

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 :

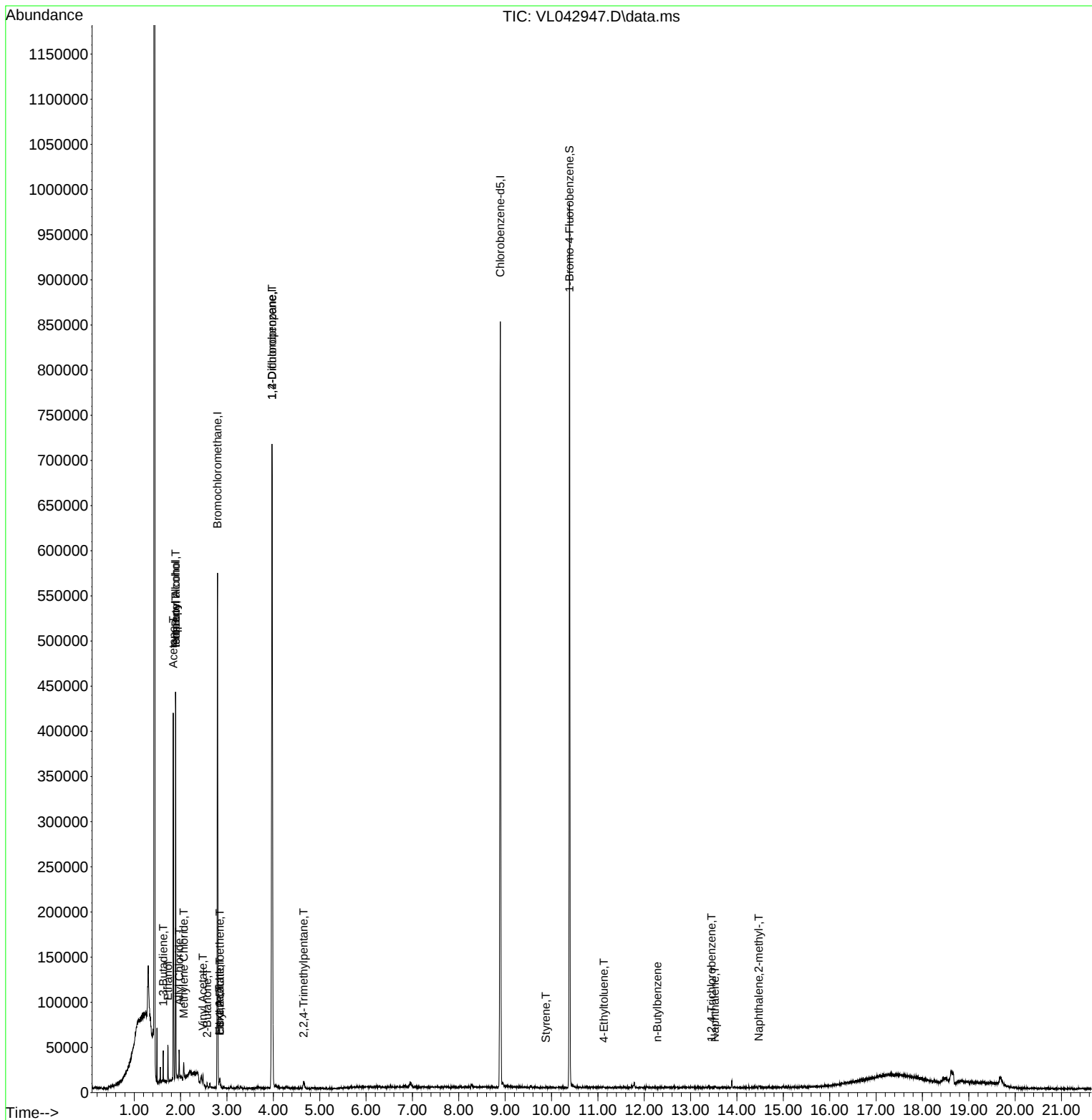
Quant Time: Sep 19 01:27:03 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL091725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Sep 18 02:57:46 2025
 Response via : Initial Calibration

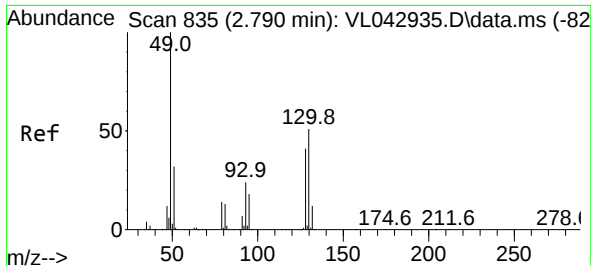
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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	1.890	41	17342	1.940	ppbv	95
13) Ethanol	1.725	45	14193	15.570	ppbv	94
15) Acetone	1.842	43	172481	8.627	ppbv	97
16) 1,3-Butadiene	1.625	39	1796	0.215	ppbv #	23
17) tert-Butyl alcohol	1.890	59	6648	0.345	ppbv #	90
19) Isopropyl Alcohol	1.890	45	176815	16.494	ppbv #	97
20) Methylene Chloride	2.068	84	2379	0.273	ppbv #	90
21) Allyl Chloride	1.968	41	4055	0.299	ppbv #	73
23) Vinyl Acetate	2.480	43	1555	0.067	ppbv #	28
25) Ethyl Acetate	2.849	43	6287	0.147	ppbv #	90
26) Hexane	2.839	57	748	0.041	ppbv #	1
31) cis-1,2-Dichloroethene	2.845	61	549	0.031	ppbv #	24
34) 2-Butanone	2.570	43	2780	0.108	ppbv	94
39) 1,2-Dichloropropane	3.972	63	106542	7.577	ppbv #	20
44) 2,2,4-Trimethylpentane	4.655	57	4481	0.077	ppbv #	54
61) Styrene	9.882	104	158	0.551	ppbv #	48
70) n-Butylbenzene	12.283	91	56	0.302	ppbv #	23
72) 4-Ethyltoluene	11.128	105	31	0.362	ppbv #	1
79) Naphthalene	13.526	128	97	0.366	ppbv #	1
80) Naphthalene,2-methyl-	14.471	142	703	0.809	ppbv #	69
81) 1,2,4-Trichlorobenzene	13.452	180	97	0.430	ppbv #	1

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

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_LFri Aug 26 06:05:16 2022
QLast Update : Thu Sep 18 02:57:46 2025
Response via : Initial Calibration

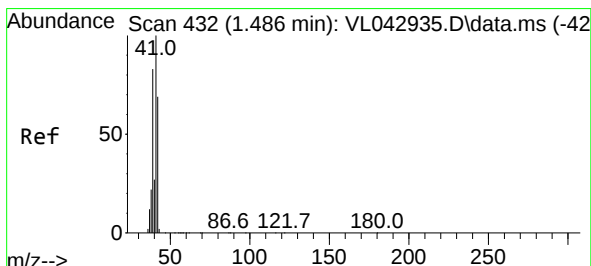
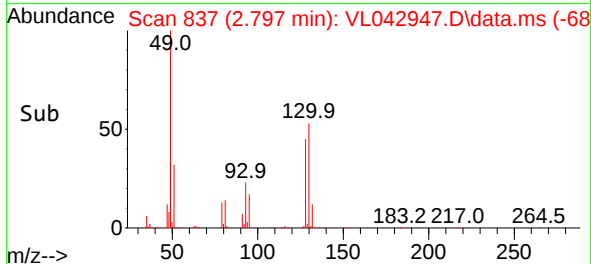
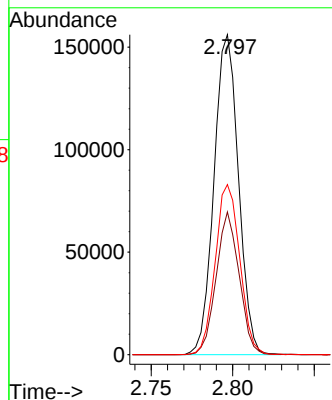
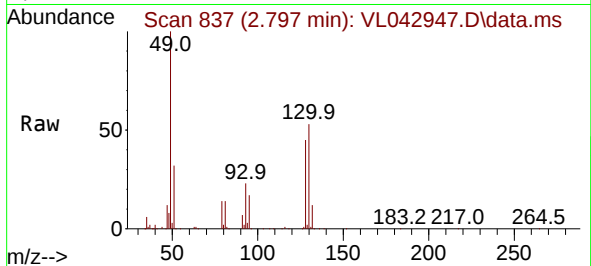




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 81
Delta R.T. 0.007 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

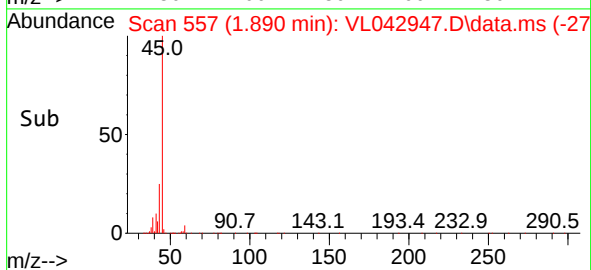
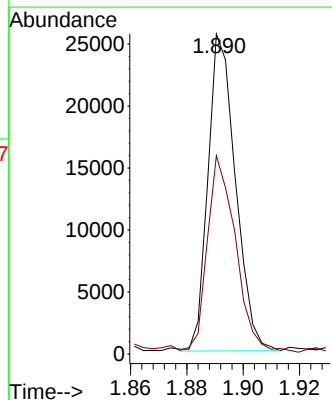
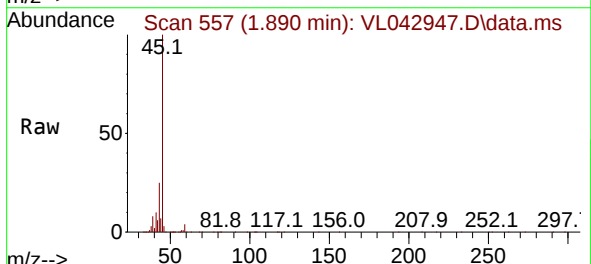
Instrument :
MSVOA_L
ClientSampleId :

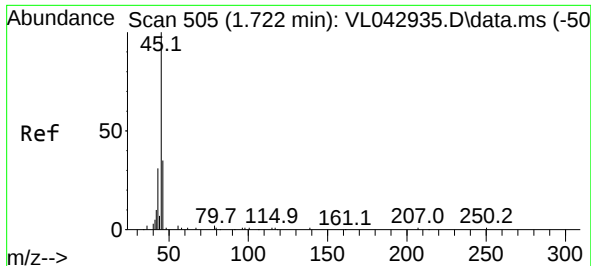
Tgt Ion: 49 Resp: 162782
Ion Ratio Lower Upper
49 100
128 42.0 21.1 63.4
130 53.5 26.4 79.2



#9
Propene
Concen: 1.940 ppbv
RT: 1.890 min Scan# 557
Delta R.T. 0.405 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

Tgt Ion: 41 Resp: 17342
Ion Ratio Lower Upper
41 100
42 64.6 55.0 82.4

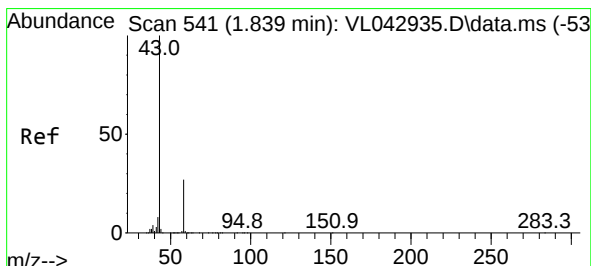
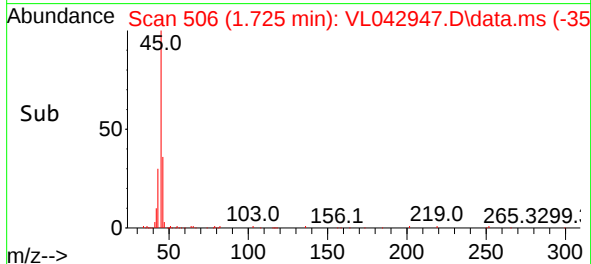
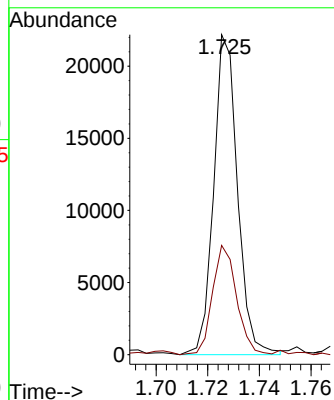
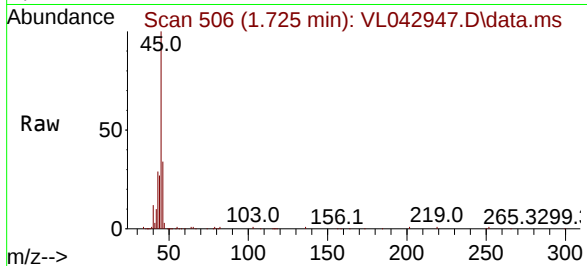




#13
Ethanol
Concen: 15.570 ppbv
RT: 1.725 min Scan# 50
Delta R.T. 0.003 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

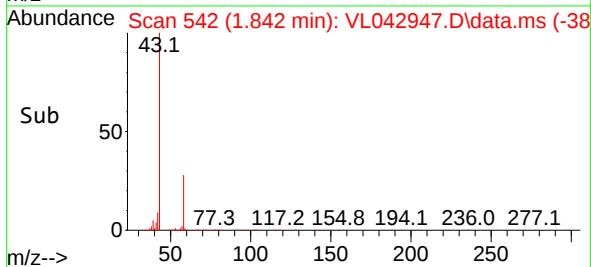
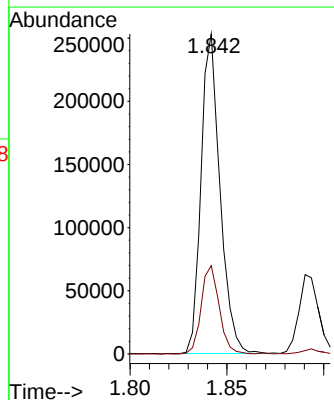
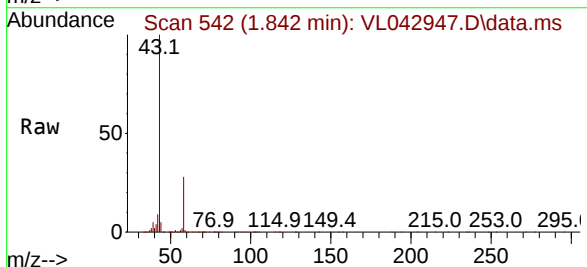
Instrument :
MSVOA_L
ClientSampleId :

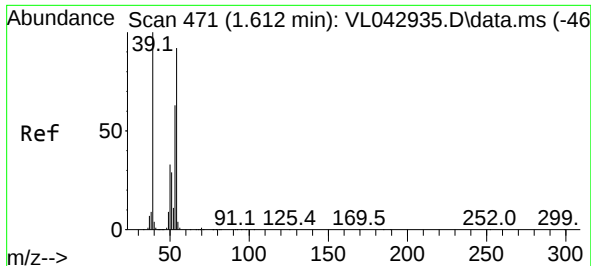
Tgt Ion: 45 Resp: 14193
Ion Ratio Lower Upper
45 100
46 37.5 16.5 66.1



#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





#16

1,3-Butadiene

Concen: 0.215 ppbv

RT: 1.625 min Scan# 41

Delta R.T. 0.013 min

Lab File: VL042947.D

Acq: 18 Sep 2025 15:50

Instrument :

MSVOA_L

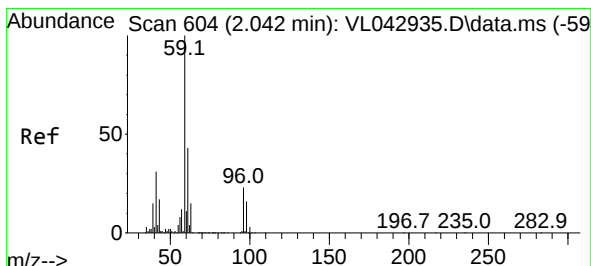
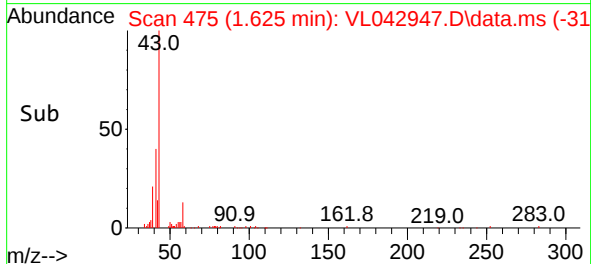
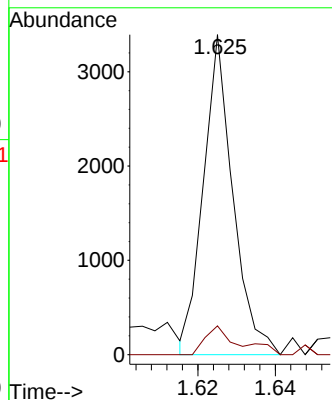
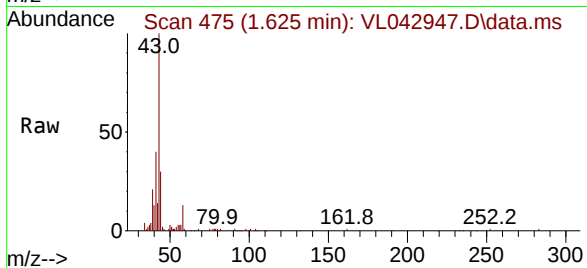
ClientSampleId :

Tgt Ion: 39 Resp: 1796

Ion Ratio Lower Upper

39 100

54 11.2 62.2 93.4#



#17

tert-Butyl alcohol

Concen: 0.345 ppbv

RT: 1.890 min Scan# 557

Delta R.T. -0.152 min

Lab File: VL042947.D

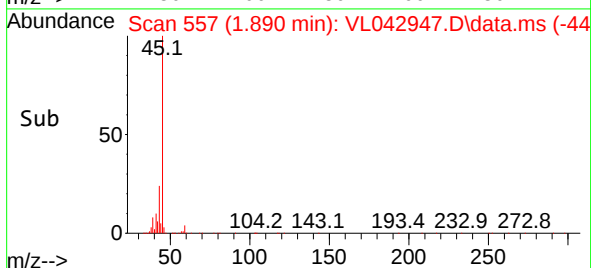
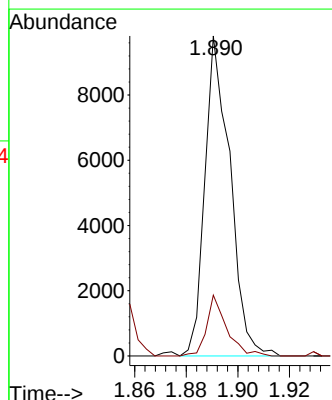
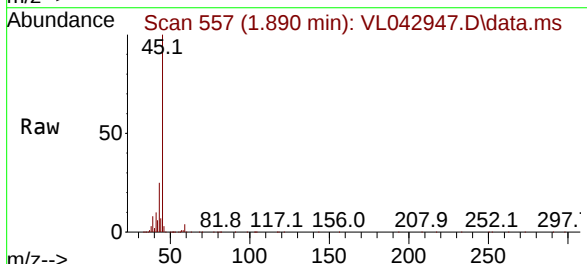
Acq: 18 Sep 2025 15:50

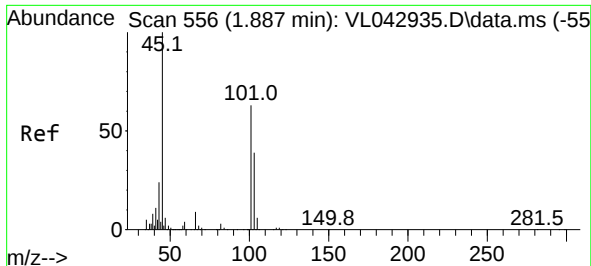
Tgt Ion: 59 Resp: 6648

Ion Ratio Lower Upper

59 100

57 15.1 9.0 13.6#

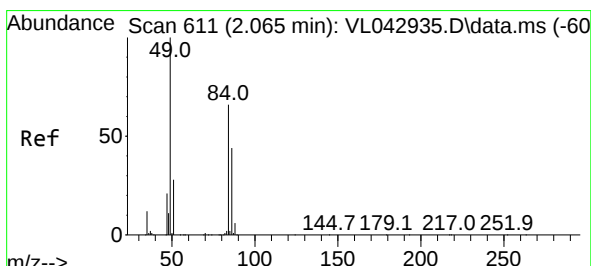
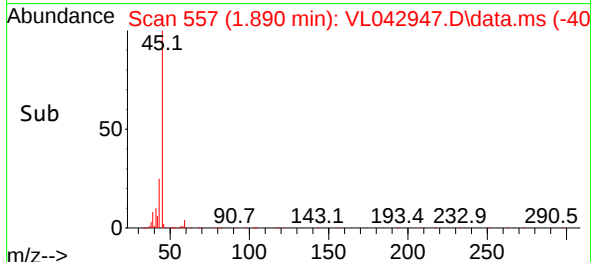
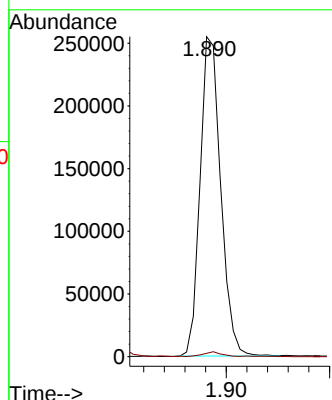
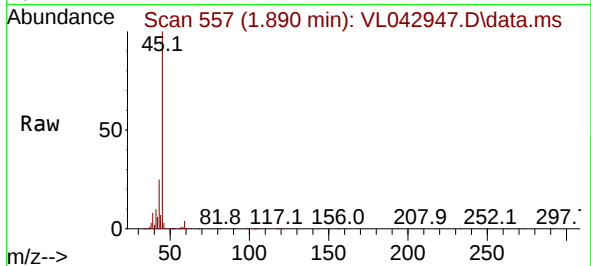




#19
Isopropyl Alcohol
Concen: 16.494 ppbv
RT: 1.890 min Scan# 51
Delta R.T. 0.003 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

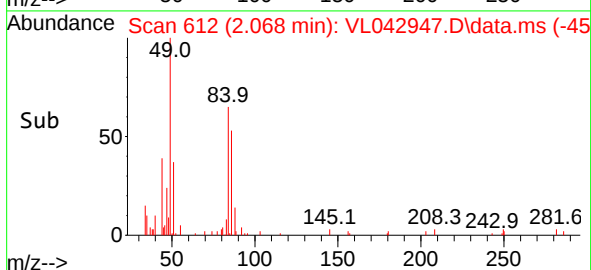
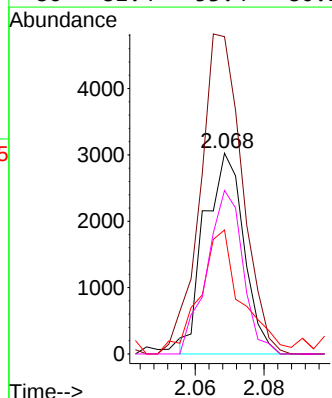
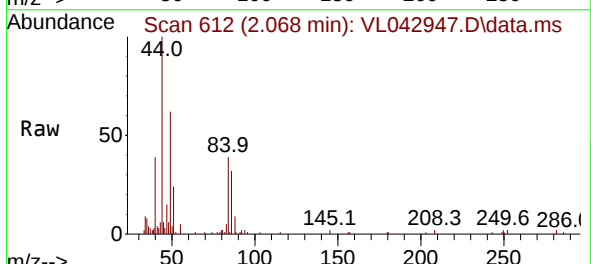
Instrument :
MSVOA_L
ClientSampleId :

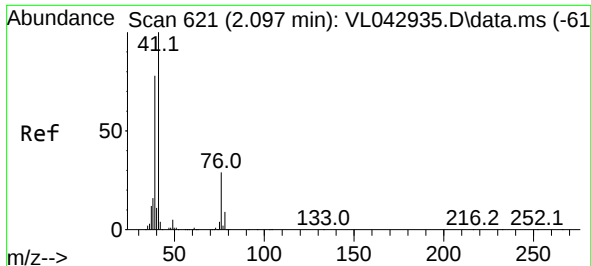
Tgt Ion: 45 Resp: 176815
Ion Ratio Lower Upper
45 100
58 1.6 2.0 3.0#



#20
Methylene Chloride
Concen: 0.273 ppbv
RT: 2.068 min Scan# 612
Delta R.T. 0.003 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

Tgt Ion: 84 Resp: 2379
Ion Ratio Lower Upper
84 100
49 156.1 121.8 182.6
51 57.1 35.6 53.4#
86 81.4 53.4 80.2#

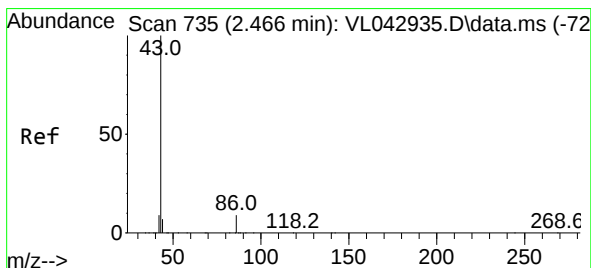
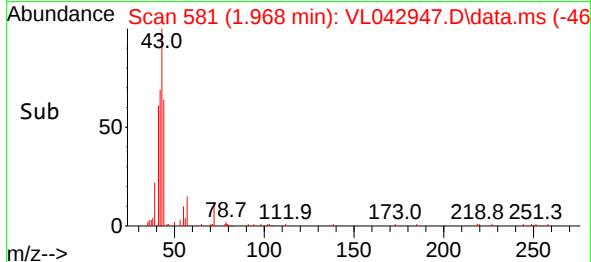
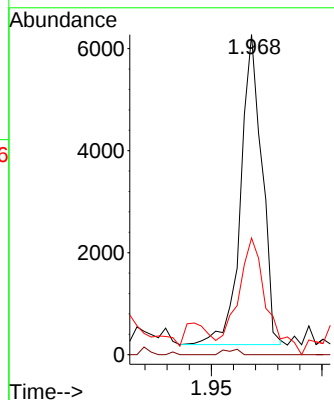
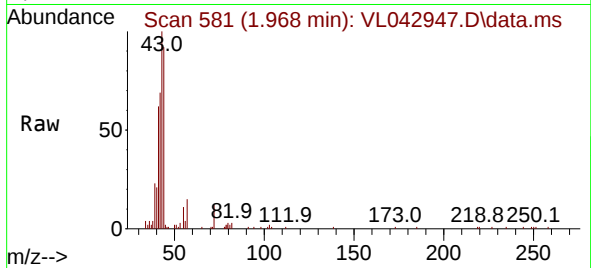




#21
 Allyl Chloride
 Concen: 0.299 ppbv
 RT: 1.968 min Scan# 51
 Delta R.T. -0.129 min
 Lab File: VL042947.D
 Acq: 18 Sep 2025 15:50

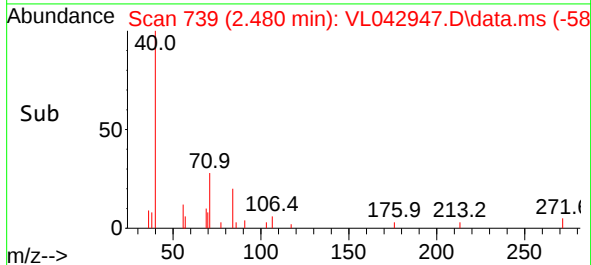
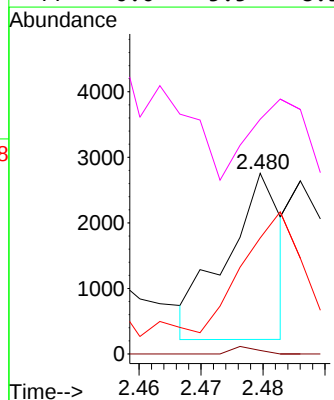
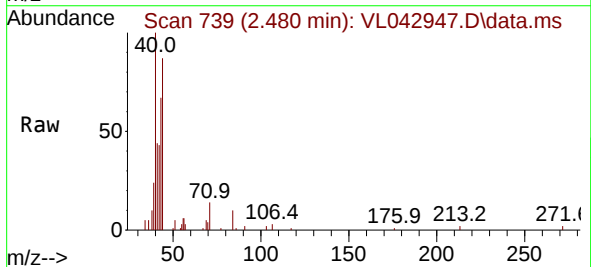
Instrument :
 MSVOA_L
 ClientSampleId :

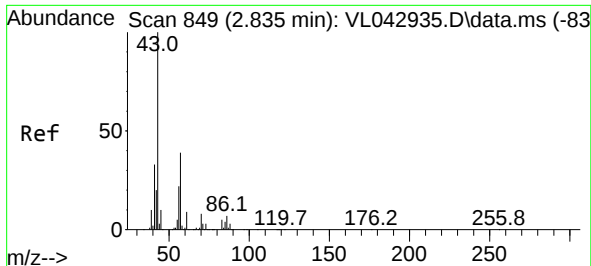
Tgt Ion: 41 Resp: 4055
 Ion Ratio Lower Upper
 41 100
 76 1.3 23.8 35.6#
 39 63.5 63.2 94.8



#23
 Vinyl Acetate
 Concen: 0.067 ppbv
 RT: 2.480 min Scan# 739
 Delta R.T. 0.013 min
 Lab File: VL042947.D
 Acq: 18 Sep 2025 15:50

Tgt Ion: 43 Resp: 1555
 Ion Ratio Lower Upper
 43 100
 86 2.7 6.4 9.6#
 42 67.7 7.5 11.3#
 44 0.0 5.5 8.3#





#25

Ethyl Acetate

Concen: 0.147 ppbv

RT: 2.849 min Scan# 8

Delta R.T. 0.013 min

Lab File: VL042947.D

Acq: 18 Sep 2025 15:50

Instrument :

MSVOA_L

ClientSampleId :

Tgt Ion: 43 Resp: 6287

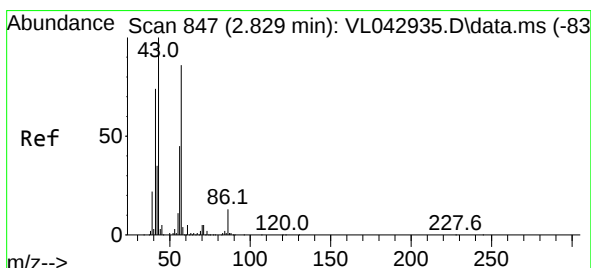
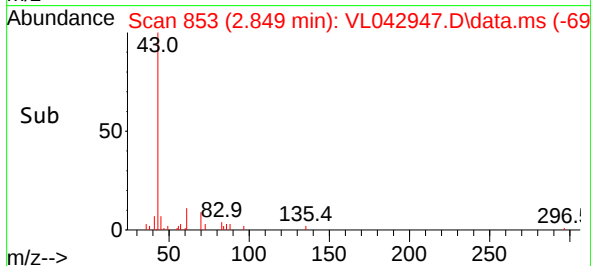
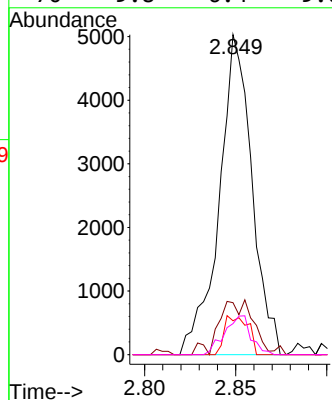
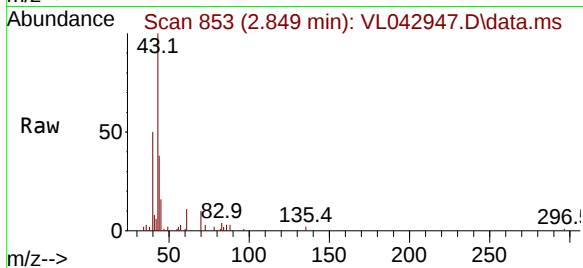
Ion Ratio Lower Upper

43 100

45 18.4 7.8 11.8#

61 8.7 7.2 10.8

70 9.8 6.4 9.6#



#26

Hexane

Concen: 0.041 ppbv

RT: 2.839 min Scan# 850

Delta R.T. 0.010 min

Lab File: VL042947.D

Acq: 18 Sep 2025 15:50

Tgt Ion: 57 Resp: 748

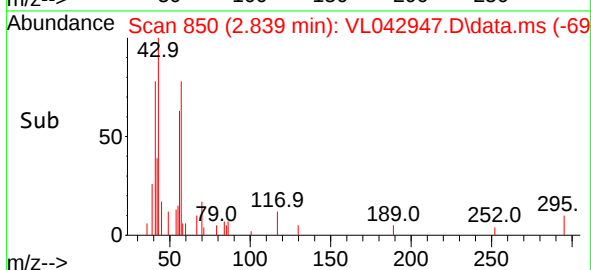
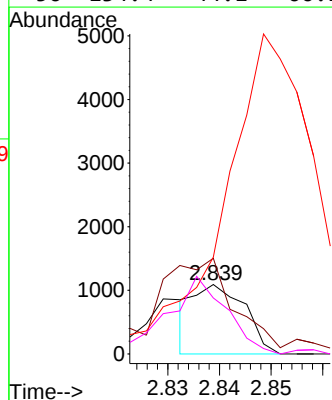
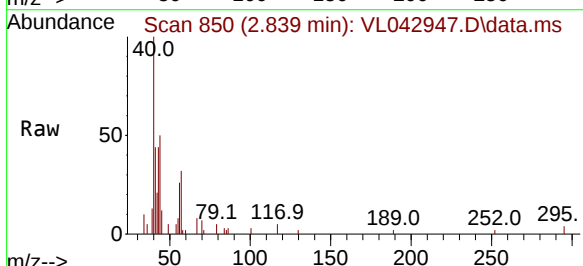
Ion Ratio Lower Upper

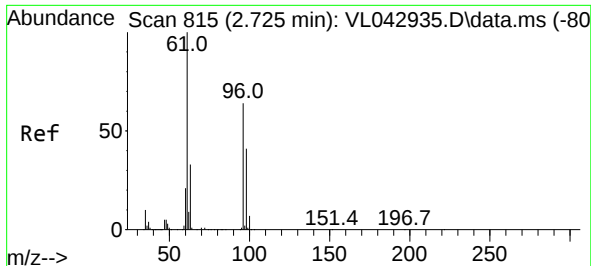
57 100

41 243.0 71.3 106.9#

43 849.3 183.9 275.9#

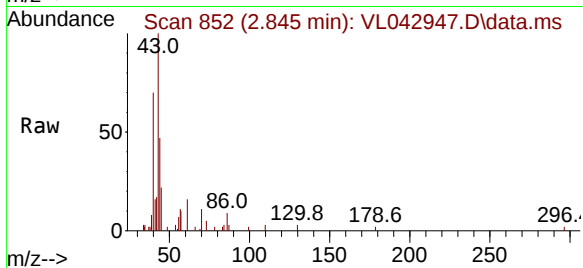
56 134.4 44.1 66.1#



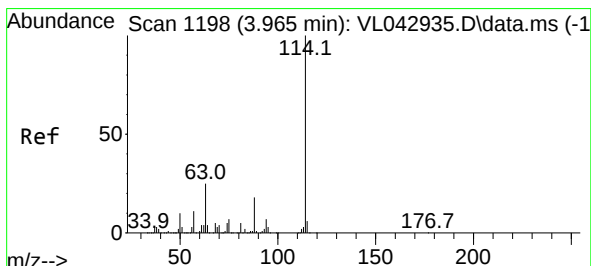
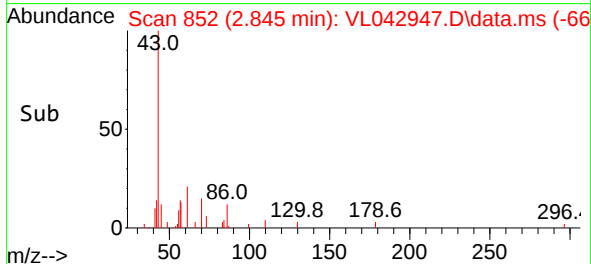
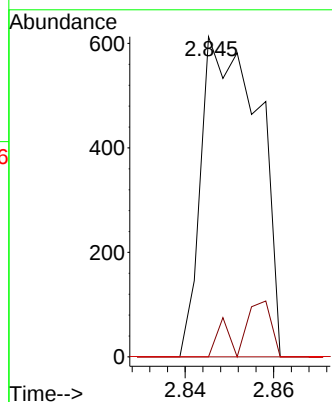


#31
 cis-1,2-Dichloroethene
 Concen: 0.031 ppbv
 RT: 2.845 min Scan# 815
 Delta R.T. 0.120 min
 Lab File: VL042947.D
 Acq: 18 Sep 2025 15:50

Instrument :
 MSVOA_L
 ClientSampleId :

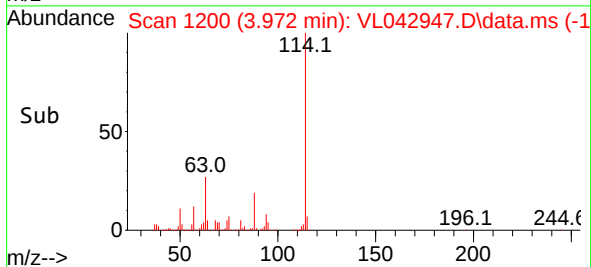
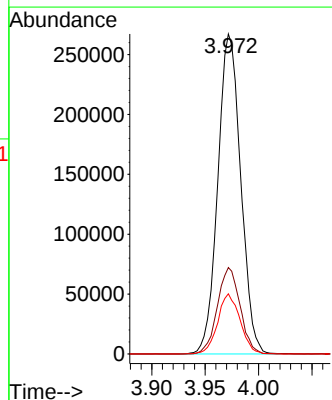
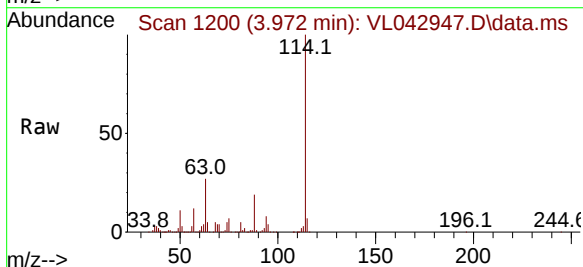


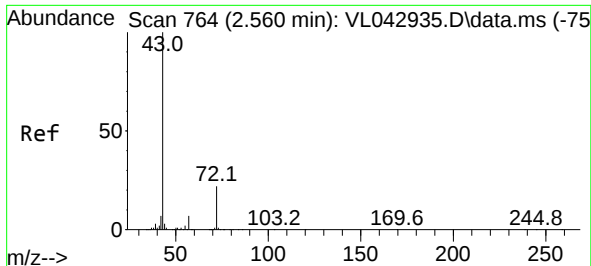
Tgt Ion: 61 Resp: 549
 Ion Ratio Lower Upper
 61 100
 96 0.0 51.4 77.2#
 98 0.0 32.8 49.2#



#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

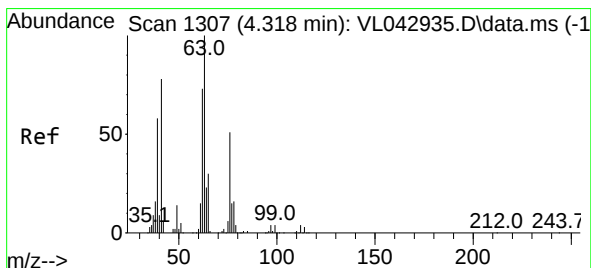
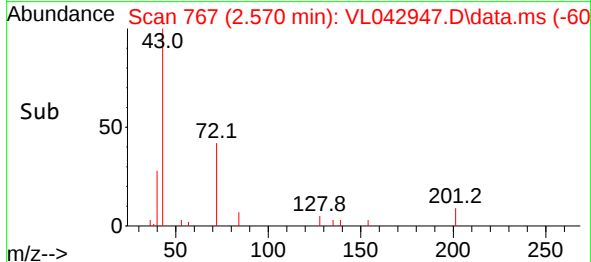
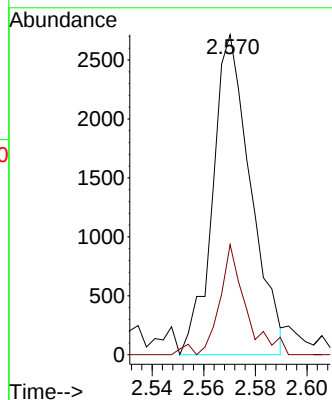
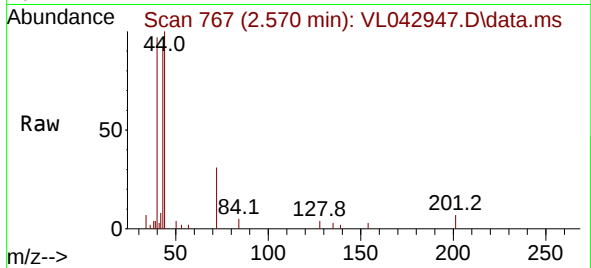




#34
2-Butanone
Concen: 0.108 ppbv
RT: 2.570 min Scan# 71
Delta R.T. 0.010 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

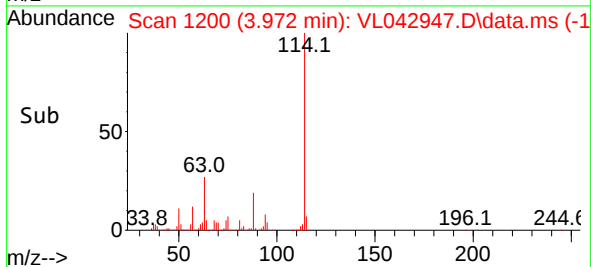
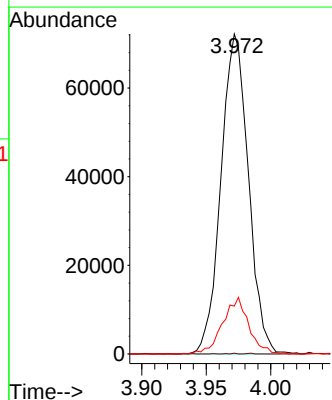
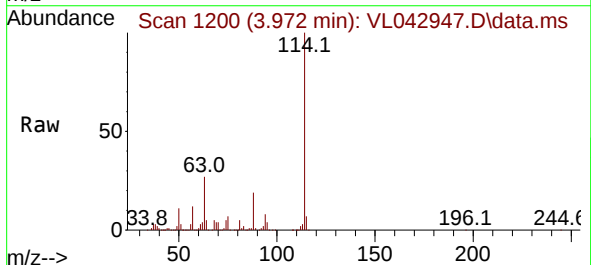
Instrument :
MSVOA_L
ClientSampleId :

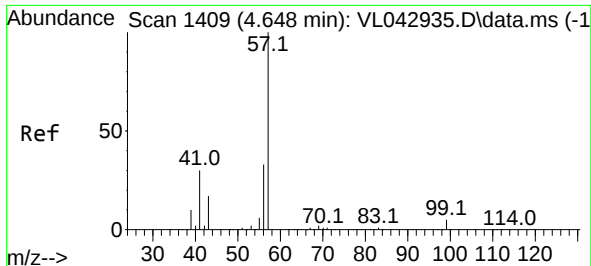
Tgt Ion: 43 Resp: 2780
Ion Ratio Lower Upper
43 100
72 24.1 17.2 25.8



#39
1,2-Dichloropropane
Concen: 7.577 ppbv
RT: 3.972 min Scan# 1200
Delta R.T. -0.346 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

Tgt Ion: 63 Resp: 106542
Ion Ratio Lower Upper
63 100
41 0.2 62.7 94.1#
62 15.0 58.4 87.6#

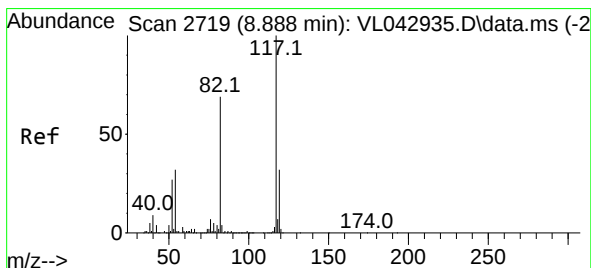
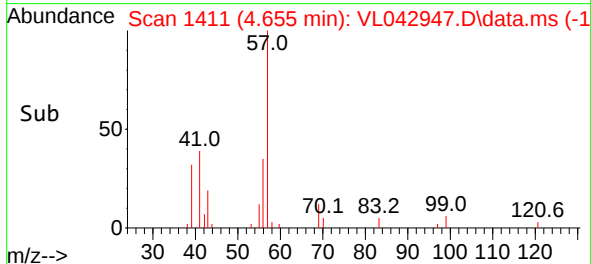
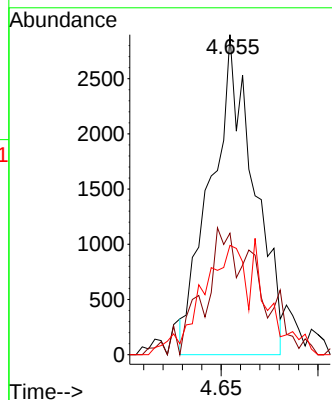
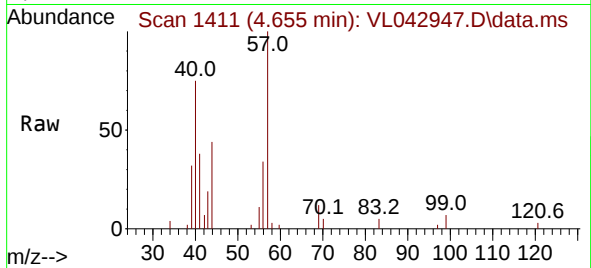




#44
2,2,4-Trimethylpentane
Concen: 0.077 ppbv
RT: 4.655 min Scan# 1409
Delta R.T. 0.007 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

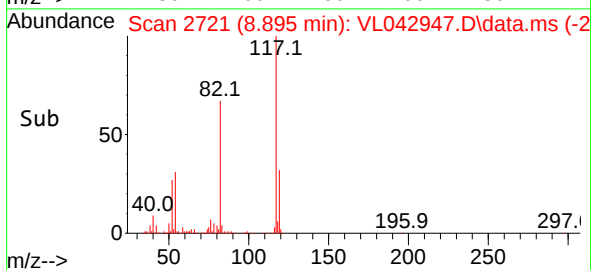
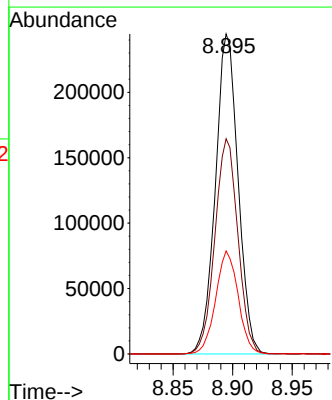
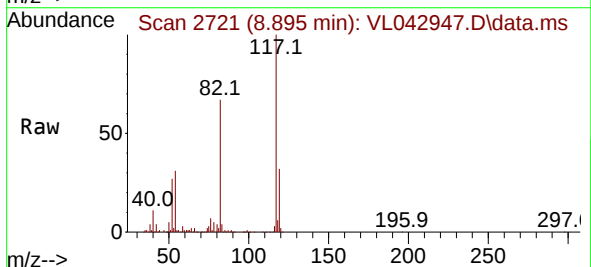
Instrument :
MSVOA_L
ClientSampleId :

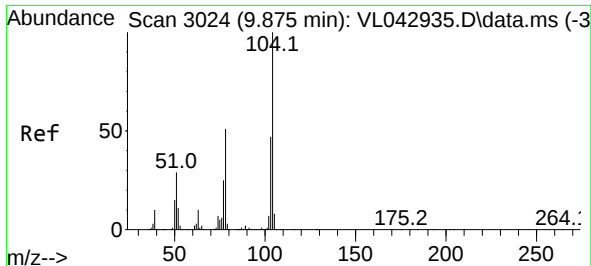
Tgt Ion: 57 Resp: 4481
Ion Ratio Lower Upper
57 100
41 51.5 25.8 38.6#
56 0.0 26.2 39.4#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.895 min Scan# 2721
Delta R.T. 0.007 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

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

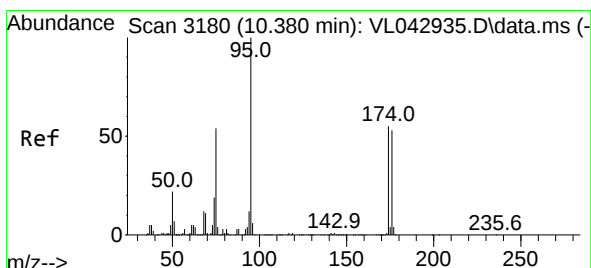
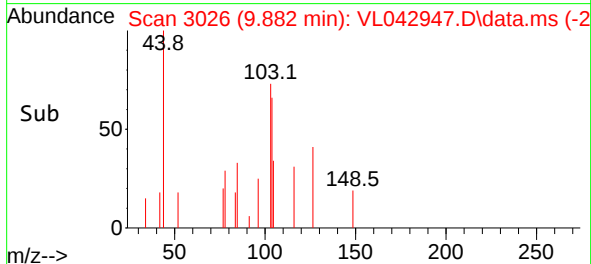
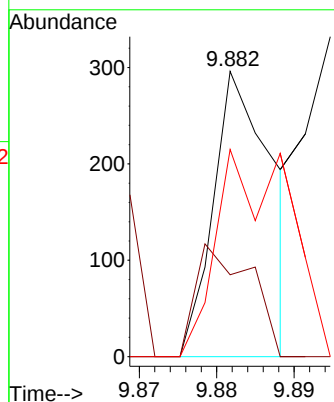
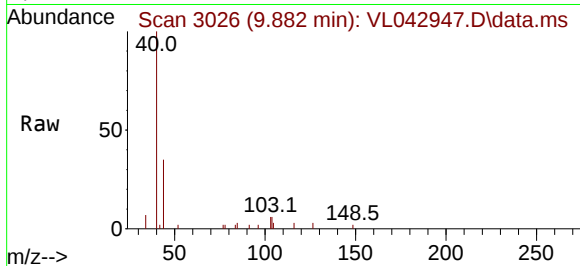




#61
Styrene
Concen: 0.551 ppbv
RT: 9.882 min Scan# 3024
Delta R.T. 0.007 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

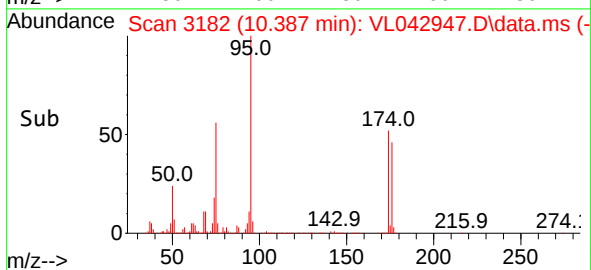
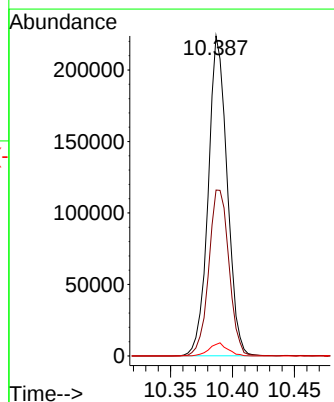
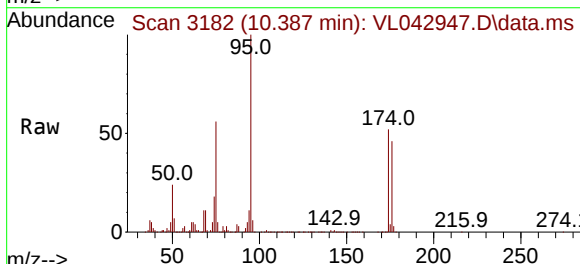
Instrument :
MSVOA_L
ClientSampleId :

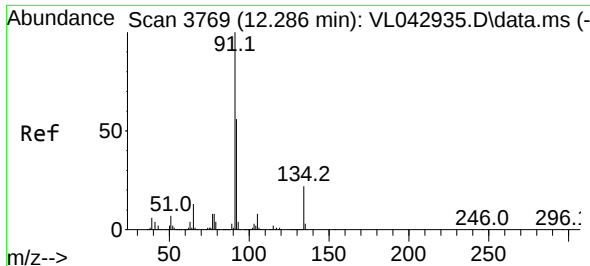
Tgt Ion:104 Resp: 158
Ion Ratio Lower Upper
104 100
78 64.6 40.2 60.2#
103 103.2 36.8 55.2#



#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

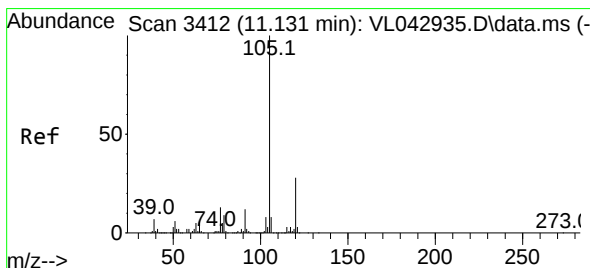
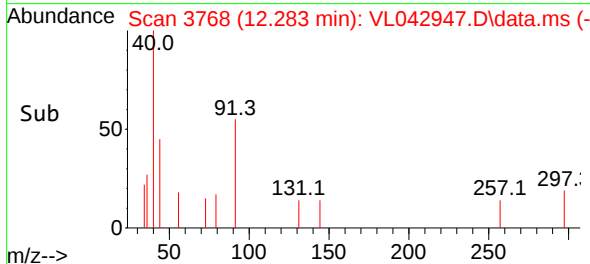
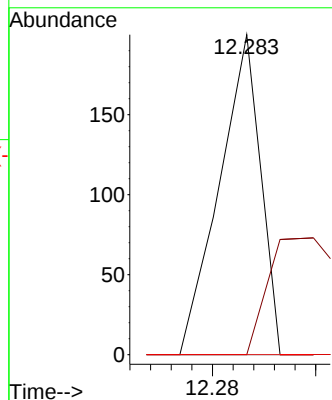
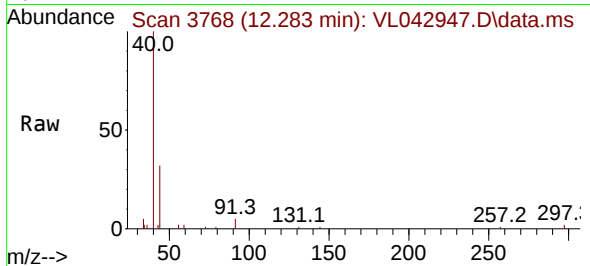




#70
n-Butylbenzene
Concen: 0.302 ppbv
RT: 12.283 min Scan# 31
Delta R.T. -0.003 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

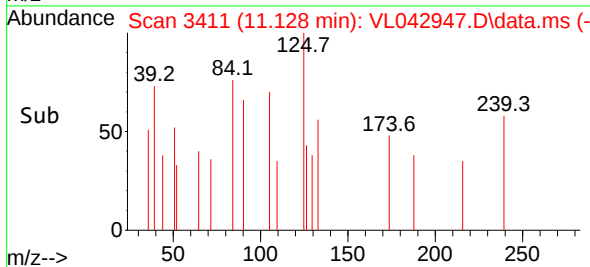
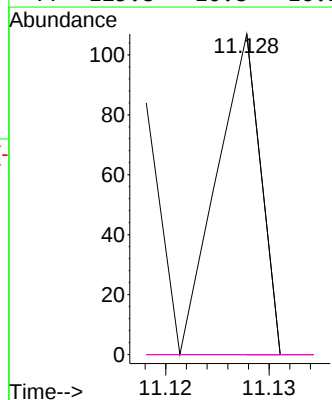
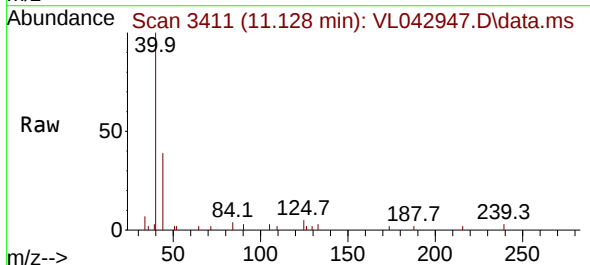
Instrument :
MSVOA_L
ClientSampleId :

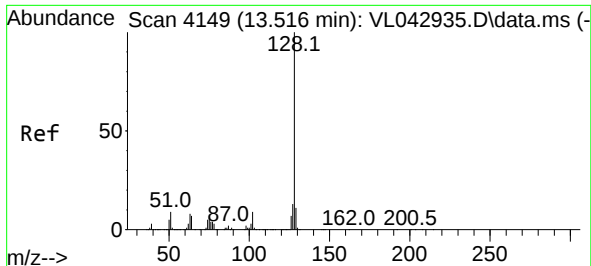
Tgt Ion:	91	Resp:	56
Ion	Ratio	Lower	Upper
91	100		
92	119.6	43.8	65.8#
134	0.0	17.3	25.9#



#72
4-Ethyltoluene
Concen: 0.362 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. -0.003 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

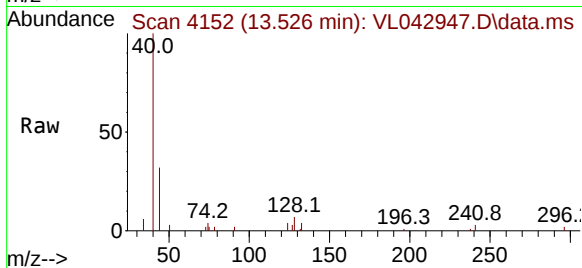
Tgt Ion:	105	Resp:	31
Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.1	34.7#
91	0.0	10.4	15.6#
77	125.8	10.8	16.2#



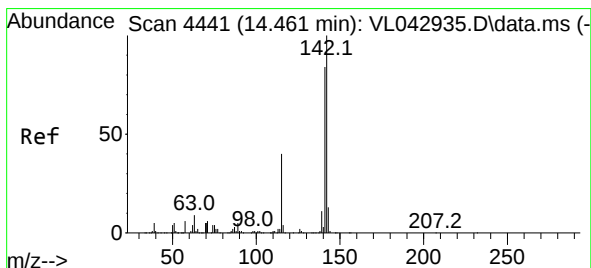
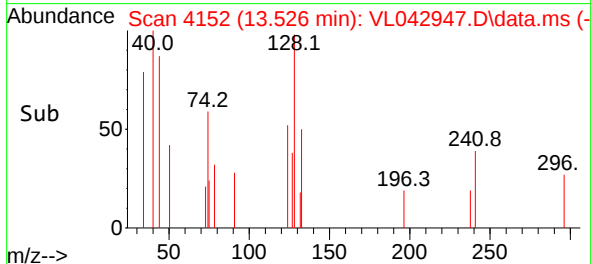
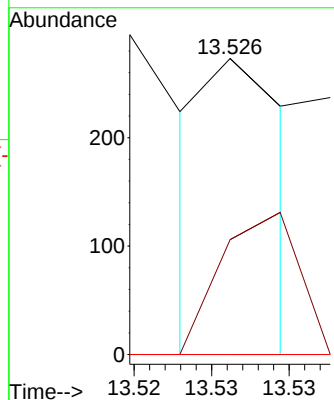


#79
Naphthalene
Concen: 0.366 ppbv
RT: 13.526 min Scan# 4149
Delta R.T. 0.010 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :

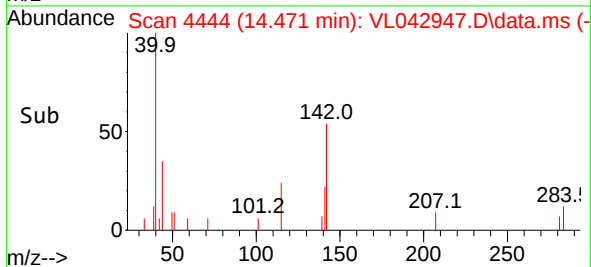
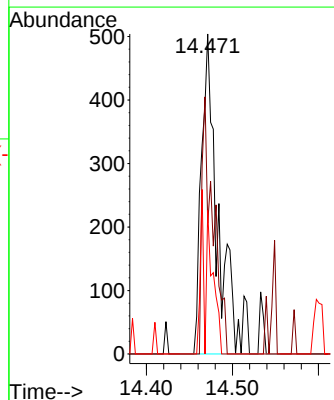
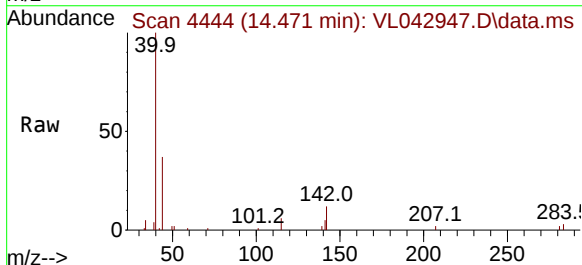


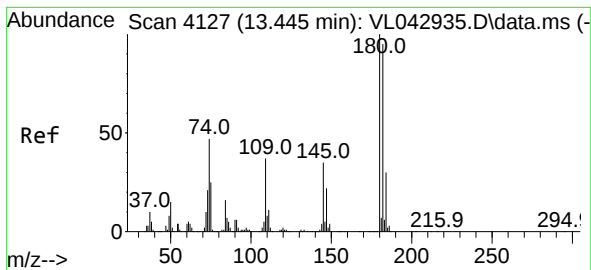
Tgt Ion:128 Resp: 97
Ion Ratio Lower Upper
128 100
127 216.3 10.3 15.5#
129 0.0 8.7 13.1#



#80
Naphthalene,2-methyl-
Concen: 0.809 ppbv
RT: 14.471 min Scan# 4444
Delta R.T. 0.010 min
Lab File: VL042947.D
Acq: 18 Sep 2025 15:50

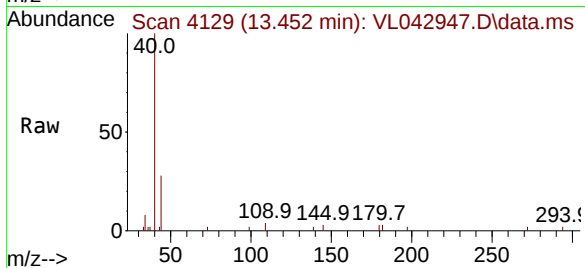
Tgt Ion:142 Resp: 703
Ion Ratio Lower Upper
142 100
141 51.5 67.0 100.6#
115 26.9 32.0 48.0#





#81
 1,2,4-Trichlorobenzene
 Concen: 0.430 ppbv
 RT: 13.452 min Scan# 41
 Delta R.T. 0.007 min
 Lab File: VL042947.D
 Acq: 18 Sep 2025 15:50

Instrument :
 MSVOA_L
 ClientSampleId :



Tgt Ion:180 Resp: 97
 Ion Ratio Lower Upper
 180 100
 182 238.1 75.5 113.3#
 184 46.4 24.6 37.0#

