

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL062725\
 Data File : VL042676.D
 Acq On : 27 Jun 2025 12:57
 Operator : SY/MD
 Sample : Q2432-01DL 100X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

Quant Time: Jun 27 23:04:06 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri May 30 02:01:56 2025
 Response via : Initial Calibration

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

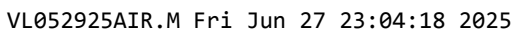
Internal Standards						
1) Bromochloromethane	2.780	49	110587	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.949	114	292442	10.000	ppbv	-0.01
55) Chlorobenzene-d5	8.872	117	252771	10.000	ppbv	-0.02

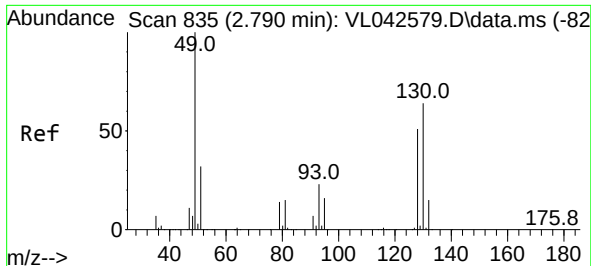
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	195816	10.334	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.300%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.495	85	446	0.033	ppbv	99
3) Chlorodifluoromethane	1.473	51	1460	0.078	ppbv #	91
4) Chloromethane	1.528	50	361	0.067	ppbv #	87
8) Dichlorotetrafluoroethane	1.495	85	446	0.039	ppbv #	19
9) Propene	1.483	41	659	0.087	ppbv #	45
11) Trichlorofluoromethane	1.874	101	382	0.030	ppbv	92
12) 1,1,2-Trichlorotrifluo...	1.874	101	382	0.038	ppbv #	15
13) Ethanol	1.431	45	172711	192.248	ppbv #	25
15) Acetone	1.832	43	9339	0.701	ppbv	99
16) 1,3-Butadiene	1.599	39	590	0.094	ppbv #	37
17) tert-Butyl alcohol	2.042	59	837	0.060	ppbv	100
19) Isopropyl Alcohol	1.431	45	172711	21.689	ppbv #	38
20) Methylene Chloride	2.059	84	13086	2.977	ppbv	96
25) Ethyl Acetate	2.822	43	16103	0.442	ppbv #	76
26) Hexane	2.822	57	21578	1.303	ppbv #	41
29) Chloroform	2.842	83	1197	0.056	ppbv	100
34) 2-Butanone	2.557	43	4064	0.195	ppbv	92
36) Benzene	3.645	78	1113	0.039	ppbv #	73
39) 1,2-Dichloropropane	3.949	63	72446	6.803	ppbv #	24
41) Tetrahydrofuran	2.822	42	9973	0.817	ppbv #	51
52) Tetrachloroethene	8.215	164	46894	4.358	ppbv	90
53) Toluene	6.920	91	1594	0.048	ppbv #	59

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

Quant Time: Jun 27 23:04:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri May 30 02:01:56 2025
Response via : Initial Calibration

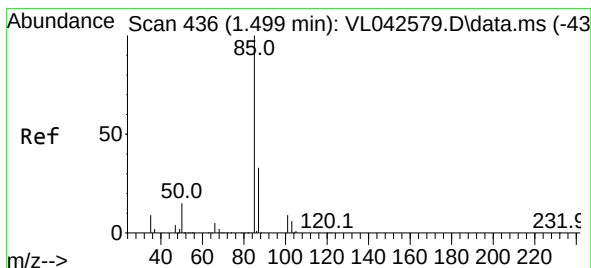
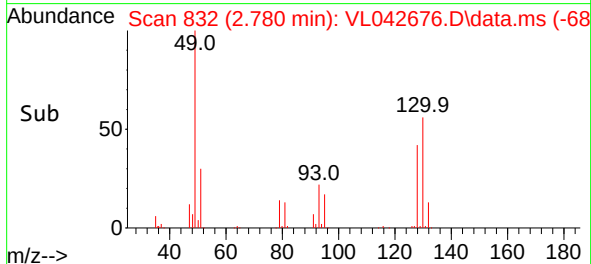
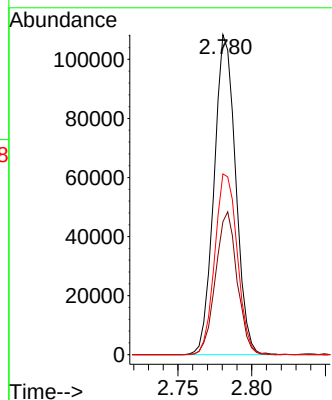
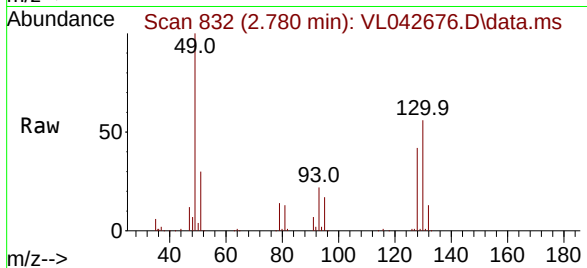




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 81
Delta R.T. -0.010 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

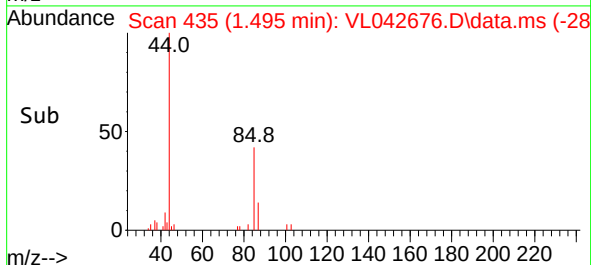
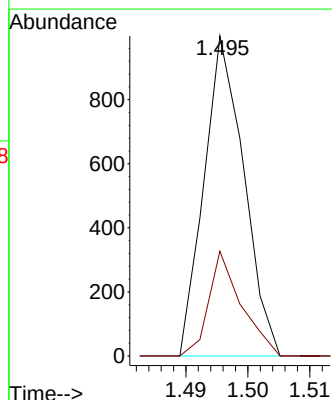
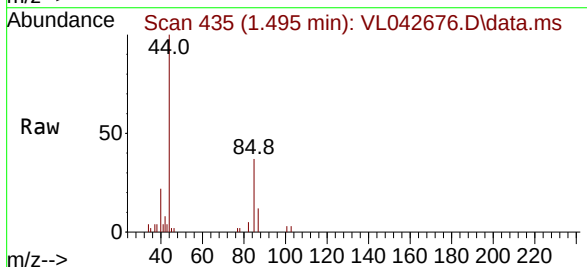
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

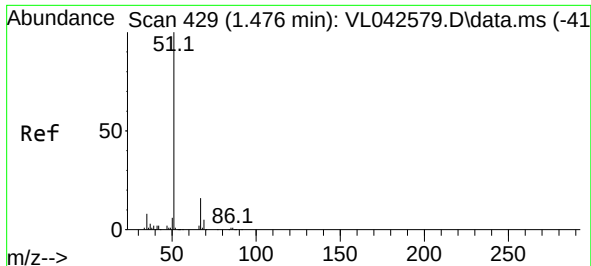
Tgt Ion: 49 Resp: 110587
Ion Ratio Lower Upper
49 100
128 44.6 24.2 72.6
130 58.7 30.4 91.2



#2
Dichlorodifluoromethane
Concen: 0.033 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

Tgt Ion: 85 Resp: 446
Ion Ratio Lower Upper
85 100
87 32.7 26.6 39.8

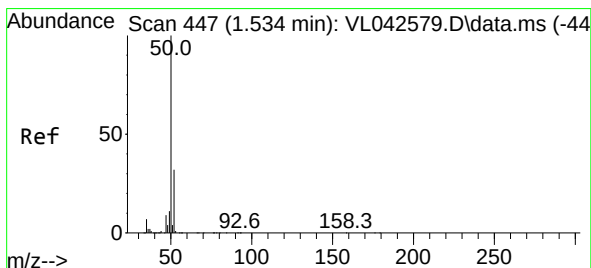
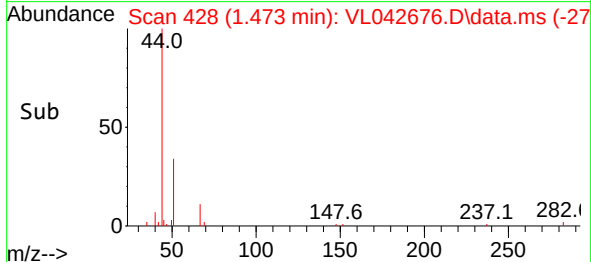
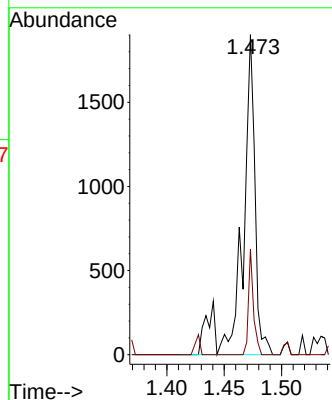
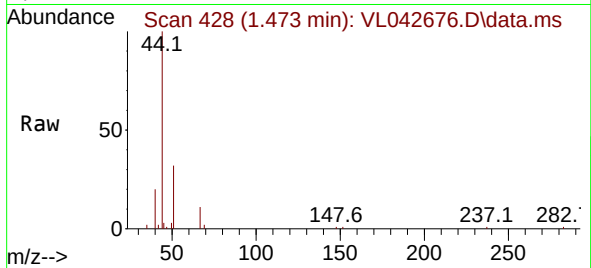




#3
Chlorodifluoromethane
Concen: 0.078 ppbv
RT: 1.473 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

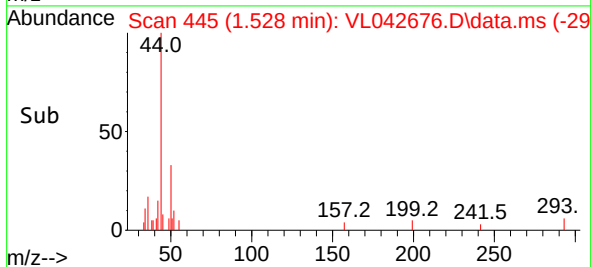
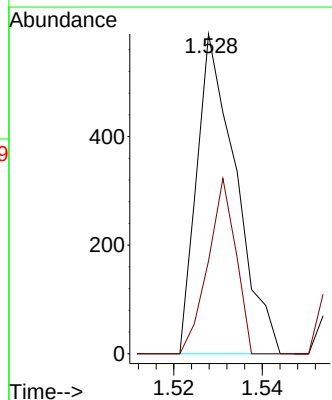
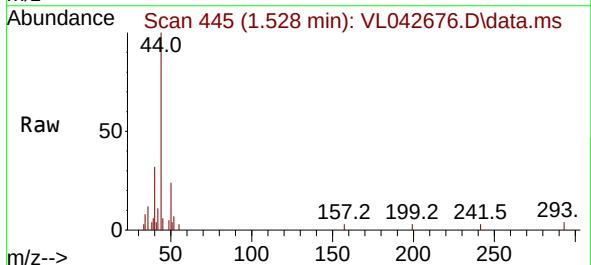
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

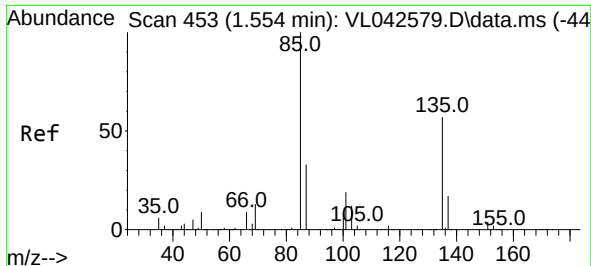
Tgt Ion: 51 Resp: 1460
Ion Ratio Lower Upper
51 100
67 13.0 13.4 20.2#



#4
Chloromethane
Concen: 0.067 ppbv
RT: 1.528 min Scan# 445
Delta R.T. -0.007 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

Tgt Ion: 50 Resp: 361
Ion Ratio Lower Upper
50 100
52 24.7 25.8 38.6#

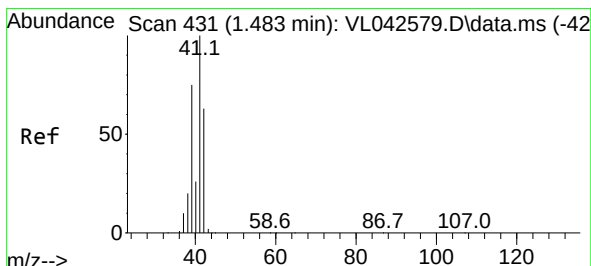
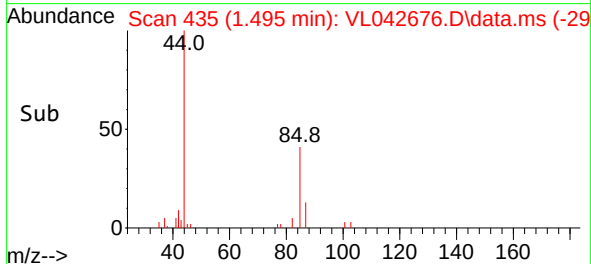
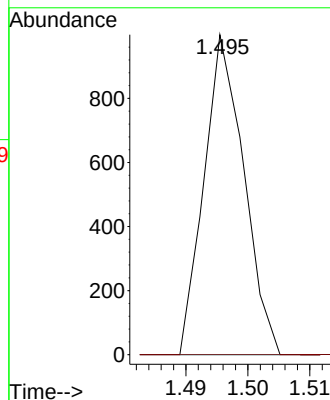
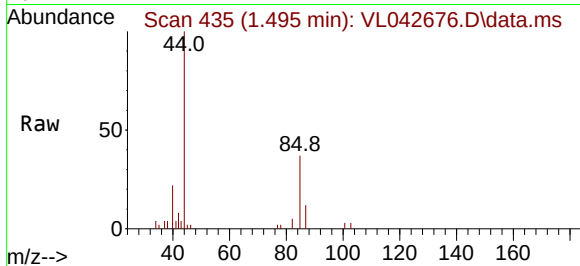




#8
 Dichlorotetrafluoroethane
 Concen: 0.039 ppbv
 RT: 1.495 min Scan# 41
 Delta R.T. -0.058 min
 Lab File: VL042676.D
 Acq: 27 Jun 2025 12:57

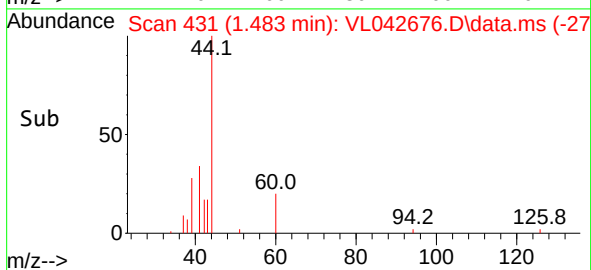
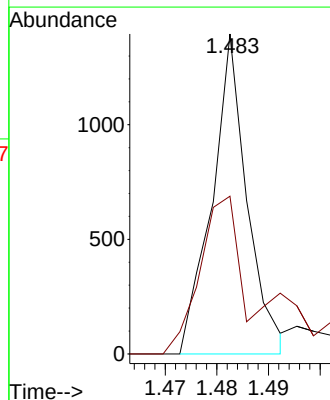
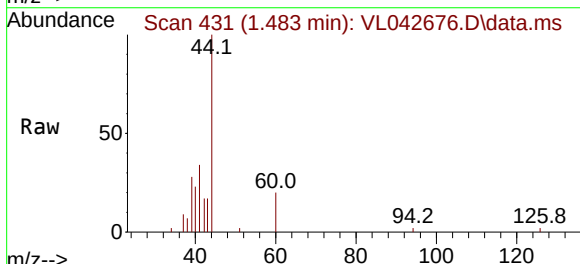
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

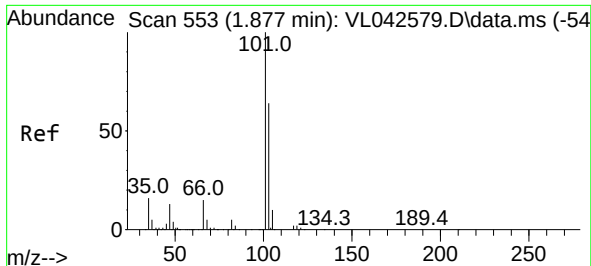
Tgt Ion: 85 Resp: 446
 Ion Ratio Lower Upper
 85 100
 135 0.0 50.2 75.4#



#9
 Propene
 Concen: 0.087 ppbv
 RT: 1.483 min Scan# 431
 Delta R.T. -0.000 min
 Lab File: VL042676.D
 Acq: 27 Jun 2025 12:57

Tgt Ion: 41 Resp: 659
 Ion Ratio Lower Upper
 41 100
 42 110.2 53.3 79.9#

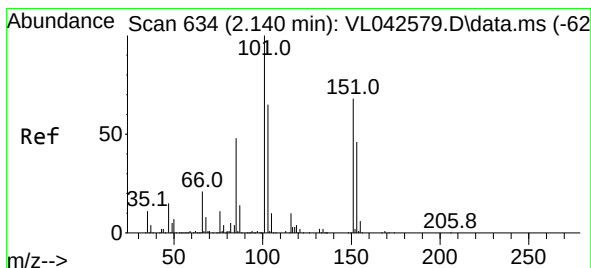
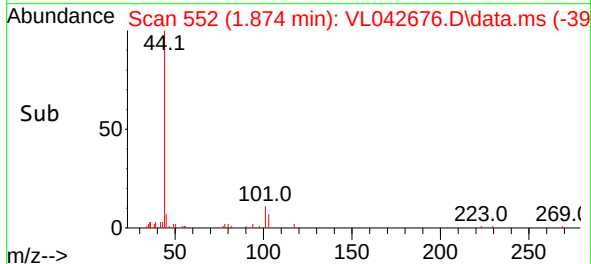
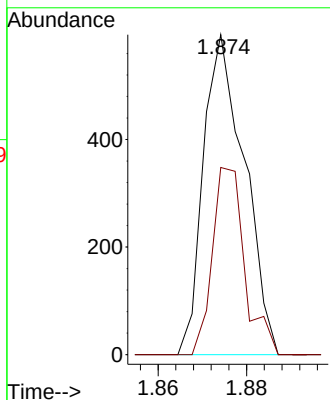
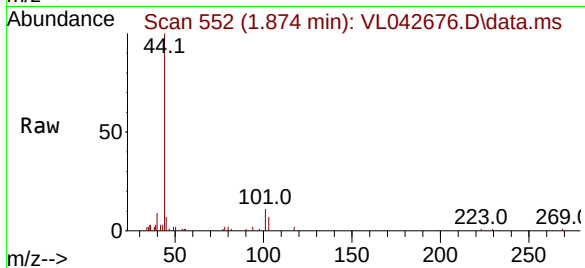




#11
 Trichlorofluoromethane
 Concen: 0.030 ppbv
 RT: 1.874 min Scan# 511
 Delta R.T. -0.003 min
 Lab File: VL042676.D
 Acq: 27 Jun 2025 12:57

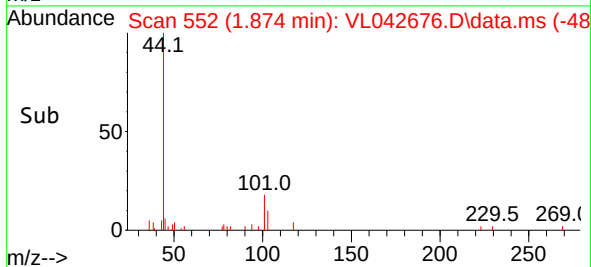
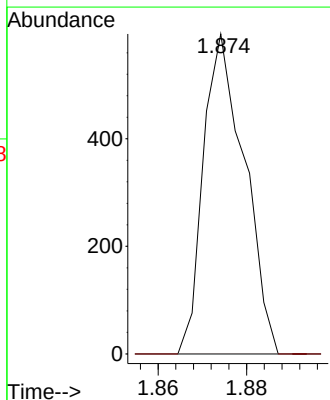
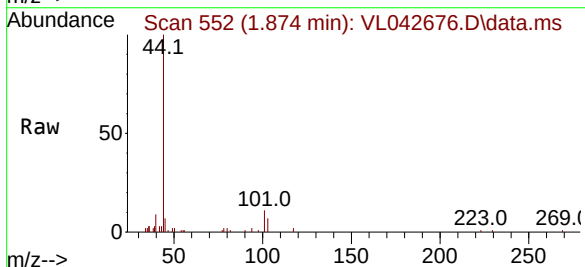
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

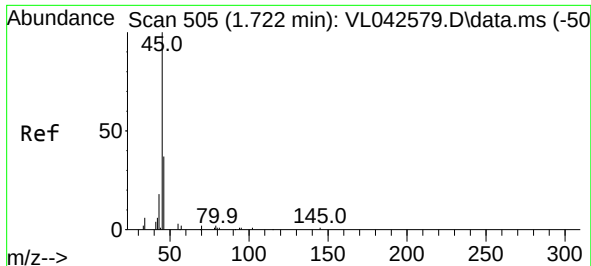
Tgt Ion:101 Resp: 382
 Ion Ratio Lower Upper
 101 100
 103 58.5 51.5 77.3



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.038 ppbv
 RT: 1.874 min Scan# 552
 Delta R.T. -0.266 min
 Lab File: VL042676.D
 Acq: 27 Jun 2025 12:57

Tgt Ion:101 Resp: 382
 Ion Ratio Lower Upper
 101 100
 151 0.0 55.3 82.9#

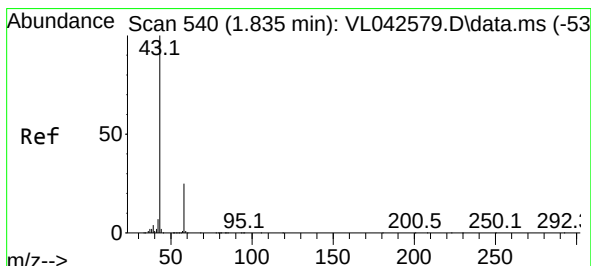
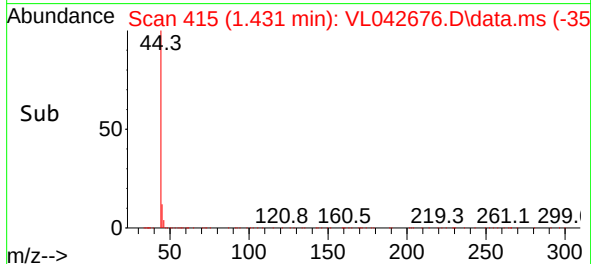
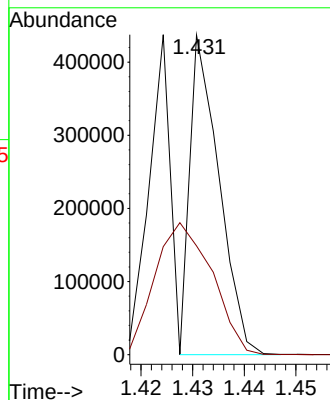
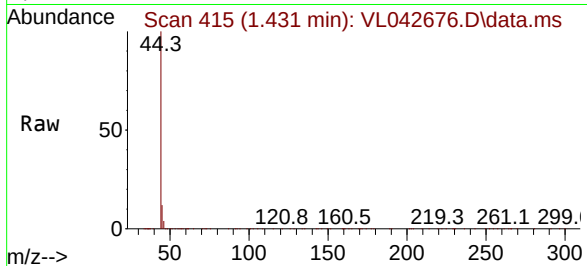




#13
Ethanol
Concen: 192.248 ppbv
RT: 1.431 min Scan# 415
Delta R.T. -0.291 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

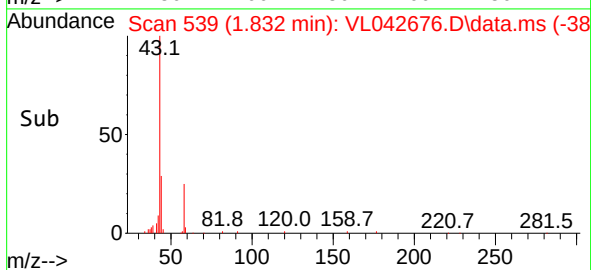
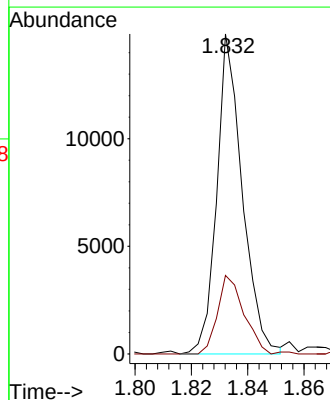
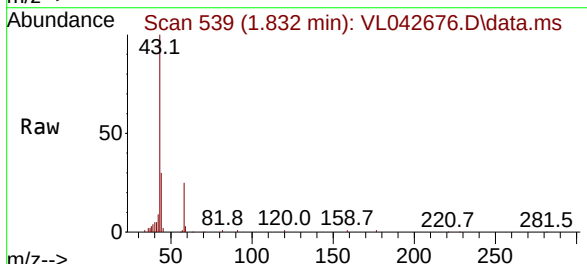
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

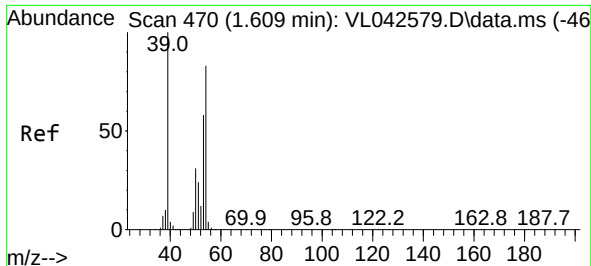
Tgt Ion: 45 Resp: 172711
Ion Ratio Lower Upper
45 100
46 80.6 14.5 58.1#



#15
Acetone
Concen: 0.701 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.003 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

Tgt Ion: 43 Resp: 9339
Ion Ratio Lower Upper
43 100
58 25.6 21.0 31.4





#16

1,3-Butadiene

Concen: 0.094 ppbv

RT: 1.599 min Scan# 467

Delta R.T. -0.010 min

Lab File: VL042676.D

Acq: 27 Jun 2025 12:57

Instrument :

MSVOA_L

ClientSampleId :

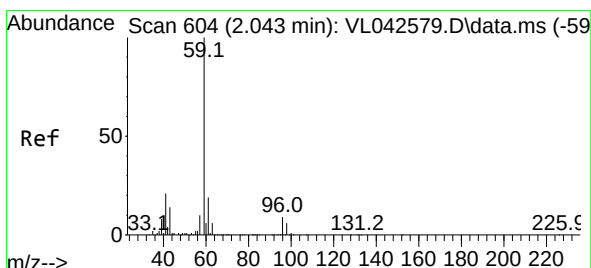
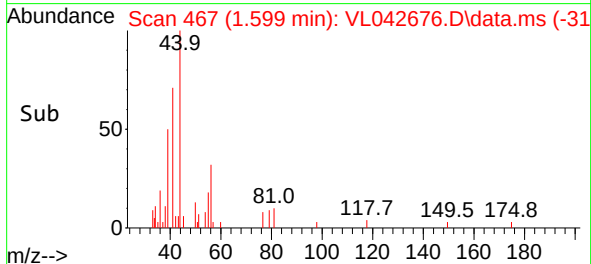
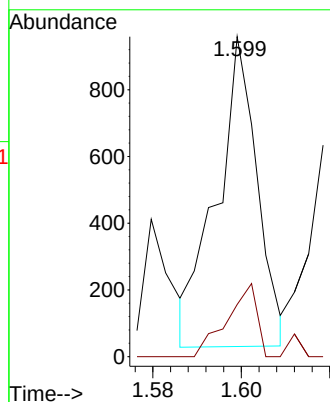
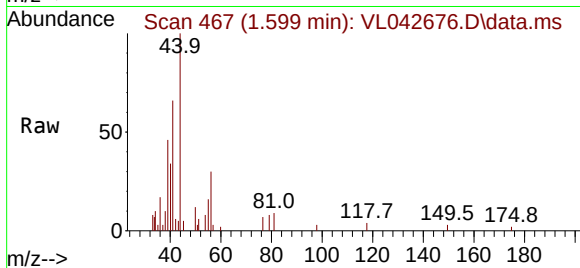
SV1DL

Tgt Ion: 39 Resp: 590

Ion Ratio Lower Upper

39 100

54 19.7 57.9 86.9#



#17

tert-Butyl alcohol

Concen: 0.060 ppbv

RT: 2.042 min Scan# 604

Delta R.T. -0.000 min

Lab File: VL042676.D

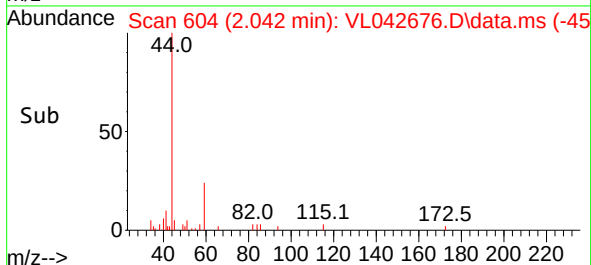
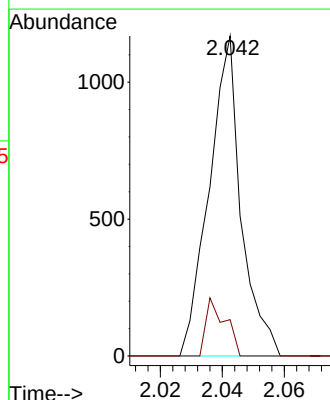
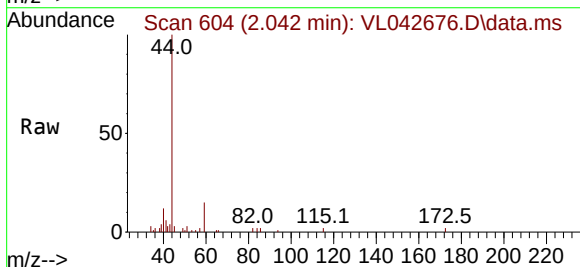
Acq: 27 Jun 2025 12:57

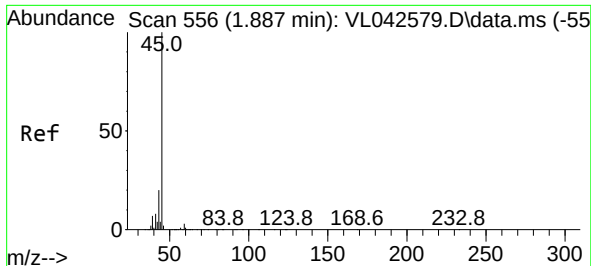
Tgt Ion: 59 Resp: 837

Ion Ratio Lower Upper

59 100

57 10.9 8.6 12.8

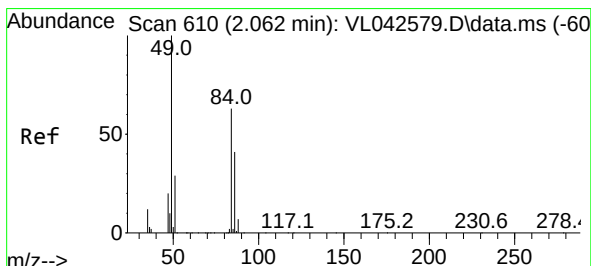
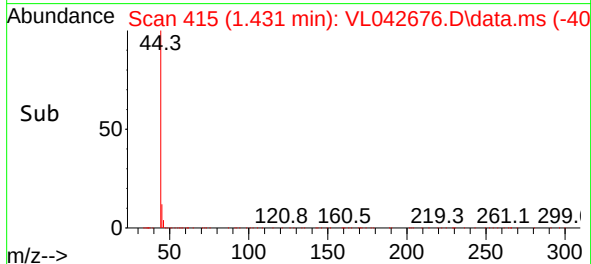
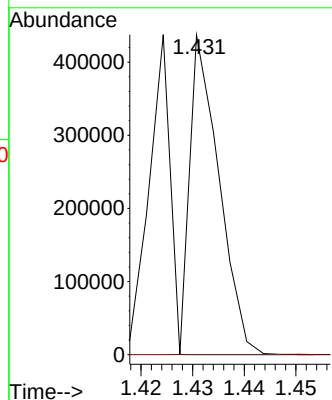
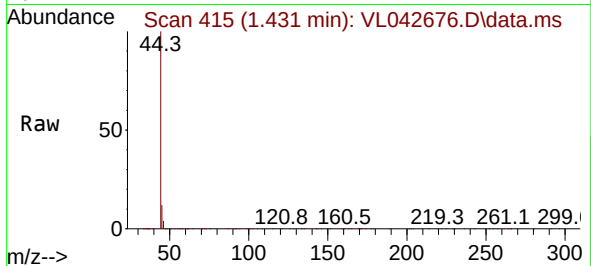




#19
Isopropyl Alcohol
Concen: 21.689 ppbv
RT: 1.431 min Scan# 415
Delta R.T. -0.456 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

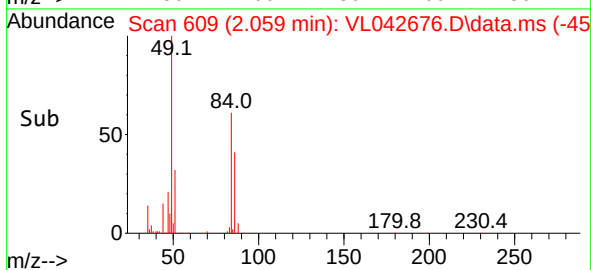
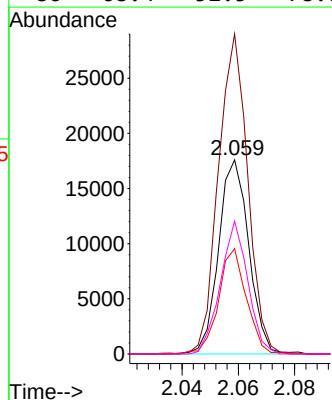
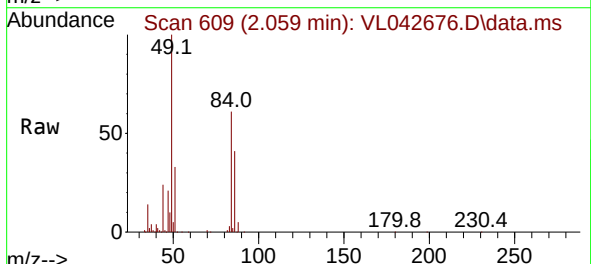
Instrument :
MSVOA_L
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SV1DL

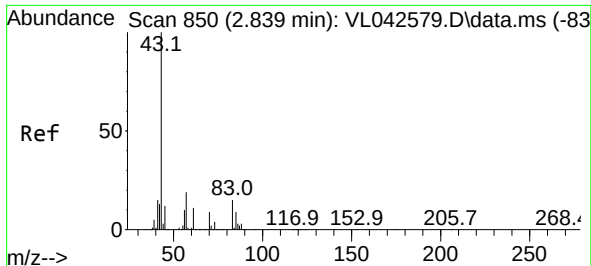
Tgt Ion: 45 Resp: 172711
Ion Ratio Lower Upper
45 100
58 0.1 29.4 44.2#



#20
Methylene Chloride
Concen: 2.977 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

Tgt Ion: 84 Resp: 13086
Ion Ratio Lower Upper
84 100
49 164.4 128.8 193.2
51 54.2 38.6 57.8
86 68.4 52.5 78.7

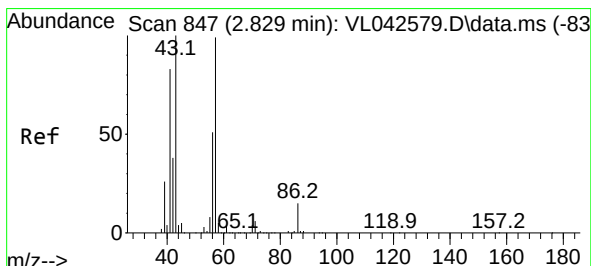
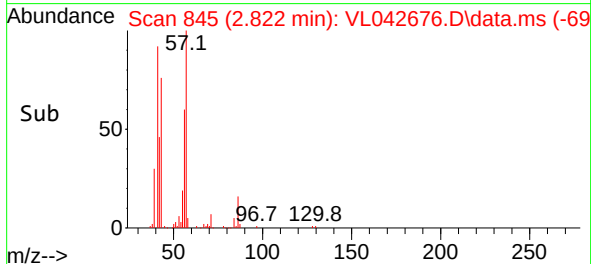
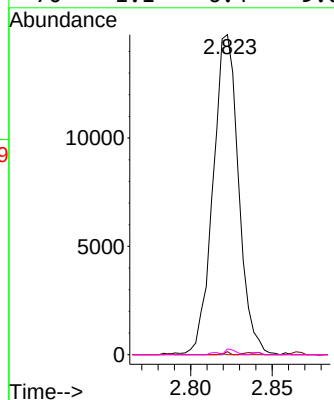
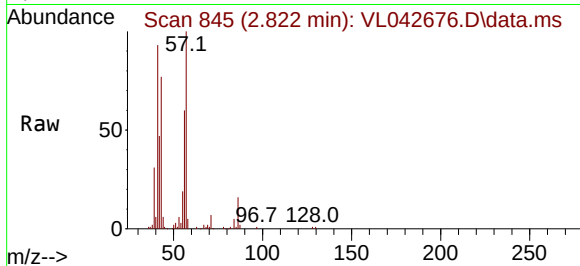




#25
Ethyl Acetate
Concen: 0.442 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.016 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

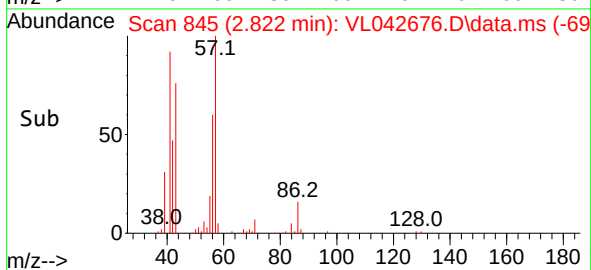
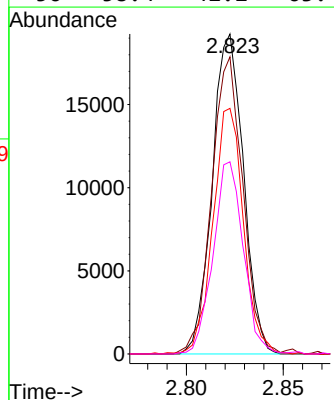
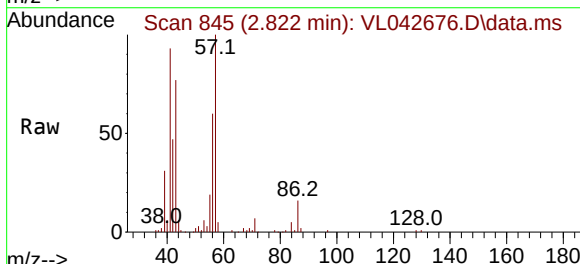
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

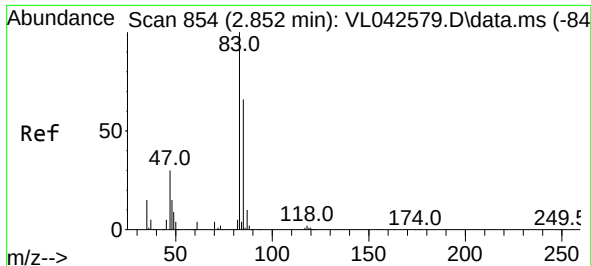
Tgt Ion: 43	Resp: 16103
Ion Ratio	Lower Upper
43 100	
45 0.6	8.2 12.2#
61 0.0	7.1 10.7#
70 1.1	6.4 9.6#



#26
Hexane
Concen: 1.303 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.007 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

Tgt Ion: 57	Resp: 21578
Ion Ratio	Lower Upper
57 100	
41 93.3	70.6 106.0
43 74.9	181.1 271.7#
56 58.4	42.2 63.4





#29

Chloroform

Concen: 0.056 ppbv

RT: 2.842 min Scan# 81

Delta R.T. -0.010 min

Lab File: VL042676.D

Acq: 27 Jun 2025 12:57

Instrument :

MSVOA_L

ClientSampleId :

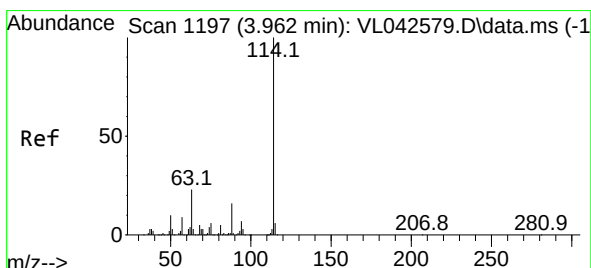
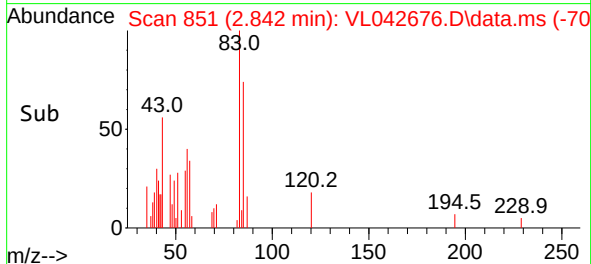
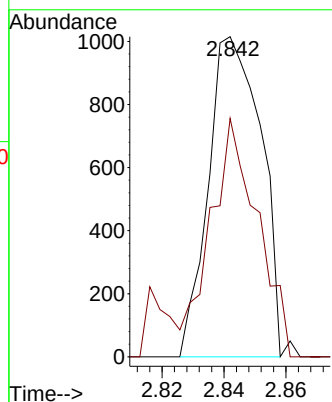
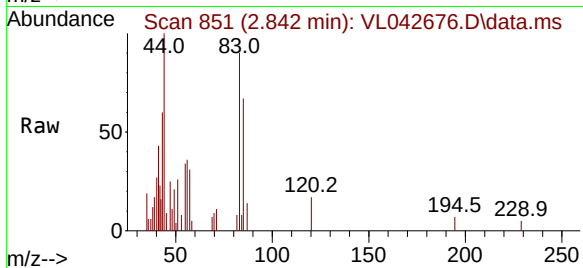
SV1DL

Tgt Ion: 83 Resp: 1197

Ion Ratio Lower Upper

83 100

85 66.1 52.8 79.2



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.949 min Scan# 1193

Delta R.T. -0.013 min

Lab File: VL042676.D

Acq: 27 Jun 2025 12:57

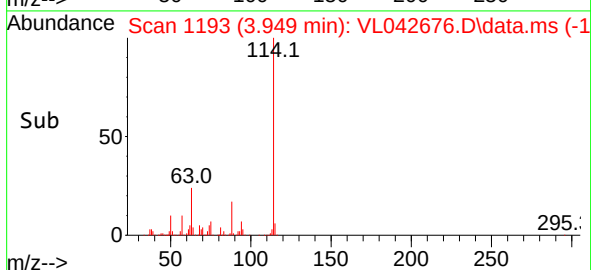
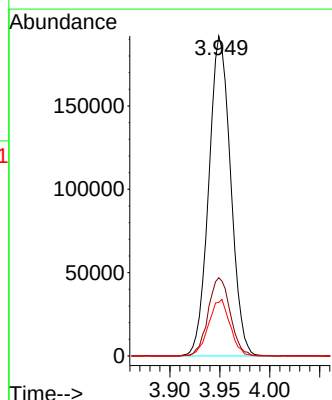
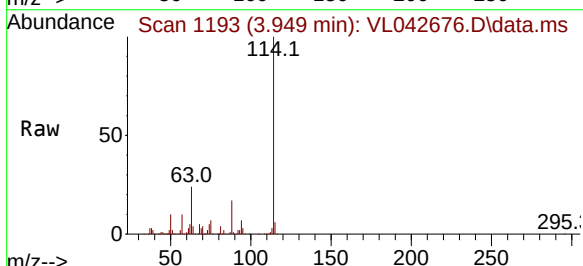
Tgt Ion:114 Resp: 292442

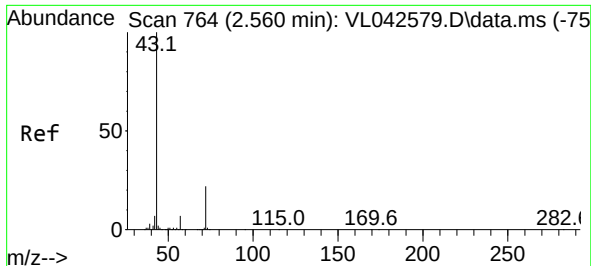
Ion Ratio Lower Upper

114 100

63 24.8 19.0 28.6

88 17.4 13.6 20.4

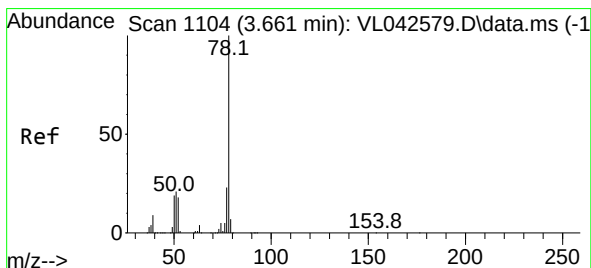
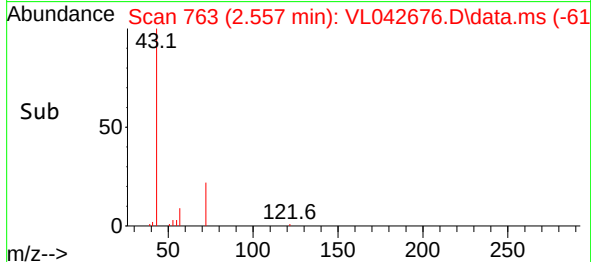
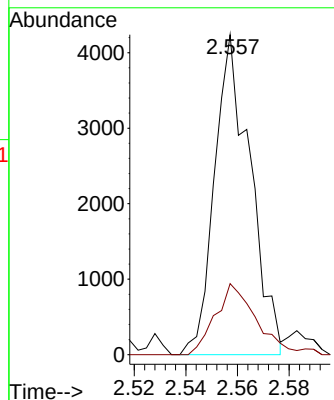
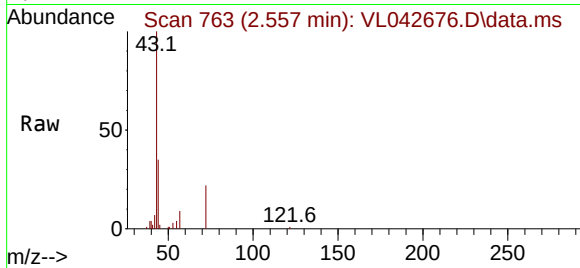




#34
2-Butanone
Concen: 0.195 ppbv
RT: 2.557 min Scan# 763
Delta R.T. -0.003 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

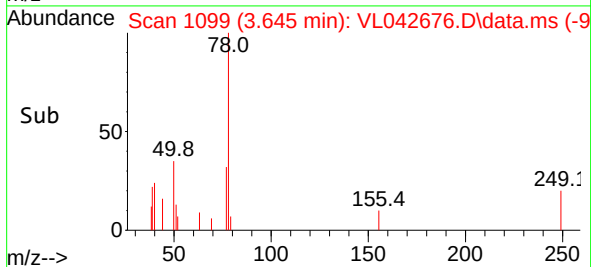
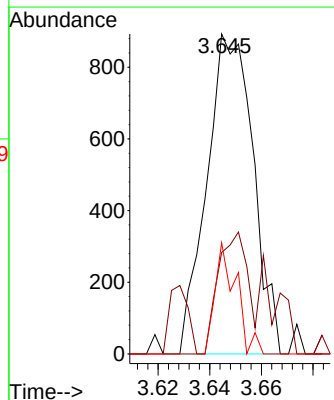
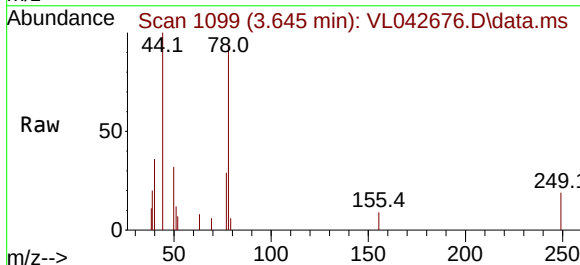
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

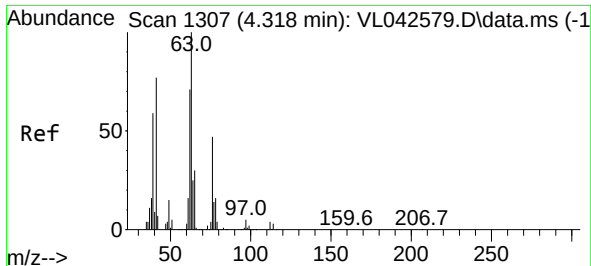
Tgt Ion: 43 Resp: 4064
Ion Ratio Lower Upper
43 100
72 25.8 17.7 26.5



#36
Benzene
Concen: 0.039 ppbv
RT: 3.645 min Scan# 1099
Delta R.T. -0.016 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

Tgt Ion: 78 Resp: 1113
Ion Ratio Lower Upper
78 100
77 12.7 18.2 27.2#
50 34.7 15.2 22.8#





#39

1,2-Dichloropropane

Concen: 6.803 ppbv

RT: 3.949 min Scan# 1193

Delta R.T. -0.369 min

Lab File: VL042676.D

Acq: 27 Jun 2025 12:57

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

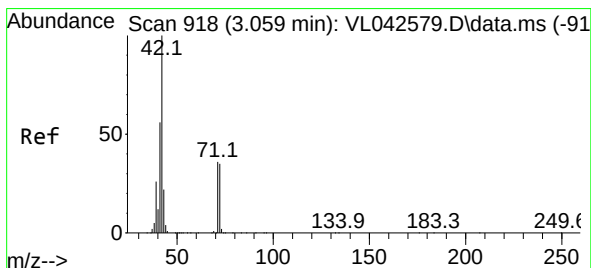
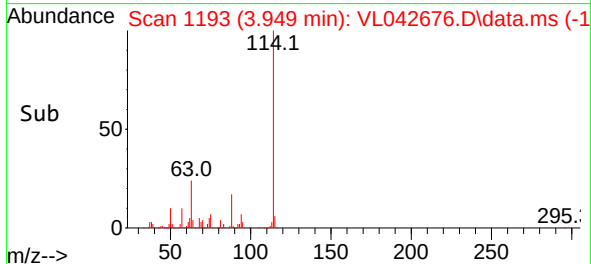
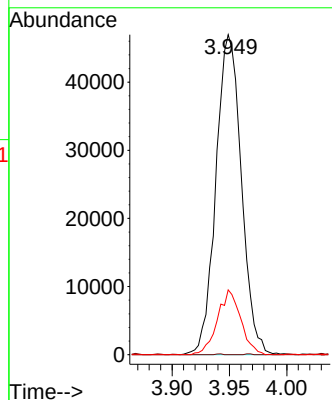
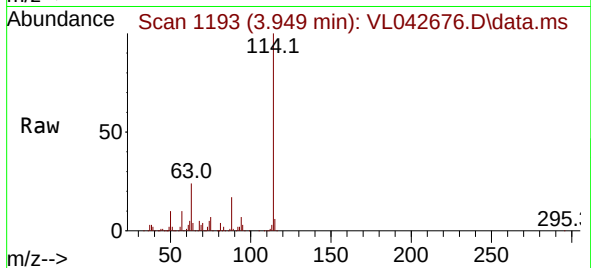
Tgt Ion: 63 Resp: 72446

Ion Ratio Lower Upper

63 100

41 0.0 61.8 92.6#

62 20.3 56.6 85.0#



#41

Tetrahydrofuran

Concen: 0.817 ppbv

RT: 2.822 min Scan# 845

Delta R.T. -0.236 min

Lab File: VL042676.D

Acq: 27 Jun 2025 12:57

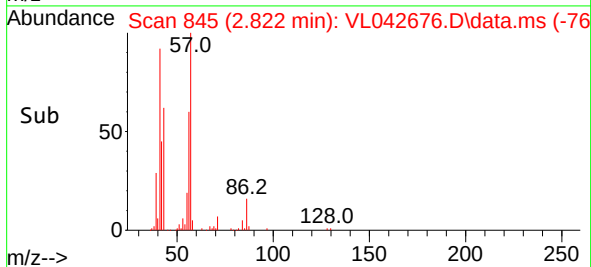
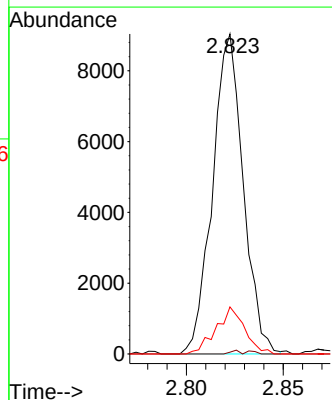
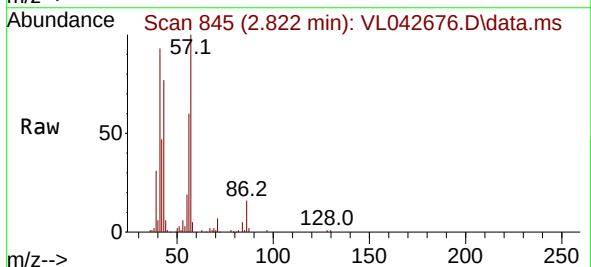
Tgt Ion: 42 Resp: 9973

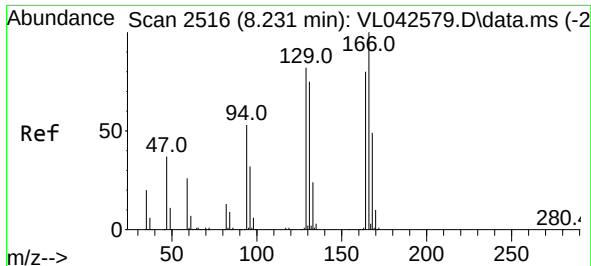
Ion Ratio Lower Upper

42 100

72 0.6 28.9 43.3#

71 13.6 28.5 42.7#

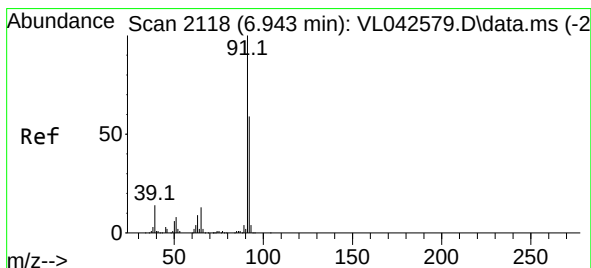
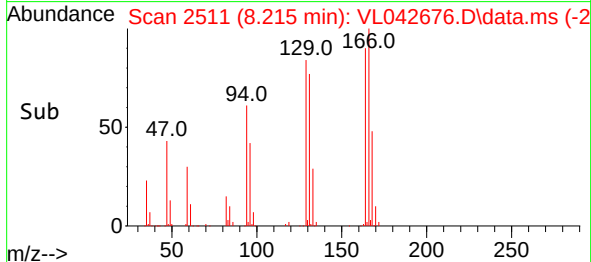
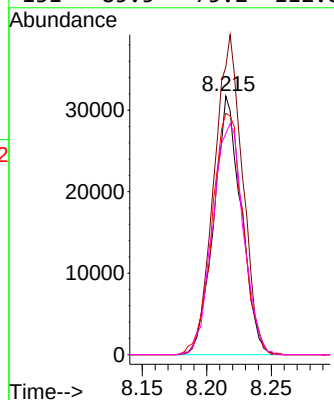
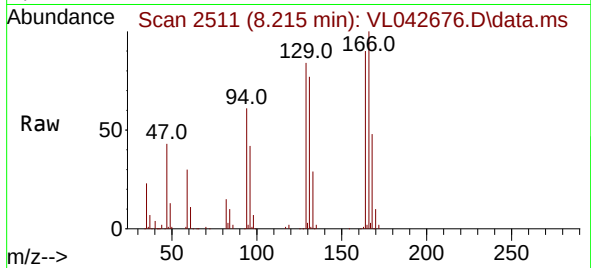




#52
Tetrachloroethene
Concen: 4.358 ppbv
RT: 8.215 min Scan# 2111
Delta R.T. -0.016 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

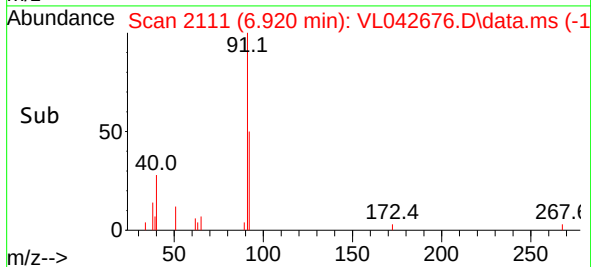
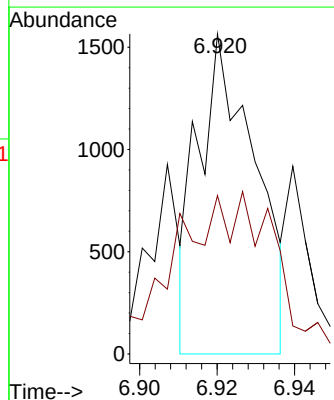
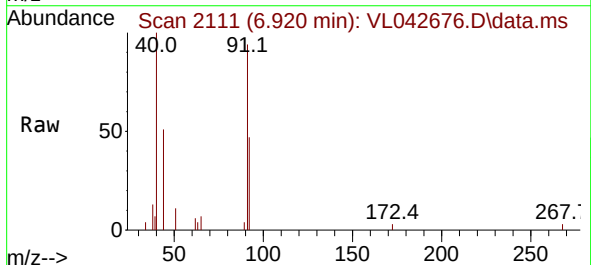
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

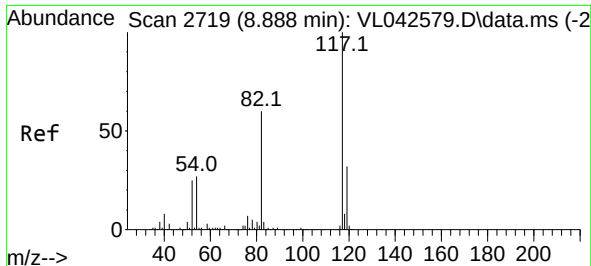
Tgt Ion:164 Resp: 46894
Ion Ratio Lower Upper
164 100
166 111.1 100.0 150.0
129 93.1 82.2 123.4
131 85.5 75.2 112.8



#53
Toluene
Concen: 0.048 ppbv
RT: 6.920 min Scan# 2111
Delta R.T. -0.023 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

Tgt Ion: 91 Resp: 1594
Ion Ratio Lower Upper
91 100
92 91.0 48.2 72.4#

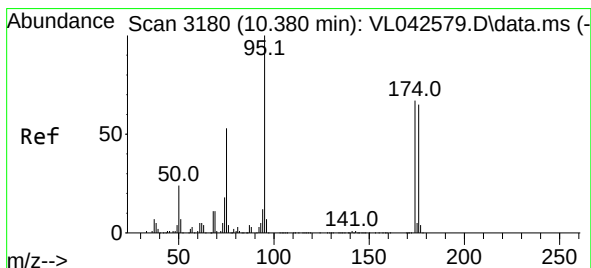
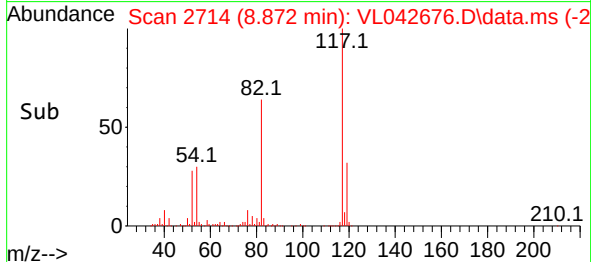
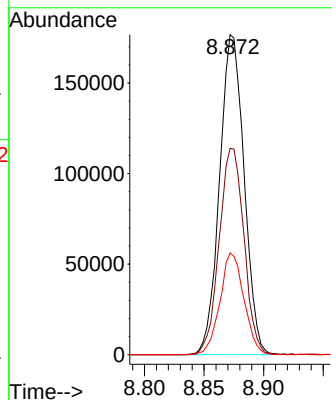
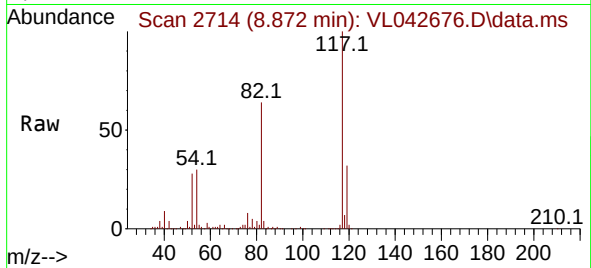




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.872 min Scan# 21
Delta R.T. -0.016 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

Instrument :
MSVOA_L
ClientSampleId :
SV1DL

Tgt Ion:117 Resp: 252771
Ion Ratio Lower Upper
117 100
82 65.1 51.2 76.8
119 31.0 26.3 39.5



#68
1-Bromo-4-Fluorobenzene
Concen: 10.334 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.010 min
Lab File: VL042676.D
Acq: 27 Jun 2025 12:57

Tgt Ion: 95 Resp: 195816
Ion Ratio Lower Upper
95 100
174 62.9 53.1 79.7
175 4.5 4.2 6.2

