

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL120825\
 Data File : VL043324.D
 Acq On : 08 Dec 2025 21:56
 Operator : SY/MD
 Sample : Q3799-06DL 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 16-IA-1DL

Quant Time: Dec 09 01:25:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

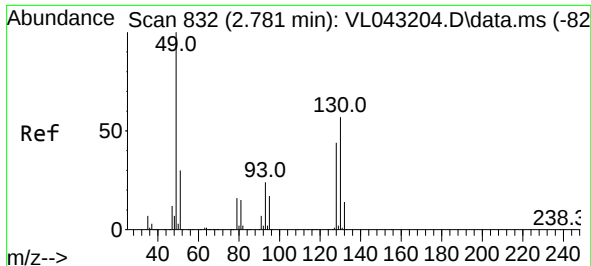
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.780	49	127959	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.946	114	316604	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.869	117	248177	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.364	95	180171	9.904	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.000%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.496	85	748	0.041	ppbv #	78
3) Chlorodifluoromethane	1.447	51	6352	0.358	ppbv #	65
4) Chloromethane	1.531	50	637	0.094	ppbv #	68
8) Dichlorotetrafluoroethane	1.496	85	748	0.050	ppbv #	17
9) Propene	1.884	41	341455	45.304	ppbv #	86
13) Ethanol	1.719	45	40793	15.392	ppbv	98
15) Acetone	1.832	43	62169	3.497	ppbv	98
16) 1,3-Butadiene	1.884	39	294574	37.167	ppbv #	13
17) tert-Butyl alcohol	1.884	59	144102	6.175	ppbv #	92
19) Isopropyl Alcohol	1.884	45	2523636	251.215	ppbv #	37
20) Methylene Chloride	2.059	84	8511	0.911	ppbv	88
21) Allyl Chloride	1.884	41	341455	28.548	ppbv #	77
23) Vinyl Acetate	2.447	43	981	0.046	ppbv #	47
25) Ethyl Acetate	2.829	43	5166	0.135	ppbv #	82
26) Hexane	2.819	57	3985	0.237	ppbv #	68
34) 2-Butanone	2.547	43	766	0.034	ppbv #	53
39) 1,2-Dichloropropane	3.949	63	78444	7.069	ppbv #	23

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

Quant Time: Dec 09 01:25:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Nov 19 01:11:25 2025
Response via : Initial Calibration

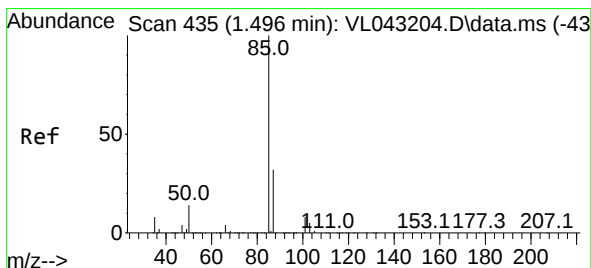
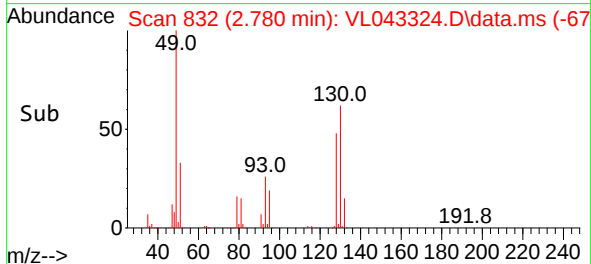
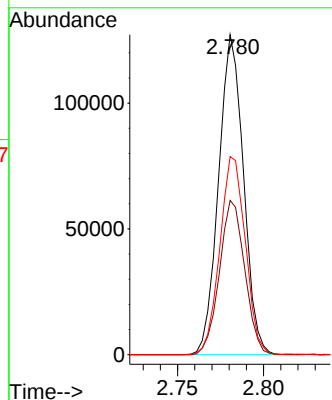
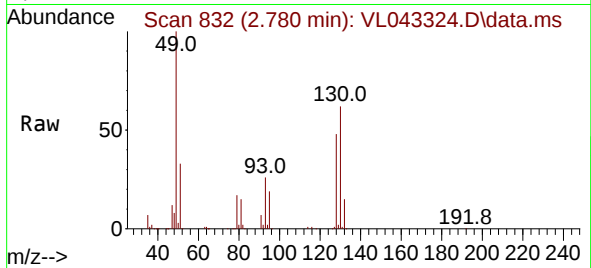




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 832
Delta R.T. -0.001 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

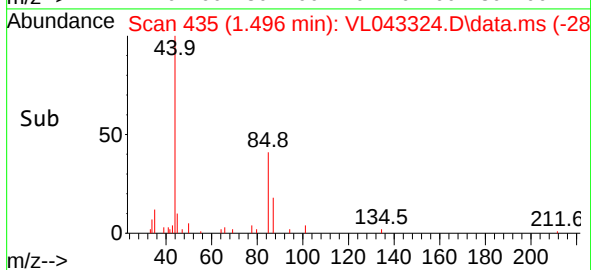
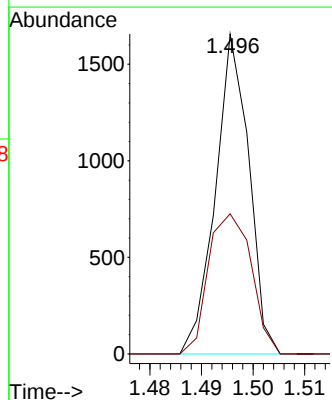
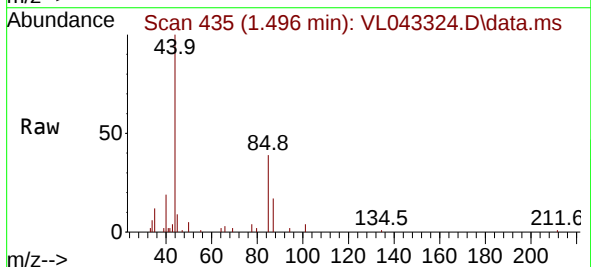
Instrument :
MSVOA_L
ClientSampleId :
16-IA-1DL

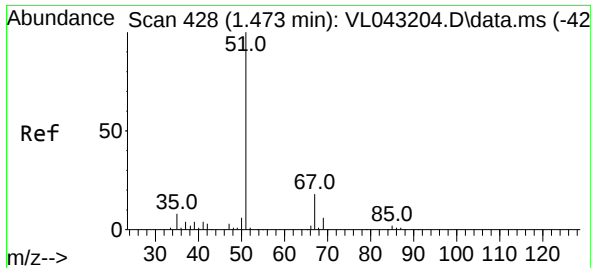
Tgt Ion: 49 Resp: 127959
Ion Ratio Lower Upper
49 100
128 49.0 23.0 69.0
130 63.6 29.9 89.7



#2
Dichlorodifluoromethane
Concen: 0.041 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

Tgt Ion: 85 Resp: 748
Ion Ratio Lower Upper
85 100
87 43.8 25.4 38.2#

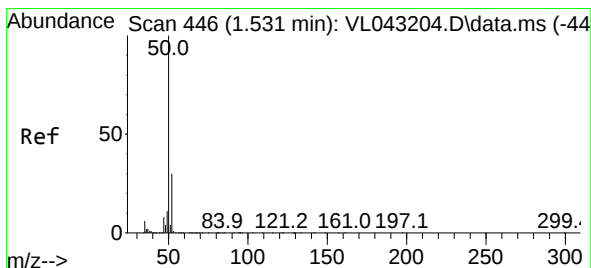
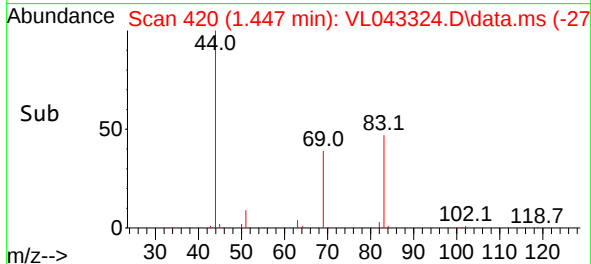
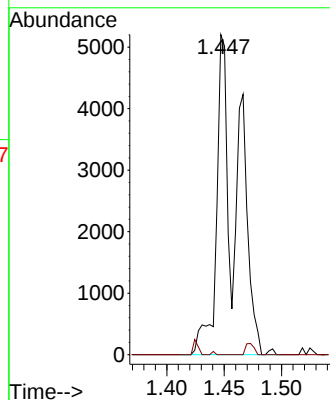
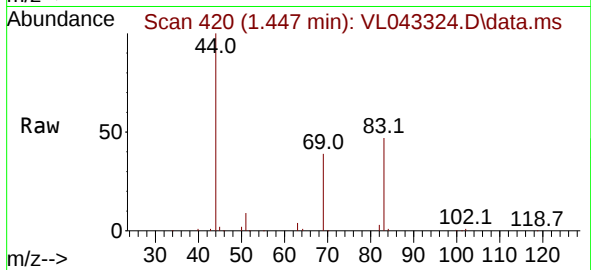




#3
Chlorodifluoromethane
Concen: 0.358 ppbv
RT: 1.447 min Scan# 41
Delta R.T. -0.026 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

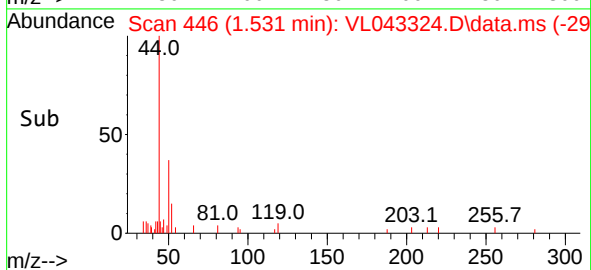
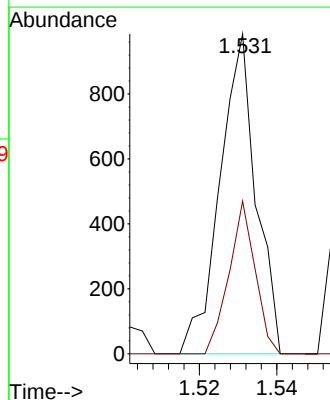
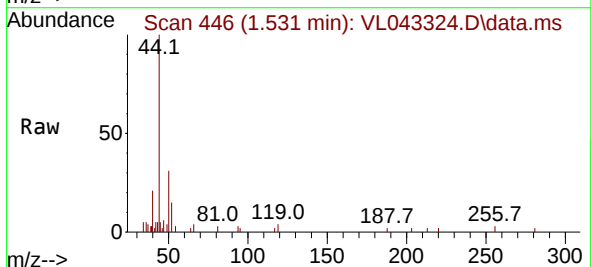
Instrument :
MSVOA_L
ClientSampleId :
16-IA-1DL

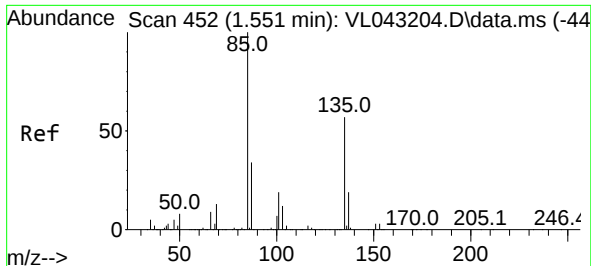
Tgt Ion: 51 Resp: 6352
Ion Ratio Lower Upper
51 100
67 2.8 14.9 22.3#



#4
Chloromethane
Concen: 0.094 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

Tgt Ion: 50 Resp: 637
Ion Ratio Lower Upper
50 100
52 47.7 24.1 36.1#

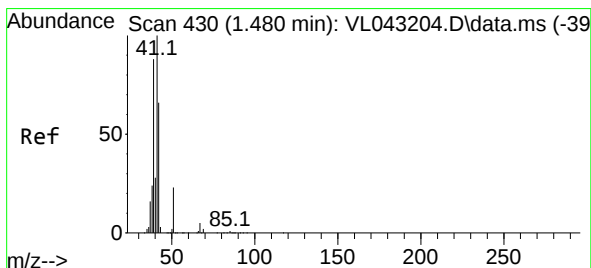
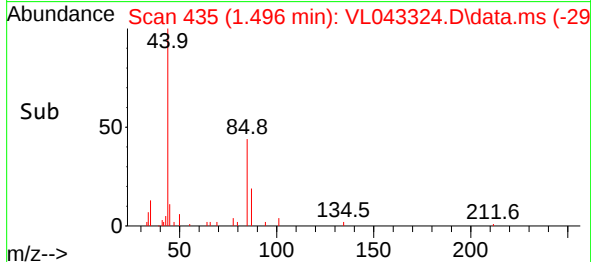
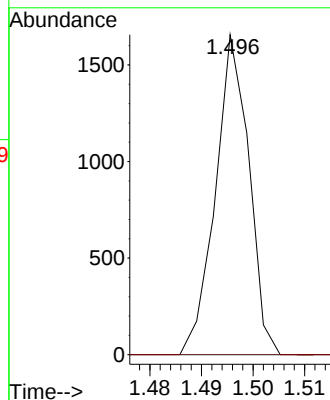
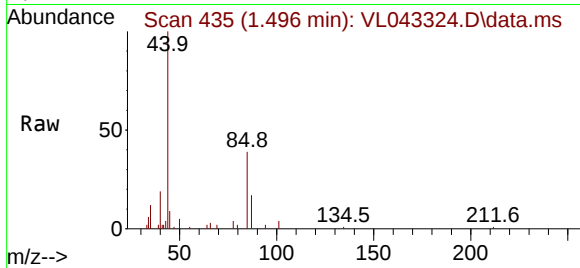




#8
Dichlorotetrafluoroethane
Concen: 0.050 ppbv
RT: 1.496 min Scan# 41
Delta R.T. -0.055 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

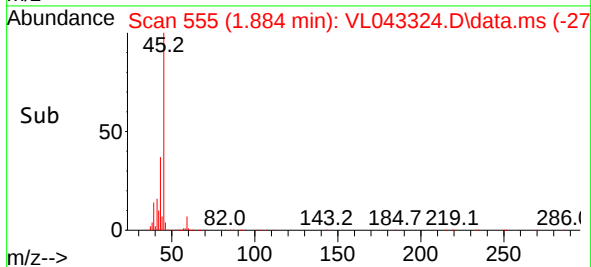
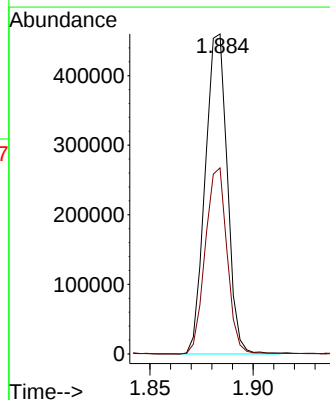
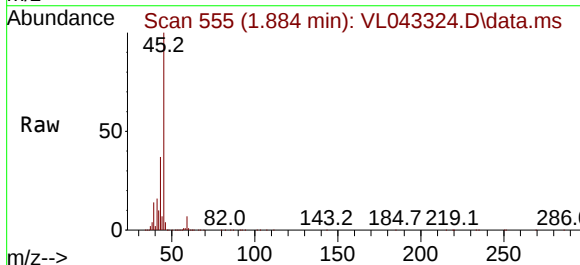
Instrument :
MSVOA_1
ClientSampleId :
16-IA-1DL

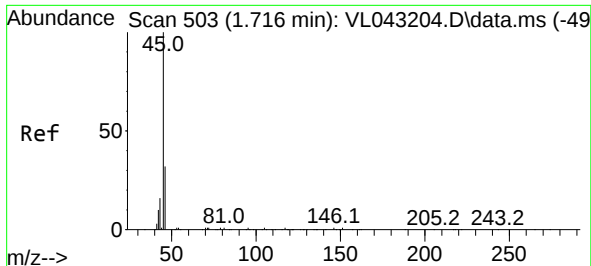
Tgt Ion: 85 Resp: 748
Ion Ratio Lower Upper
85 100
135 0.0 52.6 79.0#



#9
Propene
Concen: 45.304 ppbv
RT: 1.884 min Scan# 555
Delta R.T. 0.404 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

Tgt Ion: 41 Resp: 341455
Ion Ratio Lower Upper
41 100
42 0.0 3.7 5.5#

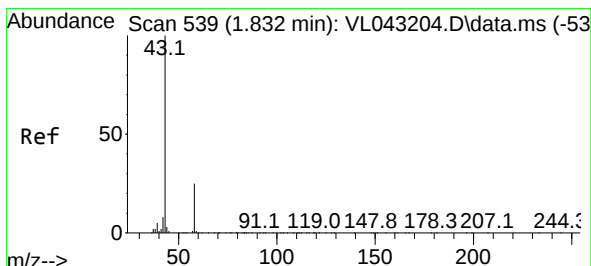
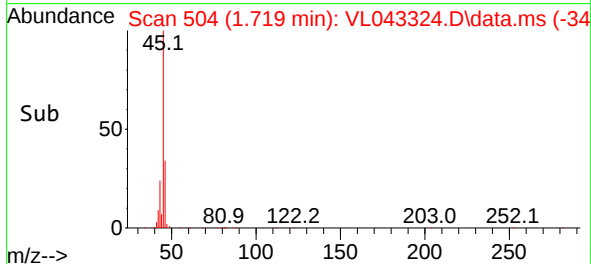
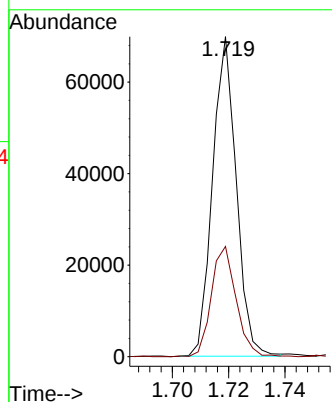
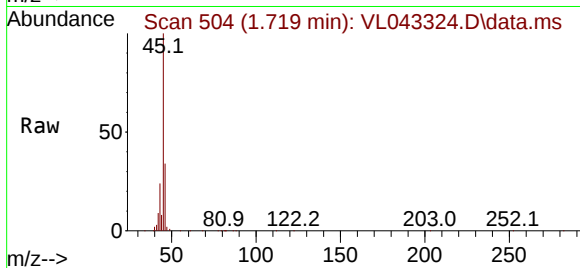




#13
Ethanol
Concen: 15.392 ppbv
RT: 1.719 min Scan# 503
Delta R.T. 0.003 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

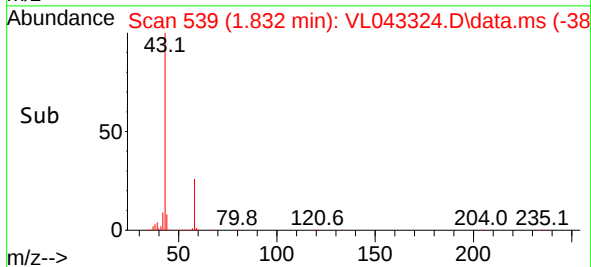
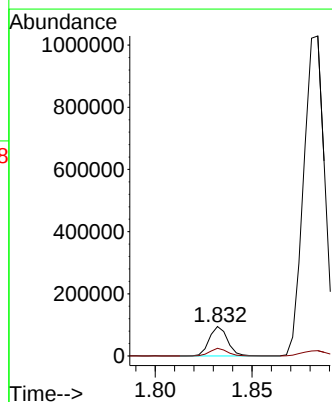
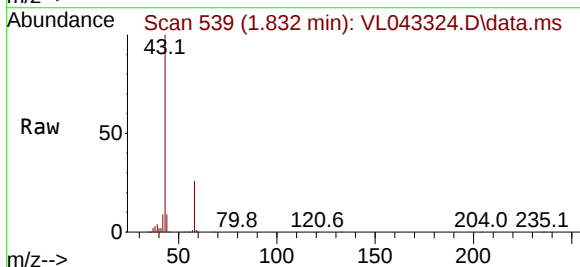
Instrument :
MSVOA_1
ClientSampleId :
16-IA-1DL

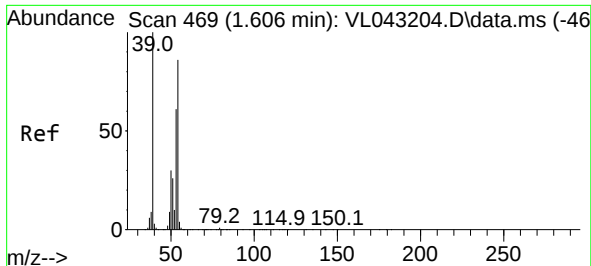
Tgt Ion: 45 Resp: 40793
Ion Ratio Lower Upper
45 100
46 36.1 15.0 59.8



#15
Acetone
Concen: 3.497 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

Tgt Ion: 43 Resp: 62169
Ion Ratio Lower Upper
43 100
58 25.0 20.7 31.1





#16

1,3-Butadiene

Concen: 37.167 ppbv

RT: 1.884 min Scan# 555

Delta R.T. 0.278 min

Lab File: VL043324.D

Acq: 08 Dec 2025 21:56

Instrument :

MSVOA_L

ClientSampleId :

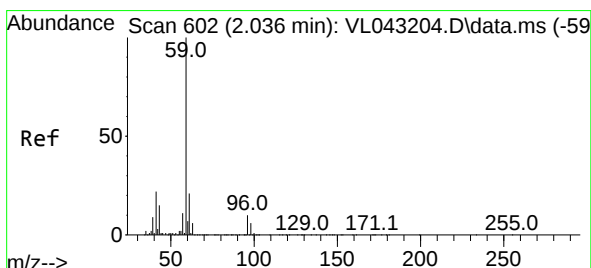
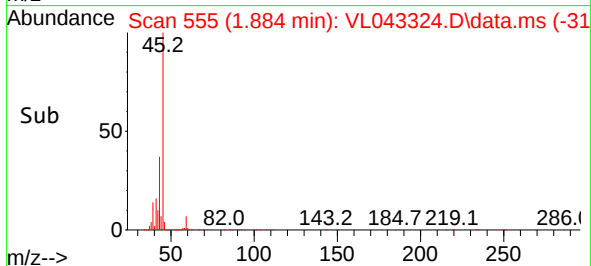
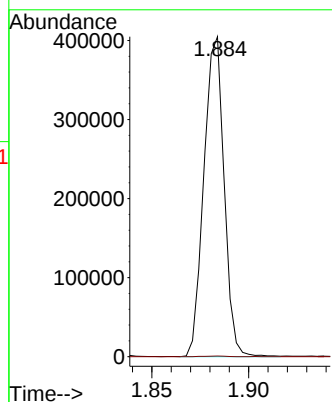
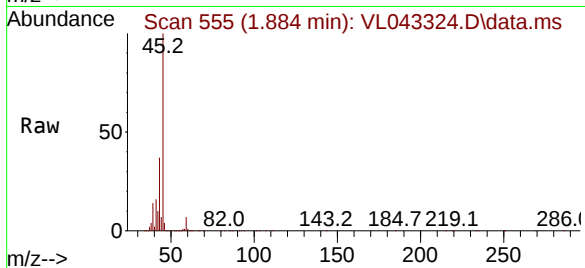
16-IA-1DL

Tgt Ion: 39 Resp: 294574

Ion Ratio Lower Upper

39 100

54 0.2 59.4 89.2#



#17

tert-Butyl alcohol

Concen: 6.175 ppbv

RT: 1.884 min Scan# 555

Delta R.T. -0.152 min

Lab File: VL043324.D

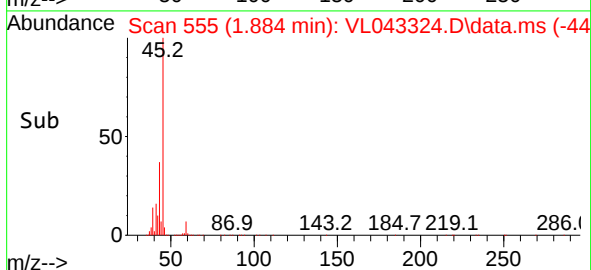
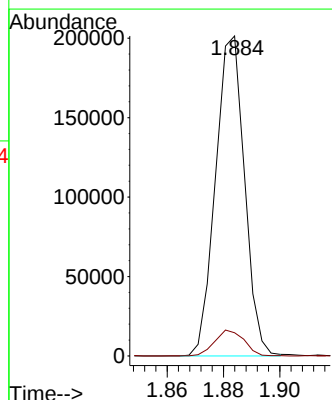
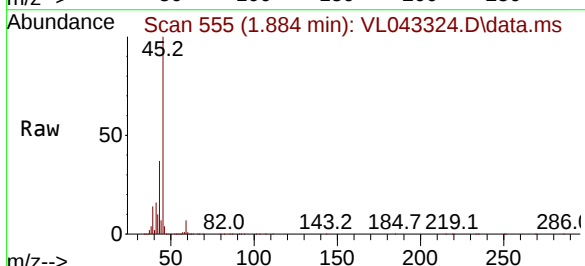
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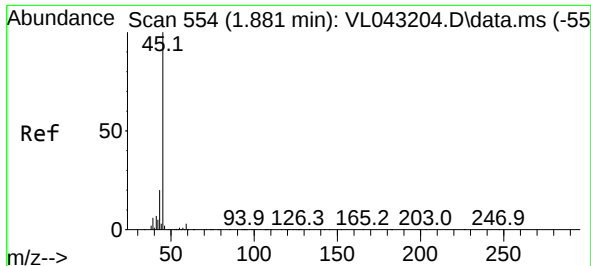
Tgt Ion: 59 Resp: 144102

Ion Ratio Lower Upper

59 100

57 8.3 9.0 13.4#

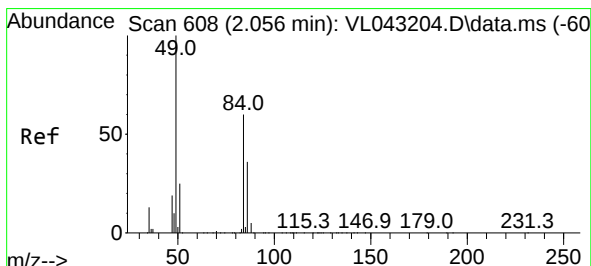
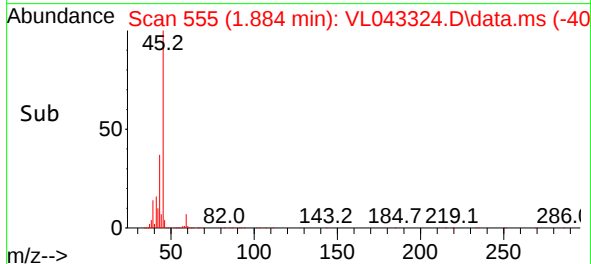
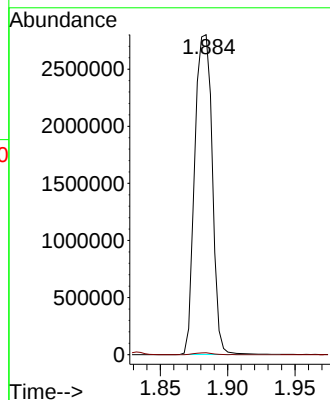
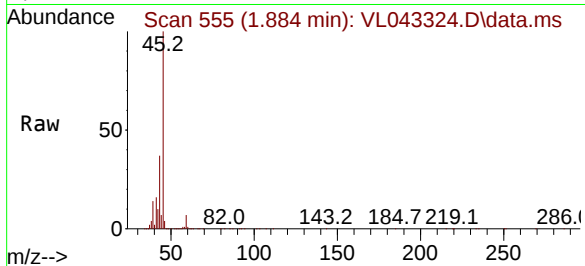




#19
Isopropyl Alcohol
Concen: 251.215 ppbv
RT: 1.884 min Scan# 51
Delta R.T. 0.003 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

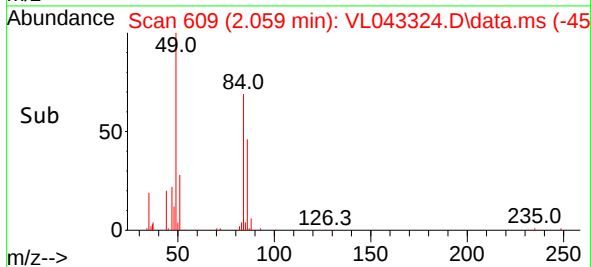
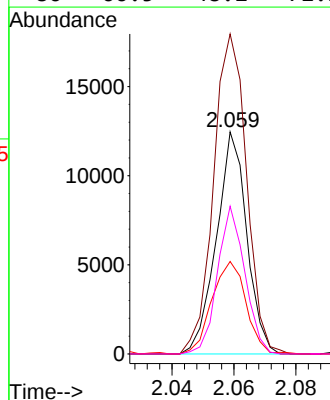
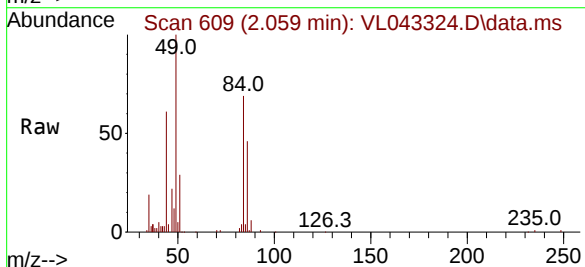
Instrument :
MSVOA_L
ClientSampleId :
16-IA-1DL

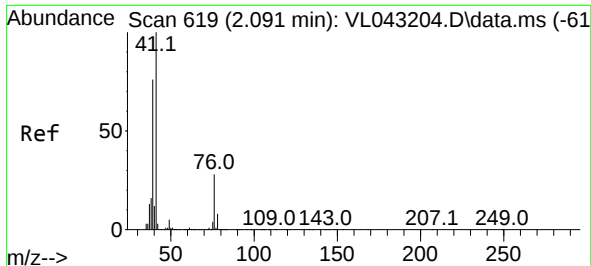
Tgt Ion: 45 Resp: 2523636
Ion Ratio Lower Upper
45 100
58 0.6 31.3 46.9#



#20
Methylene Chloride
Concen: 0.911 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.003 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

Tgt Ion: 84 Resp: 8511
Ion Ratio Lower Upper
84 100
49 144.1 132.9 199.3
51 41.6 34.8 52.2
86 66.5 48.2 72.2

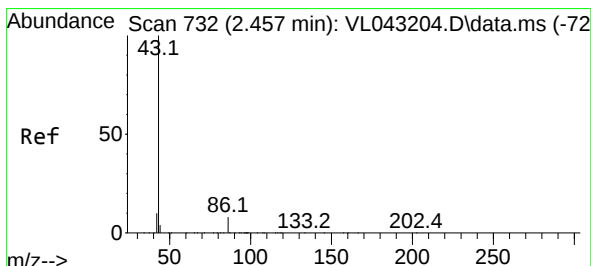
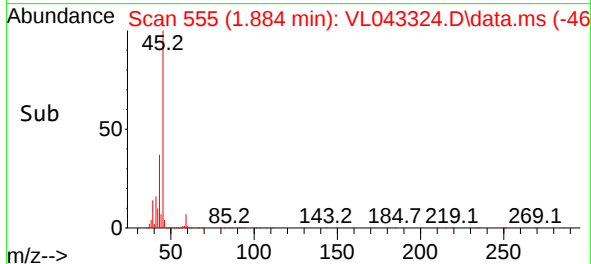
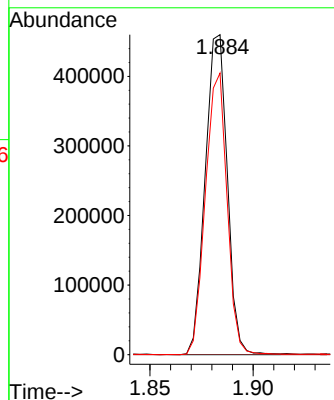
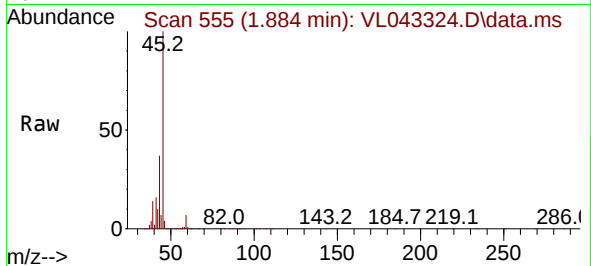




#21
 Allyl Chloride
 Concen: 28.548 ppbv
 RT: 1.884 min Scan# 51
 Delta R.T. -0.207 min
 Lab File: VL043324.D
 Acq: 08 Dec 2025 21:56

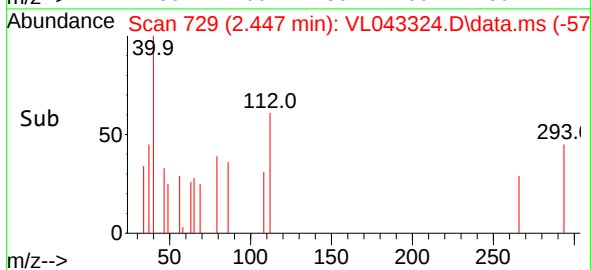
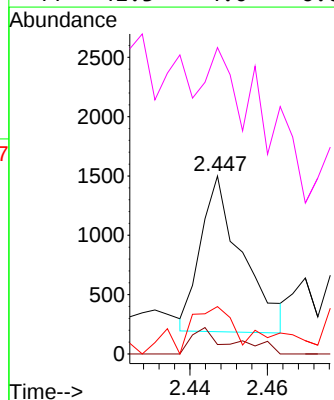
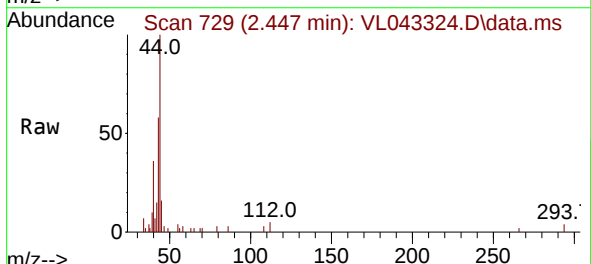
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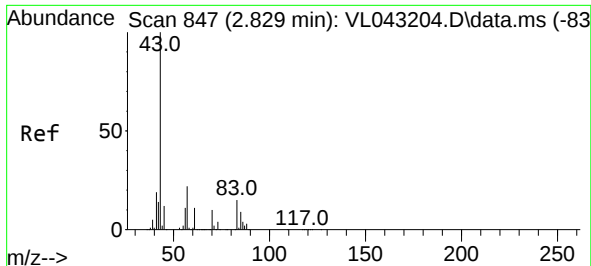
Tgt Ion: 41 Resp: 341455
 Ion Ratio Lower Upper
 41 100
 76 0.0 22.1 33.1#
 39 86.6 61.0 91.4



#23
 Vinyl Acetate
 Concen: 0.046 ppbv
 RT: 2.447 min Scan# 729
 Delta R.T. -0.010 min
 Lab File: VL043324.D
 Acq: 08 Dec 2025 21:56

Tgt Ion: 43 Resp: 981
 Ion Ratio Lower Upper
 43 100
 86 6.7 6.2 9.2
 42 33.2 8.0 12.0#
 44 41.3 4.0 6.0#

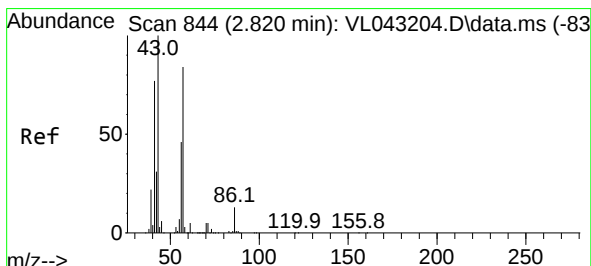
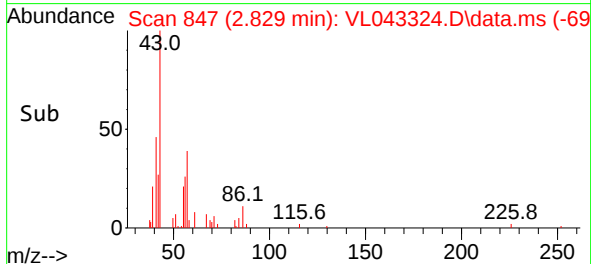
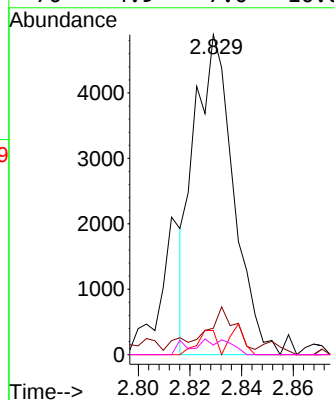
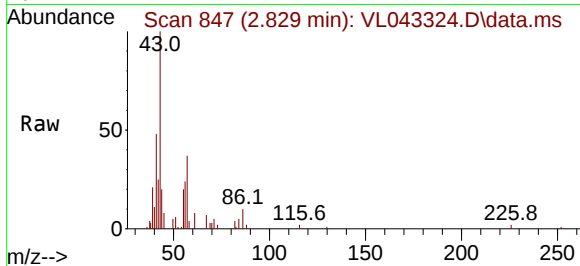




#25
Ethyl Acetate
Concen: 0.135 ppbv
RT: 2.829 min Scan# 847
Delta R.T. -0.000 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

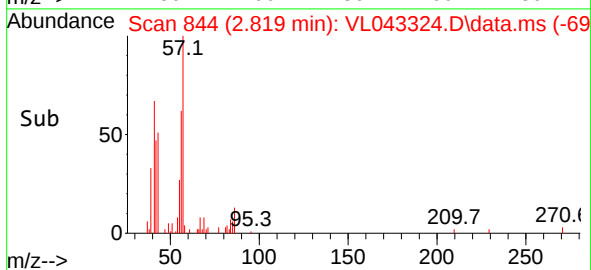
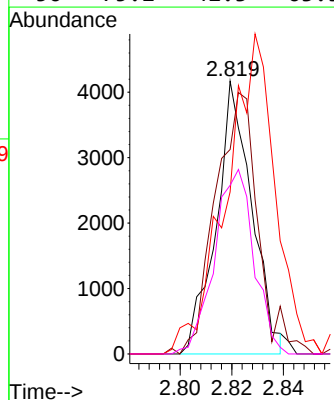
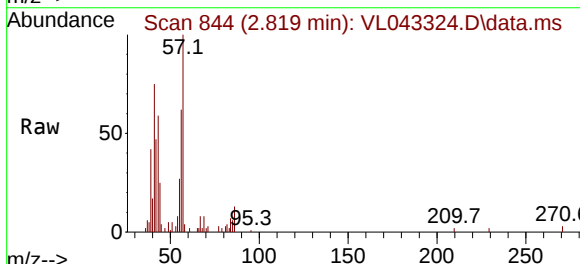
Instrument :
MSVOA_L
ClientSampleId :
16-IA-1DL

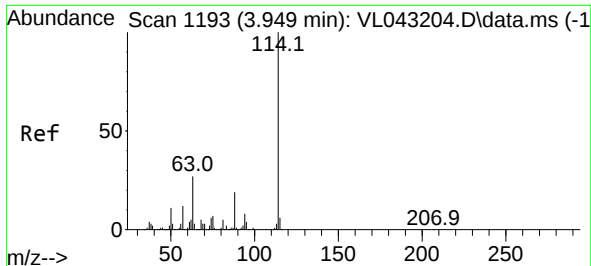
Tgt Ion:	43	Resp:	5166
Ion	Ratio	Lower	Upper
43	100		
45	23.1	8.1	12.1#
61	7.0	7.0	10.4
70	4.9	7.0	10.6#



#26
Hexane
Concen: 0.237 ppbv
RT: 2.819 min Scan# 844
Delta R.T. -0.000 min
Lab File: VL043324.D
Acq: 08 Dec 2025 21:56

Tgt Ion:	57	Resp:	3985
Ion	Ratio	Lower	Upper
57	100		
41	114.6	74.6	111.8#
43	165.2	179.0	268.4#
56	75.2	42.3	63.5#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.946 min Scan# 1193

Delta R.T. -0.004 min

Lab File: VL043324.D

Acq: 08 Dec 2025 21:56

Instrument :

MSVOA_L

ClientSampleId :

16-IA-1DL

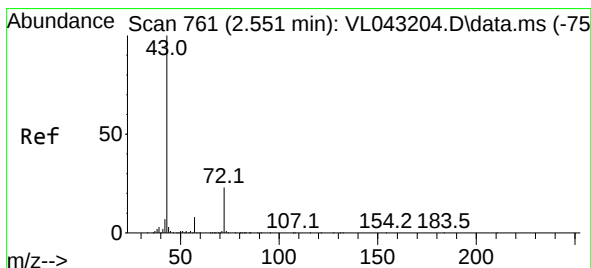
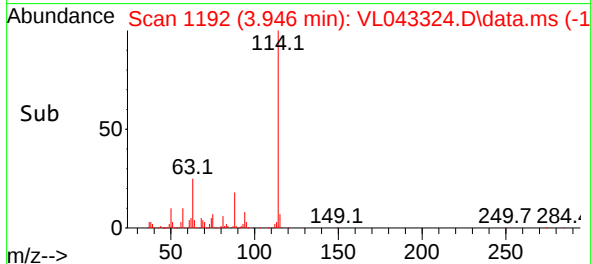
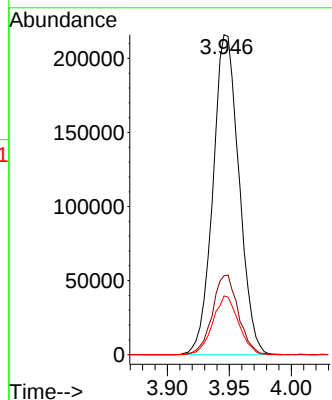
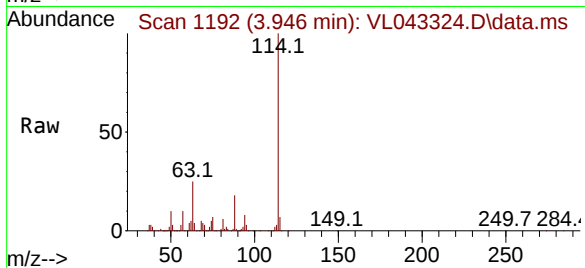
Tgt Ion:114 Resp: 316604

Ion Ratio Lower Upper

114 100

63 24.9 21.0 31.6

88 18.2 14.9 22.3



#34

2-Butanone

Concen: 0.034 ppbv

RT: 2.547 min Scan# 760

Delta R.T. -0.004 min

Lab File: VL043324.D

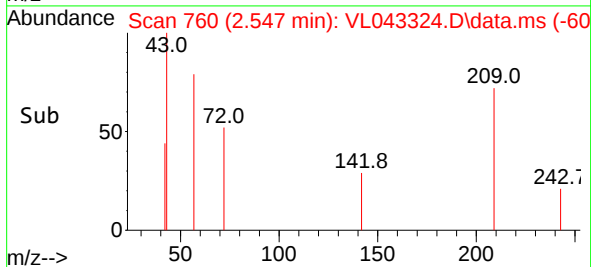
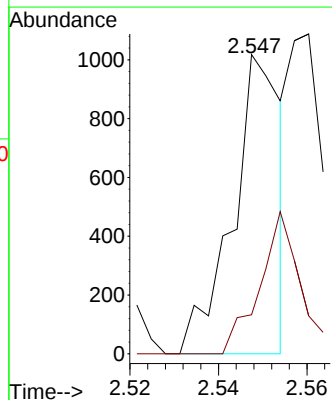
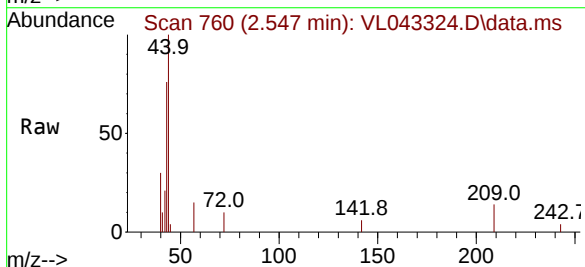
Acq: 08 Dec 2025 21:56

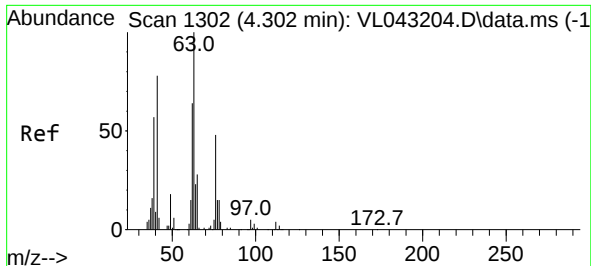
Tgt Ion: 43 Resp: 766

Ion Ratio Lower Upper

43 100

72 0.0 18.1 27.1#





#39

1,2-Dichloropropane

Concen: 7.069 ppbv

RT: 3.949 min Scan# 1193

Delta R.T. -0.353 min

Lab File: VL043324.D

Acq: 08 Dec 2025 21:56

Instrument :

MSVOA_L

ClientSampleId :

16-IA-1DL

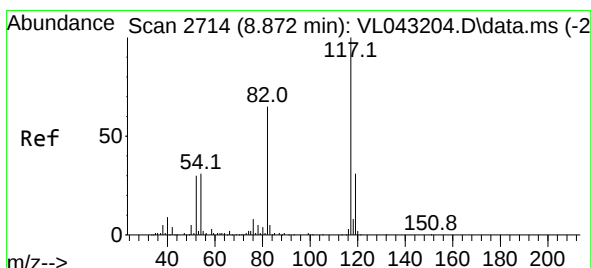
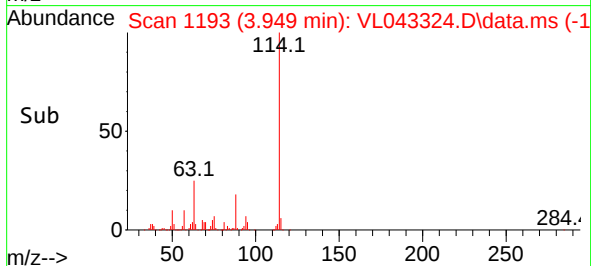
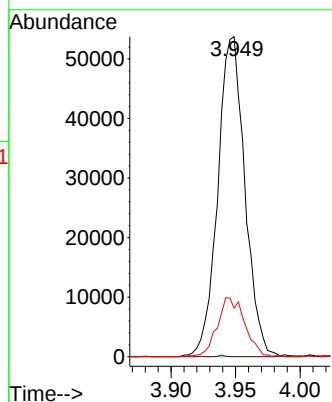
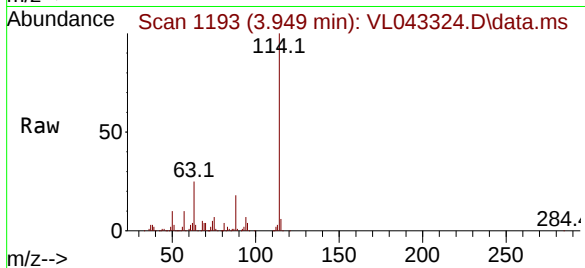
Tgt Ion: 63 Resp: 78444

Ion Ratio Lower Upper

63 100

41 0.0 62.6 93.8#

62 15.0 51.0 76.6#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.869 min Scan# 2713

Delta R.T. -0.004 min

Lab File: VL043324.D

Acq: 08 Dec 2025 21:56

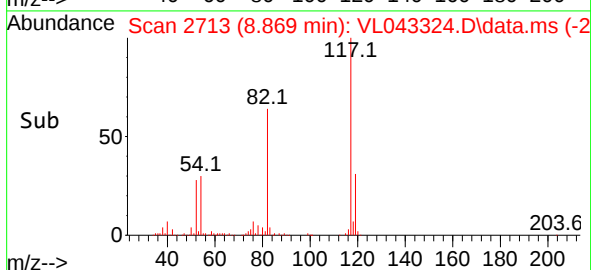
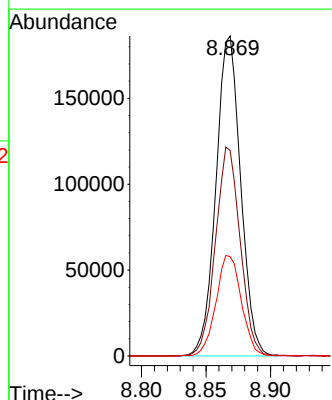
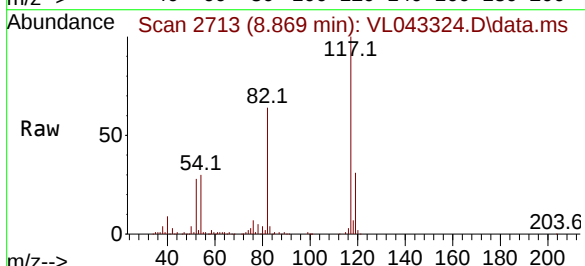
Tgt Ion: 117 Resp: 248177

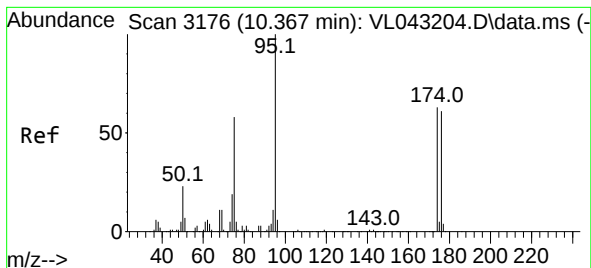
Ion Ratio Lower Upper

117 100

82 65.4 56.1 84.1

119 32.3 25.0 37.6





#68

1-Bromo-4-Fluorobenzene

Concen: 9.904 ppbv

RT: 10.364 min Scan# 31

Delta R.T. -0.004 min

Lab File: VL043324.D

Acq: 08 Dec 2025 21:56

Instrument :

MSVOA_L

ClientSampleId :

16-IA-1DL

Tgt Ion: 95 Resp: 180171

Ion Ratio Lower Upper

95 100

174 70.2 50.2 75.2

175 5.0 4.1 6.1

