

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040825\
 Data File : VL042275.D
 Acq On : 08 Apr 2025 22:42
 Operator : SY/MD
 Sample : Q1728-12 2X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSSG-B1-3-04012025

Quant Time: Apr 09 02:01:29 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

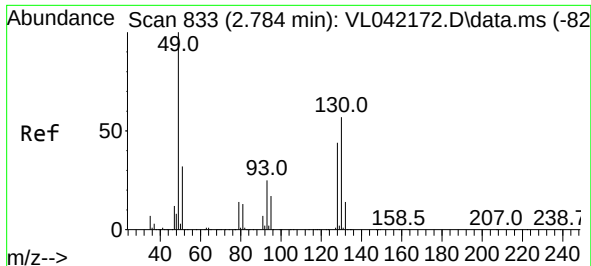
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.794	49	160295	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	399383	10.000	ppbv	0.02
55) Chlorobenzene-d5	8.891	117	355820	10.000	ppbv	0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	276732	9.470	ppbv	0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	5426	0.229	ppbv #	77
3) Chlorodifluoromethane	1.606	51	2012	0.083	ppbv	99
4) Chloromethane	1.534	50	1118	0.116	ppbv	100
9) Propene	1.486	41	2314	0.209	ppbv	88
11) Trichlorofluoromethane	1.884	101	2674	0.116	ppbv	90
13) Ethanol	1.725	45	12651	12.076	ppbv	89
15) Acetone	1.839	43	228835	10.208	ppbv	96
16) 1,3-Butadiene	1.602	39	12463	1.138	ppbv #	20
17) tert-Butyl alcohol	2.046	59	6274	0.225	ppbv	95
19) Isopropyl Alcohol	1.890	45	90023	7.117	ppbv #	67
20) Methylene Chloride	2.065	84	9525	1.141	ppbv #	91
21) Allyl Chloride	2.049	41	2138	0.135	ppbv #	85
23) Vinyl Acetate	2.463	43	2691	0.277	ppbv #	66
25) Ethyl Acetate	2.832	43	6826	0.117	ppbv #	81
26) Hexane	2.836	57	7214	0.321	ppbv #	33
29) Chloroform	2.855	83	101229	3.078	ppbv	95
34) 2-Butanone	2.570	43	7264	0.251	ppbv	95
36) Benzene	3.667	78	4760	0.120	ppbv #	93
39) 1,2-Dichloropropane	3.968	63	103082	7.149	ppbv #	23
53) Toluene	6.953	91	7934	0.169	ppbv #	1
58) Ethyl Benzene	9.364	91	6292	0.100	ppbv	92
59) m/p-Xylene	9.558	91	3961	0.078	ppbv #	31
60) o-Xylene	9.972	91	7001	0.138	ppbv	94
61) Styrene	9.879	104	1302	0.052	ppbv #	86
72) 4-Ethyltoluene	11.131	105	2178	0.035	ppbv #	60
73) 1,3,5-Trimethylbenzene	11.212	105	1937	0.035	ppbv	95
74) 1,2,4-Trimethylbenzene	11.542	105	7204	0.114	ppbv #	67

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

Quant Time: Apr 09 02:01:29 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

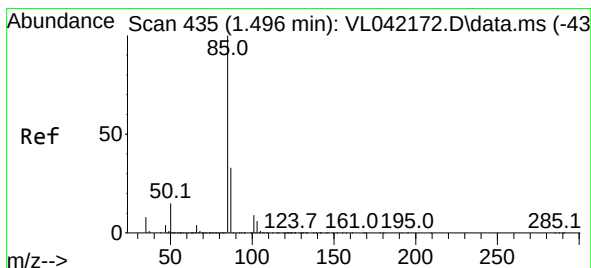
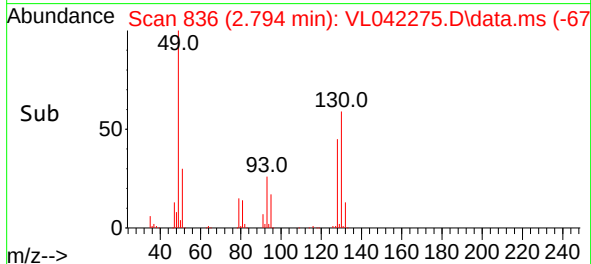
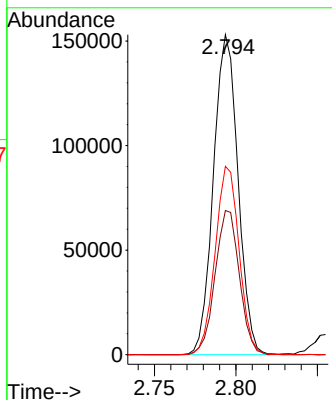
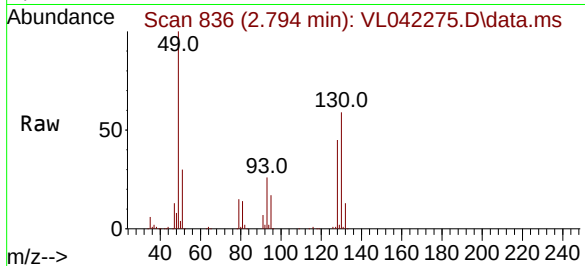




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.794 min Scan# 81
Delta R.T. 0.010 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

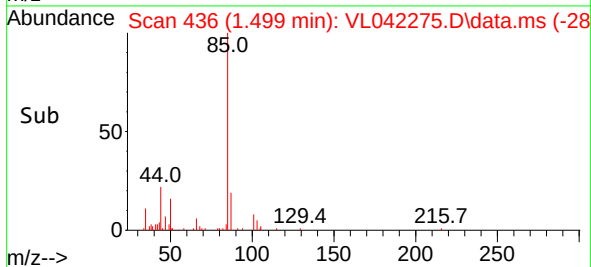
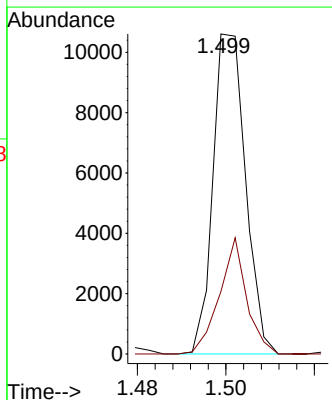
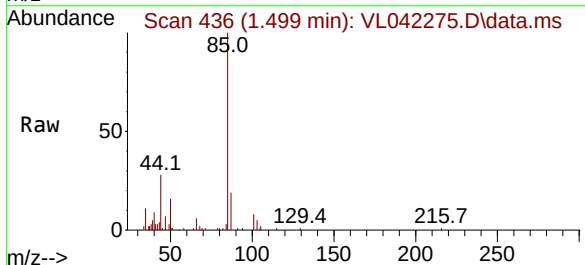
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-3-04012025

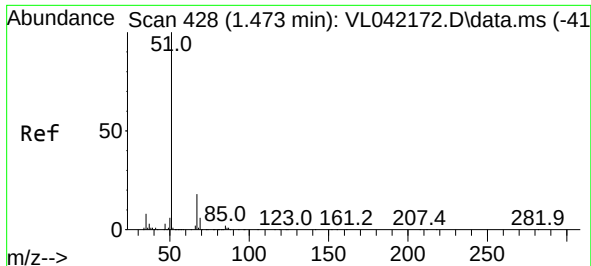
Tgt Ion: 49 Resp: 160295
Ion Ratio Lower Upper
49 100
128 44.6 22.9 68.5
130 57.4 28.8 86.4



#2
Dichlorodifluoromethane
Concen: 0.229 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

Tgt Ion: 85 Resp: 5426
Ion Ratio Lower Upper
85 100
87 19.5 26.1 39.1#

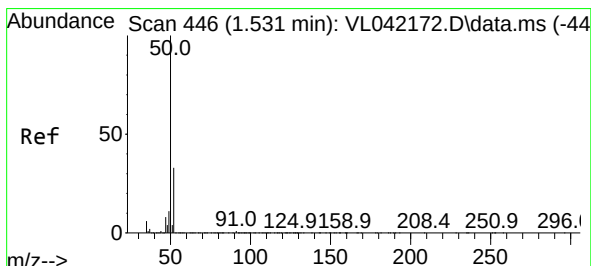
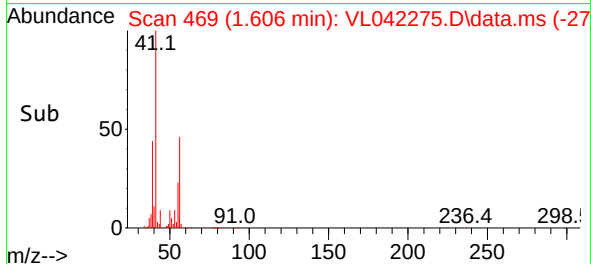
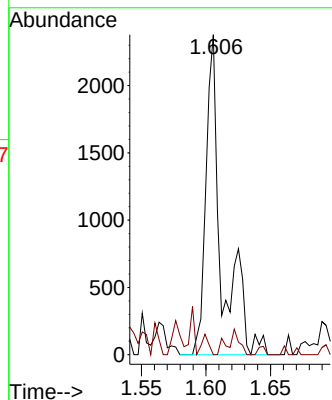
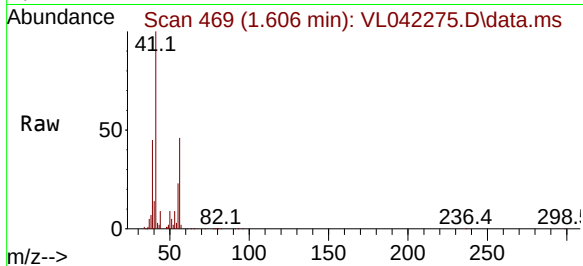




#3
Chlorodifluoromethane
Concen: 0.083 ppbv
RT: 1.606 min Scan# 41
Delta R.T. 0.133 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

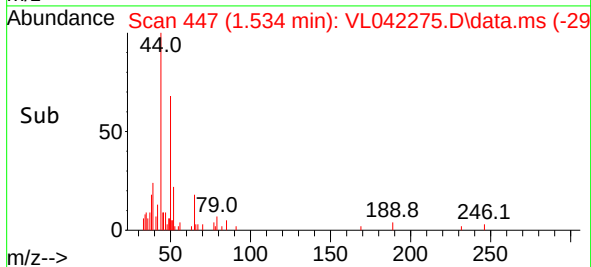
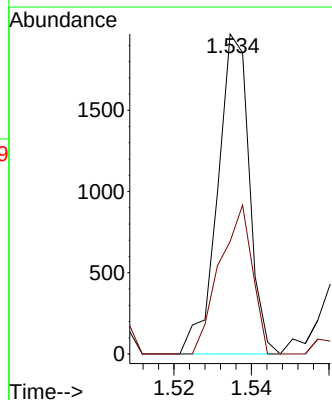
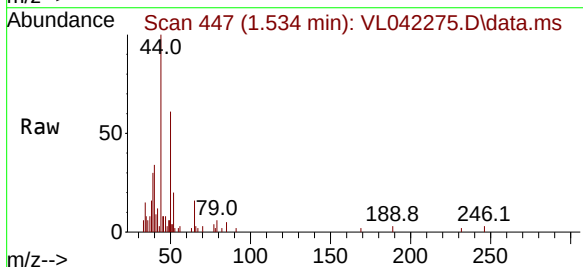
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-3-04012025

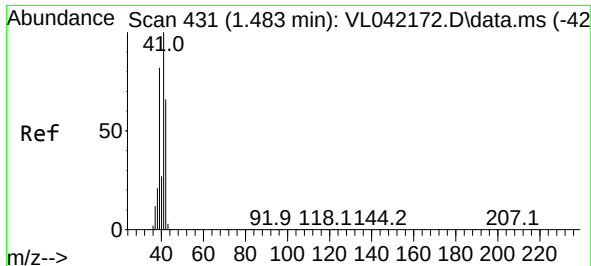
Tgt Ion: 51 Resp: 2012
Ion Ratio Lower Upper
51 100
67 19.4 15.0 22.6



#4
Chloromethane
Concen: 0.116 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

Tgt Ion: 50 Resp: 1118
Ion Ratio Lower Upper
50 100
52 32.8 26.1 39.1





#9

Propene

Concen: 0.209 ppbv

RT: 1.486 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL042275.D

Acq: 08 Apr 2025 22:42

Instrument :

MSVOA_L

ClientSampleId :

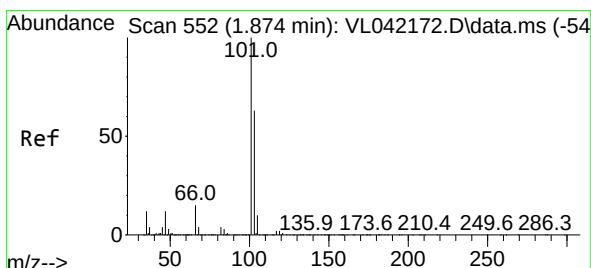
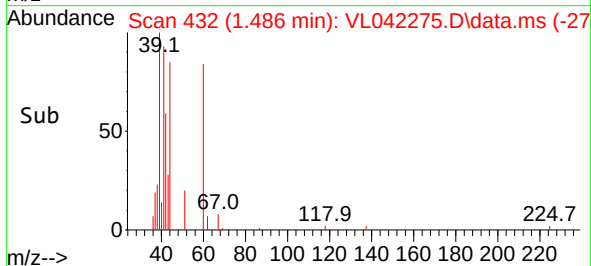
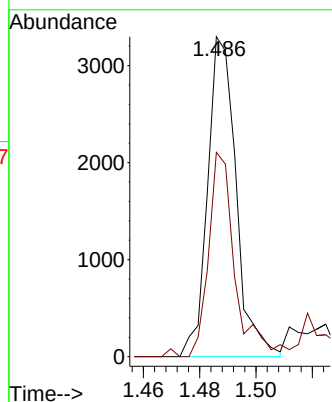
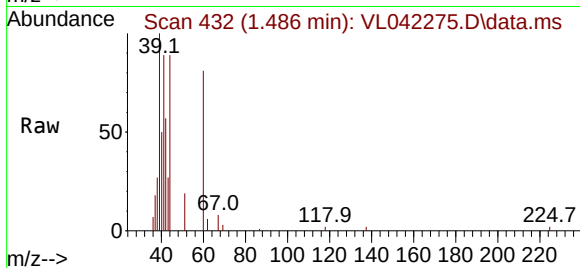
SSSG-B1-3-04012025

Tgt Ion: 41 Resp: 2314

Ion Ratio Lower Upper

41 100

42 59.7 55.4 83.2



#11

Trichlorofluoromethane

Concen: 0.116 ppbv

RT: 1.884 min Scan# 555

Delta R.T. 0.010 min

Lab File: VL042275.D

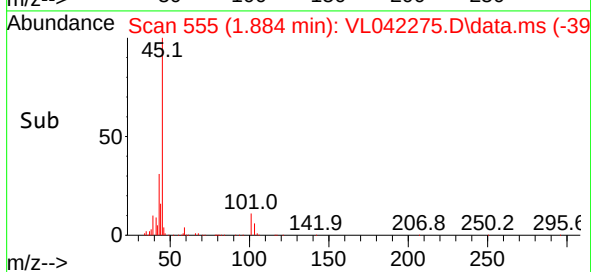
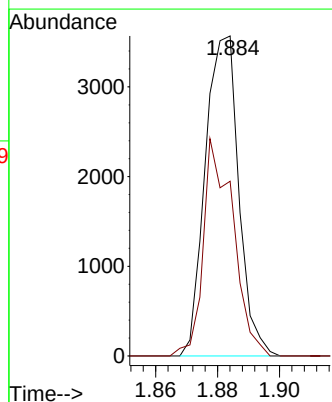
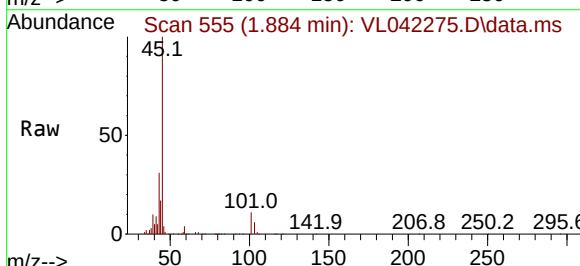
Acq: 08 Apr 2025 22:42

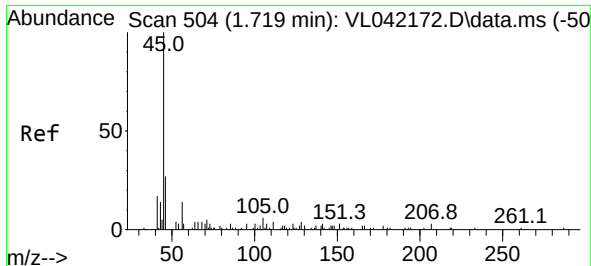
Tgt Ion: 101 Resp: 2674

Ion Ratio Lower Upper

101 100

103 54.6 50.2 75.2

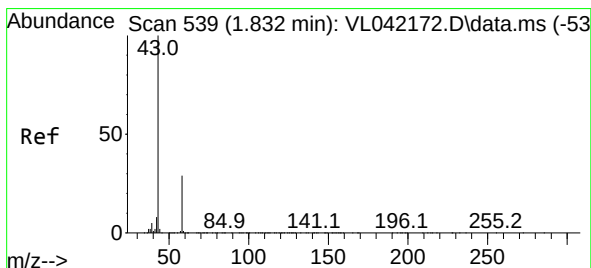
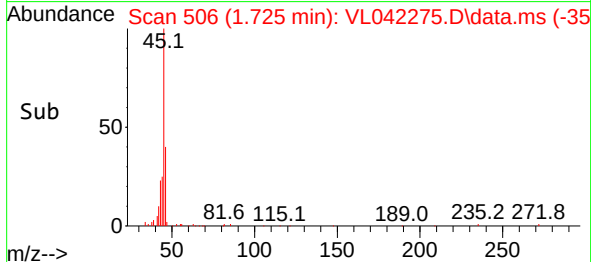
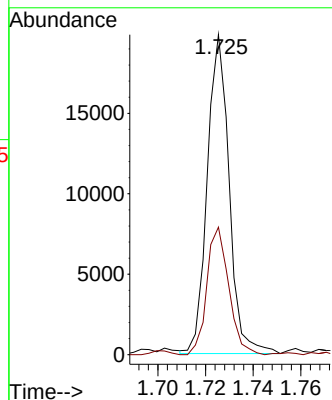
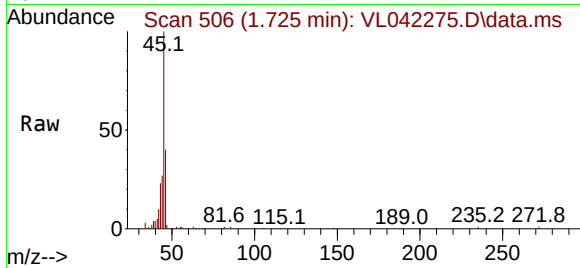




#13
Ethanol
Concen: 12.076 ppbv
RT: 1.725 min Scan# 504
Delta R.T. 0.006 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

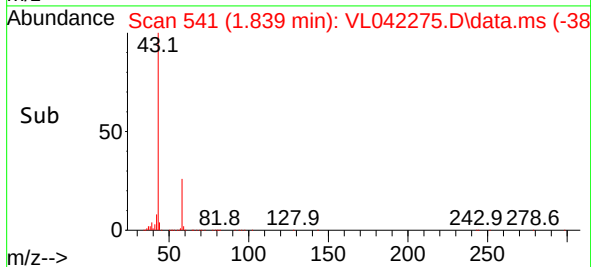
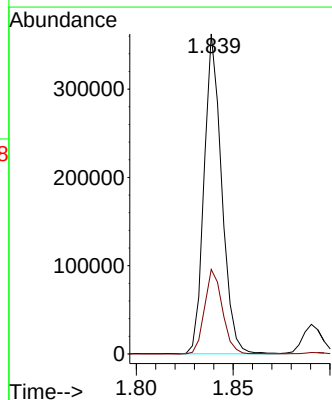
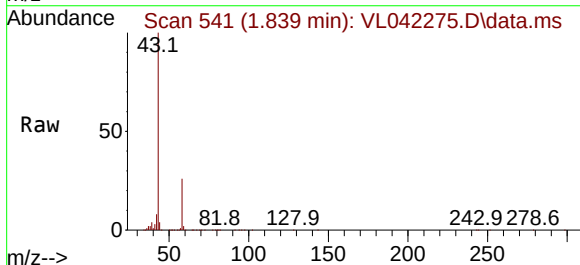
Instrument :
MSVOA_1
ClientSampleId :
SSSG-B1-3-04012025

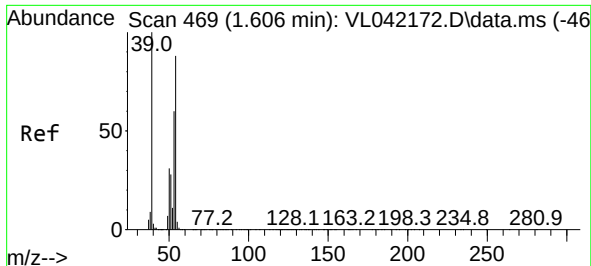
Tgt Ion: 45 Resp: 12651
Ion Ratio Lower Upper
45 100
46 42.5 20.2 80.8



#15
Acetone
Concen: 10.208 ppbv
RT: 1.839 min Scan# 541
Delta R.T. 0.006 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

Tgt Ion: 43 Resp: 228835
Ion Ratio Lower Upper
43 100
58 26.8 23.2 34.8

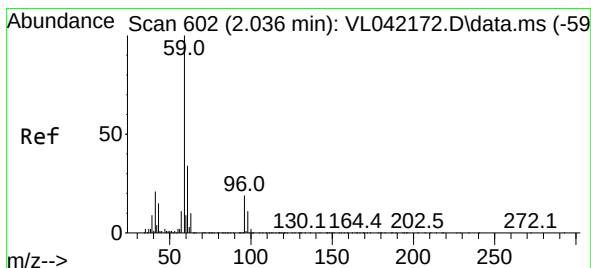
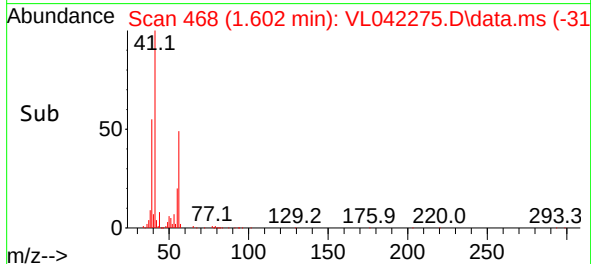
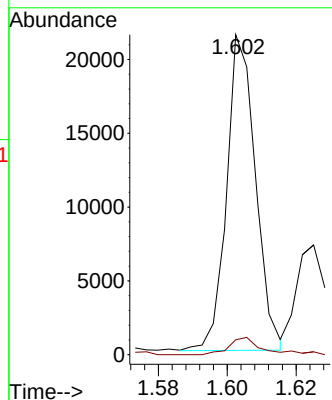
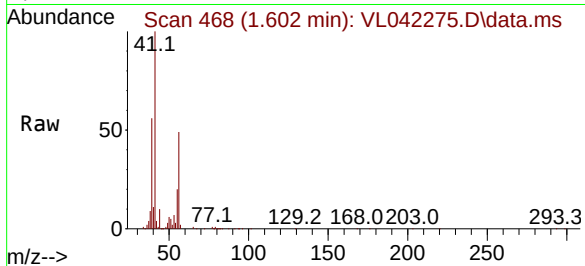




#16
1,3-Butadiene
Concen: 1.138 ppbv
RT: 1.602 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

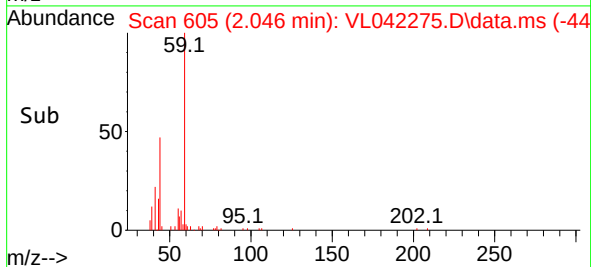
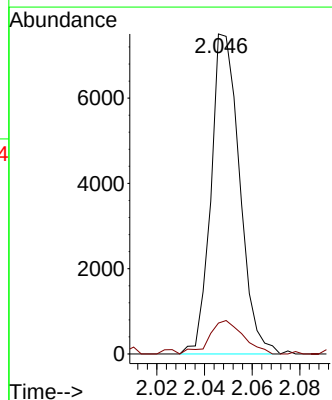
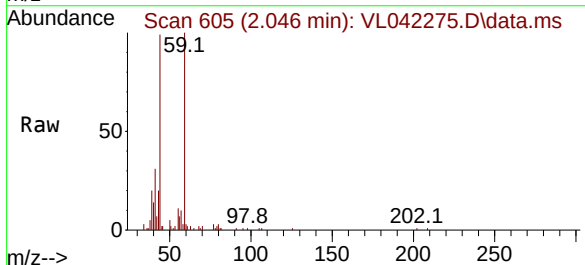
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-3-04012025

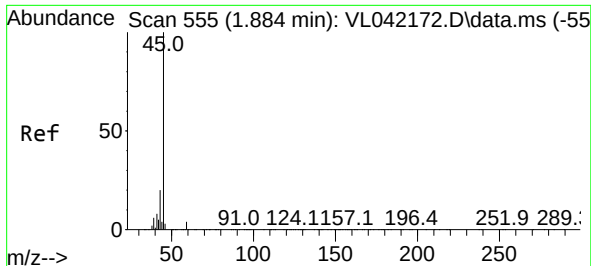
Tgt Ion: 39 Resp: 12463
Ion Ratio Lower Upper
39 100
54 7.7 60.7 91.1#



#17
tert-Butyl alcohol
Concen: 0.225 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

Tgt Ion: 59 Resp: 6274
Ion Ratio Lower Upper
59 100
57 13.1 8.9 13.3

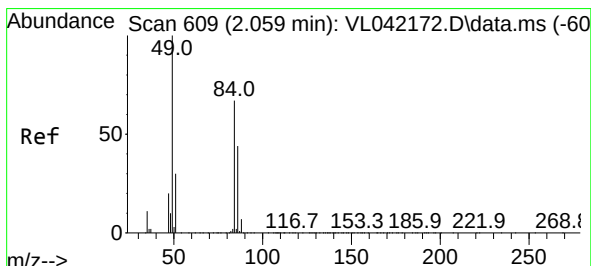
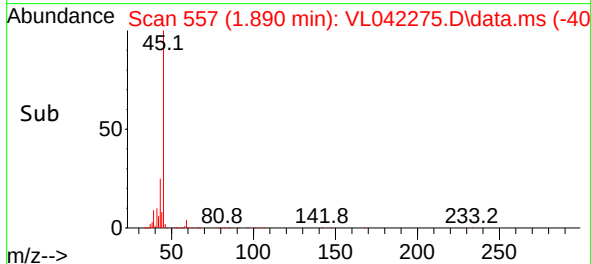
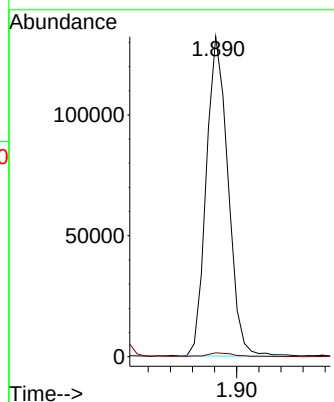
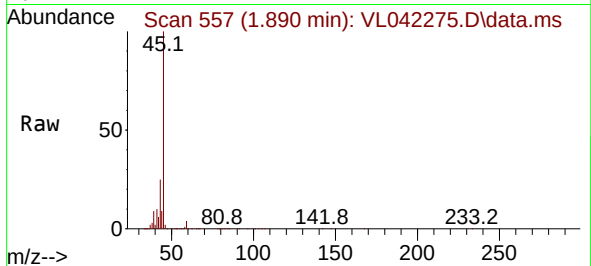




#19
Isopropyl Alcohol
Concen: 7.117 ppbv
RT: 1.890 min Scan# 511
Delta R.T. 0.006 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

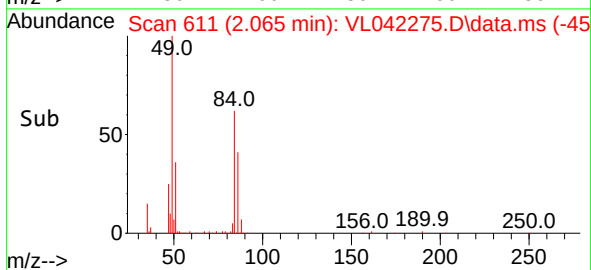
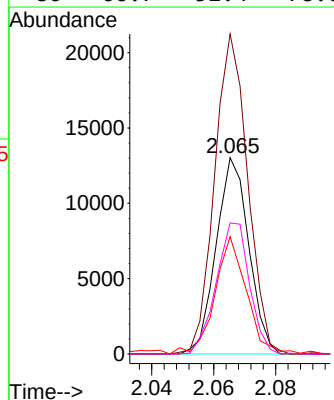
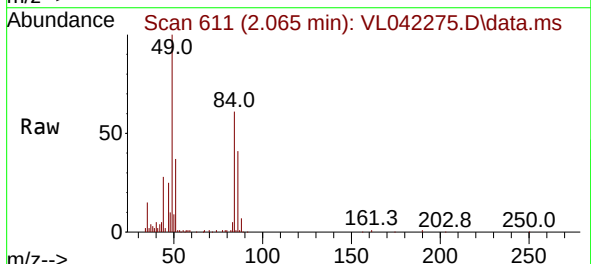
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-3-04012025

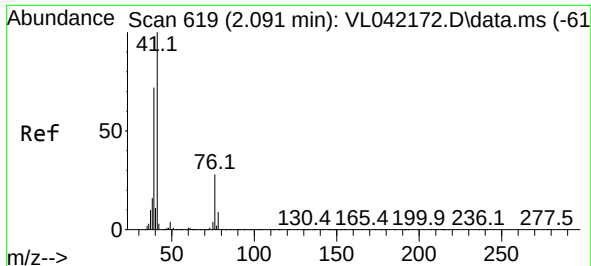
Tgt Ion: 45 Resp: 90023
Ion Ratio Lower Upper
45 100
58 68.1 36.9 55.3#



#20
Methylene Chloride
Concen: 1.141 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

Tgt Ion: 84 Resp: 9525
Ion Ratio Lower Upper
84 100
49 162.1 120.2 180.4
51 58.4 37.4 56.0#
86 66.7 52.4 78.6





#21

Allyl Chloride

Concen: 0.135 ppbv

RT: 2.049 min Scan# 619

Delta R.T. -0.042 min

Lab File: VL042275.D

Acq: 08 Apr 2025 22:42

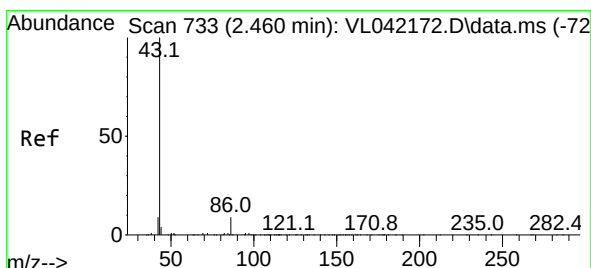
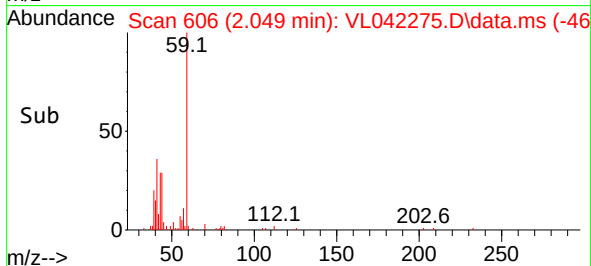
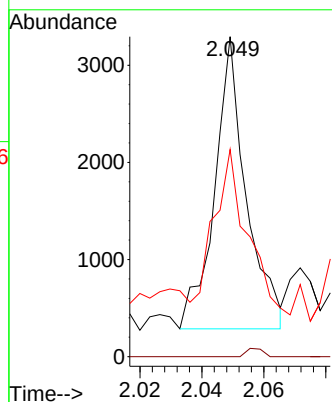
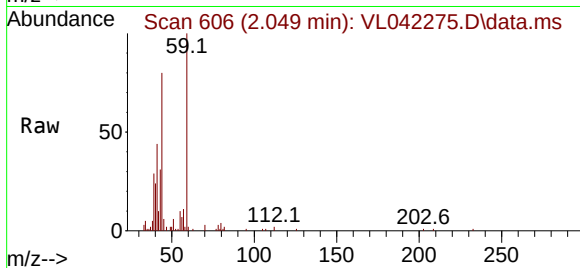
Instrument :

MSVOA_1

ClientSampleId :

SSSG-B1-3-04012025

Tgt Ion:	41	Resp:	2138
Ion Ratio	Lower	Upper	
41	100		
76	17.7	24.1	36.1#
39	86.7	61.1	91.7



#23

Vinyl Acetate

Concen: 0.277 ppbv

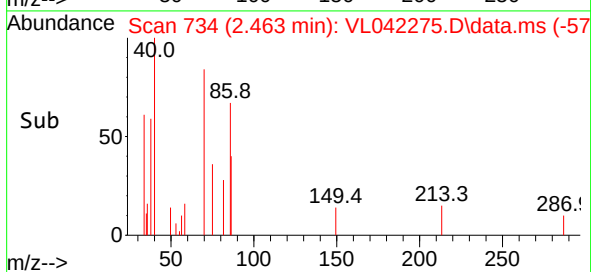
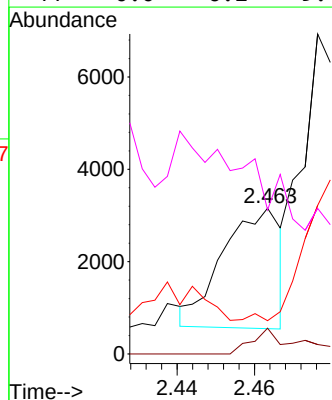
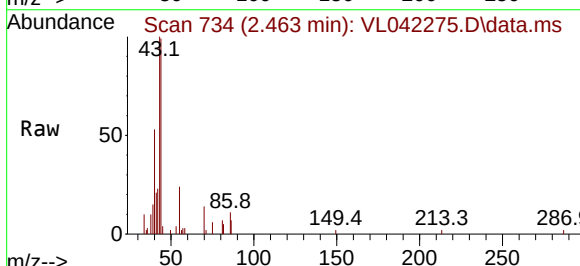
RT: 2.463 min Scan# 734

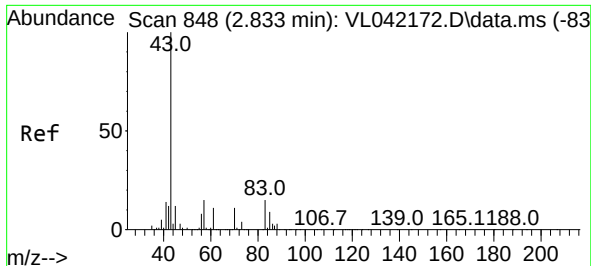
Delta R.T. 0.003 min

Lab File: VL042275.D

Acq: 08 Apr 2025 22:42

Tgt Ion:	43	Resp:	2691
Ion Ratio	Lower	Upper	
43	100		
86	26.3	5.5	8.3#
42	0.0	8.6	13.0#
44	0.0	6.2	9.4#

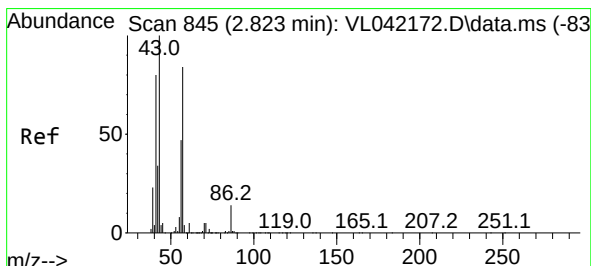
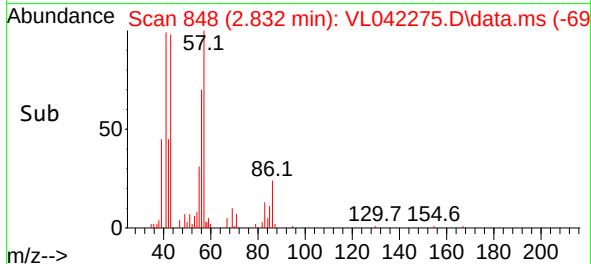
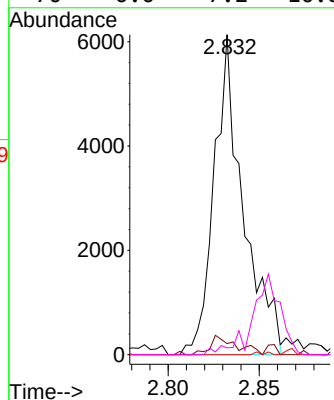
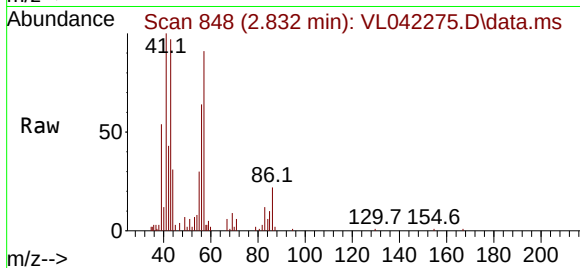




#25
Ethyl Acetate
Concen: 0.117 ppbv
RT: 2.832 min Scan# 841
Delta R.T. -0.000 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

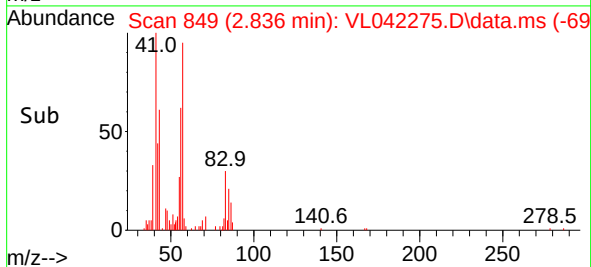
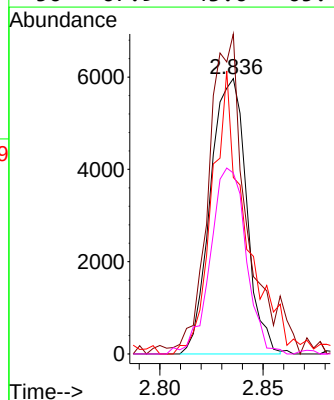
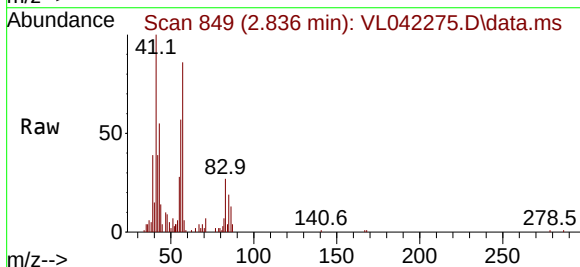
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-3-04012025

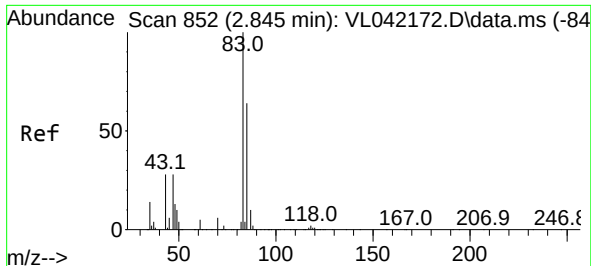
Tgt Ion: 43	Resp: 6826
Ion Ratio	Lower Upper
43 100	
45 6.8	8.2 12.2#
61 0.0	7.3 10.9#
70 0.0	7.2 10.8#



#26
Hexane
Concen: 0.321 ppbv
RT: 2.836 min Scan# 849
Delta R.T. 0.013 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

Tgt Ion: 57	Resp: 7214
Ion Ratio	Lower Upper
57 100	
41 127.3	76.6 114.8#
43 99.3	207.8 311.8#
56 67.9	43.6 65.4#





#29

Chloroform

Concen: 3.078 ppbv

RT: 2.855 min Scan# 81

Delta R.T. 0.010 min

Lab File: VL042275.D

Acq: 08 Apr 2025 22:42

Instrument :

MSVOA_L

ClientSampleId :

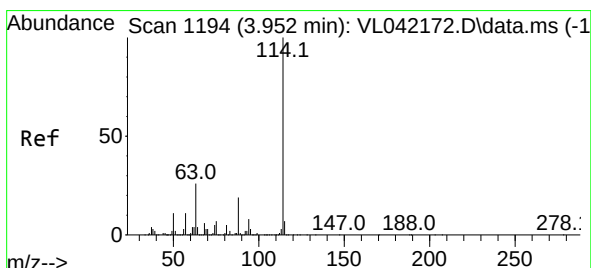
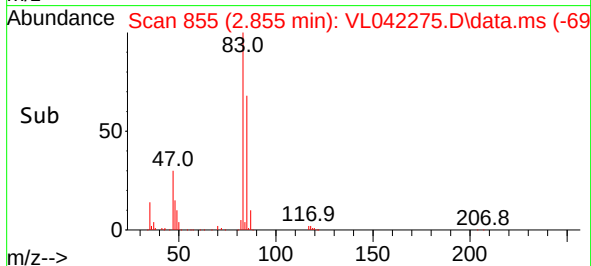
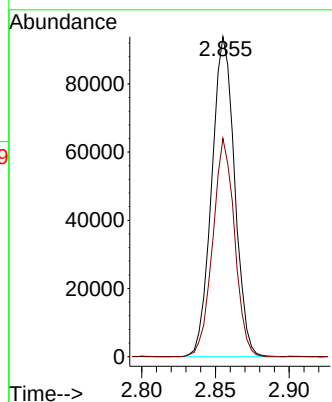
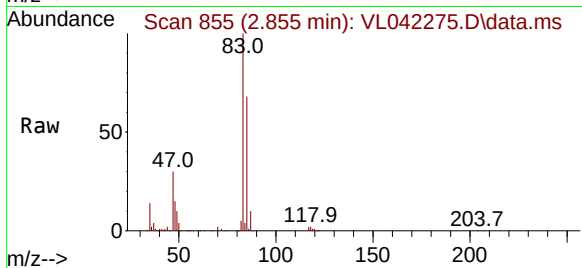
SSSG-B1-3-04012025

Tgt Ion: 83 Resp: 101229

Ion Ratio Lower Upper

83 100

85 68.2 51.4 77.2



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.968 min Scan# 1199

Delta R.T. 0.016 min

Lab File: VL042275.D

Acq: 08 Apr 2025 22:42

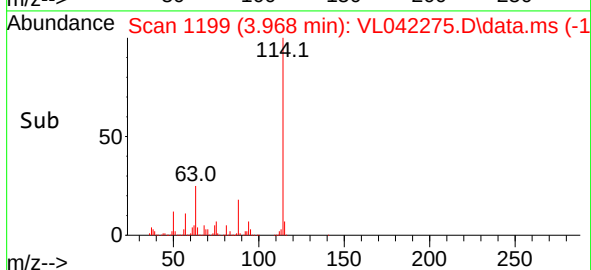
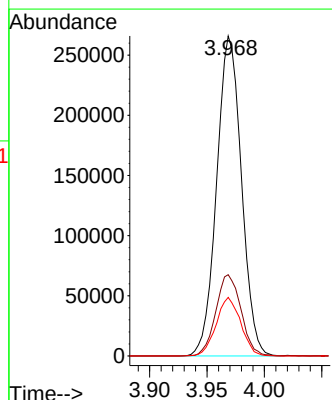
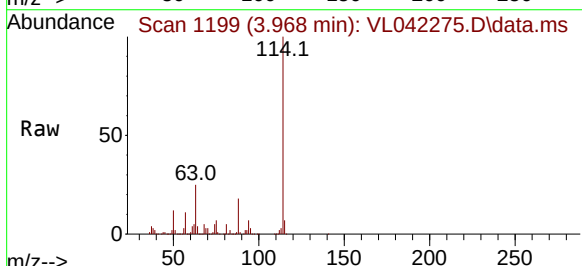
Tgt Ion: 114 Resp: 399383

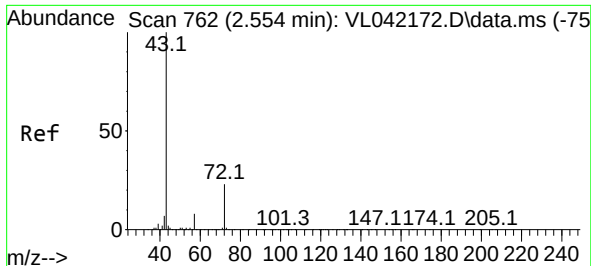
Ion Ratio Lower Upper

114 100

63 25.9 20.7 31.1

88 18.1 15.0 22.4

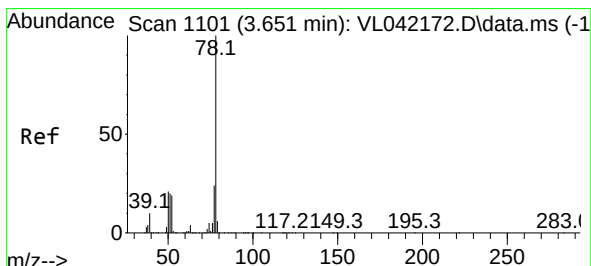
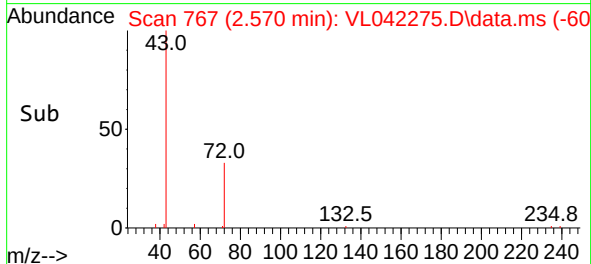
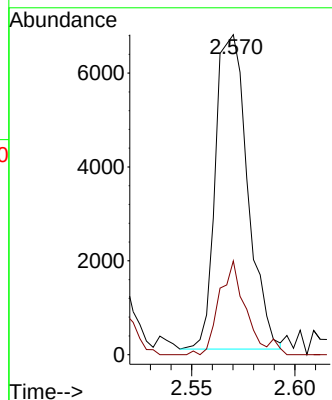
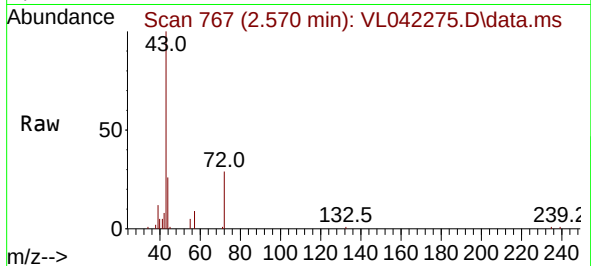




#34
2-Butanone
Concen: 0.251 ppbv
RT: 2.570 min Scan# 71
Delta R.T. 0.016 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

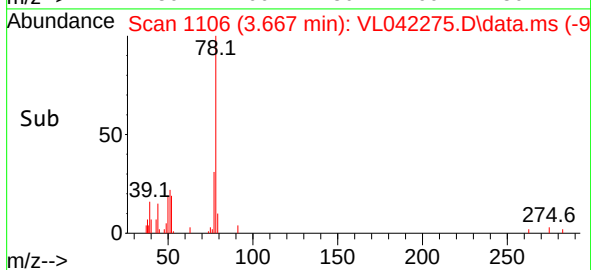
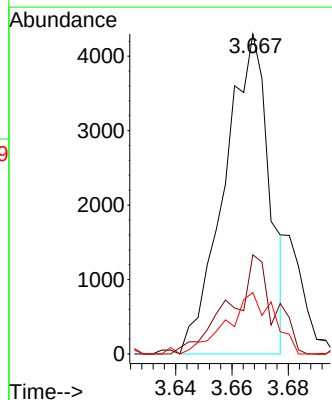
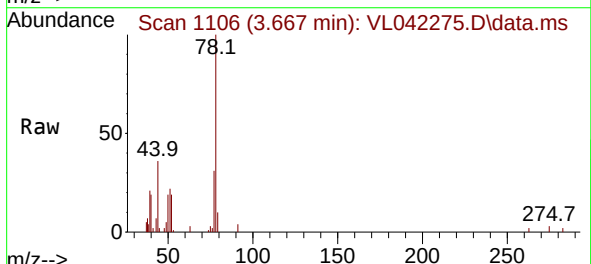
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-3-04012025

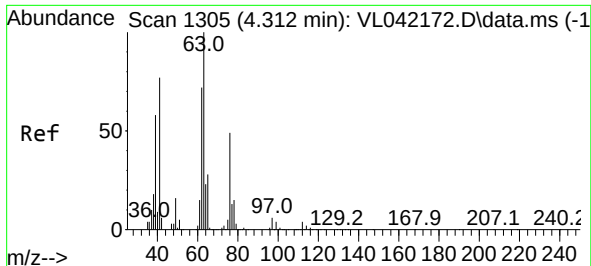
Tgt Ion: 43 Resp: 7264
Ion Ratio Lower Upper
43 100
72 25.0 18.2 27.2



#36
Benzene
Concen: 0.120 ppbv
RT: 3.667 min Scan# 1106
Delta R.T. 0.016 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

Tgt Ion: 78 Resp: 4760
Ion Ratio Lower Upper
78 100
77 29.0 19.1 28.7#
50 19.2 16.6 24.8





#39

1,2-Dichloropropane

Concen: 7.149 ppbv

RT: 3.968 min Scan# 1199

Delta R.T. -0.343 min

Lab File: VL042275.D

Acq: 08 Apr 2025 22:42

Instrument :

MSVOA_1

ClientSampleId :

SSSG-B1-3-04012025

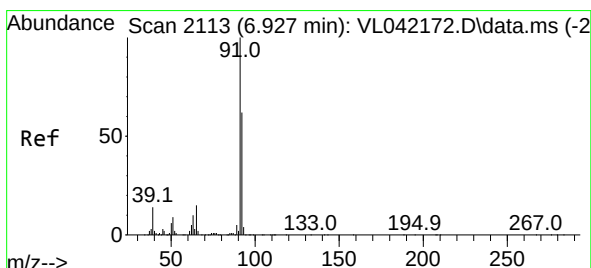
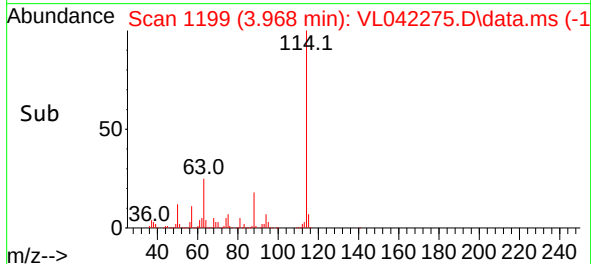
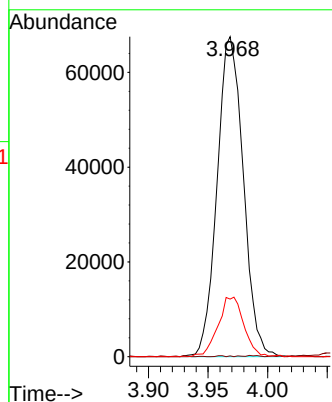
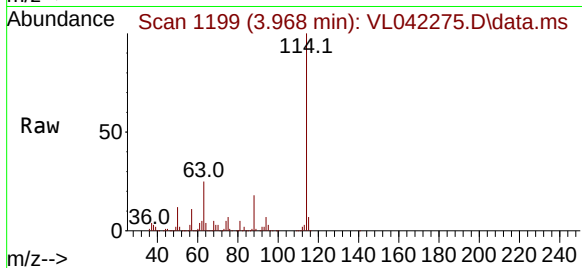
Tgt Ion: 63 Resp: 103082

Ion Ratio Lower Upper

63 100

41 0.3 61.7 92.5#

62 18.0 57.6 86.4#



#53

Toluene

Concen: 0.169 ppbv

RT: 6.953 min Scan# 2121

Delta R.T. 0.026 min

Lab File: VL042275.D

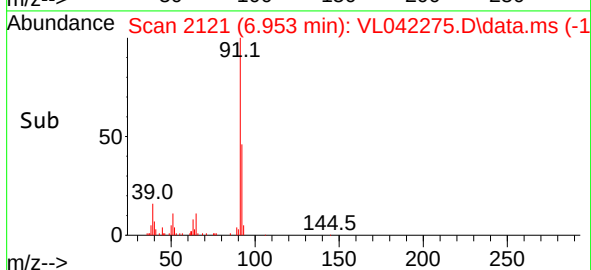
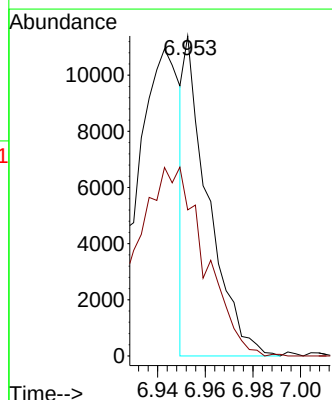
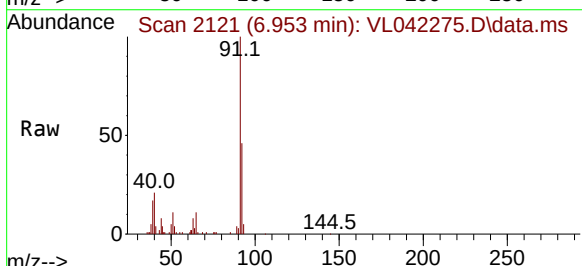
Acq: 08 Apr 2025 22:42

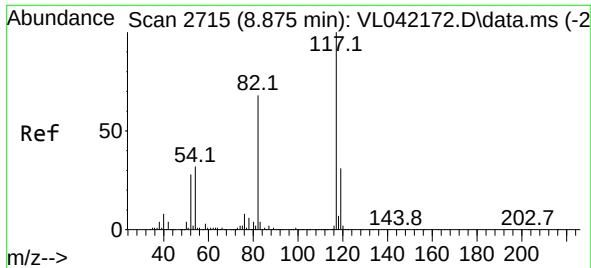
Tgt Ion: 91 Resp: 7934

Ion Ratio Lower Upper

91 100

92 167.7 48.4 72.6#

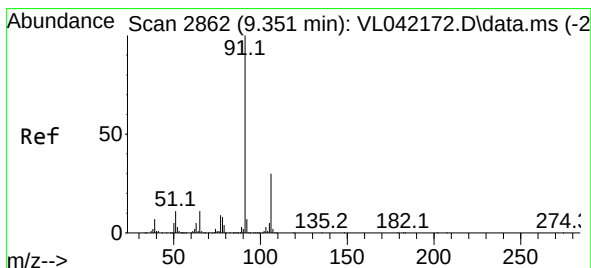
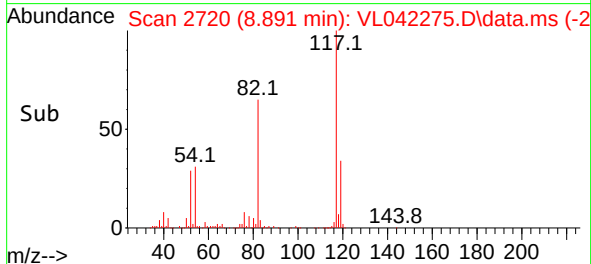
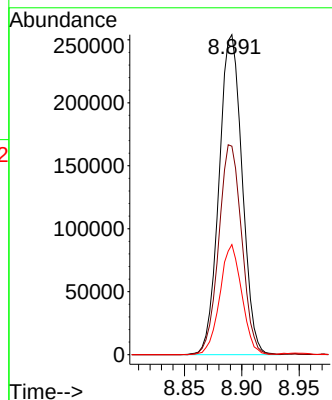
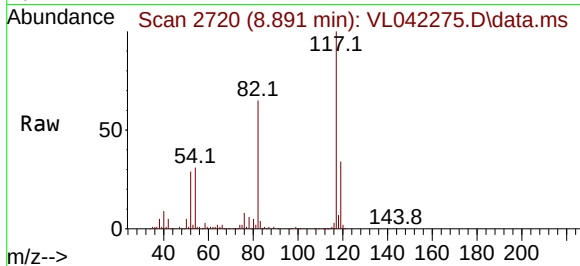




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.891 min Scan# 21
Delta R.T. 0.016 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

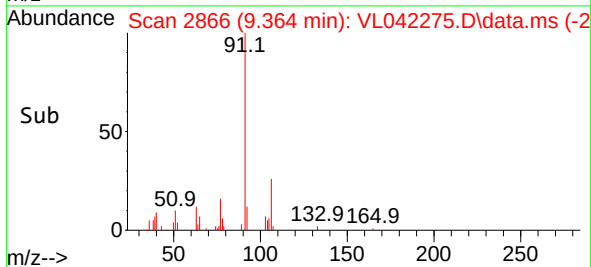
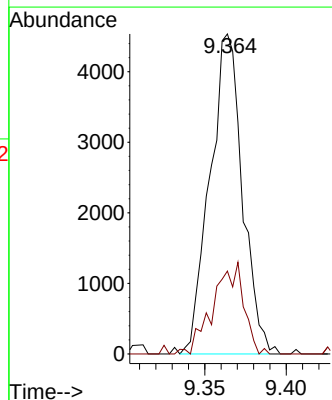
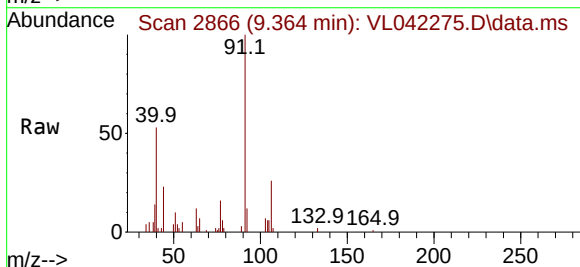
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-3-04012025

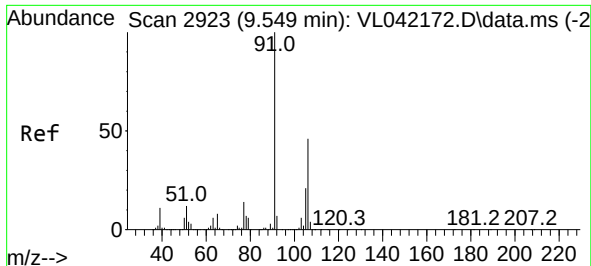
Tgt Ion: 117 Resp: 355820
Ion Ratio Lower Upper
117 100
82 65.5 55.8 83.6
119 32.8 25.5 38.3



#58
Ethyl Benzene
Concen: 0.100 ppbv
RT: 9.364 min Scan# 2866
Delta R.T. 0.013 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

Tgt Ion: 91 Resp: 6292
Ion Ratio Lower Upper
91 100
106 25.9 24.2 36.2





#59

m/p-Xylene

Concen: 0.078 ppbv

RT: 9.558 min Scan# 2923

Delta R.T. 0.010 min

Lab File: VL042275.D

Acq: 08 Apr 2025 22:42

Instrument :

MSVOA_L

ClientSampleId :

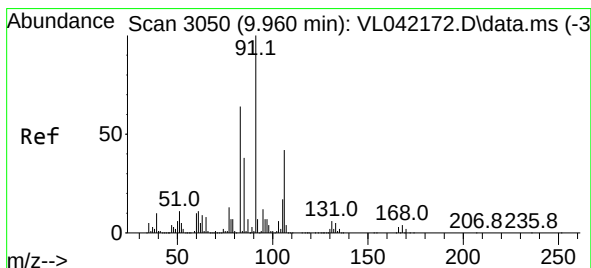
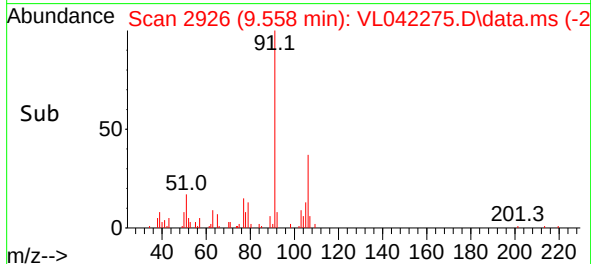
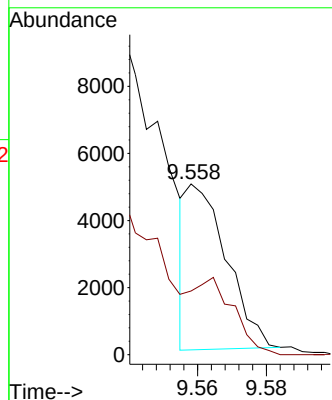
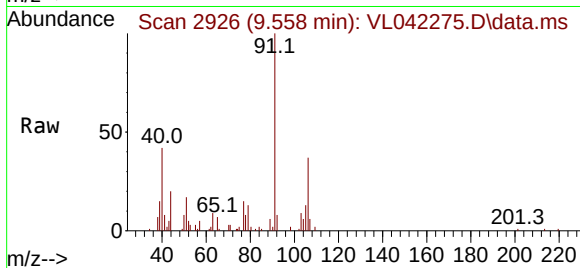
SSSG-B1-3-04012025

Tgt Ion: 91 Resp: 3961

Ion Ratio Lower Upper

91 100

106 0.0 36.4 54.6#



#60

o-Xylene

Concen: 0.138 ppbv

RT: 9.972 min Scan# 3054

Delta R.T. 0.013 min

Lab File: VL042275.D

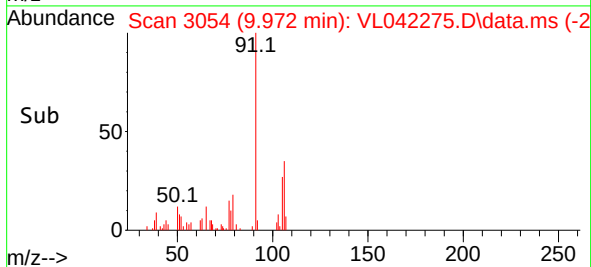
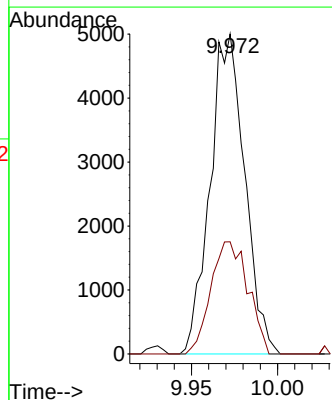
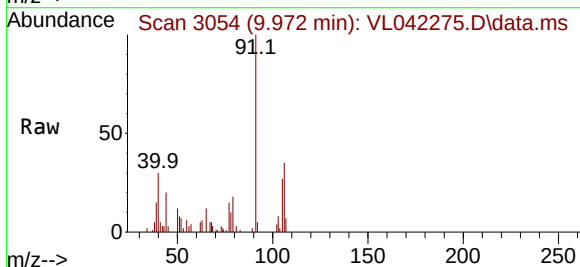
Acq: 08 Apr 2025 22:42

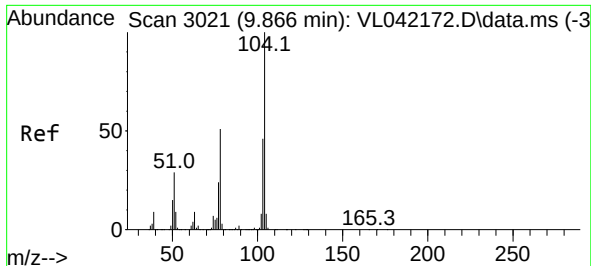
Tgt Ion: 91 Resp: 7001

Ion Ratio Lower Upper

91 100

106 37.6 20.8 62.5

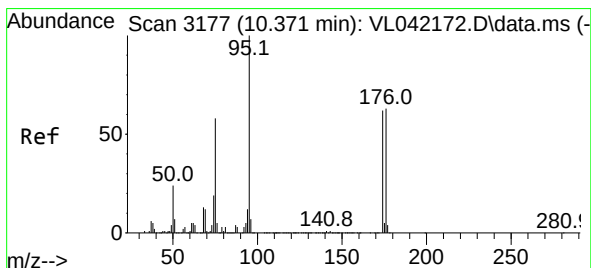
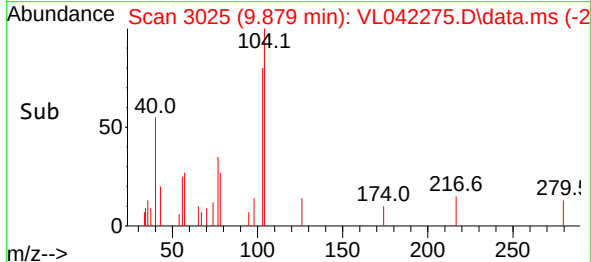
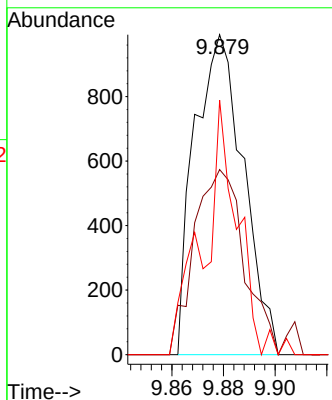
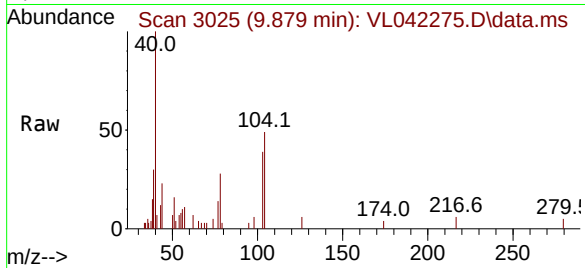




#61
Styrene
Concen: 0.052 ppbv
RT: 9.879 min Scan# 3021
Delta R.T. 0.013 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

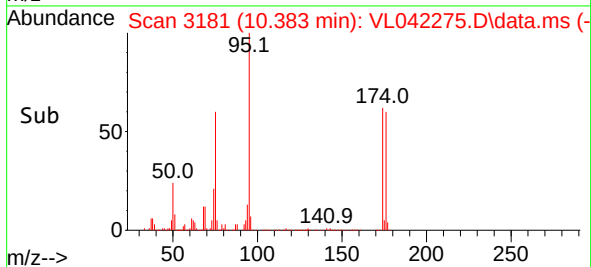
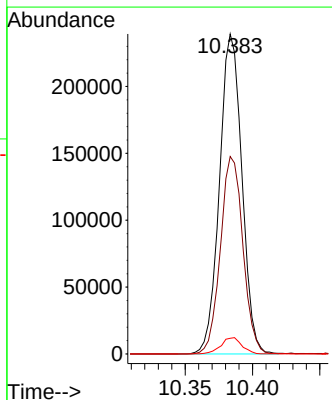
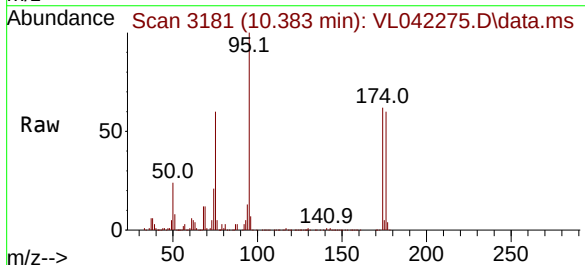
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-3-04012025

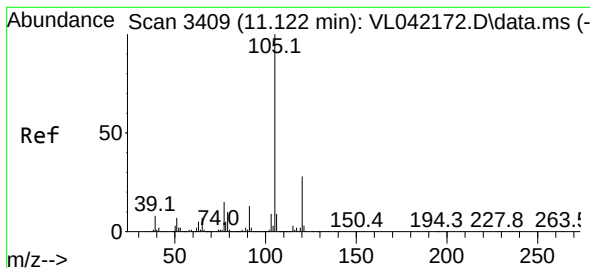
Tgt Ion:104 Resp: 1302
Ion Ratio Lower Upper
104 100
78 61.8 41.8 62.6
103 55.7 37.0 55.4#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.470 ppbv
RT: 10.383 min Scan# 3181
Delta R.T. 0.013 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

Tgt Ion: 95 Resp: 276732
Ion Ratio Lower Upper
95 100
174 62.2 50.6 76.0
175 4.8 3.8 5.6

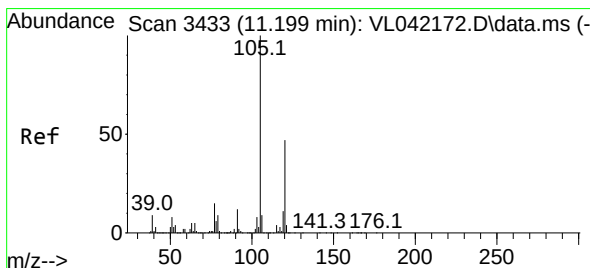
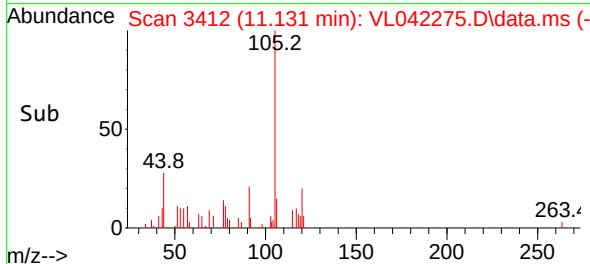
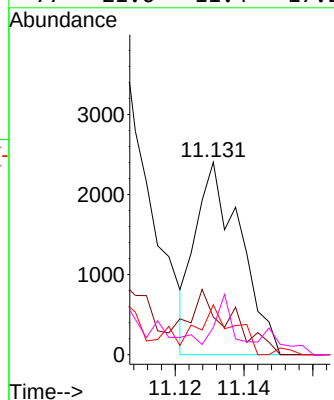
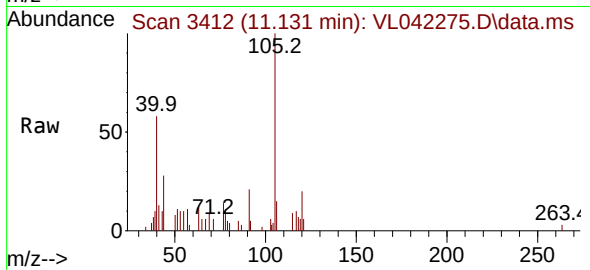




#72
4-Ethyltoluene
Concen: 0.035 ppbv
RT: 11.131 min Scan# 3409
Delta R.T. 0.010 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

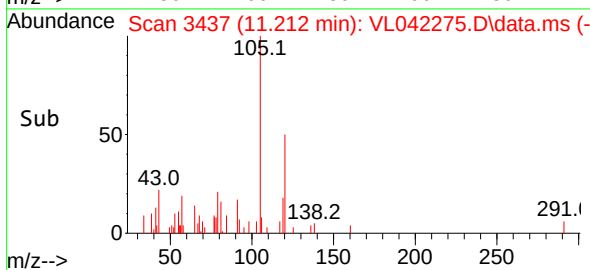
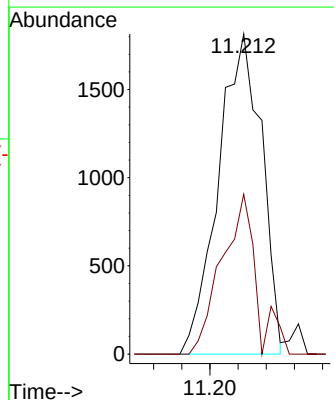
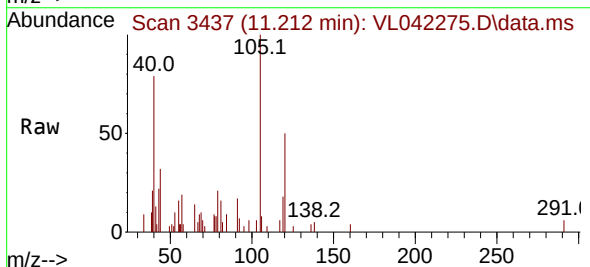
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B1-3-04012025

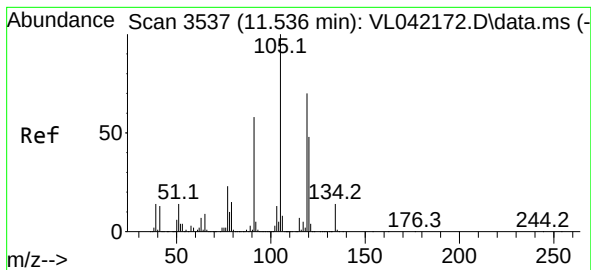
Tgt Ion:	105	Resp:	2178
Ion Ratio	Lower	Upper	
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	21.6	11.4	17.2#



#73
1,3,5-Trimethylbenzene
Concen: 0.035 ppbv
RT: 11.212 min Scan# 3437
Delta R.T. 0.013 min
Lab File: VL042275.D
Acq: 08 Apr 2025 22:42

Tgt Ion:	105	Resp:	1937
Ion Ratio	Lower	Upper	
105	100		
120	49.9	37.4	56.0





#74

1,2,4-Trimethylbenzene

Concen: 0.114 ppbv

RT: 11.542 min Scan# 31

Delta R.T. 0.006 min

Lab File: VL042275.D

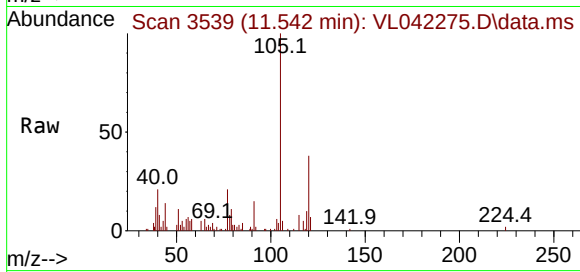
Acq: 08 Apr 2025 22:42

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B1-3-04012025



Tgt Ion:	105	Resp:	7204
Ion	Ratio	Lower	Upper
105	100		
120	38.0	38.6	58.0#
91	13.2	46.2	69.2#
77	21.0	18.6	27.8

