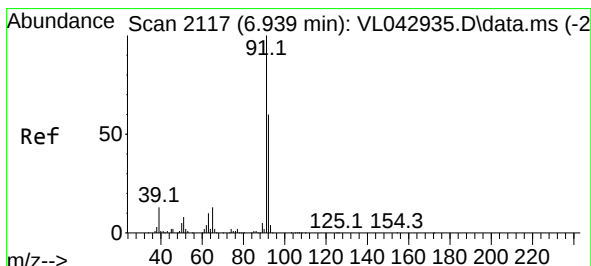
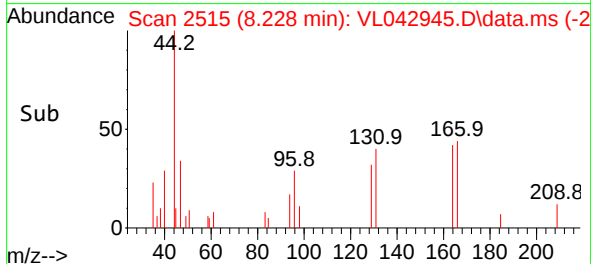
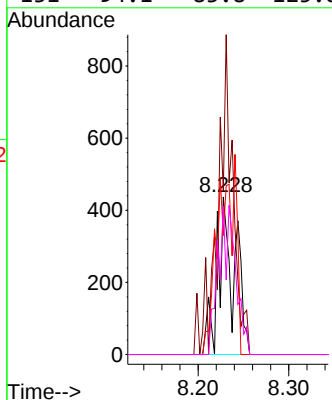
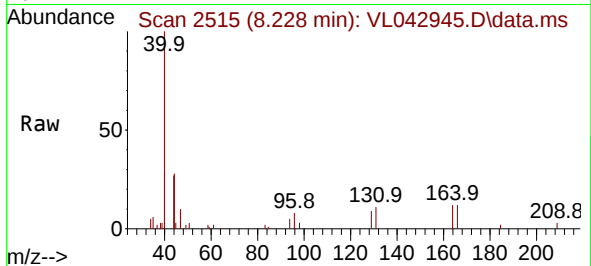




#52
Tetrachloroethene
Concen: 0.050 ppbv m
RT: 8.228 min Scan# 2115
Delta R.T. -0.003 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

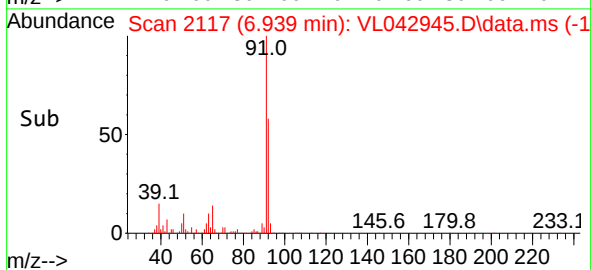
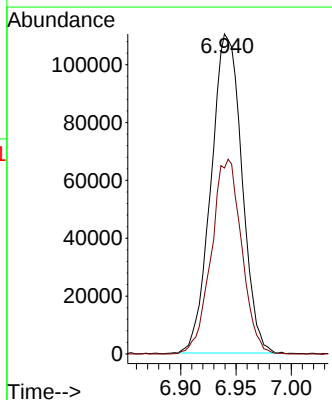
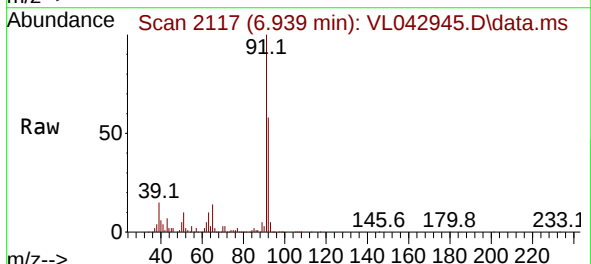
Instrument :
MSVOA_L
ClientSampleId :
IA1

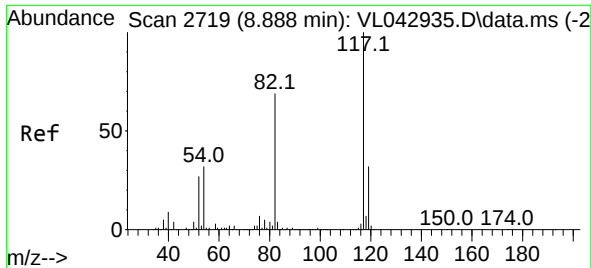
Tgt Ion:164 Resp: 584
Ion Ratio Lower Upper
164 100
166 103.9 95.4 143.0
129 75.5 84.0 126.0#
131 94.1 83.8 125.8



#53
Toluene
Concen: 6.055 ppbv
RT: 6.939 min Scan# 2117
Delta R.T. 0.000 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

Tgt Ion: 91 Resp: 213911
Ion Ratio Lower Upper
91 100
92 60.0 47.4 71.2

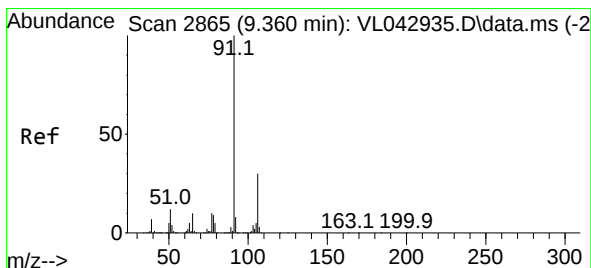
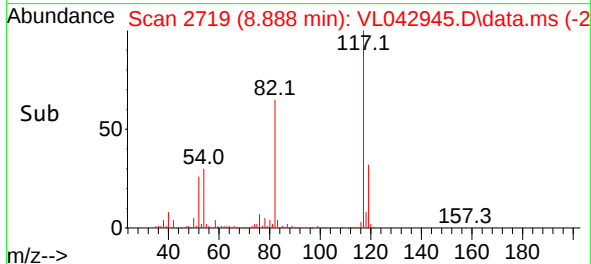
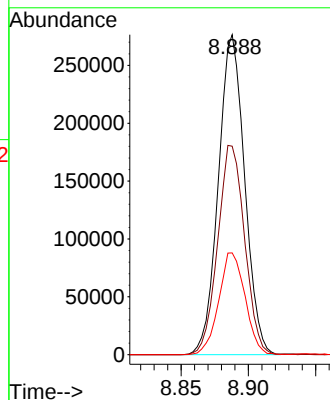
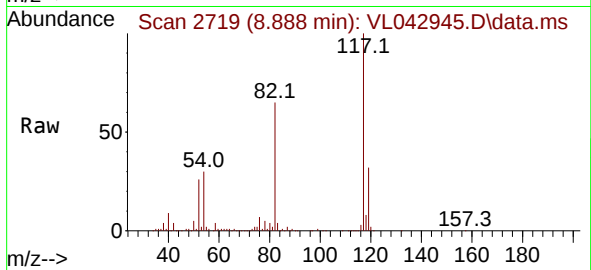




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

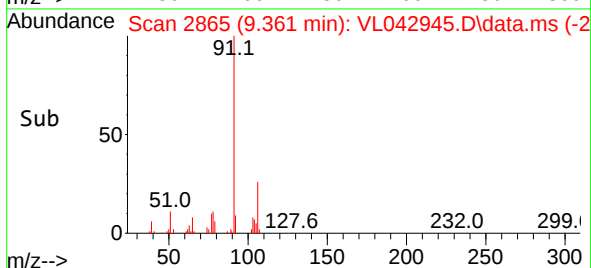
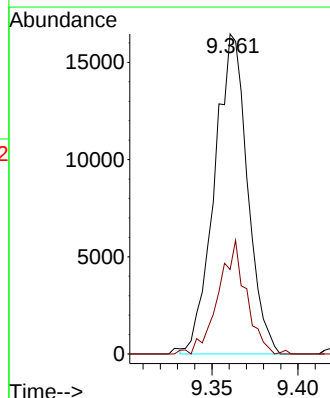
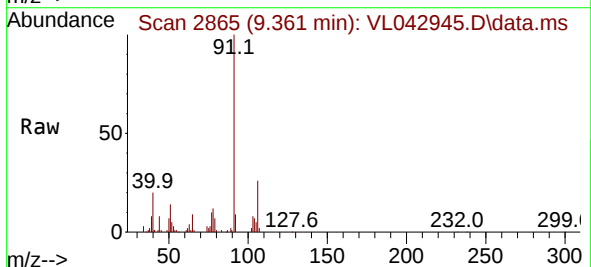
Instrument :
MSVOA_L
ClientSampleId :
IA1

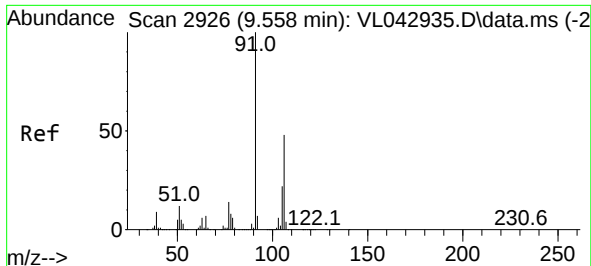
Tgt Ion:117 Resp: 375912
Ion Ratio Lower Upper
117 100
82 66.9 56.1 84.1
119 31.9 25.8 38.8



#58
Ethyl Benzene
Concen: 0.453 ppbv
RT: 9.361 min Scan# 2865
Delta R.T. 0.000 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

Tgt Ion: 91 Resp: 21939
Ion Ratio Lower Upper
91 100
106 26.0 24.2 36.4





#59

m/p-Xylene

Concen: 1.489 ppbv

RT: 9.535 min Scan# 2919

Delta R.T. -0.023 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

Instrument :

MSVOA_L

ClientSampleId :

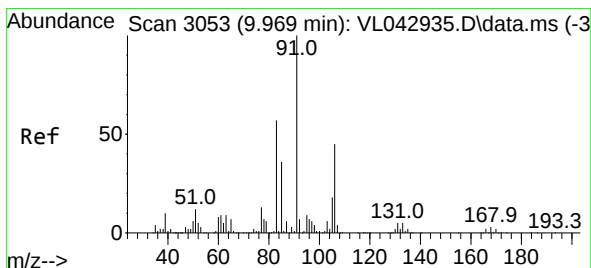
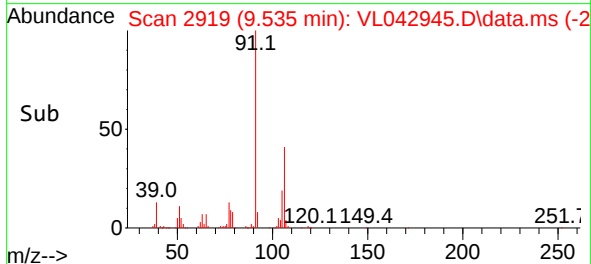
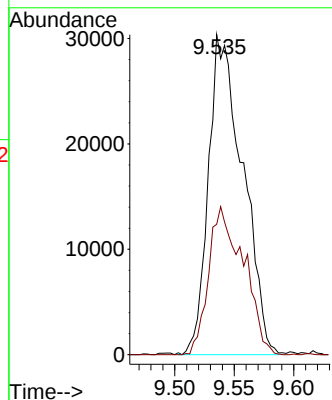
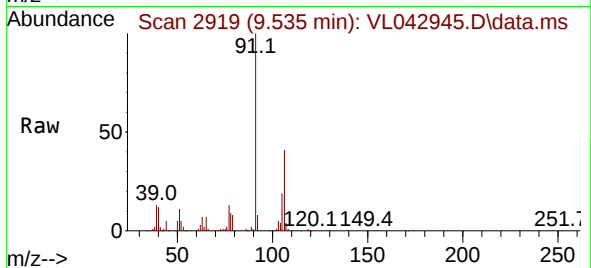
IA1

Tgt Ion: 91 Resp: 60921

Ion Ratio Lower Upper

91 100

106 47.0 37.4 56.0



#60

o-Xylene

Concen: 0.479 ppbv

RT: 9.969 min Scan# 3053

Delta R.T. 0.000 min

Lab File: VL042945.D

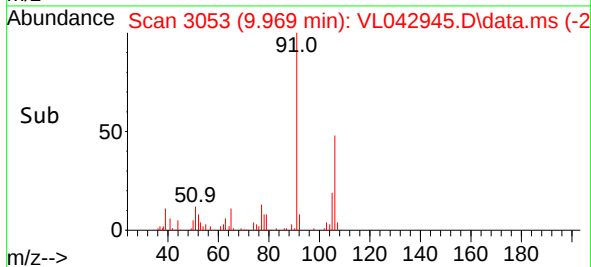
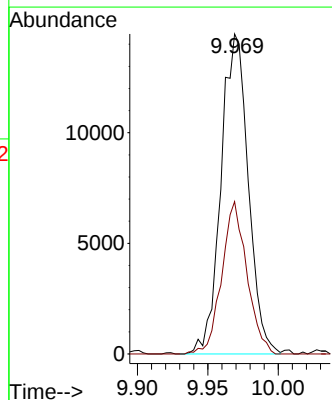
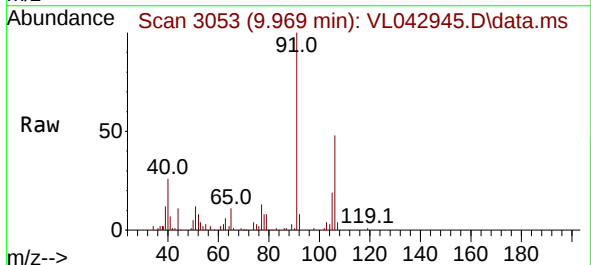
Acq: 18 Sep 2025 14:37

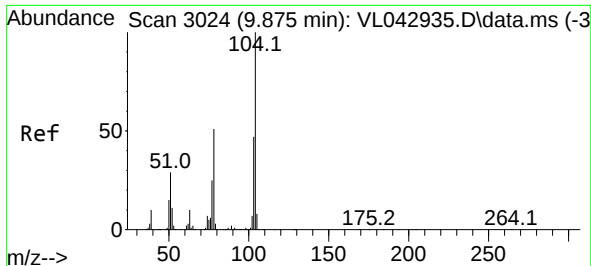
Tgt Ion: 91 Resp: 19505

Ion Ratio Lower Upper

91 100

106 44.0 22.1 66.5

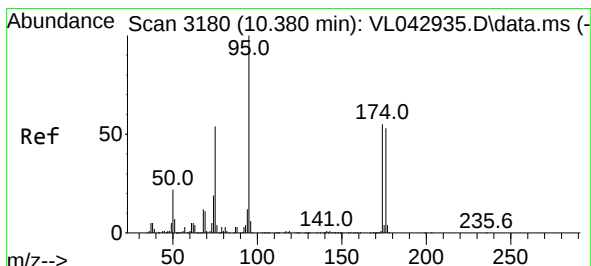
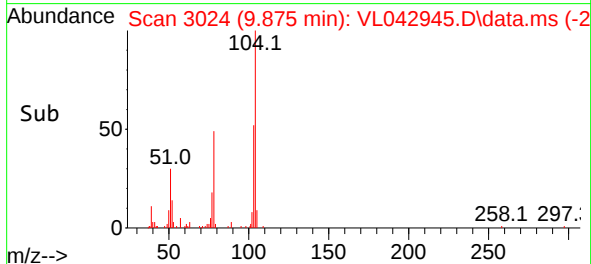
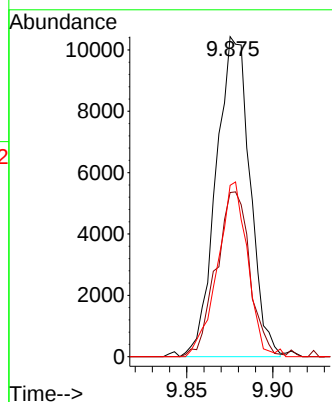
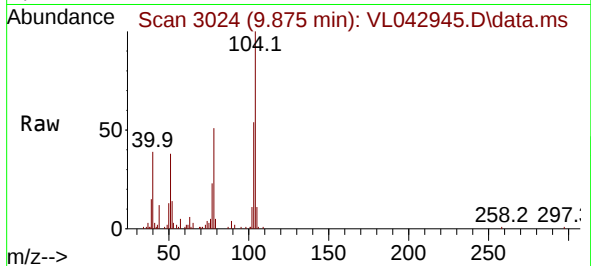




#61
Styrene
Concen: 1.184 ppbv
RT: 9.875 min Scan# 3024
Delta R.T. 0.000 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

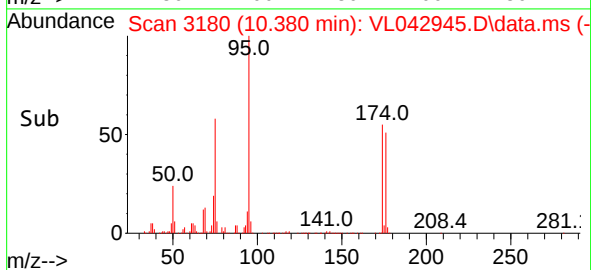
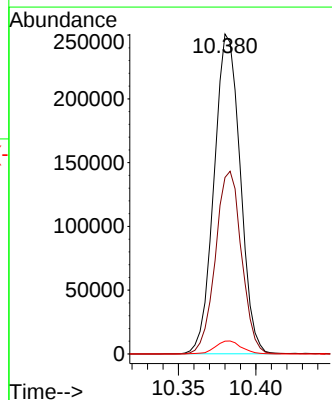
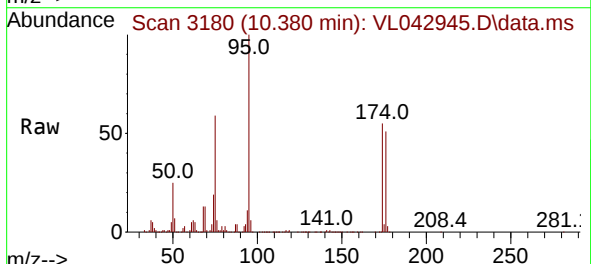
Instrument :
MSVOA_L
ClientSampleId :
IA1

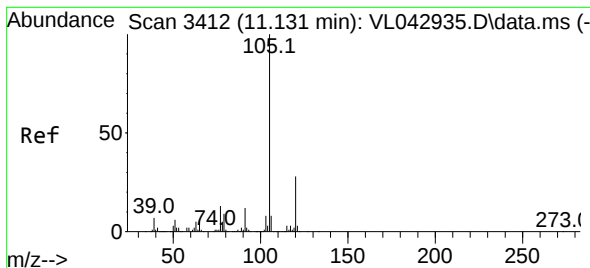
Tgt Ion:104 Resp: 14267
Ion Ratio Lower Upper
104 100
78 51.8 40.2 60.2
103 48.7 36.8 55.2



#68
1-Bromo-4-Fluorobenzene
Concen: 10.012 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.000 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

Tgt Ion: 95 Resp: 294177
Ion Ratio Lower Upper
95 100
174 57.2 44.9 67.3
175 4.1 3.3 4.9

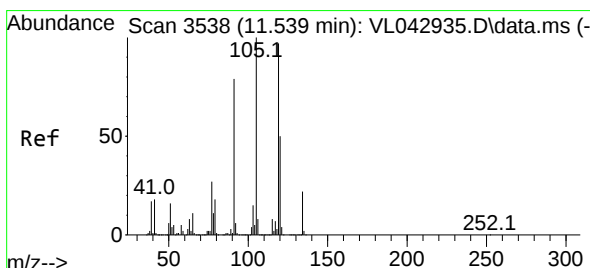
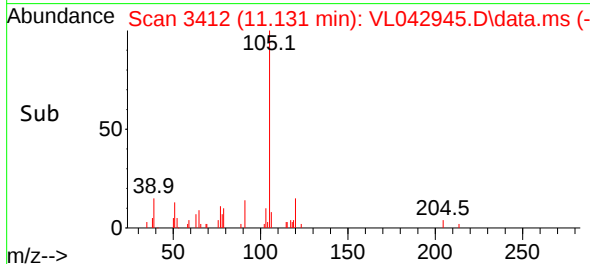
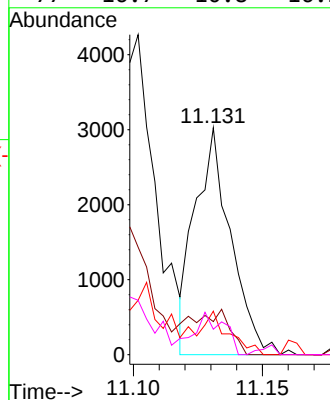
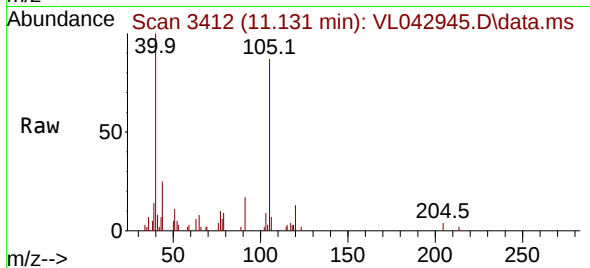




#72
4-Ethyltoluene
Concen: 0.407 ppbv
RT: 11.131 min Scan# 3412
Delta R.T. -0.000 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

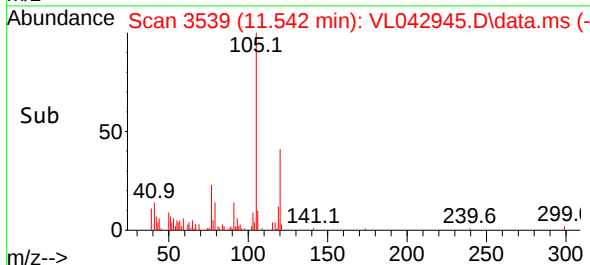
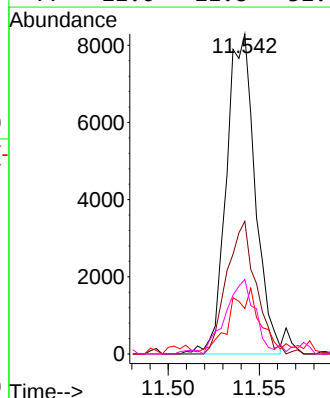
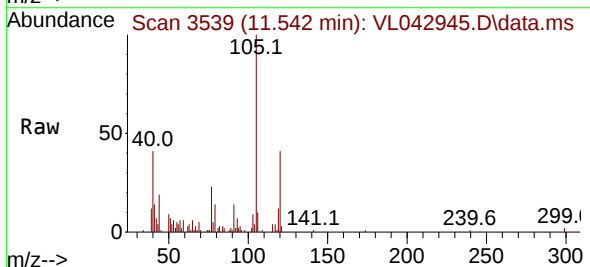
Instrument :
MSVOA_L
ClientSampleId :
IA1

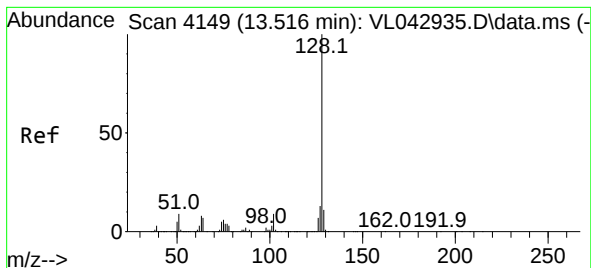
Tgt Ion:	105	Resp:	2902
Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.1	34.7#
91	0.0	10.4	15.6#
77	16.7	10.8	16.2#



#74
1,2,4-Trimethylbenzene
Concen: 0.192 ppbv
RT: 11.542 min Scan# 3539
Delta R.T. 0.003 min
Lab File: VL042945.D
Acq: 18 Sep 2025 14:37

Tgt Ion:	105	Resp:	9091
Ion	Ratio	Lower	Upper
105	100		
120	44.7	39.8	59.6
91	12.6	63.1	94.7#
77	22.6	21.8	32.6





#79

Naphthalene

Concen: 0.418 ppbv

RT: 13.516 min Scan# 4149

Delta R.T. 0.000 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

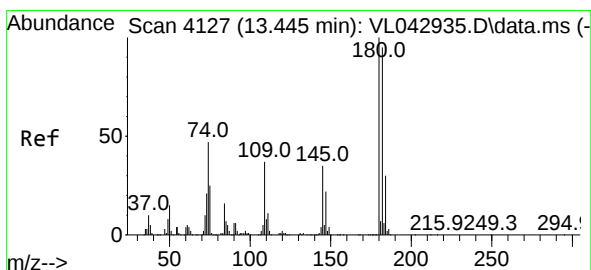
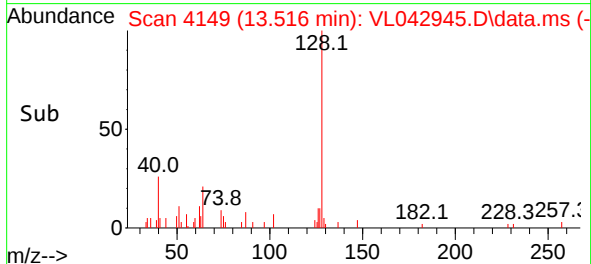
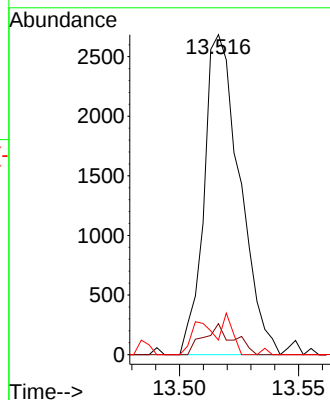
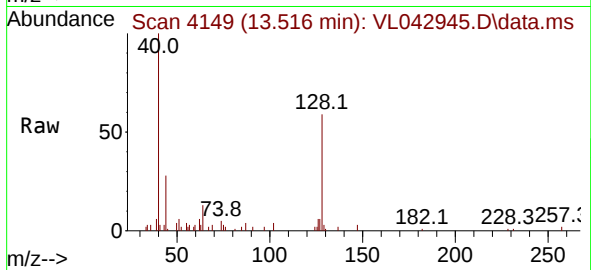
Instrument :

MSVOA_L

ClientSampleId :

IA1

Tgt Ion:	128	Resp:	2794
Ion	Ratio	Lower	Upper
128	100		
127	9.7	10.3	15.5#
129	4.5	8.7	13.1#



#81

1,2,4-Trichlorobenzene

Concen: 0.482 ppbv m

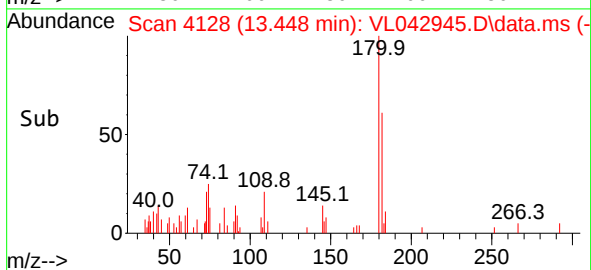
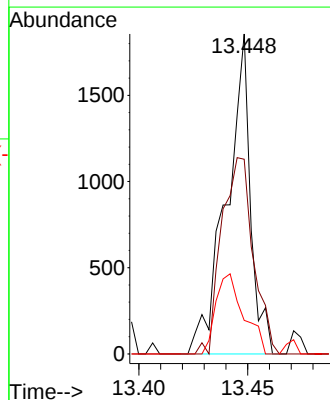
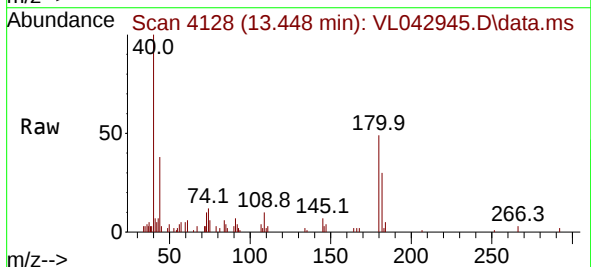
RT: 13.448 min Scan# 4128

Delta R.T. 0.003 min

Lab File: VL042945.D

Acq: 18 Sep 2025 14:37

Tgt Ion:	180	Resp:	1426
Ion	Ratio	Lower	Upper
180	100		
182	80.5	75.5	113.3
184	30.9	24.6	37.0



Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	IA1DL	SDG No.:	Q3111
Lab Sample ID:	Q3111-02DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042947.D	40		09/18/25 15:50	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	4.40	21.8	UD	21.8	98.9
74-87-3	Chloromethane	3.90	8.05	UD	8.05	41.3
75-01-4	Vinyl Chloride	1.00	2.56	UD	2.56	3.07
74-83-9	Bromomethane	3.10	12.0	UD	12.0	77.7
75-00-3	Chloroethane	6.00	15.8	UD	15.8	52.8
109-99-9	Tetrahydrofuran	3.20	9.44	UD	9.44	59.0
75-69-4	Trichlorofluoromethane	6.80	38.2	UD	38.2	112
76-13-1	1,1,2-Trichlorotrifluoroethane	5.60	42.9	UD	42.9	153
76-14-2	Dichlorotetrafluoroethane	6.00	41.9	UD	41.9	140
75-65-0	tert-Butyl alcohol	6.40	19.4	UD	19.4	60.6
142-82-5	Heptane	6.80	27.9	UD	27.9	82.0
75-35-4	1,1-Dichloroethene	6.00	23.8	UD	23.8	79.3
67-64-1	Acetone	350	831	D	17.1	47.5
75-15-0	Carbon Disulfide	3.20	9.97	UD	9.97	62.3
1634-04-4	Methyl tert-Butyl Ether	9.20	33.2	UD	33.2	72.1
75-09-2	Methylene Chloride	9.20	32.0	UD	32.0	69.5
156-60-5	trans-1,2-Dichloroethene	4.80	19.0	UD	19.0	79.3
75-34-3	1,1-Dichloroethane	5.20	21.1	UD	21.1	81.0
110-82-7	Cyclohexane	8.80	30.3	UD	30.3	68.8
78-93-3	2-Butanone	2.20	6.49	UD	6.49	59.0
56-23-5	Carbon Tetrachloride	1.00	6.29	UD	6.29	7.55
156-59-2	cis-1,2-Dichloroethene	4.00	15.9	UD	15.9	79.3
67-66-3	Chloroform	3.80	18.6	UD	18.6	97.7
71-55-6	1,1,1-Trichloroethane	0.64	3.49	UD	3.49	6.55
540-84-1	2,2,4-Trimethylpentane	5.60	26.2	UD	26.2	93.4
71-43-2	Benzene	3.20	10.2	UD	10.2	63.9
107-06-2	1,2-Dichloroethane	3.70	15.0	UD	15.0	81.0
79-01-6	Trichloroethene	0.96	5.16	UD	5.16	6.45
78-87-5	1,2-Dichloropropane	5.20	24.0	UD	24.0	92.4
75-27-4	Bromodichloromethane	2.50	16.8	UD	16.8	134
108-10-1	4-Methyl-2-Pentanone	3.90	16.0	UD	16.0	82.0
108-88-3	Toluene	6.40	24.1	UD	24.1	75.4
10061-02-6	t-1,3-Dichloropropene	6.00	27.2	UD	27.2	90.8
10061-01-5	cis-1,3-Dichloropropene	4.40	20.0	UD	20.0	90.8
79-00-5	1,1,2-Trichloroethane	3.20	17.5	UD	17.5	109

Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	IA1DL	SDG No.:	Q3111
Lab Sample ID:	Q3111-02DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042947.D	40		09/18/25 15:50	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
124-48-1	Dibromochloromethane	3.40	29.0	UD	29.0	170
106-93-4	1,2-Dibromoethane	3.40	26.1	UD	26.1	30.7
127-18-4	Tetrachloroethene	0.60	4.07	UD	4.07	8.14
108-90-7	Chlorobenzene	3.10	14.3	UD	14.3	92.1
100-41-4	Ethyl Benzene	7.60	33.0	UDQ	33.0	86.9
179601-23-1	m/p-Xylene	16.4	71.2	UD	71.2	174
95-47-6	o-Xylene	8.40	36.5	UD	36.5	86.9
100-42-5	Styrene	6.40	27.3	UD	27.3	85.2
75-25-2	Bromoform	1.90	19.6	UD	19.6	207
79-34-5	1,1,2,2-Tetrachloroethane	0.72	4.94	UD	4.94	8.24
95-49-8	2-Chlorotoluene	6.80	35.2	UD	35.2	104
108-67-8	1,3,5-Trimethylbenzene	7.20	35.4	UD	35.4	98.3
95-63-6	1,2,4-Trimethylbenzene	7.20	35.4	UD	35.4	98.3
541-73-1	1,3-Dichlorobenzene	2.20	13.2	UD	13.2	120
106-46-7	1,4-Dichlorobenzene	5.20	31.3	UD	31.3	120
95-50-1	1,2-Dichlorobenzene	5.20	31.3	UD	31.3	120
120-82-1	1,2,4-Trichlorobenzene	8.40	62.4	UD	62.4	148
87-68-3	Hexachloro-1,3-Butadiene	5.20	55.5	UD	55.5	213
106-99-0	1,3-Butadiene	2.00	4.42	UD	4.42	44.3
91-20-3	Naphthalene	0.52	2.73	UD	2.73	21.0
622-96-8	4-Ethyltoluene	8.40	41.3	UD	41.3	98.3
110-54-3	Hexane	6.40	22.6	UD	22.6	70.5
107-05-1	Allyl Chloride	4.40	13.8	UD	13.8	62.6
123-91-1	1,4-Dioxane	8.80	31.7	UD	31.7	72.1
80-62-6	Methyl Methacrylate	5.60	22.9	UD	22.9	81.9
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	9.40			65 - 135	94% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	163000		2.797		
540-36-3	1,4-Difluorobenzene	399000		3.972		
3114-55-4	Chlorobenzene-d5	324000		8.895		

Report of Analysis

Client:	GFE LLC	Date Collected:	09/13/25
Project:	28 RT 46 PINE BROOK	Date Received:	09/16/25
Client Sample ID:	IA1DL	SDG No.:	Q3111
Lab Sample ID:	Q3111-02DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042947.D	40		09/18/25 15:50	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL
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U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range
 D = Dilution

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042947.D
 Acq On : 18 Sep 2025 15:50
 Operator : SY/MD
 Sample : Q3111-02DL 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

Quant Time: Sep 19 01:27:03 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

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

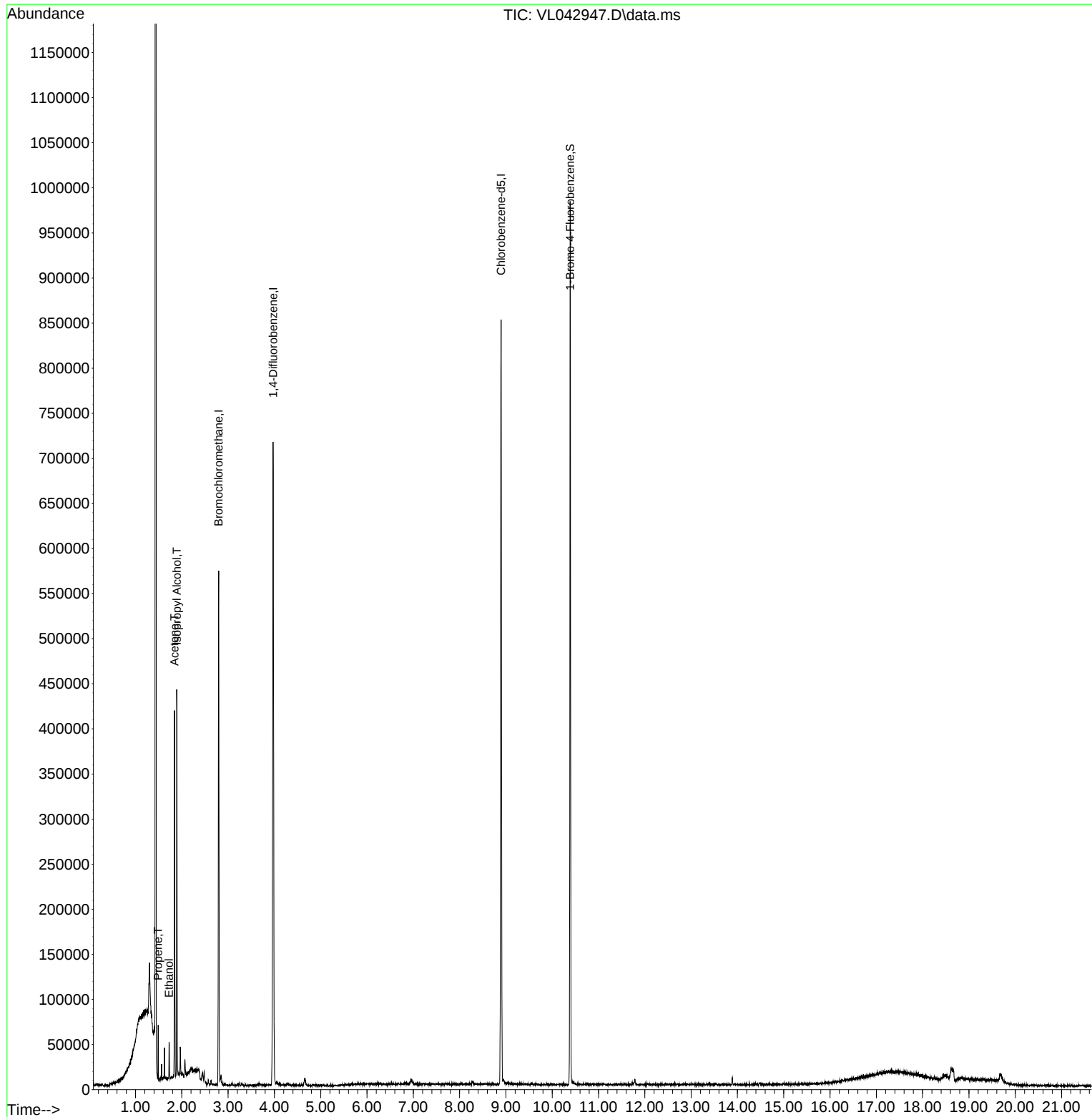
Internal Standards						
1) Bromochloromethane	2.797	49	162782	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.972	114	398877	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.895	117	323651	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	238298	9.420	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.200%
Target Compounds						
					Qvalue	
9) Propene	1.489	41	5327m	0.596	ppbv	
13) Ethanol	1.725	45	14193	15.570	ppbv	94
15) Acetone	1.842	43	172481	8.627	ppbv	97
19) Isopropyl Alcohol	1.890	45	176815	16.494	ppbv #	97

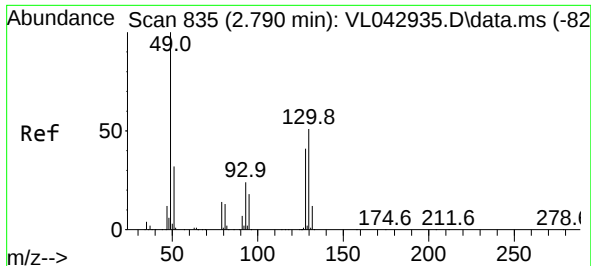
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
Data File : VL042947.D
Acq On : 18 Sep 2025 15:50
Operator : SY/MD
Sample : Q3111-02DL 40X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA1DL

Quant Time: Sep 19 01:27:03 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Thu Sep 18 02:57:46 2025
Response via : Initial Calibration

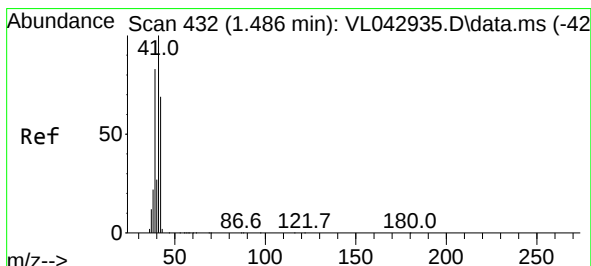
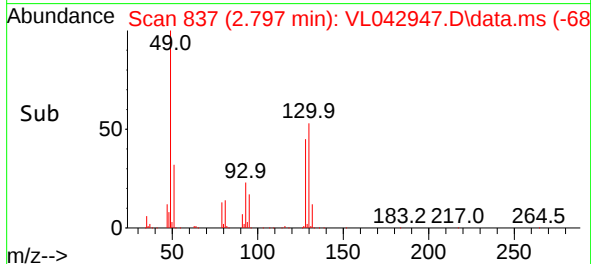
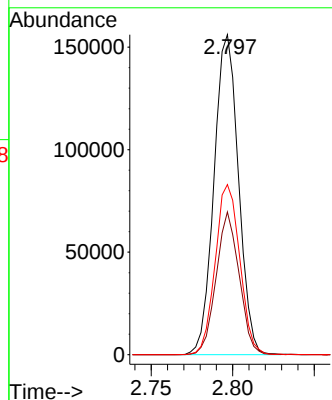
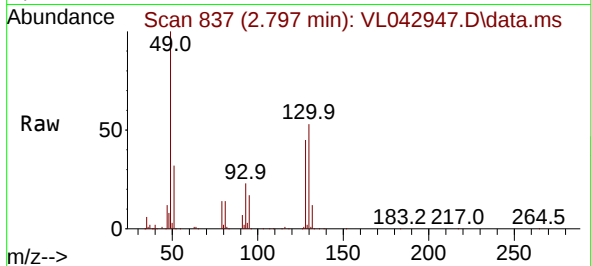




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.797 min Scan# 81
 Delta R.T. 0.007 min
 Lab File: VL042947.D
 Acq: 18 Sep 2025 15:50

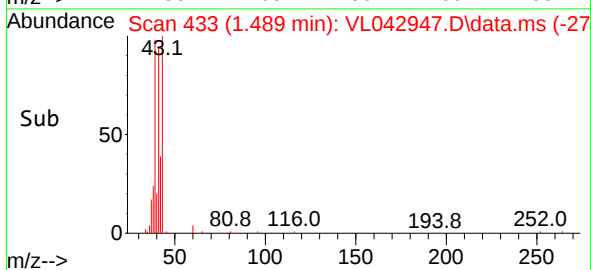
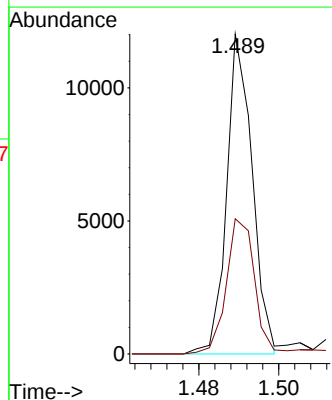
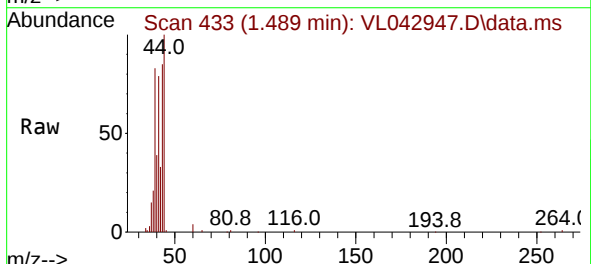
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

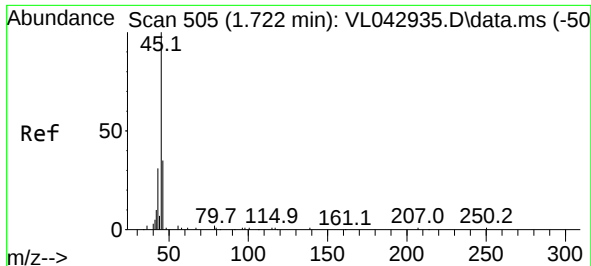
Tgt Ion: 49 Resp: 162782
 Ion Ratio Lower Upper
 49 100
 128 42.0 21.1 63.4
 130 53.5 26.4 79.2



#9
 Propene
 Concen: 0.596 ppbv m
 RT: 1.489 min Scan# 433
 Delta R.T. 0.003 min
 Lab File: VL042947.D
 Acq: 18 Sep 2025 15:50

Tgt Ion: 41 Resp: 5327
 Ion Ratio Lower Upper
 41 100
 42 210.2 55.0 82.4#

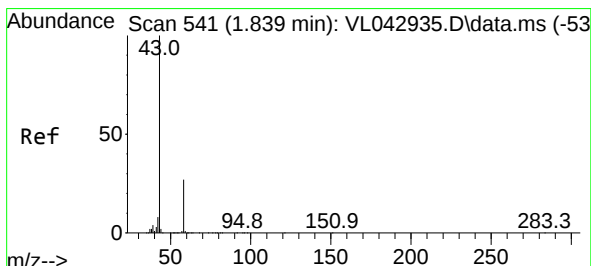
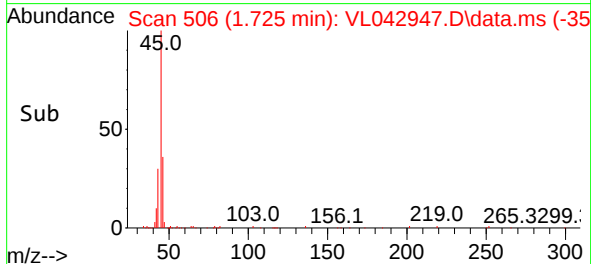
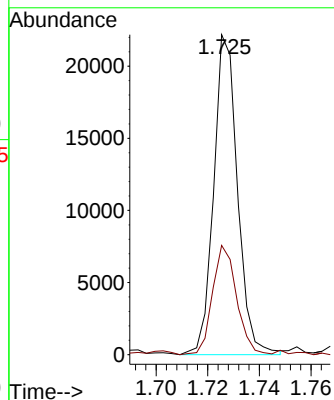
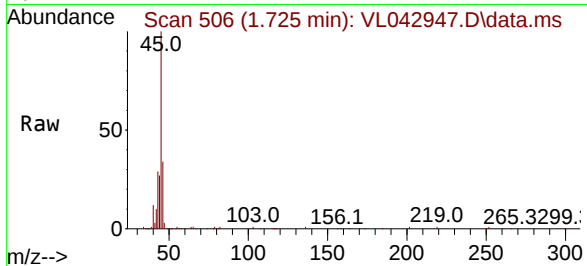




#13
 Ethanol
 Concen: 15.570 ppbv
 RT: 1.725 min Scan# 50
 Delta R.T. 0.003 min
 Lab File: VL042947.D
 Acq: 18 Sep 2025 15:50

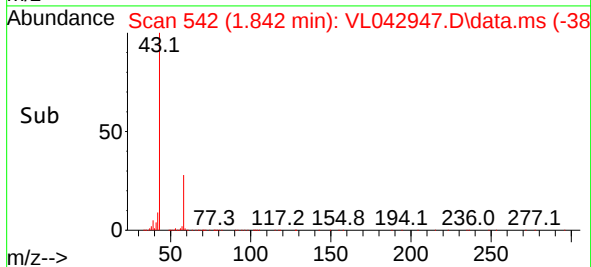
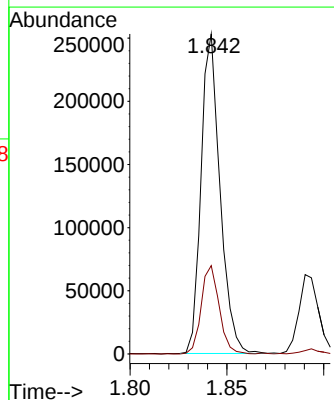
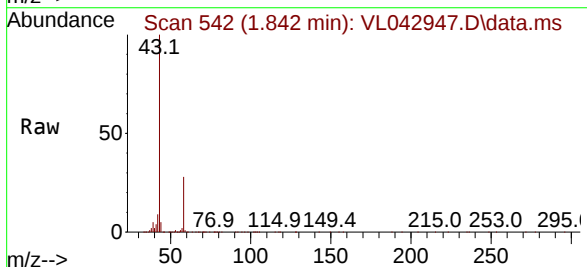
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

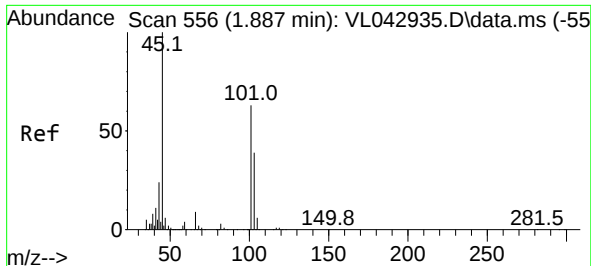
Tgt Ion: 45 Resp: 14193
 Ion Ratio Lower Upper
 45 100
 46 37.5 16.5 66.1



#15
 Acetone
 Concen: 8.627 ppbv
 RT: 1.842 min Scan# 542
 Delta R.T. 0.003 min
 Lab File: VL042947.D
 Acq: 18 Sep 2025 15:50

Tgt Ion: 43 Resp: 172481
 Ion Ratio Lower Upper
 43 100
 58 26.2 22.2 33.2





#19

Isopropyl Alcohol

Concen: 16.494 ppbv

RT: 1.890 min Scan# 51

Delta R.T. 0.003 min

Lab File: VL042947.D

Acq: 18 Sep 2025 15:50

Instrument :

MSVOA_L

ClientSampleId :

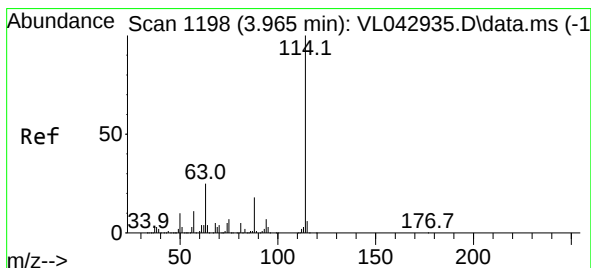
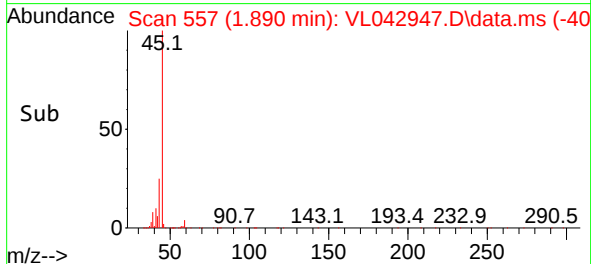
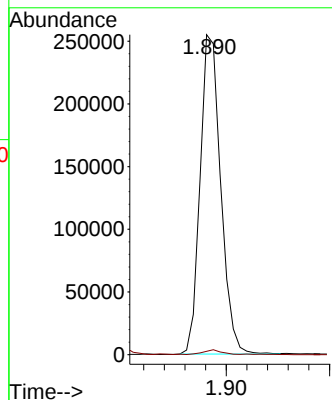
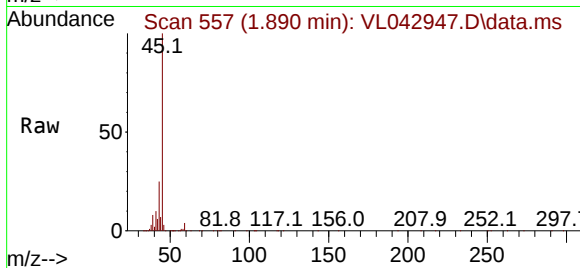
IA1DL

Tgt Ion: 45 Resp: 176815

Ion Ratio Lower Upper

45 100

58 1.6 2.0 3.0#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.972 min Scan# 1200

Delta R.T. 0.007 min

Lab File: VL042947.D

Acq: 18 Sep 2025 15:50

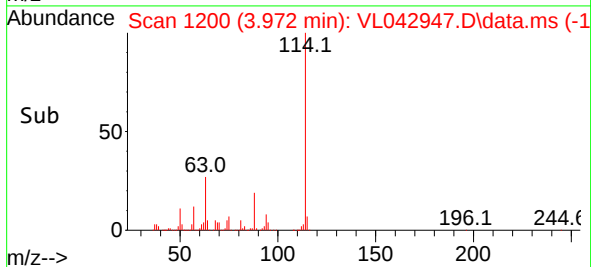
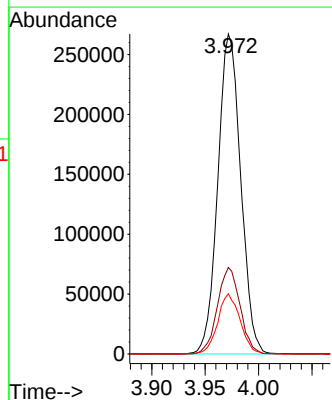
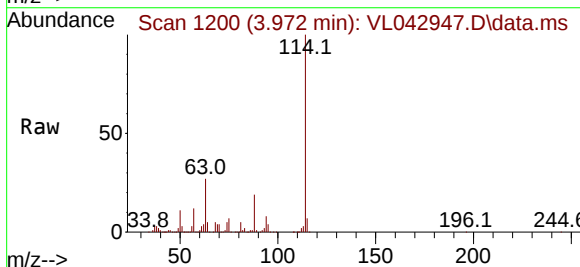
Tgt Ion:114 Resp: 398877

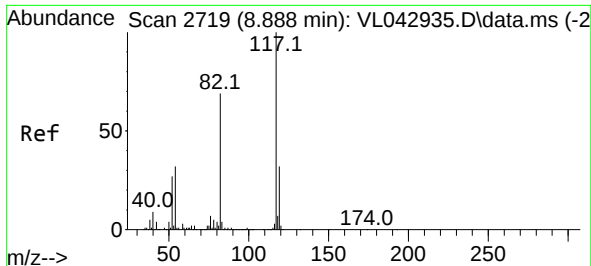
Ion Ratio Lower Upper

114 100

63 26.8 21.1 31.7

88 18.3 14.6 22.0

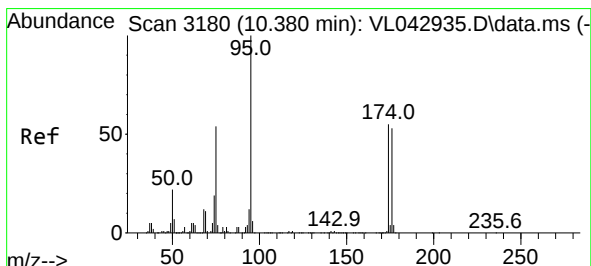
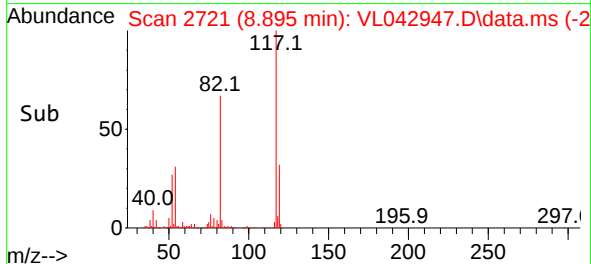
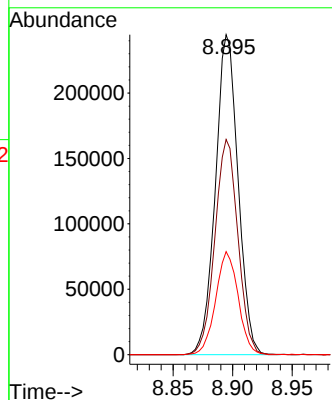
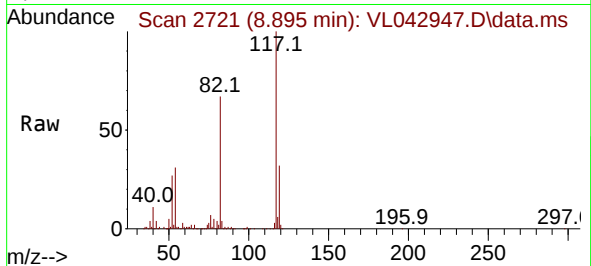




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.895 min Scan# 21
Delta R.T. 0.007 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

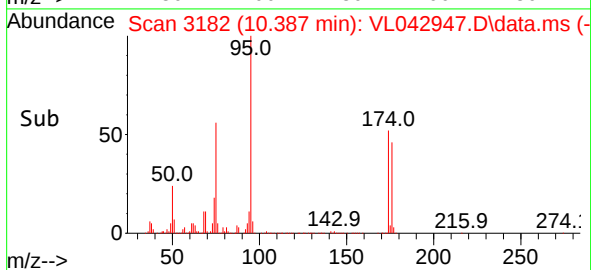
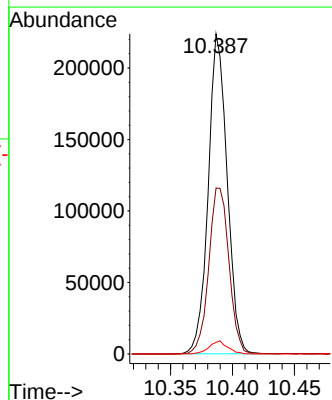
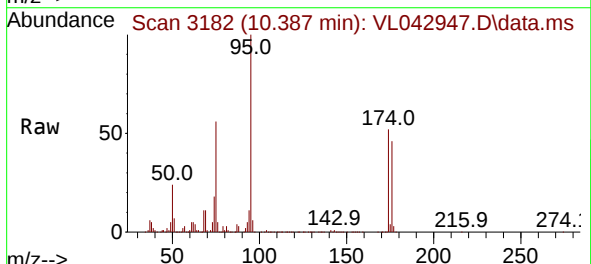
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

Tgt Ion:117 Resp: 323651
Ion Ratio Lower Upper
117 100
82 68.2 56.1 84.1
119 32.0 25.8 38.8



#68
1-Bromo-4-Fluorobenzene
Concen: 9.420 ppbv
RT: 10.387 min Scan# 3182
Delta R.T. 0.007 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

Tgt Ion: 95 Resp: 238298
Ion Ratio Lower Upper
95 100
174 55.5 44.9 67.3
175 4.0 3.3 4.9





CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance

Contract: GFEL01

Lab Code: ACE

SDG No.: Q3111

Instrument ID: MSVOA_L

Calibration Date(s): 09/17/2025 09/17/2025

Heated Purge: (Y/N) N

Calibration Time(s): 10:48 14:17

GC Column: RTX-1 ID: 0.32 (mm)

LAB FILE ID:		RRF002 = VL042930.D		RRF001 = VL042931.D		RRF0.5 = VL042932.D			
		RRF0.1 = VL042933.D		RRF.03 = VL042934.D		RRF010 = VL042935.D			
COMPOUND	RRF002	RRF001	RRF0.5	RRF0.1	RRF.03	RRF010	RRF	% RSD	
Dichlorodifluoromethane	1.419	1.446	1.465			1.445	1.428	2.7	
Chloromethane	0.536	0.622	0.588			0.574	0.574	5.9	
Vinyl Chloride	0.497	0.504	0.545	0.586	0.669	0.500	0.542	12.1	
Bromomethane	0.178	0.175	0.217			0.190	0.188	9	
Chloroethane	0.190	0.213	0.192			0.201	0.199	4.6	
Tetrahydrofuran	0.298	0.266	0.290			0.363	0.321	16.1	
Trichlorofluoromethane	1.370	1.490	1.400			1.429	1.411	3.6	
1,1,2-Trichlorotrifluoroethane	1.064	1.135	1.135			1.113	1.102	3.3	
Dichlorotetrafluoroethane	1.103	1.166	1.154			1.143	1.133	2.6	
tert-Butyl alcohol	1.114	1.255	1.224			1.170	1.183	4.8	
Heptane	1.352	1.233	1.004			1.616	1.361	18.9	
1,1-Dichloroethene	0.482	0.489	0.474			0.488	0.483	1.3	
Acetone	1.246	1.359	1.420			1.072	1.228	13.6	
Carbon Disulfide	1.317	1.458	1.436			1.375	1.388	4.2	
Methyl tert-Butyl Ether	0.574	0.624	0.643			0.617	0.619	4.3	
Methylene Chloride	0.510	0.611	0.716			0.421	0.535	24.1	
trans-1,2-Dichloroethene	0.528	0.575	0.550			0.549	0.547	3.3	
1,1-Dichloroethane	1.050	1.080	1.105			1.099	1.080	2.1	
Cyclohexane	0.815	0.735	0.625			1.011	0.848	21.5	
2-Butanone	0.659	0.627	0.596			0.674	0.648	5.6	
Carbon Tetrachloride	0.641	0.681	0.690	0.719	0.887	0.691	0.711	11.4	
cis-1,2-Dichloroethene	1.102	1.086	0.968			1.149	1.099	7.6	
Chloroform	1.823	1.891	1.803			1.865	1.840	2	
1,1,1-Trichloroethane	1.662	1.661	1.666	1.510	2.127	1.709	1.721	11.1	
2,2,4-Trimethylpentane	1.471	1.300	1.170			1.687	1.455	15.2	
Benzene	0.839	0.829	0.816			0.924	0.872	7.2	
1,2-Dichloroethane	0.512	0.519	0.529			0.527	0.522	1.3	
Trichloroethene	0.354	0.353	0.373	0.376	0.503	0.402	0.395	13.1	
1,2-Dichloropropane	0.338	0.351	0.358			0.357	0.353	2.4	
Bromodichloromethane	0.714	0.742	0.783			0.762	0.750	3.4	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance

Contract: GFEL01

Lab Code: ACE

SDG No.: Q3111

Instrument ID: MSVOA_L

Calibration Date(s): 09/17/2025 09/17/2025

Heated Purge: (Y/N) N

Calibration Time(s): 10:48 14:17

GC Column: RTX-1 ID: 0.32 (mm)

LAB FILE ID:	RRF002 = VL042930.D			RRF001 = VL042931.D		RRF0.5 = VL042932.D		
	RRF0.1 = VL042933.D			RRF.03 = VL042934.D		RRF010 = VL042935.D		
COMPOUND	RRF002	RRF001	RRF0.5	RRF0.1	RRF.03	RRF010	RRF	% RSD
4-Methyl-2-Pentanone	0.728	0.664	0.595			0.933	0.775	20.8
Toluene	0.758	0.670	0.598			1.001	0.813	24.3
t-1,3-Dichloropropene	0.283	0.274	0.251			0.352	0.308	17.9
cis-1,3-Dichloropropene	0.390	0.385	0.366			0.474	0.425	14.7
1,1,2-Trichloroethane	0.352	0.353	0.352			0.376	0.359	2.9
Dibromochloromethane	0.536	0.562	0.548			0.588	0.563	3.8
1,2-Dibromoethane	0.444	0.448	0.436	0.433		0.508	0.462	7.5
Tetrachloroethene	0.263	0.254	0.256	0.224	0.327	0.279	0.269	11.8
Chlorobenzene	0.898	0.886	0.949			0.970	0.924	3.8
Ethyl Benzene	1.196	1.017	0.942			1.650	1.288	26.2
m/p-Xylene	1.104	0.884	0.738			1.392	1.089	25.7
o-Xylene	1.096	0.844	0.726			1.402	1.082	27.5
Styrene	0.340	0.299	0.245			0.556	0.403	37.7
Bromoform	0.425	0.411	0.429			0.472	0.439	5.9
1,1,2,2-Tetrachloroethane	0.747	0.723	0.730	0.748	0.970	0.803	0.782	11.1
2-Chlorotoluene	1.116	0.945	0.834			1.503	1.170	25.5
1,3,5-Trimethylbenzene	1.076	0.868	0.670			1.398	1.071	28.9
1,2,4-Trimethylbenzene	1.337	1.074	0.781			1.603	1.258	26.5
1,3-Dichlorobenzene	0.802	0.714	0.703			0.904	0.798	11.2
1,4-Dichlorobenzene	0.762	0.674	0.629			0.913	0.768	15.6
1,2-Dichlorobenzene	0.813	0.786	0.689			0.897	0.805	9.5
1,2,4-Trichlorobenzene	0.485	0.366	0.267			0.635	0.479	34.5
Hexachloro-1,3-Butadiene	0.513	0.496	0.533			0.524	0.514	3
1,3-Butadiene	0.472	0.529	0.579			0.494	0.514	8.1
Naphthalene	0.972	0.609	0.438	0.394		1.344	0.849	50.9
4-Ethyltoluene	1.252	0.977	0.779			1.691	1.267	31.5
1-Bromo-4-Fluorobenzene	0.781	0.782	0.778	0.753	0.743	0.837	0.782	3.9
Hexane	1.145	1.026	0.939			1.242	1.126	12.7
Allyl Chloride	0.814	0.815	0.883			0.826	0.833	3.5
1,4-Dioxane	112.993	122.124	99.291			146.704	125.114	16.3

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: GFEL01
 Lab Code: ACE SDG No.: Q3111
 Instrument ID: MSVOA_L Calibration Date(s): 09/17/2025 09/17/2025
 Heated Purge: (Y/N) N Calibration Time(s): 10:48 14:17
 GC Column: RTX-1 ID: 0.32 (mm)

LAB FILE ID:								
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RRF0.1 = VL042933.D			RRF.03 = VL042934.D			RRF010 = VL042935.D		
COMPOUND	RRF002	RRF001	RRF0.5	RRF0.1	RRF.03	RRF010	RRF	% RSD
Methyl Methacrylate	0.276	0.248	0.227			0.345	0.292	20.6

* Compounds with required minimum RRF and maximum %RSD values.
 All other compounds must meet a minimum RRF of 0.010.
 RRF of 1,4-Dioxane = Value should be divide by 1000.

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\

Method File : VL091725AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022

Last Update : Thu Sep 18 02:57:46 2025

Response Via : Initial Calibration

Calibration Files

0.03=VL042934.D 0.1 =VL042933.D 0.5 =VL042932.D 1 =VL042931.D 2 =VL042930.D 10 =VL042935.D 15 =VL042936.D

Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD

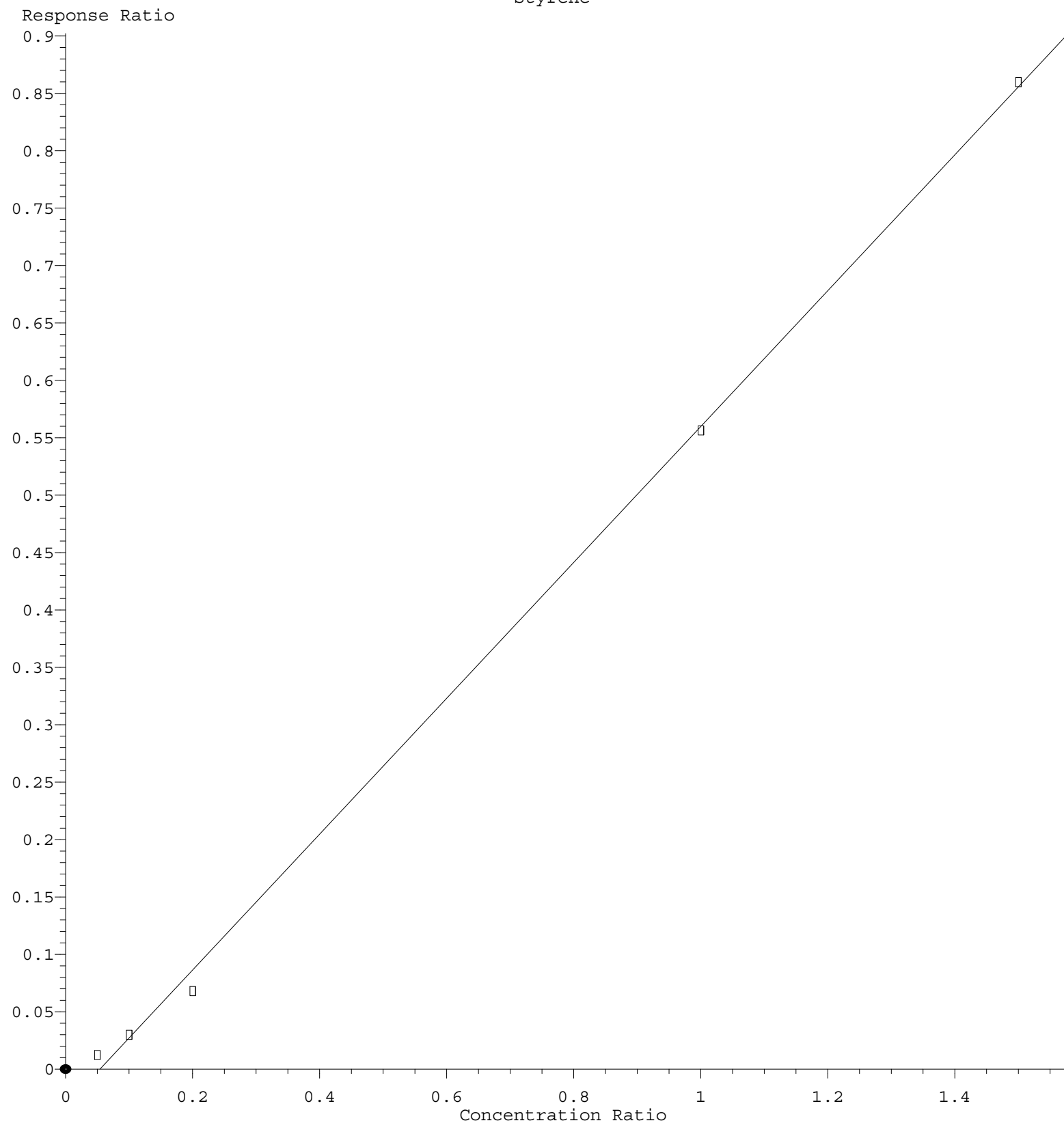
1) I Bromochloromethane	-----ISTD-----								
2) T Dichlorodifluo...			1.465	1.446	1.419	1.445	1.366	1.428	2.68
3) Chlorodifluoro...			1.556	1.534	1.491	1.484	1.454	1.504	2.71
4) Chloromethane			0.588	0.622	0.536	0.574	0.550	0.574	5.88
5) T Vinyl Chloride	0.669	0.586	0.545	0.504	0.497	0.500	0.491	0.542	12.13
6) T Bromomethane			0.217	0.175	0.178	0.190	0.181	0.188	8.96
7) Chloroethane			0.192	0.213	0.190	0.201	0.201	0.199	4.63
8) T Dichlorotetra...			1.154	1.166	1.103	1.143	1.100	1.133	2.65
9) T Propene			0.515	0.564	0.548	0.538	0.581	0.549	4.59
10) T Heptane			1.004	1.233	1.352	1.616	1.599	1.361	18.93
11) T Trichlorofluor...			1.400	1.490	1.370	1.429	1.366	1.411	3.63
12) T 1,1,2-Trichlor...			1.135	1.135	1.064	1.113	1.064	1.102	3.26
13) Ethanol			0.070	0.059	0.056	0.048	0.048	0.056	16.18
14) T Bromoethene			0.407	0.414	0.366	0.391	0.386	0.393	4.73
15) T Acetone			1.420	1.359	1.246	1.072	1.045	1.228	13.65
16) T 1,3-Butadiene			0.579	0.529	0.472	0.494	0.494	0.514	8.13
17) tert-Butyl alc...			1.224	1.255	1.114	1.170	1.151	1.183	4.78
18) T 1,1-Dichloroet...			0.474	0.489	0.482	0.488	0.479	0.483	1.33
19) T Isopropyl Alcohol			0.721	0.680	0.617	0.644	0.631	0.659	6.40
20) T Methylene Chlo...			0.716	0.611	0.510	0.421	0.415	0.535	24.11
21) T Allyl Chloride			0.883	0.815	0.814	0.826	0.824	0.833	3.47
22) T trans-1,2-Dich...			0.550	0.575	0.528	0.549	0.533	0.547	3.34
23) T Vinyl Acetate			1.374	1.284	1.357	1.484	1.638	1.427	9.65
24) T 1,1-Dichloroet...			1.105	1.080	1.050	1.099	1.067	1.080	2.08
25) T Ethyl Acetate			2.360	2.502	2.630	2.836	2.786	2.623	7.52
26) T Hexane			0.939	1.026	1.145	1.242	1.276	1.126	12.66
27) T Carbon Disulfide			1.436	1.458	1.317	1.375	1.355	1.388	4.18
28) T Methyl tert-Bu...			0.643	0.624	0.574	0.617	0.634	0.619	4.31
29) T Chloroform			1.803	1.891	1.823	1.865	1.817	1.840	1.99
30) T Cyclohexane			0.625	0.735	0.815	1.011	1.054	0.848	21.47
31) T cis-1,2-Dichlo...			0.968	1.086	1.102	1.149	1.190	1.099	7.64
32) T 1,1,1-Trichlor...	2.127	1.510	1.666	1.661	1.662	1.709	1.715	1.721	11.12

33) I 1,4-Difluorobenzene	-----ISTD-----								
34) T 2-Butanone			0.596	0.627	0.659	0.674	0.685	0.648	5.65
35) T Carbon Tetrach...	0.887	0.719	0.690	0.681	0.641	0.691	0.666	0.711	11.42
36) T Benzene			0.816	0.829	0.839	0.924	0.954	0.872	7.16
37) T 1,2-Dichloroet...			0.529	0.519	0.512	0.527	0.524	0.522	1.34
38) T Trichloroethene	0.503	0.376	0.373	0.353	0.354	0.402	0.403	0.395	13.08
39) T 1,2-Dichloropr...			0.358	0.351	0.338	0.357	0.357	0.353	2.37

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\										
Method File : VL091725AIR.M										
40) T	1,4-Dioxane			0.099	0.122	0.113	0.147	0.144	0.125	16.30
41) T	Tetrahydrofuran			0.290	0.266	0.298	0.363	0.387	0.321	16.10
42) T	Bromodichlorom...			0.783	0.742	0.714	0.762	0.746	0.750	3.40
43) T	Methyl Methacr...			0.227	0.248	0.276	0.345	0.364	0.292	20.57
44) T	2,2,4-Trimethy...			1.170	1.300	1.471	1.687	1.646	1.455	15.20
45) T	t-1,3-Dichloro...			0.251	0.274	0.283	0.352	0.380	0.308	17.89
46) T	cis-1,3-Dichlo...			0.366	0.385	0.390	0.474	0.508	0.425	14.72
47) T	1,1,2-Trichlor...			0.352	0.353	0.352	0.376	0.365	0.359	2.94
48) T	Dibromochlorom...			0.548	0.562	0.536	0.588	0.580	0.563	3.84
49) T	Bromoform			0.429	0.411	0.425	0.472	0.460	0.439	5.87
50) T	4-Methyl-2-Pen...			0.595	0.664	0.728	0.933	0.955	0.775	20.83
51) T	2-Hexanone			0.423	0.450	0.510	0.740	0.755	0.576	27.84
52) T	Tetrachloroethene	0.327	0.224	0.256	0.254	0.263	0.279	0.281	0.269	11.80
53) T	Toluene			0.598	0.670	0.758	1.001	1.040	0.813	24.32
54) T	1,2-Dibromoethane	0.433		0.436	0.448	0.444	0.508	0.505	0.462	7.47
-----ISTD-----										
55) I	Chlorobenzene-d5									
56) T	1,1,1,2-Tetrac...			0.517	0.512	0.493	0.527	0.498	0.509	2.78
57) T	Chlorobenzene			0.949	0.886	0.898	0.970	0.919	0.924	3.79
58) T	Ethyl Benzene			0.942	1.017	1.196	1.650	1.637	1.288	26.17
59) T	m/p-Xylene			0.738	0.884	1.104	1.392	1.325	1.089	25.72
60) T	o-Xylene			0.726	0.844	1.096	1.402	1.343	1.082	27.48
61) T	Styrene			0.245	0.299	0.340	0.556	0.573	0.403	37.70
62) T	Isopropylbenzene			1.142	1.307	1.541	2.003	1.891	1.577	23.38
63) T	1,1,2,2-Tetrac...	0.970	0.748	0.730	0.723	0.747	0.803	0.752	0.782	11.13
64) T	n-propylbenzene			0.277	0.343	0.413	0.517	0.494	0.409	24.68
65) T	tert-Butylbenzene			0.818	1.112	1.398	1.753	1.656	1.347	28.70
66) T	Benzyl Chloride			0.091	0.109	0.117	0.150	0.159	0.125	22.74
67) T	sec-Butylbenzene			1.399	1.798	2.090	2.561	2.401	2.050	22.80
68) S	1-Bromo-4-Fluo...	0.743	0.753	0.778	0.782	0.781	0.837	0.797	0.782	3.93
69) T	p-Isopropyltol...			0.986	1.282	1.606	2.067	1.958	1.580	28.70
70) T	n-Butylbenzene			0.982	1.300	1.709	2.228	2.085	1.661	31.50
71) T	2-Chlorotoluene			0.834	0.945	1.116	1.503	1.451	1.170	25.50
72) T	4-Ethyltoluene			0.779	0.977	1.252	1.691	1.633	1.267	31.48
73) T	1,3,5-Trimethy...			0.670	0.868	1.076	1.398	1.343	1.071	28.88
74) T	1,2,4-Trimethy...			0.781	1.074	1.337	1.603	1.498	1.258	26.47
75) T	1,3-Dichlorobe...			0.703	0.714	0.802	0.904	0.867	0.798	11.20
76) T	1,4-Dichlorobe...			0.629	0.674	0.762	0.913	0.860	0.768	15.65
77) T	1,2-Dichlorobe...			0.689	0.786	0.813	0.897	0.839	0.805	9.52
78) T	Hexachloro-1,3...			0.533	0.496	0.513	0.524	0.504	0.514	2.95
79) T	Naphthalene	0.394		0.438	0.609	0.972	1.344	1.338	0.849	50.88
80) T	Naphthalene,2-...			0.172	0.156	0.223	0.376	0.449	0.275	47.42
81) T	1,2,4-Trichlor...			0.267	0.366	0.485	0.635	0.645	0.479	34.52

(#) = Out of Range

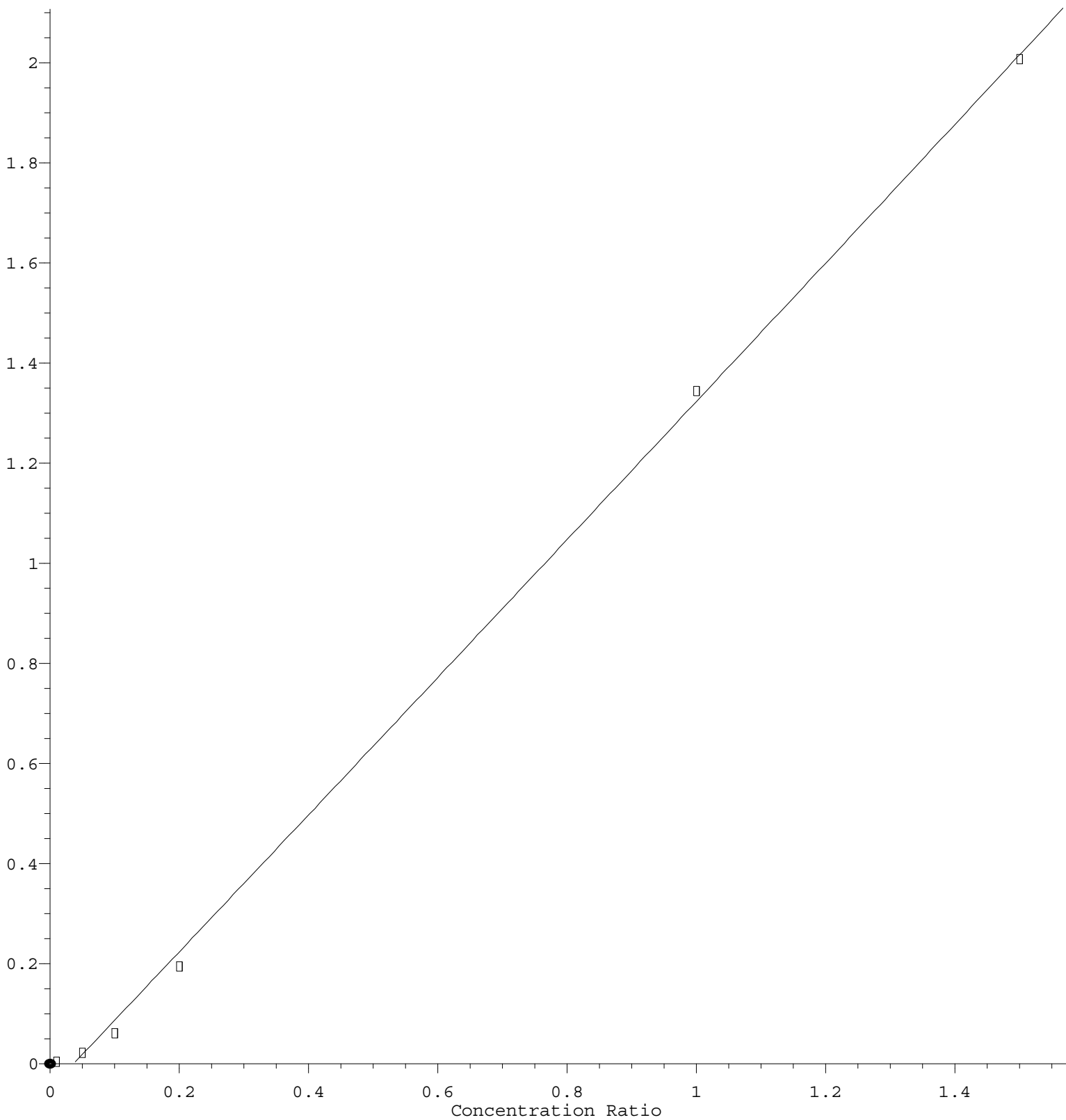
Styrene



$\text{Response} = 5.919\text{e-}001 * \text{Amt} - 3.215\text{e-}002$
 Coef of Det (r^2) = 0.998999 Curve Fit: Linear
 Method Name: Z:\voasrv\HPCHEM1\MSVOA L\methods\VL091725AIR.M
 Calibration Table Last Updated: Thu Sep 18 02:57:46 2025

Naphthalene

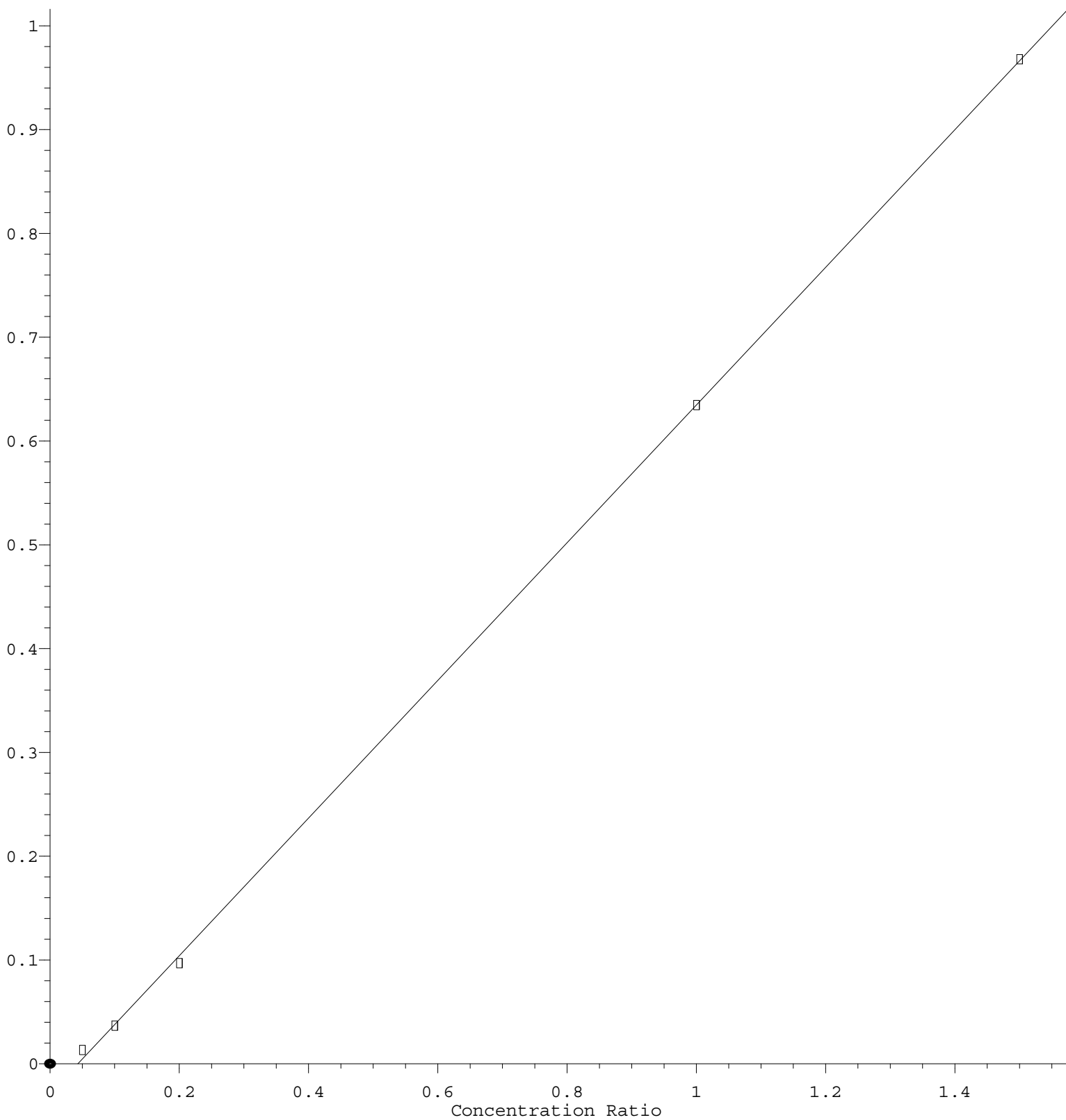
Response Ratio



$R = 8.404e-003 A^2 + 1.364e+000 A - 4.958e-002$
 Coef of Det (r^2) = 0.999008 Curve Fit: Quadratic
 Method Name: Z:\voasrv\HPCHEM1\MSVOA L\methods\VL091725AIR.M
 Calibration Table Last Updated: Thu Sep 18 02:57:46 2025

1,2,4-Trichlorobenzene

Response Ratio



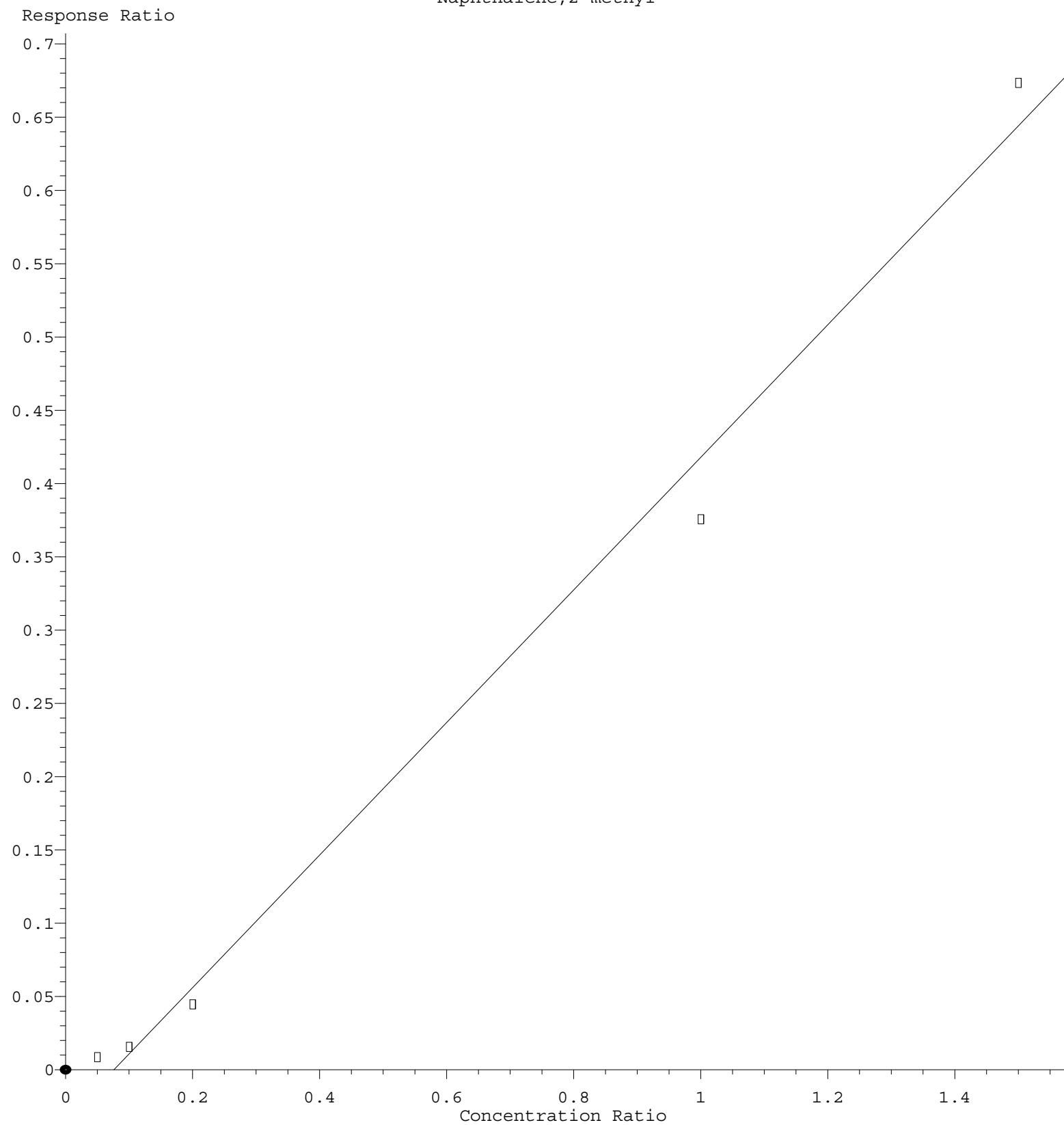
$$\text{Response} = 6.632\text{e-}001 * \text{Amt} - 2.819\text{e-}002$$

Coef of Det (r^2) = 0.999823 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA L\methods\VL091725AIR.M

Calibration Table Last Updated: Thu Sep 18 02:57:46 2025

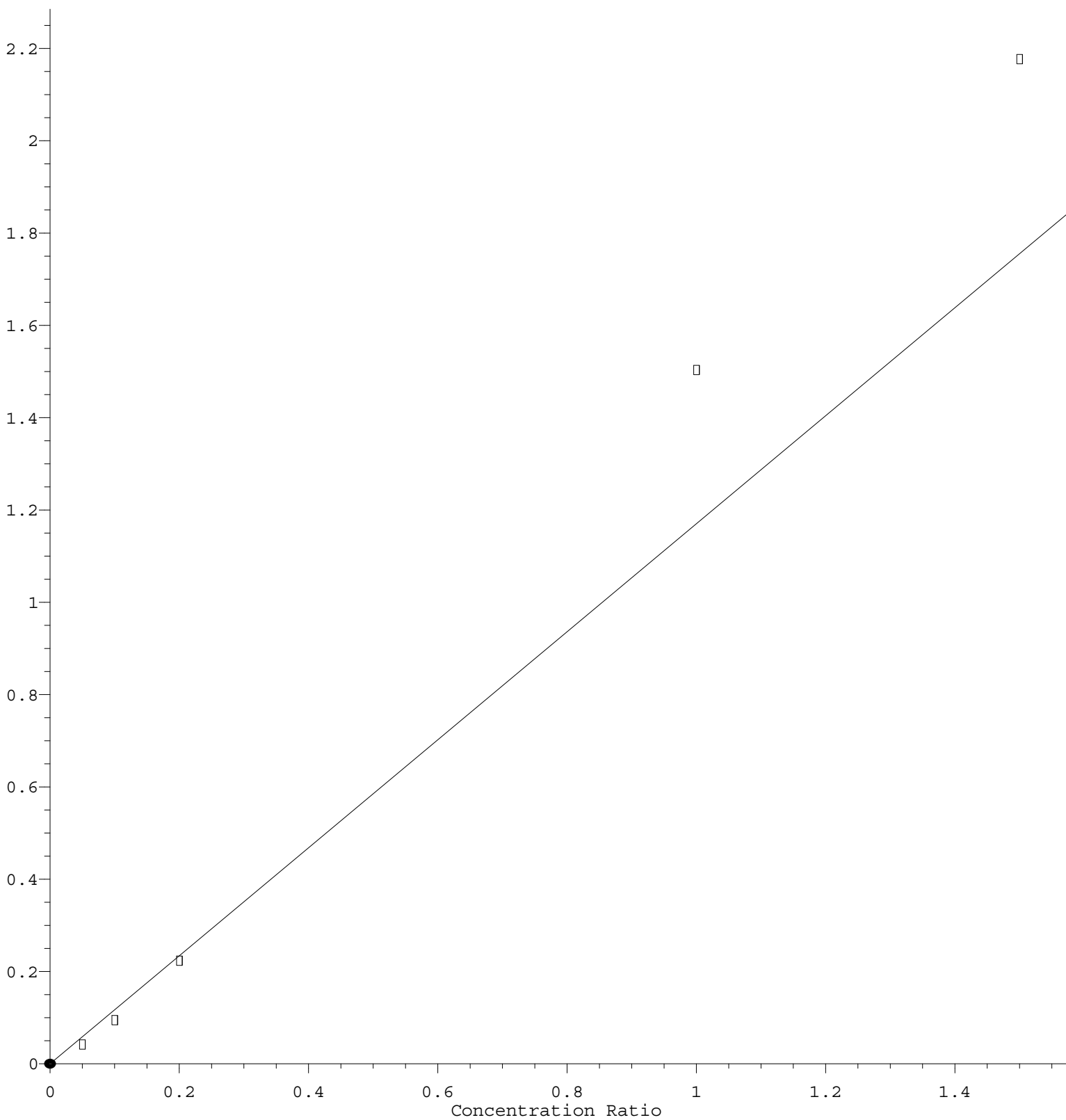
Naphthalene, 2-methyl-



$\text{Response} = 4.526\text{e-}001 * \text{Amt} - 3.443\text{e-}002$
 Coef of Det (r^2) = 0.990741 Curve Fit: Linear
 Method Name: Z:\voasrv\HPCHEM1\MSVOA L\methods\VL091725AIR.M
 Calibration Table Last Updated: Thu Sep 18 02:57:46 2025

2-Chlorotoluene

Response Ratio



$$\text{Response} = 1.170\text{e}+000 * \text{Amt}$$

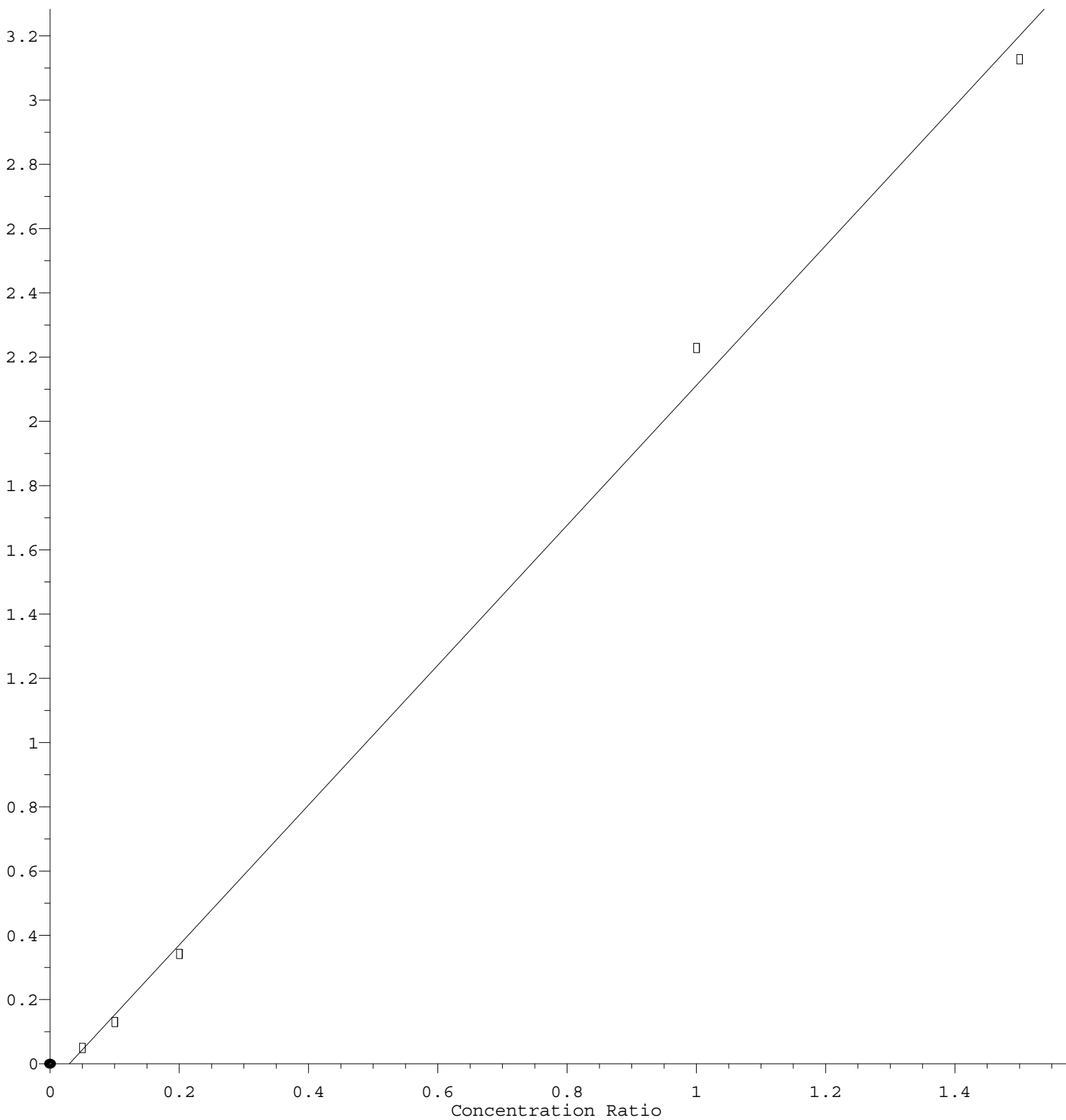
RF Rel Std Dev = 25.504% Curve Fit: Avg RF

Method Name: Z:\voasrv\HPCHEM1\MSVOA L\methods\VL091725AIR.M

Calibration Table Last Updated: Thu Sep 18 02:57:46 2025

n-Butylbenzene

Response Ratio



$$\text{Response} = 2.177\text{e}+000 * \text{Amt} - 6.568\text{e}-002$$

Coef of Det (r^2) = 0.997454 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA L\methods\VL091725AIR.M

Calibration Table Last Updated: Thu Sep 18 02:57:46 2025

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042930.D
 Acq On : 17 Sep 2025 10:48
 Operator : SY/MD
 Sample : VSTDICC002
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC002

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:27:39 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2

QLast Update : Thu Sep 18 02:25:28 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	164907	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.958	114	435071	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	369327	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.377 95 288273 9.986 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 99.900%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.499	85	46802	1.987	ppbv	95
3) Chlorodifluoromethane	1.476	51	49186	1.983	ppbv	100
4) Chloromethane	1.534	50	17675	1.867	ppbv	99
5) Vinyl Chloride	1.580	62	16393	1.836	ppbv #	86
6) Bromomethane	1.670	94	5883	1.896	ppbv	92
7) Chloroethane	1.706	64	6270	1.906	ppbv	96
8) Dichlorotetrafluoroethane	1.554	85	36390	1.947	ppbv	98
9) Propene	1.482	41	18062	1.994	ppbv	99
10) Heptane	4.981	43	44603	1.988	ppbv	99
11) Trichlorofluoromethane	1.877	101	45172	1.941	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.140	101	35102	1.931	ppbv	99
13) Ethanol	1.722	45	1853	2.007	ppbv	86
14) Bromoethene	1.780	108	12079	1.865	ppbv	99
15) Acetone	1.835	43	41083	2.028	ppbv	94
16) 1,3-Butadiene	1.609	39	15580	1.839	ppbv	97
17) tert-Butyl alcohol	2.042	59	36744	1.884	ppbv	98
18) 1,1-Dichloroethene	2.036	96	15909	1.999	ppbv	96
19) Isopropyl Alcohol	1.887	45	20335	1.873	ppbv #	1
20) Methylene Chloride	2.062	84	16824	1.908	ppbv	97
21) Allyl Chloride	2.097	41	26855	1.956	ppbv	98
22) trans-1,2-Dichloroethene	2.340	96	17418	1.931	ppbv	96
23) Vinyl Acetate	2.463	43	44744	1.901	ppbv	99
24) 1,1-Dichloroethane	2.408	63	34643	1.944	ppbv	97
25) Ethyl Acetate	2.835	43	86728	2.005	ppbv	99
26) Hexane	2.829	57	37751	2.034	ppbv	97
27) Carbon Disulfide	2.152	76	43441	1.897	ppbv #	71
28) Methyl tert-Butyl Ether	2.441	73	18935	1.856	ppbv	97
29) Chloroform	2.848	83	60110	1.981	ppbv	96
30) Cyclohexane	3.855	84	26874m	1.922	ppbv	
31) cis-1,2-Dichloroethene	2.722	61	36341	2.005	ppbv	99
32) 1,1,1-Trichloroethane	3.369	97	54810	1.931	ppbv	100
34) 2-Butanone	2.560	43	57314	2.032	ppbv	100
35) Carbon Tetrachloride	3.764	117	55818	1.805	ppbv	99
36) Benzene	3.658	78	73010	1.924	ppbv	95
37) 1,2-Dichloroethane	3.221	62	44529	1.959	ppbv	100
38) Trichloroethene	4.548	130	30836	1.795	ppbv	98
39) 1,2-Dichloropropane	4.311	63	29453m	1.921	ppbv	
40) 1,4-Dioxane	4.599	88	9832m	1.807	ppbv	
41) Tetrahydrofuran	3.059	42	25945	1.871	ppbv	99
42) Bromodichloromethane	4.493	83	62170	1.906	ppbv	94
43) Methyl Methacrylate	4.884	69	23990m	1.885	ppbv	
44) 2,2,4-Trimethylpentane	4.645	57	127979	2.022	ppbv	99
45) t-1,3-Dichloropropene	6.415	75	24591	1.836	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042930.D
 Acq On : 17 Sep 2025 10:48
 Operator : SY/MD
 Sample : VSTDIC002
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC002

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:27:39 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Thu Sep 18 02:25:28 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	33947	1.838	ppbv	96
47) 1,1,2-Trichloroethane	6.580	97	30589m	1.956	ppbv	
48) Dibromochloromethane	7.389	129	46665	1.905	ppbv	98
49) Bromoform	9.483	173	36951	1.933	ppbv	99
50) 4-Methyl-2-Pentanone	5.761	43	63384	1.886	ppbv	99
51) 2-Hexanone	7.441	43	44357	1.793	ppbv #	95
52) Tetrachloroethene	8.228	164	22859m	1.937	ppbv	
53) Toluene	6.939	91	65999m	1.866	ppbv	
54) 1,2-Dibromoethane	7.655	107	38670	1.923	ppbv	94
56) 1,1,1,2-Tetrachloroethane	8.927	131	36390	1.934	ppbv	95
57) Chlorobenzene	8.924	112	66303	1.942	ppbv	98
58) Ethyl Benzene	9.357	91	88328	1.856	ppbv	99
59) m/p-Xylene	9.551	91	163157m	4.057	ppbv	
60) o-Xylene	9.966	91	80966	2.025	ppbv	99
61) Styrene	9.875	104	25108	1.690	ppbv	98
62) Isopropylbenzene	10.542	105	113843	1.955	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.962	83	55150	1.910	ppbv	97
64) n-propylbenzene	10.992	120	30484	2.019	ppbv	97
65) tert-Butylbenzene	11.532	119	103228	2.074	ppbv	99
66) Benzyl Chloride	11.616	91	8657	1.872	ppbv	98
67) sec-Butylbenzene	11.769	105	154393	2.039	ppbv	99
69) p-Isopropyltoluene	11.927	119	118634	2.033	ppbv	98
70) n-Butylbenzene	12.283	91	126244	1.872	ppbv	98
71) 2-Chlorotoluene	10.904	91	82459	1.908	ppbv	100
72) 4-Ethyltoluene	11.128	105	92502	1.838	ppbv	98
73) 1,3,5-Trimethylbenzene	11.205	105	79446	2.009	ppbv	97
74) 1,2,4-Trimethylbenzene	11.539	105	98757	2.125	ppbv #	84
75) 1,3-Dichlorobenzene	11.607	146	59236	2.010	ppbv	98
76) 1,4-Dichlorobenzene	11.671	146	56252	1.984	ppbv	98
77) 1,2-Dichlorobenzene	11.947	146	60057	2.020	ppbv	100
78) Hexachloro-1,3-Butadiene	13.882	225	37895	1.996	ppbv	98
79) Naphthalene	13.513	128	71767	1.785	ppbv	98
80) Naphthalene,2-methyl-	14.461	142	16473	1.745	ppbv	100
81) 1,2,4-Trichlorobenzene	13.442	180	35795	1.886	ppbv	96

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042931.D
 Acq On : 17 Sep 2025 11:23
 Operator : SY/MD
 Sample : VSTDICC001
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC001

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:28:34 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2

QLast Update : Thu Sep 18 02:25:28 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	158272	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.958	114	413841	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	354619	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.377 95 277264 10.003 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.000%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.499	85	22884	1.012	ppbv	94
3) Chlorodifluoromethane	1.476	51	24279	1.020	ppbv	100
4) Chloromethane	1.534	50	9850	1.084	ppbv	98
5) Vinyl Chloride	1.583	62	7971	0.930	ppbv #	83
6) Bromomethane	1.670	94	2772	0.931	ppbv #	80
7) Chloroethane	1.706	64	3374	1.069	ppbv	93
8) Dichlorotetrafluoroethane	1.557	85	18455	1.029	ppbv	96
9) Propene	1.486	41	8924	1.027	ppbv	98
10) Heptane	4.981	43	19516m	0.906	ppbv	
11) Trichlorofluoromethane	1.877	101	23589	1.056	ppbv	90
12) 1,1,2-Trichlorotrifluo...	2.140	101	17971	1.030	ppbv	98
13) Ethanol	1.722	45	926	1.045	ppbv #	50
14) Bromoethene	1.783	108	6547	1.053	ppbv #	96
15) Acetone	1.839	43	21505	1.106	ppbv	95
16) 1,3-Butadiene	1.609	39	8380	1.031	ppbv	93
17) tert-Butyl alcohol	2.042	59	19857	1.061	ppbv	99
18) 1,1-Dichloroethene	2.036	96	7747	1.014	ppbv	95
19) Isopropyl Alcohol	1.887	45	10765	1.033	ppbv #	1
20) Methylene Chloride	2.062	84	9665	1.142	ppbv	95
21) Allyl Chloride	2.097	41	12905	0.979	ppbv	98
22) trans-1,2-Dichloroethene	2.343	96	9099	1.051	ppbv	91
23) Vinyl Acetate	2.463	43	20319	0.900	ppbv #	96
24) 1,1-Dichloroethane	2.411	63	17097	1.000	ppbv	98
25) Ethyl Acetate	2.835	43	39603	0.954	ppbv	98
26) Hexane	2.826	57	16236	0.911	ppbv	87
27) Carbon Disulfide	2.152	76	23073	1.050	ppbv #	79
28) Methyl tert-Butyl Ether	2.444	73	9873	1.009	ppbv	91
29) Chloroform	2.848	83	29928	1.028	ppbv	93
30) Cyclohexane	3.861	84	11631m	0.867	ppbv	
31) cis-1,2-Dichloroethene	2.722	61	17192	0.988	ppbv	94
32) 1,1,1-Trichloroethane	3.366	97	26292	0.965	ppbv	99
34) 2-Butanone	2.557	43	25950	0.967	ppbv	99
35) Carbon Tetrachloride	3.761	117	28194	0.958	ppbv	91
36) Benzene	3.654	78	34301	0.950	ppbv	95
37) 1,2-Dichloroethane	3.217	62	21496	0.994	ppbv	100
38) Trichloroethene	4.551	130	14609	0.894	ppbv	98
39) 1,2-Dichloropropane	4.318	63	14533m	0.996	ppbv	
40) 1,4-Dioxane	4.599	88	5054m	0.977	ppbv	
41) Tetrahydrofuran	3.062	42	10997	0.834	ppbv	98
42) Bromodichloromethane	4.493	83	30707	0.990	ppbv	99
43) Methyl Methacrylate	4.887	69	10283m	0.849	ppbv	
44) 2,2,4-Trimethylpentane	4.638	57	53804	0.894	ppbv	92
45) t-1,3-Dichloropropene	6.415	75	11328m	0.889	ppbv	

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042931.D
 Acq On : 17 Sep 2025 11:23
 Operator : SY/MD
 Sample : VSTDICC001
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC001

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:28:34 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Thu Sep 18 02:25:28 2025

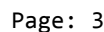
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.599	75	15914m	0.906	ppbv	
47) 1,1,2-Trichloroethane	6.587	97	14628m	0.983	ppbv	
48) Dibromochloromethane	7.386	129	23257	0.998	ppbv	98
49) Bromoform	9.487	173	16990	0.934	ppbv	98
50) 4-Methyl-2-Pentanone	5.765	43	27486m	0.860	ppbv	
51) 2-Hexanone	7.441	43	18604m	0.791	ppbv	
52) Tetrachloroethene	8.224	164	10494	0.935	ppbv	92
53) Toluene	6.933	91	27724m	0.824	ppbv	
54) 1,2-Dibromoethane	7.655	107	18521	0.968	ppbv	97
56) 1,1,1,2-Tetrachloroethane	8.927	131	18170	1.006	ppbv #	1
57) Chlorobenzene	8.924	112	31407	0.958	ppbv	95
58) Ethyl Benzene	9.357	91	36048	0.789	ppbv	94
59) m/p-Xylene	9.551	91	62681m	1.623	ppbv	
60) o-Xylene	9.966	91	29945	0.780	ppbv	98
61) Styrene	9.872	104	10595	1.046	ppbv	97
62) Isopropylbenzene	10.542	105	46332	0.829	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.966	83	25646	0.925	ppbv	98
64) n-propylbenzene	10.992	120	12151	0.838	ppbv	97
65) tert-Butylbenzene	11.535	119	39439	0.825	ppbv	96
66) Benzyl Chloride	11.616	91	3848	0.867	ppbv	94
67) sec-Butylbenzene	11.769	105	63758	0.877	ppbv	98
69) p-Isopropyltoluene	11.927	119	45477	0.812	ppbv	97
70) n-Butylbenzene	12.283	91	46106	0.899	ppbv	95
71) 2-Chlorotoluene	10.901	91	33505	0.808	ppbv	99
72) 4-Ethyltoluene	11.124	105	34655	0.937	ppbv #	97
73) 1,3,5-Trimethylbenzene	11.202	105	30778	0.810	ppbv	90
74) 1,2,4-Trimethylbenzene	11.535	105	38075	0.853	ppbv	96
75) 1,3-Dichlorobenzene	11.607	146	25315	0.895	ppbv	95
76) 1,4-Dichlorobenzene	11.675	146	23918	0.879	ppbv	97
77) 1,2-Dichlorobenzene	11.947	146	27862	0.976	ppbv	99
78) Hexachloro-1,3-Butadiene	13.882	225	17581	0.964	ppbv	98
79) Naphthalene	13.513	128	21593	0.809	ppbv	95
80) Naphthalene,2-methyl-	14.461	142	5523	1.103	ppbv	94
81) 1,2,4-Trichlorobenzene	13.442	180	12986	0.977	ppbv	96

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

Manual Integrations

Quant Time: Sep 18 02:28:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Sep 18 02:25:28 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042932.D
 Acq On : 17 Sep 2025 11:58
 Operator : SY/MD
 Sample : VSTDICC0.5
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.5

Quant Time: Sep 18 02:29:24 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2025

QLast Update : Thu Sep 18 02:25:28 2025

Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/18/2025
 Supervised By : Mahesh Dadoda 09/18/2025

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

Internal Standards						
1) Bromochloromethane	2.787	49	156392	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	401247	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	338744	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	10.377	95	263700	9.959	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.600%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.499	85	11457	0.513	ppbv	99
3) Chlorodifluoromethane	1.476	51	12168	0.517	ppbv	100
4) Chloromethane	1.534	50	4596	0.512	ppbv #	84
5) Vinyl Chloride	1.580	62	4260	0.503	ppbv	90
6) Bromomethane	1.667	94	1694	0.576	ppbv #	79
7) Chloroethane	1.703	64	1499	0.481	ppbv	91
8) Dichlorotetrafluoroethane	1.554	85	9022	0.509	ppbv	91
9) Propene	1.483	41	4027	0.469	ppbv	90
10) Heptane	4.981	43	7851m	0.369	ppbv	
11) Trichlorofluoromethane	1.877	101	10951	0.496	ppbv	86
12) 1,1,2-Trichlorotrifluo...	2.140	101	8872	0.515	ppbv	100
13) Ethanol	1.722	45	545m	0.622	ppbv	
14) Bromoethene	1.780	108	3180	0.518	ppbv	97
15) Acetone	1.835	43	11107	0.578	ppbv	97
16) 1,3-Butadiene	1.609	39	4527	0.563	ppbv	98
17) tert-Butyl alcohol	2.042	59	9574	0.518	ppbv	100
18) 1,1-Dichloroethene	2.033	96	3704	0.491	ppbv	97
19) Isopropyl Alcohol	1.887	45	5637	0.547	ppbv #	97
20) Methylene Chloride	2.062	84	5602	0.670	ppbv #	89
21) Allyl Chloride	2.094	41	6908	0.531	ppbv	91
22) trans-1,2-Dichloroethene	2.340	96	4297	0.502	ppbv	89
23) Vinyl Acetate	2.463	43	10743	0.481	ppbv #	94
24) 1,1-Dichloroethane	2.408	63	8640	0.511	ppbv	98
25) Ethyl Acetate	2.839	43	18457	0.450	ppbv	97
26) Hexane	2.826	57	7346	0.417	ppbv #	83
27) Carbon Disulfide	2.149	76	11231	0.517	ppbv #	1
28) Methyl tert-Butyl Ether	2.441	73	5027	0.520	ppbv	96
29) Chloroform	2.845	83	14102	0.490	ppbv	94
30) Cyclohexane	3.852	84	4888m	0.369	ppbv	
31) cis-1,2-Dichloroethene	2.719	61	7566	0.440	ppbv #	87
32) 1,1,1-Trichloroethane	3.366	97	13029	0.484	ppbv	95
34) 2-Butanone	2.560	43	11954	0.460	ppbv	91
35) Carbon Tetrachloride	3.755	117	13842m	0.485	ppbv	
36) Benzene	3.654	78	16361	0.467	ppbv #	86
37) 1,2-Dichloroethane	3.217	62	10620	0.507	ppbv	97
38) Trichloroethene	4.548	130	7478m	0.472	ppbv	
39) 1,2-Dichloropropane	4.308	63	7185	0.508	ppbv #	81
40) 1,4-Dioxane	4.606	88	1992m	0.397	ppbv	
41) Tetrahydrofuran	3.059	42	5821m	0.455	ppbv	
42) Bromodichloromethane	4.489	83	15717m	0.522	ppbv	
43) Methyl Methacrylate	4.881	69	4550m	0.388	ppbv	
44) 2,2,4-Trimethylpentane	4.638	57	23481m	0.402	ppbv	
45) t-1,3-Dichloropropene	6.415	75	5044m	0.408	ppbv	

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042932.D
 Acq On : 17 Sep 2025 11:58
 Operator : SY/MD
 Sample : VSTDICC0.5
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.5

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:29:24 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Thu Sep 18 02:25:28 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	7341m	0.431	ppbv	
47) 1,1,2-Trichloroethane	6.583	97	7061m	0.490	ppbv	
48) Dibromochloromethane	7.380	129	10997m	0.487	ppbv	
49) Bromoform	9.484	173	8614	0.489	ppbv	99
50) 4-Methyl-2-Pentanone	5.761	43	11932m	0.385	ppbv	
51) 2-Hexanone	7.444	43	8494m	0.372	ppbv	
52) Tetrachloroethene	8.234	164	5126m	0.471	ppbv	
53) Toluene	6.933	91	11993	0.368	ppbv	98
54) 1,2-Dibromoethane	7.658	107	8754m	0.472	ppbv	
56) 1,1,1,2-Tetrachloroethane	8.927	131	8760m	0.507	ppbv	
57) Chlorobenzene	8.924	112	16080	0.514	ppbv #	92
58) Ethyl Benzene	9.354	91	15958	0.366	ppbv	91
59) m/p-Xylene	9.539	91	24990m	0.678	ppbv	
60) o-Xylene	9.963	91	12302	0.336	ppbv	100
61) Styrene	9.869	104	4154	0.748	ppbv	93
62) Isopropylbenzene	10.539	105	19343	0.362	ppbv	98
63) 1,1,2,2-Tetrachloroethane	9.959	83	12366m	0.467	ppbv	
64) n-propylbenzene	10.989	120	4697	0.339	ppbv	90
65) tert-Butylbenzene	11.529	119	13853	0.304	ppbv	91
66) Benzyl Chloride	11.613	91	1547	0.365	ppbv	95
67) sec-Butylbenzene	11.769	105	23691	0.341	ppbv	98
69) p-Isopropyltoluene	11.924	119	16694	0.312	ppbv	95
70) n-Butylbenzene	12.280	91	16636	0.527	ppbv	91
71) 2-Chlorotoluene	10.898	91	14134	0.357	ppbv	98
72) 4-Ethyltoluene	11.124	105	13199	0.591	ppbv #	95
73) 1,3,5-Trimethylbenzene	11.202	105	11354	0.313	ppbv	94
74) 1,2,4-Trimethylbenzene	11.539	105	13232	0.310	ppbv #	79
75) 1,3-Dichlorobenzene	11.607	146	11911	0.441	ppbv	98
76) 1,4-Dichlorobenzene	11.671	146	10649	0.410	ppbv	98
77) 1,2-Dichlorobenzene	11.947	146	11678	0.428	ppbv	97
78) Hexachloro-1,3-Butadiene	13.879	225	9035	0.519	ppbv	97
79) Naphthalene	13.513	128	7418	0.523	ppbv #	94
80) Naphthalene,2-methyl-	14.458	142	2905	0.949	ppbv	96
81) 1,2,4-Trichlorobenzene	13.439	180	4520	0.626	ppbv	98

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042933.D
 Acq On : 17 Sep 2025 12:32
 Operator : SY/MD
 Sample : VSTDICC0.1
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.1

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:30:14 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 2
 QLast Update : Thu Sep 18 02:25:28 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	155710	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	390094	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	326535	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	245820	9.631	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.300%
Target Compounds						
						Qvalue
5) Vinyl Chloride	1.583	62	912	0.108	ppbv	92
32) 1,1,1-Trichloroethane	3.376	97	2351m	0.088	ppbv	
35) Carbon Tetrachloride	3.765	117	2804m	0.101	ppbv	
38) Trichloroethene	4.548	130	1467m	0.095	ppbv	
52) Tetrachloroethene	8.225	164	875m	0.083	ppbv	
54) 1,2-Dibromoethane	7.661	107	1690m	0.094	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.966	83	2442m	0.096	ppbv	
79) Naphthalene	13.520	128	1286m	0.391	ppbv	

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

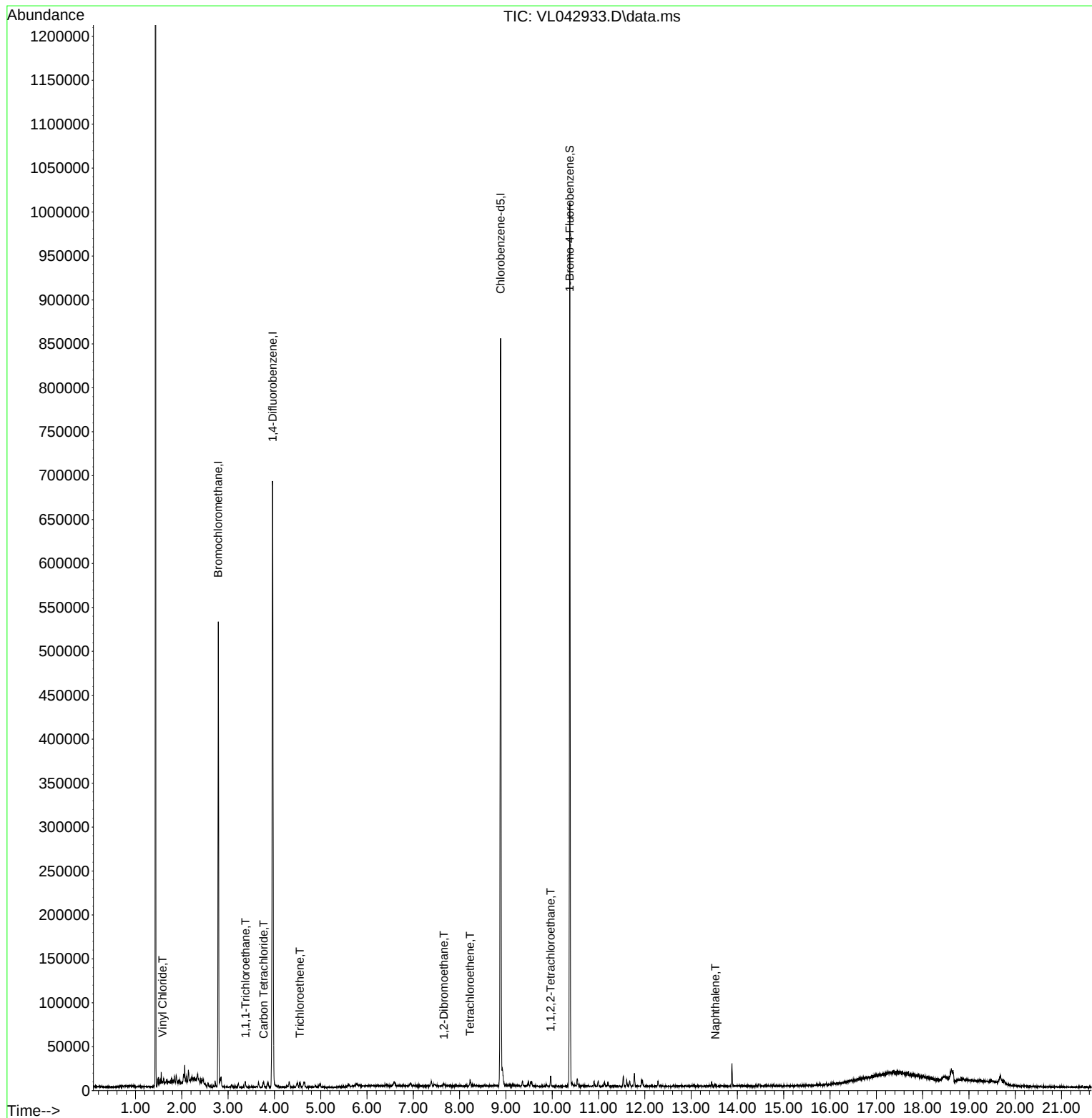
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
Data File : VL042933.D
Acq On : 17 Sep 2025 12:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

Reviewed By : Semsettin Yesilyurt 09/18/2025
Supervised By : Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:30:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Thu Sep 18 02:25:28 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042934.D
 Acq On : 17 Sep 2025 13:07
 Operator : SY/MD
 Sample : VSTDICC0.03
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.03

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 09/18/2025
 Supervised By : Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:31:06 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 2
 QLast Update : Thu Sep 18 02:25:28 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	151993	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	373216	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	318402	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	236647	9.509	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.100%
Target Compounds						
						Qvalue
5) Vinyl Chloride	1.583	62	305	0.037	ppbv	93
32) 1,1,1-Trichloroethane	3.376	97	970m	0.037	ppbv	
35) Carbon Tetrachloride	3.771	117	993m	0.037	ppbv	
38) Trichloroethene	4.551	130	563m	0.038	ppbv	
52) Tetrachloroethene	8.221	164	366m	0.036	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.963	83	927m	0.037	ppbv	

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

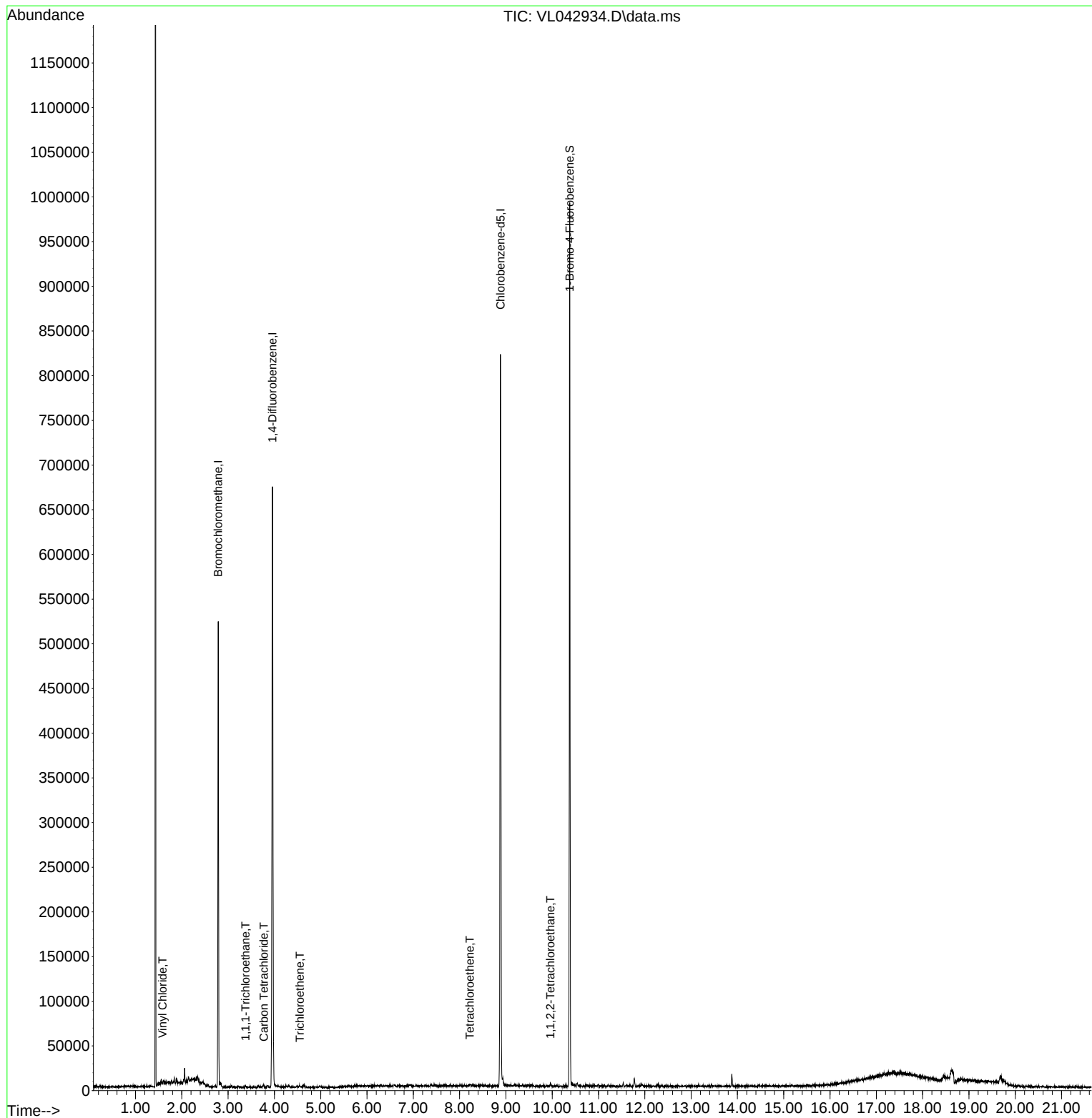
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
Data File : VL042934.D
Acq On : 17 Sep 2025 13:07
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Sep 18 02:31:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Thu Sep 18 02:25:28 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By : Semsettin Yesilyurt 09/18/2025
Supervised By : Mahesh Dadoda 09/18/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042935.D
 Acq On : 17 Sep 2025 13:42
 Operator : SY/MD
 Sample : VSTDICCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:32:00 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2025

QLast Update : Thu Sep 18 02:25:28 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	160573	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	415318	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	353249	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.380 95 295803 10.713 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 107.100%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.502	85	232093	10.119	ppbv	100
3) Chlorodifluoromethane	1.479	51	238232	9.865	ppbv	100
4) Chloromethane	1.534	50	92202	10.003	ppbv	100
5) Vinyl Chloride	1.583	62	80228	9.226	ppbv	100
6) Bromomethane	1.670	94	30537	10.105	ppbv	100
7) Chloroethane	1.706	64	32281	10.079	ppbv	100
8) Dichlorotetrafluoroethane	1.557	85	183602	10.089	ppbv	100
9) Propene	1.486	41	86426	9.800	ppbv	100
10) Heptane	4.988	43	259422	11.872	ppbv	100
11) Trichlorofluoromethane	1.881	101	229480	10.128	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.143	101	178790	10.100	ppbv	100
13) Ethanol	1.722	45	7630	8.486	ppbv	98
14) Bromoethene	1.784	108	62744	9.949	ppbv	100
15) Acetone	1.839	43	172060	8.724	ppbv	100
16) 1,3-Butadiene	1.612	39	79400	9.624	ppbv	100
17) tert-Butyl alcohol	2.042	59	187824	9.890	ppbv	100
18) 1,1-Dichloroethene	2.036	96	78341	10.110	ppbv	100
19) Isopropyl Alcohol	1.887	45	103481	9.786	ppbv	100
20) Methylene Chloride	2.065	84	67680	7.882	ppbv	100
21) Allyl Chloride	2.097	41	132660	9.923	ppbv	100
22) trans-1,2-Dichloroethene	2.343	96	88151	10.037	ppbv	100
23) Vinyl Acetate	2.466	43	238255	10.397	ppbv	100
24) 1,1-Dichloroethane	2.411	63	176500	10.174	ppbv	100
25) Ethyl Acetate	2.835	43	455318	10.811	ppbv	100
26) Hexane	2.829	57	199382	11.031	ppbv	100
27) Carbon Disulfide	2.152	76	220787	9.904	ppbv	99
28) Methyl tert-Butyl Ether	2.444	73	99133	9.982	ppbv	100
29) Chloroform	2.852	83	299464	10.137	ppbv	100
30) Cyclohexane	3.861	84	162355	11.924	ppbv	100
31) cis-1,2-Dichloroethene	2.725	61	184566	10.459	ppbv	100
32) 1,1,1-Trichloroethane	3.373	97	274368	9.926	ppbv	100
34) 2-Butanone	2.560	43	280052	10.402	ppbv	100
35) Carbon Tetrachloride	3.768	117	287073	9.724	ppbv	100
36) Benzene	3.661	78	383581	10.588	ppbv	100
37) 1,2-Dichloroethane	3.221	62	218944	10.091	ppbv	100
38) Trichloroethene	4.557	130	166868	10.176	ppbv	100
39) 1,2-Dichloropropane	4.318	63	148415	10.139	ppbv	100
40) 1,4-Dioxane	4.583	88	60929	11.733	ppbv #	100
41) Tetrahydrofuran	3.056	42	150567	11.375	ppbv	100
42) Bromodichloromethane	4.496	83	316501	10.165	ppbv	100
43) Methyl Methacrylate	4.884	69	143457	11.807	ppbv	100
44) 2,2,4-Trimethylpentane	4.648	57	700623	11.595	ppbv	100
45) t-1,3-Dichloropropene	6.422	75	146102	11.424	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042935.D
 Acq On : 17 Sep 2025 13:42
 Operator : SY/MD
 Sample : VSTDICCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:32:00 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2025

QLast Update : Thu Sep 18 02:25:28 2025

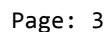
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.609	75	197003	11.174	ppbv	100
47) 1,1,2-Trichloroethane	6.587	97	156042	10.453	ppbv	100
48) Dibromochloromethane	7.393	129	244251	10.447	ppbv	100
49) Bromoform	9.490	173	196118	10.747	ppbv	100
50) 4-Methyl-2-Pentanone	5.758	43	387522	12.080	ppbv	100
51) 2-Hexanone	7.441	43	307420	13.020	ppbv	100
52) Tetrachloroethene	8.231	164	115985	10.295	ppbv	100
53) Toluene	6.939	91	415754	12.313	ppbv	100
54) 1,2-Dibromoethane	7.658	107	211125	10.997	ppbv	100
56) 1,1,1,2-Tetrachloroethane	8.930	131	186222	10.345	ppbv	100
57) Chlorobenzene	8.927	112	342500	10.490	ppbv	100
58) Ethyl Benzene	9.360	91	582982	12.810	ppbv	100
59) m/p-Xylene	9.558	91	983541m	25.571	ppbv	
60) o-Xylene	9.969	91	495406	12.957	ppbv	100
61) Styrene	9.875	104	196509	9.941	ppbv	100
62) Isopropylbenzene	10.545	105	707651	12.705	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.966	83	283680	10.272	ppbv	100
64) n-propylbenzene	10.992	120	182766	12.656	ppbv	100
65) tert-Butylbenzene	11.536	119	619284	13.011	ppbv	100
66) Benzyl Chloride	11.620	91	53013	11.987	ppbv	100
67) sec-Butylbenzene	11.772	105	904817	12.496	ppbv	100
69) p-Isopropyltoluene	11.930	119	730122	13.084	ppbv	100
70) n-Butylbenzene	12.286	91	787146	10.537	ppbv	100
71) 2-Chlorotoluene	10.904	91	530980	12.848	ppbv	100
72) 4-Ethyltoluene	11.131	105	597492	10.333	ppbv	100
73) 1,3,5-Trimethylbenzene	11.209	105	493710	13.051	ppbv	100
74) 1,2,4-Trimethylbenzene	11.539	105	566106	12.734	ppbv	100
75) 1,3-Dichlorobenzene	11.613	146	319203	11.326	ppbv	100
76) 1,4-Dichlorobenzene	11.678	146	322554	11.896	ppbv	100
77) 1,2-Dichlorobenzene	11.950	146	316961	11.147	ppbv	100
78) Hexachloro-1,3-Butadiene	13.885	225	185221	10.199	ppbv	100
79) Naphthalene	13.516	128	474749	10.151	ppbv	100
80) Naphthalene,2-methyl-	14.461	142	132693	9.058	ppbv	100
81) 1,2,4-Trichlorobenzene	13.445	180	224163	9.993	ppbv	100

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

Manual Integrations

Quant Time: Sep 18 02:32:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Thu Sep 18 02:25:28 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042936.D
 Acq On : 17 Sep 2025 14:17
 Operator : SY/MD
 Sample : VSTDICC015
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC015

Quant Time: Sep 18 02:32:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2
 QLast Update : Thu Sep 18 02:25:28 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/18/2025
 Supervised By : Mahesh Dadoda 09/18/2025

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

Internal Standards						
1) Bromochloromethane	2.790	49	166880	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	435144	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	378127	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	10.380	95	301418	10.198	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.000%

Target Compounds	Qvalue					
2) Dichlorodifluoromethane	1.499	85	342031	14.349	ppbv	99
3) Chlorodifluoromethane	1.476	51	364078	14.507	ppbv	100
4) Chloromethane	1.534	50	137673	14.371	ppbv	96
5) Vinyl Chloride	1.583	62	122964	13.606	ppbv	98
6) Bromomethane	1.670	94	45220	14.399	ppbv	96
7) Chloroethane	1.706	64	50396	15.140	ppbv	92
8) Dichlorotetrafluoroethane	1.557	85	275345	14.559	ppbv	99
9) Propene	1.486	41	145520	15.877	ppbv	98
10) Heptane	4.985	43	400273	17.626	ppbv	99
11) Trichlorofluoromethane	1.881	101	341853	14.517	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.143	101	266384	14.480	ppbv	100
13) Ethanol	1.722	45	12036	12.880	ppbv	88
14) Bromoethene	1.784	108	96723	14.758	ppbv	98
15) Acetone	1.835	43	261592	12.762	ppbv	99
16) 1,3-Butadiene	1.612	39	123576	14.413	ppbv	99
17) tert-Butyl alcohol	2.039	59	288104	14.597	ppbv	99
18) 1,1-Dichloroethene	2.036	96	119994	14.901	ppbv	96
19) Isopropyl Alcohol	1.887	45	157857	14.364	ppbv #	1
20) Methylene Chloride	2.065	84	103933	11.646	ppbv	97
21) Allyl Chloride	2.098	41	206205	14.841	ppbv	99
22) trans-1,2-Dichloroethene	2.344	96	133482	14.624	ppbv	97
23) Vinyl Acetate	2.463	43	409957	17.213	ppbv	98
24) 1,1-Dichloroethane	2.412	63	267165	14.818	ppbv	99
25) Ethyl Acetate	2.836	43	697465	15.935	ppbv	100
26) Hexane	2.829	57	319529	17.011	ppbv	94
27) Carbon Disulfide	2.153	76	339264	14.644	ppbv	99
28) Methyl tert-Butyl Ether	2.441	73	158791	15.384	ppbv	99
29) Chloroform	2.852	83	454938	14.817	ppbv	96
30) Cyclohexane	3.862	84	263817	18.643	ppbv	99
31) cis-1,2-Dichloroethene	2.725	61	297831	16.240	ppbv	98
32) 1,1,1-Trichloroethane	3.370	97	429312	14.944	ppbv	99
34) 2-Butanone	2.557	43	447323	15.858	ppbv	97
35) Carbon Tetrachloride	3.768	117	434961	14.062	ppbv	99
36) Benzene	3.661	78	622923	16.412	ppbv	100
37) 1,2-Dichloroethane	3.221	62	342237	15.055	ppbv	99
38) Trichloroethene	4.554	130	263119	15.314	ppbv	95
39) 1,2-Dichloropropane	4.318	63	233331	15.214	ppbv	97
40) 1,4-Dioxane	4.583	88	94289	17.330	ppbv #	96
41) Tetrahydrofuran	3.052	42	252880	18.235	ppbv	99
42) Bromodichloromethane	4.493	83	487210	14.935	ppbv	99
43) Methyl Methacrylate	4.881	69	237510	18.657	ppbv	98
44) 2,2,4-Trimethylpentane	4.645	57	1074444	16.972	ppbv	99
45) t-1,3-Dichloropropene	6.422	75	248122	18.517	ppbv	94

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042936.D
 Acq On : 17 Sep 2025 14:17
 Operator : SY/MD
 Sample : VSTDIC015
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDIC015

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 09/18/2025
 Supervised By : Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 02:32:56 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Thu Sep 18 02:25:28 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.606	75	331381	17.939	ppbv	97
47) 1,1,2-Trichloroethane	6.587	97	237995	15.216	ppbv	98
48) Dibromochloromethane	7.393	129	378815	15.464	ppbv	99
49) Bromoform	9.490	173	300343	15.709	ppbv	100
50) 4-Methyl-2-Pentanone	5.755	43	623273	18.544	ppbv	98
51) 2-Hexanone	7.441	43	492844	19.922	ppbv #	98
52) Tetrachloroethene	8.231	164	183151	15.516	ppbv	96
53) Toluene	6.940	91	678667	19.184	ppbv	99
54) 1,2-Dibromoethane	7.658	107	329410	16.376	ppbv	96
56) 1,1,1,2-Tetrachloroethane	8.930	131	282351	14.654	ppbv	99
57) Chlorobenzene	8.927	112	521288	14.916	ppbv	97
58) Ethyl Benzene	9.361	91	928410	19.058	ppbv	100
59) m/p-Xylene	9.558	91	1503527m	36.519	ppbv	
60) o-Xylene	9.969	91	761569	18.607	ppbv	100
61) Styrene	9.875	104	325087	15.069	ppbv	99
62) Isopropylbenzene	10.542	105	1072342	17.986	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.969	83	426688	14.434	ppbv	98
64) n-propylbenzene	10.995	120	280188	18.126	ppbv	96
65) tert-Butylbenzene	11.536	119	939322	18.437	ppbv	100
66) Benzyl Chloride	11.620	91	90114	19.035	ppbv	99
67) sec-Butylbenzene	11.772	105	1361807	17.569	ppbv	100
69) p-Isopropyltoluene	11.930	119	1110321	18.588	ppbv	99
70) n-Butylbenzene	12.283	91	1182368	14.665	ppbv	98
71) 2-Chlorotoluene	10.904	91	823050	18.604	ppbv	99
72) 4-Ethyltoluene	11.128	105	926161	14.801	ppbv	100
73) 1,3,5-Trimethylbenzene	11.209	105	761800	18.813	ppbv	100
74) 1,2,4-Trimethylbenzene	11.542	105	849558	17.853	ppbv #	87
75) 1,3-Dichlorobenzene	11.610	146	491485	16.291	ppbv	99
76) 1,4-Dichlorobenzene	11.675	146	487745	16.805	ppbv	99
77) 1,2-Dichlorobenzene	11.950	146	476080	15.641	ppbv	100
78) Hexachloro-1,3-Butadiene	13.882	225	285795	14.702	ppbv	99
79) Naphthalene	13.516	128	758929	14.938	ppbv	99
80) Naphthalene,2-methyl-	14.458	142	254607	15.635	ppbv	99
81) 1,2,4-Trichlorobenzene	13.442	180	365929	15.017	ppbv	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042937.D
 Acq On : 17 Sep 2025 14:52
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL091725

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 03:00:18 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2

QLast Update : Thu Sep 18 02:57:46 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	163811	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.958	114	429845	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	368077	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.377 95 295691 10.278 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 102.800%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.499	85	229111	9.792	ppbv	99
3) Chlorodifluoromethane	1.476	51	246816	10.019	ppbv	99
4) Chloromethane	1.534	50	88317	9.392	ppbv	98
5) Vinyl Chloride	1.580	62	79666	8.980	ppbv	97
6) Bromomethane	1.667	94	29113	9.444	ppbv	89
7) Chloroethane	1.706	64	32759	10.026	ppbv	98
8) Dichlorotetrafluoroethane	1.554	85	183884	9.905	ppbv	100
9) Propene	1.482	41	98232	10.919	ppbv	99
10) Heptane	4.978	43	264357	11.859	ppbv	100
11) Trichlorofluoromethane	1.877	101	228320	9.878	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.140	101	175799	9.735	ppbv	99
13) Ethanol	1.722	45	6424	7.003	ppbv	92
14) Bromoethene	1.783	108	61980	9.634	ppbv	99
15) Acetone	1.835	43	166535	8.277	ppbv	99
16) 1,3-Butadiene	1.609	39	82098	9.755	ppbv	98
17) tert-Butyl alcohol	2.039	59	195293	10.080	ppbv	99
18) 1,1-Dichloroethene	2.036	96	80688	10.208	ppbv	94
19) Isopropyl Alcohol	1.884	45	104411	9.679	ppbv #	1
20) Methylene Chloride	2.062	84	69478	7.931	ppbv	96
21) Allyl Chloride	2.097	41	135109	9.906	ppbv	99
22) trans-1,2-Dichloroethene	2.340	96	88461	9.873	ppbv	97
23) Vinyl Acetate	2.463	43	245812	10.514	ppbv	99
24) 1,1-Dichloroethane	2.408	63	178694	10.097	ppbv	99
25) Ethyl Acetate	2.832	43	465727	10.840	ppbv	99
26) Hexane	2.826	57	214492	11.633	ppbv	94
27) Carbon Disulfide	2.149	76	225070	9.897	ppbv	100
28) Methyl tert-Butyl Ether	2.437	73	100988	9.968	ppbv	99
29) Chloroform	2.848	83	303164	10.059	ppbv	99
30) Cyclohexane	3.858	84	169974	12.237	ppbv	98
31) cis-1,2-Dichloroethene	2.722	61	201417	11.188	ppbv	99
32) 1,1,1-Trichloroethane	3.369	97	282320	10.012	ppbv	99
34) 2-Butanone	2.557	43	295206	10.594	ppbv	98
35) Carbon Tetrachloride	3.761	117	287165	9.398	ppbv	98
36) Benzene	3.657	78	409107	10.911	ppbv	99
37) 1,2-Dichloroethane	3.217	62	226948	10.107	ppbv	100
38) Trichloroethene	4.548	130	176428	10.395	ppbv	98
39) 1,2-Dichloropropane	4.315	63	154678	10.208	ppbv	97
40) 1,4-Dioxane	4.580	88	62205	11.567	ppbv #	95
41) Tetrahydrofuran	3.052	42	164799	11.951	ppbv	98
42) Bromodichloromethane	4.489	83	328094	10.181	ppbv	96
43) Methyl Methacrylate	4.878	69	154971	12.345	ppbv	98
44) 2,2,4-Trimethylpentane	4.641	57	714131	11.419	ppbv	99
45) t-1,3-Dichloropropene	6.415	75	159002	12.012	ppbv	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042937.D
 Acq On : 17 Sep 2025 14:52
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL091725

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

Quant Time: Sep 18 03:00:18 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LFri Aug 2

QLast Update : Thu Sep 18 02:57:46 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	215811	11.827	ppbv	96
47) 1,1,2-Trichloroethane	6.583	97	156292	10.115	ppbv	98
48) Dibromochloromethane	7.386	129	248022	10.249	ppbv	100
49) Bromoform	9.483	173	199430	10.559	ppbv	99
50) 4-Methyl-2-Pentanone	5.748	43	401816	12.061	ppbv	99
51) 2-Hexanone	7.435	43	309643	12.515	ppbv	98
52) Tetrachloroethene	8.224	164	117822	10.191	ppbv	95
53) Toluene	6.936	91	437541	12.514	ppbv	99
54) 1,2-Dibromoethane	7.655	107	216018	10.868	ppbv	96
56) 1,1,1,2-Tetrachloroethane	8.924	131	185285	9.881	ppbv	99
57) Chlorobenzene	8.924	112	345434	10.154	ppbv	99
58) Ethyl Benzene	9.357	91	594613	12.539	ppbv	98
59) m/p-Xylene	9.535	91	992545m	24.769	ppbv	
60) o-Xylene	9.966	91	493072	12.376	ppbv	98
61) Styrene	9.875	104	207040	10.047	ppbv	99
62) Isopropylbenzene	10.542	105	705403	12.155	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.966	83	281350	9.775	ppbv	99
64) n-propylbenzene	10.992	120	182390	12.121	ppbv	98
65) tert-Butylbenzene	11.532	119	614507	12.391	ppbv	100
66) Benzyl Chloride	11.616	91	55461	12.035	ppbv	99
67) sec-Butylbenzene	11.769	105	903484	11.975	ppbv	99
69) p-Isopropyltoluene	11.927	119	728062	12.521	ppbv	99
70) n-Butylbenzene	12.283	91	776317	9.990	ppbv	99
71) 2-Chlorotoluene	10.904	91	539069	12.518	ppbv	100
72) 4-Ethyltoluene	11.128	105	596475	9.915	ppbv	100
73) 1,3,5-Trimethylbenzene	11.205	105	490000	12.431	ppbv	99
74) 1,2,4-Trimethylbenzene	11.539	105	560019	12.090	ppbv #	88
75) 1,3-Dichlorobenzene	11.610	146	320827	10.925	ppbv	99
76) 1,4-Dichlorobenzene	11.675	146	316382	11.199	ppbv	100
77) 1,2-Dichlorobenzene	11.950	146	309923	10.460	ppbv	99
78) Hexachloro-1,3-Butadiene	13.882	225	181670	9.601	ppbv	99
79) Naphthalene	13.513	128	471217	9.690	ppbv	99
80) Naphthalene,2-methyl-	14.458	142	114187	7.615	ppbv	99
81) 1,2,4-Trichlorobenzene	13.442	180	219451	9.415	ppbv	98

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042937.D
 Acq On : 17 Sep 2025 14:52
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL091725

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 09/18/2025
 Supervised By :Mahesh Dadoda 09/18/2025

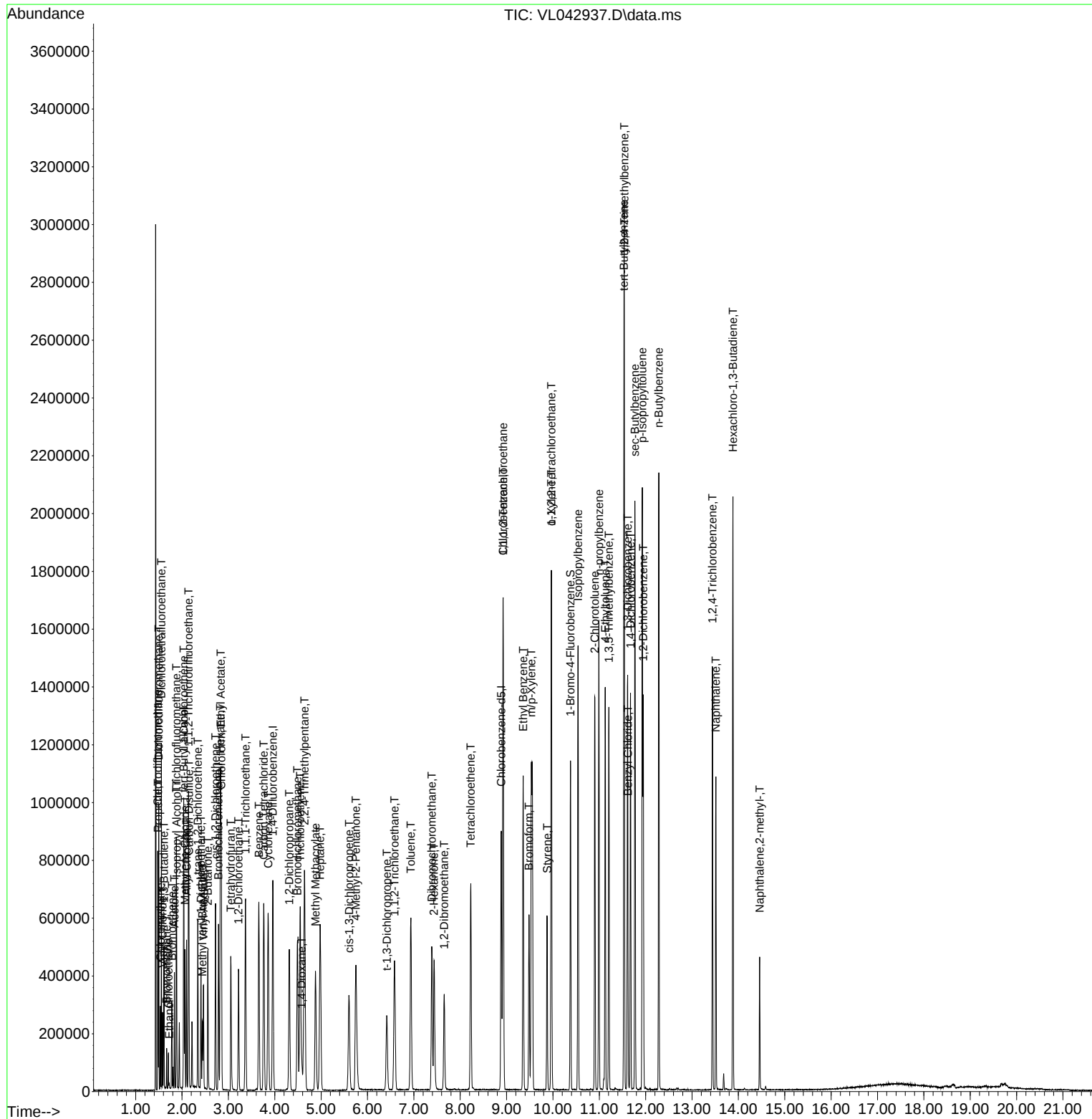
Quant Time: Sep 18 03:00:18 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug

QLast Update : Thu Sep 18 02:57:46 2025

Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042937.D
 Acq On : 17 Sep 2025 14:52
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL091725

Quant Time: Sep 18 03:00:18 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	102	0.00
2 T	Dichlorodifluoromethane	1.428	1.399	2.0	99	0.00
3	Chlorodifluoromethane	1.504	1.507	-0.2	104	0.00
4	Chloromethane	0.574	0.539	6.1	96	0.00
5 T	Vinyl Chloride	0.542	0.486	10.3	99	0.00
6 T	Bromomethane	0.188	0.178	5.3	95	0.00
7	Chloroethane	0.199	0.200	-0.5	101	0.00
8 T	Dichlorotetrafluoroethane	1.133	1.123	0.9	100	0.00
9 T	Propene	0.549	0.600	-9.3	114	0.00
10 T	Heptane	1.361	1.614	-18.6	102	0.00
11 T	Trichlorofluoromethane	1.411	1.394	1.2	99	0.00
12 T	1,1,2-Trichlorotrifluoroeth	1.102	1.073	2.6	98	0.00
13	Ethanol	0.056	0.039#	30.4#	84	0.00
14 T	Bromoethene	0.393	0.378	3.8	99	0.00
15 T	Acetone	1.228	1.017	17.2	97	0.00
16 T	1,3-Butadiene	0.514	0.501	2.5	103	0.00
17	tert-Butyl alcohol	1.183	1.192	-0.8	104	0.00
18 T	1,1-Dichloroethene	0.483	0.493	-2.1	103	0.00
19 T	Isopropyl Alcohol	0.659	0.637	3.3	101	0.00
20 T	Methylene Chloride	0.535	0.424	20.7	103	0.00
21 T	Allyl Chloride	0.833	0.825	1.0	102	0.00
22 T	trans-1,2-Dichloroethene	0.547	0.540	1.3	100	0.00
23 T	Vinyl Acetate	1.427	1.501	-5.2	103	0.00
24 T	1,1-Dichloroethane	1.080	1.091	-1.0	101	0.00
25 T	Ethyl Acetate	2.623	2.843	-8.4	102	0.00
26 T	Hexane	1.126	1.309	-16.3	108	0.00
27 T	Carbon Disulfide	1.388	1.374	1.0	102	0.00
28 T	Methyl tert-Butyl Ether	0.619	0.616	0.5	102	0.00
29 T	Chloroform	1.840	1.851	-0.6	101	0.00
30 T	Cyclohexane	0.848	1.038	-22.4	105	0.00
31 T	cis-1,2-Dichloroethene	1.099	1.230	-11.9	109	0.00
32 T	1,1,1-Trichloroethane	1.721	1.723	-0.1	103	0.00
33 I	1,4-Difluorobenzene	1.000	1.000	0.0	103	0.00
34 T	2-Butanone	0.648	0.687	-6.0	105	0.00
35 T	Carbon Tetrachloride	0.711	0.668	6.0	100	0.00
36 T	Benzene	0.872	0.952	-9.2	107	0.00
37 T	1,2-Dichloroethane	0.522	0.528	-1.1	104	0.00
38 T	Trichloroethene	0.395	0.410	-3.8	106	0.00
39 T	1,2-Dichloropropane	0.353	0.360	-2.0	104	0.00
40 T	1,4-Dioxane	0.125	0.145	-16.0	102	0.00
41 T	Tetrahydrofuran	0.321	0.383	-19.3	109	0.00
42 T	Bromodichloromethane	0.750	0.763	-1.7	104	0.00
43	Methyl Methacrylate	0.292	0.361	-23.6	108	0.00
44 T	2,2,4-Trimethylpentane	1.455	1.661	-14.2	102	0.00
45 T	t-1,3-Dichloropropene	0.308	0.370	-20.1	109	0.00
46 T	cis-1,3-Dichloropropene	0.425	0.502	-18.1	110	0.00
47 T	1,1,2-Trichloroethane	0.359	0.364	-1.4	100	0.00
48 T	Dibromochloromethane	0.563	0.577	-2.5	102	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042937.D
 Acq On : 17 Sep 2025 14:52
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL091725

Quant Time: Sep 18 03:00:18 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	Bromoform	0.439	0.464	-5.7	102	0.00
50 T	4-Methyl-2-Pentanone	0.775	0.935	-20.6	104	0.00
51 T	2-Hexanone	0.576	0.720	-25.0	101	0.00
52 T	Tetrachloroethene	0.269	0.274	-1.9	102	0.00
53 T	Toluene	0.813	1.018	-25.2	105	0.00
54 T	1,2-Dibromoethane	0.462	0.503	-8.9	102	0.00
55 I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
56	1,1,1,2-Tetrachloroethane	0.509	0.503	1.2	99	0.00
57 T	Chlorobenzene	0.924	0.938	-1.5	101	0.00
58 T	Ethyl Benzene	1.288	1.615	-25.4	102	0.00
59 T	m/p-Xylene	1.089	1.348	-23.8	101	-0.02
60 T	o-Xylene	1.082	1.340	-23.8	100	0.00
61 T	Styrene	0.403	0.562	-39.5#	105	0.00
62	Isopropylbenzene	1.577	1.916	-21.5	100	0.00
63 T	1,1,2,2-Tetrachloroethane	0.782	0.764	2.3	99	0.00
64	n-propylbenzene	0.409	0.496	-21.3	100	0.00
65	tert-Butylbenzene	1.347	1.670	-24.0	99	0.00
66 T	Benzyl Chloride	0.125	0.151	-20.8	105	0.00
67	sec-Butylbenzene	2.050	2.455	-19.8	100	0.00
68 S	1-Bromo-4-Fluorobenzene	0.782	0.803	-2.7	100	0.00
69	p-Isopropyltoluene	1.580	1.978	-25.2	100	0.00
70	n-Butylbenzene	1.661	2.109	-27.0	99	0.00
71	2-Chlorotoluene	1.170	1.465	-25.2	102	0.00
72 T	4-Ethyltoluene	1.267	1.621	-27.9	100	0.00
73 T	1,3,5-Trimethylbenzene	1.071	1.331	-24.3	99	0.00
74 T	1,2,4-Trimethylbenzene	1.258	1.521	-20.9	99	0.00
75 T	1,3-Dichlorobenzene	0.798	0.872	-9.3	101	0.00
76 T	1,4-Dichlorobenzene	0.768	0.860	-12.0	98	0.00
77 T	1,2-Dichlorobenzene	0.805	0.842	-4.6	98	0.00
78 T	Hexachloro-1,3-Butadiene	0.514	0.494	3.9	98	0.00
79 T	Naphthalene	0.849	1.280	-50.8#	99	0.00
80 T	Naphthalene,2-methyl-	0.275	0.310	-12.7	86	0.00
81 T	1,2,4-Trichlorobenzene	0.479	0.596	-24.4	98	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042937.D
 Acq On : 17 Sep 2025 14:52
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL091725

Quant Time: Sep 18 03:00:18 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	10.000	10.000	0.0	102	0.00
2 T	Dichlorodifluoromethane	10.000	9.792	2.1	99	0.00
3	Chlorodifluoromethane	10.000	10.019	-0.2	104	0.00
4	Chloromethane	10.000	9.392	6.1	96	0.00
5 T	Vinyl Chloride	10.000	8.980	10.2	99	0.00
6 T	Bromomethane	10.000	9.444	5.6	95	0.00
7	Chloroethane	10.000	10.026	-0.3	101	0.00
8 T	Dichlorotetrafluoroethane	10.000	9.905	1.0	100	0.00
9 T	Propene	10.000	10.919	-9.2	114	0.00
10 T	Heptane	10.000	11.859	-18.6	102	0.00
11 T	Trichlorofluoromethane	10.000	9.878	1.2	99	0.00
12 T	1,1,2-Trichlorotrifluoroeth	10.000	9.735	2.7	98	0.00
13	Ethanol	10.000	7.003	30.0	84	0.00
14 T	Bromoethene	10.000	9.634	3.7	99	0.00
15 T	Acetone	10.000	8.277	17.2	97	0.00
16 T	1,3-Butadiene	10.000	9.755	2.4	103	0.00
17	tert-Butyl alcohol	10.000	10.080	-0.8	104	0.00
18 T	1,1-Dichloroethene	10.000	10.208	-2.1	103	0.00
19 T	Isopropyl Alcohol	10.000	9.679	3.2	101	0.00
20 T	Methylene Chloride	10.000	7.931	20.7	103	0.00
21 T	Allyl Chloride	10.000	9.906	0.9	102	0.00
22 T	trans-1,2-Dichloroethene	10.000	9.873	1.3	100	0.00
23 T	Vinyl Acetate	10.000	10.514	-5.1	103	0.00
24 T	1,1-Dichloroethane	10.000	10.097	-1.0	101	0.00
25 T	Ethyl Acetate	10.000	10.840	-8.4	102	0.00
26 T	Hexane	10.000	11.633	-16.3	108	0.00
27 T	Carbon Disulfide	10.000	9.897	1.0	102	0.00
28 T	Methyl tert-Butyl Ether	10.000	9.968	0.3	102	0.00
29 T	Chloroform	10.000	10.059	-0.6	101	0.00
30 T	Cyclohexane	10.000	12.237	-22.4	105	0.00
31 T	cis-1,2-Dichloroethene	10.000	11.188	-11.9	109	0.00
32 T	1,1,1-Trichloroethane	10.000	10.012	-0.1	103	0.00
33 I	1,4-Difluorobenzene	10.000	10.000	0.0	103	0.00
34 T	2-Butanone	10.000	10.594	-5.9	105	0.00
35 T	Carbon Tetrachloride	10.000	9.398	6.0	100	0.00
36 T	Benzene	10.000	10.911	-9.1	107	0.00
37 T	1,2-Dichloroethane	10.000	10.107	-1.1	104	0.00
38 T	Trichloroethene	10.000	10.395	-3.9	106	0.00
39 T	1,2-Dichloropropane	10.000	10.208	-2.1	104	0.00
40 T	1,4-Dioxane	10.000	11.567	-15.7	102	0.00
41 T	Tetrahydrofuran	10.000	11.951	-19.5	109	0.00
42 T	Bromodichloromethane	10.000	10.181	-1.8	104	0.00
43	Methyl Methacrylate	10.000	12.345	-23.5	108	0.00
44 T	2,2,4-Trimethylpentane	10.000	11.419	-14.2	102	0.00
45 T	t-1,3-Dichloropropene	10.000	12.012	-20.1	109	0.00
46 T	cis-1,3-Dichloropropene	10.000	11.827	-18.3	110	0.00
47 T	1,1,2-Trichloroethane	10.000	10.115	-1.2	100	0.00
48 T	Dibromochloromethane	10.000	10.249	-2.5	102	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
 Data File : VL042937.D
 Acq On : 17 Sep 2025 14:52
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL091725

Quant Time: Sep 18 03:00:18 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
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 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)

49 T	Bromoform	10.000	10.559	-5.6	102	0.00
50 T	4-Methyl-2-Pentanone	10.000	12.061	-20.6	104	0.00
51 T	2-Hexanone	10.000	12.515	-25.2	101	0.00
52 T	Tetrachloroethene	10.000	10.191	-1.9	102	0.00
53 T	Toluene	10.000	12.514	-25.1	105	0.00
54 T	1,2-Dibromoethane	10.000	10.868	-8.7	102	0.00
55 I	Chlorobenzene-d5	10.000	10.000	0.0	104	0.00
56	1,1,1,2-Tetrachloroethane	10.000	9.881	1.2	99	0.00
57 T	Chlorobenzene	10.000	10.154	-1.5	101	0.00
58 T	Ethyl Benzene	10.000	12.539	-25.4	102	0.00
59 T	m/p-Xylene	20.000	24.769	-23.8	101	-0.02
60 T	o-Xylene	10.000	12.376	-23.8	100	0.00
61 T	Styrene	10.000	10.047	-0.5	105	0.00
62	Isopropylbenzene	10.000	12.155	-21.5	100	0.00
63 T	1,1,2,2-Tetrachloroethane	10.000	9.775	2.2	99	0.00
64	n-propylbenzene	10.000	12.121	-21.2	100	0.00
65	tert-Butylbenzene	10.000	12.391	-23.9	99	0.00
66 T	Benzyl Chloride	10.000	12.035	-20.4	105	0.00
67	sec-Butylbenzene	10.000	11.975	-19.7	100	0.00
68 S	1-Bromo-4-Fluorobenzene	10.000	10.278	-2.8	100	0.00
69	p-Isopropyltoluene	10.000	12.521	-25.2	100	0.00
70	n-Butylbenzene	10.000	9.990	0.1	99	0.00
71	2-Chlorotoluene	10.000	12.518	-25.2	102	0.00
72 T	4-Ethyltoluene	10.000	9.915	0.9	100	0.00
73 T	1,3,5-Trimethylbenzene	10.000	12.431	-24.3	99	0.00
74 T	1,2,4-Trimethylbenzene	10.000	12.090	-20.9	99	0.00
75 T	1,3-Dichlorobenzene	10.000	10.925	-9.3	101	0.00
76 T	1,4-Dichlorobenzene	10.000	11.199	-12.0	98	0.00
77 T	1,2-Dichlorobenzene	10.000	10.460	-4.6	98	0.00
78 T	Hexachloro-1,3-Butadiene	10.000	9.601	4.0	98	0.00
79 T	Naphthalene	10.000	9.690	3.1	99	0.00
80 T	Naphthalene,2-methyl-	10.000	7.615	23.8	86	0.00
81 T	1,2,4-Trichlorobenzene	10.000	9.415	5.9	98	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance

Contract: GFEL01

Lab Code: ACE

SDG No.: Q3111

Instrument ID: MSVOA_L

Calibration Date(s): 09/22/2025 09/22/2025

Heated Purge: (Y/N) N

Calibration Time(s): 09:39 13:05

GC Column: RTX-1 ID: 0.32 (mm)

LAB FILE ID:	RRF010 = VL042950.D		RRF002 = VL042951.D		RRF001 = VL042952.D			
	RRF0.5 = VL042953.D		RRF0.1 = VL042954.D		RRF.03 = VL042955.D			
COMPOUND	RRF010	RRF002	RRF001	RRF0.5	RRF0.1	RRF.03	RRF	% RSD
Dichlorodifluoromethane	1.248	1.401	1.452	1.391			1.345	7.3
Chloromethane	0.560	0.624	0.622	0.693			0.609	9.7
Vinyl Chloride	0.470	0.524	0.567	0.529	0.562	0.729	0.550	15.9
Bromomethane	0.166	0.200	0.215	0.224			0.194	13.8
Chloroethane	0.196	0.212	0.238	0.234			0.214	10.3
Tetrahydrofuran	0.389	0.419	0.407	0.427			0.403	5.6
Trichlorofluoromethane	1.199	1.346	1.376	1.354			1.297	6.6
1,1,2-Trichlorotrifluoroethane	0.963	1.068	1.117	1.130			1.050	7.5
Dichlorotetrafluoroethane	1.047	1.180	1.239	1.227			1.148	8.2
tert-Butyl alcohol	1.351	1.398	1.544	1.587			1.429	9.5
Heptane	1.870	1.961	2.060	2.102			1.946	7.6
1,1-Dichloroethene	0.446	0.485	0.503	0.549			0.486	8.9
Acetone	0.993	1.475	1.552	1.490			1.302	21.5
Carbon Disulfide	1.271	1.396	1.436	1.395			1.346	6.6
Methyl tert-Butyl Ether	0.638	0.742	0.773	0.953			0.780	14.6
Methylene Chloride	0.388	0.510	0.617	0.832			0.545	34.4
trans-1,2-Dichloroethene	0.507	0.556	0.612	0.589			0.552	9
1,1-Dichloroethane	0.993	1.109	1.172	1.147			1.083	7.8
Cyclohexane	1.193	1.280	1.333	1.312			1.255	6.2
2-Butanone	0.655	0.741	0.731	0.744			0.701	7.5
Carbon Tetrachloride	0.610	0.657	0.665	0.660	0.616	0.734	0.651	6.6
cis-1,2-Dichloroethene	1.357	1.465	1.464	1.443			1.406	5.3
Chloroform	1.848	2.038	2.042	2.078			1.962	6.4
1,1,1-Trichloroethane	1.902	2.071	2.164	2.017	2.087	2.724	2.119	13.5
2,2,4-Trimethylpentane	1.563	1.690	1.660	1.705			1.622	5.6
Benzene	0.898	0.972	0.970	0.974			0.939	4.8
1,2-Dichloroethane	0.470	0.507	0.517	0.502			0.494	4.3
Trichloroethene	0.426	0.452	0.467	0.481	0.495	0.527	0.467	8.2
1,2-Dichloropropane	0.327	0.356	0.361	0.344			0.343	4.8
Bromodichloromethane	0.681	0.702	0.699	0.689			0.688	2.1

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance

Contract: GFEL01

Lab Code: ACE

SDG No.: Q3111

Instrument ID: MSVOA_L

Calibration Date(s): 09/22/2025 09/22/2025

Heated Purge: (Y/N) N

Calibration Time(s): 09:39 13:05

GC Column: RTX-1 ID: 0.32 (mm)

LAB FILE ID:		RRF010 = VL042950.D		RRF002 = VL042951.D		RRF001 = VL042952.D		RRF0.5 = VL042953.D		RRF0.1 = VL042954.D		RRF.03 = VL042955.D	
COMPOUND	RRF010	RRF002	RRF001	RRF0.5	RRF0.1	RRF.03	RRF	% RSD					
4-Methyl-2-Pentanone	0.934	0.988	0.949	0.928			0.939	3.5					
Toluene	1.078	1.156	1.137	1.155			1.111	5					
t-1,3-Dichloropropene	0.409	0.421	0.414	0.403			0.410	2					
cis-1,3-Dichloropropene	0.523	0.537	0.528	0.522			0.522	2.6					
1,1,2-Trichloroethane	0.344	0.371	0.377	0.382			0.362	5.7					
Dibromochloromethane	0.571	0.600	0.586	0.572			0.580	2.4					
1,2-Dibromoethane	0.490	0.525	0.520	0.520	0.520		0.510	3.5					
Tetrachloroethene	0.325	0.351	0.355	0.356	0.404	0.436	0.363	11.8					
Chlorobenzene	0.853	0.944	0.978	0.968			0.913	7.7					
Ethyl Benzene	1.570	1.737	1.715	1.657			1.642	5.5					
m/p-Xylene	1.225	1.361	1.365	1.332			1.295	6.3					
o-Xylene	1.221	1.359	1.379	1.335			1.294	7					
Styrene	0.602	0.648	0.619	0.605			0.612	3.9					
Bromoform	0.508	0.534	0.507	0.477			0.504	4.2					
1,1,2,2-Tetrachloroethane	0.610	0.673	0.675	0.688	0.722	0.806	0.680	10.7					
2-Chlorotoluene	1.373	1.528	1.504	1.543			1.456	6.6					
1,3,5-Trimethylbenzene	1.263	1.399	1.346	1.333			1.314	5.1					
1,2,4-Trimethylbenzene	1.349	1.558	1.522	1.534			1.451	8.3					
1,3-Dichlorobenzene	0.845	0.956	0.954	0.918			0.900	6.7					
1,4-Dichlorobenzene	0.845	0.959	0.914	0.922			0.894	6.1					
1,2-Dichlorobenzene	0.796	0.918	0.914	0.874			0.856	7.6					
1,2,4-Trichlorobenzene	0.718	0.777	0.691	0.557			0.686	11.7					
Hexachloro-1,3-Butadiene	0.575	0.728	0.742	0.755			0.670	14.8					
1,3-Butadiene	0.520	0.607	0.675	0.751			0.614	16.4					
Naphthalene	1.373	1.474	1.320	1.102	1.093		1.283	12					
4-Ethyltoluene	1.523	1.703	1.686	1.715			1.621	6.9					
1-Bromo-4-Fluorobenzene	0.763	0.747	0.743	0.749	0.738	0.736	0.746	1.2					
Hexane	1.398	1.553	1.614	1.621			1.501	9.1					
Allyl Chloride	0.857	0.966	0.971	0.904			0.907	6.7					
1,4-Dioxane	147.887	162.799	172.031	172.980			159.404	9					

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance Contract: GFEL01
 Lab Code: ACE SDG No.: Q3111
 Instrument ID: MSVOA_L Calibration Date(s): 09/22/2025 09/22/2025
 Heated Purge: (Y/N) N Calibration Time(s): 09:39 13:05
 GC Column: RTX-1 ID: 0.32 (mm)

LAB FILE ID:								
RRF010 = VL042950.D			RRF002 = VL042951.D			RRF001 = VL042952.D		
RRF0.5 = VL042953.D			RRF0.1 = VL042954.D			RRF.03 = VL042955.D		
COMPOUND	RRF010	RRF002	RRF001	RRF0.5	RRF0.1	RRF.03	RRF	% RSD
Methyl Methacrylate	0.368	0.396	0.396	0.406			0.384	5.6

* Compounds with required minimum RRF and maximum %RSD values.
 All other compounds must meet a minimum RRF of 0.010.
 RRF of 1,4-Dioxane = Value should be divide by 1000.

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\

Method File : VL092225AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022

Last Update : Tue Sep 23 02:39:16 2025

Response Via : Initial Calibration

Calibration Files

0.03=VL042955.D 0.1 =VL042954.D 0.5 =VL042953.D 1 =VL042952.D 2 =VL042951.D 10 =VL042950.D 15 =VL042956.D

Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD

1) I Bromochloromethane	-----ISTD-----								
2) T Dichlorodifluo...			1.391	1.452	1.401	1.248	1.232	1.345	7.33
3) Chlorodifluoro...			1.782	1.821	1.710	1.574	1.494	1.676	8.27
4) Chloromethane			0.693	0.622	0.624	0.560	0.545	0.609	9.66
5) T Vinyl Chloride	0.729	0.562	0.529	0.567	0.524	0.470	0.472	0.550	15.95
6) T Bromomethane			0.224	0.215	0.200	0.166	0.167	0.194	13.76
7) Chloroethane			0.234	0.238	0.212	0.196	0.189	0.214	10.33
8) T Dichlorotetra...			1.227	1.239	1.180	1.047	1.047	1.148	8.24
9) T Propene			0.784	0.787	0.762	0.684	0.631	0.729	9.47
10) T Heptane			2.102	2.060	1.961	1.870	1.738	1.946	7.57
11) T Trichlorofluor...			1.354	1.376	1.346	1.199	1.210	1.297	6.58
12) T 1,1,2-Trichlor...			1.130	1.117	1.068	0.963	0.973	1.050	7.48
13) Ethanol			0.076	0.090	0.088	0.053	0.047	0.071	27.75
14) T Bromoethene			0.430	0.417	0.415	0.362	0.362	0.397	8.23
15) T Acetone			1.490	1.552	1.475	0.993	1.002	1.302	21.48
16) T 1,3-Butadiene			0.751	0.675	0.607	0.520	0.519	0.614	16.41
17) tert-Butyl alc...			1.587	1.544	1.398	1.351	1.262	1.429	9.47
18) T 1,1-Dichloroet...			0.549	0.503	0.485	0.446	0.447	0.486	8.86
19) T Isopropyl Alcohol			0.898	0.813	0.818	0.718	0.667	0.783	11.61
20) T Methylene Chlo...			0.832	0.617	0.510	0.388	0.380	0.545	34.40
21) T Allyl Chloride			0.904	0.971	0.966	0.857	0.837	0.907	6.72
22) T trans-1,2-Dich...			0.589	0.612	0.556	0.507	0.499	0.552	8.98
23) T Vinyl Acetate			2.208	1.897	1.888	1.594	1.716	1.861	12.45
24) T 1,1-Dichloroet...			1.147	1.172	1.109	0.993	0.996	1.083	7.76
25) T Ethyl Acetate			3.405	3.494	3.443	3.153	2.966	3.292	6.83
26) T Hexane			1.621	1.614	1.553	1.398	1.317	1.501	9.08
27) T Carbon Disulfide			1.395	1.436	1.396	1.271	1.232	1.346	6.59
28) T Methyl tert-Bu...			0.953	0.773	0.742	0.638	0.794	0.780	14.61
29) T Chloroform			2.078	2.042	2.038	1.848	1.804	1.962	6.42
30) T Cyclohexane			1.312	1.333	1.280	1.193	1.154	1.255	6.19
31) T cis-1,2-Dichlo...			1.443	1.464	1.465	1.357	1.300	1.406	5.26
32) T 1,1,1-Trichlor...	2.724	2.087	2.017	2.164	2.071	1.902	1.868	2.119	13.51

33) I 1,4-Difluorobenzene	-----ISTD-----								
34) T 2-Butanone			0.744	0.731	0.741	0.655	0.633	0.701	7.52
35) T Carbon Tetrach...	0.734	0.616	0.660	0.665	0.657	0.610	0.617	0.651	6.63
36) T Benzene			0.974	0.970	0.972	0.898	0.881	0.939	4.84
37) T 1,2-Dichloroet...			0.502	0.517	0.507	0.470	0.473	0.494	4.28
38) T Trichloroethene	0.527	0.495	0.481	0.467	0.452	0.426	0.419	0.467	8.20
39) T 1,2-Dichloropr...			0.344	0.361	0.356	0.327	0.325	0.343	4.85

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\										
Method File : VL092225AIR.M										
40)	T	1,4-Dioxane		0.173	0.172	0.163	0.148	0.141	0.159	8.95
41)	T	Tetrahydrofuran		0.427	0.407	0.419	0.389	0.372	0.403	5.57
42)	T	Bromodichlorom...		0.689	0.699	0.702	0.681	0.667	0.688	2.07
43)		Methyl Methacr...		0.406	0.396	0.396	0.368	0.355	0.384	5.61
44)	T	2,2,4-Trimethy...		1.705	1.660	1.690	1.563	1.492	1.622	5.64
45)	T	t-1,3-Dichloro...		0.403	0.414	0.421	0.409	0.402	0.410	1.99
46)	T	cis-1,3-Dichlo...		0.522	0.528	0.537	0.523	0.501	0.522	2.55
47)	T	1,1,2-Trichlor...		0.382	0.377	0.371	0.344	0.336	0.362	5.70
48)	T	Dibromochlorom...		0.572	0.586	0.600	0.571	0.568	0.580	2.36
49)	T	Bromoform		0.477	0.507	0.534	0.508	0.495	0.504	4.18
50)	T	4-Methyl-2-Pen...		0.928	0.949	0.988	0.934	0.897	0.939	3.51
51)	T	2-Hexanone		0.719	0.774	0.769	0.751	0.730	0.749	3.19
52)	T	Tetrachloroethene	0.436 0.404	0.356	0.355	0.351	0.325	0.315	0.363	11.76
53)	T	Toluene		1.155	1.137	1.156	1.078	1.031	1.111	4.95
54)	T	1,2-Dibromoethane	0.520	0.520	0.520	0.525	0.490	0.485	0.510	3.47
-----ISTD-----										
55)	I	Chlorobenzene-d5								
56)		1,1,1,2-Tetrac...		0.497	0.486	0.505	0.458	0.447	0.479	5.28
57)	T	Chlorobenzene		0.968	0.978	0.944	0.853	0.822	0.913	7.75
58)	T	Ethyl Benzene		1.657	1.715	1.737	1.570	1.531	1.642	5.45
59)	T	m/p-Xylene		1.332	1.365	1.361	1.225	1.190	1.295	6.29
60)	T	o-Xylene		1.335	1.379	1.359	1.221	1.176	1.294	6.96
61)	T	Styrene		0.605	0.619	0.648	0.602	0.585	0.612	3.89
62)		Isopropylbenzene		2.010	2.059	2.028	1.803	1.744	1.929	7.49
63)	T	1,1,2,2-Tetrac...	0.806 0.722	0.688	0.675	0.673	0.610	0.586	0.680	10.66
64)		n-propylbenzene		0.531	0.529	0.523	0.473	0.463	0.504	6.51
65)		tert-Butylbenzene		1.836	1.839	1.842	1.557	1.503	1.715	9.91
66)	T	Benzyl Chloride		0.170	0.173	0.196	0.195	0.165	0.180	8.14
67)		sec-Butylbenzene		2.508	2.559	2.579	2.191	2.115	2.390	9.19
68)	S	1-Bromo-4-Fluo...	0.736 0.738	0.749	0.743	0.747	0.763	0.750	0.746	1.20
69)		p-Isopropyltol...		2.105	2.168	2.179	1.856	1.788	2.019	9.11
70)		n-Butylbenzene		1.929	2.108	2.136	1.881	1.803	1.971	7.36
71)		2-Chlorotoluene		1.543	1.504	1.528	1.373	1.333	1.456	6.61
72)	T	4-Ethyltoluene		1.715	1.686	1.703	1.523	1.476	1.621	6.92
73)	T	1,3,5-Trimethy...		1.333	1.346	1.399	1.263	1.231	1.314	5.12
74)	T	1,2,4-Trimethy...		1.534	1.522	1.558	1.349	1.294	1.451	8.34
75)	T	1,3-Dichlorobe...		0.918	0.954	0.956	0.845	0.827	0.900	6.72
76)	T	1,4-Dichlorobe...		0.922	0.914	0.959	0.845	0.829	0.894	6.12
77)	T	1,2-Dichlorobe...		0.874	0.914	0.918	0.796	0.780	0.856	7.61
78)	T	Hexachloro-1,3...		0.755	0.742	0.728	0.575	0.549	0.670	14.79
79)	T	Naphthalene	1.093	1.102	1.320	1.474	1.373	1.339	1.283	11.96
80)	T	Naphthalene,2-...		0.384	0.365	0.428	0.402	0.404	0.396	5.94
81)	T	1,2,4-Trichlor...		0.557	0.691	0.777	0.718	0.689	0.686	11.73

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042950.D
 Acq On : 22 Sep 2025 09:39
 Operator : SY/MD
 Sample : VSTDICCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:08:12 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2

QLast Update : Tue Sep 23 02:07:33 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	170899	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	526679	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	486724	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.371 95 371195 10.217 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 102.200%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.496	85	213351	9.282	ppbv	100
3) Chlorodifluoromethane	1.473	51	269073	9.392	ppbv	100
4) Chloromethane	1.531	50	95679	9.196	ppbv	100
5) Vinyl Chloride	1.577	62	80350	8.543	ppbv	100
6) Bromomethane	1.667	94	28301	8.530	ppbv	100
7) Chloroethane	1.703	64	33446	9.158	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	178992	9.122	ppbv	100
9) Propene	1.483	41	116849	9.376	ppbv	100
10) Heptane	4.969	43	319577	9.560	ppbv	100
11) Trichlorofluoromethane	1.874	101	204850	9.243	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.137	101	164598	9.171	ppbv	100
13) Ethanol	1.719	45	9094	7.613	ppbv	100
14) Bromoethene	1.780	108	61824	9.111	ppbv	100
15) Acetone	1.832	43	169676	7.623	ppbv	100
16) 1,3-Butadiene	1.606	39	88812	8.459	ppbv	100
17) tert-Butyl alcohol	2.036	59	230853	9.456	ppbv	100
18) 1,1-Dichloroethene	2.030	96	76184	9.170	ppbv	100
19) Isopropyl Alcohol	1.884	45	122753	9.174	ppbv	100
20) Methylene Chloride	2.059	84	66314	9.992	ppbv	100
21) Allyl Chloride	2.094	41	146473	9.449	ppbv	100
22) trans-1,2-Dichloroethene	2.337	96	86580	9.172	ppbv	100
23) Vinyl Acetate	2.460	43	272378	8.566	ppbv	100
24) 1,1-Dichloroethane	2.405	63	169721	9.168	ppbv	100
25) Ethyl Acetate	2.829	43	538761	9.577	ppbv	100
26) Hexane	2.823	57	238896	9.316	ppbv	100
27) Carbon Disulfide	2.146	76	217259	9.446	ppbv	100
28) Methyl tert-Butyl Ether	2.434	73	108987	8.176	ppbv	100
29) Chloroform	2.845	83	315779	9.418	ppbv	100
30) Cyclohexane	3.852	84	203803	9.506	ppbv	100
31) cis-1,2-Dichloroethene	2.716	61	231907	9.654	ppbv	100
32) 1,1,1-Trichloroethane	3.363	97	325118	8.947	ppbv	100
34) 2-Butanone	2.551	43	344874	9.343	ppbv	100
35) Carbon Tetrachloride	3.755	117	321267	9.480	ppbv	100
36) Benzene	3.651	78	472855	9.561	ppbv	100
37) 1,2-Dichloroethane	3.214	62	247754	9.525	ppbv	100
38) Trichloroethene	4.541	130	224516	9.134	ppbv	100
39) 1,2-Dichloropropane	4.305	63	172059	9.523	ppbv	100
40) 1,4-Dioxane	4.570	88	77889	9.283	ppbv #	100
41) Tetrahydrofuran	3.046	42	204724	9.649	ppbv	100
42) Bromodichloromethane	4.480	83	358858	9.903	ppbv	100
43) Methyl Methacrylate	4.871	69	193676	9.646	ppbv	100
44) 2,2,4-Trimethylpentane	4.632	57	823031	9.631	ppbv	100
45) t-1,3-Dichloropropene	6.406	75	215233	9.969	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042950.D
 Acq On : 22 Sep 2025 09:39
 Operator : SY/MD
 Sample : VSTDICCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 09/23/2025
 Supervised By : Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:08:12 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2025

QLast Update : Tue Sep 23 02:07:33 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.590	75	275210	10.006	ppbv	100
47) 1,1,2-Trichloroethane	6.571	97	181329	9.498	ppbv	100
48) Dibromochloromethane	7.383	129	300497	9.845	ppbv	100
49) Bromoform	9.480	173	267814	10.087	ppbv	100
50) 4-Methyl-2-Pentanone	5.736	43	492068	9.920	ppbv	100
51) 2-Hexanone	7.428	43	395744	10.036	ppbv #	100
52) Tetrachloroethene	8.218	164	171294	8.951	ppbv	100
53) Toluene	6.923	91	567779	9.699	ppbv	100
54) 1,2-Dibromoethane	7.645	107	257904	9.605	ppbv	100
56) 1,1,1,2-Tetrachloroethane	8.921	131	223066	9.575	ppbv	100
57) Chlorobenzene	8.917	112	415238	9.345	ppbv	100
58) Ethyl Benzene	9.348	91	764249	9.562	ppbv	100
59) m/p-Xylene	9.526	91	1192566m	18.913	ppbv	
60) o-Xylene	9.959	91	594329	9.437	ppbv	100
61) Styrene	9.866	104	293111	9.840	ppbv	100
62) Isopropylbenzene	10.536	105	877401	9.347	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.956	83	296678	8.963	ppbv	100
64) n-propylbenzene	10.985	120	230432	9.394	ppbv	100
65) tert-Butylbenzene	11.526	119	757958	9.078	ppbv	100
66) Benzyl Chloride	11.610	91	94982	10.842	ppbv	100
67) sec-Butylbenzene	11.762	105	1066409	9.166	ppbv	100
69) p-Isopropyltoluene	11.921	119	903376	9.192	ppbv	100
70) n-Butylbenzene	12.277	91	915624	9.543	ppbv	100
71) 2-Chlorotoluene	10.895	91	668239	9.428	ppbv	100
72) 4-Ethyltoluene	11.121	105	741298	9.398	ppbv	100
73) 1,3,5-Trimethylbenzene	11.199	105	614632	9.608	ppbv	100
74) 1,2,4-Trimethylbenzene	11.532	105	656535	9.294	ppbv	100
75) 1,3-Dichlorobenzene	11.604	146	411473	9.392	ppbv	100
76) 1,4-Dichlorobenzene	11.668	146	411464	9.456	ppbv	100
77) 1,2-Dichlorobenzene	11.944	146	387219	9.289	ppbv	100
78) Hexachloro-1,3-Butadiene	13.876	225	280080	8.591	ppbv	100
79) Naphthalene	13.510	128	668171	10.696	ppbv	100
80) Naphthalene,2-methyl-	14.452	142	195695	10.142	ppbv	100
81) 1,2,4-Trichlorobenzene	13.436	180	349393	10.461	ppbv	100

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042951.D
 Acq On : 22 Sep 2025 10:14
 Operator : SY/MD
 Sample : VSTDICC002
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC002

Quant Time: Sep 23 02:09:14 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2
 QLast Update : Tue Sep 23 02:07:33 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/23/2025
 Supervised By : Mahesh Dadoda 09/24/2025

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

Internal Standards						
1) Bromochloromethane	2.787	49	170758	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	524389	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	483821	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	10.374	95	361586	10.012	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.100%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	47851	2.083	ppbv	97
3) Chlorodifluoromethane	1.476	51	58395	2.040	ppbv	95
4) Chloromethane	1.534	50	21326	2.051	ppbv	99
5) Vinyl Chloride	1.580	62	17892	1.904	ppbv	98
6) Bromomethane	1.667	94	6816	2.056	ppbv	96
7) Chloroethane	1.706	64	7250	1.987	ppbv #	85
8) Dichlorotetrafluoroethane	1.554	85	40306	2.056	ppbv	98
9) Propene	1.483	41	26007	2.088	ppbv	99
10) Heptane	4.978	43	66978	2.005	ppbv	99
11) Trichlorofluoromethane	1.877	101	45973	2.076	ppbv	94
12) 1,1,2-Trichlorotrifluo...	2.140	101	36490	2.035	ppbv	98
13) Ethanol	1.722	45	2989	2.504	ppbv	93
14) Bromoethene	1.784	108	14189	2.093	ppbv #	96
15) Acetone	1.835	43	50357	2.264	ppbv	99
16) 1,3-Butadiene	1.609	39	20729	1.976	ppbv	94
17) tert-Butyl alcohol	2.042	59	47749	1.957	ppbv #	93
18) 1,1-Dichloroethene	2.036	96	16572	1.996	ppbv	95
19) Isopropyl Alcohol	1.887	45	27930	2.089	ppbv #	79
20) Methylene Chloride	2.062	84	17413	2.097	ppbv #	84
21) Allyl Chloride	2.098	41	32985	2.130	ppbv	99
22) trans-1,2-Dichloroethene	2.340	96	18991	2.013	ppbv	98
23) Vinyl Acetate	2.463	43	64479	2.029	ppbv #	98
24) 1,1-Dichloroethane	2.408	63	37865	2.047	ppbv	99
25) Ethyl Acetate	2.835	43	117567	2.092	ppbv	99
26) Hexane	2.826	57	53034	2.070	ppbv	98
27) Carbon Disulfide	2.153	76	47660	2.074	ppbv #	60
28) Methyl tert-Butyl Ether	2.441	73	25348	1.903	ppbv	92
29) Chloroform	2.848	83	69599	2.077	ppbv	96
30) Cyclohexane	3.855	84	43725	2.041	ppbv	99
31) cis-1,2-Dichloroethene	2.719	61	50019	2.084	ppbv	95
32) 1,1,1-Trichloroethane	3.366	97	70729	1.948	ppbv	97
34) 2-Butanone	2.557	43	77689	2.114	ppbv	98
35) Carbon Tetrachloride	3.761	117	68858	2.041	ppbv	95
36) Benzene	3.658	78	101901	2.069	ppbv	97
37) 1,2-Dichloroethane	3.217	62	53130	2.052	ppbv	98
38) Trichloroethene	4.548	130	47424	1.938	ppbv	94
39) 1,2-Dichloropropane	4.308	63	37381m	2.078	ppbv	
40) 1,4-Dioxane	4.586	88	17074m	2.044	ppbv	
41) Tetrahydrofuran	3.056	42	43962	2.081	ppbv	98
42) Bromodichloromethane	4.486	83	73675	2.042	ppbv	98
43) Methyl Methacrylate	4.881	69	41527	2.077	ppbv	99
44) 2,2,4-Trimethylpentane	4.638	57	177242	2.083	ppbv	99
45) t-1,3-Dichloropropene	6.415	75	44171	2.055	ppbv	91

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042951.D
 Acq On : 22 Sep 2025 10:14
 Operator : SY/MD
 Sample : VSTDICC002
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC002

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:09:14 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Tue Sep 23 02:07:33 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.596	75	56335	2.057	ppbv	97
47) 1,1,2-Trichloroethane	6.577	97	38961m	2.050	ppbv	
48) Dibromochloromethane	7.383	129	62968	2.072	ppbv	98
49) Bromoform	9.480	173	56021	2.119	ppbv	99
50) 4-Methyl-2-Pentanone	5.755	43	103605m	2.098	ppbv	
51) 2-Hexanone	7.438	43	80620	2.053	ppbv	99
52) Tetrachloroethene	8.224	164	36853	1.934	ppbv	94
53) Toluene	6.933	91	121268	2.081	ppbv	100
54) 1,2-Dibromoethane	7.652	107	55022	2.058	ppbv	94
56) 1,1,1,2-Tetrachloroethane	8.920	131	48901	2.112	ppbv	98
57) Chlorobenzene	8.924	112	91325	2.068	ppbv	94
58) Ethyl Benzene	9.354	91	168063	2.115	ppbv	99
59) m/p-Xylene	9.532	91	263362m	4.202	ppbv	
60) o-Xylene	9.963	91	131507	2.101	ppbv	98
61) Styrene	9.869	104	62748	2.119	ppbv	98
62) Isopropylbenzene	10.539	105	196198	2.103	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.963	83	65089	1.978	ppbv	98
64) n-propylbenzene	10.985	120	50569	2.074	ppbv	93
65) tert-Butylbenzene	11.529	119	178218	2.147	ppbv	98
66) Benzyl Chloride	11.613	91	18992	2.181	ppbv	98
67) sec-Butylbenzene	11.765	105	249510	2.158	ppbv	100
69) p-Isopropyltoluene	11.924	119	210808	2.158	ppbv	97
70) n-Butylbenzene	12.280	91	206691	2.167	ppbv	100
71) 2-Chlorotoluene	10.898	91	147901	2.099	ppbv	100
72) 4-Ethyltoluene	11.124	105	164770	2.102	ppbv	99
73) 1,3,5-Trimethylbenzene	11.202	105	135344	2.128	ppbv	100
74) 1,2,4-Trimethylbenzene	11.536	105	150772	2.147	ppbv	98
75) 1,3-Dichlorobenzene	11.607	146	92487	2.124	ppbv	98
76) 1,4-Dichlorobenzene	11.671	146	92794	2.145	ppbv	99
77) 1,2-Dichlorobenzene	11.947	146	88825	2.144	ppbv	100
78) Hexachloro-1,3-Butadiene	13.879	225	70481	2.175	ppbv	99
79) Naphthalene	13.510	128	142653	2.297	ppbv	98
80) Naphthalene,2-methyl-	14.458	142	41369	2.157	ppbv	98
81) 1,2,4-Trichlorobenzene	13.439	180	75139	2.263	ppbv	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042952.D
 Acq On : 22 Sep 2025 10:48
 Operator : SY/MD
 Sample : VSTDICC001
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC001

Quant Time: Sep 23 02:10:27 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2
 QLast Update : Tue Sep 23 02:07:33 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/23/2025
 Supervised By : Mahesh Dadoda 09/24/2025

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

Internal Standards						
1) Bromochloromethane	2.784	49	162797	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	511767	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	469265	10.000	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	348878	9.960	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.600%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	23644	1.080	ppbv	97
3) Chlorodifluoromethane	1.476	51	29646	1.086	ppbv	99
4) Chloromethane	1.531	50	10120	1.021	ppbv	97
5) Vinyl Chloride	1.580	62	9228	1.030	ppbv	99
6) Bromomethane	1.667	94	3493	1.105	ppbv	96
7) Chloroethane	1.703	64	3872	1.113	ppbv #	81
8) Dichlorotetrafluoroethane	1.554	85	20172	1.079	ppbv	97
9) Propene	1.482	41	12808	1.079	ppbv	92
10) Heptane	4.972	43	33540m	1.053	ppbv	
11) Trichlorofluoromethane	1.874	101	22397	1.061	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.136	101	18180	1.063	ppbv	99
13) Ethanol	1.719	45	1463	1.286	ppbv #	33
14) Bromoethene	1.780	108	6783	1.049	ppbv #	87
15) Acetone	1.832	43	25273	1.192	ppbv	99
16) 1,3-Butadiene	1.609	39	10993	1.099	ppbv	88
17) tert-Butyl alcohol	2.039	59	25141	1.081	ppbv #	88
18) 1,1-Dichloroethene	2.033	96	8192	1.035	ppbv	96
19) Isopropyl Alcohol	1.884	45	13241	1.039	ppbv #	41
20) Methylene Chloride	2.059	84	10045	0.985	ppbv	97
21) Allyl Chloride	2.094	41	15801	1.070	ppbv	95
22) trans-1,2-Dichloroethene	2.337	96	9960	1.108	ppbv	96
23) Vinyl Acetate	2.457	43	30884	1.020	ppbv #	96
24) 1,1-Dichloroethane	2.405	63	19077	1.082	ppbv	99
25) Ethyl Acetate	2.832	43	56877	1.061	ppbv	97
26) Hexane	2.822	57	26276	1.076	ppbv	96
27) Carbon Disulfide	2.149	76	23373	1.067	ppbv #	32
28) Methyl tert-Butyl Ether	2.441	73	12580	0.991	ppbv #	86
29) Chloroform	2.842	83	33240	1.041	ppbv	99
30) Cyclohexane	3.855	84	21707	1.063	ppbv	98
31) cis-1,2-Dichloroethene	2.716	61	23828	1.041	ppbv	96
32) 1,1,1-Trichloroethane	3.360	97	35233	1.018	ppbv	97
34) 2-Butanone	2.554	43	37431	1.044	ppbv	97
35) Carbon Tetrachloride	3.758	117	34016	1.033	ppbv	96
36) Benzene	3.651	78	49652	1.033	ppbv	100
37) 1,2-Dichloroethane	3.214	62	26482	1.048	ppbv	98
38) Trichloroethene	4.538	130	23906	1.001	ppbv	98
39) 1,2-Dichloropropane	4.311	63	18493m	1.053	ppbv	
40) 1,4-Dioxane	4.583	88	8804m	1.080	ppbv	
41) Tetrahydrofuran	3.055	42	20845	1.011	ppbv	98
42) Bromodichloromethane	4.480	83	35768m	1.016	ppbv	
43) Methyl Methacrylate	4.871	69	20289	1.040	ppbv	98
44) 2,2,4-Trimethylpentane	4.635	57	84970	1.023	ppbv	96
45) t-1,3-Dichloropropene	6.402	75	21210m	1.011	ppbv	

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042952.D
 Acq On : 22 Sep 2025 10:48
 Operator : SY/MD
 Sample : VSTDICC001
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC001

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:10:27 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Tue Sep 23 02:07:33 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.587	75	27025m	1.011	ppbv	
47) 1,1,2-Trichloroethane	6.574	97	19311	1.041	ppbv	96
48) Dibromochloromethane	7.383	129	30015	1.012	ppbv	99
49) Bromoform	9.477	173	25929	1.005	ppbv	98
50) 4-Methyl-2-Pentanone	5.748	43	48546	1.007	ppbv	98
51) 2-Hexanone	7.431	43	39627	1.034	ppbv #	99
52) Tetrachloroethene	8.218	164	18188	0.978	ppbv	97
53) Toluene	6.926	91	58200	1.023	ppbv	100
54) 1,2-Dibromoethane	7.645	107	26608	1.020	ppbv	94
56) 1,1,1,2-Tetrachloroethane	8.920	131	22802	1.015	ppbv	94
57) Chlorobenzene	8.914	112	45873	1.071	ppbv	98
58) Ethyl Benzene	9.351	91	80473	1.044	ppbv	97
59) m/p-Xylene	9.529	91	128139m	2.108	ppbv	
60) o-Xylene	9.959	91	64703	1.066	ppbv	99
61) Styrene	9.869	104	29061	1.012	ppbv	98
62) Isopropylbenzene	10.535	105	96621	1.068	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.959	83	31695	0.993	ppbv	96
64) n-propylbenzene	10.985	120	24820	1.049	ppbv	98
65) tert-Butylbenzene	11.526	119	86303	1.072	ppbv	99
66) Benzyl Chloride	11.610	91	8140	0.964	ppbv	100
67) sec-Butylbenzene	11.762	105	120070	1.070	ppbv	100
69) p-Isopropyltoluene	11.921	119	101749	1.074	ppbv	99
70) n-Butylbenzene	12.277	91	98908	1.069	ppbv	99
71) 2-Chlorotoluene	10.895	91	70577	1.033	ppbv	98
72) 4-Ethyltoluene	11.121	105	79095	1.040	ppbv	99
73) 1,3,5-Trimethylbenzene	11.199	105	63174	1.024	ppbv	98
74) 1,2,4-Trimethylbenzene	11.532	105	71411	1.049	ppbv	95
75) 1,3-Dichlorobenzene	11.603	146	44769	1.060	ppbv	99
76) 1,4-Dichlorobenzene	11.668	146	42879	1.022	ppbv	97
77) 1,2-Dichlorobenzene	11.940	146	42911	1.068	ppbv	98
78) Hexachloro-1,3-Butadiene	13.879	225	34798	1.107	ppbv	99
79) Naphthalene	13.510	128	61925	1.028	ppbv	98
80) Naphthalene,2-methyl-	14.455	142	17116	0.920	ppbv	97
81) 1,2,4-Trichlorobenzene	13.435	180	32411	1.007	ppbv	97

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042953.D
 Acq On : 22 Sep 2025 11:22
 Operator : SY/MD
 Sample : VSTDICC0.5
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.5

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 09/23/2025
 Supervised By : Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:11:22 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Tue Sep 23 02:07:33 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	165435	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	509306	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	464091	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.374 95 347374 10.027 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.300%

Target Compounds

					Qvalue	
2) Dichlorodifluoromethane	1.499	85	11508	0.517	ppbv	96
3) Chlorodifluoromethane	1.476	51	14744	0.532	ppbv #	90
4) Chloromethane	1.534	50	5729	0.569	ppbv	97
5) Vinyl Chloride	1.580	62	4373	0.480	ppbv	93
6) Bromomethane	1.667	94	1850	0.576	ppbv	100
7) Chloroethane	1.703	64	1936	0.548	ppbv #	87
8) Dichlorotetrafluoroethane	1.554	85	10149	0.534	ppbv	96
9) Propene	1.483	41	6482	0.537	ppbv	94
10) Heptane	4.978	43	17388m	0.537	ppbv	
11) Trichlorofluoromethane	1.877	101	11200	0.522	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.140	101	9346	0.538	ppbv	100
13) Ethanol	1.719	45	629m	0.544	ppbv	
14) Bromoethene	1.784	108	3553	0.541	ppbv #	84
15) Acetone	1.835	43	12326	0.572	ppbv #	86
16) 1,3-Butadiene	1.609	39	6215	0.611	ppbv #	82
17) tert-Butyl alcohol	2.043	59	13128	0.555	ppbv #	77
18) 1,1-Dichloroethene	2.033	96	4543	0.565	ppbv	93
19) Isopropyl Alcohol	1.887	45	7431	0.574	ppbv #	46
20) Methylene Chloride	2.062	84	6881	0.430	ppbv	87
21) Allyl Chloride	2.098	41	7481	0.499	ppbv #	69
22) trans-1,2-Dichloroethene	2.337	96	4869m	0.533	ppbv	
23) Vinyl Acetate	2.460	43	18264	0.593	ppbv #	95
24) 1,1-Dichloroethane	2.408	63	9484	0.529	ppbv #	98
25) Ethyl Acetate	2.836	43	28162	0.517	ppbv #	95
26) Hexane	2.823	57	13406	0.540	ppbv	98
27) Carbon Disulfide	2.149	76	11535	0.518	ppbv #	1
28) Methyl tert-Butyl Ether	2.441	73	7886	0.611	ppbv #	65
29) Chloroform	2.845	83	17188	0.530	ppbv	100
30) Cyclohexane	3.855	84	10856	0.523	ppbv	93
31) cis-1,2-Dichloroethene	2.719	61	11939	0.513	ppbv	99
32) 1,1,1-Trichloroethane	3.366	97	16684	0.474	ppbv	96
34) 2-Butanone	2.557	43	18948	0.531	ppbv	96
35) Carbon Tetrachloride	3.761	117	16799	0.513	ppbv	94
36) Benzene	3.654	78	24807	0.519	ppbv #	95
37) 1,2-Dichloroethane	3.217	62	12788	0.508	ppbv	100
38) Trichloroethene	4.544	130	12243	0.515	ppbv #	88
39) 1,2-Dichloropropane	4.315	63	8772	0.502	ppbv #	86
40) 1,4-Dioxane	4.599	88	4405m	0.543	ppbv	
41) Tetrahydrofuran	3.059	42	10871	0.530	ppbv	95
42) Bromodichloromethane	4.486	83	17552	0.501	ppbv	96
43) Methyl Methacrylate	4.881	69	10330m	0.532	ppbv	
44) 2,2,4-Trimethylpentane	4.642	57	43414m	0.525	ppbv	
45) t-1,3-Dichloropropene	6.409	75	10262m	0.492	ppbv	

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042953.D
 Acq On : 22 Sep 2025 11:22
 Operator : SY/MD
 Sample : VSTDICC0.5
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.5

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:11:22 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2

QLast Update : Tue Sep 23 02:07:33 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	13304m	0.500	ppbv	
47) 1,1,2-Trichloroethane	6.580	97	9725m	0.527	ppbv	
48) Dibromochloromethane	7.383	129	14563	0.493	ppbv	99
49) Bromoform	9.480	173	12136	0.473	ppbv	97
50) 4-Methyl-2-Pentanone	5.761	43	23639	0.493	ppbv	95
51) 2-Hexanone	7.441	43	18322	0.480	ppbv #	97
52) Tetrachloroethene	8.218	164	9073m	0.490	ppbv	
53) Toluene	6.927	91	29404	0.519	ppbv	99
54) 1,2-Dibromoethane	7.648	107	13233	0.510	ppbv	98
56) 1,1,1,2-Tetrachloroethane	8.924	131	11535	0.519	ppbv #	1
57) Chlorobenzene	8.920	112	22463	0.530	ppbv	91
58) Ethyl Benzene	9.351	91	38459	0.505	ppbv	96
59) m/p-Xylene	9.545	91	61801m	1.028	ppbv	
60) o-Xylene	9.959	91	30976	0.516	ppbv	98
61) Styrene	9.865	104	14048	0.495	ppbv	98
62) Isopropylbenzene	10.535	105	46640	0.521	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.959	83	15974	0.506	ppbv	97
64) n-propylbenzene	10.985	120	12333	0.527	ppbv	100
65) tert-Butylbenzene	11.529	119	42595	0.535	ppbv	99
66) Benzyl Chloride	11.613	91	3942m	0.472	ppbv	
67) sec-Butylbenzene	11.765	105	58190	0.525	ppbv	99
69) p-Isopropyltoluene	11.924	119	48855	0.521	ppbv	100
70) n-Butylbenzene	12.280	91	44764	0.489	ppbv	100
71) 2-Chlorotoluene	10.898	91	35797	0.530	ppbv	96
72) 4-Ethyltoluene	11.125	105	39803	0.529	ppbv	99
73) 1,3,5-Trimethylbenzene	11.202	105	30932	0.507	ppbv	96
74) 1,2,4-Trimethylbenzene	11.532	105	35601	0.529	ppbv	97
75) 1,3-Dichlorobenzene	11.607	146	21307	0.510	ppbv	98
76) 1,4-Dichlorobenzene	11.668	146	21404	0.516	ppbv	98
77) 1,2-Dichlorobenzene	11.943	146	20279	0.510	ppbv	95
78) Hexachloro-1,3-Butadiene	13.879	225	17515	0.563	ppbv	98
79) Naphthalene	13.510	128	25577	0.429	ppbv	97
80) Naphthalene,2-methyl-	14.458	142	8906	0.484	ppbv	92
81) 1,2,4-Trichlorobenzene	13.439	180	12920	0.406	ppbv	98

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042954.D
 Acq On : 22 Sep 2025 11:56
 Operator : SY/MD
 Sample : VSTDICC0.1
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.1

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 09/23/2025
 Supervised By : Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:12:22 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 22 2025
 QLast Update : Tue Sep 23 02:07:33 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	163771	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	498673	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	457171	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	337196	9.881	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.800%
Target Compounds						
5) Vinyl Chloride	1.580	62	920	0.102	ppbv	# 75
32) 1,1,1-Trichloroethane	3.370	97	3418	0.098	ppbv	96
35) Carbon Tetrachloride	3.764	117	3071m	0.096	ppbv	
38) Trichloroethene	4.541	130	2470m	0.106	ppbv	
52) Tetrachloroethene	8.228	164	2013m	0.111	ppbv	
54) 1,2-Dibromoethane	7.655	107	2595m	0.102	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.966	83	3301	0.106	ppbv	97
79) Naphthalene	13.516	128	4997m	0.085	ppbv	

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

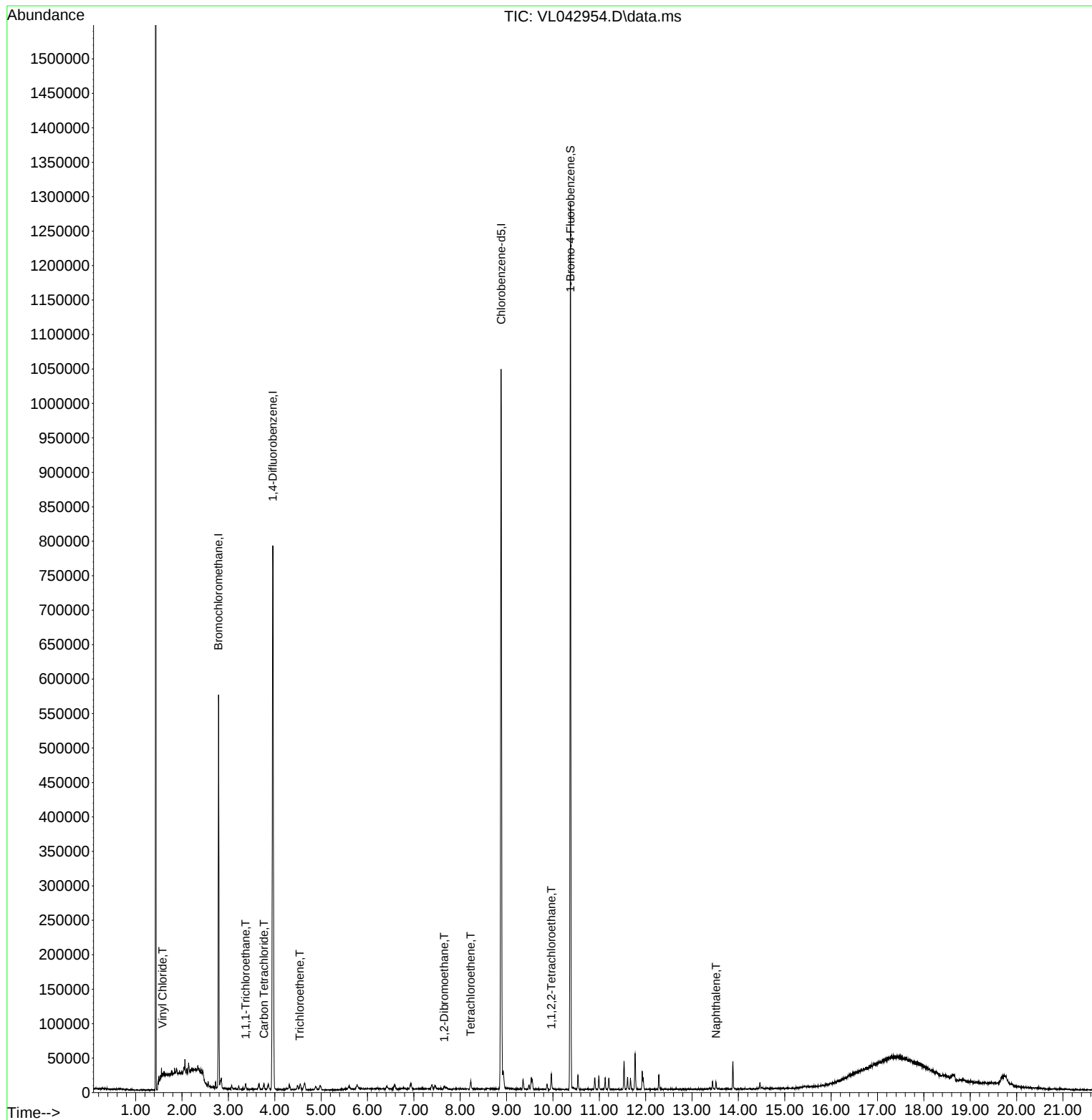
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042954.D
Acq On : 22 Sep 2025 11:56
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:12:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042955.D
 Acq On : 22 Sep 2025 12:30
 Operator : SY/MD
 Sample : VSTDICC0.03
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC0.03

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:13:15 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 2
 QLast Update : Tue Sep 23 02:07:33 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	163615	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	504423	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	454013	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	334002	9.855	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.600%
Target Compounds						
					Qvalue	
5) Vinyl Chloride	1.580	62	358	0.040	ppbv	# 53
32) 1,1,1-Trichloroethane	3.373	97	1337m	0.038	ppbv	
35) Carbon Tetrachloride	3.761	117	1110m	0.034	ppbv	
38) Trichloroethene	4.551	130	797m	0.034	ppbv	
52) Tetrachloroethene	8.231	164	660m	0.036	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.959	83	1098m	0.036	ppbv	

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

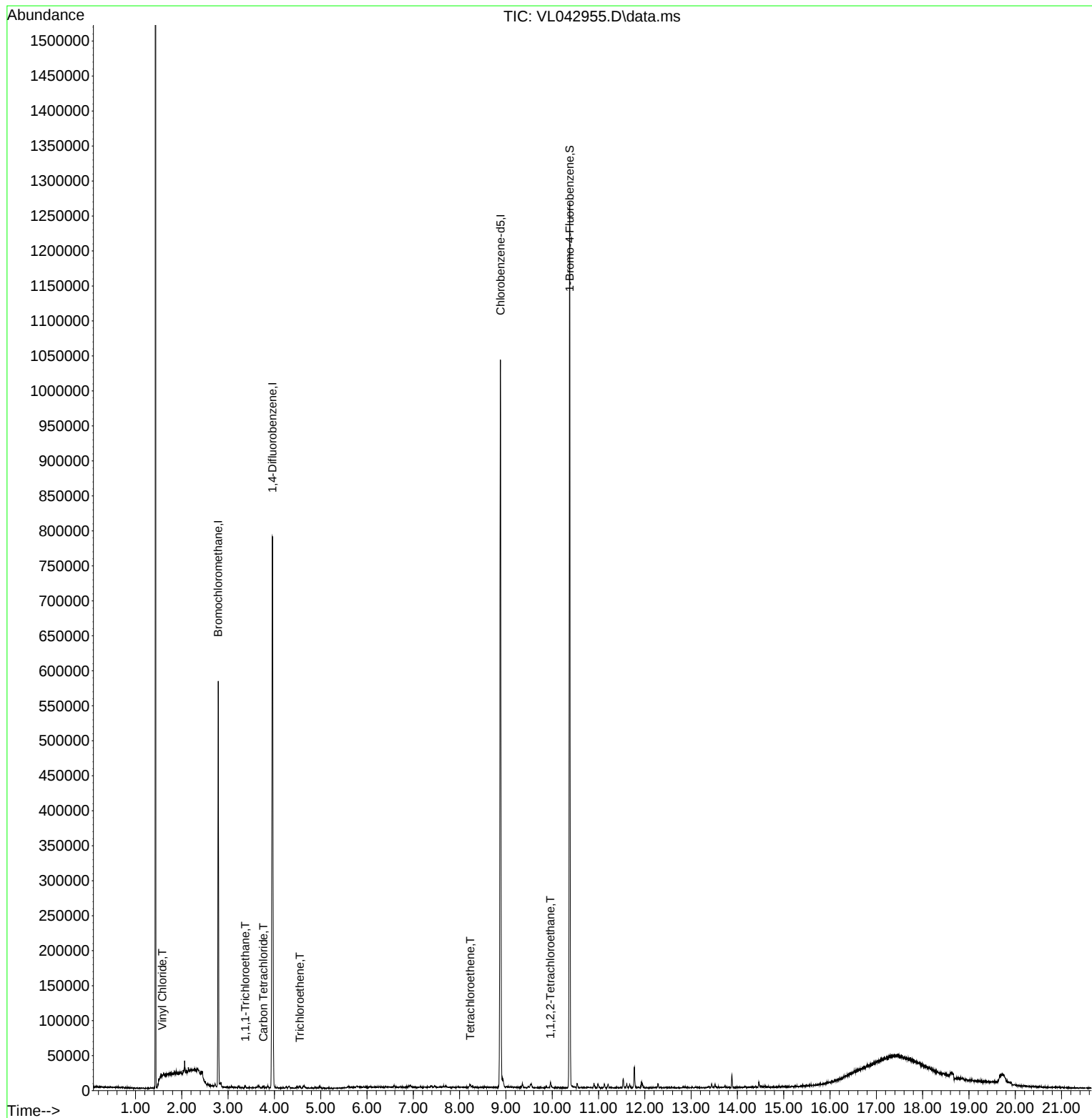
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042955.D
Acq On : 22 Sep 2025 12:30
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Sep 23 02:13:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Tue Sep 23 02:07:33 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
Supervised By :Mahesh Dadoda 09/24/2025



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042956.D
 Acq On : 22 Sep 2025 13:05
 Operator : SY/MD
 Sample : VSTDICC015
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC015

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:14:14 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2

QLast Update : Tue Sep 23 02:07:33 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	162846	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	494779	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	458256	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.377 95 343752 10.049 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.500%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.502	85	300946	13.740	ppbv	97
3) Chlorodifluoromethane	1.476	51	364959	13.369	ppbv	100
4) Chloromethane	1.534	50	133240	13.439	ppbv	99
5) Vinyl Chloride	1.583	62	115257	12.860	ppbv	100
6) Bromomethane	1.670	94	40861	12.925	ppbv	94
7) Chloroethane	1.706	64	46081	13.241	ppbv	99
8) Dichlorotetrafluoroethane	1.557	85	255815	13.682	ppbv	98
9) Propene	1.486	41	154069	12.973	ppbv	94
10) Heptane	4.985	43	424500	13.327	ppbv	98
11) Trichlorofluoromethane	1.881	101	295479	13.991	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.143	101	237615	13.894	ppbv	99
13) Ethanol	1.722	45	11502	10.105	ppbv	99
14) Bromoethene	1.784	108	88375	13.668	ppbv	100
15) Acetone	1.835	43	244861	11.545	ppbv	97
16) 1,3-Butadiene	1.612	39	126670	12.661	ppbv	97
17) tert-Butyl alcohol	2.039	59	308347	13.255	ppbv	99
18) 1,1-Dichloroethene	2.036	96	109211	13.796	ppbv	99
19) Isopropyl Alcohol	1.887	45	162952	12.780	ppbv	100
20) Methylene Chloride	2.062	84	92708	14.996	ppbv	95
21) Allyl Chloride	2.098	41	204552	13.848	ppbv	100
22) trans-1,2-Dichloroethene	2.343	96	121815	13.542	ppbv	98
23) Vinyl Acetate	2.463	43	419251	13.837	ppbv	99
24) 1,1-Dichloroethane	2.411	63	243229	13.789	ppbv	99
25) Ethyl Acetate	2.835	43	724418	13.514	ppbv	99
26) Hexane	2.829	57	321710	13.166	ppbv	99
27) Carbon Disulfide	2.153	76	300931	13.731	ppbv	97
28) Methyl tert-Butyl Ether	2.444	73	193915	15.267	ppbv	94
29) Chloroform	2.852	83	440772	13.796	ppbv	98
30) Cyclohexane	3.858	84	281932	13.800	ppbv	98
31) cis-1,2-Dichloroethene	2.722	61	317456	13.869	ppbv	98
32) 1,1,1-Trichloroethane	3.369	97	456335	13.178	ppbv	99
34) 2-Butanone	2.557	43	469872	13.551	ppbv	99
35) Carbon Tetrachloride	3.764	117	457985	14.385	ppbv	97
36) Benzene	3.658	78	654205	14.080	ppbv	99
37) 1,2-Dichloroethane	3.221	62	350841	14.358	ppbv	100
38) Trichloroethene	4.548	130	310602	13.450	ppbv	97
39) 1,2-Dichloropropane	4.315	63	241323	14.218	ppbv	95
40) 1,4-Dioxane	4.580	88	104884	13.306	ppbv #	98
41) Tetrahydrofuran	3.052	42	276157	13.855	ppbv	99
42) Bromodichloromethane	4.489	83	495091	14.544	ppbv	98
43) Methyl Methacrylate	4.881	69	263659	13.979	ppbv	99
44) 2,2,4-Trimethylpentane	4.641	57	1107180	13.791	ppbv	99
45) t-1,3-Dichloropropene	6.415	75	298019	14.694	ppbv	96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042956.D
 Acq On : 22 Sep 2025 13:05
 Operator : SY/MD
 Sample : VSTDICC015
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICC015

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:14:14 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Tue Sep 23 02:07:33 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	371770	14.389	ppbv	99
47) 1,1,2-Trichloroethane	6.583	97	249453	13.909	ppbv	96
48) Dibromochloromethane	7.389	129	421755	14.709	ppbv	99
49) Bromoform	9.487	173	367120	14.719	ppbv	99
50) 4-Methyl-2-Pentanone	5.748	43	666049	14.293	ppbv	100
51) 2-Hexanone	7.435	43	541611	14.620	ppbv	100
52) Tetrachloroethene	8.228	164	233980	13.015	ppbv	99
53) Toluene	6.936	91	765216	13.915	ppbv	98
54) 1,2-Dibromoethane	7.652	107	359750	14.261	ppbv	99
56) 1,1,1,2-Tetrachloroethane	8.927	131	306952	13.994	ppbv	99
57) Chlorobenzene	8.924	112	565065	13.507	ppbv	98
58) Ethyl Benzene	9.357	91	1052303	13.985	ppbv	99
59) m/p-Xylene	9.555	91	1636030m	27.557	ppbv	
60) o-Xylene	9.966	91	808098	13.629	ppbv	100
61) Styrene	9.872	104	401899	14.330	ppbv	99
62) Isopropylbenzene	10.542	105	1198767	13.564	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.966	83	403038	12.932	ppbv	100
64) n-propylbenzene	10.992	120	318541	13.793	ppbv	97
65) tert-Butylbenzene	11.532	119	1033382	13.146	ppbv	100
66) Benzyl Chloride	11.616	91	113549	13.767	ppbv	99
67) sec-Butylbenzene	11.769	105	1454158	13.276	ppbv	99
69) p-Isopropyltoluene	11.927	119	1228773	13.280	ppbv	100
70) n-Butylbenzene	12.283	91	1239042	13.716	ppbv	99
71) 2-Chlorotoluene	10.904	91	916456	13.733	ppbv	100
72) 4-Ethyltoluene	11.128	105	1014567	13.662	ppbv	99
73) 1,3,5-Trimethylbenzene	11.205	105	845958	14.046	ppbv	98
74) 1,2,4-Trimethylbenzene	11.539	105	889339	13.372	ppbv	97
75) 1,3-Dichlorobenzene	11.610	146	568597	13.785	ppbv	100
76) 1,4-Dichlorobenzene	11.675	146	570104	13.916	ppbv	99
77) 1,2-Dichlorobenzene	11.950	146	536286	13.665	ppbv	100
78) Hexachloro-1,3-Butadiene	13.882	225	377435	12.296	ppbv	99
79) Naphthalene	13.513	128	920123	15.645	ppbv	100
80) Naphthalene,2-methyl-	14.458	142	277792	15.290	ppbv	99
81) 1,2,4-Trichlorobenzene	13.442	180	473767	15.066	ppbv	99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042957.D
 Acq On : 22 Sep 2025 14:15
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL092225

Quant Time: Sep 23 02:49:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 09/23/2025
 Supervised By : Mahesh Dadoda 09/24/2025

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

Internal Standards						
1) Bromochloromethane	2.787	49	159826	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	493072	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	450930	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	10.377	95	338071	10.043	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.400%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	197861	9.204	ppbv	98
3) Chlorodifluoromethane	1.476	51	246838	9.213	ppbv	99
4) Chloromethane	1.535	50	85932	8.831	ppbv	100
5) Vinyl Chloride	1.580	62	74819	8.506	ppbv	98
6) Bromomethane	1.667	94	26463	8.529	ppbv	91
7) Chloroethane	1.706	64	30377	8.894	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	164255	8.951	ppbv	98
9) Propene	1.483	41	105822	9.079	ppbv	95
10) Heptane	4.982	43	284333	9.141	ppbv	99
11) Trichlorofluoromethane	1.878	101	189800	9.157	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.140	101	151398	9.020	ppbv	99
13) Ethanol	1.722	45	6606	5.842	ppbv	90
14) Bromoethene	1.781	108	55748	8.785	ppbv	98
15) Acetone	1.836	43	157306	7.557	ppbv	98
16) 1,3-Butadiene	1.609	39	80854	8.234	ppbv	98
17) tert-Butyl alcohol	2.040	59	206466	9.043	ppbv	100
18) 1,1-Dichloroethene	2.036	96	69181	8.904	ppbv	94
19) Isopropyl Alcohol	1.884	45	108171	8.644	ppbv	100
20) Methylene Chloride	2.062	84	61743	9.945	ppbv	98
21) Allyl Chloride	2.098	41	132878	9.166	ppbv	100
22) trans-1,2-Dichloroethene	2.341	96	78085	8.845	ppbv	98
23) Vinyl Acetate	2.464	43	280339	9.427	ppbv	99
24) 1,1-Dichloroethane	2.409	63	155861	9.003	ppbv	100
25) Ethyl Acetate	2.833	43	486993	9.256	ppbv	99
26) Hexane	2.826	57	216458	9.026	ppbv	99
27) Carbon Disulfide	2.150	76	196191	9.121	ppbv	98
28) Methyl tert-Butyl Ether	2.441	73	121564	9.752	ppbv	95
29) Chloroform	2.849	83	300507	9.583	ppbv	100
30) Cyclohexane	3.855	84	186186	9.286	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	213362	9.497	ppbv	99
32) 1,1,1-Trichloroethane	3.370	97	307237	9.071	ppbv	100
34) 2-Butanone	2.558	43	313801	9.081	ppbv	100
35) Carbon Tetrachloride	3.762	117	304293	9.479	ppbv	97
36) Benzene	3.655	78	435981	9.416	ppbv	98
37) 1,2-Dichloroethane	3.218	62	233305	9.581	ppbv	99
38) Trichloroethene	4.548	130	205431	8.927	ppbv	95
39) 1,2-Dichloropropane	4.312	63	160275	9.482	ppbv	95
40) 1,4-Dioxane	4.577	88	69659	8.863	ppbv #	95
41) Tetrahydrofuran	3.053	42	184258	9.277	ppbv	100
42) Bromodichloromethane	4.490	83	329680	9.721	ppbv	99
43) Methyl Methacrylate	4.878	69	172867	9.125	ppbv	99
44) 2,2,4-Trimethylpentane	4.642	57	738876	9.239	ppbv	99
45) t-1,3-Dichloropropene	6.416	75	188332	9.321	ppbv	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042957.D
 Acq On : 22 Sep 2025 14:15
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL092225

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:49:01 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Tue Sep 23 02:39:16 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	244367	9.490	ppbv	99
47) 1,1,2-Trichloroethane	6.577	97	165721	9.279	ppbv	97
48) Dibromochloromethane	7.387	129	278090	9.732	ppbv	99
49) Bromoform	9.484	173	238337	9.589	ppbv	99
50) 4-Methyl-2-Pentanone	5.746	43	435845	9.411	ppbv	99
51) 2-Hexanone	7.435	43	352962	9.561	ppbv	100
52) Tetrachloroethene	8.225	164	155469	8.678	ppbv	98
53) Toluene	6.933	91	509968	9.306	ppbv	99
54) 1,2-Dibromoethane	7.652	107	237604	9.452	ppbv	96
56) 1,1,1,2-Tetrachloroethane	8.924	131	205811	9.536	ppbv	99
57) Chlorobenzene	8.924	112	379110	9.209	ppbv	99
58) Ethyl Benzene	9.354	91	698086	9.428	ppbv	100
59) m/p-Xylene	9.552	91	1092496m	18.715	ppbv	
60) o-Xylene	9.966	91	538861	9.236	ppbv	99
61) Styrene	9.872	104	264257	9.575	ppbv	99
62) Isopropylbenzene	10.539	105	802723	9.230	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.963	83	272416	8.883	ppbv	100
64) n-propylbenzene	10.989	120	214374	9.433	ppbv	99
65) tert-Butylbenzene	11.533	119	711319	9.196	ppbv	99
66) Benzyl Chloride	11.617	91	71896	8.858	ppbv	99
67) sec-Butylbenzene	11.769	105	995407	9.235	ppbv	99
69) p-Isopropyltoluene	11.928	119	848196	9.316	ppbv	99
70) n-Butylbenzene	12.280	91	834882	9.392	ppbv	100
71) 2-Chlorotoluene	10.902	91	611697	9.315	ppbv	100
72) 4-Ethyltoluene	11.125	105	686229	9.391	ppbv	100
73) 1,3,5-Trimethylbenzene	11.203	105	567874	9.582	ppbv	100
74) 1,2,4-Trimethylbenzene	11.536	105	607159	9.277	ppbv	92
75) 1,3-Dichlorobenzene	11.607	146	380822	9.382	ppbv	100
76) 1,4-Dichlorobenzene	11.672	146	380109	9.429	ppbv	99
77) 1,2-Dichlorobenzene	11.947	146	359995	9.322	ppbv	100
78) Hexachloro-1,3-Butadiene	13.883	225	249142	8.248	ppbv	100
79) Naphthalene	13.514	128	590759	10.208	ppbv	99
80) Naphthalene,2-methyl-	14.459	142	173023	9.678	ppbv	98
81) 1,2,4-Trichlorobenzene	13.439	180	304647	9.845	ppbv	98

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042957.D
 Acq On : 22 Sep 2025 14:15
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL092225

Quant Time: Sep 23 02:49:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	94	0.00
2 T	Dichlorodifluoromethane	1.345	1.238	8.0	93	0.00
3	Chlorodifluoromethane	1.676	1.544	7.9	92	0.00
4	Chloromethane	0.609	0.538	11.7	90	0.00
5 T	Vinyl Chloride	0.550	0.468	14.9	93	0.00
6 T	Bromomethane	0.194	0.166	14.4	94	0.00
7	Chloroethane	0.214	0.190	11.2	91	0.00
8 T	Dichlorotetrafluoroethane	1.148	1.028	10.5	92	0.00
9 T	Propene	0.729	0.662	9.2	91	0.00
10 T	Heptane	1.946	1.779	8.6	89	0.01
11 T	Trichlorofluoromethane	1.297	1.188	8.4	93	0.00
12 T	1,1,2-Trichlorotrifluoroeth	1.050	0.947	9.8	92	0.00
13	Ethanol	0.071	0.041#	42.3#	73	0.00
14 T	Bromoethene	0.397	0.349	12.1	90	0.00
15 T	Acetone	1.302	0.984	24.4	93	0.00
16 T	1,3-Butadiene	0.614	0.506	17.6	91	0.00
17	tert-Butyl alcohol	1.429	1.292	9.6	89	0.00
18 T	1,1-Dichloroethene	0.486	0.433	10.9	91	0.00
19 T	Isopropyl Alcohol	0.783	0.677	13.5	88	0.00
20 T	Methylene Chloride	0.545	0.386	29.2	93	0.00
21 T	Allyl Chloride	0.907	0.831	8.4	91	0.00
22 T	trans-1,2-Dichloroethene	0.552	0.489	11.4	90	0.00
23 T	Vinyl Acetate	1.861	1.754	5.7	103	0.00
24 T	1,1-Dichloroethane	1.083	0.975	10.0	92	0.00
25 T	Ethyl Acetate	3.292	3.047	7.4	90	0.00
26 T	Hexane	1.501	1.354	9.8	91	0.00
27 T	Carbon Disulfide	1.346	1.228	8.8	90	0.00
28 T	Methyl tert-Butyl Ether	0.780	0.761	2.4	112	0.00
29 T	Chloroform	1.962	1.880	4.2	95	0.00
30 T	Cyclohexane	1.255	1.165	7.2	91	0.00
31 T	cis-1,2-Dichloroethene	1.406	1.335	5.0	92	0.00
32 T	1,1,1-Trichloroethane	2.119	1.922	9.3	95	0.00
33 I	1,4-Difluorobenzene	1.000	1.000	0.0	94	0.00
34 T	2-Butanone	0.701	0.636	9.3	91	0.00
35 T	Carbon Tetrachloride	0.651	0.617	5.2	95	0.00
36 T	Benzene	0.939	0.884	5.9	92	0.00
37 T	1,2-Dichloroethane	0.494	0.473	4.3	94	0.00
38 T	Trichloroethene	0.467	0.417	10.7	91	0.00
39 T	1,2-Dichloropropane	0.343	0.325	5.2	93	0.00
40 T	1,4-Dioxane	0.159	0.141	11.3	89	0.00
41 T	Tetrahydrofuran	0.403	0.374	7.2	90	0.00
42 T	Bromodichloromethane	0.688	0.669	2.8	92	0.00
43	Methyl Methacrylate	0.384	0.351	8.6	89	0.00
44 T	2,2,4-Trimethylpentane	1.622	1.499	7.6	90	0.00
45 T	t-1,3-Dichloropropene	0.410	0.382	6.8	88	0.00
46 T	cis-1,3-Dichloropropene	0.522	0.496	5.0	89	0.01
47 T	1,1,2-Trichloroethane	0.362	0.336	7.2	91	0.00
48 T	Dibromochloromethane	0.580	0.564	2.8	93	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042957.D
 Acq On : 22 Sep 2025 14:15
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL092225

Quant Time: Sep 23 02:49:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	Bromoform	0.504	0.483	4.2	89	0.00
50 T	4-Methyl-2-Pentanone	0.939	0.884	5.9	89	0.00
51 T	2-Hexanone	0.749	0.716	4.4	89	0.00
52 T	Tetrachloroethene	0.363	0.315	13.2	91	0.00
53 T	Toluene	1.111	1.034	6.9	90	0.00
54 T	1,2-Dibromoethane	0.510	0.482	5.5	92	0.00
55 I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.00
56	1,1,1,2-Tetrachloroethane	0.479	0.456	4.8	92	0.00
57 T	Chlorobenzene	0.913	0.841	7.9	91	0.00
58 T	Ethyl Benzene	1.642	1.548	5.7	91	0.00
59 T	m/p-Xylene	1.295	1.211	6.5	92	0.03
60 T	o-Xylene	1.294	1.195	7.7	91	0.00
61 T	Styrene	0.612	0.586	4.2	90	0.00
62	Isopropylbenzene	1.929	1.780	7.7	91	0.00
63 T	1,1,2,2-Tetrachloroethane	0.680	0.604	11.2	92	0.00
64	n-propylbenzene	0.504	0.475	5.8	93	0.00
65	tert-Butylbenzene	1.715	1.577	8.0	94	0.00
66 T	Benzyl Chloride	0.180	0.159	11.7	76	0.00
67	sec-Butylbenzene	2.390	2.207	7.7	93	0.00
68 S	1-Bromo-4-Fluorobenzene	0.746	0.750	-0.5	91	0.00
69	p-Isopropyltoluene	2.019	1.881	6.8	94	0.00
70	n-Butylbenzene	1.971	1.851	6.1	91	0.00
71	2-Chlorotoluene	1.456	1.357	6.8	92	0.00
72 T	4-Ethyltoluene	1.621	1.522	6.1	93	0.00
73 T	1,3,5-Trimethylbenzene	1.314	1.259	4.2	92	0.00
74 T	1,2,4-Trimethylbenzene	1.451	1.346	7.2	92	0.00
75 T	1,3-Dichlorobenzene	0.900	0.845	6.1	93	0.00
76 T	1,4-Dichlorobenzene	0.894	0.843	5.7	92	0.00
77 T	1,2-Dichlorobenzene	0.856	0.798	6.8	93	0.00
78 T	Hexachloro-1,3-Butadiene	0.670	0.553	17.5	89	0.00
79 T	Naphthalene	1.283	1.310	-2.1	88	0.00
80 T	Naphthalene,2-methyl-	0.396	0.384	3.0	88	0.00
81 T	1,2,4-Trichlorobenzene	0.686	0.676	1.5	87	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042957.D
 Acq On : 22 Sep 2025 14:15
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL092225

Quant Time: Sep 23 02:49:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	10.000	10.000	0.0	94	0.00
2 T	Dichlorodifluoromethane	10.000	9.204	8.0	93	0.00
3	Chlorodifluoromethane	10.000	9.213	7.9	92	0.00
4	Chloromethane	10.000	8.831	11.7	90	0.00
5 T	Vinyl Chloride	10.000	8.506	14.9	93	0.00
6 T	Bromomethane	10.000	8.529	14.7	94	0.00
7	Chloroethane	10.000	8.894	11.1	91	0.00
8 T	Dichlorotetrafluoroethane	10.000	8.951	10.5	92	0.00
9 T	Propene	10.000	9.079	9.2	91	0.00
10 T	Heptane	10.000	9.141	8.6	89	0.01
11 T	Trichlorofluoromethane	10.000	9.157	8.4	93	0.00
12 T	1,1,2-Trichlorotrifluoroeth	10.000	9.020	9.8	92	0.00
13	Ethanol	10.000	5.842	41.6#	73	0.00
14 T	Bromoethene	10.000	8.785	12.1	90	0.00
15 T	Acetone	10.000	7.557	24.4	93	0.00
16 T	1,3-Butadiene	10.000	8.234	17.7	91	0.00
17	tert-Butyl alcohol	10.000	9.043	9.6	89	0.00
18 T	1,1-Dichloroethene	10.000	8.904	11.0	91	0.00
19 T	Isopropyl Alcohol	10.000	8.644	13.6	88	0.00
20 T	Methylene Chloride	10.000	9.945	0.5	93	0.00
21 T	Allyl Chloride	10.000	9.166	8.3	91	0.00
22 T	trans-1,2-Dichloroethene	10.000	8.845	11.5	90	0.00
23 T	Vinyl Acetate	10.000	9.427	5.7	103	0.00
24 T	1,1-Dichloroethane	10.000	9.003	10.0	92	0.00
25 T	Ethyl Acetate	10.000	9.256	7.4	90	0.00
26 T	Hexane	10.000	9.026	9.7	91	0.00
27 T	Carbon Disulfide	10.000	9.121	8.8	90	0.00
28 T	Methyl tert-Butyl Ether	10.000	9.752	2.5	112	0.00
29 T	Chloroform	10.000	9.583	4.2	95	0.00
30 T	Cyclohexane	10.000	9.286	7.1	91	0.00
31 T	cis-1,2-Dichloroethene	10.000	9.497	5.0	92	0.00
32 T	1,1,1-Trichloroethane	10.000	9.071	9.3	95	0.00
33 I	1,4-Difluorobenzene	10.000	10.000	0.0	94	0.00
34 T	2-Butanone	10.000	9.081	9.2	91	0.00
35 T	Carbon Tetrachloride	10.000	9.479	5.2	95	0.00
36 T	Benzene	10.000	9.416	5.8	92	0.00
37 T	1,2-Dichloroethane	10.000	9.581	4.2	94	0.00
38 T	Trichloroethene	10.000	8.927	10.7	91	0.00
39 T	1,2-Dichloropropane	10.000	9.482	5.2	93	0.00
40 T	1,4-Dioxane	10.000	8.863	11.4	89	0.00
41 T	Tetrahydrofuran	10.000	9.277	7.2	90	0.00
42 T	Bromodichloromethane	10.000	9.721	2.8	92	0.00
43	Methyl Methacrylate	10.000	9.125	8.8	89	0.00
44 T	2,2,4-Trimethylpentane	10.000	9.239	7.6	90	0.00
45 T	t-1,3-Dichloropropene	10.000	9.321	6.8	88	0.00
46 T	cis-1,3-Dichloropropene	10.000	9.490	5.1	89	0.01
47 T	1,1,2-Trichloroethane	10.000	9.279	7.2	91	0.00
48 T	Dibromochloromethane	10.000	9.732	2.7	93	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042957.D
 Acq On : 22 Sep 2025 14:15
 Operator : SY/MD
 Sample : VSTDICV010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 ICVVL092225

Quant Time: Sep 23 02:49:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)

49 T	Bromoform	10.000	9.589	4.1	89	0.00
50 T	4-Methyl-2-Pentanone	10.000	9.411	5.9	89	0.00
51 T	2-Hexanone	10.000	9.561	4.4	89	0.00
52 T	Tetrachloroethene	10.000	8.678	13.2	91	0.00
53 T	Toluene	10.000	9.306	6.9	90	0.00
54 T	1,2-Dibromoethane	10.000	9.452	5.5	92	0.00

55 I	Chlorobenzene-d5	10.000	10.000	0.0	93	0.00
56	1,1,1,2-Tetrachloroethane	10.000	9.536	4.6	92	0.00
57 T	Chlorobenzene	10.000	9.209	7.9	91	0.00
58 T	Ethyl Benzene	10.000	9.428	5.7	91	0.00
59 T	m/p-Xylene	20.000	18.715	6.4	92	0.03
60 T	o-Xylene	10.000	9.236	7.6	91	0.00
61 T	Styrene	10.000	9.575	4.3	90	0.00
62	Isopropylbenzene	10.000	9.230	7.7	91	0.00
63 T	1,1,2,2-Tetrachloroethane	10.000	8.883	11.2	92	0.00
64	n-propylbenzene	10.000	9.433	5.7	93	0.00
65	tert-Butylbenzene	10.000	9.196	8.0	94	0.00
66 T	Benzyl Chloride	10.000	8.858	11.4	76	0.00
67	sec-Butylbenzene	10.000	9.235	7.7	93	0.00
68 S	1-Bromo-4-Fluorobenzene	10.000	10.043	-0.4	91	0.00
69	p-Isopropyltoluene	10.000	9.316	6.8	94	0.00
70	n-Butylbenzene	10.000	9.392	6.1	91	0.00
71	2-Chlorotoluene	10.000	9.315	6.9	92	0.00
72 T	4-Ethyltoluene	10.000	9.391	6.1	93	0.00
73 T	1,3,5-Trimethylbenzene	10.000	9.582	4.2	92	0.00
74 T	1,2,4-Trimethylbenzene	10.000	9.277	7.2	92	0.00
75 T	1,3-Dichlorobenzene	10.000	9.382	6.2	93	0.00
76 T	1,4-Dichlorobenzene	10.000	9.429	5.7	92	0.00
77 T	1,2-Dichlorobenzene	10.000	9.322	6.8	93	0.00
78 T	Hexachloro-1,3-Butadiene	10.000	8.248	17.5	89	0.00
79 T	Naphthalene	10.000	10.208	-2.1	88	0.00
80 T	Naphthalene,2-methyl-	10.000	9.678	3.2	88	0.00
81 T	1,2,4-Trichlorobenzene	10.000	9.845	1.5	87	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>GFEL01</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q3111</u>
Instrument ID:	<u>MSVOA_L</u>	Calibration Date/Time:	<u>09/18/2025 09:38</u>
Lab File ID:	<u>VL042939.D</u>	Init. Calib. Date(s):	<u>09/17/2025 09/17/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>10:48 14:17</u>
GC Column:	<u>RTX-1</u>	ID:	<u>0.32</u> (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	1.428	1.420		-0.56	30
Chloromethane	0.574	0.543		-5.4	30
Vinyl Chloride	0.542	0.495		-8.67	30
Bromomethane	0.188	0.181		-3.72	30
Chloroethane	0.199	0.198		-0.5	30
Tetrahydrofuran	0.321	0.385		19.94	30
Trichlorofluoromethane	1.411	1.348		-4.47	30
1,1,2-Trichlorotrifluoroethane	1.102	1.039		-5.72	30
Dichlorotetrafluoroethane	1.133	1.112		-1.85	30
tert-Butyl alcohol	1.183	1.196		1.1	30
Heptane	1.361	1.624		19.32	30
1,1-Dichloroethene	0.483	0.468		-3.11	30
Acetone	1.228	0.982		-20.03	30
Carbon Disulfide	1.388	1.355		-2.38	30
Methyl tert-Butyl Ether	0.619	0.596		-3.72	30
Methylene Chloride	0.535	0.425		-20.56	30
trans-1,2-Dichloroethene	0.547	0.538		-1.64	30
1,1-Dichloroethane	1.080	1.065		-1.39	30
Cyclohexane	0.848	1.062		25.24	30
2-Butanone	0.648	0.699		7.87	30
Carbon Tetrachloride	0.711	0.686		-3.52	30
cis-1,2-Dichloroethene	1.099	1.237		12.56	30
Chloroform	1.840	1.899		3.21	30
1,1,1-Trichloroethane	1.721	1.766		2.62	30
2,2,4-Trimethylpentane	1.455	1.669		14.71	30
Benzene	0.872	0.959		9.98	30
1,2-Dichloroethane	0.522	0.540		3.45	30
Trichloroethene	0.395	0.404		2.28	30
1,2-Dichloropropane	0.353	0.365		3.4	30
Bromodichloromethane	0.750	0.771		2.8	30
4-Methyl-2-Pentanone	0.775	0.944		21.81	30
Toluene	0.813	1.026		26.2	30
t-1,3-Dichloropropene	0.308	0.369		19.81	30
cis-1,3-Dichloropropene	0.425	0.501		17.88	30
1,1,2-Trichloroethane	0.359	0.378		5.29	30
Dibromochloromethane	0.563	0.587		4.26	30
1,2-Dibromoethane	0.462	0.508		9.96	30
Tetrachloroethene	0.269	0.281		4.46	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>GFEL01</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q3111</u>
Instrument ID:	<u>MSVOA_L</u>	Calibration Date/Time:	<u>09/18/2025 09:38</u>
Lab File ID:	<u>VL042939.D</u>	Init. Calib. Date(s):	<u>09/17/2025 09/17/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>10:48 14:17</u>
GC Column:	<u>RTX-1</u>	ID:	<u>0.32</u> (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Chlorobenzene	0.924	0.966		4.55	30
Ethyl Benzene	1.288	1.661		28.96	30
m/p-Xylene	1.089	1.387		27.36	30
o-Xylene	1.082	1.403		29.67	30
Styrene	0.403	0.572		41.94	30
Bromoform	0.439	0.471		7.29	30
1,1,2,2-Tetrachloroethane	0.782	0.788		0.77	30
2-Chlorotoluene	1.170	1.493		27.61	30
1,3,5-Trimethylbenzene	1.071	1.373		28.2	30
1,2,4-Trimethylbenzene	1.258	1.585		25.99	30
1,3-Dichlorobenzene	0.798	0.900		12.78	30
1,4-Dichlorobenzene	0.768	0.899		17.06	30
1,2-Dichlorobenzene	0.805	0.888		10.31	30
1,2,4-Trichlorobenzene	0.479	0.633		32.15	30
Hexachloro-1,3-Butadiene	0.514	0.505		-1.75	30
1,3-Butadiene	0.514	0.506		-1.56	30
Naphthalene	0.849	1.292		52.18	30
4-Ethyltoluene	1.267	1.671		31.89	30
1-Bromo-4-Fluorobenzene	0.782	0.821		4.99	30
Hexane	1.126	1.301		15.54	30
Allyl Chloride	0.833	0.815		-2.16	30
1,4-Dioxane	125.114	133.598		6.78	30
Methyl Methacrylate	0.292	0.358		22.6	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042939.D
 Acq On : 18 Sep 2025 09:38
 Operator : SY/MD
 Sample : VSTDC0010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDC0010

Quant Time: Sep 19 01:21:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.793	49	157654	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	416196	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	350205	10.000	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	287353	10.498	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.000%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	223802	9.938	ppbv	98
3) Chlorodifluoromethane	1.476	51	244077	10.294	ppbv	100
4) Chloromethane	1.534	50	85553	9.453	ppbv	98
5) Vinyl Chloride	1.583	62	77985	9.134	ppbv	95
6) Bromomethane	1.670	94	28462	9.593	ppbv	99
7) Chloroethane	1.706	64	31268	9.943	ppbv	92
8) Dichlorotetrafluoroethane	1.557	85	175256	9.809	ppbv	100
9) Propene	1.486	41	97529	11.264	ppbv	98
10) Heptane	4.988	43	256082	11.936	ppbv	99
11) Trichlorofluoromethane	1.881	101	212480	9.551	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.143	101	163856	9.428	ppbv	97
13) Ethanol	1.725	45	6145	6.961	ppbv	93
14) Bromoethene	1.784	108	57603	9.303	ppbv	98
15) Acetone	1.839	43	154852	7.997	ppbv	98
16) 1,3-Butadiene	1.612	39	79708	9.840	ppbv	98
17) tert-Butyl alcohol	2.042	59	188621	10.116	ppbv	98
18) 1,1-Dichloroethene	2.039	96	73857	9.708	ppbv	96
19) Isopropyl Alcohol	1.890	45	99740	9.607	ppbv #	1
20) Methylene Chloride	2.065	84	66946	7.941	ppbv	96
21) Allyl Chloride	2.101	41	128419	9.783	ppbv	100
22) trans-1,2-Dichloroethene	2.343	96	84863	9.842	ppbv	99
23) Vinyl Acetate	2.466	43	245936	10.931	ppbv	98
24) 1,1-Dichloroethane	2.411	63	167836	9.854	ppbv	98
25) Ethyl Acetate	2.842	43	459524	11.113	ppbv	100
26) Hexane	2.832	57	205167	11.562	ppbv	98
27) Carbon Disulfide	2.156	76	213658	9.762	ppbv	98
28) Methyl tert-Butyl Ether	2.444	73	93883	9.628	ppbv	98
29) Chloroform	2.855	83	299404	10.322	ppbv	99
30) Cyclohexane	3.865	84	167350	12.518	ppbv	100
31) cis-1,2-Dichloroethene	2.725	61	194977	11.254	ppbv	98
32) 1,1,1-Trichloroethane	3.376	97	278380	10.257	ppbv	100
34) 2-Butanone	2.560	43	290768	10.777	ppbv	98
35) Carbon Tetrachloride	3.771	117	285378	9.646	ppbv	94
36) Benzene	3.664	78	399269	10.998	ppbv	97
37) 1,2-Dichloroethane	3.224	62	224589	10.330	ppbv	99
38) Trichloroethene	4.557	130	168064	10.227	ppbv	95
39) 1,2-Dichloropropane	4.324	63	151824	10.348	ppbv	96
40) 1,4-Dioxane	4.593	88	55603	10.678	ppbv #	96
41) Tetrahydrofuran	3.059	42	160226	12.000	ppbv	99
42) Bromodichloromethane	4.499	83	320875	10.284	ppbv	97
43) Methyl Methacrylate	4.891	69	148839	12.245	ppbv	99
44) 2,2,4-Trimethylpentane	4.651	57	694671	11.472	ppbv	99
45) t-1,3-Dichloropropene	6.428	75	153654	11.989	ppbv	97

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042939.D
 Acq On : 18 Sep 2025 09:38
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

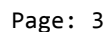
Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDCCC010

Quant Time: Sep 19 01:21:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.612	75	208635	11.808	ppbv	95
47) 1,1,2-Trichloroethane	6.596	97	157128	10.503	ppbv	98
48) Dibromochloromethane	7.396	129	244295	10.426	ppbv	100
49) Bromoform	9.493	173	196187	10.728	ppbv	99
50) 4-Methyl-2-Pentanone	5.761	43	392734	12.175	ppbv	100
51) 2-Hexanone	7.444	43	306892	12.811	ppbv	100
52) Tetrachloroethene	8.234	164	116819	10.435	ppbv	94
53) Toluene	6.946	91	426986	12.613	ppbv	100
54) 1,2-Dibromoethane	7.665	107	211227	10.975	ppbv	99
56) 1,1,1,2-Tetrachloroethane	8.933	131	180285	10.105	ppbv	97
57) Chlorobenzene	8.933	112	338397	10.455	ppbv	99
58) Ethyl Benzene	9.364	91	581778	12.894	ppbv	99
59) m/p-Xylene	9.561	91	971576m	25.483	ppbv	
60) o-Xylene	9.972	91	491310	12.961	ppbv	99
61) Styrene	9.878	104	200245	10.204	ppbv	99
62) Isopropylbenzene	10.548	105	691261	12.519	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.972	83	275929	10.076	ppbv	99
64) n-propylbenzene	10.995	120	178404	12.461	ppbv	99
65) tert-Butylbenzene	11.539	119	607057	12.865	ppbv	99
66) Benzyl Chloride	11.623	91	56239	12.827	ppbv	99
67) sec-Butylbenzene	11.775	105	896962	12.495	ppbv	100
69) p-Isopropyltoluene	11.934	119	726503	13.132	ppbv	99
70) n-Butylbenzene	12.286	91	766822	10.360	ppbv	100
71) 2-Chlorotoluene	10.908	91	522845	12.761	ppbv	99
72) 4-Ethyltoluene	11.131	105	585141	10.212	ppbv	100
73) 1,3,5-Trimethylbenzene	11.212	105	480708	12.818	ppbv	98
74) 1,2,4-Trimethylbenzene	11.545	105	555055	12.594	ppbv #	85
75) 1,3-Dichlorobenzene	11.613	146	315272	11.284	ppbv	100
76) 1,4-Dichlorobenzene	11.678	146	314779	11.710	ppbv	99
77) 1,2-Dichlorobenzene	11.953	146	310827	11.026	ppbv	100
78) Hexachloro-1,3-Butadiene	13.889	225	176944	9.828	ppbv	99
79) Naphthalene	13.520	128	452592	9.778	ppbv	100
80) Naphthalene,2-methyl-	14.465	142	115977	8.078	ppbv	99
81) 1,2,4-Trichlorobenzene	13.445	180	221727	9.972	ppbv	99

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

Quant Time: Sep 19 01:21:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Sep 18 02:57:46 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042939.D
 Acq On : 18 Sep 2025 09:38
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 LabSampleId :
 VSTDCCC010

Quant Time: Sep 19 01:21:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	98	0.00
2 T	Dichlorodifluoromethane	1.428	1.420	0.6	96	0.00
3	Chlorodifluoromethane	1.504	1.548	-2.9	102	0.00
4	Chloromethane	0.574	0.543	5.4	93	0.00
5 T	Vinyl Chloride	0.542	0.495	8.7	97	0.00
6 T	Bromomethane	0.188	0.181	3.7	93	0.00
7	Chloroethane	0.199	0.198	0.5	97	0.00
8 T	Dichlorotetrafluoroethane	1.133	1.112	1.9	95	0.00
9 T	Propene	0.549	0.619	-12.8	113	0.00
10 T	Heptane	1.361	1.624	-19.3	99	0.00
11 T	Trichlorofluoromethane	1.411	1.348	4.5	93	0.00
12 T	1,1,2-Trichlorotrifluoroeth	1.102	1.039	5.7	92	0.00
13	Ethanol	0.056	0.039#	30.4#	81	0.00
14 T	Bromoethene	0.393	0.365	7.1	92	0.00
15 T	Acetone	1.228	0.982	20.0	90	0.00
16 T	1,3-Butadiene	0.514	0.506	1.6	100	0.00
17	tert-Butyl alcohol	1.183	1.196	-1.1	100	0.00
18 T	1,1-Dichloroethene	0.483	0.468	3.1	94	0.00
19 T	Isopropyl Alcohol	0.659	0.633	3.9	96	0.00
20 T	Methylene Chloride	0.535	0.425	20.6	99	0.00
21 T	Allyl Chloride	0.833	0.815	2.2	97	0.00
22 T	trans-1,2-Dichloroethene	0.547	0.538	1.6	96	0.00
23 T	Vinyl Acetate	1.427	1.560	-9.3	103	0.00
24 T	1,1-Dichloroethane	1.080	1.065	1.4	95	0.00
25 T	Ethyl Acetate	2.623	2.915	-11.1	101	0.00
26 T	Hexane	1.126	1.301	-15.5	103	0.00
27 T	Carbon Disulfide	1.388	1.355	2.4	97	0.00
28 T	Methyl tert-Butyl Ether	0.619	0.596	3.7	95	0.00
29 T	Chloroform	1.840	1.899	-3.2	100	0.00
30 T	Cyclohexane	0.848	1.062	-25.2	103	0.00
31 T	cis-1,2-Dichloroethene	1.099	1.237	-12.6	106	0.00
32 T	1,1,1-Trichloroethane	1.721	1.766	-2.6	101	0.00
33 I	1,4-Difluorobenzene	1.000	1.000	0.0	100	0.00
34 T	2-Butanone	0.648	0.699	-7.9	104	0.00
35 T	Carbon Tetrachloride	0.711	0.686	3.5	99	0.00
36 T	Benzene	0.872	0.959	-10.0	104	0.00
37 T	1,2-Dichloroethane	0.522	0.540	-3.4	103	0.00
38 T	Trichloroethene	0.395	0.404	-2.3	101	0.00
39 T	1,2-Dichloropropane	0.353	0.365	-3.4	102	0.00
40 T	1,4-Dioxane	0.125	0.134	-7.2	91	0.00
41 T	Tetrahydrofuran	0.321	0.385	-19.9	106	0.00
42 T	Bromodichloromethane	0.750	0.771	-2.8	101	0.00
43	Methyl Methacrylate	0.292	0.358	-22.6	104	0.00
44 T	2,2,4-Trimethylpentane	1.455	1.669	-14.7	99	0.00
45 T	t-1,3-Dichloropropene	0.308	0.369	-19.8	105	0.00
46 T	cis-1,3-Dichloropropene	0.425	0.501	-17.9	106	0.00
47 T	1,1,2-Trichloroethane	0.359	0.378	-5.3	101	0.00
48 T	Dibromochloromethane	0.563	0.587	-4.3	100	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042939.D
 Acq On : 18 Sep 2025 09:38
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 LabSampleId :
 VSTDCCC010

Quant Time: Sep 19 01:21:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	Bromoform	0.439	0.471	-7.3	100	0.00
50 T	4-Methyl-2-Pentanone	0.775	0.944	-21.8	101	0.00
51 T	2-Hexanone	0.576	0.737	-28.0	100	0.00
52 T	Tetrachloroethene	0.269	0.281	-4.5	101	0.00
53 T	Toluene	0.813	1.026	-26.2	103	0.00
54 T	1,2-Dibromoethane	0.462	0.508	-10.0	100	0.00
55 I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
56	1,1,1,2-Tetrachloroethane	0.509	0.515	-1.2	97	0.00
57 T	Chlorobenzene	0.924	0.966	-4.5	99	0.00
58 T	Ethyl Benzene	1.288	1.661	-29.0	100	0.00
59 T	m/p-Xylene	1.089	1.387	-27.4	99	0.00
60 T	o-Xylene	1.082	1.403	-29.7	99	0.00
61 T	Styrene	0.403	0.572	-41.9#	102	0.00
62	Isopropylbenzene	1.577	1.974	-25.2	98	0.00
63 T	1,1,2,2-Tetrachloroethane	0.782	0.788	-0.8	97	0.00
64	n-propylbenzene	0.409	0.509	-24.4	98	0.00
65	tert-Butylbenzene	1.347	1.733	-28.7	98	0.00
66 T	Benzyl Chloride	0.125	0.161	-28.8	106	0.00
67	sec-Butylbenzene	2.050	2.561	-24.9	99	0.00
68 S	1-Bromo-4-Fluorobenzene	0.782	0.821	-5.0	97	0.00
69	p-Isopropyltoluene	1.580	2.075	-31.3#	100	0.00
70	n-Butylbenzene	1.661	2.190	-31.8#	97	0.00
71	2-Chlorotoluene	1.170	1.493	-27.6	98	0.00
72 T	4-Ethyltoluene	1.267	1.671	-31.9#	98	0.00
73 T	1,3,5-Trimethylbenzene	1.071	1.373	-28.2	97	0.00
74 T	1,2,4-Trimethylbenzene	1.258	1.585	-26.0	98	0.00
75 T	1,3-Dichlorobenzene	0.798	0.900	-12.8	99	0.00
76 T	1,4-Dichlorobenzene	0.768	0.899	-17.1	98	0.00
77 T	1,2-Dichlorobenzene	0.805	0.888	-10.3	98	0.00
78 T	Hexachloro-1,3-Butadiene	0.514	0.505	1.8	96	0.00
79 T	Naphthalene	0.849	1.292	-52.2#	95	0.00
80 T	Naphthalene,2-methyl-	0.275	0.331	-20.4	87	0.00
81 T	1,2,4-Trichlorobenzene	0.479	0.633	-32.2#	99	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042939.D
 Acq On : 18 Sep 2025 09:38
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 LabSampleId :
 VSTDCCC010

Quant Time: Sep 19 01:21:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	10.000	10.000	0.0	98	0.00
2 T	Dichlorodifluoromethane	10.000	9.938	0.6	96	0.00
3	Chlorodifluoromethane	10.000	10.294	-2.9	102	0.00
4	Chloromethane	10.000	9.453	5.5	93	0.00
5 T	Vinyl Chloride	10.000	9.134	8.7	97	0.00
6 T	Bromomethane	10.000	9.593	4.1	93	0.00
7	Chloroethane	10.000	9.943	0.6	97	0.00
8 T	Dichlorotetrafluoroethane	10.000	9.809	1.9	95	0.00
9 T	Propene	10.000	11.264	-12.6	113	0.00
10 T	Heptane	10.000	11.936	-19.4	99	0.00
11 T	Trichlorofluoromethane	10.000	9.551	4.5	93	0.00
12 T	1,1,2-Trichlorotrifluoroeth	10.000	9.428	5.7	92	0.00
13	Ethanol	10.000	6.961	30.4#	81	0.00
14 T	Bromoethene	10.000	9.303	7.0	92	0.00
15 T	Acetone	10.000	7.997	20.0	90	0.00
16 T	1,3-Butadiene	10.000	9.840	1.6	100	0.00
17	tert-Butyl alcohol	10.000	10.116	-1.2	100	0.00
18 T	1,1-Dichloroethene	10.000	9.708	2.9	94	0.00
19 T	Isopropyl Alcohol	10.000	9.607	3.9	96	0.00
20 T	Methylene Chloride	10.000	7.941	20.6	99	0.00
21 T	Allyl Chloride	10.000	9.783	2.2	97	0.00
22 T	trans-1,2-Dichloroethene	10.000	9.842	1.6	96	0.00
23 T	Vinyl Acetate	10.000	10.931	-9.3	103	0.00
24 T	1,1-Dichloroethane	10.000	9.854	1.5	95	0.00
25 T	Ethyl Acetate	10.000	11.113	-11.1	101	0.00
26 T	Hexane	10.000	11.562	-15.6	103	0.00
27 T	Carbon Disulfide	10.000	9.762	2.4	97	0.00
28 T	Methyl tert-Butyl Ether	10.000	9.628	3.7	95	0.00
29 T	Chloroform	10.000	10.322	-3.2	100	0.00
30 T	Cyclohexane	10.000	12.518	-25.2	103	0.00
31 T	cis-1,2-Dichloroethene	10.000	11.254	-12.5	106	0.00
32 T	1,1,1-Trichloroethane	10.000	10.257	-2.6	101	0.00
33 I	1,4-Difluorobenzene	10.000	10.000	0.0	100	0.00
34 T	2-Butanone	10.000	10.777	-7.8	104	0.00
35 T	Carbon Tetrachloride	10.000	9.646	3.5	99	0.00
36 T	Benzene	10.000	10.998	-10.0	104	0.00
37 T	1,2-Dichloroethane	10.000	10.330	-3.3	103	0.00
38 T	Trichloroethene	10.000	10.227	-2.3	101	0.00
39 T	1,2-Dichloropropane	10.000	10.348	-3.5	102	0.00
40 T	1,4-Dioxane	10.000	10.678	-6.8	91	0.00
41 T	Tetrahydrofuran	10.000	12.000	-20.0	106	0.00
42 T	Bromodichloromethane	10.000	10.284	-2.8	101	0.00
43	Methyl Methacrylate	10.000	12.245	-22.4	104	0.00
44 T	2,2,4-Trimethylpentane	10.000	11.472	-14.7	99	0.00
45 T	t-1,3-Dichloropropene	10.000	11.989	-19.9	105	0.00
46 T	cis-1,3-Dichloropropene	10.000	11.808	-18.1	106	0.00
47 T	1,1,2-Trichloroethane	10.000	10.503	-5.0	101	0.00
48 T	Dibromochloromethane	10.000	10.426	-4.3	100	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042939.D
 Acq On : 18 Sep 2025 09:38
 Operator : SY/MD
 Sample : VSTDCCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 LabSampleId :
 VSTDCCC010

Quant Time: Sep 19 01:21:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
 Max. RRF Dev : 30% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	Bromoform	10.000	10.728	-7.3	100	0.00
50 T	4-Methyl-2-Pentanone	10.000	12.175	-21.8	101	0.00
51 T	2-Hexanone	10.000	12.811	-28.1	100	0.00
52 T	Tetrachloroethene	10.000	10.435	-4.4	101	0.00
53 T	Toluene	10.000	12.613	-26.1	103	0.00
54 T	1,2-Dibromoethane	10.000	10.975	-9.7	100	0.00
55 I	Chlorobenzene-d5	10.000	10.000	0.0	99	0.00
56	1,1,1,2-Tetrachloroethane	10.000	10.105	-1.1	97	0.00
57 T	Chlorobenzene	10.000	10.455	-4.6	99	0.00
58 T	Ethyl Benzene	10.000	12.894	-28.9	100	0.00
59 T	m/p-Xylene	20.000	25.483	-27.4	99	0.00
60 T	o-Xylene	10.000	12.961	-29.6	99	0.00
61 T	Styrene	10.000	10.204	-2.0	102	0.00
62	Isopropylbenzene	10.000	12.519	-25.2	98	0.00
63 T	1,1,2,2-Tetrachloroethane	10.000	10.076	-0.8	97	0.00
64	n-propylbenzene	10.000	12.461	-24.6	98	0.00
65	tert-Butylbenzene	10.000	12.865	-28.7	98	0.00
66 T	Benzyl Chloride	10.000	12.827	-28.3	106	0.00
67	sec-Butylbenzene	10.000	12.495	-24.9	99	0.00
68 S	1-Bromo-4-Fluorobenzene	10.000	10.498	-5.0	97	0.00
69	p-Isopropyltoluene	10.000	13.132	-31.3#	100	0.00
70	n-Butylbenzene	10.000	10.360	-3.6	97	0.00
71	2-Chlorotoluene	10.000	12.761	-27.6	98	0.00
72 T	4-Ethyltoluene	10.000	10.212	-2.1	98	0.00
73 T	1,3,5-Trimethylbenzene	10.000	12.818	-28.2	97	0.00
74 T	1,2,4-Trimethylbenzene	10.000	12.594	-25.9	98	0.00
75 T	1,3-Dichlorobenzene	10.000	11.284	-12.8	99	0.00
76 T	1,4-Dichlorobenzene	10.000	11.710	-17.1	98	0.00
77 T	1,2-Dichlorobenzene	10.000	11.026	-10.3	98	0.00
78 T	Hexachloro-1,3-Butadiene	10.000	9.828	1.7	96	0.00
79 T	Naphthalene	10.000	9.778	2.2	95	0.00
80 T	Naphthalene,2-methyl-	10.000	8.078	19.2	87	0.00
81 T	1,2,4-Trichlorobenzene	10.000	9.972	0.3	99	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>GFEL01</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q3111</u>
Instrument ID:	<u>MSVOA_L</u>	Calibration Date/Time:	<u>09/22/2025 09:39</u>
Lab File ID:	<u>VL042950.D</u>	Init. Calib. Date(s):	<u>09/22/2025 09/22/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>09:39 13:05</u>
GC Column:	<u>RTX-1</u>	ID:	<u>0.32</u> (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	1.345	1.248		-7.21	
Chloromethane	0.609	0.560		-8.05	
Vinyl Chloride	0.550	0.470		-14.55	
Bromomethane	0.194	0.166		-14.43	
Chloroethane	0.214	0.196		-8.41	
Tetrahydrofuran	0.403	0.389		-3.47	
Trichlorofluoromethane	1.297	1.199		-7.56	
1,1,2-Trichlorotrifluoroethane	1.050	0.963		-8.29	
Dichlorotetrafluoroethane	1.148	1.047		-8.8	
tert-Butyl alcohol	1.429	1.351		-5.46	
Heptane	1.946	1.870		-3.9	
1,1-Dichloroethene	0.486	0.446		-8.23	
Acetone	1.302	0.993		-23.73	
Carbon Disulfide	1.346	1.271		-5.57	
Methyl tert-Butyl Ether	0.780	0.638		-18.2	
Methylene Chloride	0.545	0.388		-28.81	
trans-1,2-Dichloroethene	0.552	0.507		-8.15	
1,1-Dichloroethane	1.083	0.993		-8.31	
Cyclohexane	1.255	1.193		-4.94	
2-Butanone	0.701	0.655		-6.56	
Carbon Tetrachloride	0.651	0.610		-6.3	
cis-1,2-Dichloroethene	1.406	1.357		-3.48	
Chloroform	1.962	1.848		-5.81	
1,1,1-Trichloroethane	2.119	1.902		-10.24	
2,2,4-Trimethylpentane	1.622	1.563		-3.64	
Benzene	0.939	0.898		-4.37	
1,2-Dichloroethane	0.494	0.470		-4.86	
Trichloroethene	0.467	0.426		-8.78	
1,2-Dichloropropane	0.343	0.327		-4.66	
Bromodichloromethane	0.688	0.681		-1.02	
4-Methyl-2-Pentanone	0.939	0.934		-0.53	
Toluene	1.111	1.078		-2.97	
t-1,3-Dichloropropene	0.410	0.409		-0.24	
cis-1,3-Dichloropropene	0.522	0.523		0.19	
1,1,2-Trichloroethane	0.362	0.344		-4.97	
Dibromochloromethane	0.580	0.571		-1.55	
1,2-Dibromoethane	0.510	0.490		-3.92	
Tetrachloroethene	0.363	0.325		-10.47	

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>Alliance</u>	Contract:	<u>GFEL01</u>
Lab Code:	<u>ACE</u>	SDG No.:	<u>Q3111</u>
Instrument ID:	<u>MSVOA_L</u>	Calibration Date/Time:	<u>09/22/2025</u> <u>09:39</u>
Lab File ID:	<u>VL042950.D</u>	Init. Calib. Date(s):	<u>09/22/2025</u> <u>09/22/2025</u>
Heated Purge: (Y/N)	<u>N</u>	Init. Calib. Time(s):	<u>09:39</u> <u>13:05</u>
GC Column:	<u>RTX-1</u>	ID:	<u>0.32</u> (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Chlorobenzene	0.913	0.853		-6.57	
Ethyl Benzene	1.642	1.570		-4.39	
m/p-Xylene	1.295	1.225		-5.41	
o-Xylene	1.294	1.221		-5.64	
Styrene	0.612	0.602		-1.63	
Bromoform	0.504	0.508		0.79	
1,1,2,2-Tetrachloroethane	0.680	0.610		-10.29	
2-Chlorotoluene	1.456	1.373		-5.7	
1,3,5-Trimethylbenzene	1.314	1.263		-3.88	
1,2,4-Trimethylbenzene	1.451	1.349		-7.03	
1,3-Dichlorobenzene	0.900	0.845		-6.11	
1,4-Dichlorobenzene	0.894	0.845		-5.48	
1,2-Dichlorobenzene	0.856	0.796		-7.01	
1,2,4-Trichlorobenzene	0.686	0.718		4.66	
Hexachloro-1,3-Butadiene	0.670	0.575		-14.18	
1,3-Butadiene	0.614	0.520		-15.31	
Naphthalene	1.283	1.373		7.01	
4-Ethyltoluene	1.621	1.523		-6.05	
1-Bromo-4-Fluorobenzene	0.746	0.763		2.28	
Hexane	1.501	1.398		-6.86	
Allyl Chloride	0.907	0.857		-5.51	
1,4-Dioxane	159.404	147.887		-7.22	
Methyl Methacrylate	0.384	0.368		-4.17	

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042950.D
 Acq On : 22 Sep 2025 09:39
 Operator : SY/MD
 Sample : VSTDICCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:08:12 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2

QLast Update : Tue Sep 23 02:07:33 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	170899	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	526679	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	486724	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.371 95 371195 10.217 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 102.200%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.496	85	213351	9.282	ppbv	100
3) Chlorodifluoromethane	1.473	51	269073	9.392	ppbv	100
4) Chloromethane	1.531	50	95679	9.196	ppbv	100
5) Vinyl Chloride	1.577	62	80350	8.543	ppbv	100
6) Bromomethane	1.667	94	28301	8.530	ppbv	100
7) Chloroethane	1.703	64	33446	9.158	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	178992	9.122	ppbv	100
9) Propene	1.483	41	116849	9.376	ppbv	100
10) Heptane	4.969	43	319577	9.560	ppbv	100
11) Trichlorofluoromethane	1.874	101	204850	9.243	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.137	101	164598	9.171	ppbv	100
13) Ethanol	1.719	45	9094	7.613	ppbv	100
14) Bromoethene	1.780	108	61824	9.111	ppbv	100
15) Acetone	1.832	43	169676	7.623	ppbv	100
16) 1,3-Butadiene	1.606	39	88812	8.459	ppbv	100
17) tert-Butyl alcohol	2.036	59	230853	9.456	ppbv	100
18) 1,1-Dichloroethene	2.030	96	76184	9.170	ppbv	100
19) Isopropyl Alcohol	1.884	45	122753	9.174	ppbv	100
20) Methylene Chloride	2.059	84	66314	9.992	ppbv	100
21) Allyl Chloride	2.094	41	146473	9.449	ppbv	100
22) trans-1,2-Dichloroethene	2.337	96	86580	9.172	ppbv	100
23) Vinyl Acetate	2.460	43	272378	8.566	ppbv	100
24) 1,1-Dichloroethane	2.405	63	169721	9.168	ppbv	100
25) Ethyl Acetate	2.829	43	538761	9.577	ppbv	100
26) Hexane	2.823	57	238896	9.316	ppbv	100
27) Carbon Disulfide	2.146	76	217259	9.446	ppbv	100
28) Methyl tert-Butyl Ether	2.434	73	108987	8.176	ppbv	100
29) Chloroform	2.845	83	315779	9.418	ppbv	100
30) Cyclohexane	3.852	84	203803	9.506	ppbv	100
31) cis-1,2-Dichloroethene	2.716	61	231907	9.654	ppbv	100
32) 1,1,1-Trichloroethane	3.363	97	325118	8.947	ppbv	100
34) 2-Butanone	2.551	43	344874	9.343	ppbv	100
35) Carbon Tetrachloride	3.755	117	321267	9.480	ppbv	100
36) Benzene	3.651	78	472855	9.561	ppbv	100
37) 1,2-Dichloroethane	3.214	62	247754	9.525	ppbv	100
38) Trichloroethene	4.541	130	224516	9.134	ppbv	100
39) 1,2-Dichloropropane	4.305	63	172059	9.523	ppbv	100
40) 1,4-Dioxane	4.570	88	77889	9.283	ppbv #	100
41) Tetrahydrofuran	3.046	42	204724	9.649	ppbv	100
42) Bromodichloromethane	4.480	83	358858	9.903	ppbv	100
43) Methyl Methacrylate	4.871	69	193676	9.646	ppbv	100
44) 2,2,4-Trimethylpentane	4.632	57	823031	9.631	ppbv	100
45) t-1,3-Dichloropropene	6.406	75	215233	9.969	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042950.D
 Acq On : 22 Sep 2025 09:39
 Operator : SY/MD
 Sample : VSTDICCC010
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VSTDICCC010

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 09/23/2025
 Supervised By : Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:08:12 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Tue Sep 23 02:07:33 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.590	75	275210	10.006	ppbv	100
47) 1,1,2-Trichloroethane	6.571	97	181329	9.498	ppbv	100
48) Dibromochloromethane	7.383	129	300497	9.845	ppbv	100
49) Bromoform	9.480	173	267814	10.087	ppbv	100
50) 4-Methyl-2-Pentanone	5.736	43	492068	9.920	ppbv	100
51) 2-Hexanone	7.428	43	395744	10.036	ppbv #	100
52) Tetrachloroethene	8.218	164	171294	8.951	ppbv	100
53) Toluene	6.923	91	567779	9.699	ppbv	100
54) 1,2-Dibromoethane	7.645	107	257904	9.605	ppbv	100
56) 1,1,1,2-Tetrachloroethane	8.921	131	223066	9.575	ppbv	100
57) Chlorobenzene	8.917	112	415238	9.345	ppbv	100
58) Ethyl Benzene	9.348	91	764249	9.562	ppbv	100
59) m/p-Xylene	9.526	91	1192566m	18.913	ppbv	
60) o-Xylene	9.959	91	594329	9.437	ppbv	100
61) Styrene	9.866	104	293111	9.840	ppbv	100
62) Isopropylbenzene	10.536	105	877401	9.347	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.956	83	296678	8.963	ppbv	100
64) n-propylbenzene	10.985	120	230432	9.394	ppbv	100
65) tert-Butylbenzene	11.526	119	757958	9.078	ppbv	100
66) Benzyl Chloride	11.610	91	94982	10.842	ppbv	100
67) sec-Butylbenzene	11.762	105	1066409	9.166	ppbv	100
69) p-Isopropyltoluene	11.921	119	903376	9.192	ppbv	100
70) n-Butylbenzene	12.277	91	915624	9.543	ppbv	100
71) 2-Chlorotoluene	10.895	91	668239	9.428	ppbv	100
72) 4-Ethyltoluene	11.121	105	741298	9.398	ppbv	100
73) 1,3,5-Trimethylbenzene	11.199	105	614632	9.608	ppbv	100
74) 1,2,4-Trimethylbenzene	11.532	105	656535	9.294	ppbv	100
75) 1,3-Dichlorobenzene	11.604	146	411473	9.392	ppbv	100
76) 1,4-Dichlorobenzene	11.668	146	411464	9.456	ppbv	100
77) 1,2-Dichlorobenzene	11.944	146	387219	9.289	ppbv	100
78) Hexachloro-1,3-Butadiene	13.876	225	280080	8.591	ppbv	100
79) Naphthalene	13.510	128	668171	10.696	ppbv	100
80) Naphthalene,2-methyl-	14.452	142	195695	10.142	ppbv	100
81) 1,2,4-Trichlorobenzene	13.436	180	349393	10.461	ppbv	100

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



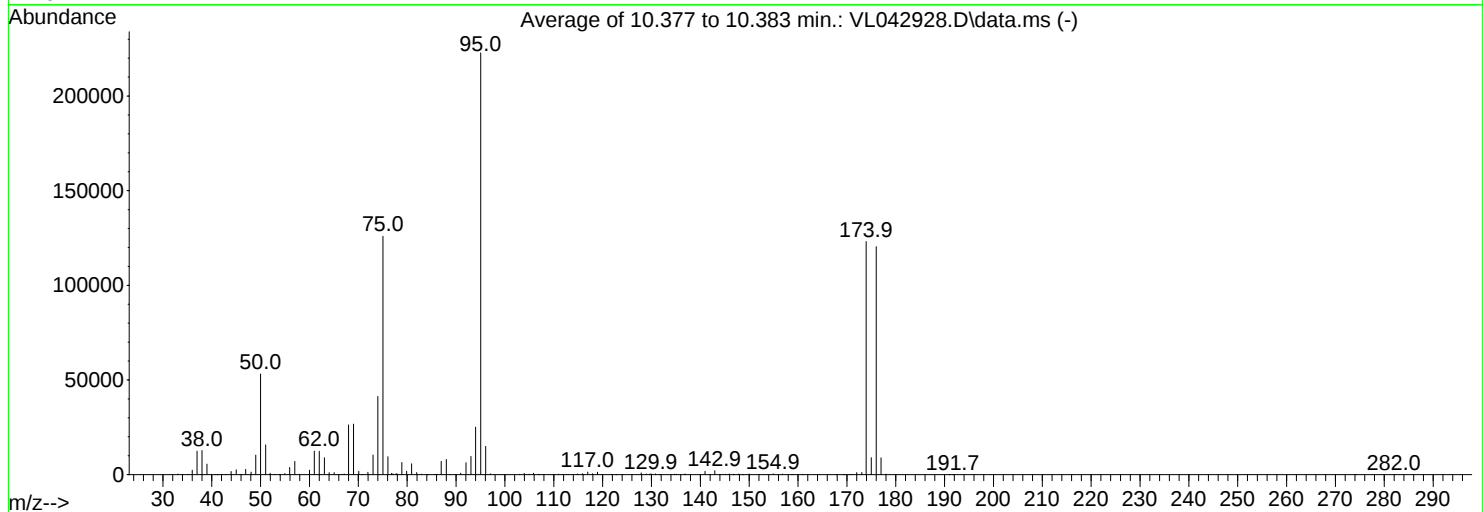
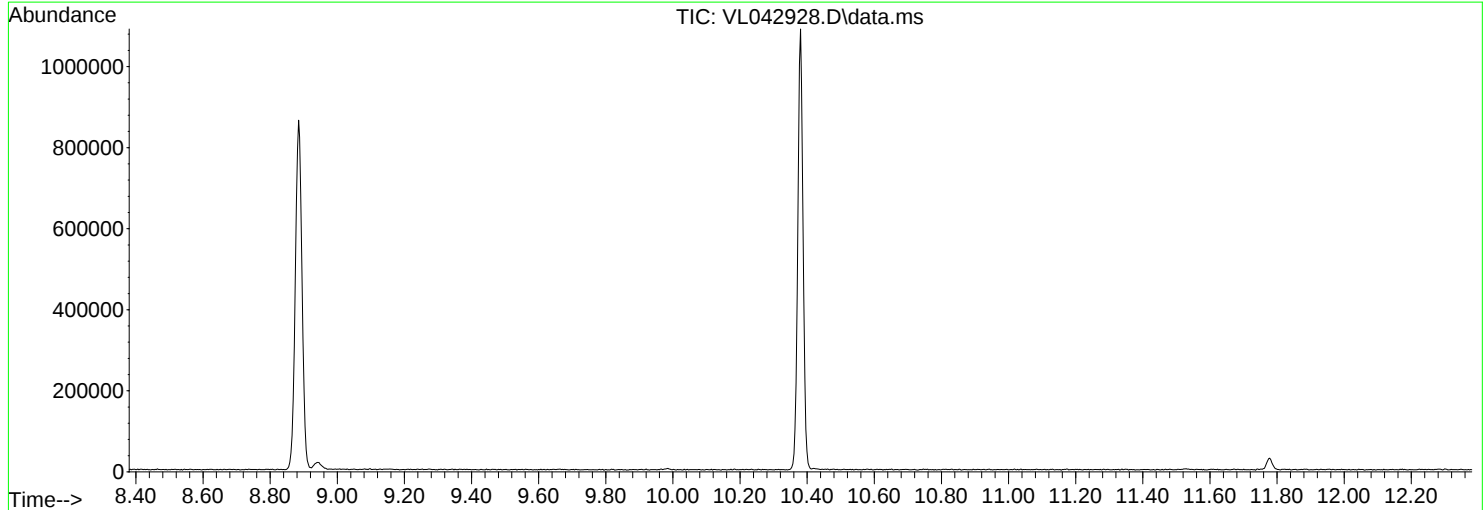
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091725\
Data File : VL042928.D
Acq On : 17 Sep 2025 07:51
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
Last Update : Thu Sep 18 02:57:46 2025



AutoFind: Scans 3179, 3180, 3181; Background Corrected with Scan 3165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.9	53203	PASS
75	95	30	66	56.5	125915	PASS
95	95	100	100	100.0	222805	PASS
96	95	5	9	6.7	14943	PASS
173	174	0.00	2	1.0	1195	PASS
174	95	50	120	55.3	123173	PASS
175	174	4	9	7.3	8935	PASS
176	174	93	101	97.8	120472	PASS
177	176	5	9	7.4	8875	PASS

Average of 10.377 to 10.383 min.: VL042928.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
33.10	326	42.90	188	52.95	173	65.05	1064
33.95	137	43.95	1727	53.80	31	65.80	21
34.15	88	45.00	2549	54.95	589	66.80	12
35.10	59	45.80	90	55.95	3828	67.10	37
36.00	2346	46.10	168	57.00	7043	68.00	26323
37.00	12410	46.95	2763	57.95	238	69.00	26749
38.00	12760	48.05	1394	60.00	2402	70.10	1737
39.00	5584	49.00	10330	61.00	12431	70.85	123
39.90	165	50.00	53203	62.00	12338	71.95	1266
40.80	98	51.05	15701	63.05	8980	73.00	10431
41.10	20	51.95	762	64.05	1139	74.00	41301

Average of 10.377 to 10.383 min.: VL042928.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
75.05	125915	84.10	22	95.05	222805	111.00	217
76.05	9509	85.65	99	96.05	14943	111.75	132
76.80	719	85.90	73	97.05	389	112.00	71
77.10	426	86.10	164	102.95	155	112.70	78
77.75	572	86.95	7006	103.95	649	113.00	78
78.00	236	88.00	8035	104.95	237	114.90	346
78.90	6414	88.80	51	105.85	789	115.85	555
79.90	1780	90.95	755	106.85	143	116.10	202
80.90	5789	92.05	6365	107.05	106	116.95	1338
81.95	1141	93.05	9636	107.80	98	117.90	540
82.95	222	94.00	25107	109.90	186	118.95	1268

Average of 10.377 to 10.383 min.: VL042928.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
119.70	61	135.10	136	145.15	167	153.75	130
121.85	152	136.80	239	145.70	106	154.90	447
122.70	20	136.95	255	145.95	347	156.80	341
124.00	44	139.90	52	146.70	25	158.05	49
127.90	905	140.95	1812	147.00	118	158.75	193
128.95	381	141.80	48	147.70	75	159.05	84
129.60	137	142.10	188	147.90	344	160.85	194
129.90	558	142.95	2132	148.70	41	161.10	94
130.85	387	143.90	68	150.00	317	167.80	27
131.70	23	144.10	58	152.15	186	169.30	22
134.70	233	144.60	85	153.00	76	169.95	102

Average of 10.377 to 10.383 min.: VL042928.D\data.ms

BFB

Modified:subtracted

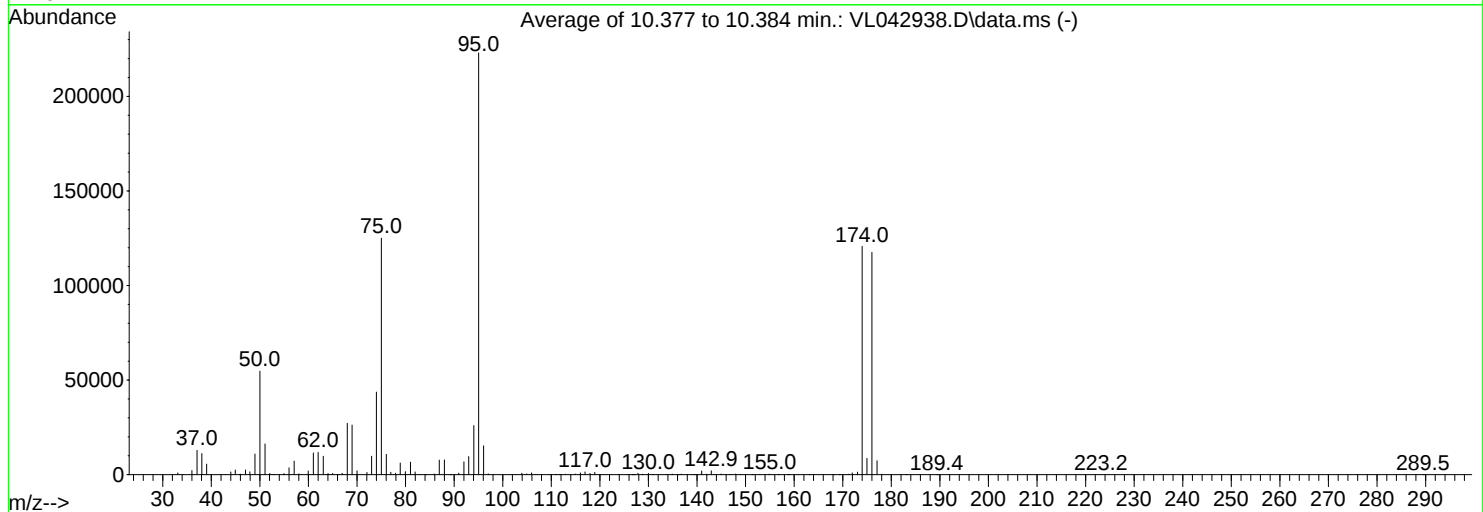
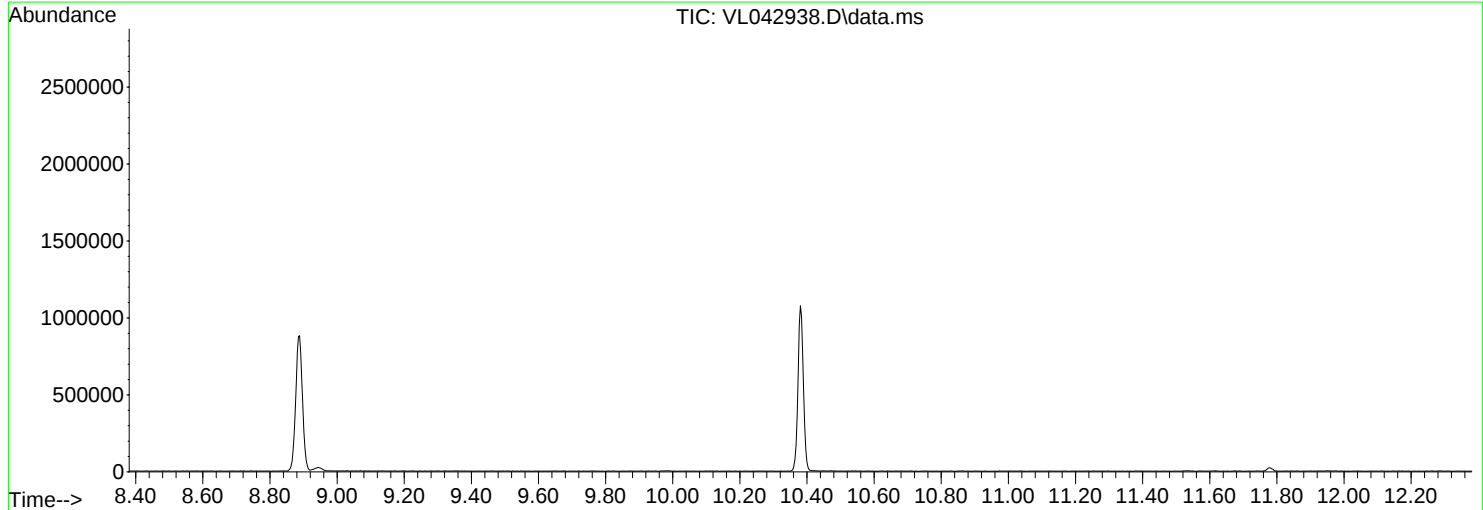
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.45	87	191.70	42				
170.85	125	274.10	31				
171.20	56	282.00	46				
172.00	1099	287.90	20				
173.05	1195						
173.95	123173						
175.00	8935						
176.00	120472						
177.00	8875						
178.00	218						
190.90	17						

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
Data File : VL042938.D
Acq On : 18 Sep 2025 07:46
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
Last Update : Thu Sep 18 02:57:46 2025



AutoFind: Scans 3179, 3180, 3181; Background Corrected with Scan 3162

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	8	40	24.5	54715	PASS
75	95	30	66	56.1	125027	PASS
95	95	100	100	100.0	223019	PASS
96	95	5	9	6.8	15247	PASS
173	174	0.00	2	1.1	1327	PASS
174	95	50	120	54.1	120688	PASS
175	174	4	9	7.2	8675	PASS
176	174	93	101	97.4	117509	PASS
177	176	5	9	6.3	7359	PASS

Average of 10.377 to 10.384 min.: VL042938.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
33.10	940	47.05	2452	56.00	3618	66.95	76
34.15	81	47.95	1522	57.05	7180	68.00	2712
36.00	2244	49.00	10911	58.05	408	69.00	2621
37.05	12901	50.00	54715	59.95	1973	70.00	206
38.05	11180	51.05	16251	61.00	11498	72.05	1180
39.05	5565	52.05	699	62.00	11801	73.00	9761
42.85	95	52.70	69	63.05	9721	74.00	43627
44.00	1483	52.95	144	63.90	323	75.00	125027
44.95	2417	54.05	148	64.10	440	76.05	10769
45.80	138	54.85	426	65.00	717	76.95	1298
46.05	268	55.10	322	66.10	100	77.95	803

Average of 10.377 to 10.384 min.: VL042938.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.90	6156	92.00	6812	107.10	117	117.95	698
79.95	1630	93.00	9523	109.55	53	118.95	1181
81.00	6577	94.05	26011	110.00	115	119.95	11
81.95	1453	95.05	223019	110.85	189	123.75	137
83.00	131	96.05	15247	111.10	94	125.60	49
84.10	35	97.00	417	111.70	126	126.15	68
85.85	353	102.70	71	111.95	65	126.70	19
86.95	7683	103.95	804	112.85	237	127.00	47
88.00	7814	104.95	400	114.95	337	127.85	800
89.20	32	105.95	907	116.00	914	128.80	290
90.95	862	106.80	119	116.95	1414	130.00	665

Average of 10.377 to 10.384 min.: VL042938.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
130.80	61	142.95	2020	153.95	86	169.30	36
131.00	189	143.70	107	154.80	211	170.00	80
133.65	61	144.95	355	155.00	246	170.80	69
134.90	371	145.90	207	155.80	50	171.25	249
136.00	20	146.75	52	156.80	195	171.95	937
136.75	255	147.00	85	157.00	83	173.05	1327
138.90	51	147.95	346	158.70	41	174.00	120688
139.40	44	148.90	110	159.05	199	175.00	8675
140.05	50	150.00	176	160.85	151	176.00	117509
140.95	1970	151.30	24	163.10	18	177.05	7359
142.00	244	152.95	145	168.10	23	178.05	280

Average of 10.377 to 10.384 min.: VL042938.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.10	23						
189.40	17						
223.20	63						
289.50	23						

Instrument :

MSVOA_L

ClientSampleId :

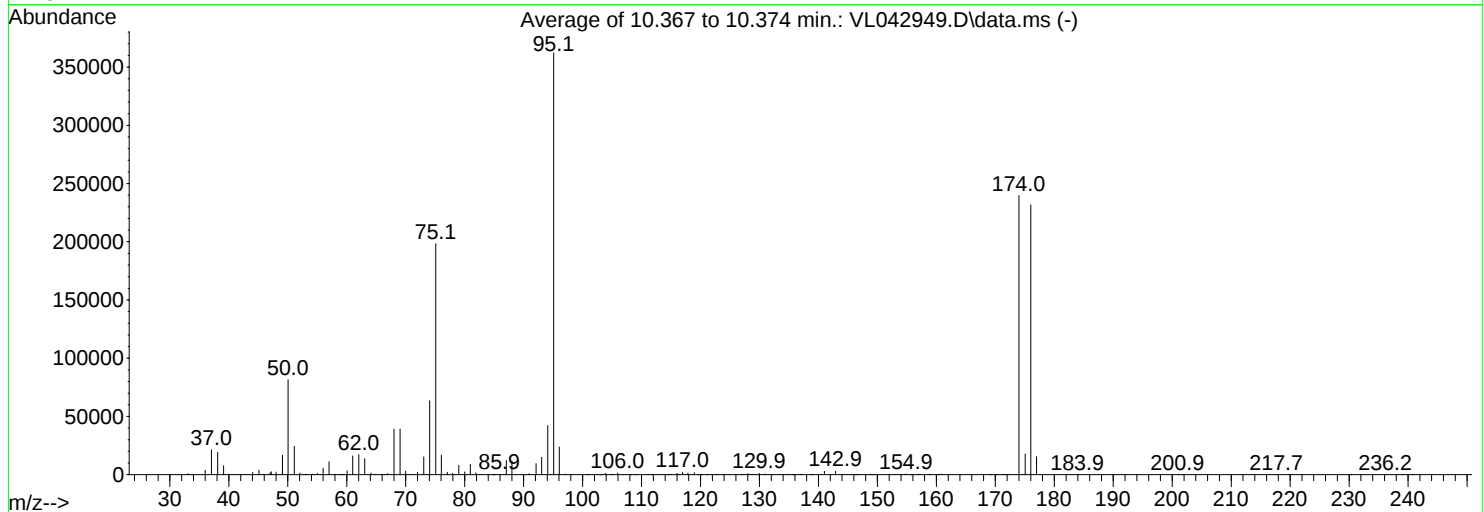
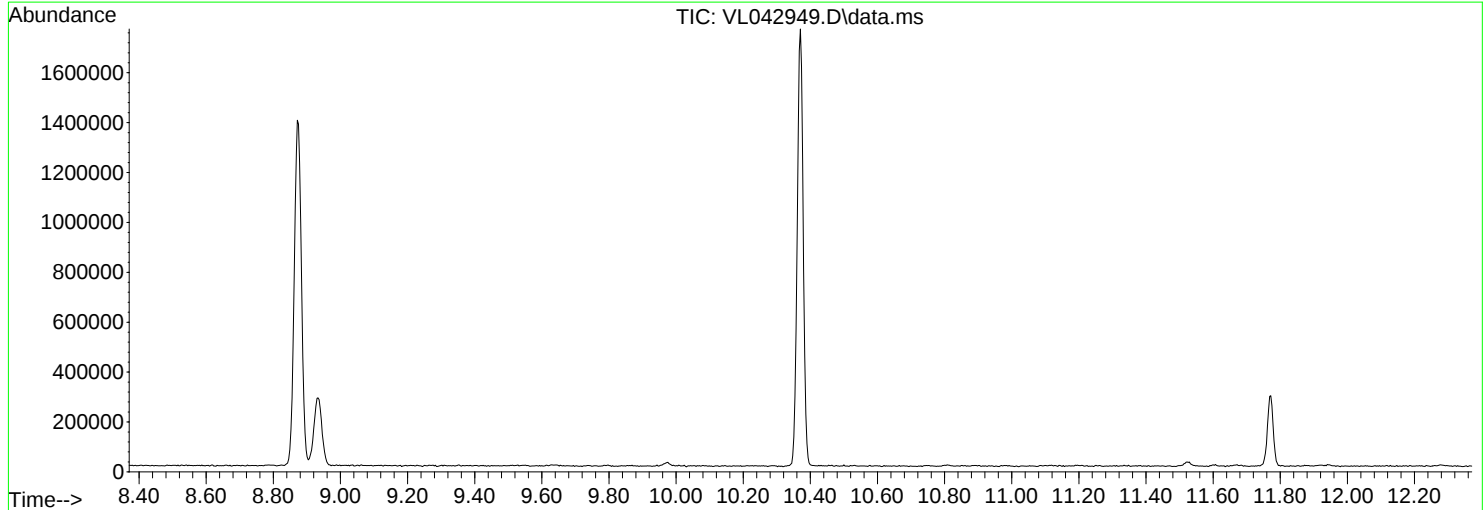
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042949.D
Acq On : 22 Sep 2025 08:55
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
Last Update : Tue Sep 23 02:39:16 2025



AutoFind: Scans 3176, 3177, 3178; Background Corrected with Scan 3156

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
50	95	8	40	22.5	81605	PASS
75	95	30	66	54.7	198315	PASS
95	95	100	100	100.0	362228	PASS
96	95	5	9	6.6	23817	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	66.2	239765	PASS
175	174	4	9	7.4	17693	PASS
176	174	93	101	96.6	231701	PASS
177	176	5	9	6.6	15367	PASS

Average of 10.367 to 10.374 min.: VL042949.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
33.10	843	45.85	253	56.00	5545	65.80	3
33.75	52	47.00	1694	57.00	11198	66.40	12
36.00	3748	47.20	2450	58.05	458	66.95	97
37.05	21251	48.00	2247	58.80	12	68.00	3914
38.10	19194	49.10	16630	59.20	54	69.05	39122
39.10	7706	50.05	81605	60.05	3370	70.00	3041
40.00	611	51.10	24305	61.00	16140	70.85	223
41.00	212	52.05	1353	62.05	17219	72.00	2035
43.05	136	53.00	72	63.05	13691	73.05	15293
44.05	2095	54.20	86	64.10	1359	74.05	63454
45.10	3798	55.00	1059	64.85	245	75.10	198315

Average of 10.367 to 10.374 min.: VL042949.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
76.05	16800	85.90	337	97.05	420	109.05	56
77.05	2059	87.05	12149	98.00	81	110.00	192
77.95	1179	88.00	11664	100.75	61	110.90	139
79.00	8035	89.80	31	102.65	97	111.15	198
80.00	2335	90.80	359	103.00	49	111.70	49
80.95	8798	91.00	622	103.85	1171	111.85	96
81.90	1684	92.10	9517	104.80	150	112.85	303
82.95	138	93.05	14816	105.00	378	114.50	70
84.15	388	94.10	42269	105.95	1346	114.90	157
84.80	17	95.10	362228	106.95	255	115.05	161
85.05	75	96.05	23817	108.20	73	116.00	1147

Average of 10.367 to 10.374 min.: VL042949.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
116.95	1950	124.00	19	132.10	39	139.90	323
117.85	1188	124.95	84	134.00	140	141.00	2899
118.95	1697	125.85	229	134.50	114	141.95	349
119.60	51	126.95	77	134.85	336	142.90	2933
120.00	53	127.80	315	135.10	170	144.05	151
120.20	61	127.90	464	135.60	42	144.85	287
121.05	57	128.05	783	135.85	51	145.60	121
121.95	99	128.80	273	136.90	259	145.95	217
122.60	27	129.10	152	137.10	199	146.20	56
123.00	155	129.95	1180	138.70	60	146.50	40
123.80	97	130.90	521	139.00	86	146.80	278

Average of 10.367 to 10.374 min.: VL042949.D\data.ms

BFB

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.90	407	155.70	50	170.40	165	190.00	32
148.10	181	156.05	156	171.30	71	200.95	53
148.70	34	156.90	168	171.75	267	201.80	37
148.95	87	157.05	367	172.05	48	217.70	32
149.20	38	158.80	225	174.00	239765	230.30	17
149.90	259	159.00	184	175.05	17693	236.20	53
152.00	157	160.30	45	176.00	231701	239.00	24
152.85	262	160.90	377	177.00	15367	240.80	20
154.00	172	169.10	53	178.00	351		
154.60	207	169.40	85	183.95	49		
154.90	569	170.10	37	188.00	21		

Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0918ABL01	SDG No.:	Q3111
Lab Sample ID:	VL0918ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042940.D	1		09/18/25 11:01	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	0.11	0.54	U	0.54	2.47
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03
75-01-4	Vinyl Chloride	0.030	0.080	U	0.080	0.080
74-83-9	Bromomethane	0.080	0.31	U	0.31	1.94
75-00-3	Chloroethane	0.15	0.40	U	0.40	1.32
109-99-9	Tetrahydrofuran	0.080	0.24	U	0.24	1.47
75-69-4	Trichlorofluoromethane	0.17	0.96	U	0.96	2.81
76-13-1	1,1,2-Trichlorotrifluoroethane	0.14	1.07	U	1.07	3.83
76-14-2	Dichlorotetrafluoroethane	0.15	1.05	U	1.05	3.49
75-65-0	tert-Butyl alcohol	0.16	0.49	U	0.49	1.52
142-82-5	Heptane	0.17	0.70	U	0.70	2.05
75-35-4	1,1-Dichloroethene	0.15	0.59	U	0.59	1.98
67-64-1	Acetone	0.18	0.43	U	0.43	1.19
75-15-0	Carbon Disulfide	0.080	0.25	U	0.25	1.56
1634-04-4	Methyl tert-Butyl Ether	0.23	0.83	U	0.83	1.80
75-09-2	Methylene Chloride	0.23	0.80	U	0.80	1.74
156-60-5	trans-1,2-Dichloroethene	0.12	0.48	U	0.48	1.98
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72
78-93-3	2-Butanone	0.060	0.18	U	0.18	1.47
56-23-5	Carbon Tetrachloride	0.030	0.19	U	0.19	0.19
156-59-2	cis-1,2-Dichloroethene	0.10	0.40	U	0.40	1.98
67-66-3	Chloroform	0.10	0.49	U	0.49	2.44
71-55-6	1,1,1-Trichloroethane	0.020	0.11	U	0.11	0.16
540-84-1	2,2,4-Trimethylpentane	0.14	0.65	U	0.65	2.34
71-43-2	Benzene	0.080	0.26	U	0.26	1.60
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16
78-87-5	1,2-Dichloropropane	0.13	0.60	U	0.60	2.31
75-27-4	Bromodichloromethane	0.060	0.40	U	0.40	3.35
108-10-1	4-Methyl-2-Pentanone	0.10	0.41	U	0.41	2.05
108-88-3	Toluene	0.16	0.60	U	0.60	1.88
10061-02-6	t-1,3-Dichloropropene	0.15	0.68	U	0.68	2.27
10061-01-5	cis-1,3-Dichloropropene	0.11	0.50	U	0.50	2.27
79-00-5	1,1,2-Trichloroethane	0.080	0.44	U	0.44	2.73

Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0918ABL01	SDG No.:	Q3111
Lab Sample ID:	VL0918ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042940.D	1		09/18/25 11:01	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
124-48-1	Dibromochloromethane	0.090	0.77	U	0.77	4.26
106-93-4	1,2-Dibromoethane	0.090	0.69	U	0.69	0.77
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30
100-41-4	Ethyl Benzene	0.19	0.83	U	0.83	2.17
179601-23-1	m/p-Xylene	0.41	1.78	U	1.78	4.34
95-47-6	o-Xylene	0.21	0.91	U	0.91	2.17
100-42-5	Styrene	0.16	0.68	U	0.68	2.13
75-25-2	Bromoform	0.050	0.52	U	0.52	5.17
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21
95-49-8	2-Chlorotoluene	0.17	0.88	U	0.88	2.59
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	U	0.88	2.46
95-63-6	1,2,4-Trimethylbenzene	0.18	0.88	U	0.88	2.46
541-73-1	1,3-Dichlorobenzene	0.050	0.30	U	0.30	3.01
106-46-7	1,4-Dichlorobenzene	0.13	0.78	U	0.78	3.01
95-50-1	1,2-Dichlorobenzene	0.13	0.78	U	0.78	3.01
120-82-1	1,2,4-Trichlorobenzene	0.21	1.56	U	1.56	3.71
87-68-3	Hexachloro-1,3-Butadiene	0.13	1.39	U	1.39	5.33
106-99-0	1,3-Butadiene	0.050	0.11	U	0.11	1.11
91-20-3	Naphthalene	0.010	0.050	U	0.050	0.52
622-96-8	4-Ethyltoluene	0.21	1.03	U	1.03	2.46
110-54-3	Hexane	0.16	0.56	U	0.56	1.76
107-05-1	Allyl Chloride	0.11	0.34	U	0.34	1.57
123-91-1	1,4-Dioxane	0.22	0.79	U	0.79	1.80
80-62-6	Methyl Methacrylate	0.14	0.57	U	0.57	2.05
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	9.60			65 - 135	96% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	148000		2.794		
540-36-3	1,4-Difluorobenzene	363000		3.965		
3114-55-4	Chlorobenzene-d5	306000		8.888		

Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0918ABL01	SDG No.:	Q3111
Lab Sample ID:	VL0918ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042940.D	1		09/18/25 11:01	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL
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U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range
 D = Dilution

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042940.D
 Acq On : 18 Sep 2025 11:01
 Operator : SY/MD
 Sample : VL0918ABL01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0918ABL01

Quant Time: Sep 19 01:22:46 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.794	49	148160	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	363124	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	306480	10.000	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	229711	9.589	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.900%

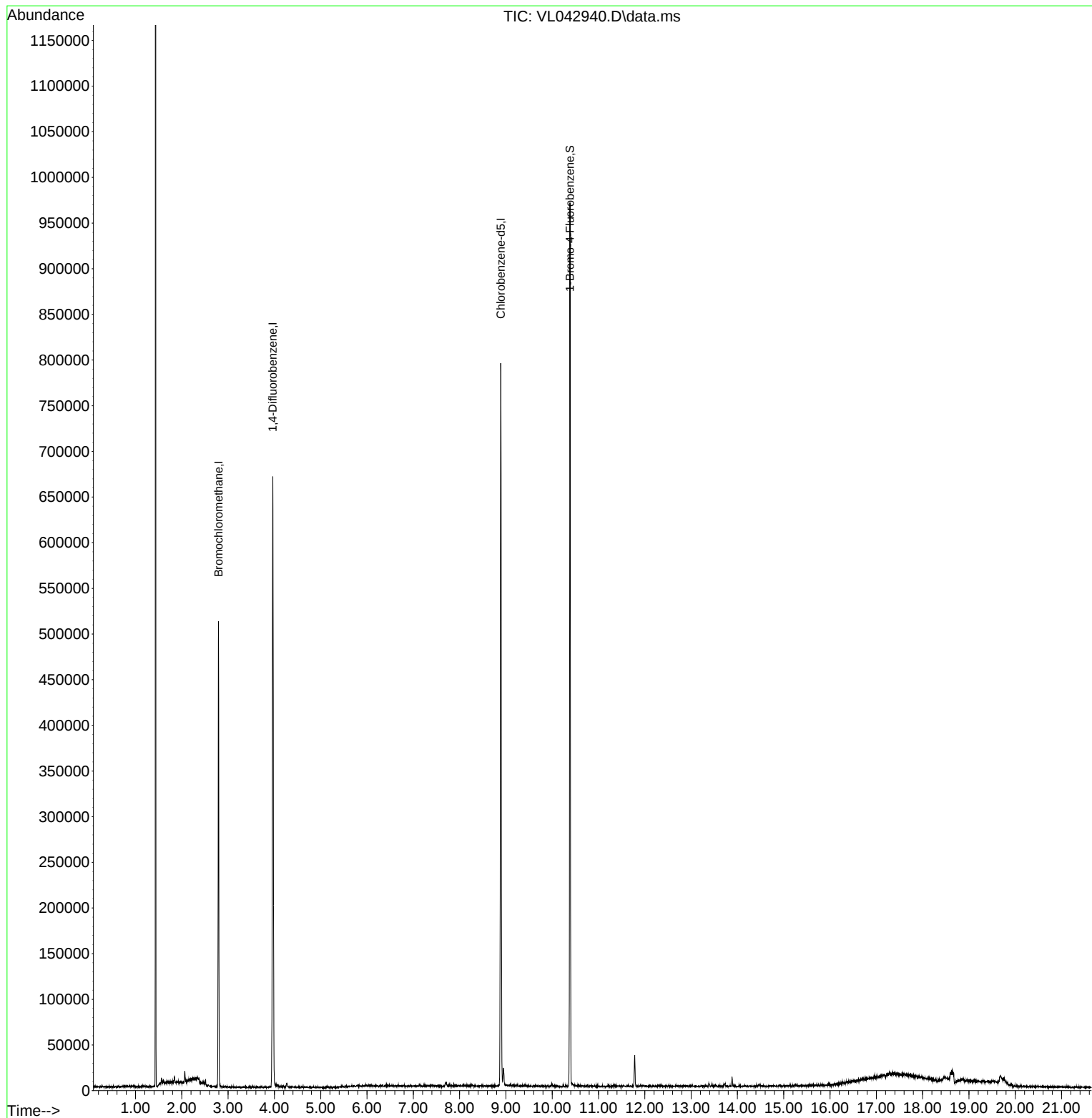
Target Compounds	Qvalue

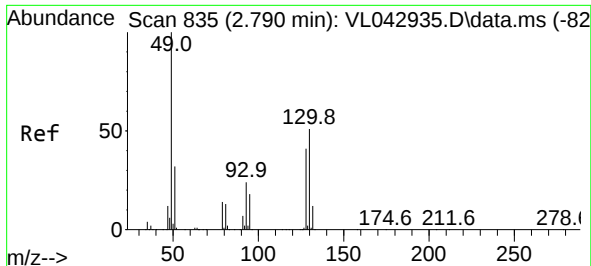
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
Data File : VL042940.D
Acq On : 18 Sep 2025 11:01
Operator : SY/MD
Sample : VL0918ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0918ABL01

Quant Time: Sep 19 01:22:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Thu Sep 18 02:57:46 2025
Response via : Initial Calibration

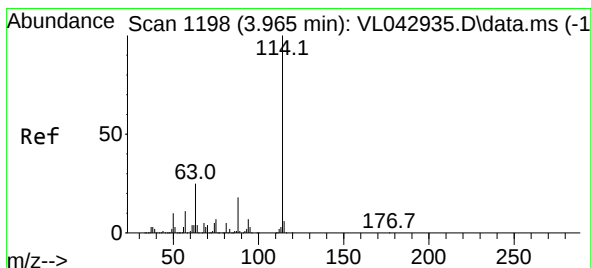
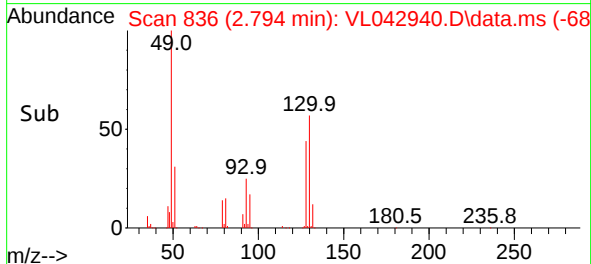
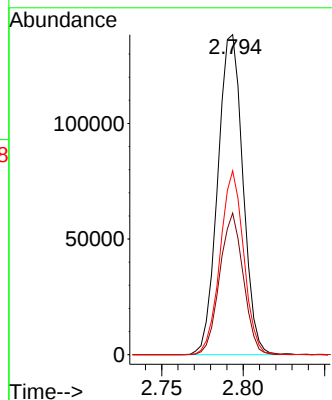
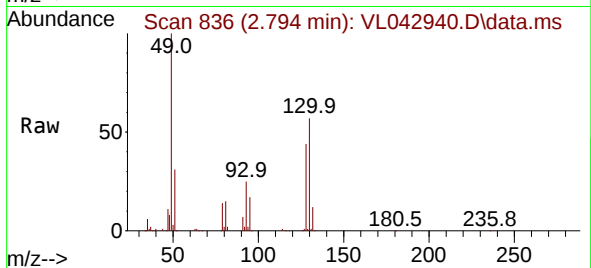




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.794 min Scan# 835
Delta R.T. 0.004 min
Lab File: VL042940.D
Acq: 18 Sep 2025 11:01

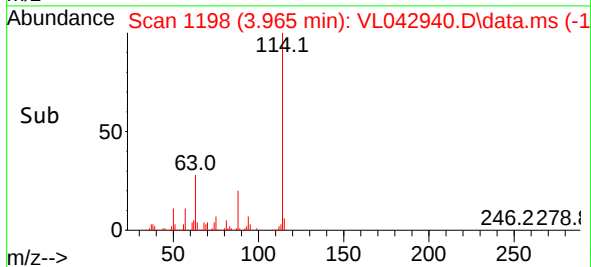
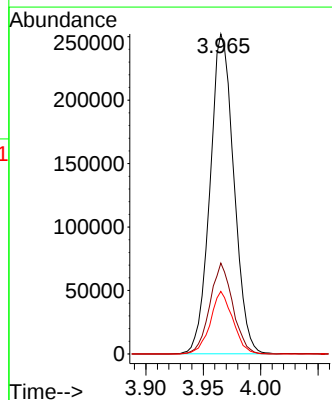
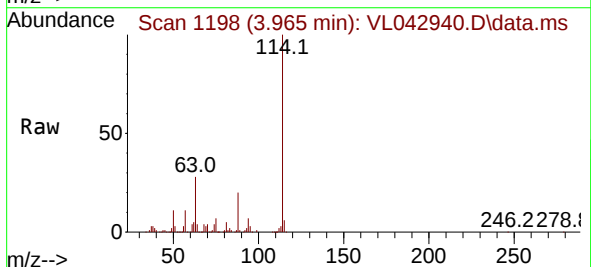
Instrument :
MSVOA_L
ClientSampleId :
VL0918ABL01

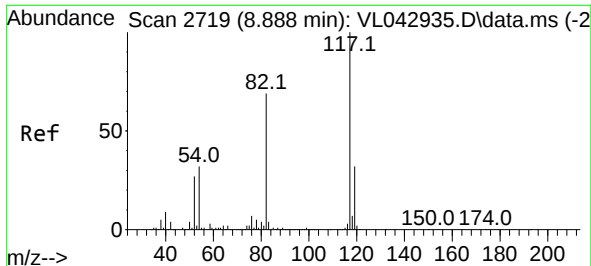
Tgt Ion: 49 Resp: 148160
Ion Ratio Lower Upper
49 100
128 41.5 21.1 63.4
130 53.9 26.4 79.2



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. 0.000 min
Lab File: VL042940.D
Acq: 18 Sep 2025 11:01

Tgt Ion: 114 Resp: 363124
Ion Ratio Lower Upper
114 100
63 27.5 21.1 31.7
88 18.5 14.6 22.0

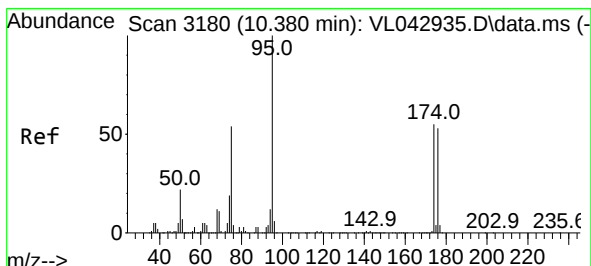
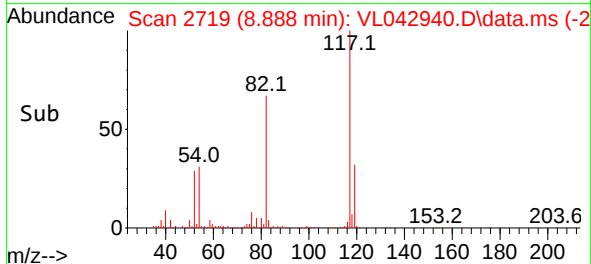
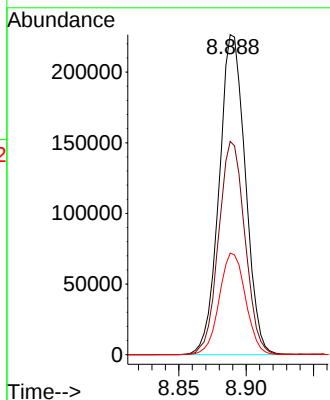
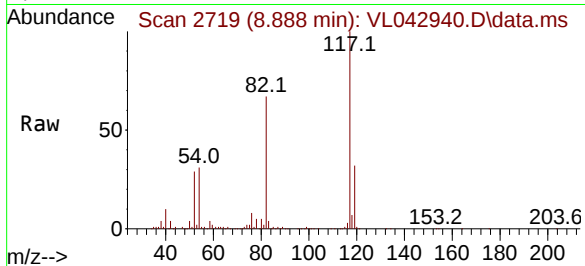




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2719
Delta R.T. 0.000 min
Lab File: VL042940.D
Acq: 18 Sep 2025 11:01

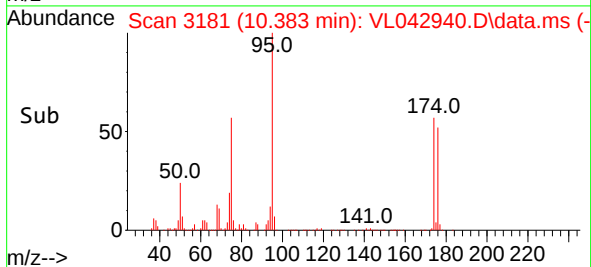
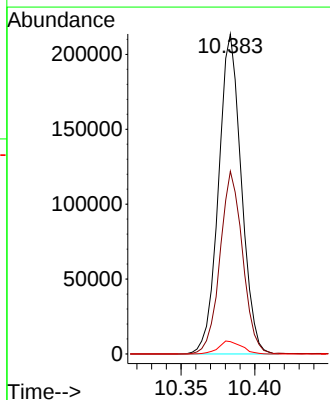
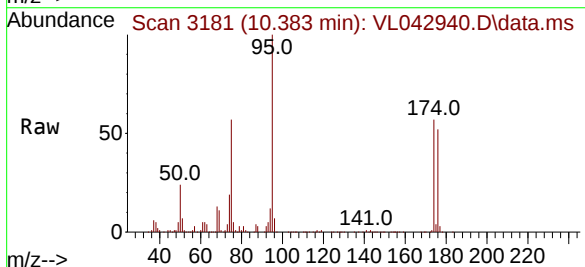
Instrument :
MSVOA_L
ClientSampleId :
VL0918ABL01

Tgt Ion: 117 Resp: 306480
Ion Ratio Lower Upper
117 100
82 67.1 56.1 84.1
119 31.9 25.8 38.8



#68
1-Bromo-4-Fluorobenzene
Concen: 9.589 ppbv
RT: 10.383 min Scan# 3181
Delta R.T. 0.003 min
Lab File: VL042940.D
Acq: 18 Sep 2025 11:01

Tgt Ion: 95 Resp: 229711
Ion Ratio Lower Upper
95 100
174 56.8 44.9 67.3
175 4.1 3.3 4.9



Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0922ABL01	SDG No.:	Q3111
Lab Sample ID:	VL0922ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042958.D	1		09/22/25 15:06	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	0.11	0.54	U	0.54	2.47
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03
75-01-4	Vinyl Chloride	0.030	0.080	U	0.080	0.080
74-83-9	Bromomethane	0.080	0.31	U	0.31	1.94
75-00-3	Chloroethane	0.15	0.40	U	0.40	1.32
109-99-9	Tetrahydrofuran	0.080	0.24	U	0.24	1.47
75-69-4	Trichlorofluoromethane	0.17	0.96	U	0.96	2.81
76-13-1	1,1,2-Trichlorotrifluoroethane	0.14	1.07	U	1.07	3.83
76-14-2	Dichlorotetrafluoroethane	0.15	1.05	U	1.05	3.49
75-65-0	tert-Butyl alcohol	0.16	0.49	U	0.49	1.52
142-82-5	Heptane	0.17	0.70	U	0.70	2.05
75-35-4	1,1-Dichloroethene	0.15	0.59	U	0.59	1.98
67-64-1	Acetone	0.18	0.43	U	0.43	1.19
75-15-0	Carbon Disulfide	0.080	0.25	U	0.25	1.56
1634-04-4	Methyl tert-Butyl Ether	0.23	0.83	U	0.83	1.80
75-09-2	Methylene Chloride	0.23	0.80	U	0.80	1.74
156-60-5	trans-1,2-Dichloroethene	0.12	0.48	U	0.48	1.98
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72
78-93-3	2-Butanone	0.060	0.18	U	0.18	1.47
56-23-5	Carbon Tetrachloride	0.030	0.19	U	0.19	0.19
156-59-2	cis-1,2-Dichloroethene	0.10	0.40	U	0.40	1.98
67-66-3	Chloroform	0.10	0.49	U	0.49	2.44
71-55-6	1,1,1-Trichloroethane	0.020	0.11	U	0.11	0.16
540-84-1	2,2,4-Trimethylpentane	0.14	0.65	U	0.65	2.34
71-43-2	Benzene	0.080	0.26	U	0.26	1.60
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16
78-87-5	1,2-Dichloropropane	0.13	0.60	U	0.60	2.31
75-27-4	Bromodichloromethane	0.060	0.40	U	0.40	3.35
108-10-1	4-Methyl-2-Pentanone	0.10	0.41	U	0.41	2.05
108-88-3	Toluene	0.16	0.60	U	0.60	1.88
10061-02-6	t-1,3-Dichloropropene	0.15	0.68	U	0.68	2.27
10061-01-5	cis-1,3-Dichloropropene	0.11	0.50	U	0.50	2.27
79-00-5	1,1,2-Trichloroethane	0.080	0.44	U	0.44	2.73

Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0922ABL01	SDG No.:	Q3111
Lab Sample ID:	VL0922ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042958.D	1		09/22/25 15:06	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
124-48-1	Dibromochloromethane	0.090	0.77	U	0.77	4.26
106-93-4	1,2-Dibromoethane	0.090	0.69	U	0.69	0.77
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30
100-41-4	Ethyl Benzene	0.19	0.83	U	0.83	2.17
179601-23-1	m/p-Xylene	0.41	1.78	U	1.78	4.34
95-47-6	o-Xylene	0.21	0.91	U	0.91	2.17
100-42-5	Styrene	0.16	0.68	U	0.68	2.13
75-25-2	Bromoform	0.050	0.52	U	0.52	5.17
79-34-5	1,1,2,2-Tetrachloroethane	0.020	0.14	U	0.14	0.21
95-49-8	2-Chlorotoluene	0.17	0.88	U	0.88	2.59
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	U	0.88	2.46
95-63-6	1,2,4-Trimethylbenzene	0.18	0.88	U	0.88	2.46
541-73-1	1,3-Dichlorobenzene	0.050	0.30	U	0.30	3.01
106-46-7	1,4-Dichlorobenzene	0.13	0.78	U	0.78	3.01
95-50-1	1,2-Dichlorobenzene	0.13	0.78	U	0.78	3.01
120-82-1	1,2,4-Trichlorobenzene	0.21	1.56	U	1.56	3.71
87-68-3	Hexachloro-1,3-Butadiene	0.13	1.39	U	1.39	5.33
106-99-0	1,3-Butadiene	0.050	0.11	U	0.11	1.11
91-20-3	Naphthalene	0.010	0.050	U	0.050	0.52
622-96-8	4-Ethyltoluene	0.21	1.03	U	1.03	2.46
110-54-3	Hexane	0.16	0.56	U	0.56	1.76
107-05-1	Allyl Chloride	0.11	0.34	U	0.34	1.57
123-91-1	1,4-Dioxane	0.22	0.79	U	0.79	1.80
80-62-6	Methyl Methacrylate	0.14	0.57	U	0.57	2.05
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	10.0			65 - 135	100% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	157000		2.787		
540-36-3	1,4-Difluorobenzene	497000		3.959		
3114-55-4	Chlorobenzene-d5	444000		8.882		

Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0922ABL01	SDG No.:	Q3111
Lab Sample ID:	VL0922ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042958.D	1		09/22/25 15:06	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL
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U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range
 D = Dilution

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042958.D
 Acq On : 22 Sep 2025 15:06
 Operator : SY/MD
 Sample : VL0922ABL01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0922ABL01

Quant Time: Sep 23 02:50:22 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	157278	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	497068	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	444461	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	10.377	95	332703	10.028	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.300%

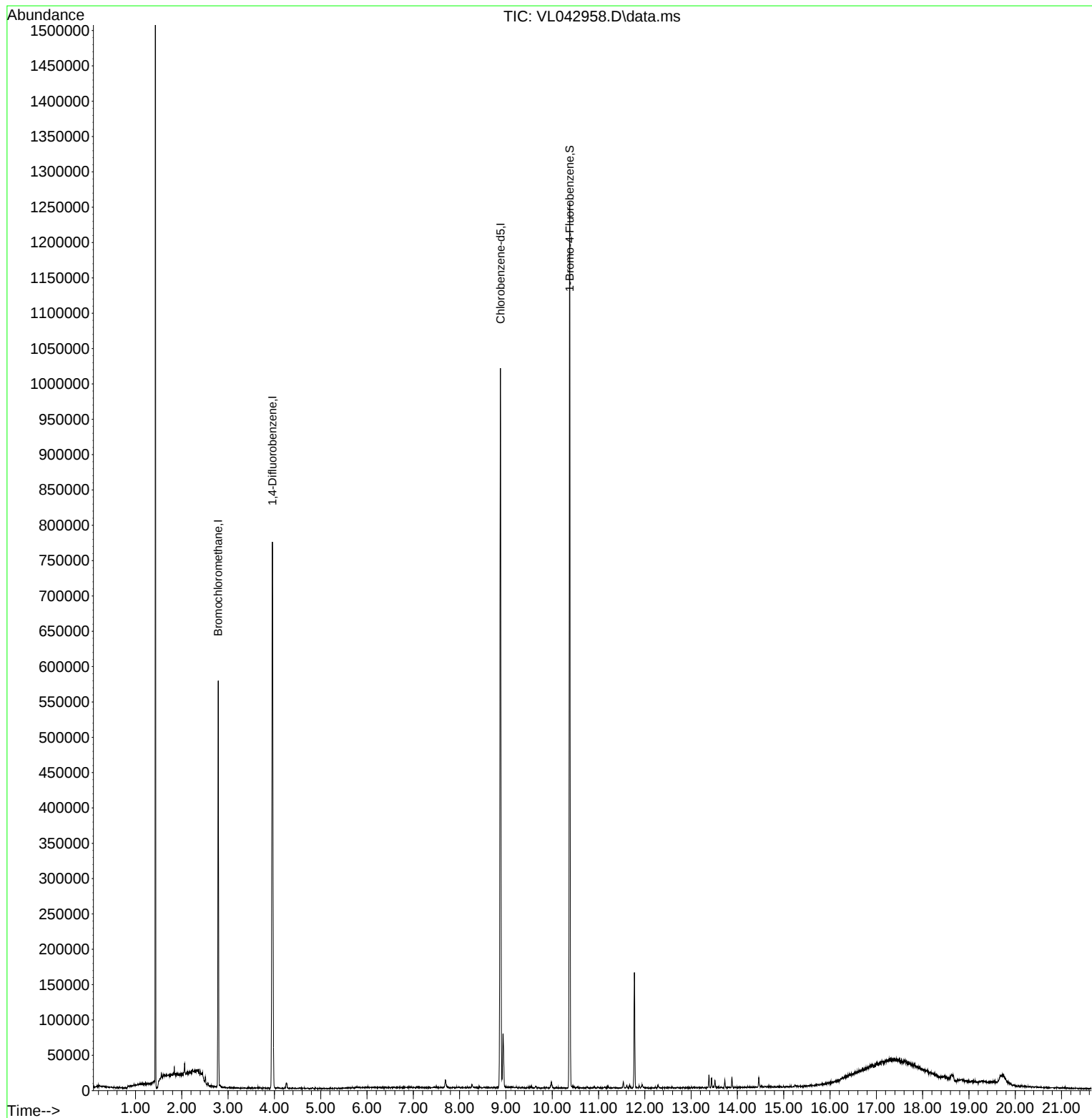
Target Compounds	Qvalue

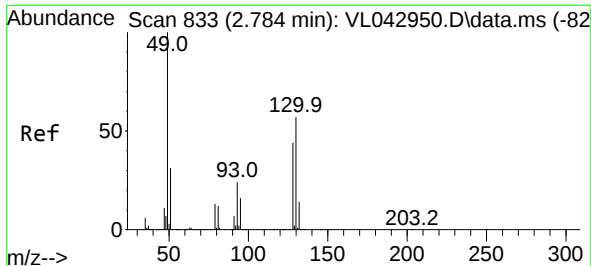
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
Data File : VL042958.D
Acq On : 22 Sep 2025 15:06
Operator : SY/MD
Sample : VL0922ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0922ABL01

Quant Time: Sep 23 02:50:22 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

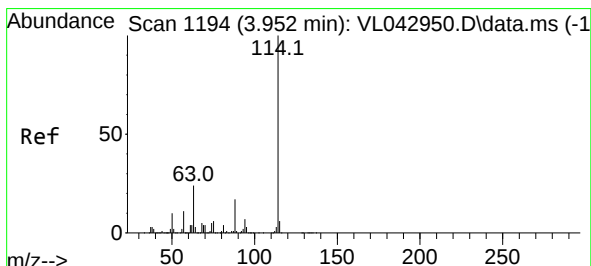
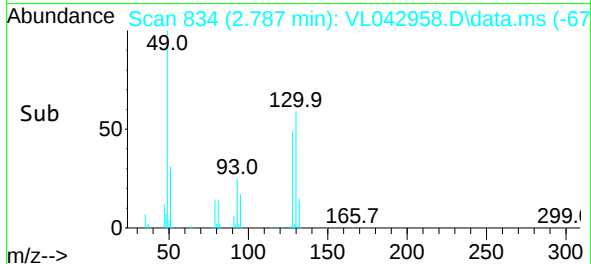
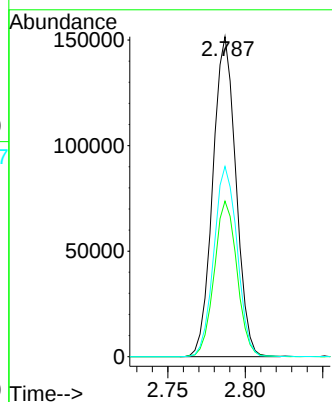
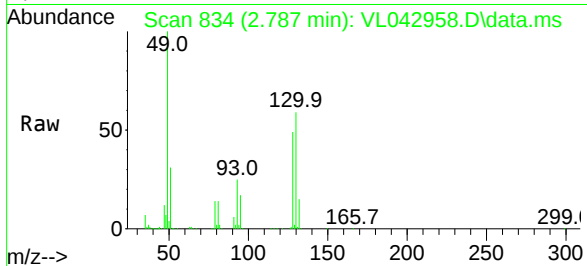




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.787 min Scan# 81
 Delta R.T. 0.003 min
 Lab File: VL042958.D
 Acq: 22 Sep 2025 15:06

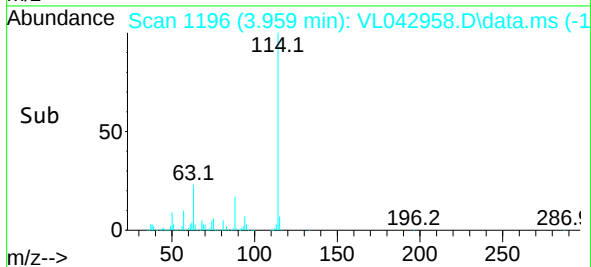
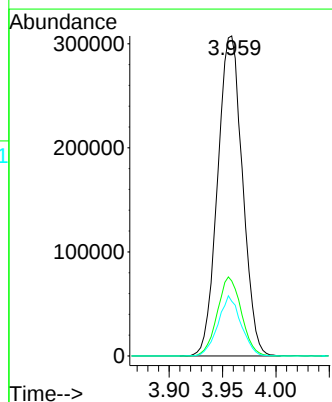
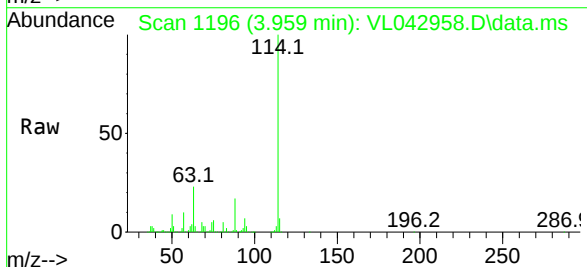
Instrument :
 MSVOA_L
 ClientSampleId :
 VL0922ABL01

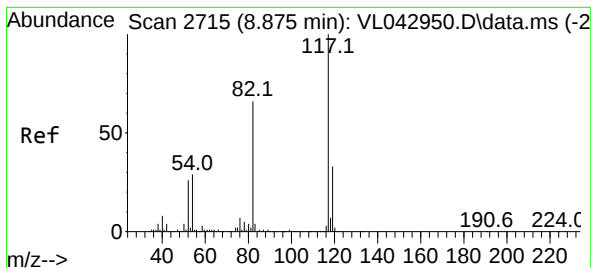
Tgt Ion: 49 Resp: 157278
 Ion Ratio Lower Upper
 49 100
 128 48.0 22.9 68.8
 130 60.1 29.1 87.3



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 3.959 min Scan# 1196
 Delta R.T. 0.006 min
 Lab File: VL042958.D
 Acq: 22 Sep 2025 15:06

Tgt Ion: 114 Resp: 497068
 Ion Ratio Lower Upper
 114 100
 63 23.9 19.4 29.2
 88 17.3 14.2 21.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.882 min Scan# 21

Delta R.T. 0.006 min

Lab File: VL042958.D

Acq: 22 Sep 2025 15:06

Instrument :

MSVOA_L

ClientSampleId :

VL0922ABL01

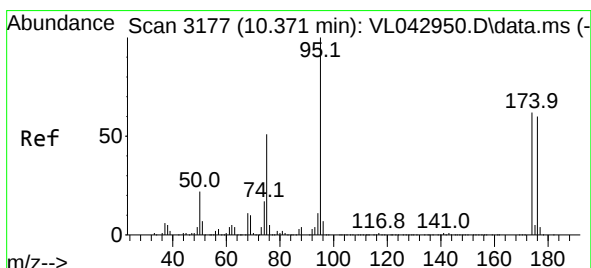
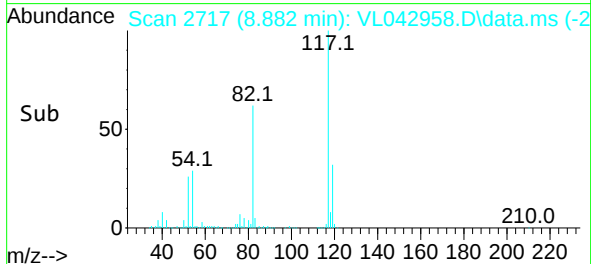
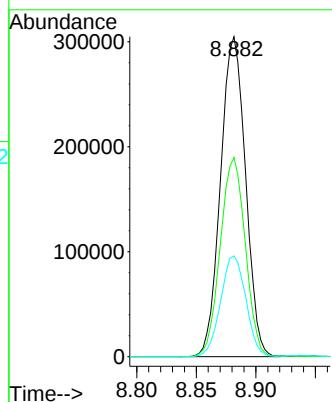
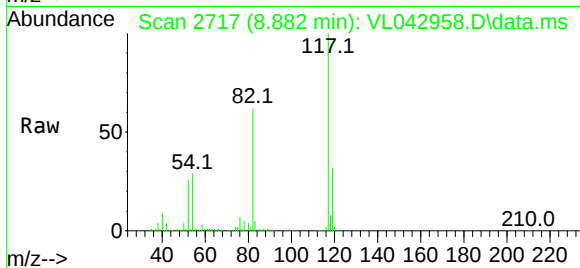
Tgt Ion:117 Resp: 444461

Ion Ratio Lower Upper

117 100

82 62.4 52.8 79.2

119 31.8 26.5 39.7



#68

1-Bromo-4-Fluorobenzene

Concen: 10.028 ppbv

RT: 10.377 min Scan# 3179

Delta R.T. 0.006 min

Lab File: VL042958.D

Acq: 22 Sep 2025 15:06

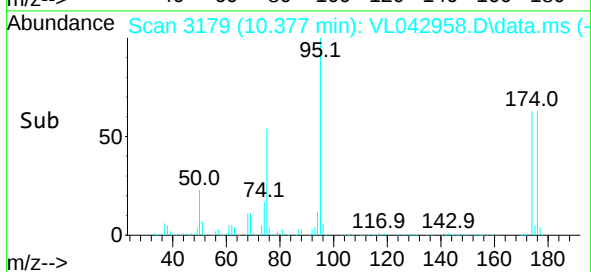
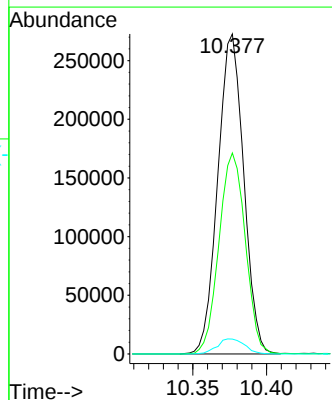
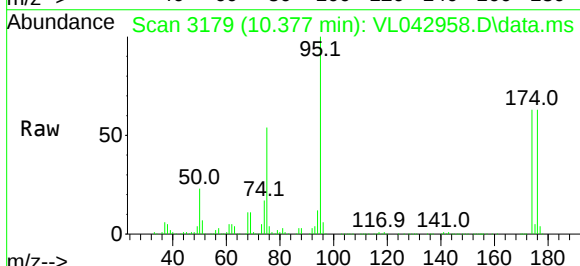
Tgt Ion: 95 Resp: 332703

Ion Ratio Lower Upper

95 100

174 64.0 51.4 77.2

175 5.0 4.0 6.0



Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0918ABS02	SDG No.:	Q3111
Lab Sample ID:	VL0918ABS02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042943.D	1		09/18/25 12:49	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	9.90	49.0		0.54	2.47
74-87-3	Chloromethane	9.80	20.2		0.21	1.03
75-01-4	Vinyl Chloride	8.90	22.8		0.080	0.080
74-83-9	Bromomethane	9.70	37.7		0.31	1.94
75-00-3	Chloroethane	9.80	25.9		0.40	1.32
109-99-9	Tetrahydrofuran	11.8	34.8		0.24	1.47
75-69-4	Trichlorofluoromethane	9.70	54.5		0.96	2.81
76-13-1	1,1,2-Trichlorotrifluoroethane	9.70	74.3		1.07	3.83
76-14-2	Dichlorotetrafluoroethane	9.80	68.5		1.05	3.49
75-65-0	tert-Butyl alcohol	9.70	29.4		0.49	1.52
142-82-5	Heptane	11.6	47.5		0.70	2.05
75-35-4	1,1-Dichloroethene	9.90	39.3		0.59	1.98
67-64-1	Acetone	8.50	20.2		0.43	1.19
75-15-0	Carbon Disulfide	9.80	30.5		0.25	1.56
1634-04-4	Methyl tert-Butyl Ether	9.50	34.3		0.83	1.80
75-09-2	Methylene Chloride	7.80	27.1		0.80	1.74
156-60-5	trans-1,2-Dichloroethene	9.90	39.3		0.48	1.98
75-34-3	1,1-Dichloroethane	9.80	39.7		0.53	2.02
110-82-7	Cyclohexane	11.8	40.6		0.76	1.72
78-93-3	2-Butanone	10.7	31.6		0.18	1.47
56-23-5	Carbon Tetrachloride	9.80	61.6		0.19	0.19
156-59-2	cis-1,2-Dichloroethene	10.5	41.6		0.40	1.98
67-66-3	Chloroform	10.1	49.3		0.49	2.44
71-55-6	1,1,1-Trichloroethane	9.90	54.0		0.11	0.16
540-84-1	2,2,4-Trimethylpentane	11.7	54.6		0.65	2.34
71-43-2	Benzene	10.8	34.5		0.26	1.60
107-06-2	1,2-Dichloroethane	10.5	42.5		0.36	2.02
79-01-6	Trichloroethene	10.5	56.4		0.11	0.16
78-87-5	1,2-Dichloropropane	10.5	48.5		0.60	2.31
75-27-4	Bromodichloromethane	10.4	69.7		0.40	3.35
108-10-1	4-Methyl-2-Pentanone	12.4	50.8		0.41	2.05
108-88-3	Toluene	12.5	47.1		0.60	1.88
10061-02-6	t-1,3-Dichloropropene	11.7	53.1		0.68	2.27
10061-01-5	cis-1,3-Dichloropropene	11.4	51.8		0.50	2.27
79-00-5	1,1,2-Trichloroethane	10.3	56.2		0.44	2.73

Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0918ABS02	SDG No.:	Q3111
Lab Sample ID:	VL0918ABS02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042943.D	1		09/18/25 12:49	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
124-48-1	Dibromochloromethane	10.6	90.3		0.77	4.26
106-93-4	1,2-Dibromoethane	11.0	84.5		0.69	0.77
127-18-4	Tetrachloroethene	10.4	70.5		0.14	0.20
108-90-7	Chlorobenzene	10.5	48.4		0.37	2.30
100-41-4	Ethyl Benzene	13.1	56.9		0.83	2.17
179601-23-1	m/p-Xylene	25.8	112		1.78	4.34
95-47-6	o-Xylene	13.0	56.5		0.91	2.17
100-42-5	Styrene	9.90	42.1		0.68	2.13
75-25-2	Bromoform	10.9	113		0.52	5.17
79-34-5	1,1,2,2-Tetrachloroethane	10.4	71.4		0.14	0.21
95-49-8	2-Chlorotoluene	12.8	66.3		0.88	2.59
108-67-8	1,3,5-Trimethylbenzene	13.0	63.9		0.88	2.46
95-63-6	1,2,4-Trimethylbenzene	12.7	62.4		0.88	2.46
541-73-1	1,3-Dichlorobenzene	11.4	68.5		0.30	3.01
106-46-7	1,4-Dichlorobenzene	11.7	70.3		0.78	3.01
95-50-1	1,2-Dichlorobenzene	11.1	66.7		0.78	3.01
120-82-1	1,2,4-Trichlorobenzene	10.1	75.0		1.56	3.71
87-68-3	Hexachloro-1,3-Butadiene	10.2	109		1.39	5.33
106-99-0	1,3-Butadiene	9.40	20.8		0.11	1.11
91-20-3	Naphthalene	10.2	53.5		0.050	0.52
622-96-8	4-Ethyltoluene	10.2	50.1		1.03	2.46
110-54-3	Hexane	11.1	39.1		0.56	1.76
107-05-1	Allyl Chloride	9.60	30.1		0.34	1.57
123-91-1	1,4-Dioxane	11.6	41.8		0.79	1.80
80-62-6	Methyl Methacrylate	12.2	50.0		0.57	2.05
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	10.5			65 - 135	105% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	157000		2.787		
540-36-3	1,4-Difluorobenzene	398000		3.962		
3114-55-4	Chlorobenzene-d5	342000		8.889		

Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0918ABS02	SDG No.:	Q3111
Lab Sample ID:	VL0918ABS02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042943.D	1		09/18/25 12:49	VL091825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL
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U = Not Detected

RL = Reporting Limit

MDL = Method Detection Limit

E = Value Exceeds Calibration Range

D = Dilution

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042943.D
 Acq On : 18 Sep 2025 12:49
 Operator : SY/MD
 Sample : VL0918ABS02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0918ABS02

Quant Time: Sep 19 01:24:21 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	157147	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	398112	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.889	117	342230	10.000	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.381	95	281987	10.542	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.400%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	221614	9.873	ppbv	98
3) Chlorodifluoromethane	1.477	51	237059	10.031	ppbv	100
4) Chloromethane	1.535	50	88001	9.755	ppbv	99
5) Vinyl Chloride	1.580	62	75659	8.890	ppbv	97
6) Bromomethane	1.668	94	28772	9.729	ppbv	93
7) Chloroethane	1.706	64	30707	9.796	ppbv	95
8) Dichlorotetrafluoroethane	1.554	85	173736	9.755	ppbv	99
9) Propene	1.483	41	87615	10.152	ppbv	99
10) Heptane	4.985	43	247851	11.590	ppbv	98
11) Trichlorofluoromethane	1.878	101	214280	9.663	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.140	101	167632	9.676	ppbv	100
13) Ethanol	1.723	45	7358	8.362	ppbv	95
14) Bromoethene	1.784	108	58670	9.506	ppbv	98
15) Acetone	1.836	43	164049	8.499	ppbv	100
16) 1,3-Butadiene	1.609	39	75881	9.398	ppbv	100
17) tert-Butyl alcohol	2.040	59	179502	9.658	ppbv	99
18) 1,1-Dichloroethene	2.037	96	75279	9.927	ppbv	94
19) Isopropyl Alcohol	1.888	45	99744	9.638	ppbv	100
20) Methylene Chloride	2.062	84	65464	7.790	ppbv	97
21) Allyl Chloride	2.098	41	125866	9.620	ppbv	99
22) trans-1,2-Dichloroethene	2.344	96	84718	9.856	ppbv	92
23) Vinyl Acetate	2.464	43	234952	10.476	ppbv	99
24) 1,1-Dichloroethane	2.412	63	167118	9.843	ppbv	99
25) Ethyl Acetate	2.836	43	445635	10.812	ppbv	100
26) Hexane	2.830	57	196952	11.134	ppbv	98
27) Carbon Disulfide	2.153	76	213020	9.764	ppbv	97
28) Methyl tert-Butyl Ether	2.441	73	92298	9.496	ppbv	99
29) Chloroform	2.849	83	291292	10.075	ppbv	96
30) Cyclohexane	3.862	84	156833	11.769	ppbv	99
31) cis-1,2-Dichloroethene	2.723	61	180628	10.459	ppbv	98
32) 1,1,1-Trichloroethane	3.370	97	268252	9.916	ppbv	99
34) 2-Butanone	2.558	43	275491	10.675	ppbv	99
35) Carbon Tetrachloride	3.765	117	278532	9.842	ppbv	99
36) Benzene	3.661	78	375346	10.809	ppbv	99
37) 1,2-Dichloroethane	3.221	62	218301	10.496	ppbv	99
38) Trichloroethene	4.551	130	165317	10.517	ppbv	97
39) 1,2-Dichloropropane	4.318	63	147865	10.536	ppbv	97
40) 1,4-Dioxane	4.584	88	57905	11.625	ppbv #	96
41) Tetrahydrofuran	3.056	42	150133	11.755	ppbv	100
42) Bromodichloromethane	4.493	83	311531	10.438	ppbv	97
43) Methyl Methacrylate	4.885	69	141275	12.151	ppbv	99
44) 2,2,4-Trimethylpentane	4.642	57	676730	11.684	ppbv	99
45) t-1,3-Dichloropropene	6.419	75	143251	11.685	ppbv	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091825\
 Data File : VL042943.D
 Acq On : 18 Sep 2025 12:49
 Operator : SY/MD
 Sample : VL0918ABS02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0918ABS02

Quant Time: Sep 19 01:24:21 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.607	75	192317	11.379	ppbv	97
47) 1,1,2-Trichloroethane	6.587	97	147521	10.309	ppbv	95
48) Dibromochloromethane	7.390	129	236633	10.558	ppbv	99
49) Bromoform	9.487	173	190569	10.894	ppbv	99
50) 4-Methyl-2-Pentanone	5.755	43	383141	12.417	ppbv	100
51) 2-Hexanone	7.442	43	301477	13.156	ppbv	99
52) Tetrachloroethene	8.231	164	111470	10.410	ppbv	95
53) Toluene	6.940	91	405706	12.529	ppbv	99
54) 1,2-Dibromoethane	7.659	107	203289	11.043	ppbv	97
56) 1,1,1,2-Tetrachloroethane	8.927	131	180415	10.348	ppbv	99
57) Chlorobenzene	8.927	112	333331	10.538	ppbv	98
58) Ethyl Benzene	9.361	91	575762	13.059	ppbv	99
59) m/p-Xylene	9.555	91	960501m	25.779	ppbv	
60) o-Xylene	9.970	91	482682	13.030	ppbv	99
61) Styrene	9.876	104	188516	9.850	ppbv	99
62) Isopropylbenzene	10.542	105	675382	12.516	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.966	83	277312	10.363	ppbv	98
64) n-propylbenzene	10.992	120	175243	12.526	ppbv	99
65) tert-Butylbenzene	11.536	119	602619	13.069	ppbv	100
66) Benzyl Chloride	11.617	91	53684	12.529	ppbv	98
67) sec-Butylbenzene	11.769	105	880638	12.553	ppbv	100
69) p-Isopropyltoluene	11.928	119	706403	13.066	ppbv	99
70) n-Butylbenzene	12.284	91	758319	10.480	ppbv	100
71) 2-Chlorotoluene	10.905	91	513816	12.833	ppbv	99
72) 4-Ethyltoluene	11.128	105	573658	10.243	ppbv	100
73) 1,3,5-Trimethylbenzene	11.209	105	476027	12.989	ppbv	99
74) 1,2,4-Trimethylbenzene	11.539	105	547542	12.713	ppbv	92
75) 1,3-Dichlorobenzene	11.611	146	311816	11.420	ppbv	99
76) 1,4-Dichlorobenzene	11.675	146	307014	11.688	ppbv	99
77) 1,2-Dichlorobenzene	11.950	146	305054	11.073	ppbv	99
78) Hexachloro-1,3-Butadiene	13.883	225	179681	10.213	ppbv	100
79) Naphthalene	13.514	128	461409	10.182	ppbv	99
80) Naphthalene,2-methyl-	14.459	142	127799	9.012	ppbv	98
81) 1,2,4-Trichlorobenzene	13.442	180	219805	10.109	ppbv	99

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

Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0922ABS01	SDG No.:	Q3111
Lab Sample ID:	VL0922ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042959.D	1		09/22/25 15:52	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
TARGETS						
75-71-8	Dichlorodifluoromethane	9.30	46.0		0.54	2.47
74-87-3	Chloromethane	8.70	18.0		0.21	1.03
75-01-4	Vinyl Chloride	8.40	21.5		0.080	0.080
74-83-9	Bromomethane	8.30	32.2		0.31	1.94
75-00-3	Chloroethane	8.80	23.2		0.40	1.32
109-99-9	Tetrahydrofuran	9.30	27.4		0.24	1.47
75-69-4	Trichlorofluoromethane	9.10	51.1		0.96	2.81
76-13-1	1,1,2-Trichlorotrifluoroethane	9.00	69.0		1.07	3.83
76-14-2	Dichlorotetrafluoroethane	9.00	62.9		1.05	3.49
75-65-0	tert-Butyl alcohol	9.00	27.3		0.49	1.52
142-82-5	Heptane	9.00	36.9		0.70	2.05
75-35-4	1,1-Dichloroethene	9.00	35.7		0.59	1.98
67-64-1	Acetone	7.40	17.6		0.43	1.19
75-15-0	Carbon Disulfide	8.80	27.4		0.25	1.56
1634-04-4	Methyl tert-Butyl Ether	7.80	28.1		0.83	1.80
75-09-2	Methylene Chloride	9.80	34.0		0.80	1.74
156-60-5	trans-1,2-Dichloroethene	8.90	35.3		0.48	1.98
75-34-3	1,1-Dichloroethane	9.00	36.4		0.53	2.02
110-82-7	Cyclohexane	9.30	32.0		0.76	1.72
78-93-3	2-Butanone	9.20	27.1		0.18	1.47
56-23-5	Carbon Tetrachloride	9.70	61.0		0.19	0.19
156-59-2	cis-1,2-Dichloroethene	9.30	36.9		0.40	1.98
67-66-3	Chloroform	9.50	46.4		0.49	2.44
71-55-6	1,1,1-Trichloroethane	9.00	49.1		0.11	0.16
540-84-1	2,2,4-Trimethylpentane	9.40	43.9		0.65	2.34
71-43-2	Benzene	9.60	30.7		0.26	1.60
107-06-2	1,2-Dichloroethane	9.90	40.1		0.36	2.02
79-01-6	Trichloroethene	9.20	49.4		0.11	0.16
78-87-5	1,2-Dichloropropane	9.70	44.8		0.60	2.31
75-27-4	Bromodichloromethane	9.90	66.3		0.40	3.35
108-10-1	4-Methyl-2-Pentanone	9.60	39.3		0.41	2.05
108-88-3	Toluene	9.50	35.8		0.60	1.88
10061-02-6	t-1,3-Dichloropropene	9.50	43.1		0.68	2.27
10061-01-5	cis-1,3-Dichloropropene	9.70	44.0		0.50	2.27
79-00-5	1,1,2-Trichloroethane	9.60	52.4		0.44	2.73

Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0922ABS01	SDG No.:	Q3111
Lab Sample ID:	VL0922ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042959.D	1		09/22/25 15:52	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL ug/m3	LOQ / CRQL ug/m3
124-48-1	Dibromochloromethane	10.0	85.2		0.77	4.26
106-93-4	1,2-Dibromoethane	9.70	74.5		0.69	0.77
127-18-4	Tetrachloroethene	8.70	59.0		0.14	0.20
108-90-7	Chlorobenzene	9.40	43.3		0.37	2.30
100-41-4	Ethyl Benzene	9.50	41.3		0.83	2.17
179601-23-1	m/p-Xylene	18.9	82.1		1.78	4.34
95-47-6	o-Xylene	9.40	40.8		0.91	2.17
100-42-5	Styrene	9.60	40.9		0.68	2.13
75-25-2	Bromoform	9.80	101		0.52	5.17
79-34-5	1,1,2,2-Tetrachloroethane	8.90	61.1		0.14	0.21
95-49-8	2-Chlorotoluene	9.30	48.1		0.88	2.59
108-67-8	1,3,5-Trimethylbenzene	9.50	46.7		0.88	2.46
95-63-6	1,2,4-Trimethylbenzene	9.30	45.7		0.88	2.46
541-73-1	1,3-Dichlorobenzene	9.30	55.9		0.30	3.01
106-46-7	1,4-Dichlorobenzene	9.40	56.5		0.78	3.01
95-50-1	1,2-Dichlorobenzene	9.30	55.9		0.78	3.01
120-82-1	1,2,4-Trichlorobenzene	10.0	74.2		1.56	3.71
87-68-3	Hexachloro-1,3-Butadiene	8.40	89.6		1.39	5.33
106-99-0	1,3-Butadiene	8.10	17.9		0.11	1.11
91-20-3	Naphthalene	10.3	54.0		0.050	0.52
622-96-8	4-Ethyltoluene	9.30	45.7		1.03	2.46
110-54-3	Hexane	9.10	32.1		0.56	1.76
107-05-1	Allyl Chloride	9.00	28.2		0.34	1.57
123-91-1	1,4-Dioxane	9.30	33.5		0.79	1.80
80-62-6	Methyl Methacrylate	9.30	38.1		0.57	2.05
SURROGATES						
460-00-4	1-Bromo-4-Fluorobenzene	10.0			65 - 135	100% SPK: 10
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	158000		2.787		
540-36-3	1,4-Difluorobenzene	476000		3.959		
3114-55-4	Chlorobenzene-d5	440000		8.882		

Report of Analysis

Client:	GFE LLC	Date Collected:	
Project:	28 RT 46 PINE BROOK	Date Received:	
Client Sample ID:	VL0922ABS01	SDG No.:	Q3111
Lab Sample ID:	VL0922ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400	Units:	mL

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042959.D	1		09/22/25 15:52	VL092225

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL
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U = Not Detected
 RL = Reporting Limit
 MDL = Method Detection Limit
 E = Value Exceeds Calibration Range
 D = Dilution

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 Q = indicates LCS control criteria did not meet requirements

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042959.D
 Acq On : 22 Sep 2025 15:52
 Operator : SY/MD
 Sample : VL0922ABS01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0922ABS01

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 09/23/2025
 Supervised By : Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:50:52 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2025

QLast Update : Tue Sep 23 02:39:16 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.787	49	157611	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	475789	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	440323	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.377 95 329520 10.025 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.300%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.499	85	196098	9.250	ppbv	98
3) Chlorodifluoromethane	1.476	51	241019	9.122	ppbv	98
4) Chloromethane	1.531	50	83097	8.660	ppbv	99
5) Vinyl Chloride	1.580	62	72910	8.405	ppbv	100
6) Bromomethane	1.667	94	25316	8.274	ppbv	96
7) Chloroethane	1.703	64	29696	8.816	ppbv	96
8) Dichlorotetrafluoroethane	1.554	85	162369	8.972	ppbv	99
9) Propene	1.483	41	99904	8.692	ppbv	96
10) Heptane	4.978	43	277314	9.040	ppbv	98
11) Trichlorofluoromethane	1.878	101	186968	9.147	ppbv	99
12) 1,1,2-Trichlorotrifluoro...	2.140	101	149089	9.007	ppbv	98
13) Ethanol	1.719	45	7189	6.447	ppbv	97
14) Bromoethene	1.781	108	55444	8.860	ppbv	99
15) Acetone	1.836	43	151513	7.381	ppbv	98
16) 1,3-Butadiene	1.609	39	78310	8.087	ppbv	100
17) tert-Butyl alcohol	2.040	59	202608	8.999	ppbv	100
18) 1,1-Dichloroethene	2.033	96	68641	8.959	ppbv	98
19) Isopropyl Alcohol	1.884	45	106256	8.610	ppbv	100
20) Methylene Chloride	2.062	84	60096	9.806	ppbv	97
21) Allyl Chloride	2.095	41	129200	9.037	ppbv	99
22) trans-1,2-Dichloroethene	2.341	96	77254	8.874	ppbv	100
23) Vinyl Acetate	2.464	43	248190	8.463	ppbv	99
24) 1,1-Dichloroethane	2.409	63	154444	9.046	ppbv	99
25) Ethyl Acetate	2.833	43	477860	9.210	ppbv	99
26) Hexane	2.826	57	215902	9.129	ppbv	98
27) Carbon Disulfide	2.150	76	187493	8.839	ppbv	99
28) Methyl tert-Butyl Ether	2.438	73	95760	7.790	ppbv	99
29) Chloroform	2.849	83	295049	9.541	ppbv	99
30) Cyclohexane	3.855	84	184610	9.336	ppbv	97
31) cis-1,2-Dichloroethene	2.719	61	206747	9.332	ppbv	99
32) 1,1,1-Trichloroethane	3.367	97	301400	9.024	ppbv	99
34) 2-Butanone	2.557	43	308258	9.245	ppbv	99
35) Carbon Tetrachloride	3.762	117	299002	9.653	ppbv	98
36) Benzene	3.655	78	427346	9.565	ppbv	99
37) 1,2-Dichloroethane	3.218	62	233446	9.935	ppbv	99
38) Trichloroethene	4.548	130	204031	9.189	ppbv	96
39) 1,2-Dichloropropane	4.315	63	157775	9.673	ppbv	98
40) 1,4-Dioxane	4.584	88	70833	9.339	ppbv #	95
41) Tetrahydrofuran	3.053	42	177879	9.281	ppbv	99
42) Bromodichloromethane	4.490	83	324757	9.924	ppbv	94
43) Methyl Methacrylate	4.878	69	169093	9.250	ppbv	99
44) 2,2,4-Trimethylpentane	4.639	57	725943	9.407	ppbv	100
45) t-1,3-Dichloropropene	6.412	75	185943	9.538	ppbv	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042959.D
 Acq On : 22 Sep 2025 15:52
 Operator : SY/MD
 Sample : VL0922ABS01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0922ABS01

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/23/2025
 Supervised By :Mahesh Dadoda 09/24/2025

Quant Time: Sep 23 02:50:52 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Tue Sep 23 02:39:16 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	240185	9.667	ppbv	98
47) 1,1,2-Trichloroethane	6.581	97	165106	9.580	ppbv	97
48) Dibromochloromethane	7.387	129	275781	10.002	ppbv	99
49) Bromoform	9.484	173	235060	9.800	ppbv	99
50) 4-Methyl-2-Pentanone	5.749	43	431031	9.645	ppbv	99
51) 2-Hexanone	7.435	43	343461	9.641	ppbv	100
52) Tetrachloroethene	8.228	164	150483	8.705	ppbv	97
53) Toluene	6.933	91	501548	9.484	ppbv	100
54) 1,2-Dibromoethane	7.652	107	235389	9.704	ppbv	100
56) 1,1,1,2-Tetrachloroethane	8.924	131	200560	9.516	ppbv	98
57) Chlorobenzene	8.924	112	377524	9.392	ppbv	97
58) Ethyl Benzene	9.354	91	686057	9.489	ppbv	99
59) m/p-Xylene	9.532	91	1075186m	18.862	ppbv	
60) o-Xylene	9.966	91	537008	9.426	ppbv	100
61) Styrene	9.872	104	258756	9.602	ppbv	98
62) Isopropylbenzene	10.539	105	787602	9.274	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.963	83	266223	8.890	ppbv	100
64) n-propylbenzene	10.989	120	208358	9.389	ppbv	100
65) tert-Butylbenzene	11.533	119	694033	9.188	ppbv	99
66) Benzyl Chloride	11.617	91	64955	8.196	ppbv	99
67) sec-Butylbenzene	11.769	105	974750	9.261	ppbv	99
69) p-Isopropyltoluene	11.924	119	820532	9.229	ppbv	99
70) n-Butylbenzene	12.280	91	818866	9.434	ppbv	100
71) 2-Chlorotoluene	10.902	91	598619	9.336	ppbv	100
72) 4-Ethyltoluene	11.125	105	665916	9.332	ppbv	100
73) 1,3,5-Trimethylbenzene	11.206	105	552039	9.539	ppbv	100
74) 1,2,4-Trimethylbenzene	11.536	105	592889	9.277	ppbv	95
75) 1,3-Dichlorobenzene	11.607	146	368544	9.299	ppbv	99
76) 1,4-Dichlorobenzene	11.672	146	369921	9.397	ppbv	99
77) 1,2-Dichlorobenzene	11.947	146	350261	9.288	ppbv	100
78) Hexachloro-1,3-Butadiene	13.882	225	246743	8.366	ppbv	99
79) Naphthalene	13.514	128	579760	10.259	ppbv	98
80) Naphthalene,2-methyl-	14.455	142	167256	9.581	ppbv	98
81) 1,2,4-Trichlorobenzene	13.439	180	300876	9.958	ppbv	99

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

Manual Integration Report

Sequence:

VL091725

Instrument

MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC002	VL042930.D	1,1,2-Trichloroethane	sam	9/18/2025 8:32:32 AM	MMDadoda	9/18/2025 3:24:11 PM	Peak Integrated by Software
VSTDICC002	VL042930.D	1,2-Dichloropropane	sam	9/18/2025 8:32:32 AM	MMDadoda	9/18/2025 3:24:11 PM	Peak Integrated by Software
VSTDICC002	VL042930.D	1,4-Dioxane	sam	9/18/2025 8:32:32 AM	MMDadoda	9/18/2025 3:24:11 PM	Peak Integrated by Software
VSTDICC002	VL042930.D	Cyclohexane	sam	9/18/2025 8:32:32 AM	MMDadoda	9/18/2025 3:24:11 PM	Peak Integrated by Software
VSTDICC002	VL042930.D	m/p-Xylene	sam	9/18/2025 8:32:32 AM	MMDadoda	9/18/2025 3:24:11 PM	Peak Integrated by Software
VSTDICC002	VL042930.D	Methyl Methacrylate	sam	9/18/2025 8:32:32 AM	MMDadoda	9/18/2025 3:24:11 PM	Peak Integrated by Software
VSTDICC002	VL042930.D	Tetrachloroethene	sam	9/18/2025 8:32:32 AM	MMDadoda	9/18/2025 3:24:11 PM	Peak Integrated by Software
VSTDICC002	VL042930.D	Toluene	sam	9/18/2025 8:32:32 AM	MMDadoda	9/18/2025 3:24:11 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	1,1,2-Trichloroethane	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	1,2-Dichloropropane	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	1,4-Dioxane	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	2-Hexanone	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	4-Methyl-2-Pentanone	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	VL091725	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VL042931.D	cis-1,3-Dichloropropene	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	Cyclohexane	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	Heptane	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	m/p-Xylene	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	Methyl Methacrylate	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	t-1,3-Dichloropropene	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC001	VL042931.D	Toluene	sam	9/18/2025 8:33:09 AM	MMDadoda	9/18/2025 3:24:13 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	1,1,1,2-Tetrachloroethane	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	1,1,2,2-Tetrachloroethane	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	1,1,2-Trichloroethane	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	1,2-Dibromoethane	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	1,4-Dioxane	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	2,2,4-Trimethylpentane	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	VL091725	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.5	VL042932.D	2-Hexanone	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	4-Methyl-2-Pentanone	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	Bromodichloromethane	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	Carbon Tetrachloride	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	cis-1,3-Dichloropropene	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	Cyclohexane	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	Dibromochloromethane	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	Ethanol	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	Heptane	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	m/p-Xylene	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	Methyl Methacrylate	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	t-1,3-Dichloropropene	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	Tetrachloroethene	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	VL091725	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.5	VL042932.D	Tetrahydrofuran	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.5	VL042932.D	Trichloroethene	sam	9/18/2025 8:33:00 AM	MMDadoda	9/18/2025 3:24:16 PM	Peak Integrated by Software
VSTDICC0.1	VL042933.D	1,1,1-Trichloroethane	sam	9/18/2025 8:33:15 AM	MMDadoda	9/18/2025 3:24:18 PM	Peak Integrated by Software
VSTDICC0.1	VL042933.D	1,1,2,2-Tetrachloroethane	sam	9/18/2025 8:33:15 AM	MMDadoda	9/18/2025 3:24:18 PM	Peak Integrated by Software
VSTDICC0.1	VL042933.D	1,2-Dibromoethane	sam	9/18/2025 8:33:15 AM	MMDadoda	9/18/2025 3:24:18 PM	Peak Integrated by Software
VSTDICC0.1	VL042933.D	Carbon Tetrachloride	sam	9/18/2025 8:33:15 AM	MMDadoda	9/18/2025 3:24:18 PM	Peak Integrated by Software
VSTDICC0.1	VL042933.D	Naphthalene	sam	9/18/2025 8:33:15 AM	MMDadoda	9/18/2025 3:24:18 PM	Peak Integrated by Software
VSTDICC0.1	VL042933.D	Tetrachloroethene	sam	9/18/2025 8:33:15 AM	MMDadoda	9/18/2025 3:24:18 PM	Peak Integrated by Software
VSTDICC0.1	VL042933.D	Trichloroethene	sam	9/18/2025 8:33:15 AM	MMDadoda	9/18/2025 3:24:18 PM	Peak Integrated by Software
VSTDICC0.03	VL042934.D	1,1,1-Trichloroethane	sam	9/18/2025 8:32:53 AM	MMDadoda	9/18/2025 3:24:19 PM	Peak Integrated by Software
VSTDICC0.03	VL042934.D	1,1,2,2-Tetrachloroethane	sam	9/18/2025 8:32:53 AM	MMDadoda	9/18/2025 3:24:19 PM	Peak Integrated by Software
VSTDICC0.03	VL042934.D	Carbon Tetrachloride	sam	9/18/2025 8:32:53 AM	MMDadoda	9/18/2025 3:24:19 PM	Peak Integrated by Software
VSTDICC0.03	VL042934.D	Tetrachloroethene	sam	9/18/2025 8:32:53 AM	MMDadoda	9/18/2025 3:24:19 PM	Peak Integrated by Software

Manual Integration Report

Sequence:

VL091725

Instrument

MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.03	VL042934.D	Trichloroethene	sam	9/18/2025 8:32:53 AM	MMDadoda	9/18/2025 3:24:19 PM	Peak Integrated by Software
VSTDICCC010	VL042935.D	m/p-Xylene	sam	9/18/2025 8:33:19 AM	MMDadoda	9/18/2025 3:24:21 PM	Peak Integrated by Software
VSTDICC015	VL042936.D	m/p-Xylene	sam	9/18/2025 8:32:47 AM	MMDadoda	9/18/2025 3:24:23 PM	Peak Integrated by Software
VSTDICV010	VL042937.D	m/p-Xylene	sam	9/18/2025 8:32:42 AM	MMDadoda	9/18/2025 3:24:40 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	VL091825	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDC0010	VL042939.D	m/p-Xylene	sam	9/19/2025 7:44:53 AM	MMDadoda	9/24/2025 2:15:13 AM	Peak Integrated by Software
VL0918ABS02	VL042943.D	m/p-Xylene	sam	9/19/2025 7:45:07 AM	MMDadoda	9/24/2025 2:15:17 AM	Peak Integrated by Software
Q3111-02	VL042945.D	1,2,4-Trichlorobenzene	sam	9/19/2025 7:46:39 AM	MMDadoda	9/24/2025 2:15:20 AM	Peak Integrated by Software
Q3111-02	VL042945.D	Carbon Tetrachloride	sam	9/19/2025 7:46:39 AM	MMDadoda	9/24/2025 2:15:20 AM	Peak Integrated by Software
Q3111-02	VL042945.D	Chlorodifluoromethane	sam	9/19/2025 7:46:39 AM	MMDadoda	9/24/2025 2:15:20 AM	Peak Integrated by Software
Q3111-02	VL042945.D	Cyclohexane	sam	9/19/2025 7:46:39 AM	MMDadoda	9/24/2025 2:15:20 AM	Peak Integrated by Software
Q3111-02	VL042945.D	m/p-Xylene	sam	9/19/2025 7:46:39 AM	MMDadoda	9/24/2025 2:15:20 AM	Peak Integrated by Software
Q3111-02	VL042945.D	Methyl Methacrylate	sam	9/19/2025 7:46:39 AM	MMDadoda	9/24/2025 2:15:20 AM	Peak Integrated by Software
Q3111-02	VL042945.D	Propene	sam	9/19/2025 7:46:39 AM	MMDadoda	9/24/2025 2:15:20 AM	Peak Integrated by Software
Q3111-02	VL042945.D	Tetrachloroethene	sam	9/19/2025 7:46:39 AM	MMDadoda	9/24/2025 2:15:20 AM	Peak Integrated by Software
Q3111-02	VL042945.D	Trichlorofluoromethane	sam	9/19/2025 7:46:39 AM	MMDadoda	9/24/2025 2:15:20 AM	Peak Integrated by Software
Q3111-02DUP	VL042946.D	1,2,4-Trichlorobenzene	sam	9/19/2025 7:46:44 AM	MMDadoda	9/24/2025 2:15:22 AM	Peak Integrated by Software
Q3111-02DUP	VL042946.D	4-Ethyltoluene	sam	9/19/2025 7:46:44 AM	MMDadoda	9/24/2025 2:15:22 AM	Peak Integrated by Software

Manual Integration Report

Sequence:

VL091825

Instrument

MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q3111-02DUP	VL042946.D	Carbon Tetrachloride	sam	9/19/2025 7:46:44 AM	MMDadoda	9/24/2025 2:15:22 AM	Peak Integrated by Software
Q3111-02DUP	VL042946.D	Chlorodifluoromethane	sam	9/19/2025 7:46:44 AM	MMDadoda	9/24/2025 2:15:22 AM	Peak Integrated by Software
Q3111-02DUP	VL042946.D	Cyclohexane	sam	9/19/2025 7:46:44 AM	MMDadoda	9/24/2025 2:15:22 AM	Peak Integrated by Software
Q3111-02DUP	VL042946.D	Heptane	sam	9/19/2025 7:46:44 AM	MMDadoda	9/24/2025 2:15:22 AM	Peak Integrated by Software
Q3111-02DUP	VL042946.D	m/p-Xylene	sam	9/19/2025 7:46:44 AM	MMDadoda	9/24/2025 2:15:22 AM	Peak Integrated by Software
Q3111-02DUP	VL042946.D	Methyl Methacrylate	sam	9/19/2025 7:46:44 AM	MMDadoda	9/24/2025 2:15:22 AM	Peak Integrated by Software
Q3111-02DUP	VL042946.D	Propene	sam	9/19/2025 7:46:44 AM	MMDadoda	9/24/2025 2:15:22 AM	Peak Integrated by Software
Q3111-02DUP	VL042946.D	Tetrachloroethene	sam	9/19/2025 7:46:44 AM	MMDadoda	9/24/2025 2:15:22 AM	Peak Integrated by Software
Q3111-02DL	VL042947.D	Propene	MMDadoda	9/24/2025 2:15:36 AM	SAM	9/24/2025 2:23:43 AM	Peak Integrated by Software

Manual Integration Report

Sequence:	VI092225	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICCC010	VL042950.D	m/p-Xylene	sam	9/23/2025 10:01:03 AM	MMDadoda	9/24/2025 2:16:17 AM	Peak Integrated by Software
VSTDICCC002	VL042951.D	1,1,2-Trichloroethane	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software
VSTDICCC002	VL042951.D	1,2-Dichloropropane	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software
VSTDICCC002	VL042951.D	1,4-Dioxane	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software
VSTDICCC002	VL042951.D	4-Methyl-2-Pentanone	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software
VSTDICCC002	VL042951.D	m/p-Xylene	sam	9/23/2025 10:01:08 AM	MMDadoda	9/24/2025 2:16:19 AM	Peak Integrated by Software
VSTDICCC001	VL042952.D	1,2-Dichloropropane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICCC001	VL042952.D	1,4-Dioxane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICCC001	VL042952.D	Bromodichloromethane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICCC001	VL042952.D	cis-1,3-Dichloropropene	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICCC001	VL042952.D	Heptane	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICCC001	VL042952.D	m/p-Xylene	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software
VSTDICCC001	VL042952.D	t-1,3-Dichloropropene	sam	9/23/2025 10:01:13 AM	MMDadoda	9/24/2025 2:16:21 AM	Peak Integrated by Software

Manual Integration Report

Sequence:	VI092225	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.5	VL042953.D	1,1,2-Trichloroethane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	1,4-Dioxane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	2,2,4-Trimethylpentane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	Benzyl Chloride	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	cis-1,3-Dichloropropene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	Ethanol	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	Heptane	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	m/p-Xylene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	Methyl Methacrylate	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	t-1,3-Dichloropropene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	Tetrachloroethene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.5	VL042953.D	trans-1,2-Dichloroethene	sam	9/23/2025 10:02:11 AM	MMDadoda	9/24/2025 2:16:23 AM	Peak Integrated by Software
VSTDICC0.1	VL042954.D	1,2-Dibromoethane	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software

Manual Integration Report

Sequence:	VI092225	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.1	VL042954.D	Carbon Tetrachloride	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software
VSTDICC0.1	VL042954.D	Naphthalene	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software
VSTDICC0.1	VL042954.D	Tetrachloroethene	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software
VSTDICC0.1	VL042954.D	Trichloroethene	sam	9/23/2025 10:02:56 AM	MMDadoda	9/24/2025 2:16:25 AM	Peak Integrated by Software
VSTDICC0.03	VL042955.D	1,1,1-Trichloroethane	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software
VSTDICC0.03	VL042955.D	1,1,2,2-Tetrachloroethane	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software
VSTDICC0.03	VL042955.D	Carbon Tetrachloride	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software
VSTDICC0.03	VL042955.D	Tetrachloroethene	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software
VSTDICC0.03	VL042955.D	Trichloroethene	sam	9/23/2025 10:01:57 AM	MMDadoda	9/24/2025 2:16:26 AM	Peak Integrated by Software
VSTDICC015	VL042956.D	m/p-Xylene	sam	9/23/2025 10:01:19 AM	MMDadoda	9/24/2025 2:16:27 AM	Peak Integrated by Software
VSTDICV010	VL042957.D	m/p-Xylene	sam	9/23/2025 10:01:52 AM	MMDadoda	9/24/2025 2:16:29 AM	Peak Integrated by Software
VL0922ABS01	VL042959.D	m/p-Xylene	sam	9/23/2025 10:01:29 AM	MMDadoda	9/24/2025 2:16:44 AM	Peak Integrated by Software
Q3111-01	VL042960.D	2,2,4-Trimethylpentane	sam	9/23/2025 10:01:24 AM	MMDadoda	9/24/2025 2:16:45 AM	Peak Integrated by Software

Manual Integration Report

Sequence:

VI092225

Instrument

MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q3111-01	VL042960.D	Heptane	sam	9/23/2025 10:01:24 AM	MMDadoda	9/24/2025 2:16:45 AM	Peak Integrated by Software
Q3111-01	VL042960.D	tert-Butyl alcohol	sam	9/23/2025 10:01:24 AM	MMDadoda	9/24/2025 2:16:45 AM	Peak Integrated by Software
Q3111-01	VL042960.D	Tetrahydrofuran	sam	9/23/2025 10:01:24 AM	MMDadoda	9/24/2025 2:16:45 AM	Peak Integrated by Software
Q3111-01DL	VL042961.D	Ethyl Acetate	sam	9/23/2025 10:02:15 AM	MMDadoda	9/24/2025 2:16:47 AM	Peak Integrated by Software
Q3111-01DL	VL042961.D	Tetrachloroethene	sam	9/23/2025 10:02:15 AM	MMDadoda	9/24/2025 2:16:47 AM	Peak Integrated by Software
Q3111-01DL	VL042961.D	Toluene	sam	9/23/2025 10:02:15 AM	MMDadoda	9/24/2025 2:16:47 AM	Peak Integrated by Software

Instrument ID: **MSVOA_L**

Daily Analysis Runlog For Sequence/QC Batch ID # VL091725

Review By	Semsettin Yesilyurt	Review On	9/18/2025 8:35:15 AM		
Supervise By	Mahesh Dadoda	Supervise On	9/18/2025 3:24:41 PM		
SubDirectory	VL091725	HP Acquire Method	TO15AIR	HP Processing Method	VL091725AIR.M
STD. NAME		STD REF.#			
Tune/Reschk		AP2664			
Initial Calibration Stds		AP2666,AP2668,AP2669			
CCC		AP2666			
Internal Standard/PEM		AP2664			
ICV/I.BLK		AP2671			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042928.D	17 Sep 2025 07:51	SY/MD	Ok
2	VSTDICCC010	VL042929.D	17 Sep 2025 10:12	SY/MD	Not Ok
3	VSTDICCC002	VL042930.D	17 Sep 2025 10:48	SY/MD	Ok,M
4	VSTDICCC001	VL042931.D	17 Sep 2025 11:23	SY/MD	Ok,M
5	VSTDICCC0.5	VL042932.D	17 Sep 2025 11:58	SY/MD	Ok,M
6	VSTDICCC0.1	VL042933.D	17 Sep 2025 12:32	SY/MD	Ok,M
7	VSTDICCC0.03	VL042934.D	17 Sep 2025 13:07	SY/MD	Ok,M
8	VSTDICCC010	VL042935.D	17 Sep 2025 13:42	SY/MD	Ok,M
9	VSTDICCC015	VL042936.D	17 Sep 2025 14:17	SY/MD	Ok,M
10	VSTDICCV010	VL042937.D	17 Sep 2025 14:52	SY/MD	Ok,M

M : Manual Integration

Instrument ID: **MSVOA_L**

Daily Analysis Runlog For Sequence/QC Batch ID # VL091825

Review By	Semsettin Yesilyurt	Review On	9/19/2025 9:39:49 AM
Supervise By	Maresh Dadoda	Supervise On	9/24/2025 2:15:54 AM
SubDirectory	VL091825	HP Acquire Method	TO15AIR
		HP Processing Method	VL091725AIR.M
STD. NAME	STD REF.#		
Tune/Reschk	AP2664		
Initial Calibration Stds	AP2666,AP2668,AP2669		
CCC	AP2666		
Internal Standard/PEM	AP2664		
ICV/I.BLK	AP2671		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042938.D	18 Sep 2025 07:46	SY/MD	Ok
2	VSTDCCC010	VL042939.D	18 Sep 2025 09:38	SY/MD	Ok,M
3	VL0918ABL01	VL042940.D	18 Sep 2025 11:01	SY/MD	Ok
4	VL0918ABS01	VL042941.D	18 Sep 2025 11:37	SY/MD	Not Ok
5	QC091125 CAN 10060	VL042942.D	18 Sep 2025 12:14	SY/MD	Ok
6	VL0918ABS02	VL042943.D	18 Sep 2025 12:49	SY/MD	Ok,M
7	Q3111-02DL	VL042944.D	18 Sep 2025 14:01	SY/MD	Not Ok
8	Q3111-02	VL042945.D	18 Sep 2025 14:37	SY/MD	Dilution
9	Q3111-02DUP	VL042946.D	18 Sep 2025 15:13	SY/MD	Ok,M
10	Q3111-02DL	VL042947.D	18 Sep 2025 15:50	SY/MD	Ok,M
11	Q3111-01	VL042948.D	18 Sep 2025 16:30	SY/MD	Not Ok

M : Manual Integration

Instrument ID: **MSVOA_L**

Daily Analysis Runlog For Sequence/QC Batch ID # VL092225

Review By	Mahesh Dadoda	Review On	9/24/2025 2:18:14 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/24/2025 2:26:00 AM		
SubDirectory	VL092225	HP Acquire Method	TO15AIR	HP Processing Method	VL092225AIR.M
STD. NAME		STD REF.#			
Tune/Reschk		AP2676			
Initial Calibration Stds		AP2673,AP2674,AP2675			
CCC		AP2673			
Internal Standard/PEM		AP2676			
ICV/I.BLK		AP2671			
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042949.D	22 Sep 2025 08:55	SY/MD	Ok
2	VSTDICCC010	VL042950.D	22 Sep 2025 09:39	SY/MD	Ok,M
3	VSTDICCC002	VL042951.D	22 Sep 2025 10:14	SY/MD	Ok,M
4	VSTDICCC001	VL042952.D	22 Sep 2025 10:48	SY/MD	Ok,M
5	VSTDICCC0.5	VL042953.D	22 Sep 2025 11:22	SY/MD	Ok,M
6	VSTDICCC0.1	VL042954.D	22 Sep 2025 11:56	SY/MD	Ok,M
7	VSTDICCC0.03	VL042955.D	22 Sep 2025 12:30	SY/MD	Ok,M
8	VSTDICCC015	VL042956.D	22 Sep 2025 13:05	SY/MD	Ok,M
9	VSTDICV010	VL042957.D	22 Sep 2025 14:15	SY/MD	Ok,M
10	VL0922ABL01	VL042958.D	22 Sep 2025 15:06	SY/MD	Ok
11	VL0922ABS01	VL042959.D	22 Sep 2025 15:52	SY/MD	Ok,M
12	Q3111-01	VL042960.D	22 Sep 2025 16:53	SY/MD	Dilution
13	Q3111-01DL	VL042961.D	22 Sep 2025 17:28	SY/MD	Ok,M
14	Q3112-01	VL042962.D	22 Sep 2025 18:04	SY/MD	Ok,M
15	Q3112-01DL	VL042963.D	22 Sep 2025 18:39	SY/MD	Not Ok
16	Q3112-02	VL042964.D	22 Sep 2025 19:14	SY/MD	Dilution
17	Q3112-02DL	VL042965.D	22 Sep 2025 19:49	SY/MD	Ok
18	Q3112-03	VL042966.D	22 Sep 2025 20:24	SY/MD	Ok,M
19	Q3112-03DL	VL042967.D	22 Sep 2025 20:59	SY/MD	Not Ok
20	VIBLK	VL042968.D	22 Sep 2025 21:35	SY/MD	Ok
21	Q3130-02	VL042969.D	22 Sep 2025 22:11	SY/MD	Ok,M

Instrument ID: **MSVOA_L**

Daily Analysis Runlog For Sequence/QC Batch ID # VL092225

Review By	Maresh Dadoda	Review On	9/24/2025 2:18:14 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/24/2025 2:26:00 AM		
SubDirectory	VL092225	HP Acquire Method	TO15AIR	HP Processing Method	VL092225AIR.M
STD. NAME		STD REF.#			
Tune/Reschk	AP2676				
Initial Calibration Stds	AP2673,AP2674,AP2675				
CCC	AP2673				
Internal Standard/PEM	AP2676				
ICV/I.BLK	AP2671				
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

22	Q3130-02DUP	VL042970.D	22 Sep 2025 22:48	SY/MD	Ok,M
23	Q3130-02DL	VL042971.D	22 Sep 2025 23:23	SY/MD	Not Ok
24	Q3130-01	VL042972.D	23 Sep 2025 00:00	SY/MD	Ok,M
25	Q3130-01DL	VL042973.D	23 Sep 2025 00:35	SY/MD	Not Ok
26	Q3131-01	VL042974.D	23 Sep 2025 01:11	SY/MD	Dilution
27	Q3131-01DL	VL042975.D	23 Sep 2025 01:46	SY/MD	Ok,M
28	Q3131-02	VL042976.D	23 Sep 2025 02:22	SY/MD	Dilution
29	Q3131-02DL	VL042977.D	23 Sep 2025 02:57	SY/MD	Ok,M
30	Q3132-01	VL042978.D	23 Sep 2025 03:33	SY/MD	Dilution
31	Q3132-01DL	VL042979.D	23 Sep 2025 04:08	SY/MD	Ok,M
32	Q3132-02	VL042980.D	23 Sep 2025 04:44	SY/MD	Ok,M
33	Q3132-02DL	VL042981.D	23 Sep 2025 05:19	SY/MD	Not Ok

M : Manual Integration

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QC Batch ID # VL091725

Review By	Semsettin Yesilyurt	Review On	9/18/2025 8:35:15 AM		
Supervise By	Mahesh Dadoda	Supervise On	9/18/2025 3:24:41 PM		
SubDirectory	VL091725	HP Acquire Method	TO15AIR	HP Processing Method	VL091725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2664
Initial Calibration Stds	AP2666,AP2668,AP2669
CCC	AP2666
Internal Standard/PEM	AP2664
ICV/I.BLK	AP2671
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	Sampled	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042928.D	17 Sep 2025 07:51		SY/MD	Ok
2	VSTDICCC010	VSTDICCC010	VL042929.D	17 Sep 2025 10:12	Not used	SY/MD	Not Ok
3	VSTDICC002	VSTDICC002	VL042930.D	17 Sep 2025 10:48	LR-61,70,72,80,81 And QR-79	SY/MD	Ok,M
4	VSTDICC001	VSTDICC001	VL042931.D	17 Sep 2025 11:23		SY/MD	Ok,M
5	VSTDICC0.5	VSTDICC0.5	VL042932.D	17 Sep 2025 11:58	%D Failed For Com.#80 In 0.5 PPB	SY/MD	Ok,M
6	VSTDICC0.1	VSTDICC0.1	VL042933.D	17 Sep 2025 12:32	%D Failed For Com.#79 In 0.1PPB	SY/MD	Ok,M
7	VSTDICC0.03	VSTDICC0.03	VL042934.D	17 Sep 2025 13:07		SY/MD	Ok,M
8	VSTDICCC010	VSTDICCC010	VL042935.D	17 Sep 2025 13:42		SY/MD	Ok,M
9	VSTDICC015	VSTDICC015	VL042936.D	17 Sep 2025 14:17		SY/MD	Ok,M
10	VSTDICV010	ICVVL091725	VL042937.D	17 Sep 2025 14:52	ICV failed for com.#13	SY/MD	Ok,M

M : Manual Integration

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QC Batch ID # VL091825

Review By	Semsettin Yesilyurt	Review On	9/19/2025 9:39:49 AM		
Supervise By	Mahesh Dadoda	Supervise On	9/24/2025 2:15:54 AM		
SubDirectory	VL091825	HP Acquire Method	TO15AIR	HP Processing Method	VL091725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2664
Initial Calibration Stds	AP2666,AP2668,AP2669
CCC	AP2666
Internal Standard/PEM	AP2664
ICV/I.BLK	AP2671
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042938.D	18 Sep 2025 07:46		SY/MD	Ok
2	VSTDCCC010	VSTDCCC010	VL042939.D	18 Sep 2025 09:38		SY/MD	Ok,M
3	VL0918ABL01	VL0918ABL01	VL042940.D	18 Sep 2025 11:01		SY/MD	Ok
4	VL0918ABS01	VL0918ABS01	VL042941.D	18 Sep 2025 11:37	Recovery fail	SY/MD	Not Ok
5	QC091125 CAN 10060	QC091125 CAN 10060	VL042942.D	18 Sep 2025 12:14		SY/MD	Ok
6	VL0918ABS02	VL0918ABS02	VL042943.D	18 Sep 2025 12:49		SY/MD	Ok,M
7	Q3111-02DL	IA1DL	VL042944.D	18 Sep 2025 14:01	Need 40X; not required	SY/MD	Not Ok
8	Q3111-02	IA1	VL042945.D	18 Sep 2025 14:37	Need 40X	SY/MD	Dilution
9	Q3111-02DUP	IA1DUP	VL042946.D	18 Sep 2025 15:13		SY/MD	Ok,M
10	Q3111-02DL	IA1DL	VL042947.D	18 Sep 2025 15:50		SY/MD	Ok,M
11	Q3111-01	SV1	VL042948.D	18 Sep 2025 16:30	Need 40X, rerun confirmation	SY/MD	Not Ok

M : Manual Integration

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QC Batch ID # VL092225

Review By	Mahesh Dadoda	Review On	9/24/2025 2:18:14 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/24/2025 2:26:00 AM		
SubDirectory	VL092225	HP Acquire Method	TO15AIR	HP Processing Method	VL092225AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2676
Initial Calibration Stds	AP2673,AP2674,AP2675
CCC	AP2673
Internal Standard/PEM	AP2676
ICV/I.BLK	AP2671
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042949.D	22 Sep 2025 08:55		SY/MD	Ok
2	VSTDICCC010	VSTDICCC010	VL042950.D	22 Sep 2025 09:39		SY/MD	Ok,M
3	VSTDICC002	VSTDICC002	VL042951.D	22 Sep 2025 10:14	LR-20	SY/MD	Ok,M
4	VSTDICC001	VSTDICC001	VL042952.D	22 Sep 2025 10:48		SY/MD	Ok,M
5	VSTDICC0.5	VSTDICC0.5	VL042953.D	22 Sep 2025 11:22		SY/MD	Ok,M
6	VSTDICC0.1	VSTDICC0.1	VL042954.D	22 Sep 2025 11:56		SY/MD	Ok,M
7	VSTDICC0.03	VSTDICC0.03	VL042955.D	22 Sep 2025 12:30		SY/MD	Ok,M
8	VSTDICC015	VSTDICC015	VL042956.D	22 Sep 2025 13:05		SY/MD	Ok,M
9	VSTDICV010	ICVVL092225	VL042957.D	22 Sep 2025 14:15	ICV failed for com.#13	SY/MD	Ok,M
10	VL0922ABL01	VL0922ABL01	VL042958.D	22 Sep 2025 15:06		SY/MD	Ok
11	VL0922ABS01	VL0922ABS01	VL042959.D	22 Sep 2025 15:52		SY/MD	Ok,M
12	Q3111-01	SV1	VL042960.D	22 Sep 2025 16:53	Need 40X	SY/MD	Dilution
13	Q3111-01DL	SV1DL	VL042961.D	22 Sep 2025 17:28		SY/MD	Ok,M
14	Q3112-01	SV1	VL042962.D	22 Sep 2025 18:04		SY/MD	Ok,M
15	Q3112-01DL	SV1DL	VL042963.D	22 Sep 2025 18:39	Not Required	SY/MD	Not Ok
16	Q3112-02	SV2	VL042964.D	22 Sep 2025 19:14	Need 40X	SY/MD	Dilution
17	Q3112-02DL	SV2DL	VL042965.D	22 Sep 2025 19:49		SY/MD	Ok
18	Q3112-03	SV3	VL042966.D	22 Sep 2025 20:24		SY/MD	Ok,M

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QC Batch ID # VL092225

Review By	Mahesh Dadoda	Review On	9/24/2025 2:18:14 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	9/24/2025 2:26:00 AM		
SubDirectory	VL092225	HP Acquire Method	TO15AIR	HP Processing Method	VL092225AIR.M
STD. NAME	STD REF.#				
Tune/Reschk	AP2676				
Initial Calibration Stds	AP2673,AP2674,AP2675				
CCC	AP2673				
Internal Standard/PEM	AP2676				
ICV/I.BLK	AP2671				
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

19	Q3112-03DL	SV3DL	VL042967.D	22 Sep 2025 20:59	Not Required	SY/MD	Not Ok
20	VIBLK	VIBLK	VL042968.D	22 Sep 2025 21:35		SY/MD	Ok
21	Q3130-02	131-1A-2	VL042969.D	22 Sep 2025 22:11		SY/MD	Ok,M
22	Q3130-02DUP	131-1A-2DUP	VL042970.D	22 Sep 2025 22:48		SY/MD	Ok,M
23	Q3130-02DL	131-1A-2DL	VL042971.D	22 Sep 2025 23:23	Not Required	SY/MD	Not Ok
24	Q3130-01	131-1A-1	VL042972.D	23 Sep 2025 00:00		SY/MD	Ok,M
25	Q3130-01DL	131-1A-1DL	VL042973.D	23 Sep 2025 00:35	Not Required	SY/MD	Not Ok
26	Q3131-01	141-1A-1	VL042974.D	23 Sep 2025 01:11	Need 10X	SY/MD	Dilution
27	Q3131-01DL	141-1A-1DL	VL042975.D	23 Sep 2025 01:46		SY/MD	Ok,M
28	Q3131-02	141-1A-2	VL042976.D	23 Sep 2025 02:22	Need 10X	SY/MD	Dilution
29	Q3131-02DL	141-1A-2DL	VL042977.D	23 Sep 2025 02:57		SY/MD	Ok,M
30	Q3132-01	151-1A-1	VL042978.D	23 Sep 2025 03:33	Need 10X	SY/MD	Dilution
31	Q3132-01DL	151-1A-1DL	VL042979.D	23 Sep 2025 04:08		SY/MD	Ok,M
32	Q3132-02	151-1A-2	VL042980.D	23 Sep 2025 04:44		SY/MD	Ok,M
33	Q3132-02DL	151-1A-2DL	VL042981.D	23 Sep 2025 05:19	Not Required	SY/MD	Not Ok

M : Manual Integration