

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042977.D
 Acq On : 23 Sep 2025 02:57
 Operator : SY/MD
 Sample : Q3131-02DL 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 141-1A-2DL

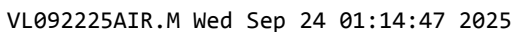
Quant Time: Sep 24 01:14:35 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

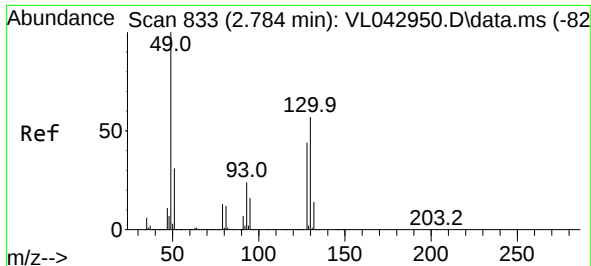
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.787	49	144383	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	412784	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	358472	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	272808	10.195	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.900%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	8070	0.416	ppbv	100
3) Chlorodifluoromethane	1.466	51	3306	0.137	ppbv #	89
4) Chloromethane	1.531	50	413	0.047	ppbv	94
8) Dichlorotetrafluoroethane	1.499	85	8070	0.487	ppbv #	19
9) Propene	1.489	41	5758	0.547	ppbv #	69
13) Ethanol	1.722	45	13003	12.730	ppbv	96
15) Acetone	1.839	43	55527	2.953	ppbv #	83
16) 1,3-Butadiene	1.599	39	380	0.043	ppbv #	11
19) Isopropyl Alcohol	1.722	45	13003	1.150	ppbv #	56
20) Methylene Chloride	2.065	84	2459	Below Cal	#	91
21) Allyl Chloride	2.078	41	803	0.061	ppbv #	46
23) Vinyl Acetate	2.476	43	13119	0.488	ppbv #	30
25) Ethyl Acetate	2.826	43	10821	0.228	ppbv #	84
26) Hexane	2.826	57	13368	0.617	ppbv #	42
30) Cyclohexane	3.861	84	895	0.049	ppbv #	40
34) 2-Butanone	2.560	43	4380	0.151	ppbv	97
36) Benzene	3.658	78	2873	0.074	ppbv #	73
39) 1,2-Dichloropropane	3.959	63	103626	7.323	ppbv #	24
44) 2,2,4-Trimethylpentane	4.632	57	2757	0.041	ppbv #	43
53) Toluene	6.936	91	6333	0.138	ppbv #	73
59) m/p-Xylene	9.532	91	3656	0.079	ppbv #	100
60) o-Xylene	9.963	91	2489	0.054	ppbv	99
80) Naphthalene,2-methyl-	14.461	142	1430	0.101	ppbv	98

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

Quant Time: Sep 24 01:14:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

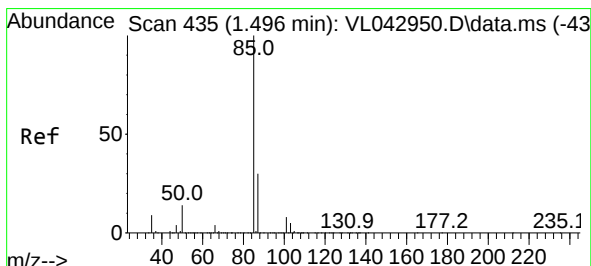
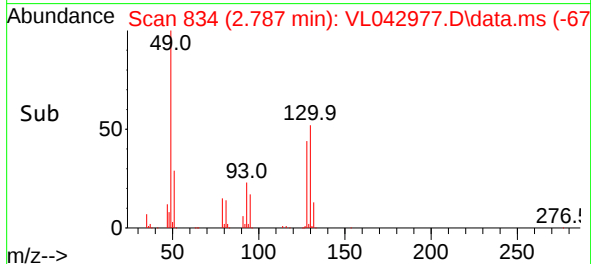
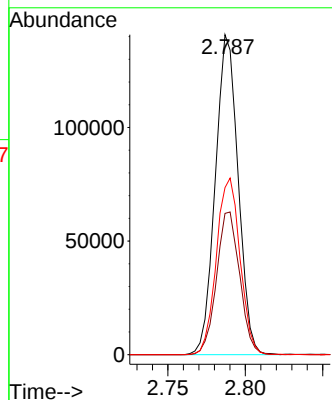
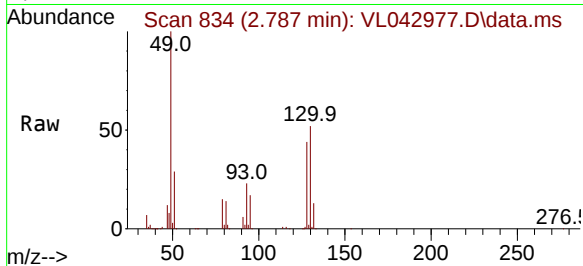




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

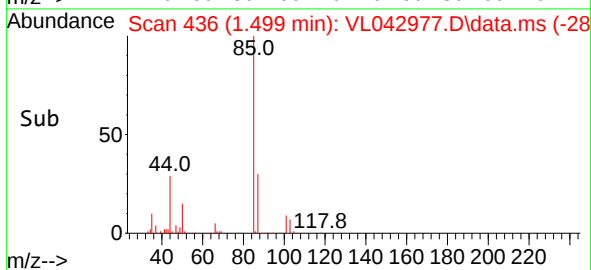
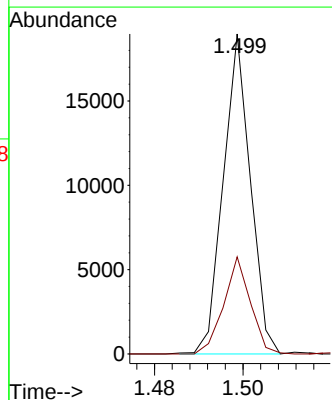
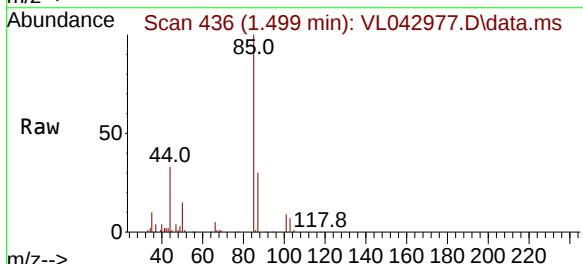
Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

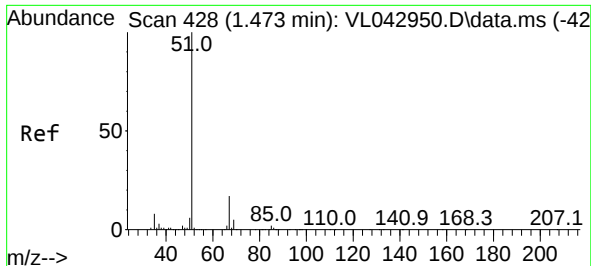
Tgt Ion: 49 Resp: 144383
Ion Ratio Lower Upper
49 100
128 45.3 22.9 68.8
130 57.3 29.1 87.3



#2
Dichlorodifluoromethane
Concen: 0.416 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 85 Resp: 8070
Ion Ratio Lower Upper
85 100
87 30.3 24.3 36.5

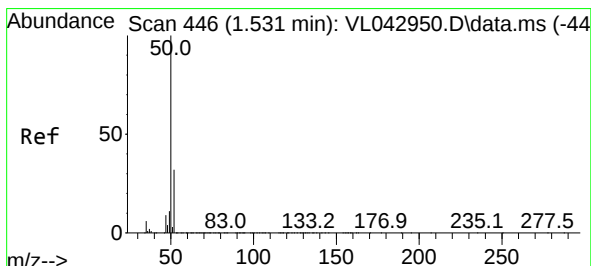
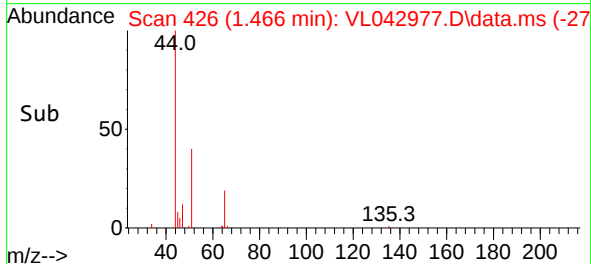
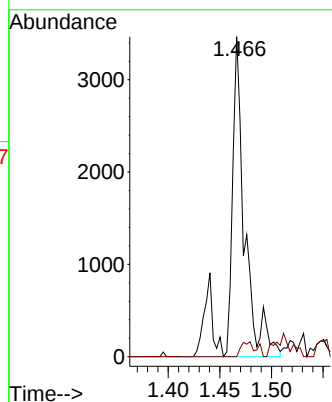
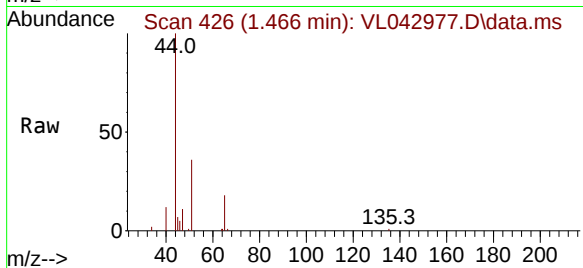




#3
Chlorodifluoromethane
Concen: 0.137 ppbv
RT: 1.466 min Scan# 41
Delta R.T. -0.007 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

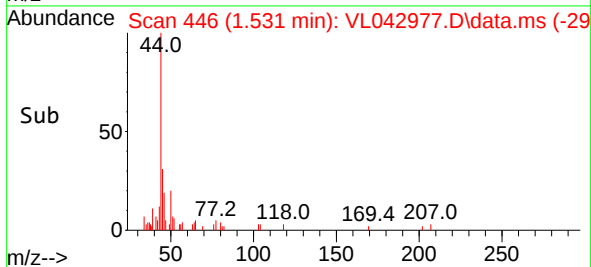
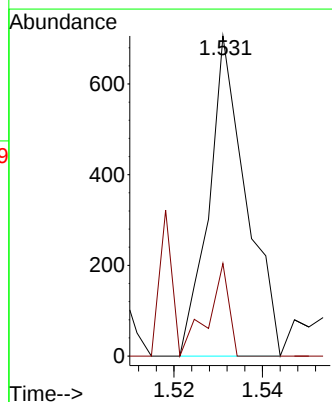
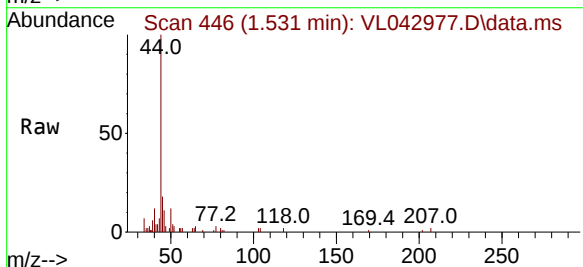
Instrument :
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ClientSampleId :
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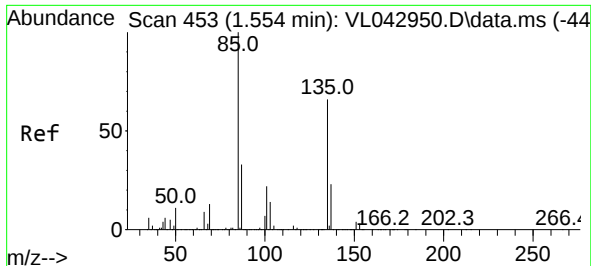
Tgt Ion: 51 Resp: 3306
Ion Ratio Lower Upper
51 100
67 12.5 13.8 20.8#



#4
Chloromethane
Concen: 0.047 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 50 Resp: 413
Ion Ratio Lower Upper
50 100
52 28.9 25.9 38.9

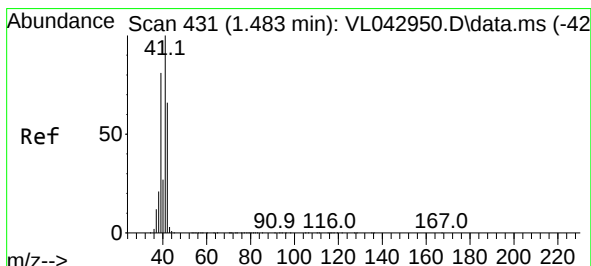
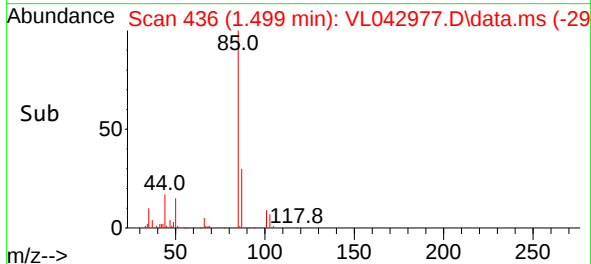
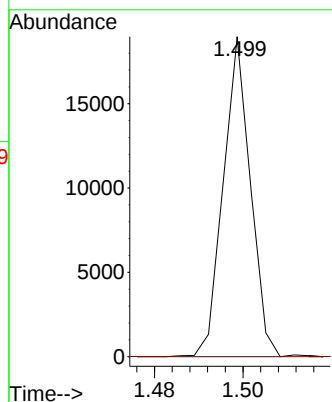
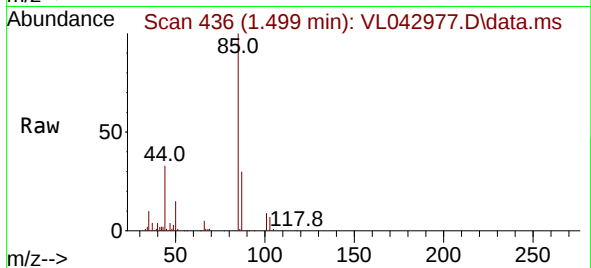




#8
 Dichlorotetrafluoroethane
 Concen: 0.487 ppbv
 RT: 1.499 min Scan# 41
 Delta R.T. -0.055 min
 Lab File: VL042977.D
 Acq: 23 Sep 2025 02:57

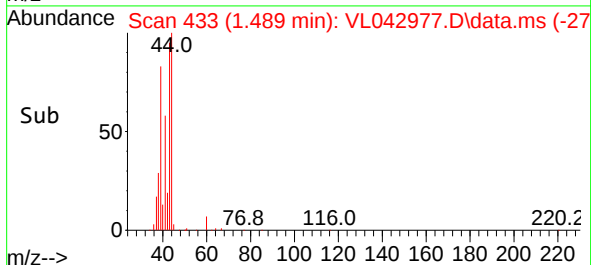
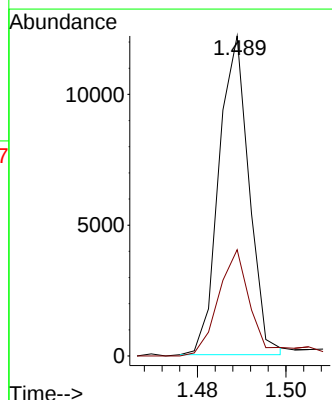
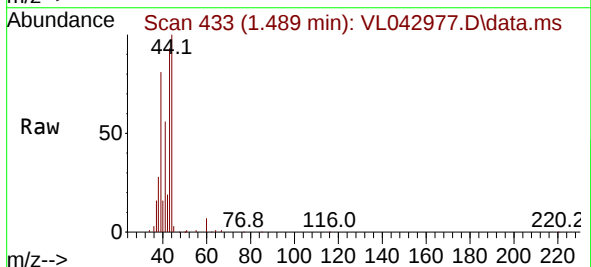
Instrument :
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 ClientSampleId :
 141-1A-2DL

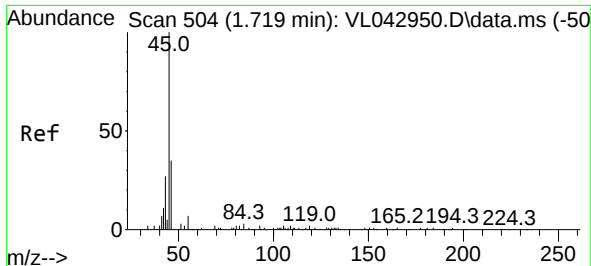
Tgt Ion: 85 Resp: 8070
 Ion Ratio Lower Upper
 85 100
 135 0.0 49.7 74.5#



#9
 Propene
 Concen: 0.547 ppbv
 RT: 1.489 min Scan# 433
 Delta R.T. 0.006 min
 Lab File: VL042977.D
 Acq: 23 Sep 2025 02:57

Tgt Ion: 41 Resp: 5758
 Ion Ratio Lower Upper
 41 100
 42 45.7 57.4 86.2#

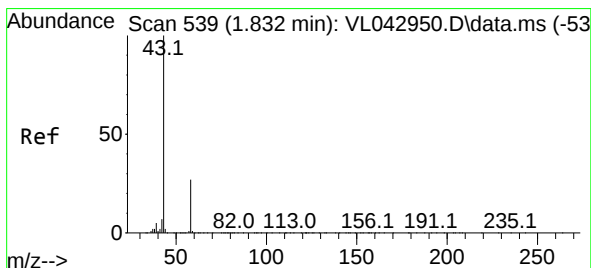
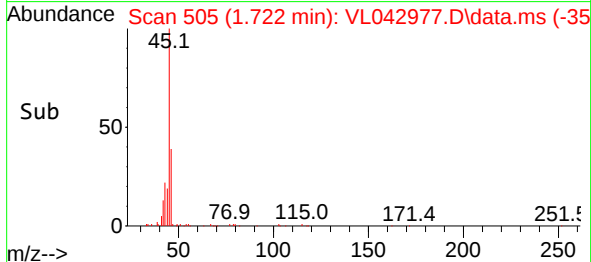
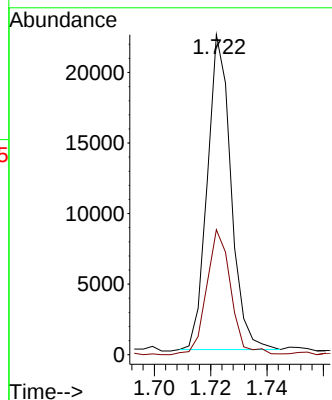
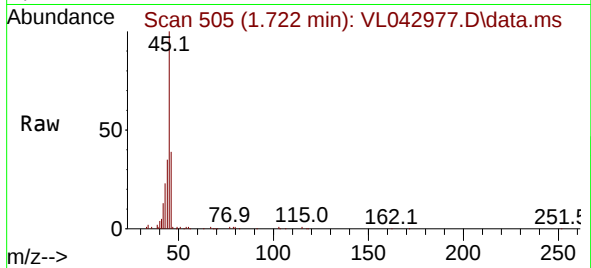




#13
Ethanol
Concen: 12.730 ppbv
RT: 1.722 min Scan# 504
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

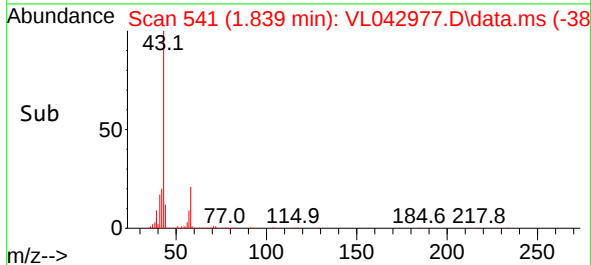
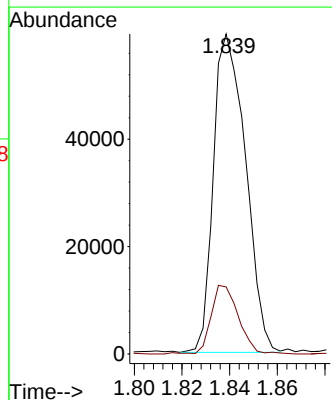
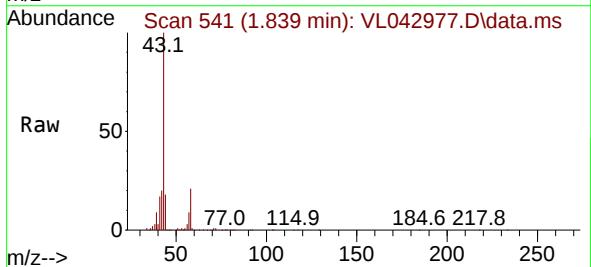
Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

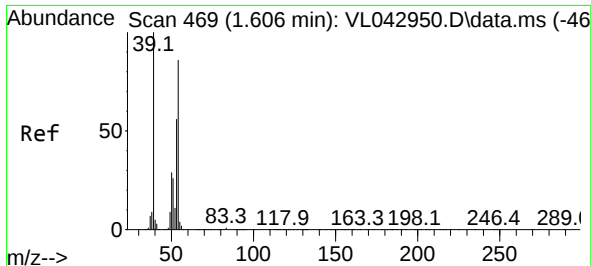
Tgt Ion: 45 Resp: 13003
Ion Ratio Lower Upper
45 100
46 43.2 16.2 64.6



#15
Acetone
Concen: 2.953 ppbv
RT: 1.839 min Scan# 541
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 43 Resp: 55527
Ion Ratio Lower Upper
43 100
58 18.8 22.3 33.5#

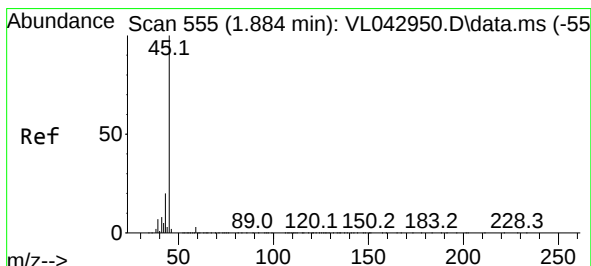
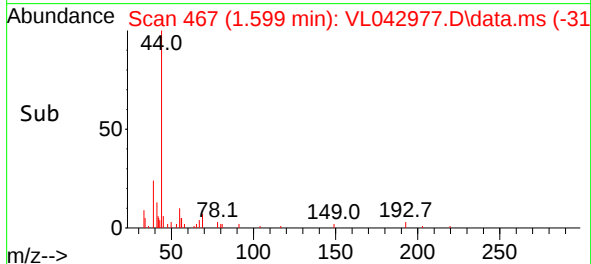
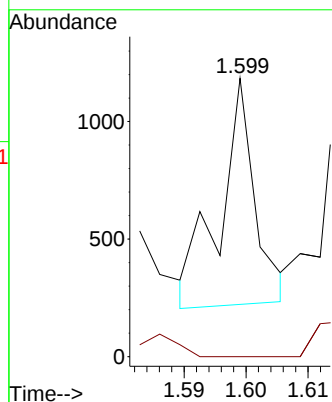
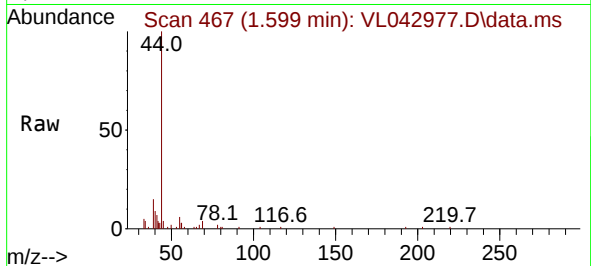




#16
1,3-Butadiene
Concen: 0.043 ppbv
RT: 1.599 min Scan# 40
Delta R.T. -0.007 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

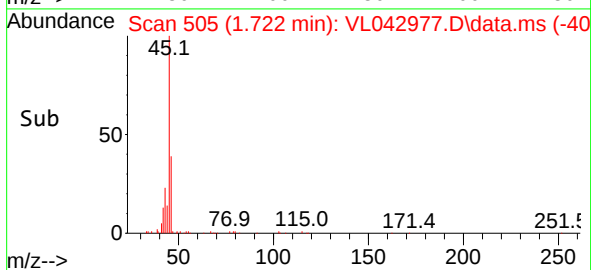
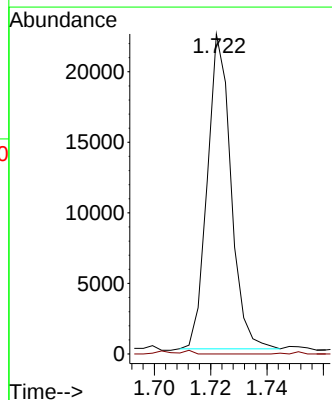
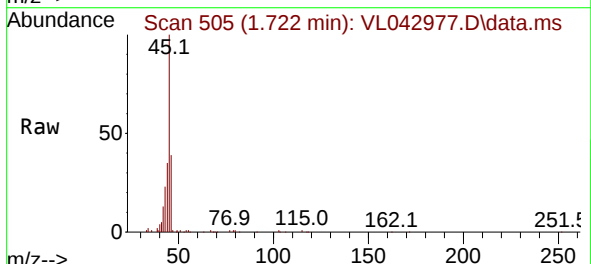
Instrument :
MSVOA_L
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141-1A-2DL

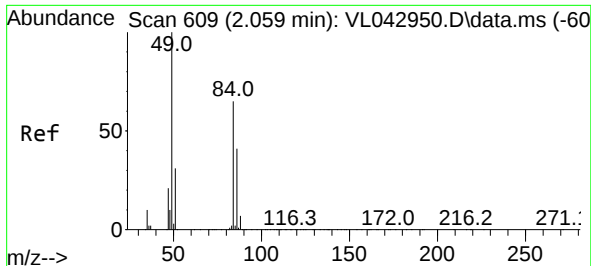
Tgt Ion: 39 Resp: 380
Ion Ratio Lower Upper
39 100
54 0.0 60.8 91.2#



#19
Isopropyl Alcohol
Concen: 1.150 ppbv
RT: 1.722 min Scan# 505
Delta R.T. -0.162 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 45 Resp: 13003
Ion Ratio Lower Upper
45 100
58 12.0 31.0 46.6#





#20

Methylene Chloride

Concen: Below Cal

RT: 2.065 min Scan# 611

Delta R.T. 0.006 min

Lab File: VL042977.D

Acq: 23 Sep 2025 02:57

Instrument :

MSVOA_L

ClientSampleId :

141-1A-2DL

Tgt Ion: 84 Resp: 2459

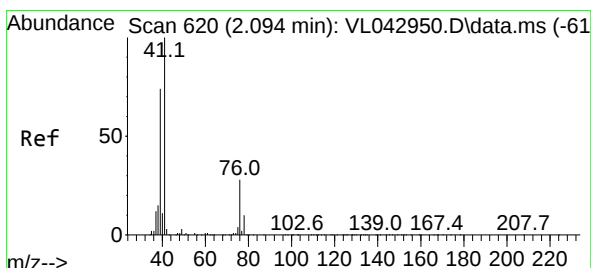
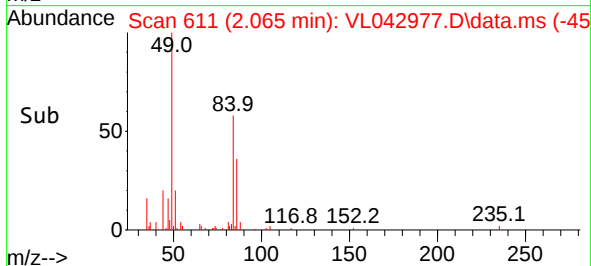
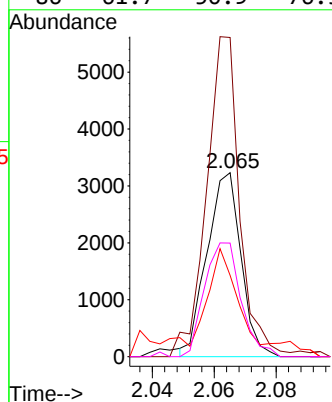
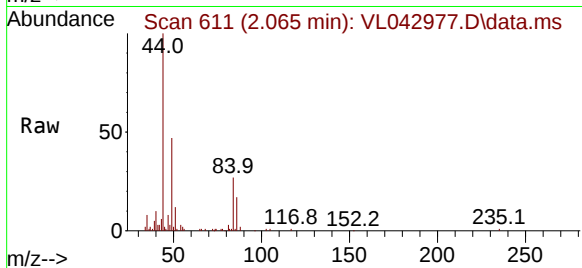
Ion Ratio Lower Upper

84 100

49 165.3 124.1 186.1

51 36.9 39.8 59.8#

86 61.7 50.9 76.3



#21

Allyl Chloride

Concen: 0.061 ppbv

RT: 2.078 min Scan# 615

Delta R.T. -0.016 min

Lab File: VL042977.D

Acq: 23 Sep 2025 02:57

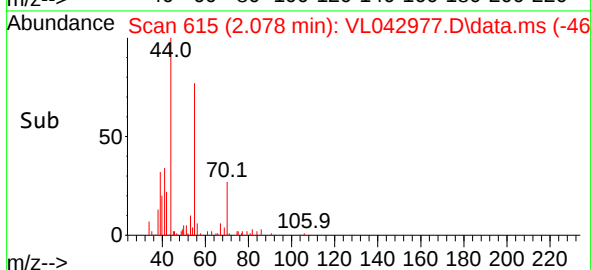
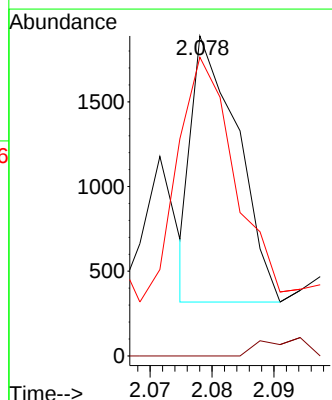
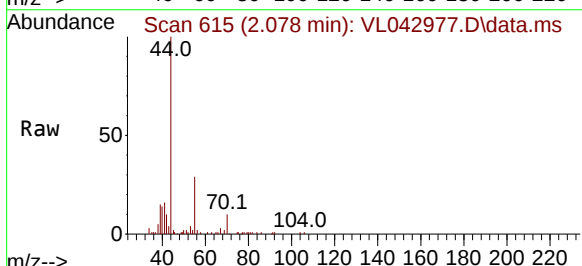
Tgt Ion: 41 Resp: 803

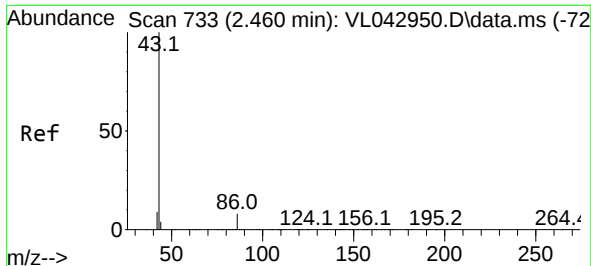
Ion Ratio Lower Upper

41 100

76 6.4 22.3 33.5#

39 127.5 61.3 91.9#

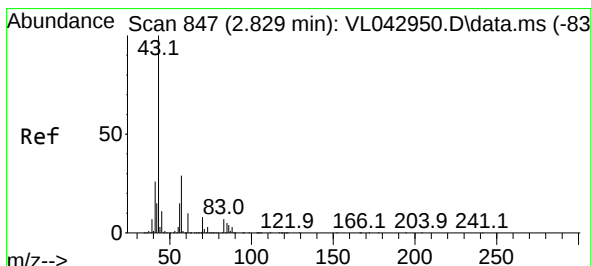
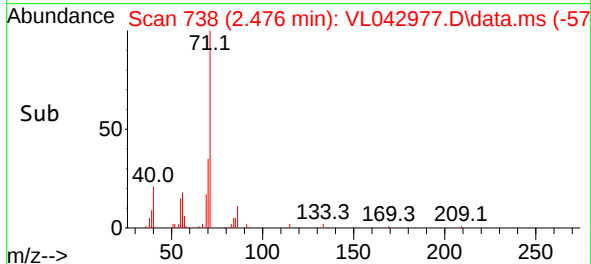
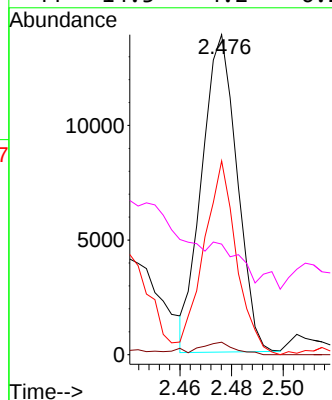
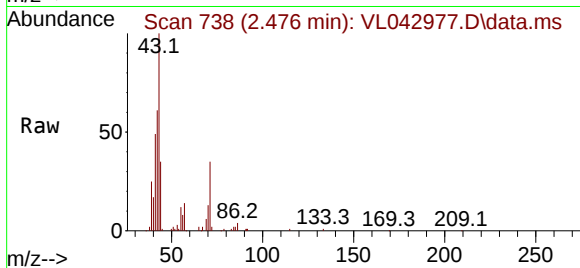




#23
 Vinyl Acetate
 Concen: 0.488 ppbv
 RT: 2.476 min Scan# 71
 Delta R.T. 0.016 min
 Lab File: VL042977.D
 Acq: 23 Sep 2025 02:57

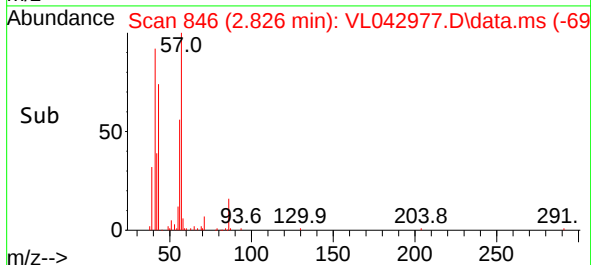
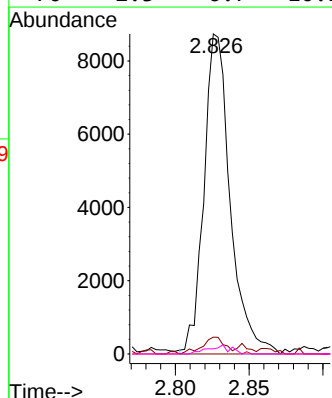
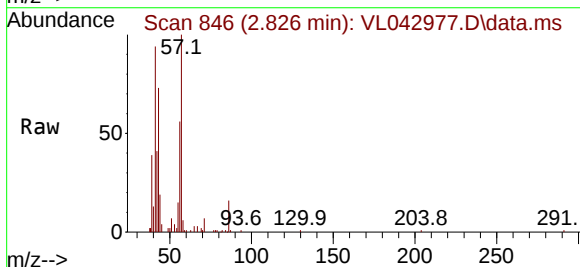
Instrument :
 MSVOA_1
 ClientSampleId :
 141-1A-2DL

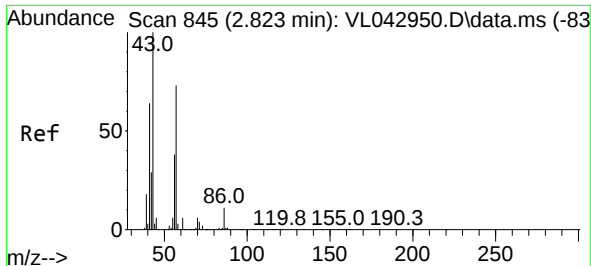
Tgt Ion:	43	Resp:	13119
Ion	Ratio	Lower	Upper
43	100		
86	3.9	6.2	9.2#
42	61.3	7.4	11.0#
44	14.3	4.2	6.2#



#25
 Ethyl Acetate
 Concen: 0.228 ppbv
 RT: 2.826 min Scan# 846
 Delta R.T. -0.003 min
 Lab File: VL042977.D
 Acq: 23 Sep 2025 02:57

Tgt Ion:	43	Resp:	10821
Ion	Ratio	Lower	Upper
43	100		
45	7.2	7.7	11.5#
61	0.0	7.1	10.7#
70	2.3	6.7	10.1#

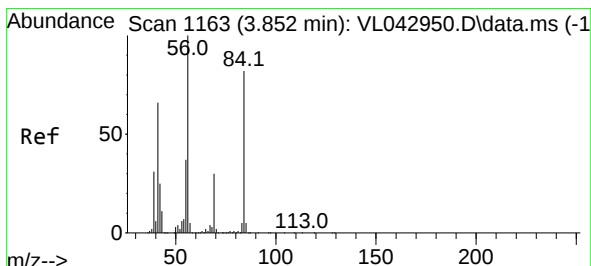
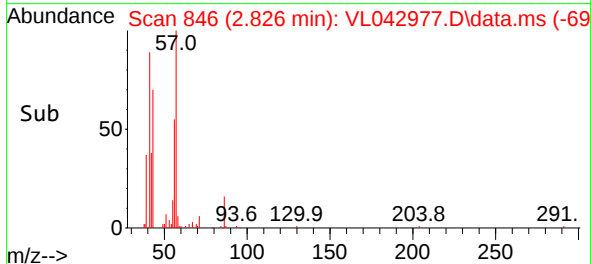
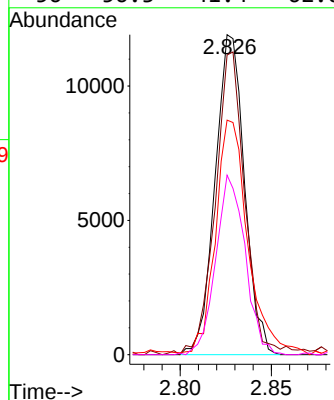
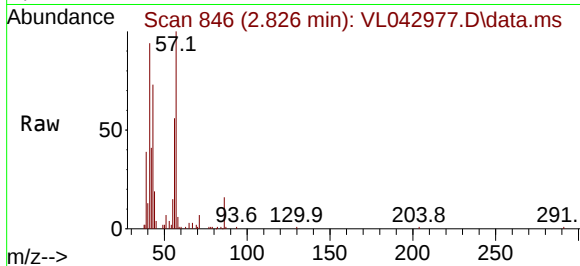




#26
Hexane
Concen: 0.617 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

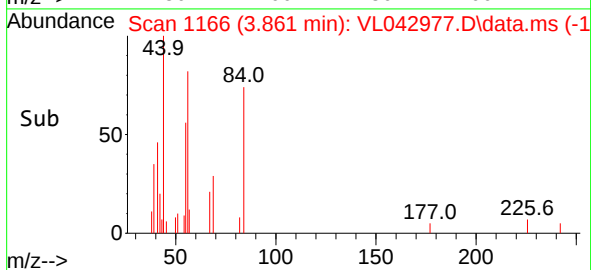
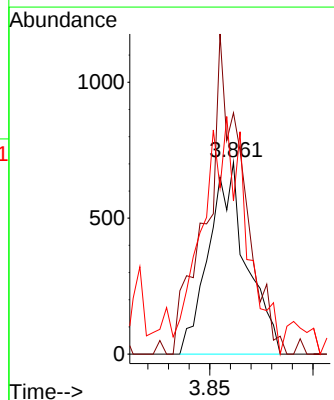
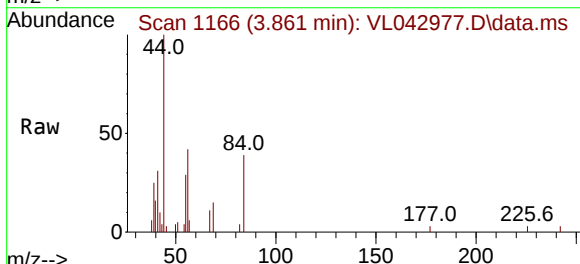
Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

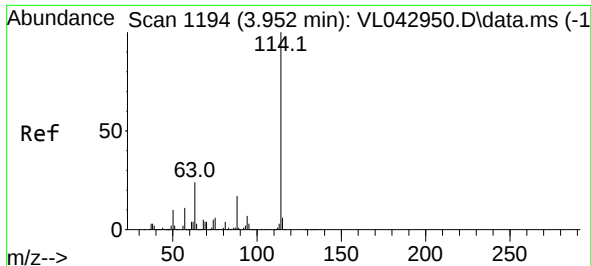
Tgt Ion: 57 Resp: 13368
Ion Ratio Lower Upper
57 100
41 98.2 71.7 107.5
43 79.9 180.8 271.2#
56 56.3 41.4 62.0



#30
Cyclohexane
Concen: 0.049 ppbv
RT: 3.861 min Scan# 1166
Delta R.T. 0.010 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 84 Resp: 895
Ion Ratio Lower Upper
84 100
56 161.2 102.2 153.4#
41 178.3 65.6 98.4#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. 0.006 min

Lab File: VL042977.D

Acq: 23 Sep 2025 02:57

Instrument :

MSVOA_L

ClientSampleId :

141-1A-2DL

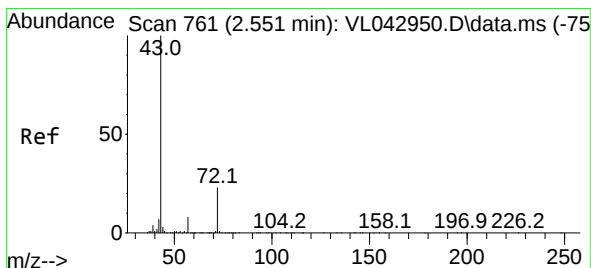
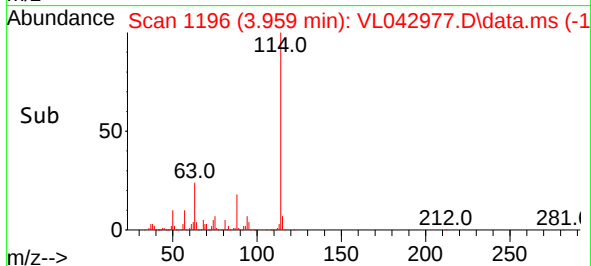
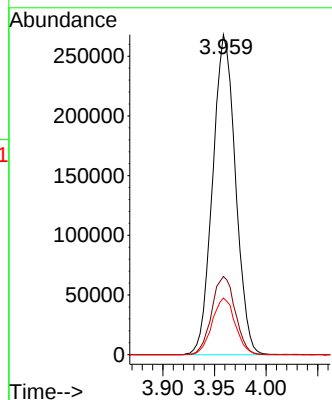
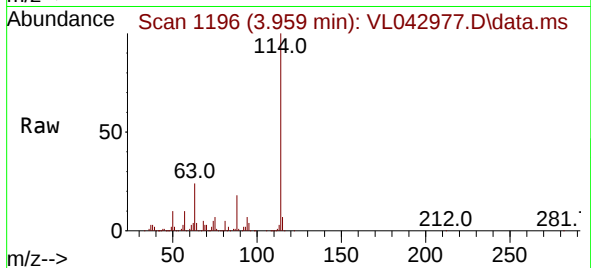
Tgt Ion:114 Resp: 412784

Ion Ratio Lower Upper

114 100

63 25.1 19.4 29.2

88 17.9 14.2 21.2



#34

2-Butanone

Concen: 0.151 ppbv

RT: 2.560 min Scan# 764

Delta R.T. 0.009 min

Lab File: VL042977.D

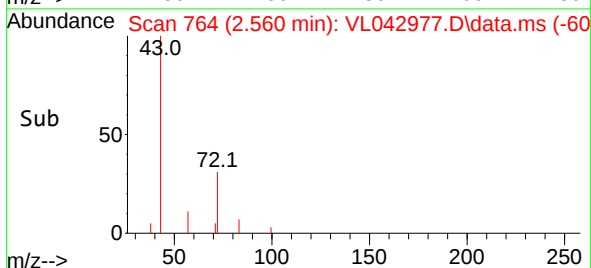
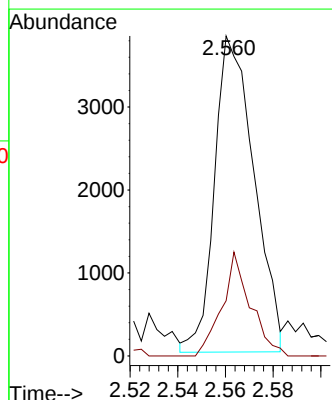
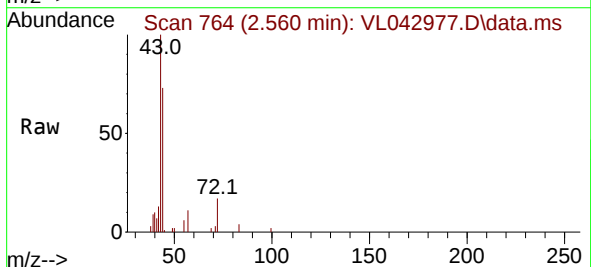
Acq: 23 Sep 2025 02:57

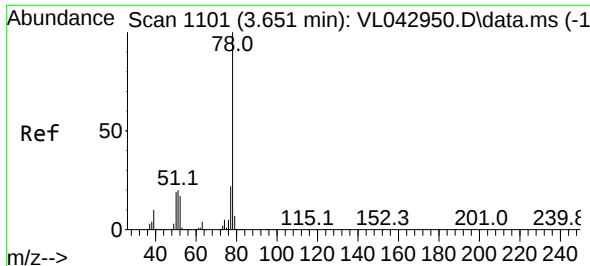
Tgt Ion: 43 Resp: 4380

Ion Ratio Lower Upper

43 100

72 23.7 17.7 26.5

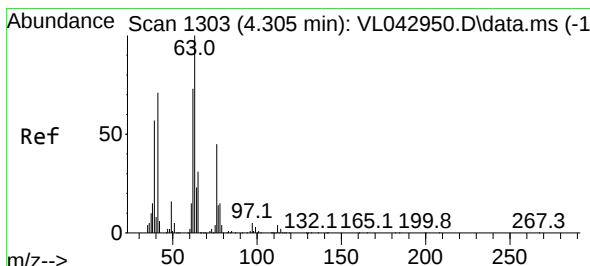
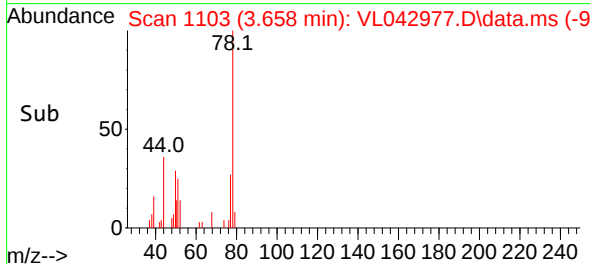
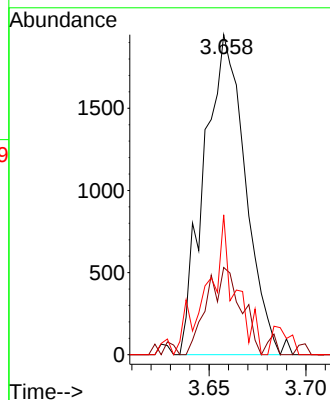
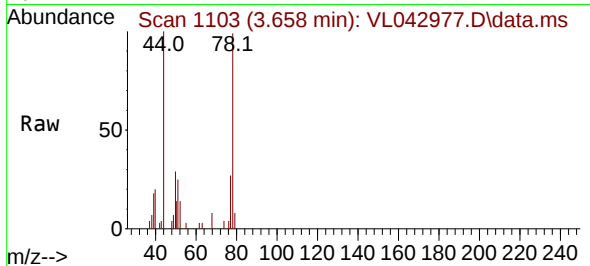




#36
Benzene
Concen: 0.074 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

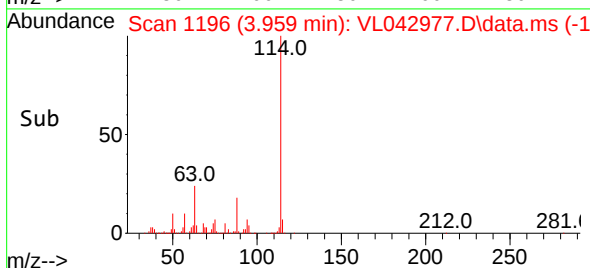
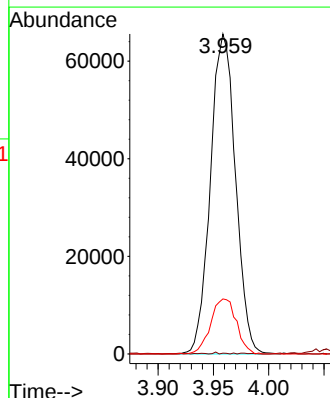
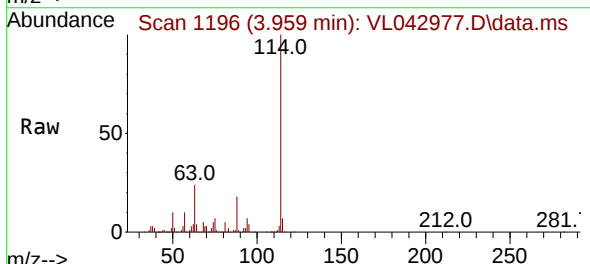
Instrument :
MSVOA_L
ClientSampleId :
141-1A-2DL

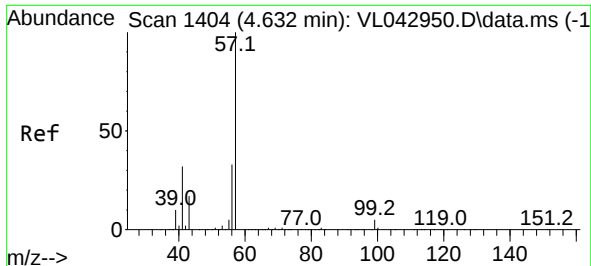
Tgt Ion: 78 Resp: 2873
Ion Ratio Lower Upper
78 100
77 27.3 17.8 26.6#
50 39.6 15.0 22.4#



#39
1,2-Dichloropropane
Concen: 7.323 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.347 min
Lab File: VL042977.D
Acq: 23 Sep 2025 02:57

Tgt Ion: 63 Resp: 103626
Ion Ratio Lower Upper
63 100
41 0.0 57.5 86.3#
62 17.2 58.5 87.7#





#44

2,2,4-Trimethylpentane

Concen: 0.041 ppbv

RT: 4.632 min Scan# 1404

Delta R.T. -0.000 min

Lab File: VL042977.D

Acq: 23 Sep 2025 02:57

Instrument :

MSVOA_1

ClientSampleId :

141-1A-2DL

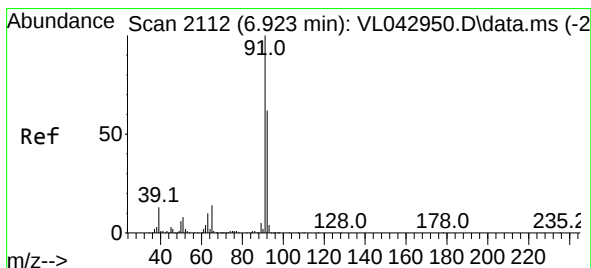
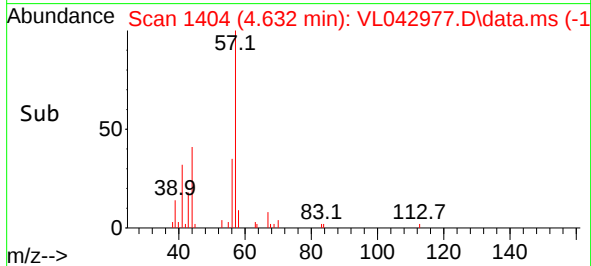
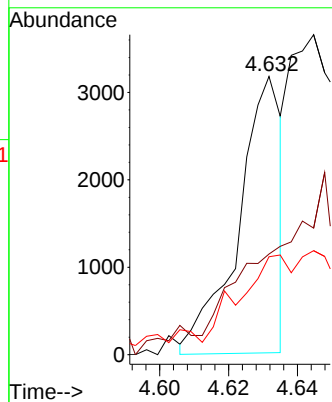
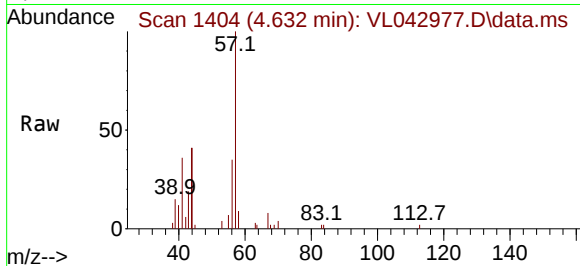
Tgt Ion: 57 Resp: 2757

Ion Ratio Lower Upper

57 100

41 0.0 25.5 38.3#

56 0.0 25.8 38.8#



#53

Toluene

Concen: 0.138 ppbv

RT: 6.936 min Scan# 2116

Delta R.T. 0.013 min

Lab File: VL042977.D

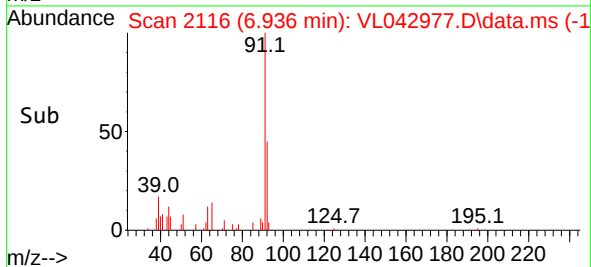
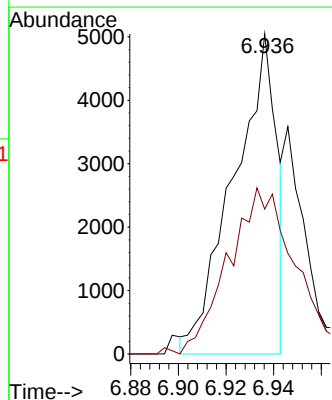
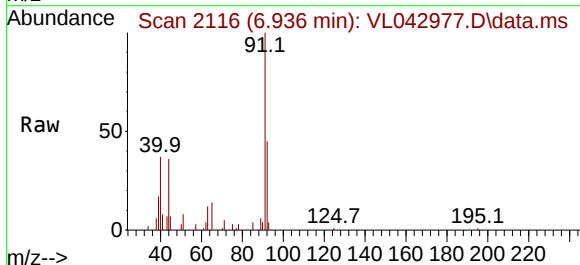
Acq: 23 Sep 2025 02:57

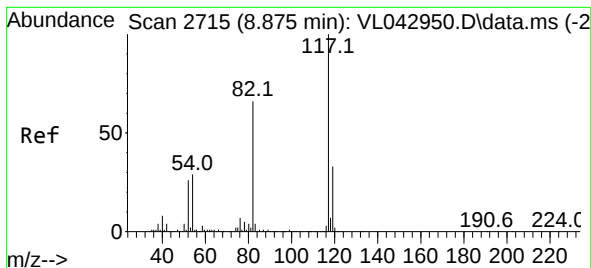
Tgt Ion: 91 Resp: 6333

Ion Ratio Lower Upper

91 100

92 80.4 48.2 72.2#





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.881 min Scan# 21

Delta R.T. 0.006 min

Lab File: VL042977.D

Acq: 23 Sep 2025 02:57

Instrument :

MSVOA_L

ClientSampleId :

141-1A-2DL

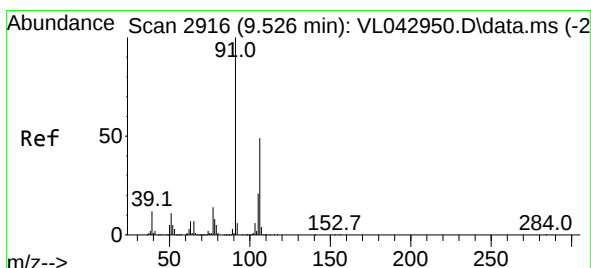
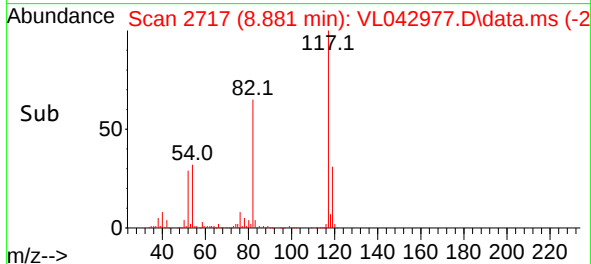
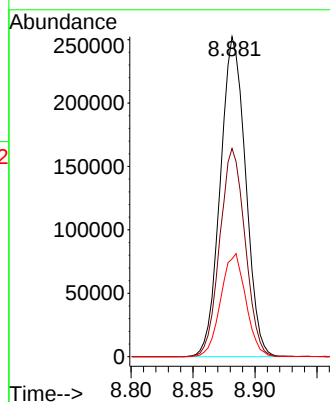
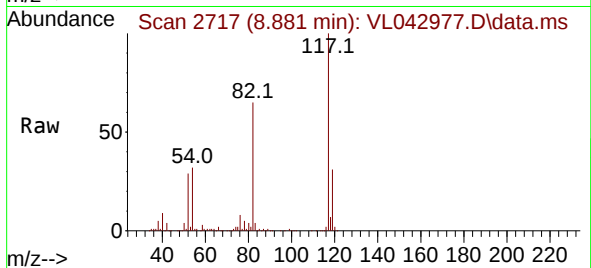
Tgt Ion:117 Resp: 358472

Ion Ratio Lower Upper

117 100

82 65.2 52.8 79.2

119 32.0 26.5 39.7



#59

m/p-Xylene

Concen: 0.079 ppbv

RT: 9.532 min Scan# 2918

Delta R.T. 0.006 min

Lab File: VL042977.D

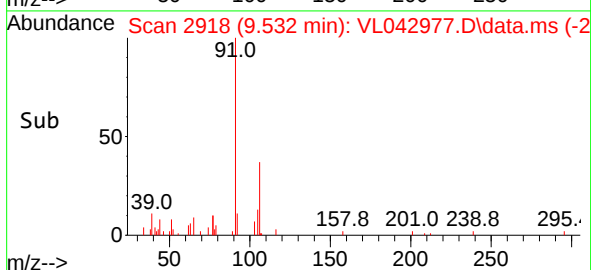
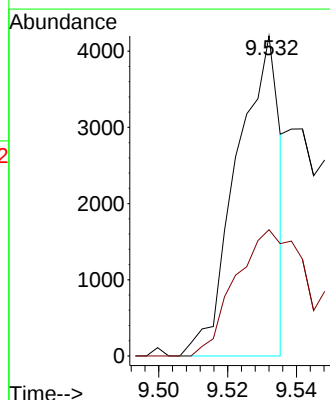
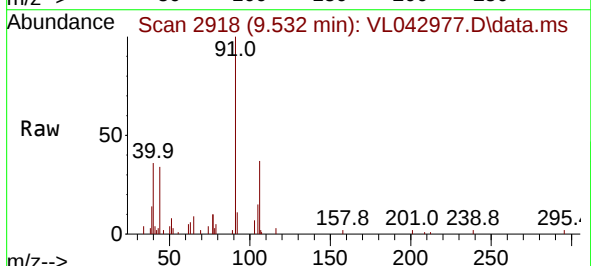
Acq: 23 Sep 2025 02:57

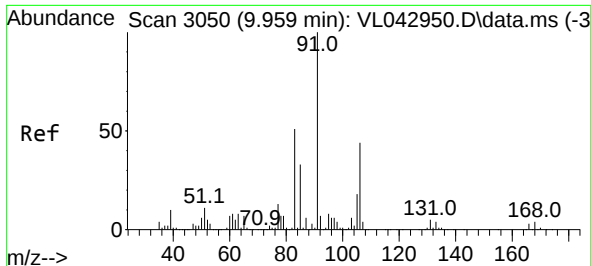
Tgt Ion: 91 Resp: 3656

Ion Ratio Lower Upper

91 100

106 86.2 0.0 0.0#





#60

o-Xylene

Concen: 0.054 ppbv

RT: 9.963 min Scan# 3050

Delta R.T. 0.003 min

Lab File: VL042977.D

Acq: 23 Sep 2025 02:57

Instrument :

MSVOA_L

ClientSampleId :

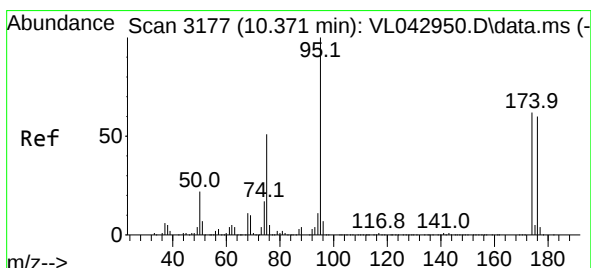
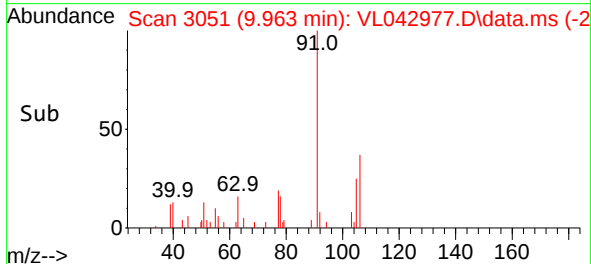
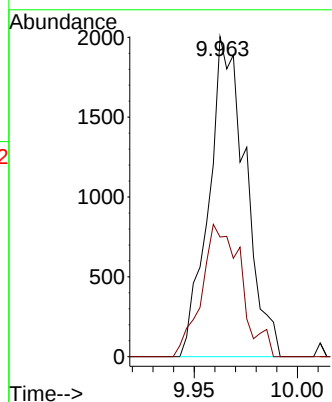
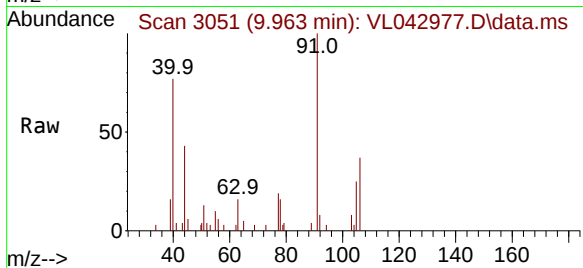
141-1A-2DL

Tgt Ion: 91 Resp: 2489

Ion Ratio Lower Upper

91 100

106 44.3 22.4 67.0



#68

1-Bromo-4-Fluorobenzene

Concen: 10.195 ppbv

RT: 10.377 min Scan# 3179

Delta R.T. 0.006 min

Lab File: VL042977.D

Acq: 23 Sep 2025 02:57

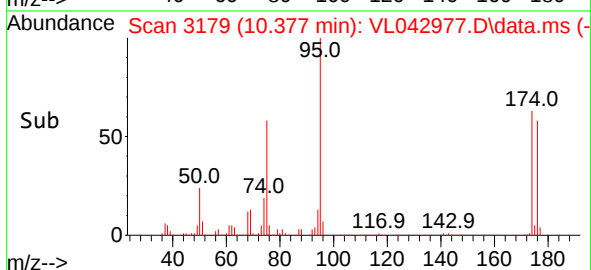
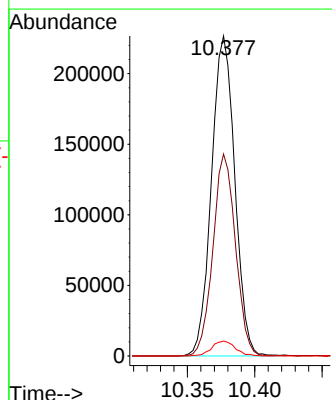
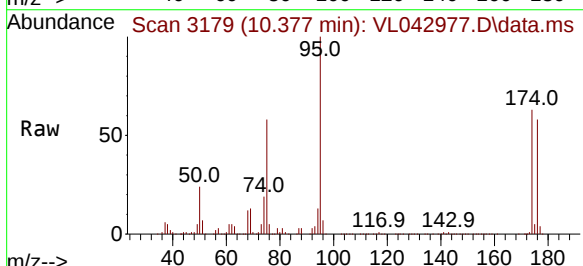
Tgt Ion: 95 Resp: 272808

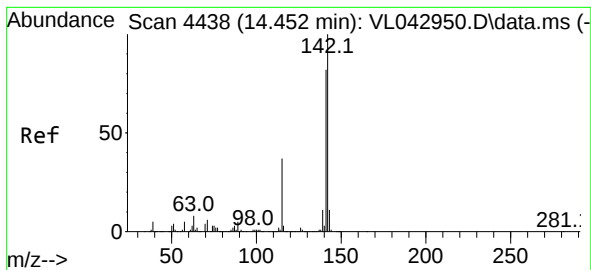
Ion Ratio Lower Upper

95 100

174 61.4 51.4 77.2

175 4.7 4.0 6.0





#80

Naphthalene, 2-methyl-

Concen: 0.101 ppbv

RT: 14.461 min Scan# 44

Delta R.T. 0.009 min

Lab File: VL042977.D

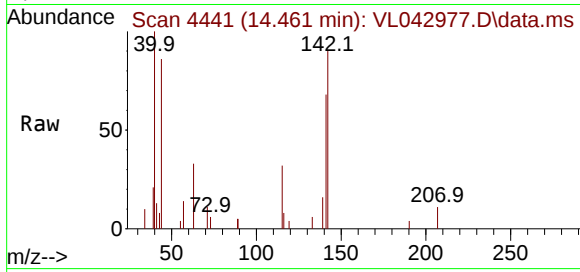
Acq: 23 Sep 2025 02:57

Instrument :

MSVOA_L

ClientSampleId :

141-1A-2DL



Tgt Ion: 142 Resp: 1430

Ion Ratio Lower Upper

142 100

141 80.5 65.1 97.7

115 39.0 28.9 43.3

