

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040725\
 Data File : VL042234.D
 Acq On : 07 Apr 2025 14:18
 Operator : SY/MD
 Sample : Q1725-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSSG-B1-2-04012025

Quant Time: Apr 08 01:32:03 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Mar 28 02:00:52 2025
 Response via : Initial Calibration

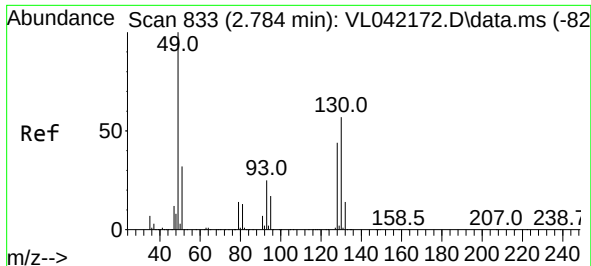
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.803	49	198158	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.981	114	527291	10.000	ppbv	0.03
55) Chlorobenzene-d5	8.904	117	473671	10.000	ppbv	0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	385746	9.917	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.200%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.505	85	11751	0.402	ppbv	91
3) Chlorodifluoromethane	1.480	51	8937	0.299	ppbv #	88
4) Chloromethane	1.538	50	1133	0.095	ppbv	97
9) Propene	1.489	41	1293	0.094	ppbv	87
10) Heptane	5.011	43	3028	0.083	ppbv #	63
11) Trichlorofluoromethane	1.887	101	6010	0.211	ppbv	90
12) 1,1,2-Trichlorotrifluo...	2.150	101	1400	0.060	ppbv	87
13) Ethanol	1.441	45	235284	181.676	ppbv #	29
15) Acetone	1.845	43	70052	2.528	ppbv	96
16) 1,3-Butadiene	1.609	39	4232	0.313	ppbv #	31
17) tert-Butyl alcohol	2.056	59	3925	0.114	ppbv #	86
19) Isopropyl Alcohol	1.441	45	235284	15.047	ppbv #	30
20) Methylene Chloride	2.072	84	10076	0.976	ppbv	99
23) Vinyl Acetate	2.486	43	4130	0.344	ppbv #	50
25) Ethyl Acetate	2.842	43	8241	0.115	ppbv #	74
26) Hexane	2.845	57	3892	0.140	ppbv #	39
29) Chloroform	2.865	83	81943	2.015	ppbv	98
34) 2-Butanone	2.580	43	7789	0.204	ppbv	93
35) Carbon Tetrachloride	3.791	117	2669	0.065	ppbv #	55
36) Benzene	3.680	78	7218	0.138	ppbv #	88
39) 1,2-Dichloropropane	3.985	63	136029	7.145	ppbv #	22
41) Tetrahydrofuran	3.095	42	675	0.031	ppbv #	74
52) Tetrachloroethene	8.251	164	622	0.030	ppbv #	76
53) Toluene	6.966	91	132108	2.132	ppbv	98
57) Chlorobenzene	8.940	112	8901	0.198	ppbv #	76
58) Ethyl Benzene	9.374	91	23493	0.279	ppbv	92
59) m/p-Xylene	9.552	91	79086	1.177	ppbv	99
60) o-Xylene	9.985	91	26822	0.398	ppbv	92
61) Styrene	9.888	104	7302	0.219	ppbv	97
62) Isopropylbenzene	10.558	105	3342	0.033	ppbv	97
72) 4-Ethyltoluene	11.141	105	6813	0.081	ppbv #	55
73) 1,3,5-Trimethylbenzene	11.222	105	5904	0.081	ppbv	94
74) 1,2,4-Trimethylbenzene	11.555	105	19699	0.233	ppbv #	67

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

Quant Time: Apr 08 01:32:03 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

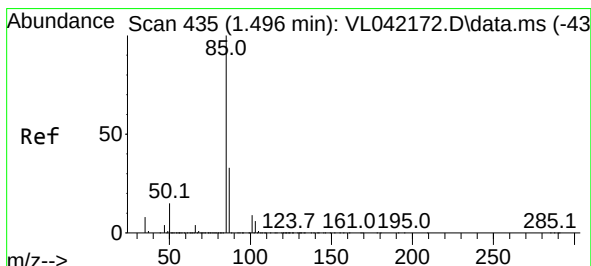
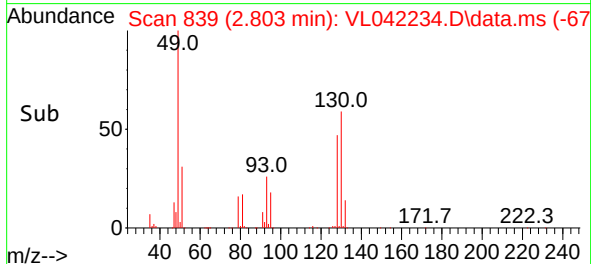
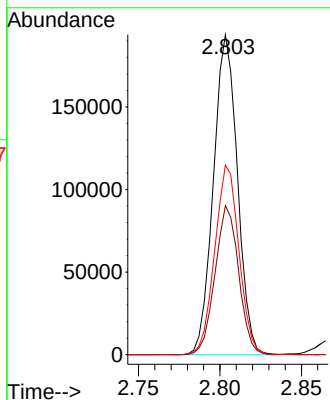
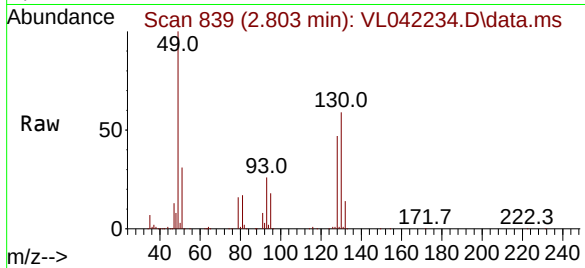




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.803 min Scan# 81
Delta R.T. 0.019 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

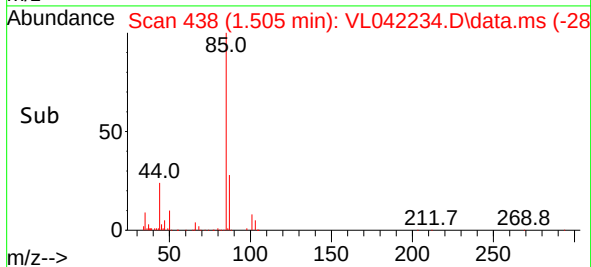
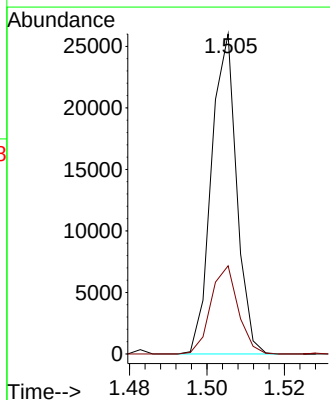
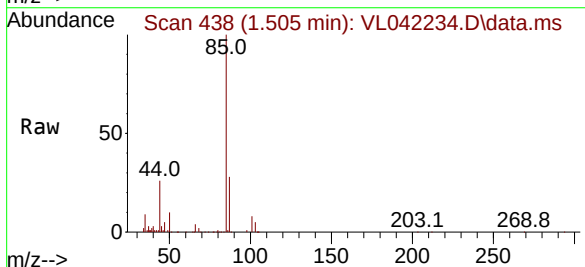
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-2-04012025

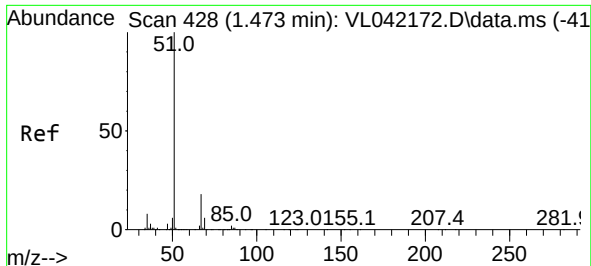
Tgt Ion: 49 Resp: 198158
Ion Ratio Lower Upper
49 100
128 45.8 22.9 68.5
130 59.8 28.8 86.4



#2
Dichlorodifluoromethane
Concen: 0.402 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.010 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion: 85 Resp: 11751
Ion Ratio Lower Upper
85 100
87 27.6 26.1 39.1

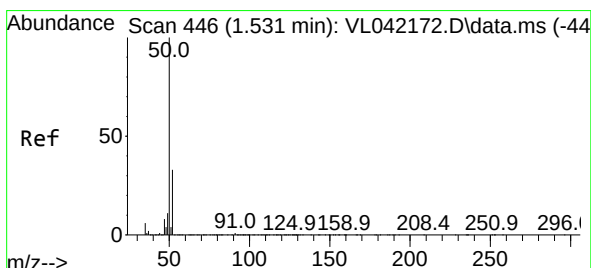
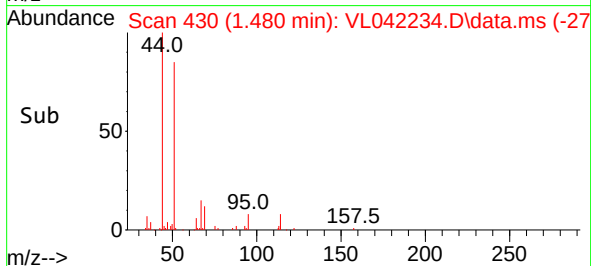
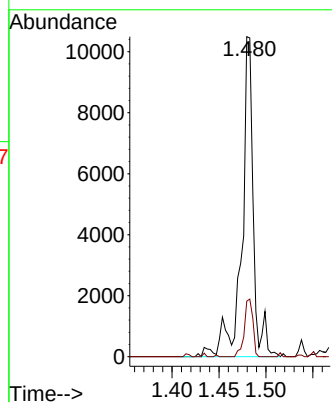
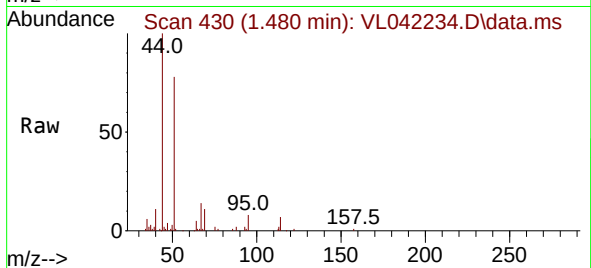




#3
Chlorodifluoromethane
Concen: 0.299 ppbv
RT: 1.480 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

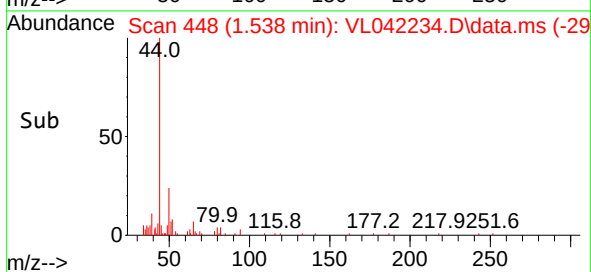
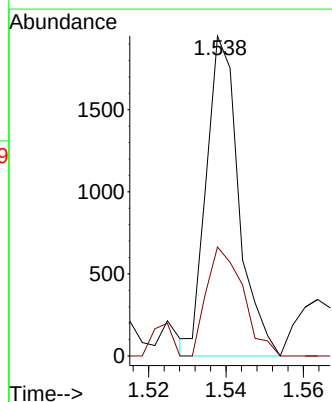
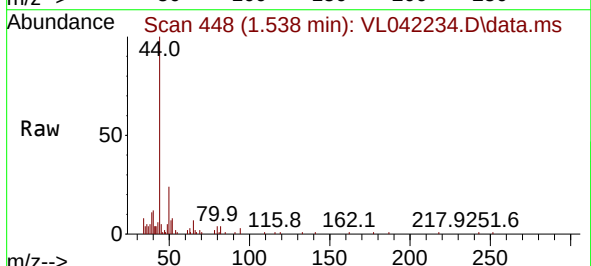
Instrument :
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ClientSampleId :
SSSG-B1-2-04012025

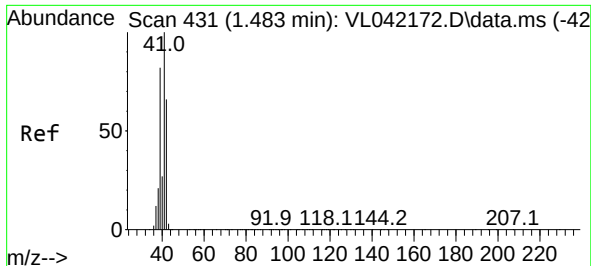
Tgt Ion: 51 Resp: 8937
Ion Ratio Lower Upper
51 100
67 13.5 15.0 22.6#



#4
Chloromethane
Concen: 0.095 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion: 50 Resp: 1133
Ion Ratio Lower Upper
50 100
52 34.1 26.1 39.1

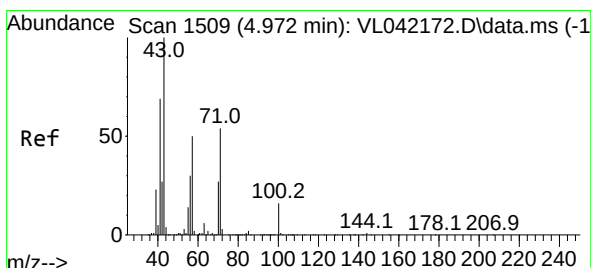
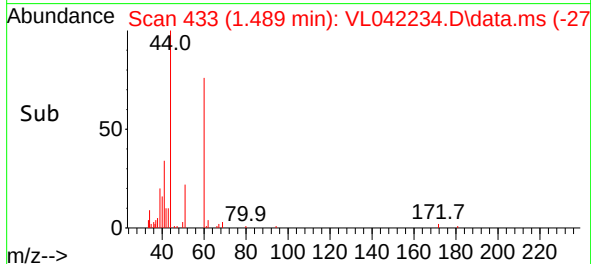
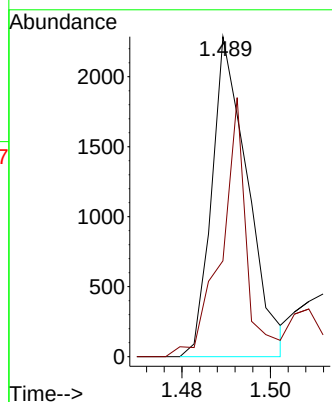
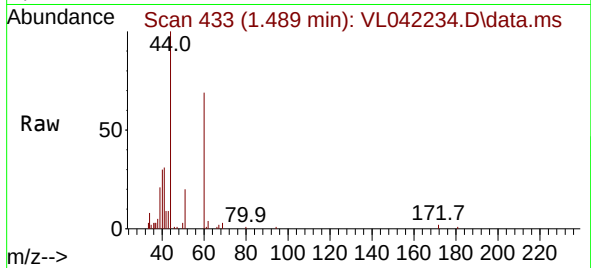




#9
Propene
Concen: 0.094 ppbv
RT: 1.489 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

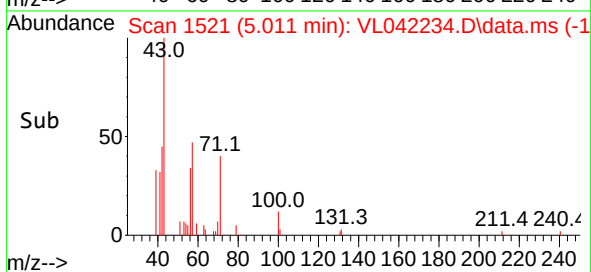
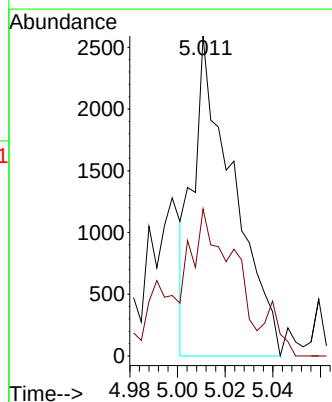
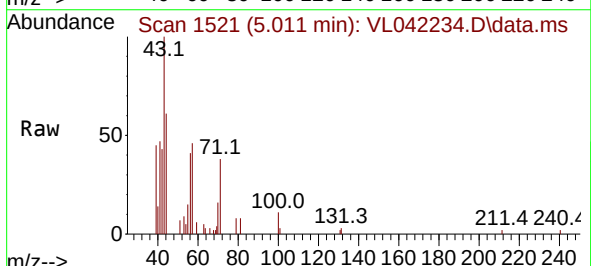
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-2-04012025

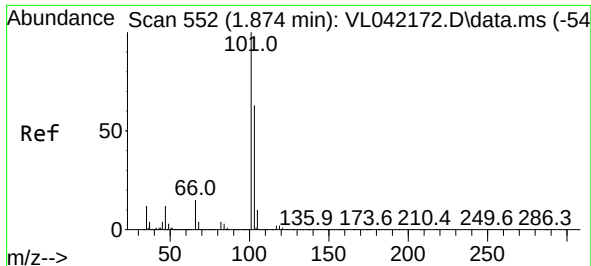
Tgt Ion: 41 Resp: 1293
Ion Ratio Lower Upper
41 100
42 79.5 55.4 83.2



#10
Heptane
Concen: 0.083 ppbv
RT: 5.011 min Scan# 1521
Delta R.T. 0.039 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion: 43 Resp: 3028
Ion Ratio Lower Upper
43 100
57 74.8 39.4 59.2#

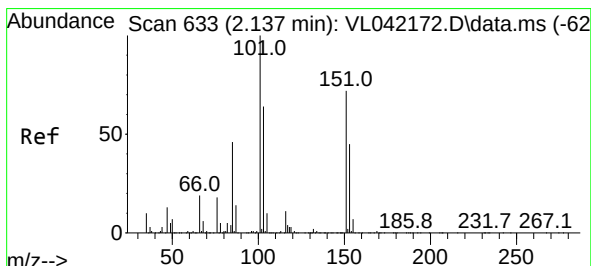
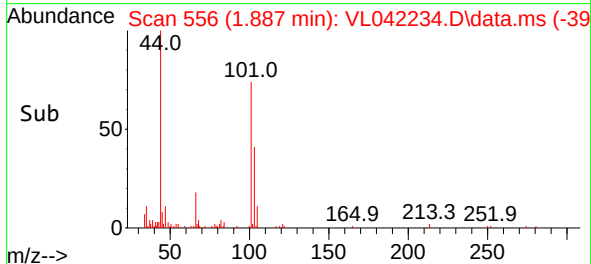
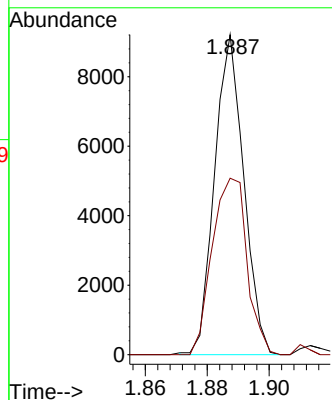
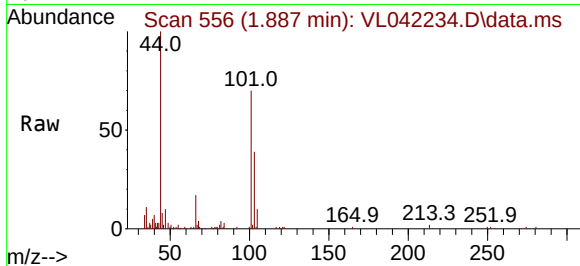




#11
Trichlorofluoromethane
Concen: 0.211 ppbv
RT: 1.887 min Scan# 511
Delta R.T. 0.013 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

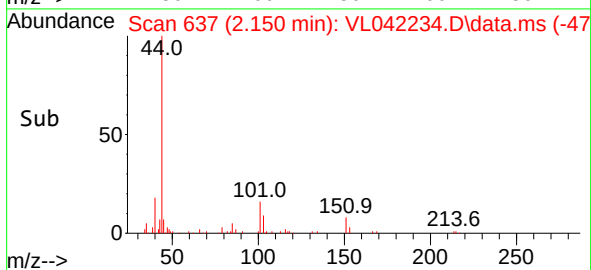
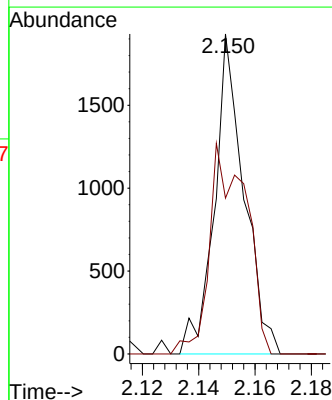
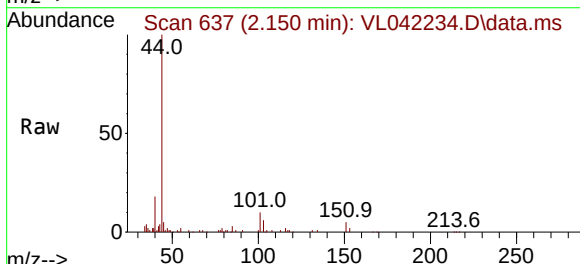
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-2-04012025

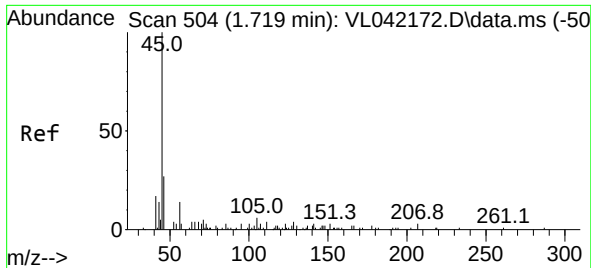
Tgt Ion:101 Resp: 6010
Ion Ratio Lower Upper
101 100
103 55.2 50.2 75.2



#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.060 ppbv
RT: 2.150 min Scan# 637
Delta R.T. 0.013 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion:101 Resp: 1400
Ion Ratio Lower Upper
101 100
151 82.4 57.1 85.7

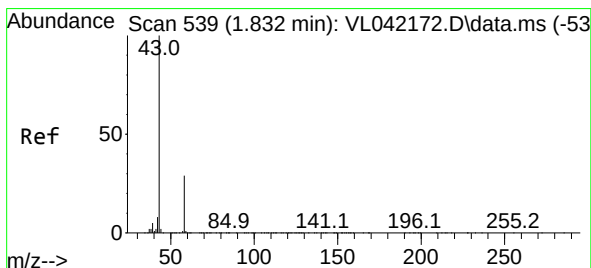
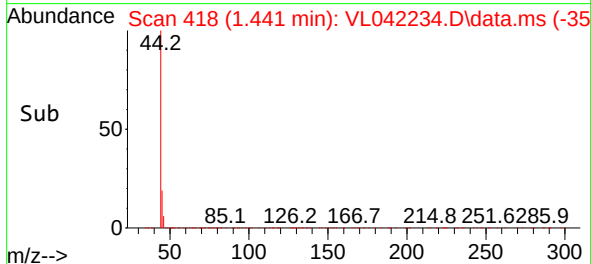
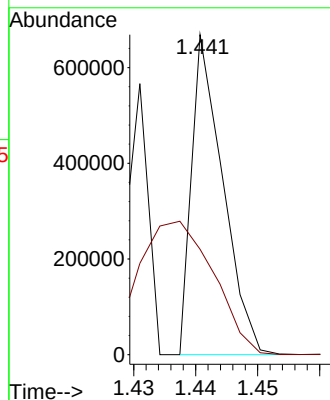
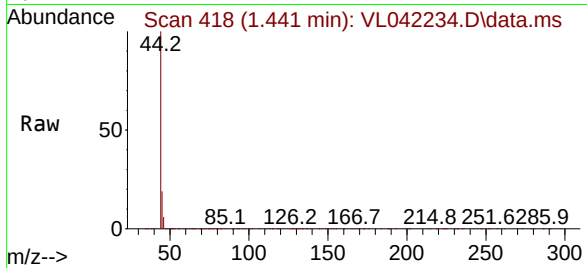




#13
 Ethanol
 Concen: 181.676 ppbv
 RT: 1.441 min Scan# 41
 Delta R.T. -0.278 min
 Lab File: VL042234.D
 Acq: 07 Apr 2025 14:18

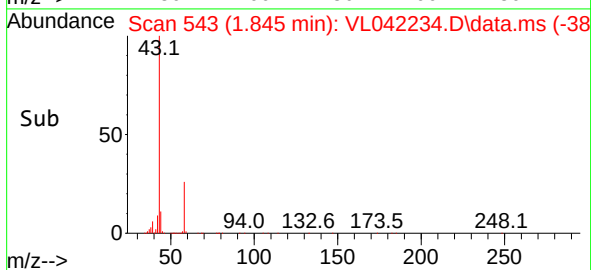
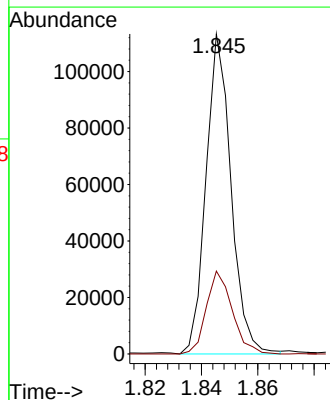
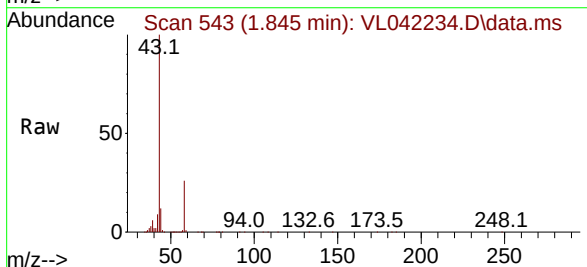
Instrument :
 MSVOA_L
 ClientSampleId :
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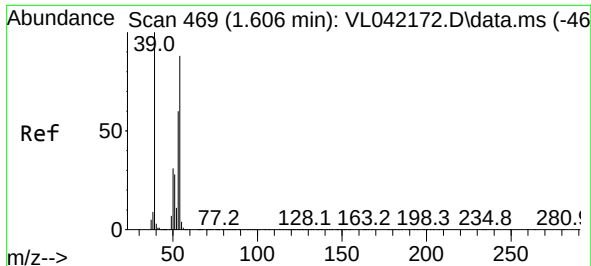
Tgt Ion: 45 Resp: 235284
 Ion Ratio Lower Upper
 45 100
 46 99.5 20.2 80.8#



#15
 Acetone
 Concen: 2.528 ppbv
 RT: 1.845 min Scan# 543
 Delta R.T. 0.013 min
 Lab File: VL042234.D
 Acq: 07 Apr 2025 14:18

Tgt Ion: 43 Resp: 70052
 Ion Ratio Lower Upper
 43 100
 58 26.8 23.2 34.8

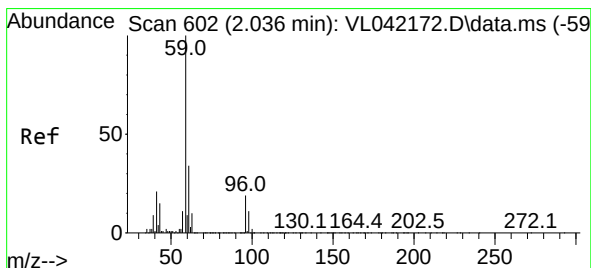
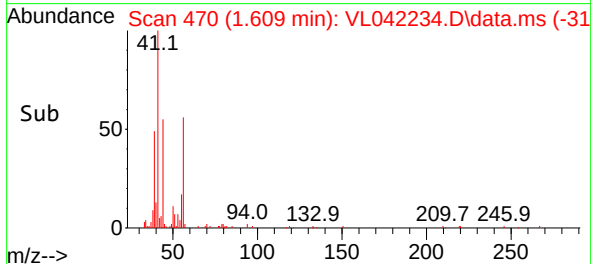
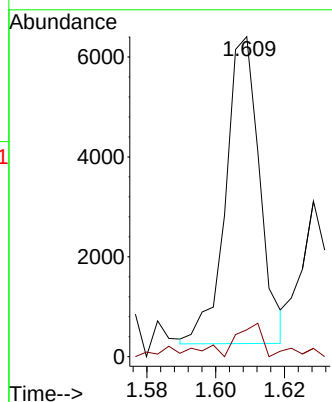
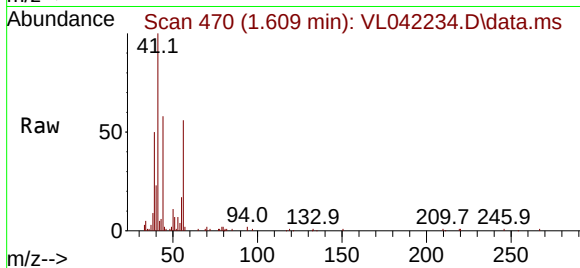




#16
1,3-Butadiene
Concen: 0.313 ppbv
RT: 1.609 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

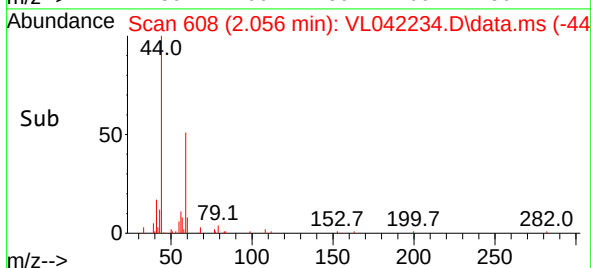
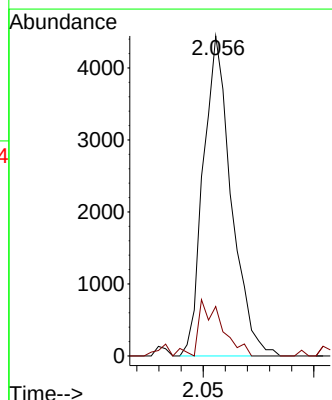
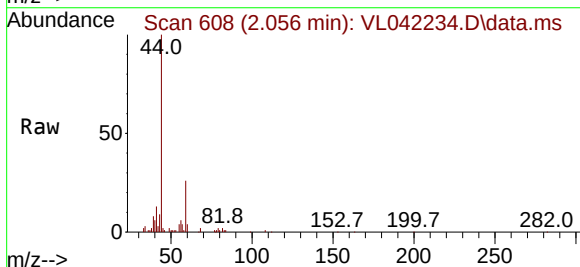
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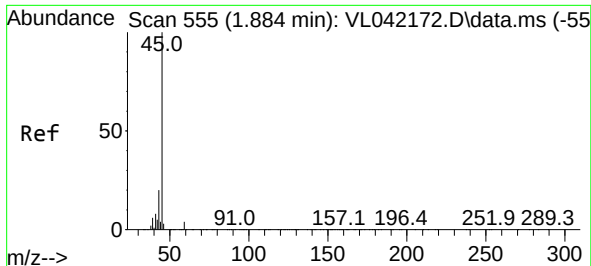
Tgt Ion: 39 Resp: 4232
Ion Ratio Lower Upper
39 100
54 16.5 60.7 91.1#



#17
tert-Butyl alcohol
Concen: 0.114 ppbv
RT: 2.056 min Scan# 608
Delta R.T. 0.019 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion: 59 Resp: 3925
Ion Ratio Lower Upper
59 100
57 16.3 8.9 13.3#

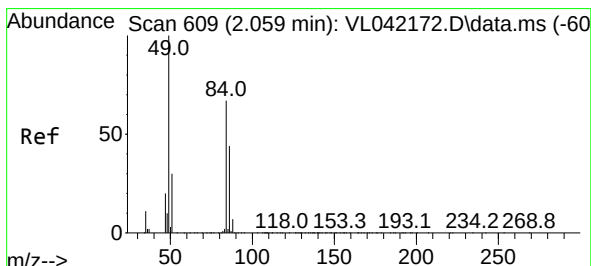
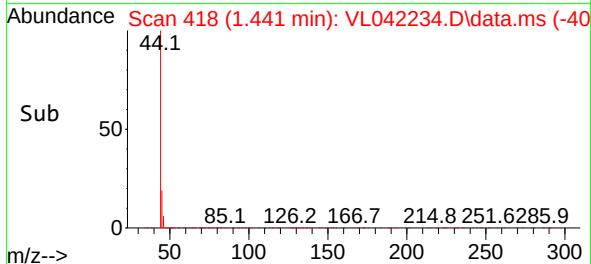
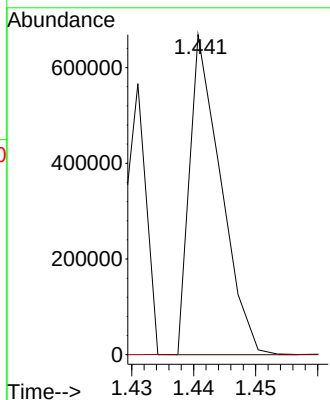
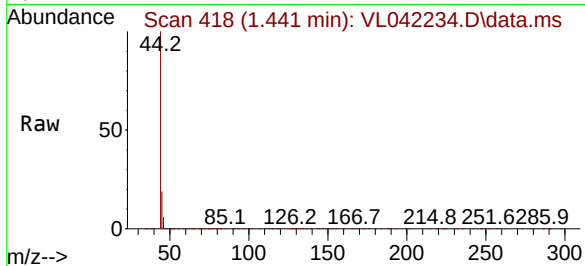




#19
Isopropyl Alcohol
Concen: 15.047 ppbv
RT: 1.441 min Scan# 41
Delta R.T. -0.443 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

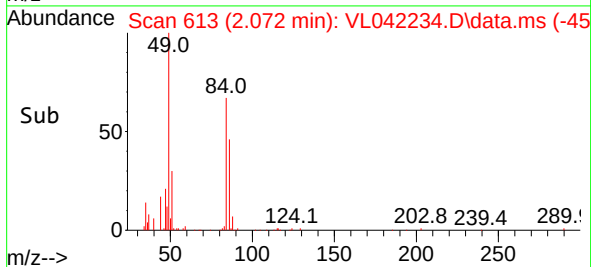
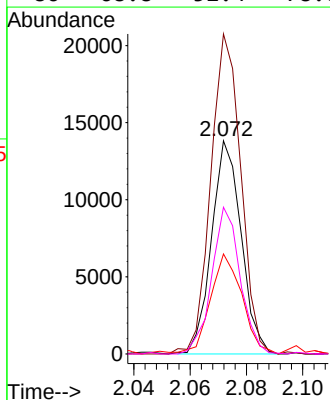
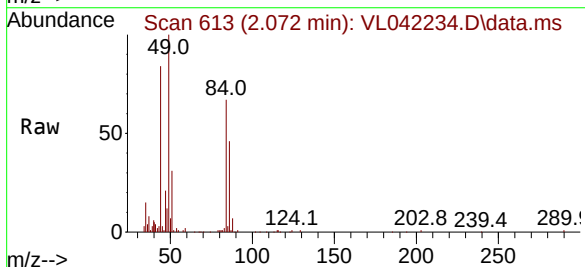
Instrument :
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ClientSampleId :
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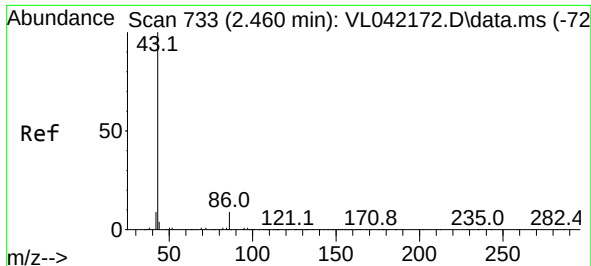
Tgt Ion: 45 Resp: 235284
Ion Ratio Lower Upper
45 100
58 0.0 36.9 55.3#



#20
Methylene Chloride
Concen: 0.976 ppbv
RT: 2.072 min Scan# 613
Delta R.T. 0.013 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion: 84 Resp: 10076
Ion Ratio Lower Upper
84 100
49 150.1 120.2 180.4
51 46.9 37.4 56.0
86 68.8 52.4 78.6

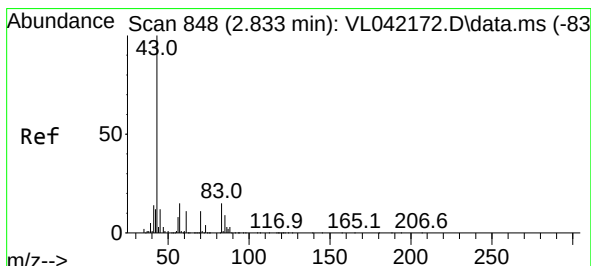
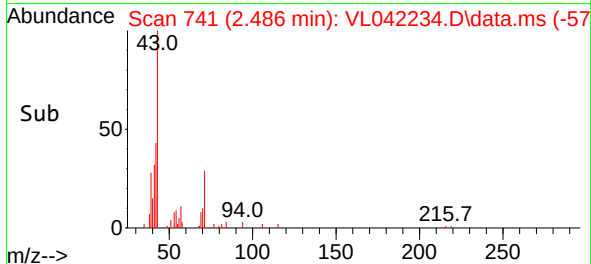
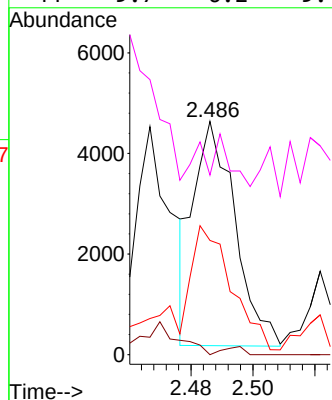
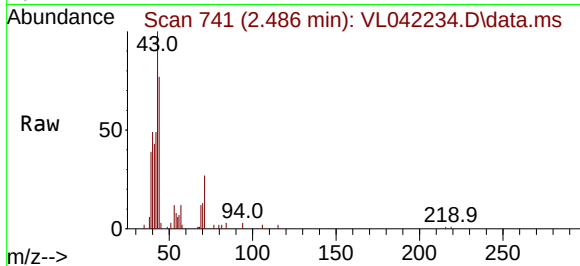




#23
 Vinyl Acetate
 Concen: 0.344 ppbv
 RT: 2.486 min Scan# 741
 Delta R.T. 0.026 min
 Lab File: VL042234.D
 Acq: 07 Apr 2025 14:18

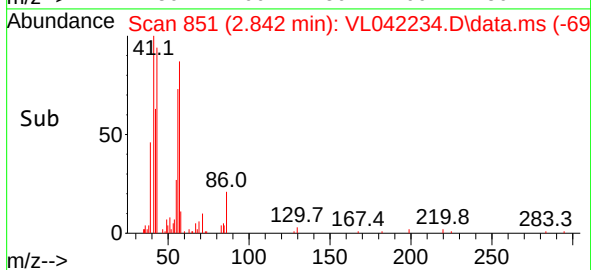
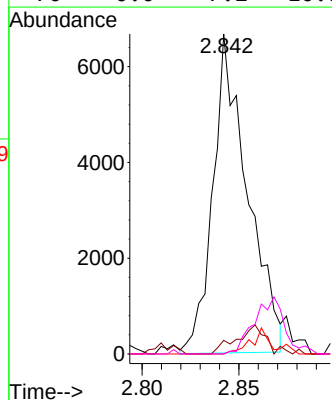
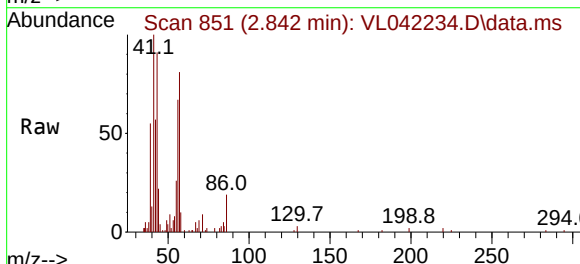
Instrument :
 MSVOA_1
 ClientSampleId :
 SSSG-B1-2-04012025

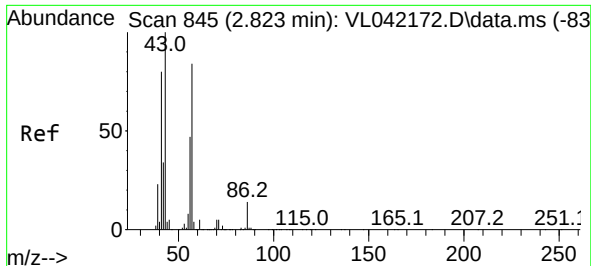
Tgt Ion: 43	Resp: 4130
Ion Ratio	Lower Upper
43 100	
86 0.0	5.5 8.3#
42 49.1	8.6 13.0#
44 9.7	6.2 9.4#



#25
 Ethyl Acetate
 Concen: 0.115 ppbv
 RT: 2.842 min Scan# 851
 Delta R.T. 0.010 min
 Lab File: VL042234.D
 Acq: 07 Apr 2025 14:18

Tgt	Ion: 43	Resp:	8241
Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.2	12.2#
61	0.0	7.3	10.9#
70	0.0	7.2	10.8#

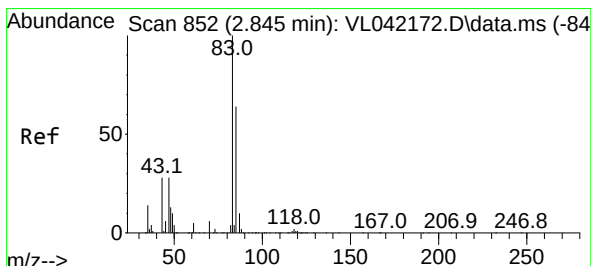
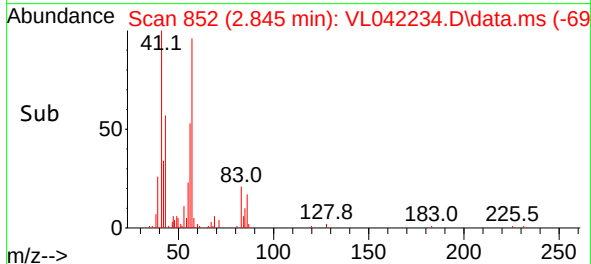
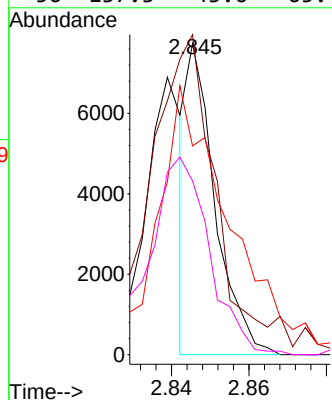
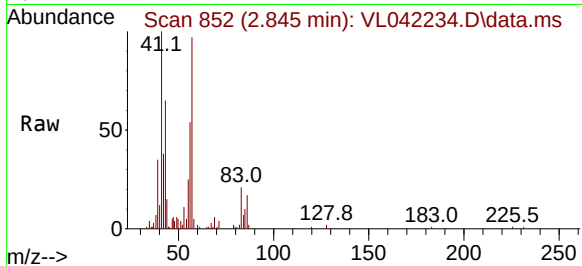




#26
Hexane
Concen: 0.140 ppbv
RT: 2.845 min Scan# 845
Delta R.T. 0.023 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

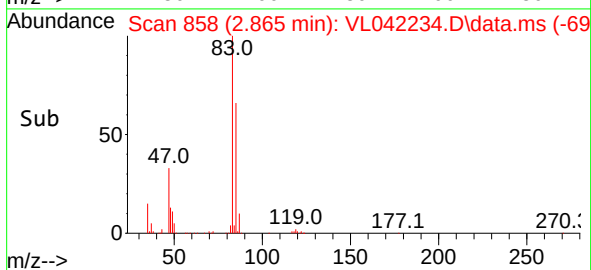
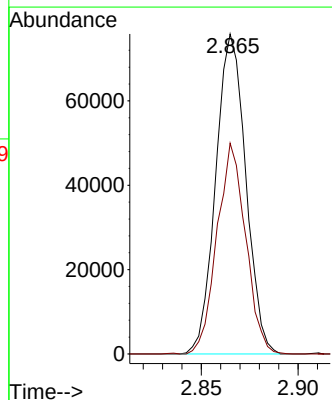
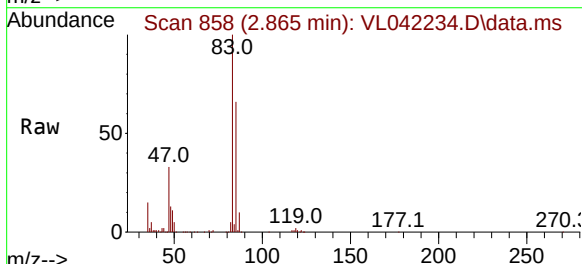
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-2-04012025

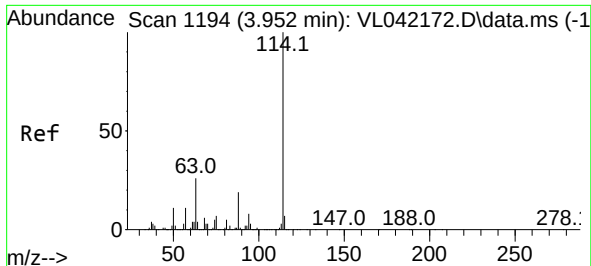
Tgt Ion: 57 Resp: 3892
Ion Ratio Lower Upper
57 100
41 249.5 76.6 114.8#
43 235.3 207.8 311.8
56 137.3 43.6 65.4#



#29
Chloroform
Concen: 2.015 ppbv
RT: 2.865 min Scan# 858
Delta R.T. 0.019 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion: 83 Resp: 81943
Ion Ratio Lower Upper
83 100
85 65.8 51.4 77.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.981 min Scan# 1194

Delta R.T. 0.029 min

Lab File: VL042234.D

Acq: 07 Apr 2025 14:18

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B1-2-04012025

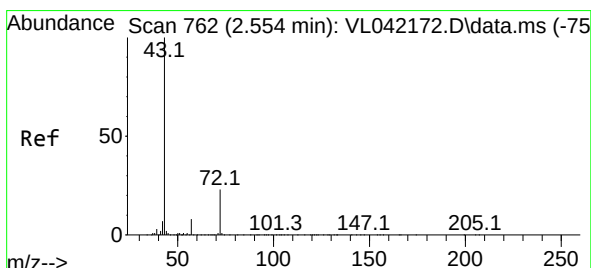
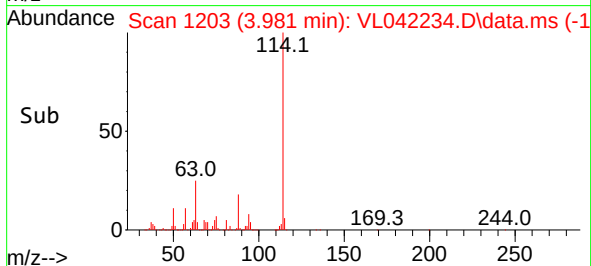
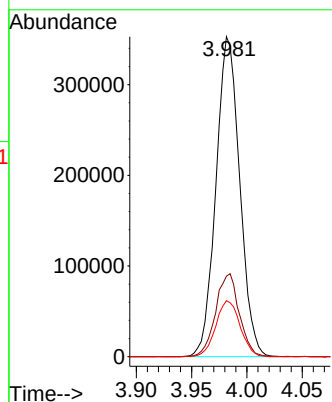
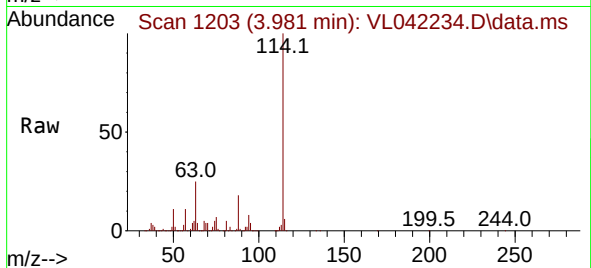
Tgt Ion:114 Resp: 527291

Ion Ratio Lower Upper

114 100

63 25.9 20.7 31.1

88 17.9 15.0 22.4



#34

2-Butanone

Concen: 0.204 ppbv

RT: 2.580 min Scan# 770

Delta R.T. 0.026 min

Lab File: VL042234.D

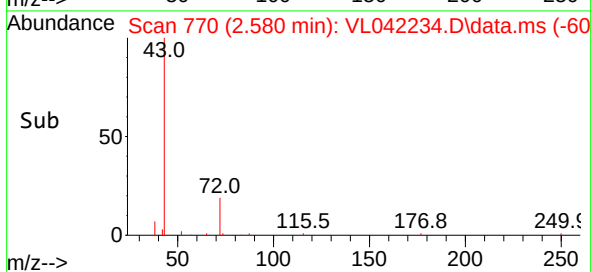
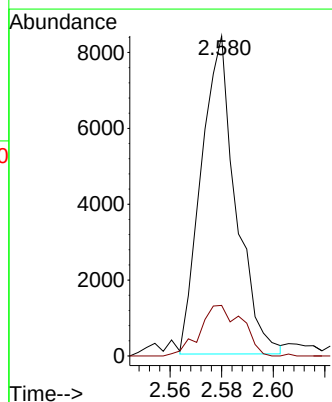
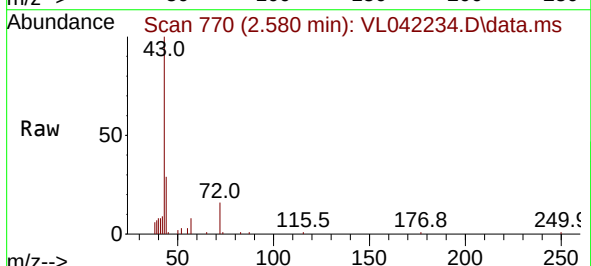
Acq: 07 Apr 2025 14:18

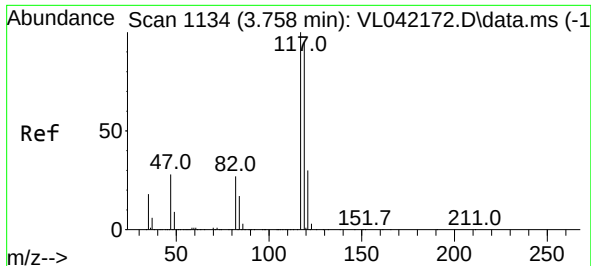
Tgt Ion: 43 Resp: 7789

Ion Ratio Lower Upper

43 100

72 19.6 18.2 27.2

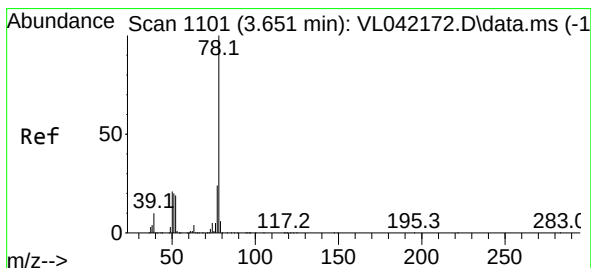
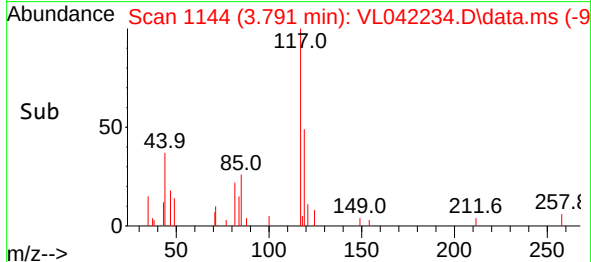
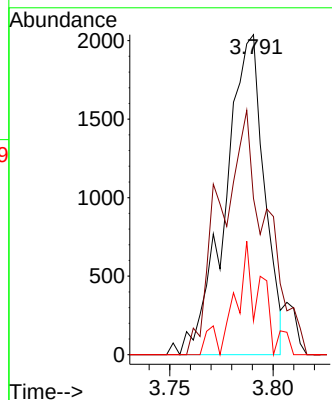
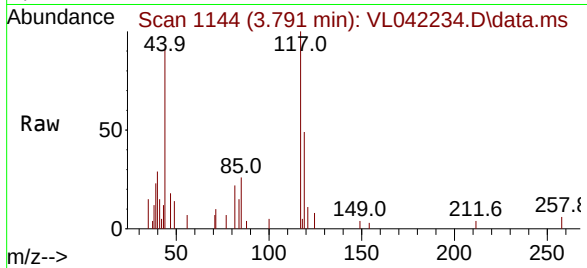




#35
Carbon Tetrachloride
Concen: 0.065 ppbv
RT: 3.791 min Scan# 1114
Delta R.T. 0.032 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

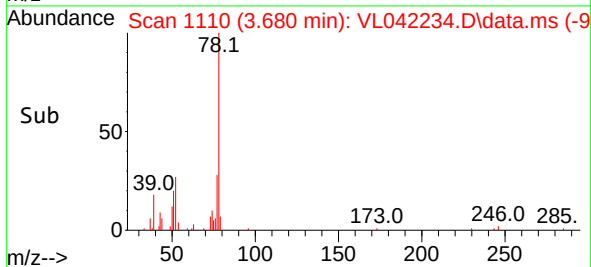
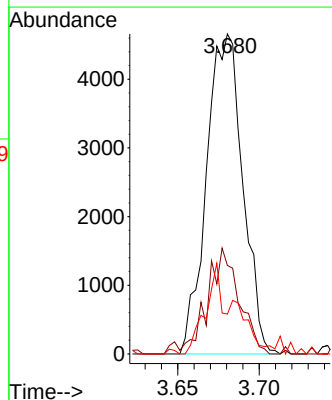
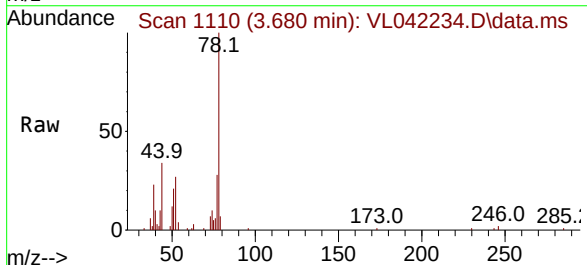
Instrument :
MSVOA_1
ClientSampleId :
SSSG-B1-2-04012025

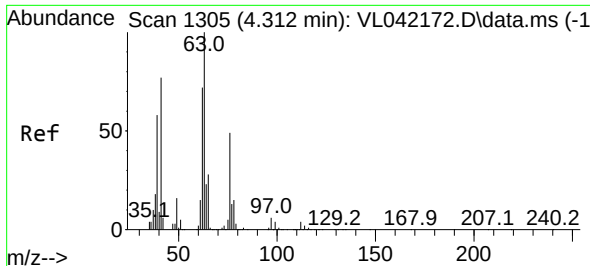
Tgt Ion:117 Resp: 2669
Ion Ratio Lower Upper
117 100
119 48.9 76.2 114.2#
121 10.5 24.2 36.4#



#36
Benzene
Concen: 0.138 ppbv
RT: 3.680 min Scan# 1110
Delta R.T. 0.029 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion: 78 Resp: 7218
Ion Ratio Lower Upper
78 100
77 27.6 19.1 28.7
50 12.5 16.6 24.8#





#39

1,2-Dichloropropane

Concen: 7.145 ppbv

RT: 3.985 min Scan# 11

Delta R.T. -0.327 min

Lab File: VL042234.D

Acq: 07 Apr 2025 14:18

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B1-2-04012025

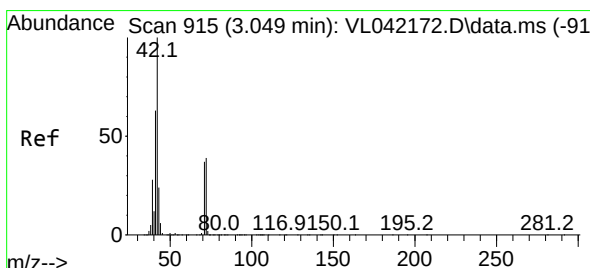
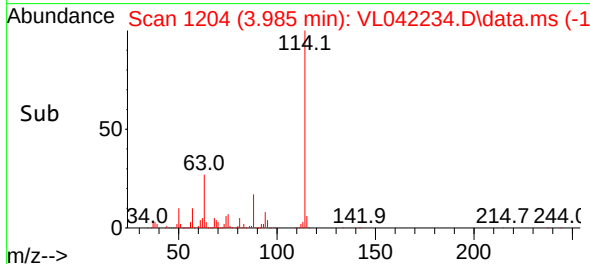
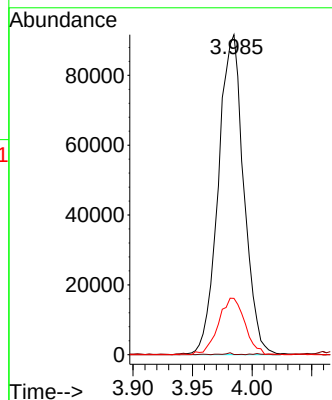
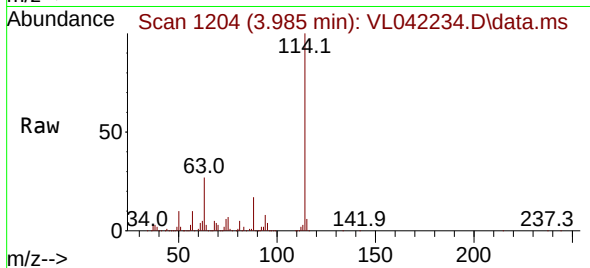
Tgt Ion: 63 Resp: 136029

Ion Ratio Lower Upper

63 100

41 0.1 61.7 92.5#

62 17.6 57.6 86.4#



#41

Tetrahydrofuran

Concen: 0.031 ppbv

RT: 3.095 min Scan# 929

Delta R.T. 0.045 min

Lab File: VL042234.D

Acq: 07 Apr 2025 14:18

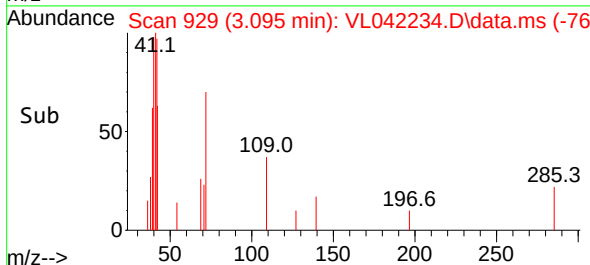
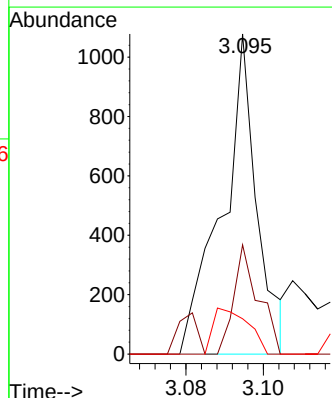
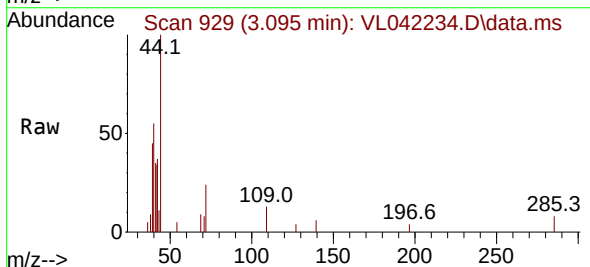
Tgt Ion: 42 Resp: 675

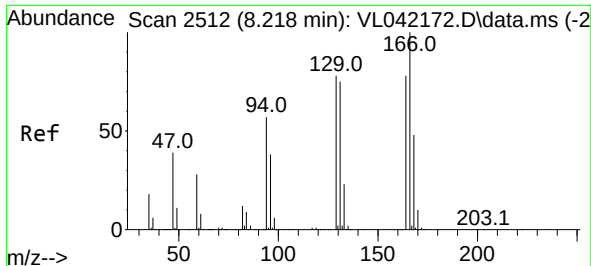
Ion Ratio Lower Upper

42 100

72 31.4 31.4 47.0

71 14.4 30.2 45.4#

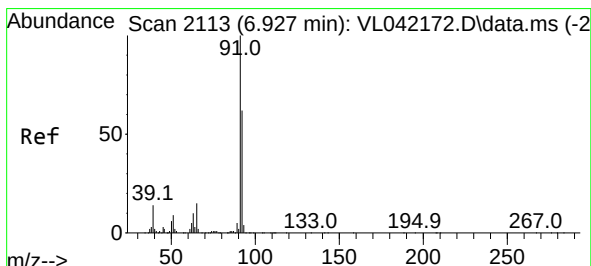
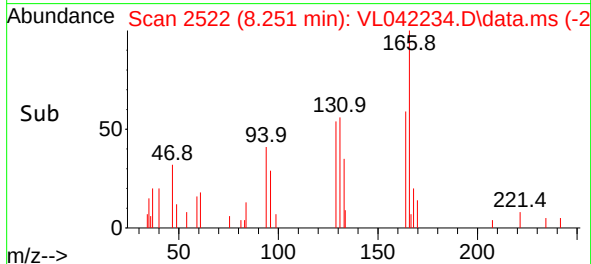
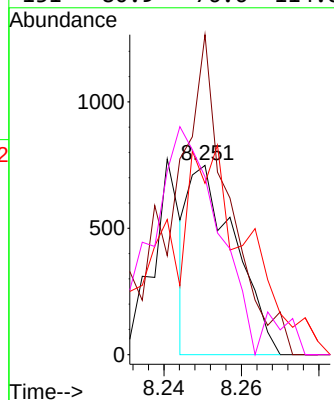
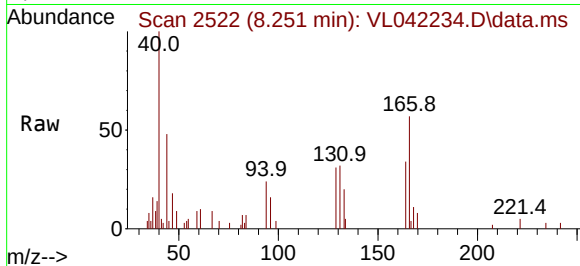




#52
Tetrachloroethene
Concen: 0.030 ppbv
RT: 8.251 min Scan# 2125
Delta R.T. 0.032 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

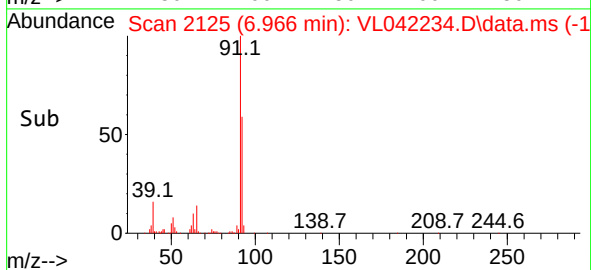
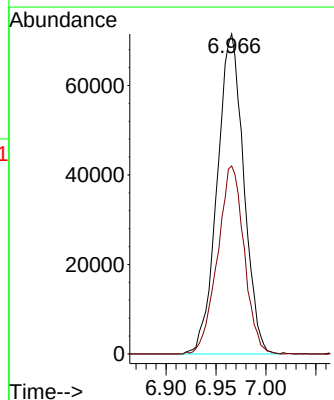
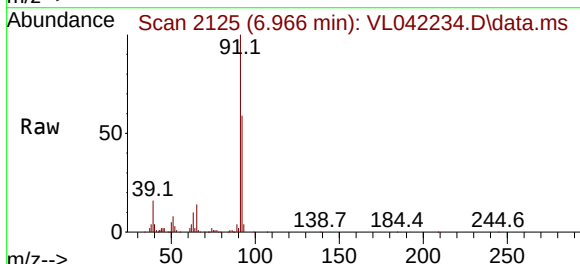
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-2-04012025

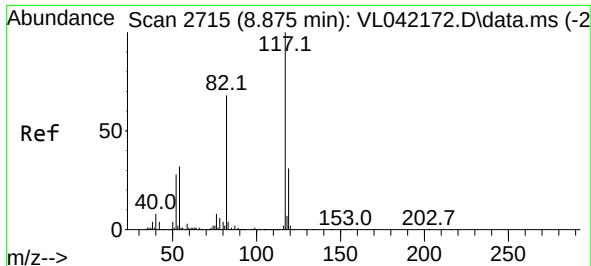
Tgt Ion:164 Resp: 622
Ion Ratio Lower Upper
164 100
166 158.5 102.5 153.7#
129 68.8 79.8 119.8#
131 80.9 76.6 114.8



#53
Toluene
Concen: 2.132 ppbv
RT: 6.966 min Scan# 2125
Delta R.T. 0.039 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion: 91 Resp: 132108
Ion Ratio Lower Upper
91 100
92 58.9 48.4 72.6

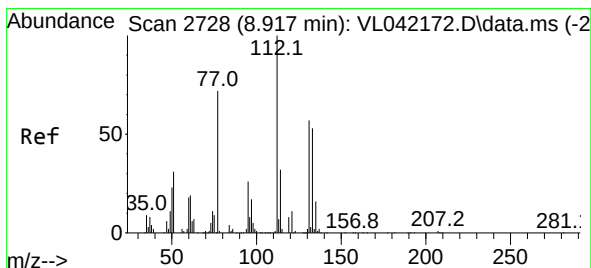
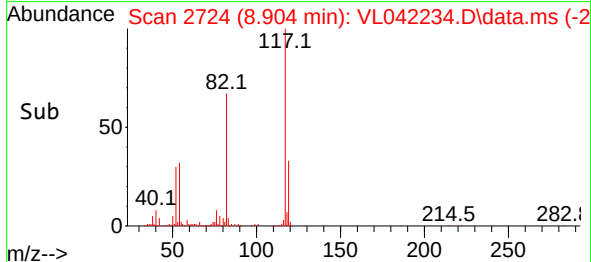
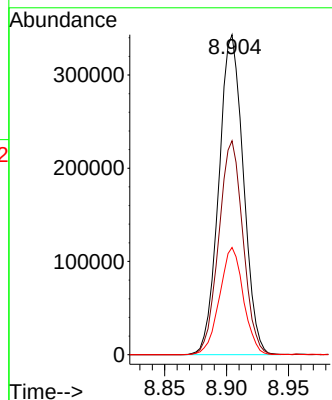
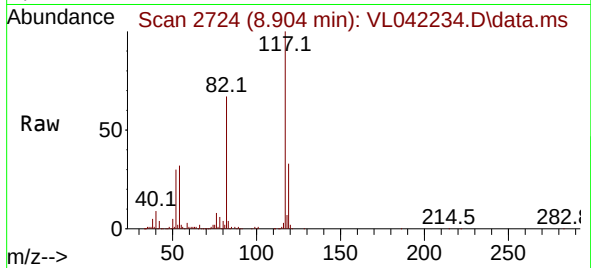




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.904 min Scan# 2715
Delta R.T. 0.029 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

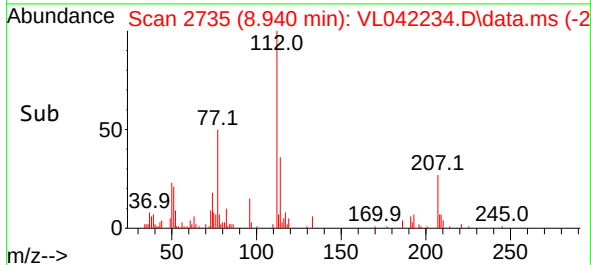
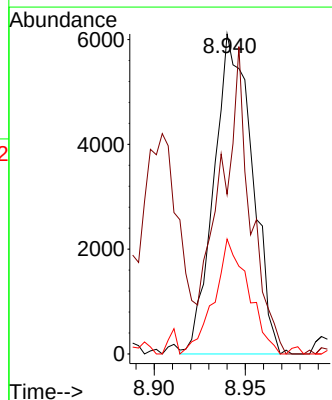
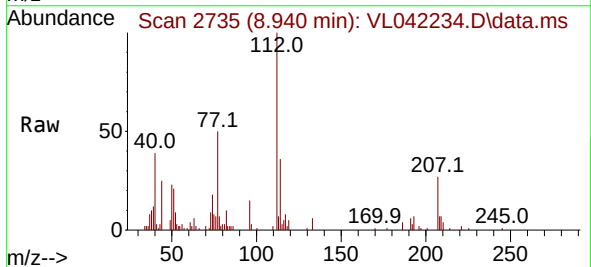
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-2-04012025

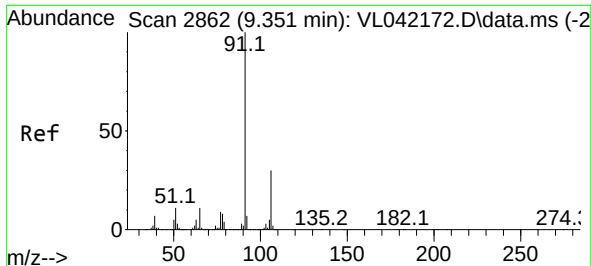
Tgt Ion:117 Resp: 473671
Ion Ratio Lower Upper
117 100
82 66.2 55.8 83.6
119 32.8 25.5 38.3



#57
Chlorobenzene
Concen: 0.198 ppbv
RT: 8.940 min Scan# 2735
Delta R.T. 0.023 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion:112 Resp: 8901
Ion Ratio Lower Upper
112 100
77 46.2 58.2 87.2#
114 35.9 29.1 35.5#





#58

Ethyl Benzene

Concen: 0.279 ppbv

RT: 9.374 min Scan# 2869

Delta R.T. 0.023 min

Lab File: VL042234.D

Acq: 07 Apr 2025 14:18

Instrument :

MSVOA_L

ClientSampleId :

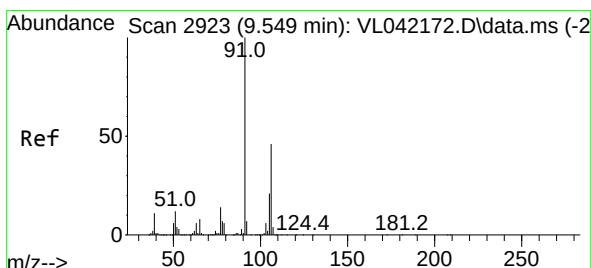
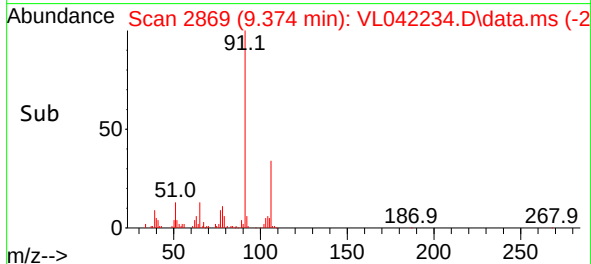
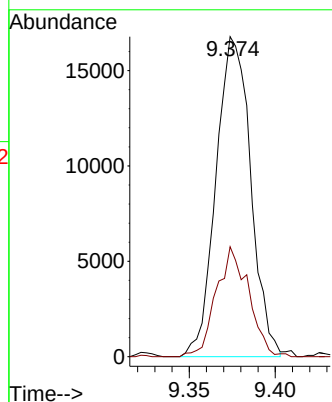
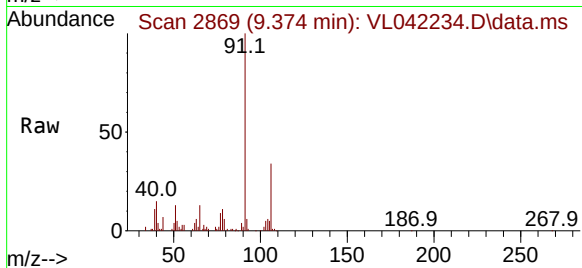
SSSG-B1-2-04012025

Tgt Ion: 91 Resp: 23493

Ion Ratio Lower Upper

91 100

106 34.3 24.2 36.2



#59

m/p-Xylene

Concen: 1.177 ppbv

RT: 9.552 min Scan# 2924

Delta R.T. 0.003 min

Lab File: VL042234.D

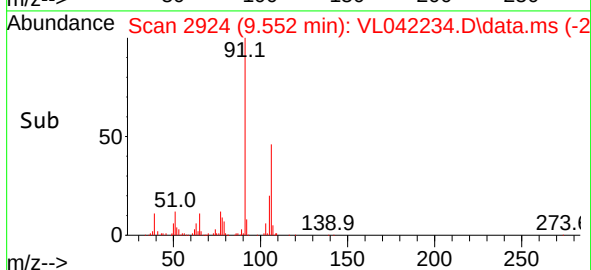
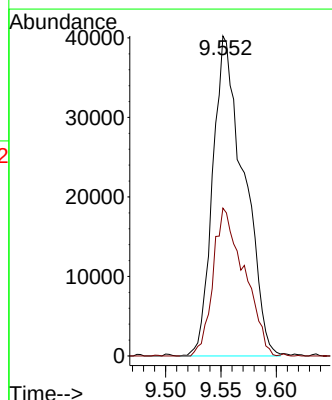
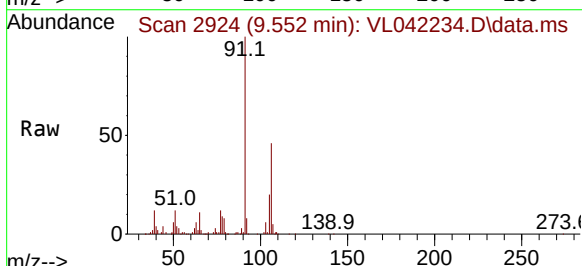
Acq: 07 Apr 2025 14:18

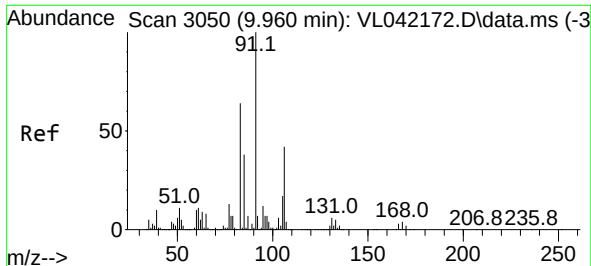
Tgt Ion: 91 Resp: 79086

Ion Ratio Lower Upper

91 100

106 46.2 36.4 54.6

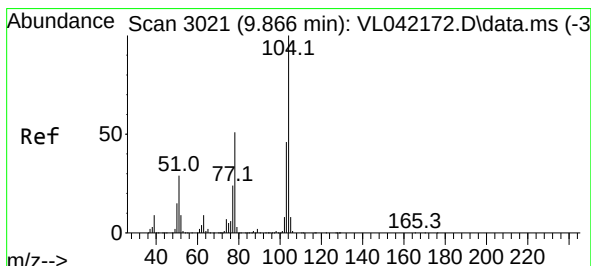
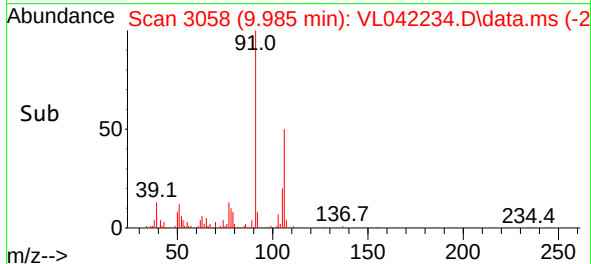
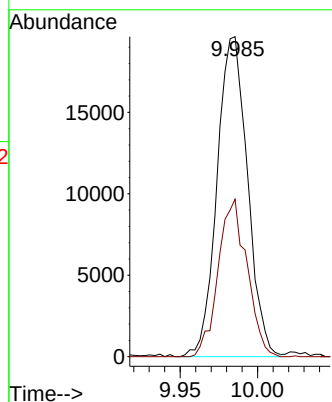
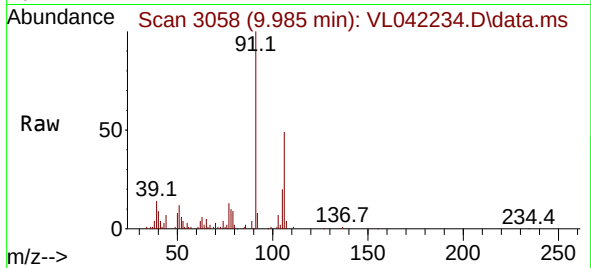




#60
o-Xylene
Concen: 0.398 ppbv
RT: 9.985 min Scan# 3050
Delta R.T. 0.026 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

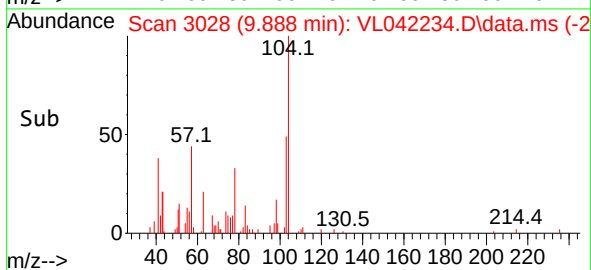
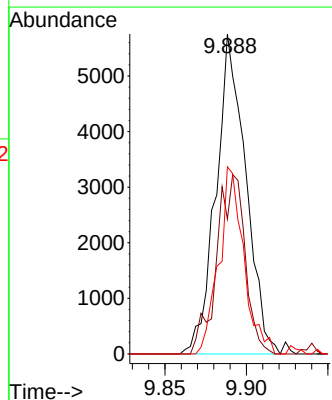
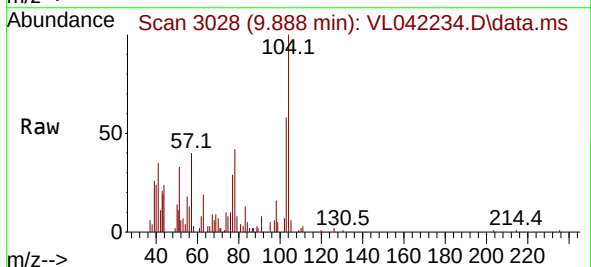
Instrument :
MSVOA_1
ClientSampleId :
SSSG-B1-2-04012025

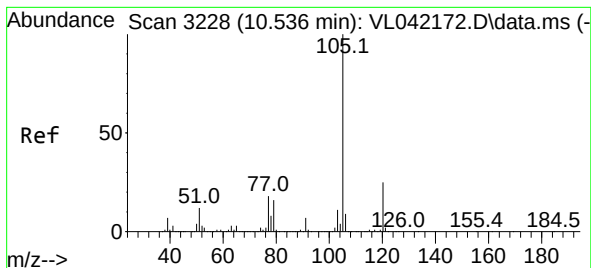
Tgt Ion: 91 Resp: 26822
Ion Ratio Lower Upper
91 100
106 46.6 20.8 62.5



#61
Styrene
Concen: 0.219 ppbv
RT: 9.888 min Scan# 3028
Delta R.T. 0.023 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion: 104 Resp: 7302
Ion Ratio Lower Upper
104 100
78 53.5 41.8 62.6
103 49.3 37.0 55.4





#62

Isopropylbenzene

Concen: 0.033 ppbv

RT: 10.558 min Scan# 3184

Delta R.T. 0.023 min

Lab File: VL042234.D

Acq: 07 Apr 2025 14:18

Instrument :

MSVOA_L

ClientSampleId :

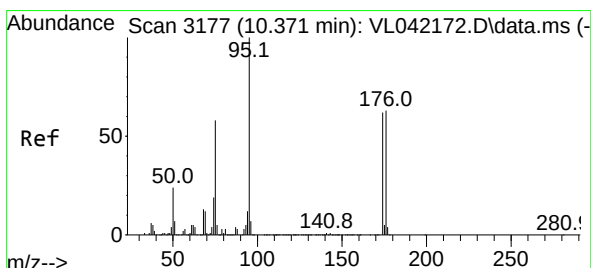
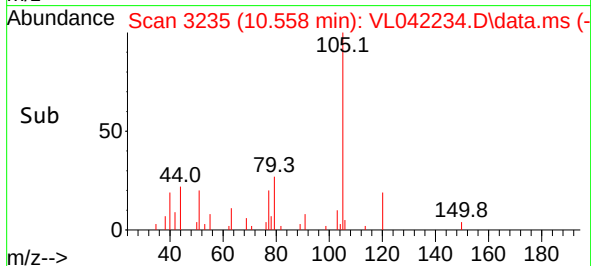
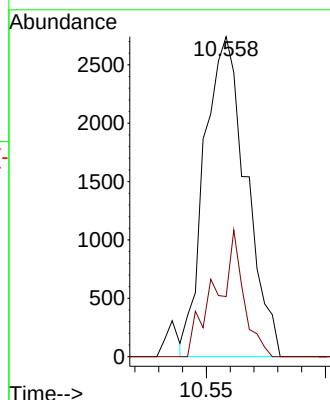
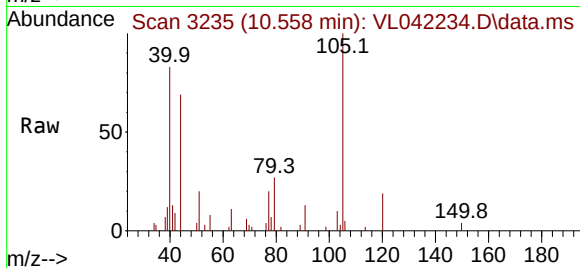
SSSG-B1-2-04012025

Tgt Ion:105 Resp: 3342

Ion Ratio Lower Upper

105 100

120 26.4 19.9 29.9



#68

1-Bromo-4-Fluorobenzene

Concen: 9.917 ppbv

RT: 10.393 min Scan# 3184

Delta R.T. 0.023 min

Lab File: VL042234.D

Acq: 07 Apr 2025 14:18

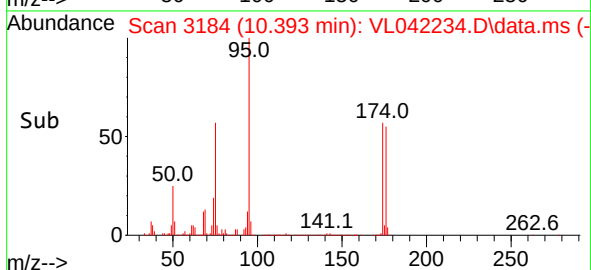
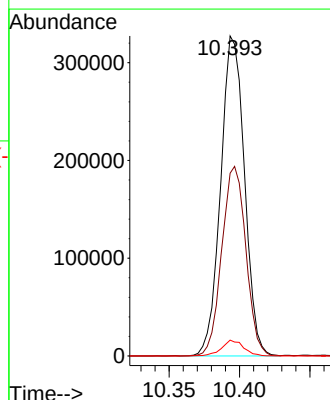
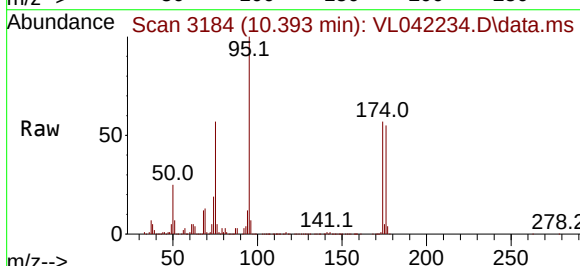
Tgt Ion: 95 Resp: 385746

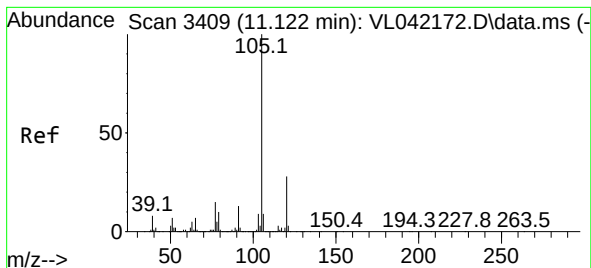
Ion Ratio Lower Upper

95 100

174 60.0 50.6 76.0

175 4.6 3.8 5.6

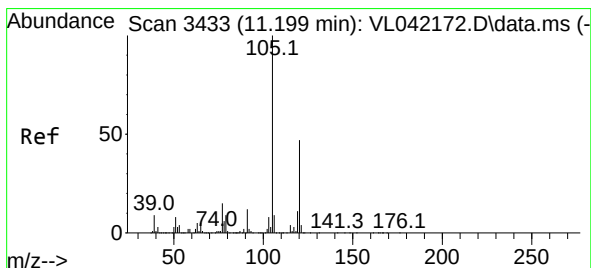
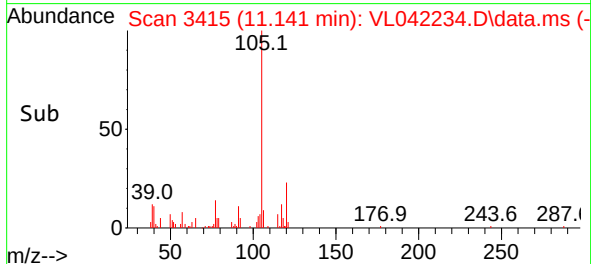
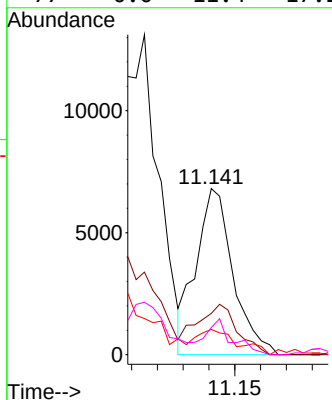
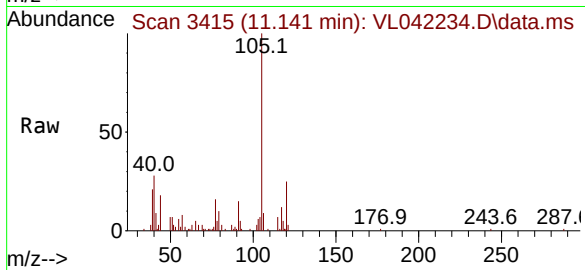




#72
4-Ethyltoluene
Concen: 0.081 ppbv
RT: 11.141 min Scan# 3409
Delta R.T. 0.019 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

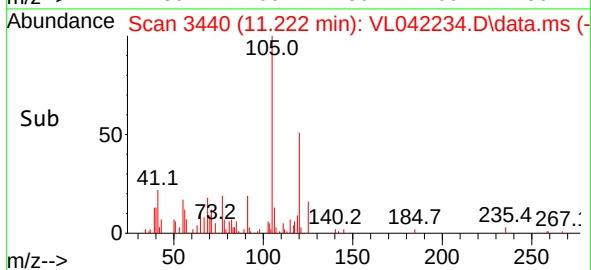
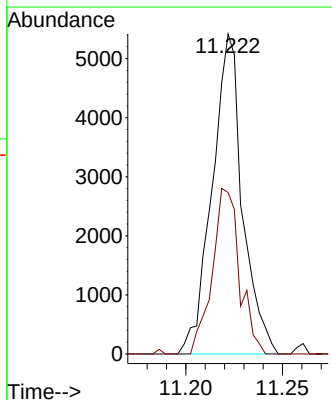
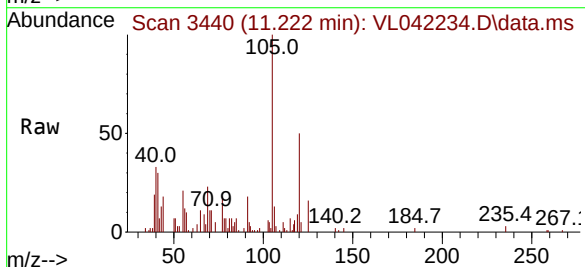
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-2-04012025

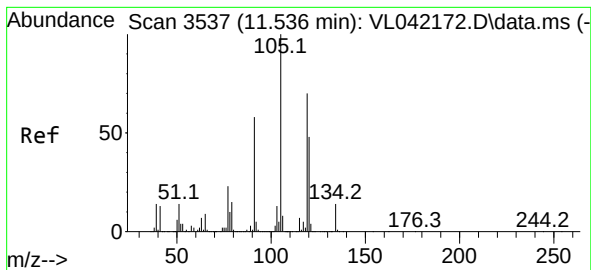
Tgt Ion:105 Resp: 6813
Ion Ratio Lower Upper
105 100
120 0.0 23.4 35.0#
91 0.0 10.3 15.5#
77 0.0 11.4 17.2#



#73
1,3,5-Trimethylbenzene
Concen: 0.081 ppbv
RT: 11.222 min Scan# 3440
Delta R.T. 0.023 min
Lab File: VL042234.D
Acq: 07 Apr 2025 14:18

Tgt Ion:105 Resp: 5904
Ion Ratio Lower Upper
105 100
120 50.4 37.4 56.0





#74

1,2,4-Trimethylbenzene

Concen: 0.233 ppbv

RT: 11.555 min Scan# 31

Delta R.T. 0.019 min

Lab File: VL042234.D

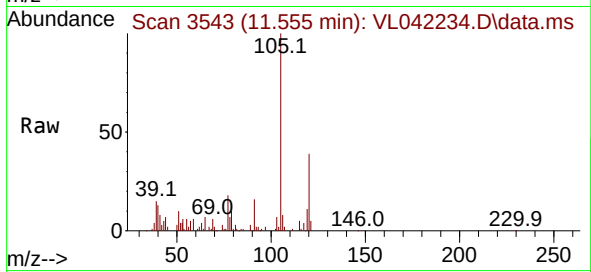
Acq: 07 Apr 2025 14:18

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B1-2-04012025



Tgt Ion:105 Resp: 19699

Ion Ratio Lower Upper

105 100

120 38.9 38.6 58.0

91 15.2 46.2 69.2#

77 18.1 18.6 27.8#

