

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL110625\
 Data File : VL043172.D
 Acq On : 06 Nov 2025 17:35
 Operator : SY/MD
 Sample : Q3557-02 DL 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 141-IA-1DL

Quant Time: Nov 07 00:25:09 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101425AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Oct 15 02:12:58 2025
 Response via : Initial Calibration

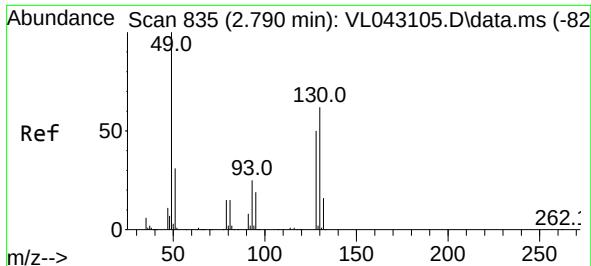
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.787	49	118952	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	326674	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	276195	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	218383	10.173	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	6052	0.358	ppbv #	87
3) Chlorodifluoromethane	1.473	51	3168	0.173	ppbv #	85
4) Chloromethane	1.534	50	786	0.117	ppbv #	88
8) Dichlorotetrafluoroethane	1.499	85	6052	0.443	ppbv #	21
9) Propene	1.560	41	11536	1.422	ppbv	96
11) Trichlorofluoromethane	1.874	101	1381	0.083	ppbv #	62
13) Ethanol	1.722	45	18986	6.325	ppbv	94
15) Acetone	1.835	43	46549	2.903	ppbv	97
16) 1,3-Butadiene	1.599	39	606	0.079	ppbv #	13
19) Isopropyl Alcohol	1.722	45	18986	1.901	ppbv	99
20) Methylene Chloride	2.062	84	23578	3.720	ppbv	90
21) Allyl Chloride	2.081	41	1172	0.099	ppbv #	1
23) Vinyl Acetate	2.476	43	11271	0.480	ppbv #	49
25) Ethyl Acetate	2.826	43	17000	0.428	ppbv #	80
26) Hexane	2.826	57	23868	1.303	ppbv #	40
30) Cyclohexane	3.862	84	590	0.037	ppbv #	17
34) 2-Butanone	2.557	43	8478	0.386	ppbv	94
36) Benzene	3.654	78	2816	0.092	ppbv #	78
39) 1,2-Dichloropropane	3.952	63	84302	7.495	ppbv #	25
44) 2,2,4-Trimethylpentane	4.632	57	2333	0.045	ppbv #	13
53) Toluene	6.920	91	3828	0.105	ppbv #	77
60) o-Xylene	9.956	91	1125	0.030	ppbv	93

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

Quant Time: Nov 07 00:25:09 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Oct 15 02:12:58 2025
Response via : Initial Calibration

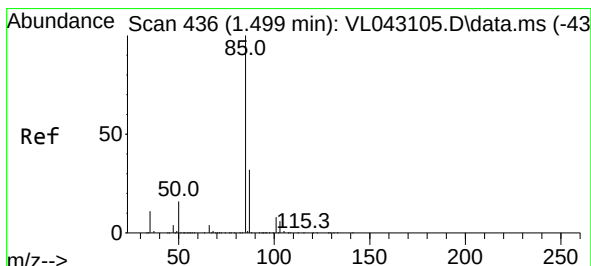
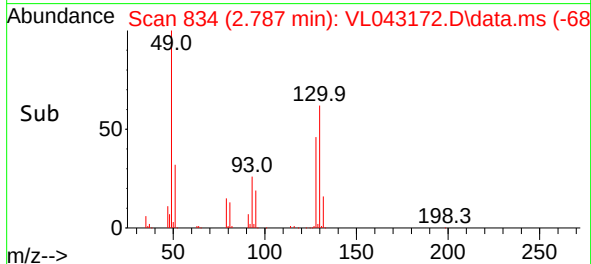
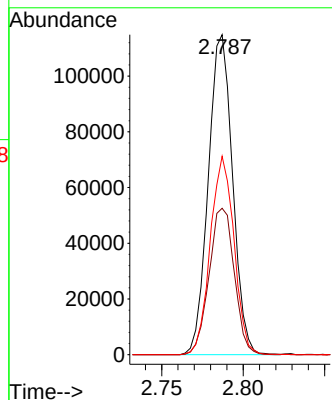
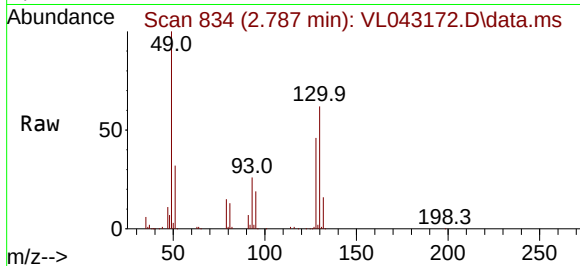




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 81
Delta R.T. -0.003 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

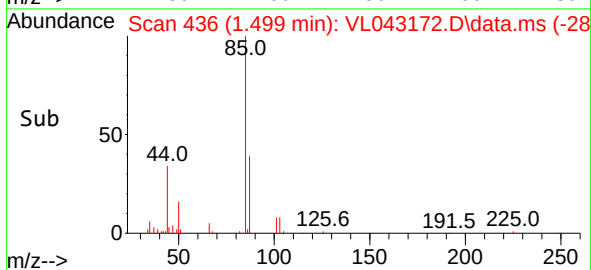
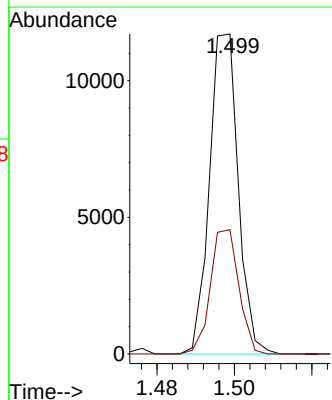
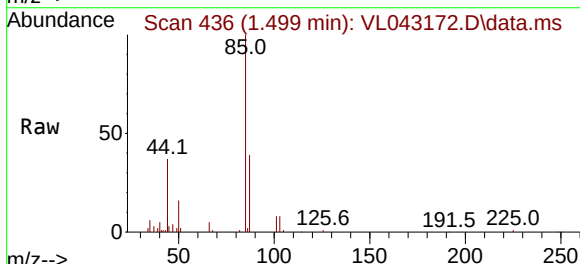
Instrument :
MSVOA_L
ClientSampleId :
141-IA-1DL

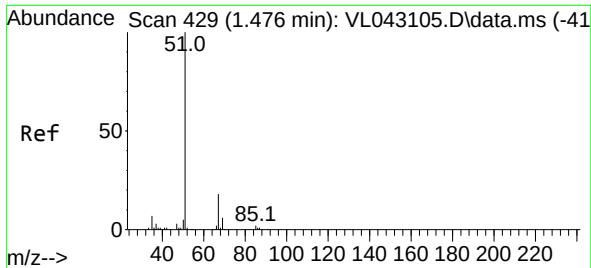
Tgt Ion: 49 Resp: 118952
Ion Ratio Lower Upper
49 100
128 47.5 24.4 73.4
130 60.7 31.0 93.0



#2
Dichlorodifluoromethane
Concen: 0.358 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

Tgt Ion: 85 Resp: 6052
Ion Ratio Lower Upper
85 100
87 38.8 25.3 37.9

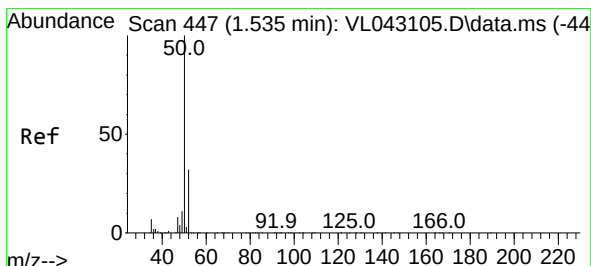
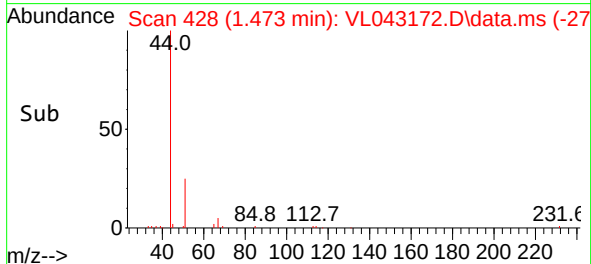
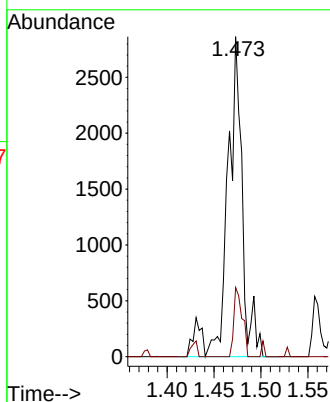
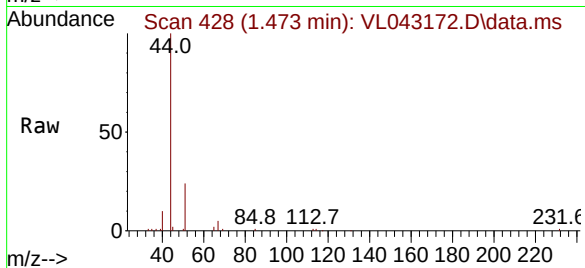




#3
Chlorodifluoromethane
Concen: 0.173 ppbv
RT: 1.473 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

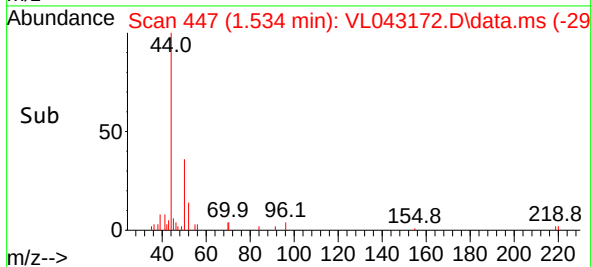
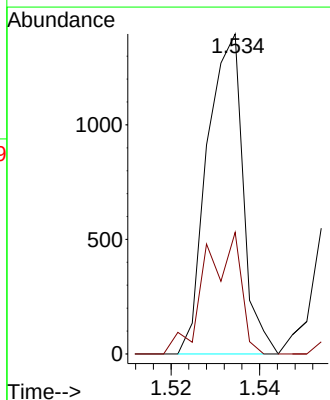
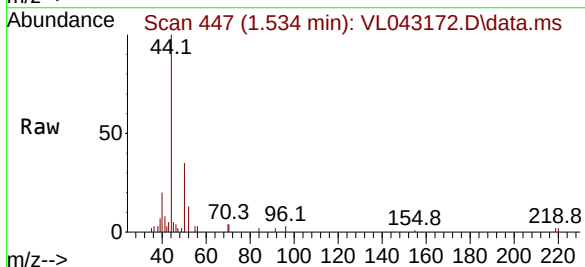
Instrument :
MSVOA_L
ClientSampleId :
141-IA-1DL

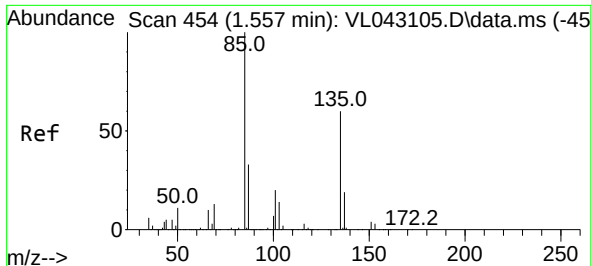
Tgt Ion: 51 Resp: 3168
Ion Ratio Lower Upper
51 100
67 12.2 15.1 22.7#



#4
Chloromethane
Concen: 0.117 ppbv
RT: 1.534 min Scan# 447
Delta R.T. -0.000 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

Tgt Ion: 50 Resp: 786
Ion Ratio Lower Upper
50 100
52 38.0 25.2 37.8#

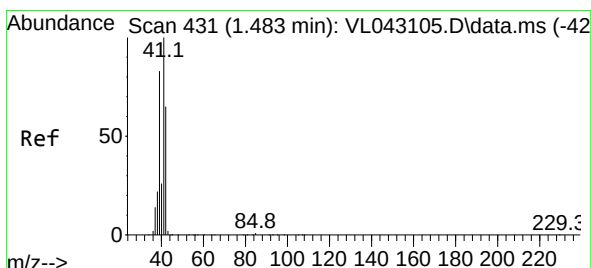
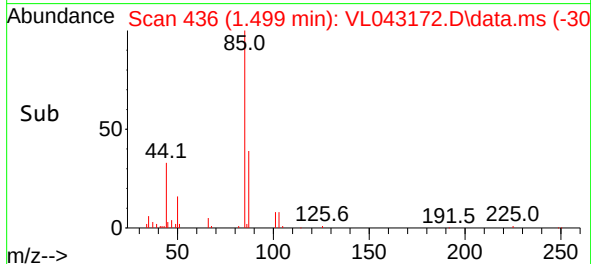
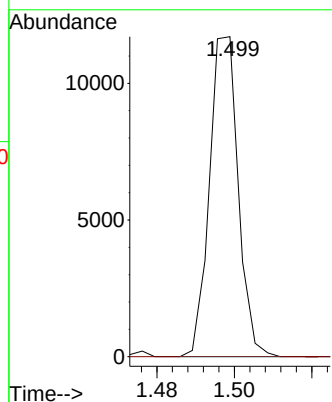
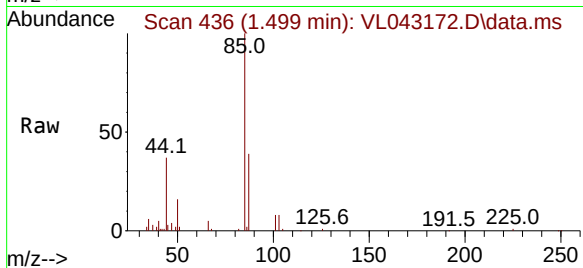




#8
 Dichlorotetrafluoroethane
 Concen: 0.443 ppbv
 RT: 1.499 min Scan# 41
 Delta R.T. -0.058 min
 Lab File: VL043172.D
 Acq: 06 Nov 2025 17:35

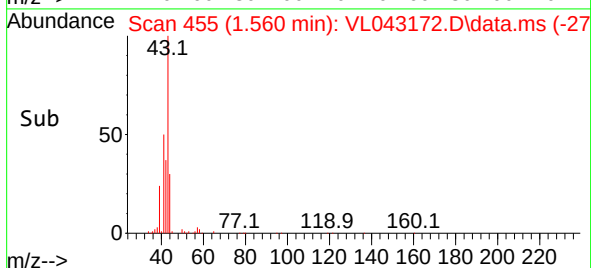
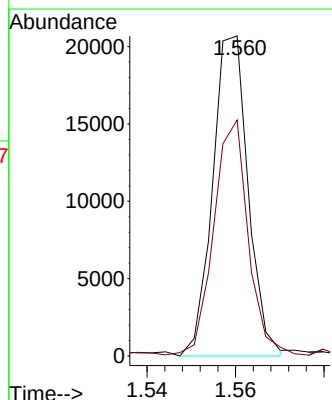
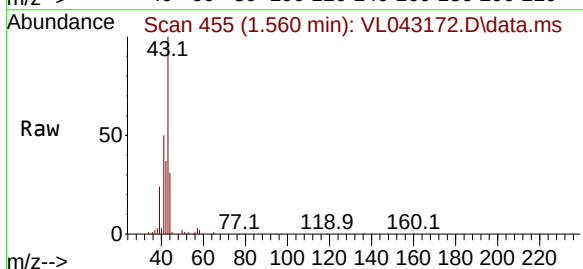
Instrument :
 MSVOA_1
 ClientSampleId :
 141-IA-1DL

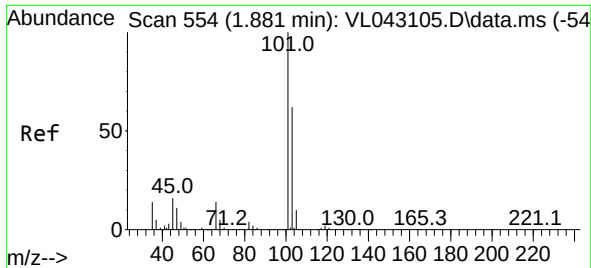
Tgt Ion: 85 Resp: 6052
 Ion Ratio Lower Upper
 85 100
 135 0.5 48.2 72.4#



#9
 Propene
 Concen: 1.422 ppbv
 RT: 1.560 min Scan# 455
 Delta R.T. 0.078 min
 Lab File: VL043172.D
 Acq: 06 Nov 2025 17:35

Tgt Ion: 41 Resp: 11536
 Ion Ratio Lower Upper
 41 100
 42 72.3 55.1 82.7

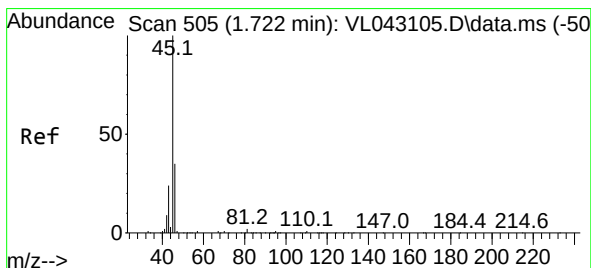
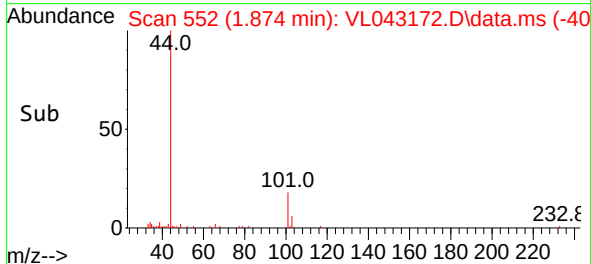
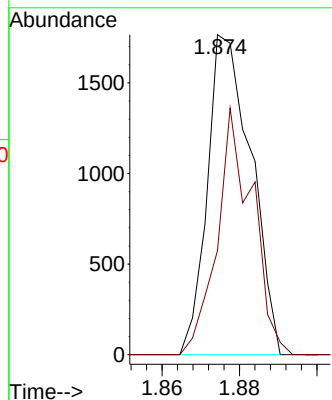
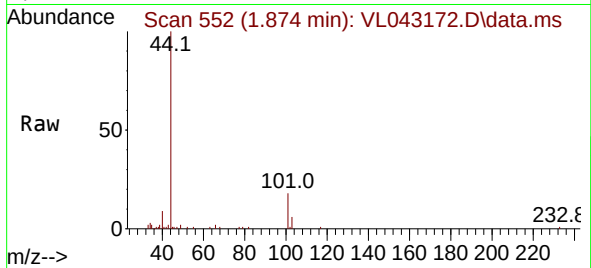




#11
 Trichlorofluoromethane
 Concen: 0.083 ppbv
 RT: 1.874 min Scan# 51
 Delta R.T. -0.007 min
 Lab File: VL043172.D
 Acq: 06 Nov 2025 17:35

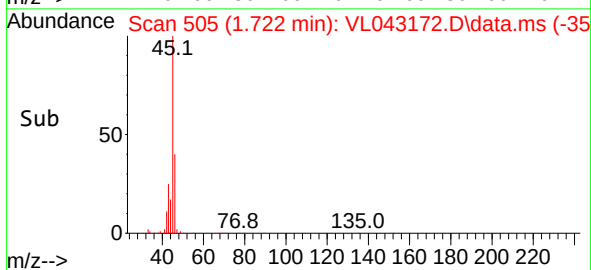
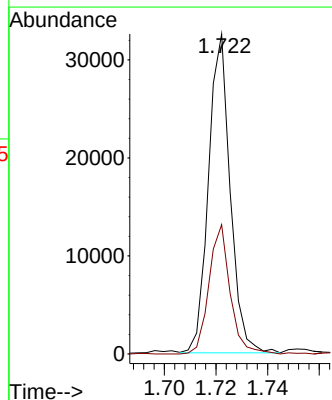
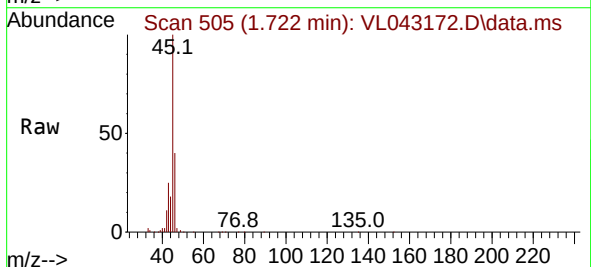
Instrument :
 MSVOA_L
 ClientSampleId :
 141-IA-1DL

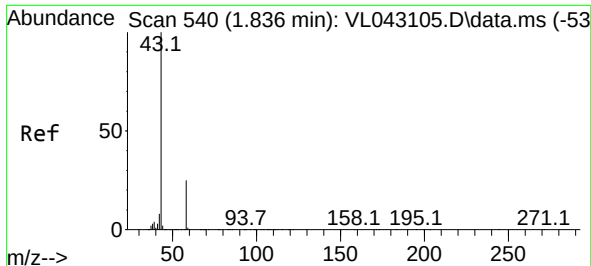
Tgt Ion:101 Resp: 1381
 Ion Ratio Lower Upper
 101 100
 103 32.5 49.3 73.9#



#13
 Ethanol
 Concen: 6.325 ppbv
 RT: 1.722 min Scan# 505
 Delta R.T. -0.000 min
 Lab File: VL043172.D
 Acq: 06 Nov 2025 17:35

Tgt Ion: 45 Resp: 18986
 Ion Ratio Lower Upper
 45 100
 46 40.1 14.7 58.9

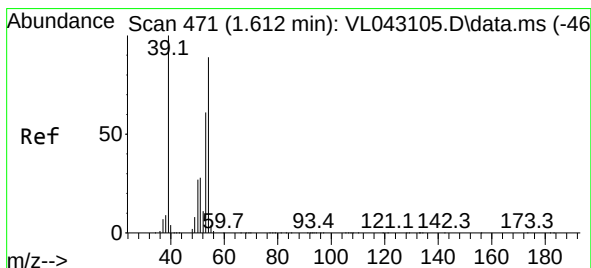
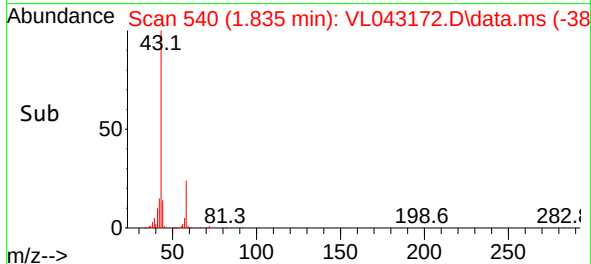
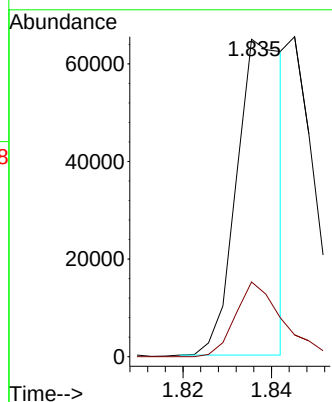
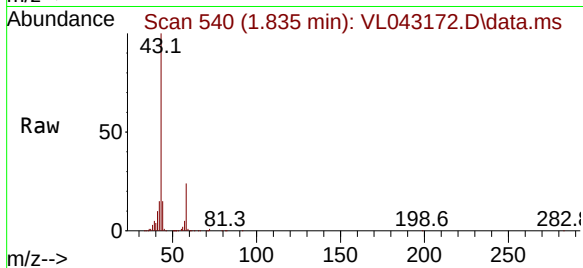




#15
Acetone
Concen: 2.903 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

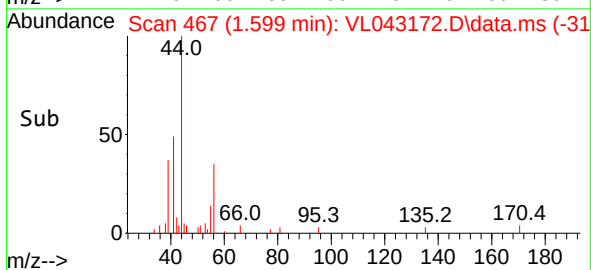
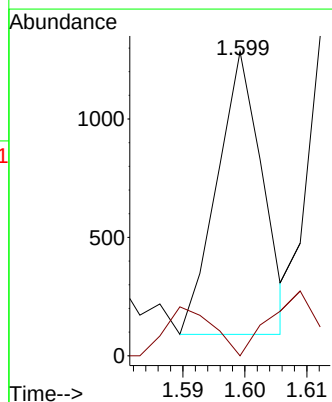
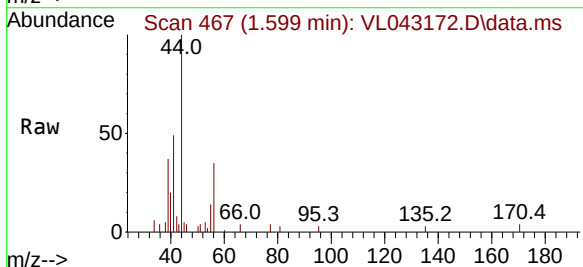
Instrument :
MSVOA_L
ClientSampleId :
141-IA-1DL

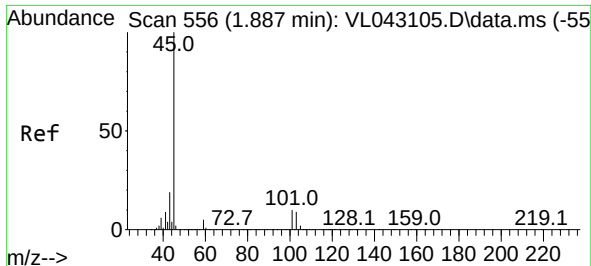
Tgt Ion: 43 Resp: 46549
Ion Ratio Lower Upper
43 100
58 24.3 20.8 31.2



#16
1,3-Butadiene
Concen: 0.079 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.013 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

Tgt Ion: 39 Resp: 606
Ion Ratio Lower Upper
39 100
54 0.0 59.0 88.4#

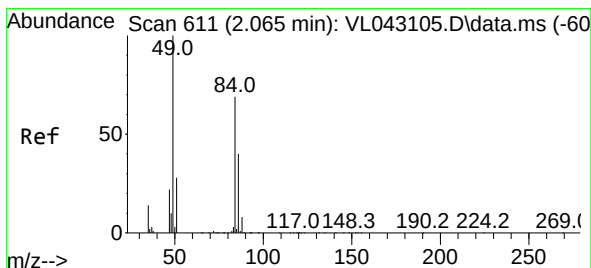
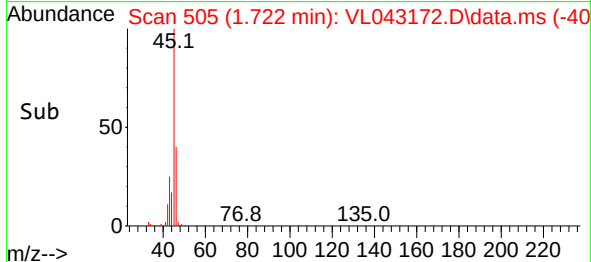
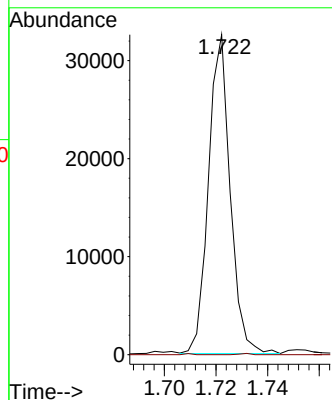
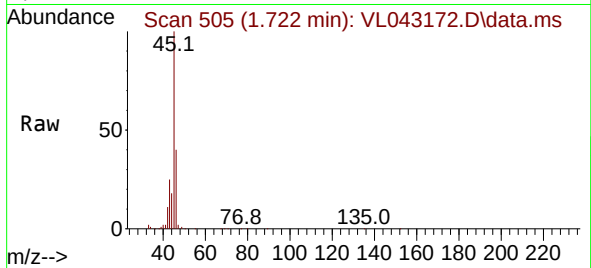




#19
Isopropyl Alcohol
Concen: 1.901 ppbv
RT: 1.722 min Scan# 505
Delta R.T. -0.165 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

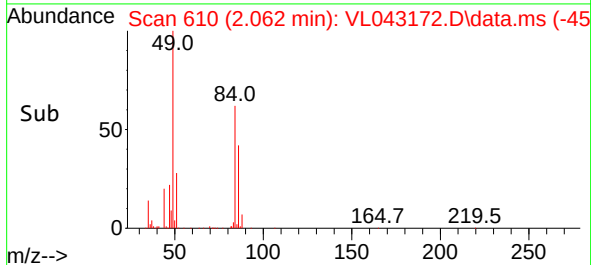
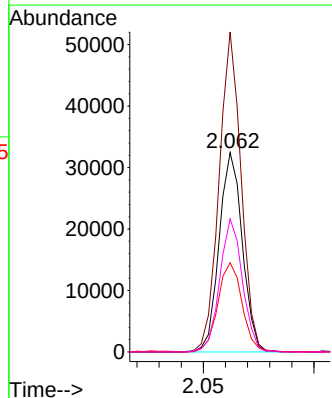
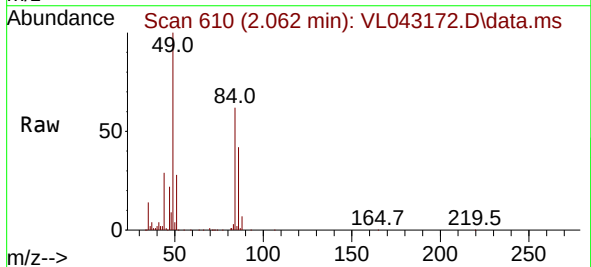
Instrument :
MSVOA_L
ClientSampleId :
141-IA-1DL

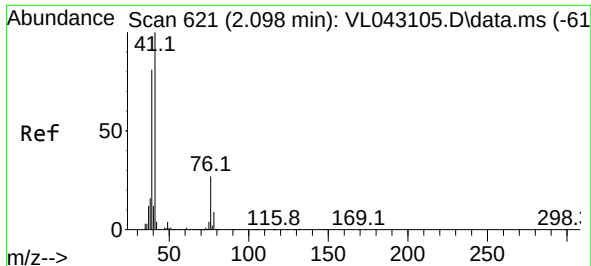
Tgt Ion: 45 Resp: 18986
Ion Ratio Lower Upper
45 100
58 39.9 31.3 46.9



#20
Methylene Chloride
Concen: 3.720 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.003 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

Tgt Ion: 84 Resp: 23578
Ion Ratio Lower Upper
84 100
49 160.5 116.6 175.0
51 44.8 34.8 52.2
86 66.7 46.2 69.4

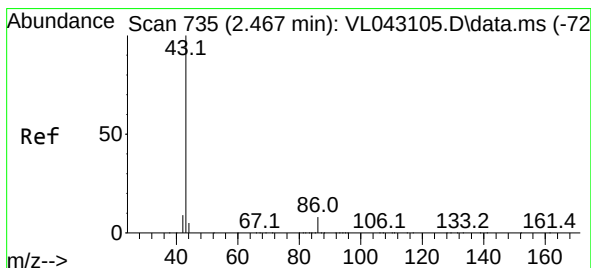
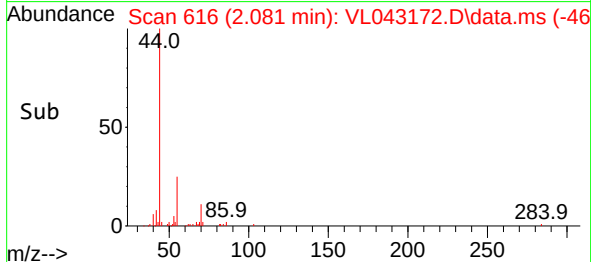
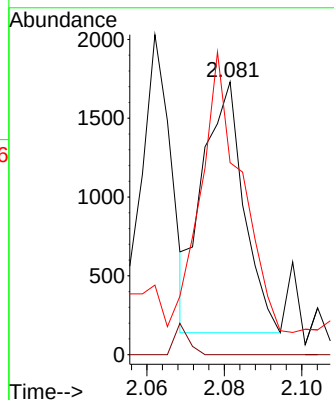
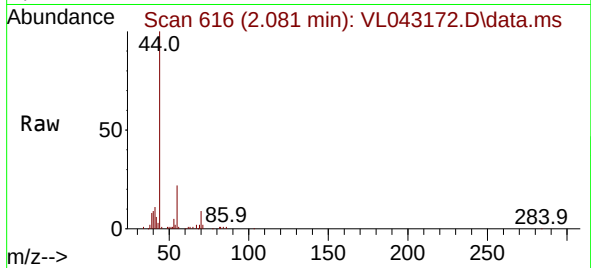




#21
 Allyl Chloride
 Concen: 0.099 ppbv
 RT: 2.081 min Scan# 61
 Delta R.T. -0.016 min
 Lab File: VL043172.D
 Acq: 06 Nov 2025 17:35

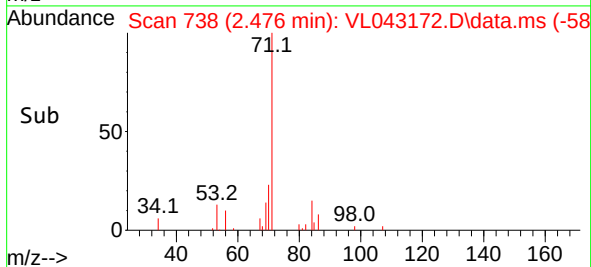
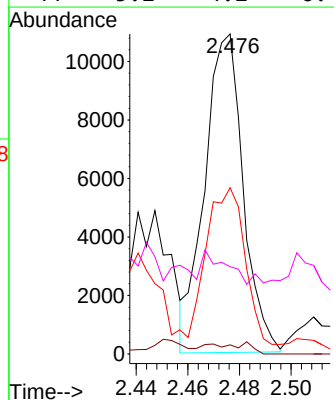
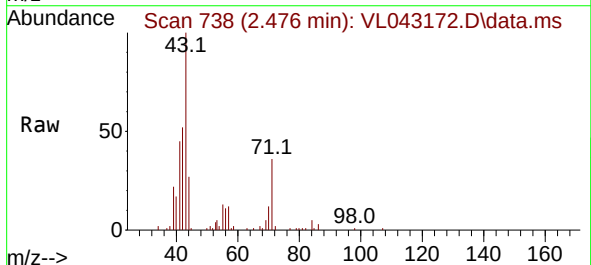
Instrument :
 MSVOA_L
 ClientSampleId :
 141-IA-1DL

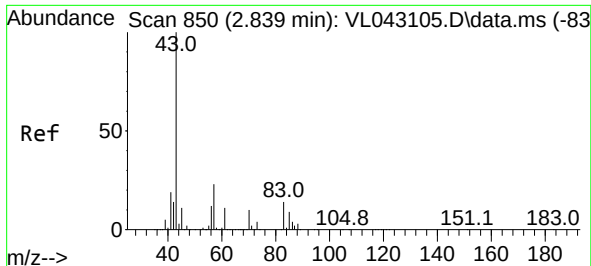
Tgt Ion: 41 Resp: 1172
 Ion Ratio Lower Upper
 41 100
 76 0.0 21.5 32.3#
 39 202.5 60.8 91.2#



#23
 Vinyl Acetate
 Concen: 0.480 ppbv
 RT: 2.476 min Scan# 738
 Delta R.T. 0.010 min
 Lab File: VL043172.D
 Acq: 06 Nov 2025 17:35

Tgt Ion: 43 Resp: 11271
 Ion Ratio Lower Upper
 43 100
 86 2.9 6.2 9.2#
 42 49.7 7.6 11.4#
 44 5.2 4.2 6.4





#25

Ethyl Acetate

Concen: 0.428 ppbv

RT: 2.826 min Scan# 846

Delta R.T. -0.013 min

Lab File: VL043172.D

Acq: 06 Nov 2025 17:35

Instrument :

MSVOA_1

ClientSampleId :

141-IA-1DL

Tgt Ion: 43 Resp: 17000

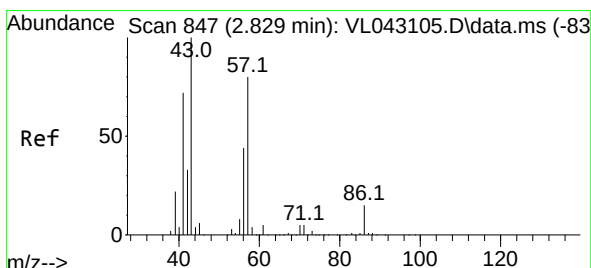
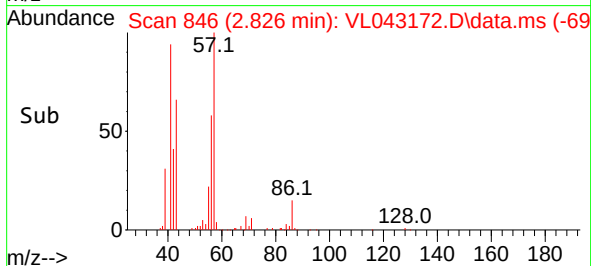
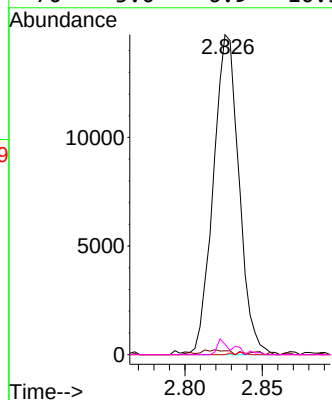
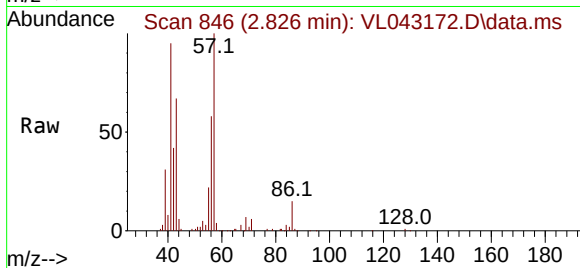
Ion Ratio Lower Upper

43 100

45 2.3 7.8 11.8#

61 0.0 7.0 10.6#

70 3.0 6.9 10.3#



#26

Hexane

Concen: 1.303 ppbv

RT: 2.826 min Scan# 846

Delta R.T. -0.003 min

Lab File: VL043172.D

Acq: 06 Nov 2025 17:35

Tgt Ion: 57 Resp: 23868

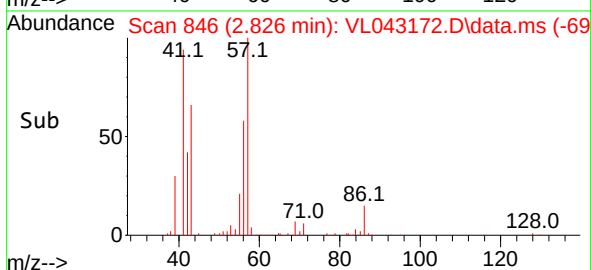
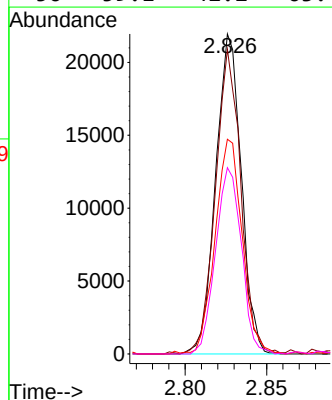
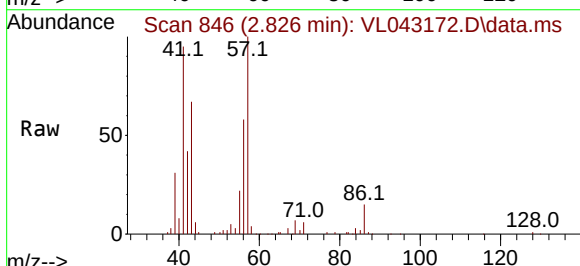
Ion Ratio Lower Upper

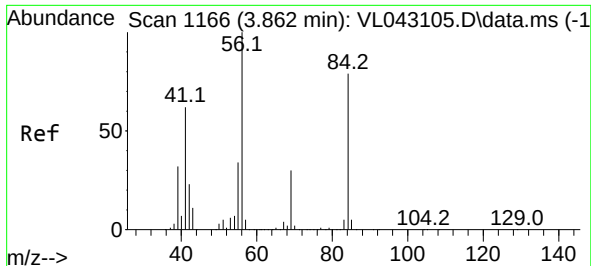
57 100

41 95.0 71.4 107.0

43 71.9 178.5 267.7#

56 59.1 42.2 63.4

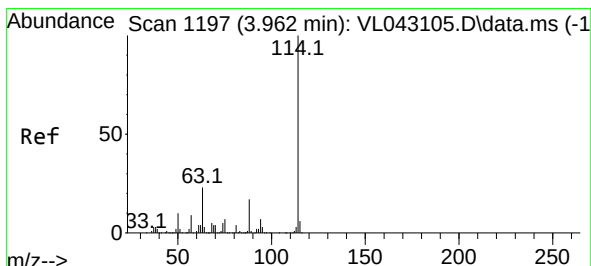
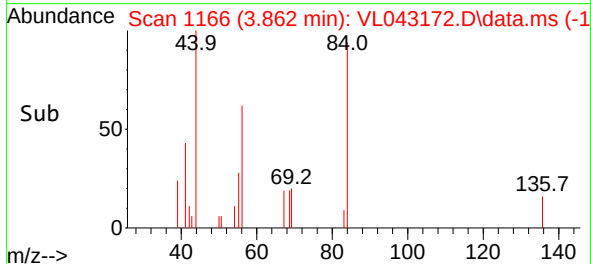
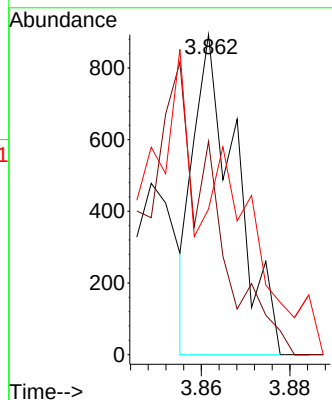
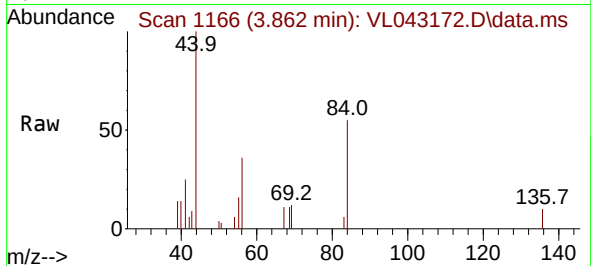




#30
Cyclohexane
Concen: 0.037 ppbv
RT: 3.862 min Scan# 1166
Delta R.T. -0.000 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

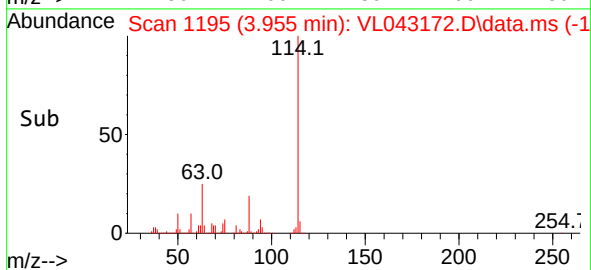
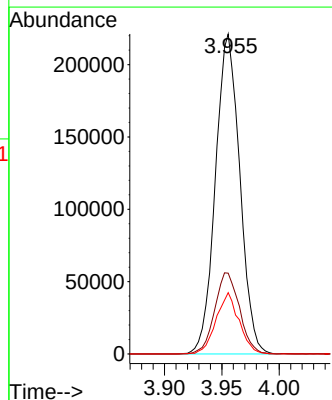
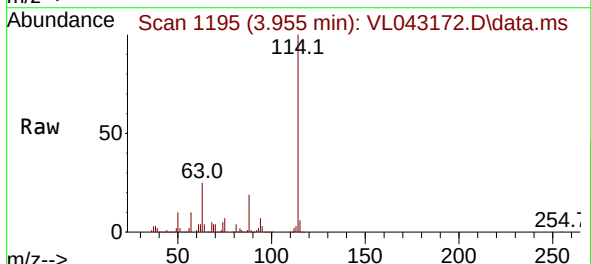
Instrument :
MSVOA_L
ClientSampleId :
141-IA-1DL

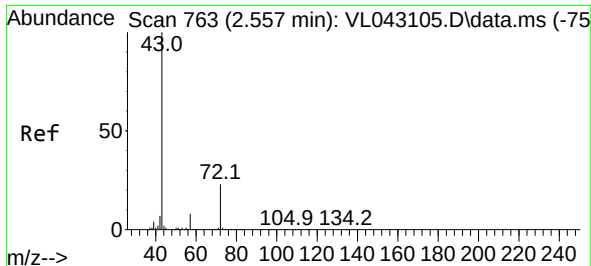
Tgt Ion: 84 Resp: 590
Ion Ratio Lower Upper
84 100
56 158.3 100.9 151.3#
41 228.6 63.8 95.6#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. -0.007 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

Tgt Ion: 114 Resp: 326674
Ion Ratio Lower Upper
114 100
63 25.8 19.3 28.9
88 18.1 13.9 20.9

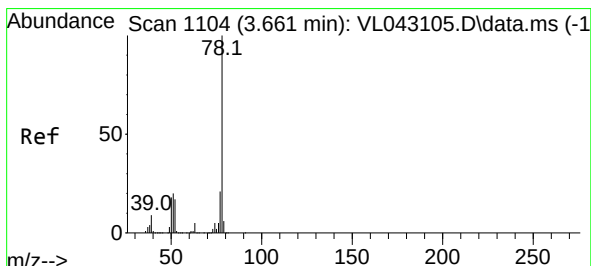
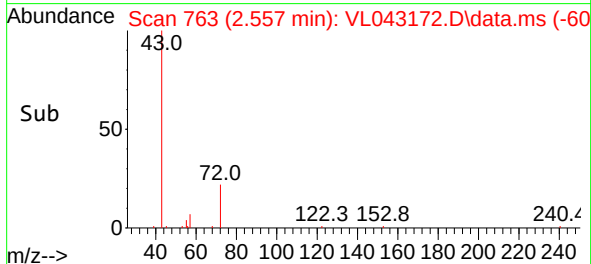
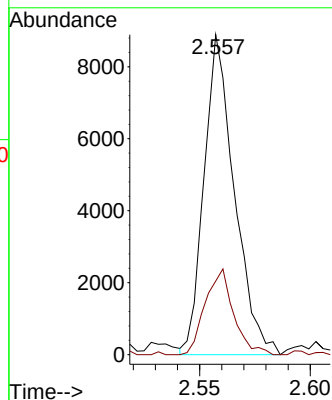
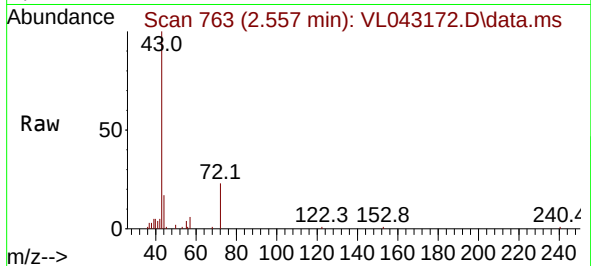




#34
2-Butanone
Concen: 0.386 ppbv
RT: 2.557 min Scan# 71
Delta R.T. -0.000 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

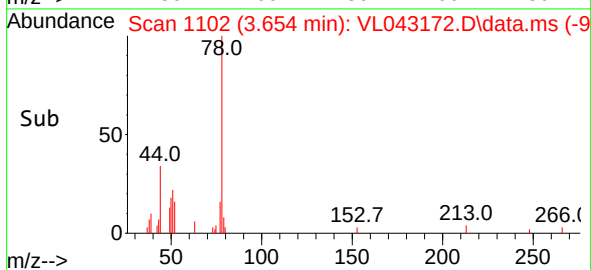
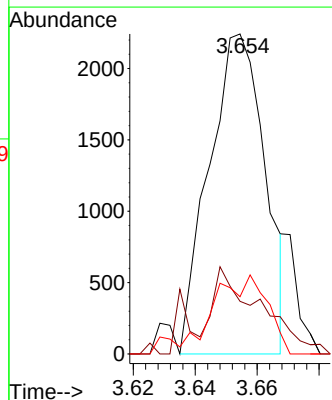
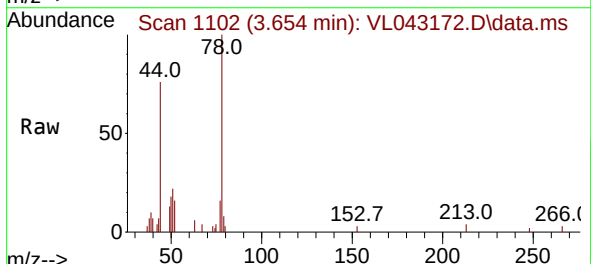
Instrument :
MSVOA_L
ClientSampleId :
141-IA-1DL

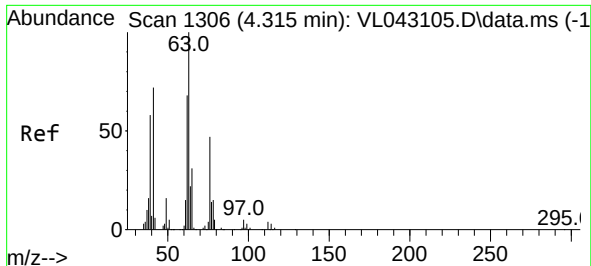
Tgt Ion: 43 Resp: 8478
Ion Ratio Lower Upper
43 100
72 25.7 18.4 27.6



#36
Benzene
Concen: 0.092 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. -0.007 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

Tgt Ion: 78 Resp: 2816
Ion Ratio Lower Upper
78 100
77 4.8 17.0 25.6#
50 15.7 14.6 22.0





#39

1,2-Dichloropropane

Concen: 7.495 ppbv

RT: 3.952 min Scan# 1194

Delta R.T. -0.363 min

Lab File: VL043172.D

Acq: 06 Nov 2025 17:35

Instrument :

MSVOA_L

ClientSampleId :

141-IA-1DL

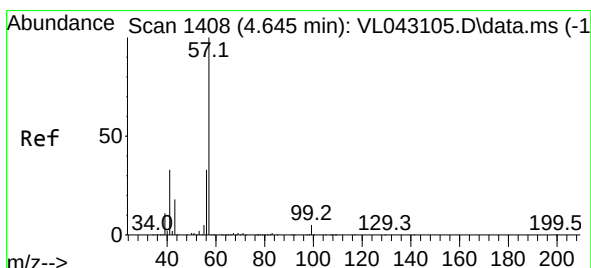
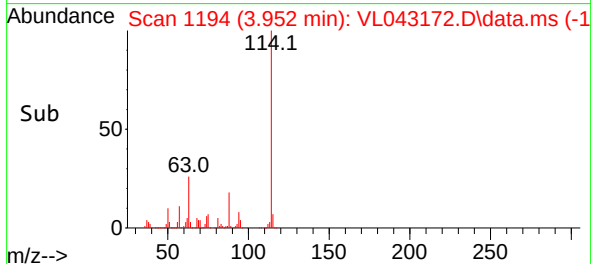
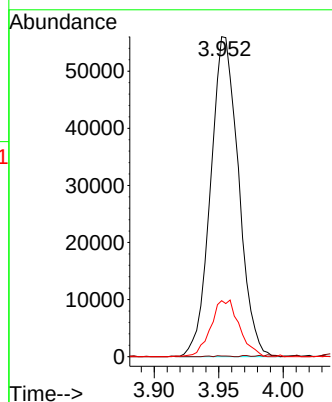
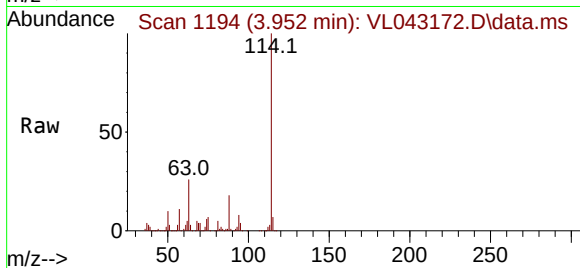
Tgt Ion: 63 Resp: 84302

Ion Ratio Lower Upper

63 100

41 0.2 58.0 87.0#

62 17.3 54.7 82.1#



#44

2,2,4-Trimethylpentane

Concen: 0.045 ppbv

RT: 4.632 min Scan# 1404

Delta R.T. -0.013 min

Lab File: VL043172.D

Acq: 06 Nov 2025 17:35

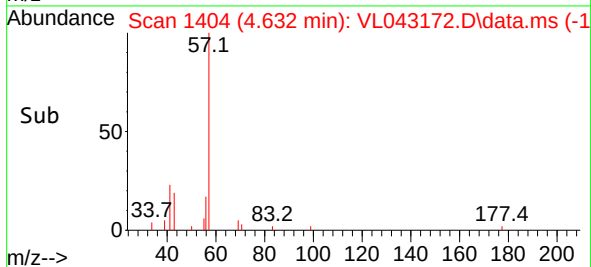
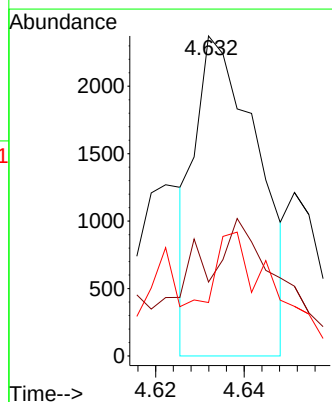
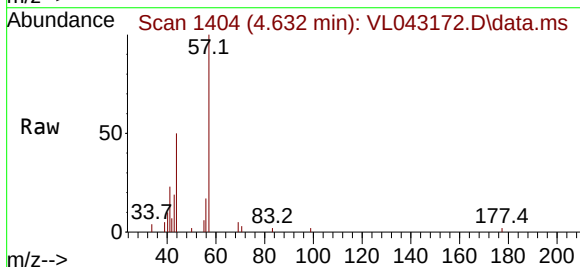
Tgt Ion: 57 Resp: 2333

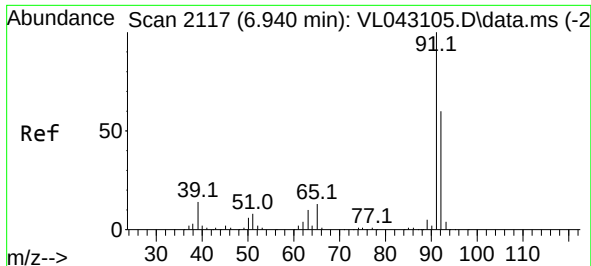
Ion Ratio Lower Upper

57 100

41 86.1 26.3 39.5#

56 76.5 25.9 38.9#

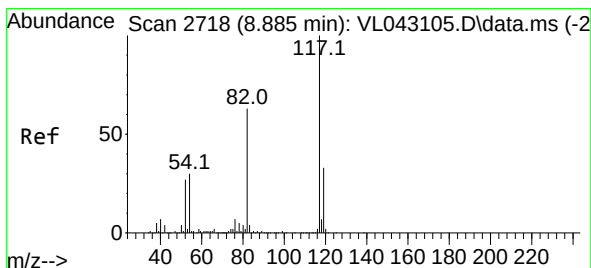
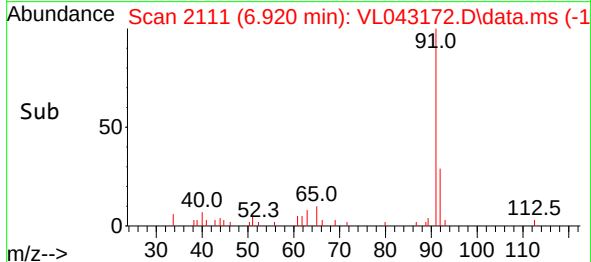
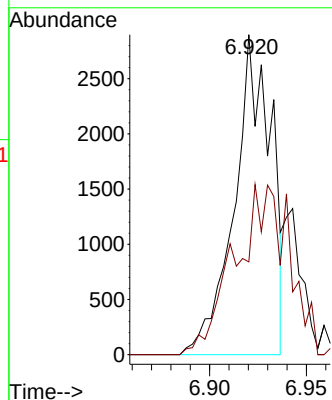
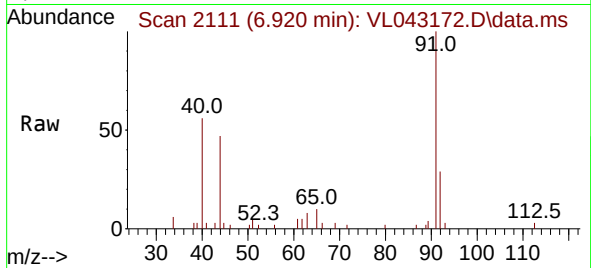




#53
Toluene
Concen: 0.105 ppbv
RT: 6.920 min Scan# 2117
Delta R.T. -0.020 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

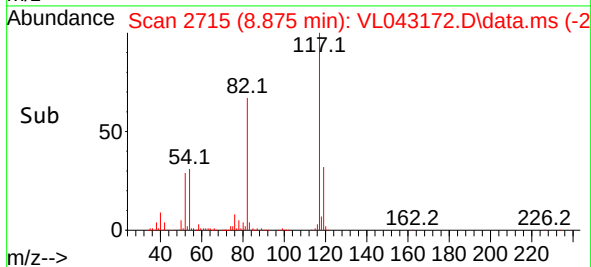
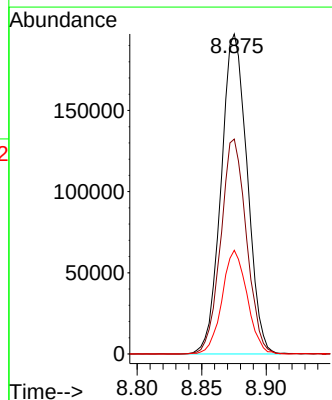
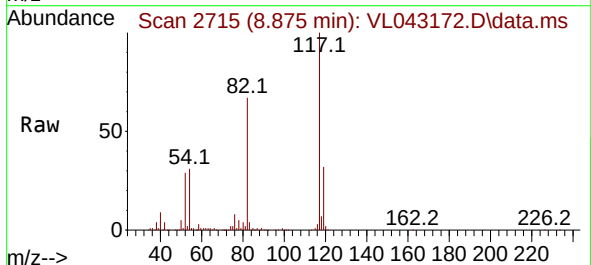
Instrument :
MSVOA_L
ClientSampleId :
141-IA-1DL

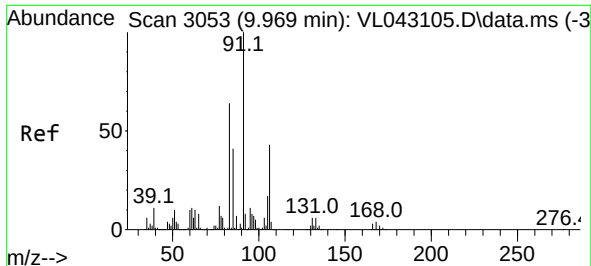
Tgt Ion: 91 Resp: 3828
Ion Ratio Lower Upper
91 100
92 78.6 48.8 73.2#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.010 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

Tgt Ion: 117 Resp: 276195
Ion Ratio Lower Upper
117 100
82 66.3 53.8 80.8
119 31.3 25.4 38.0

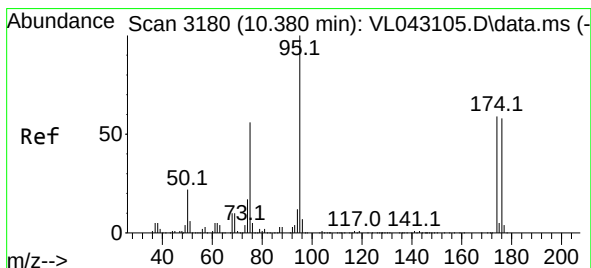
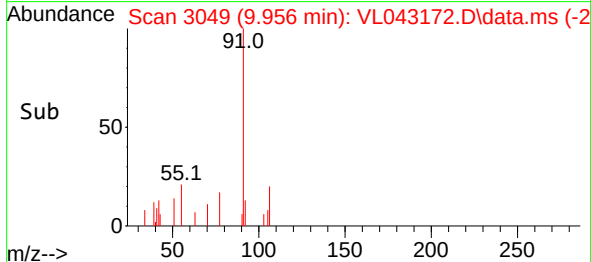
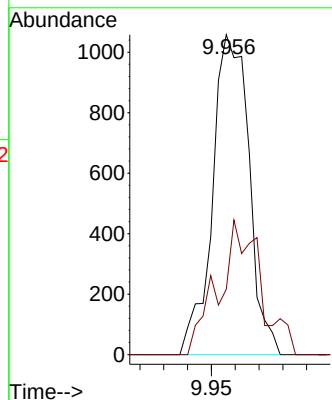
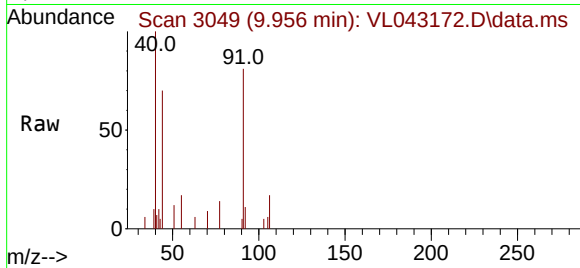




#60
o-Xylene
Concen: 0.030 ppbv
RT: 9.956 min Scan# 3053
Delta R.T. -0.013 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

Instrument :
MSVOA_L
ClientSampleId :
141-IA-1DL

Tgt Ion: 91 Resp: 1125
Ion Ratio Lower Upper
91 100
106 48.4 21.9 65.8



#68
1-Bromo-4-Fluorobenzene
Concen: 10.173 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. -0.010 min
Lab File: VL043172.D
Acq: 06 Nov 2025 17:35

Tgt Ion: 95 Resp: 218383
Ion Ratio Lower Upper
95 100
174 63.6 48.3 72.5
175 4.6 3.8 5.8

