

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
 Data File : VL042183.D
 Acq On : 27 Mar 2025 17:13
 Operator : SY/MD
 Sample : Q1649-01 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Quant Time: Mar 28 02:13:53 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	2.787	49	186939	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	535675	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	487132	10.000	ppbv	0.00

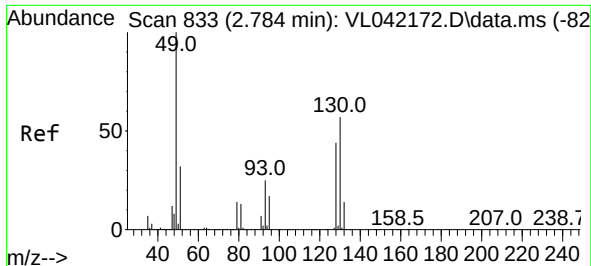
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	402708	10.067	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.700%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.495	85	1569	0.057	ppbv	95
3) Chlorodifluoromethane	1.473	51	2491	0.088	ppbv #	70
4) Chloromethane	1.528	50	404	0.036	ppbv #	55
7) Chloroethane	1.699	64	147	0.032	ppbv #	83
9) Propene	1.479	41	6544	0.506	ppbv	96
10) Heptane	4.975	43	2895	0.084	ppbv #	1
13) Ethanol	1.434	45	148817	121.806	ppbv #	27
15) Acetone	1.835	43	26694	1.021	ppbv	99
16) 1,3-Butadiene	1.599	39	3537	0.277	ppbv #	45
19) Isopropyl Alcohol	1.434	45	148817	10.088	ppbv #	31
20) Methylene Chloride	2.062	84	1986	0.204	ppbv #	73
23) Vinyl Acetate	2.463	43	7922	0.700	ppbv #	51
25) Ethyl Acetate	2.826	43	65991	0.973	ppbv #	79
26) Hexane	2.822	57	93163	3.554	ppbv #	29
27) Carbon Disulfide	2.149	76	1916	0.068	ppbv #	1
28) Methyl tert-Butyl Ether	2.444	73	1712	0.105	ppbv #	49
34) 2-Butanone	2.564	43	3130	0.081	ppbv	94
36) Benzene	3.654	78	1998	0.038	ppbv #	73
39) 1,2-Dichloropropane	3.955	63	139244	7.200	ppbv #	22
41) Tetrahydrofuran	2.822	42	39746	1.777	ppbv #	49
53) Toluene	6.933	91	4573	0.073	ppbv #	1
58) Ethyl Benzene	9.357	91	3836	0.044	ppbv	92
60) o-Xylene	9.963	91	4878	0.070	ppbv	88
72) 4-Ethyltoluene	11.124	105	3847	0.045	ppbv #	82
73) 1,3,5-Trimethylbenzene	11.202	105	2840	0.038	ppbv	97
74) 1,2,4-Trimethylbenzene	11.539	105	13657	0.157	ppbv #	65

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

Quant Time: Mar 28 02:13:53 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

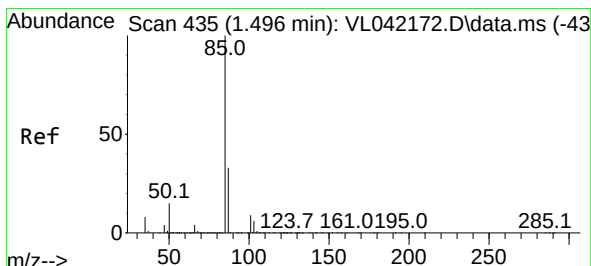
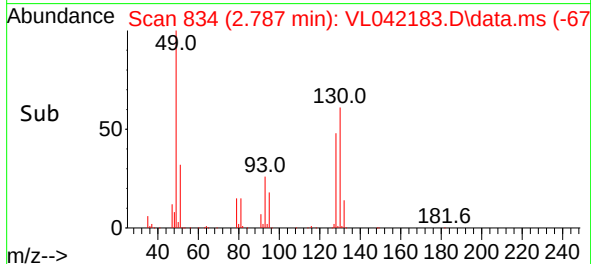
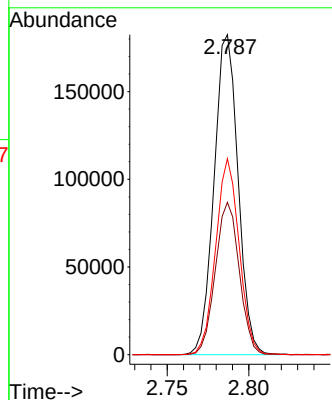
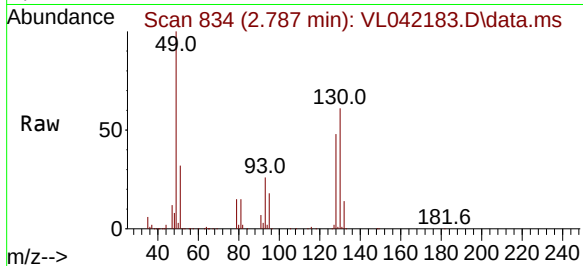




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

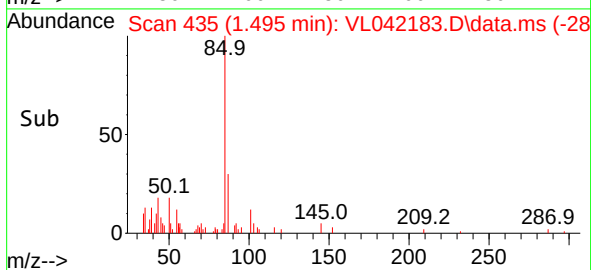
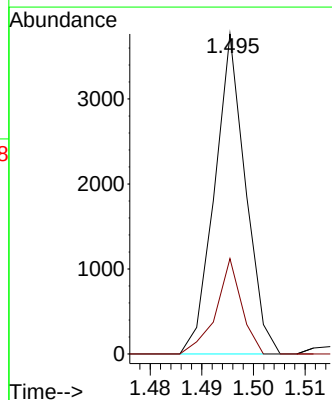
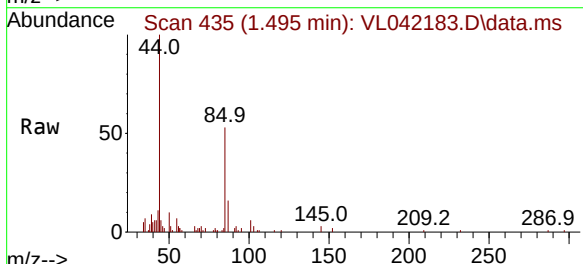
Instrument :
MSVOA_L
ClientSampleId :
SV1

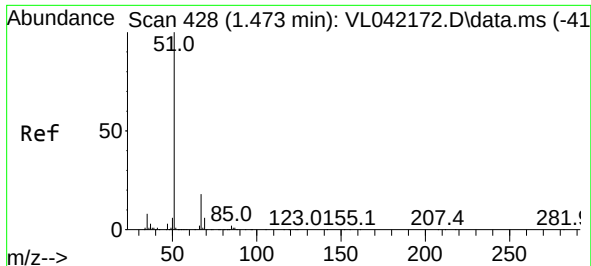
Tgt Ion: 49 Resp: 186939
Ion Ratio Lower Upper
49 100
128 47.5 22.9 68.5
130 59.8 28.8 86.4



#2
Dichlorodifluoromethane
Concen: 0.057 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 85 Resp: 1569
Ion Ratio Lower Upper
85 100
87 29.8 26.1 39.1

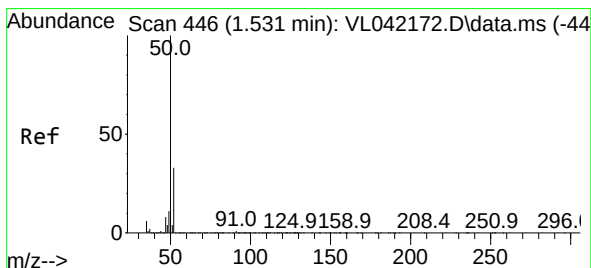
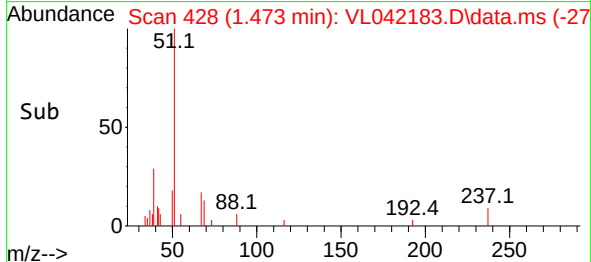
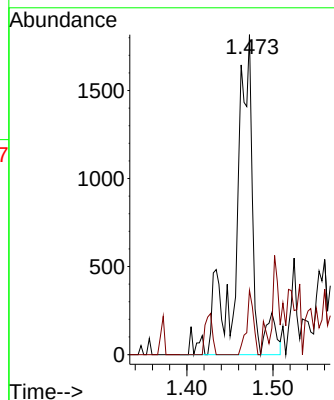
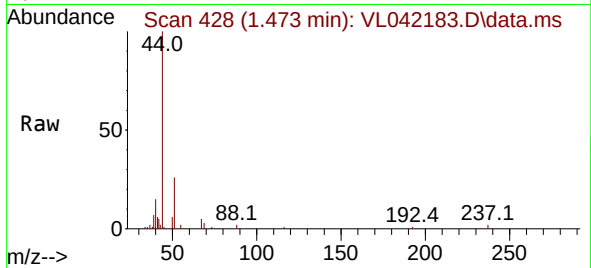




#3
Chlorodifluoromethane
Concen: 0.088 ppbv
RT: 1.473 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

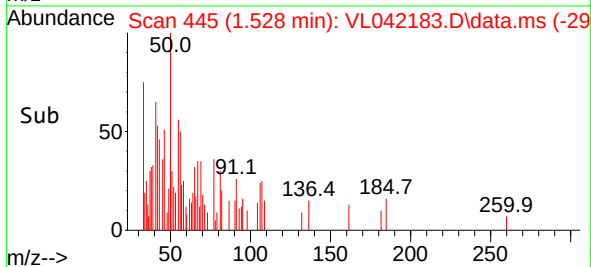
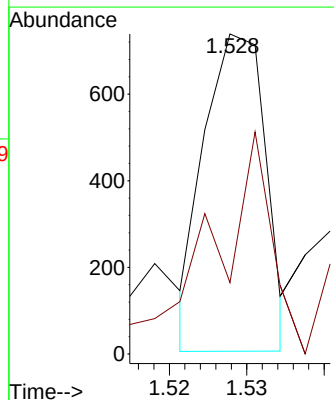
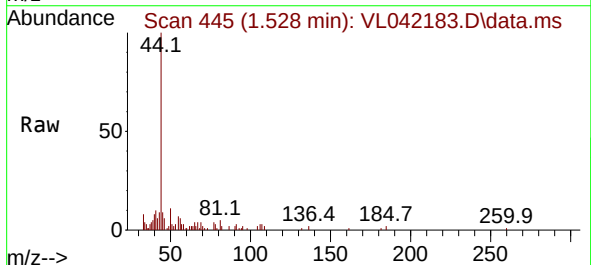
Instrument :
MSVOA_1
ClientSampleId :
SV1

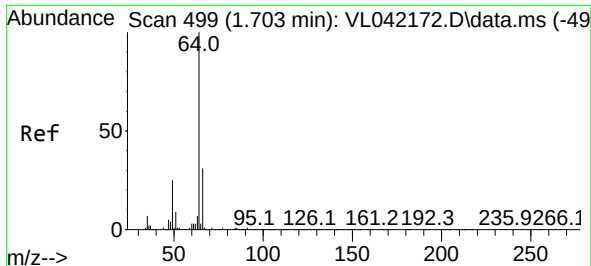
Tgt Ion: 51 Resp: 2491
Ion Ratio Lower Upper
51 100
67 5.5 15.0 22.6#



#4
Chloromethane
Concen: 0.036 ppbv
RT: 1.528 min Scan# 445
Delta R.T. -0.004 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 50 Resp: 404
Ion Ratio Lower Upper
50 100
52 7.3 26.1 39.1#

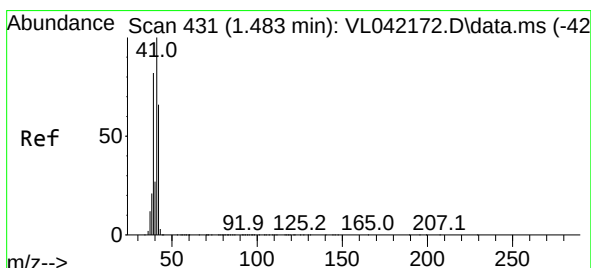
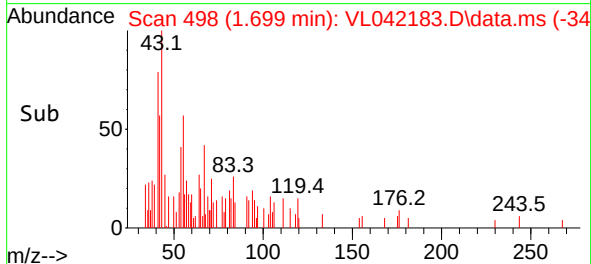
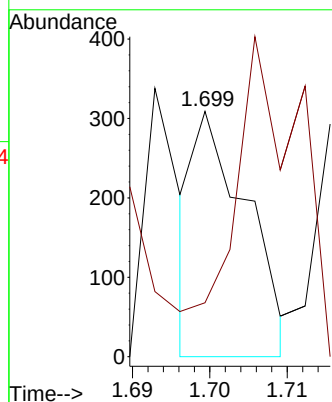
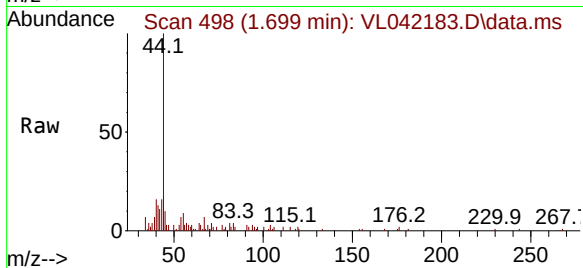




#7
Chloroethane
Concen: 0.032 ppbv
RT: 1.699 min Scan# 499
Delta R.T. -0.004 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

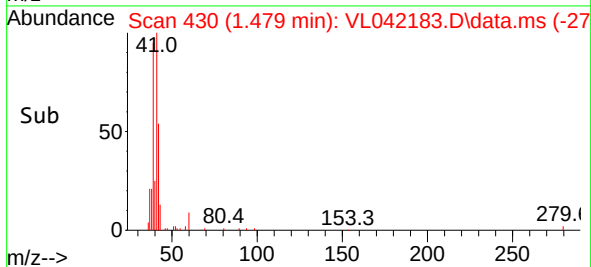
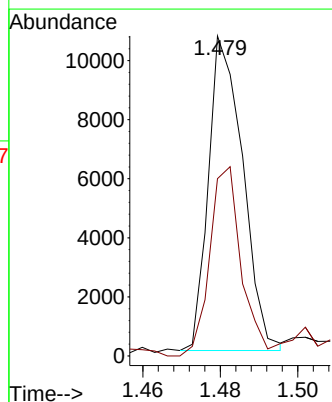
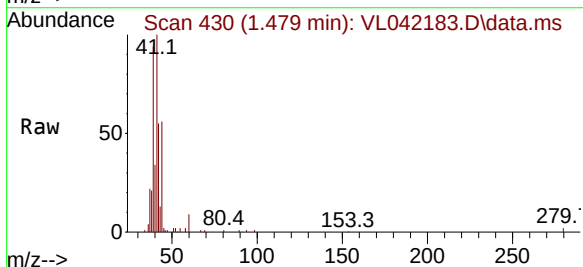
Instrument :
MSVOA_L
ClientSampleId :
SV1

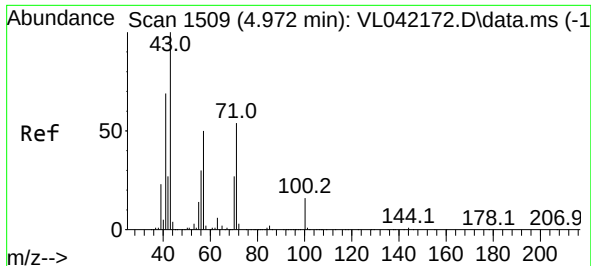
Tgt Ion: 64 Resp: 147
Ion Ratio Lower Upper
64 100
66 22.0 25.2 37.8#



#9
Propene
Concen: 0.506 ppbv
RT: 1.479 min Scan# 430
Delta R.T. -0.004 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 41 Resp: 6544
Ion Ratio Lower Upper
41 100
42 66.3 55.4 83.2

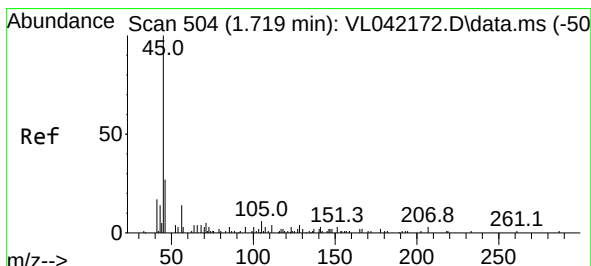
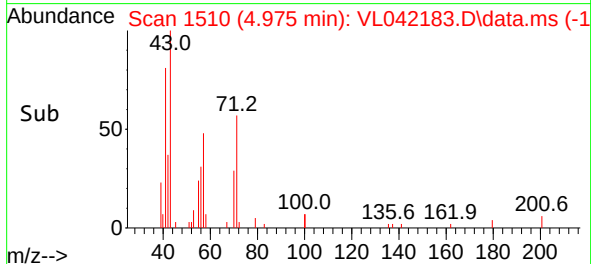
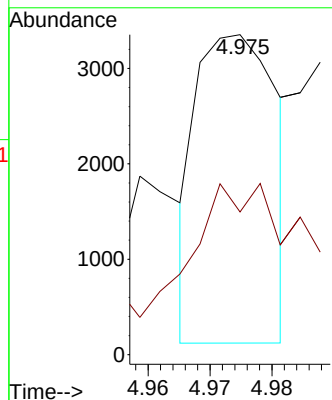
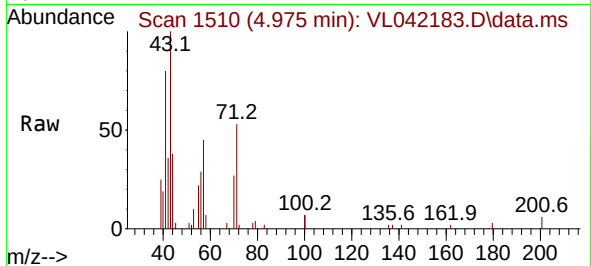




#10
Heptane
Concen: 0.084 ppbv
RT: 4.975 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

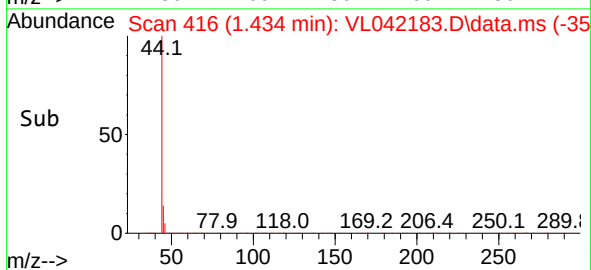
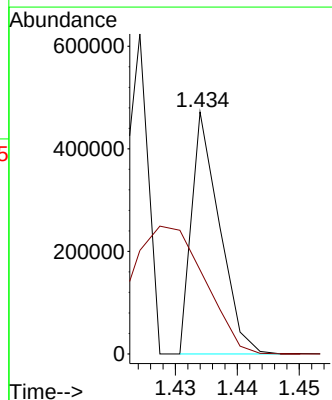
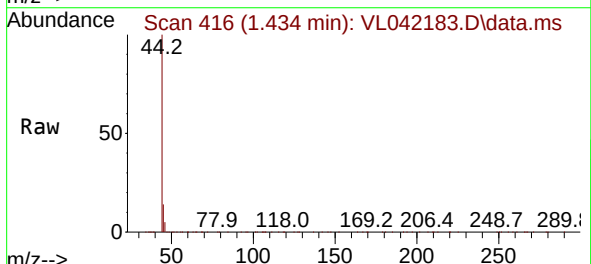
Instrument :
MSVOA_L
ClientSampleId :
SV1

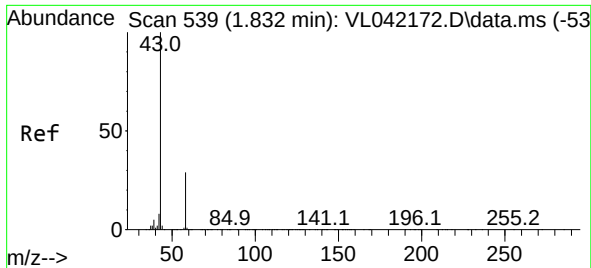
Tgt Ion: 43 Resp: 2895
Ion Ratio Lower Upper
43 100
57 124.9 39.4 59.2#



#13
Ethanol
Concen: 121.806 ppbv
RT: 1.434 min Scan# 416
Delta R.T. -0.285 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 45 Resp: 148817
Ion Ratio Lower Upper
45 100
46 0.0 20.2 80.8#

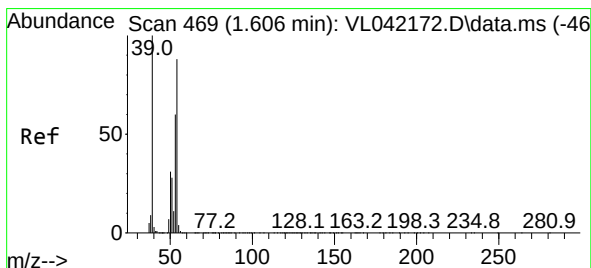
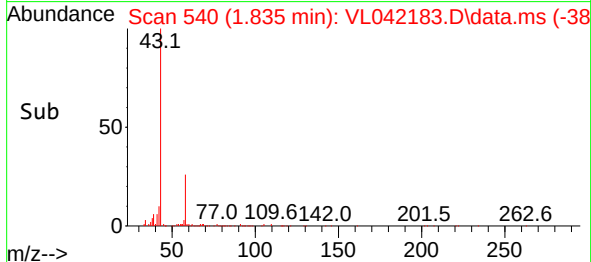
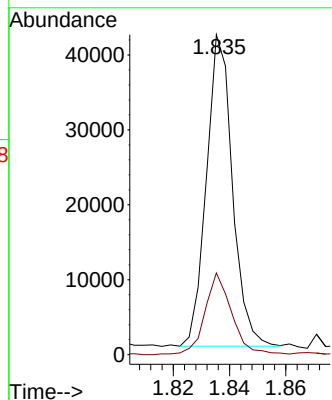
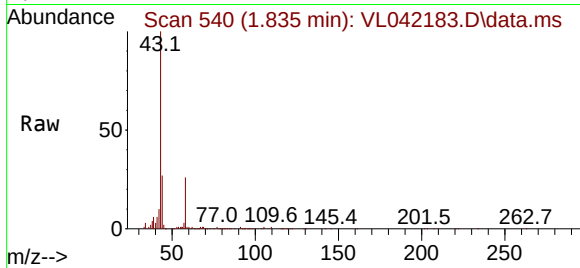




#15
Acetone
Concen: 1.021 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

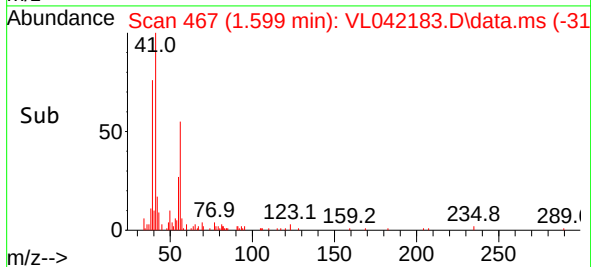
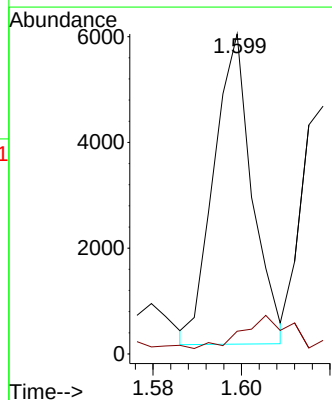
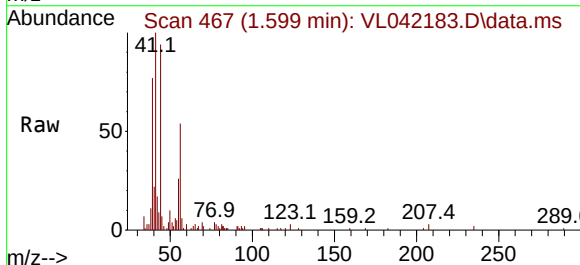
Instrument :
MSVOA_L
ClientSampleId :
SV1

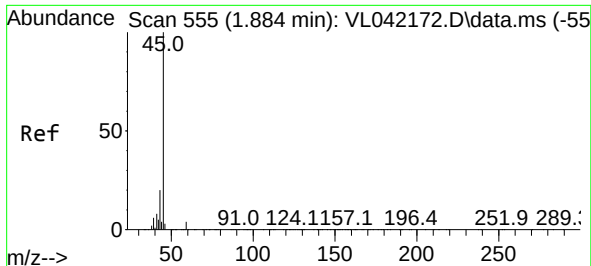
Tgt Ion: 43 Resp: 26694
Ion Ratio Lower Upper
43 100
58 28.2 23.2 34.8



#16
1,3-Butadiene
Concen: 0.277 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.007 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 39 Resp: 3537
Ion Ratio Lower Upper
39 100
54 29.0 60.7 91.1#





#19

Isopropyl Alcohol

Concen: 10.088 ppbv

RT: 1.434 min Scan# 416

Delta R.T. -0.450 min

Lab File: VL042183.D

Acq: 27 Mar 2025 17:13

Instrument :

MSVOA_1

ClientSampleId :

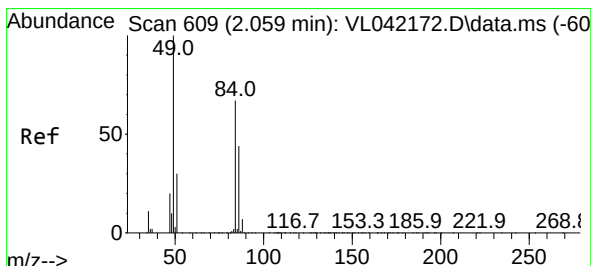
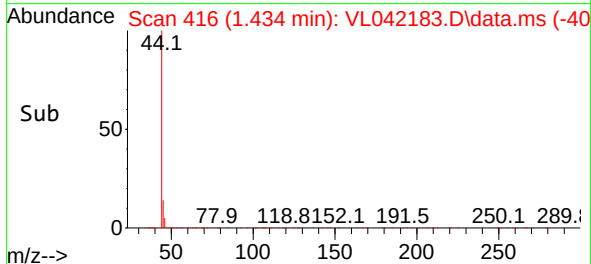
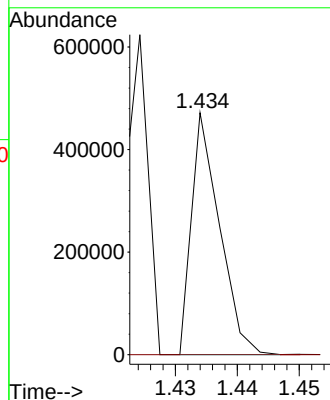
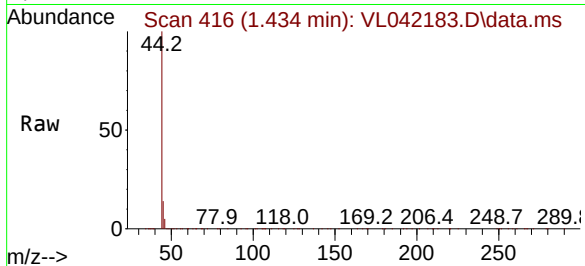
SV1

Tgt Ion: 45 Resp: 148817

Ion Ratio Lower Upper

45 100

58 0.2 36.9 55.3#



#20

Methylene Chloride

Concen: 0.204 ppbv

RT: 2.062 min Scan# 610

Delta R.T. 0.003 min

Lab File: VL042183.D

Acq: 27 Mar 2025 17:13

Tgt Ion: 84 Resp: 1986

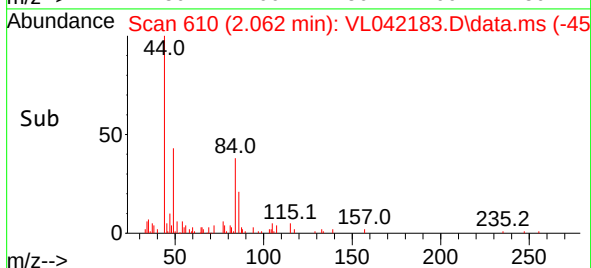
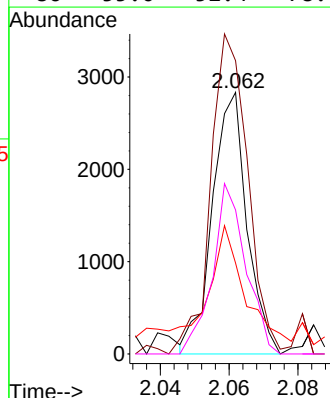
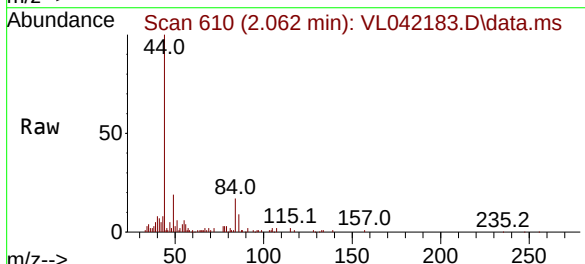
Ion Ratio Lower Upper

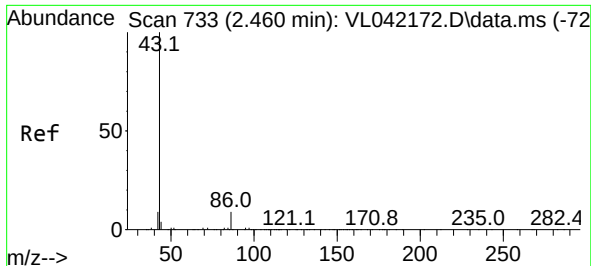
84 100

49 110.3 120.2 180.4#

51 26.9 37.4 56.0#

86 55.0 52.4 78.6

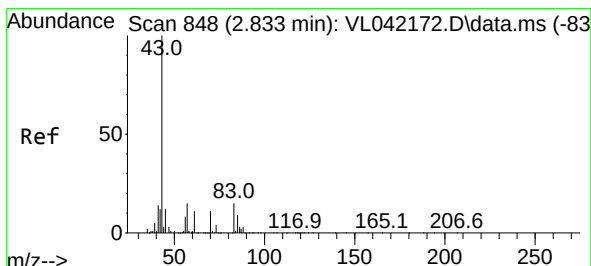
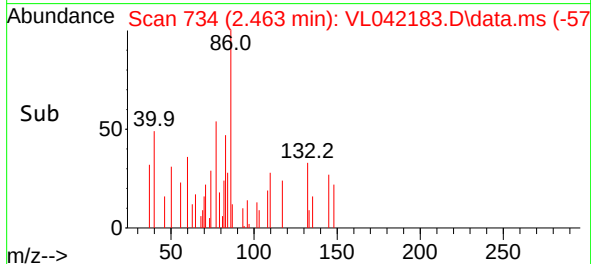
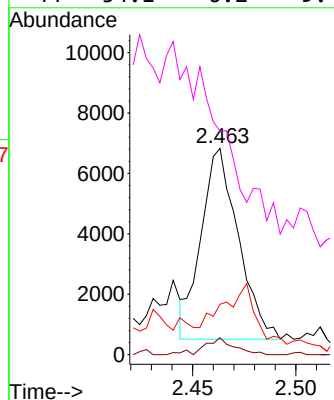
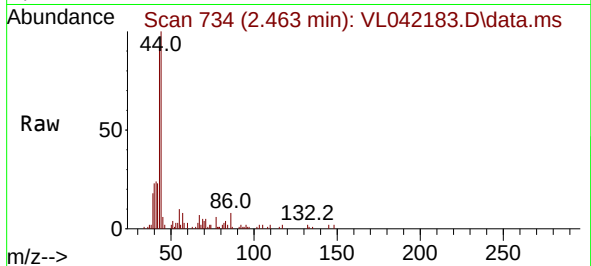




#23
 Vinyl Acetate
 Concen: 0.700 ppbv
 RT: 2.463 min Scan# 71
 Delta R.T. 0.003 min
 Lab File: VL042183.D
 Acq: 27 Mar 2025 17:13

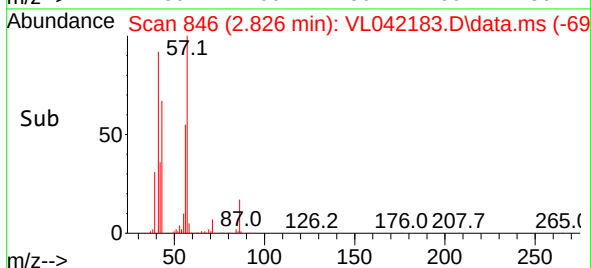
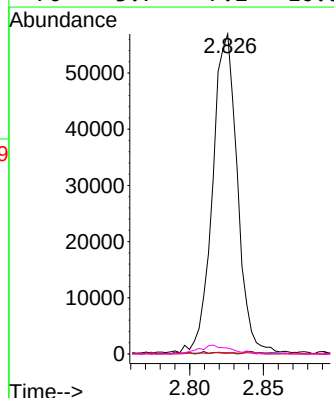
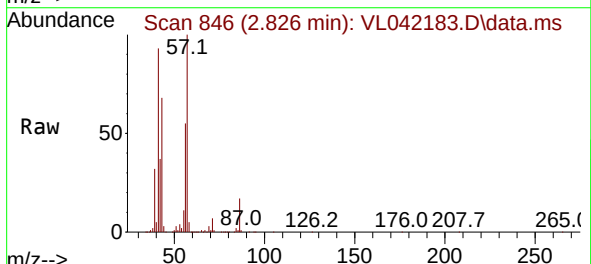
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

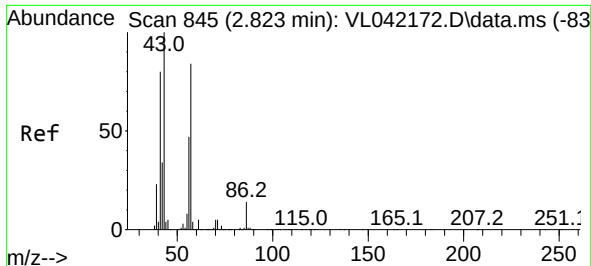
Tgt Ion:	43	Resp:	7922
Ion	Ratio	Lower	Upper
43	100		
86	8.9	5.5	8.3#
42	17.6	8.6	13.0#
44	54.1	6.2	9.4#



#25
 Ethyl Acetate
 Concen: 0.973 ppbv
 RT: 2.826 min Scan# 846
 Delta R.T. -0.007 min
 Lab File: VL042183.D
 Acq: 27 Mar 2025 17:13

Tgt Ion:	43	Resp:	65991
Ion	Ratio	Lower	Upper
43	100		
45	0.9	8.2	12.2#
61	0.8	7.3	10.9#
70	3.7	7.2	10.8#

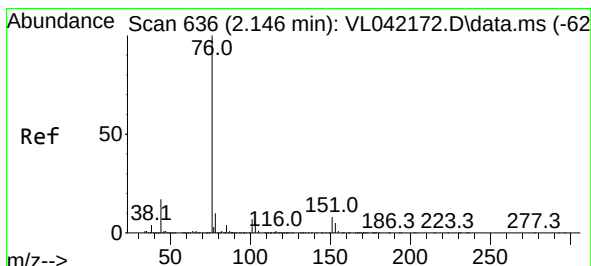
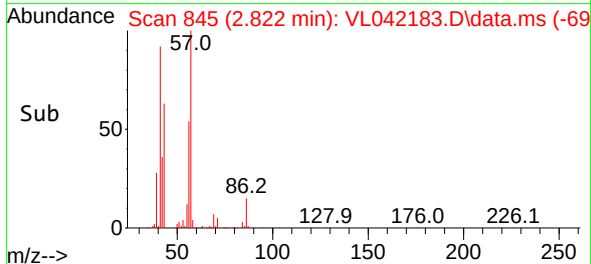
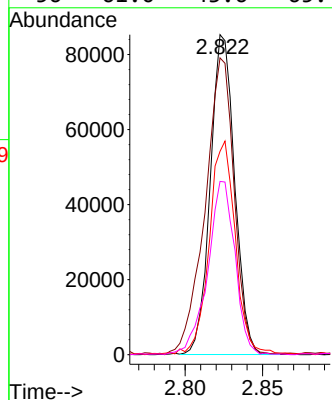
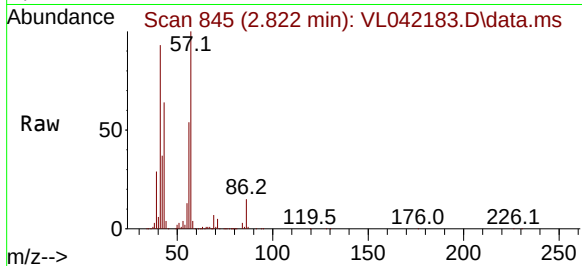




#26
Hexane
Concen: 3.554 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

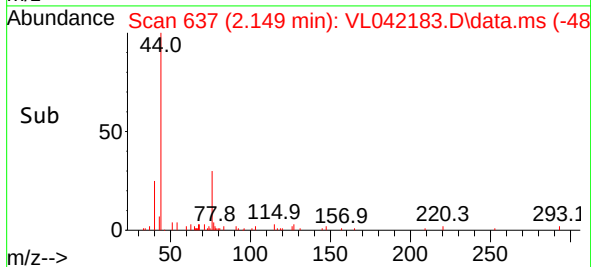
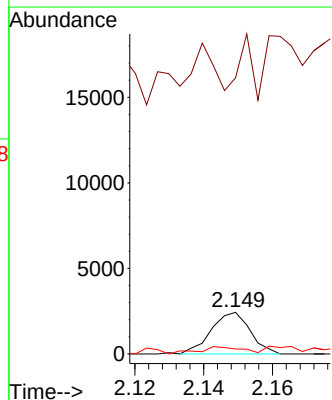
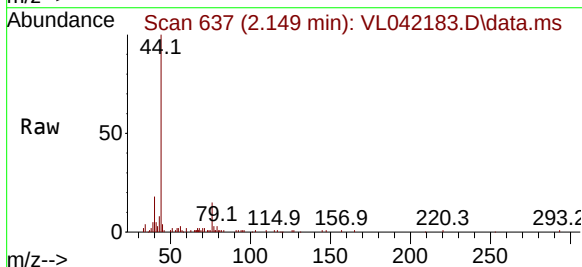
Instrument :
MSVOA_L
ClientSampleId :
SV1

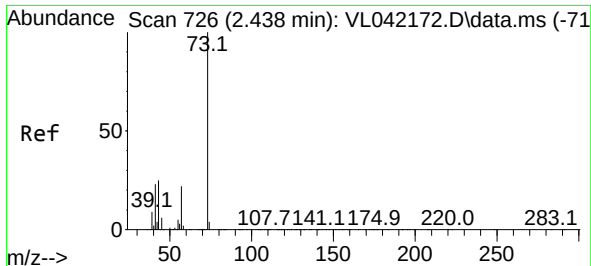
Tgt Ion: 57 Resp: 93163
Ion Ratio Lower Upper
57 100
41 110.1 76.6 114.8
43 72.3 207.8 311.8#
56 61.0 43.6 65.4



#27
Carbon Disulfide
Concen: 0.068 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.003 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 76 Resp: 1916
Ion Ratio Lower Upper
76 100
44 2286.3 14.7 22.1#
78 47.8 9.3 13.9#

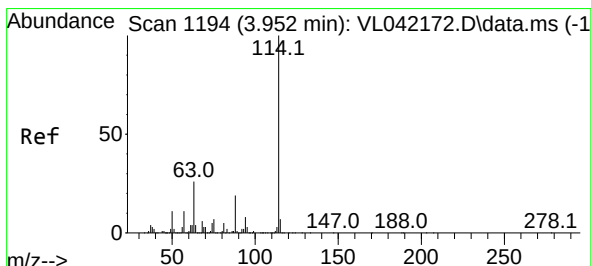
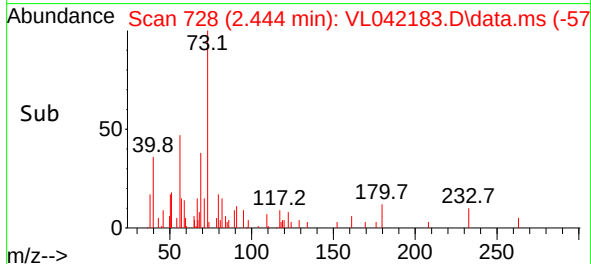
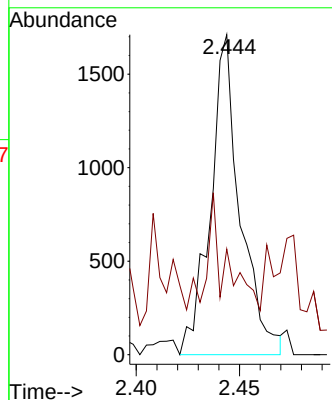
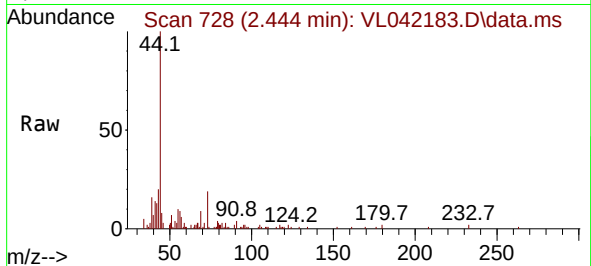




#28
Methyl tert-Butyl Ether
Concen: 0.105 ppbv
RT: 2.444 min Scan# 71
Delta R.T. 0.006 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

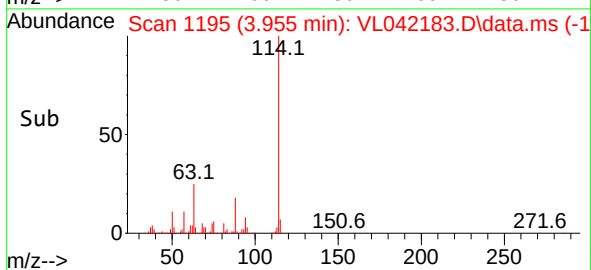
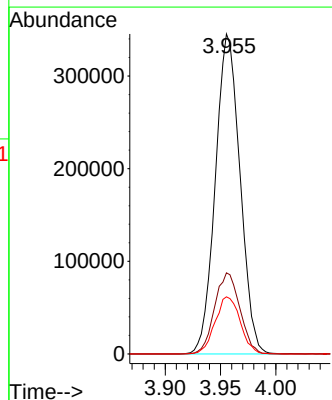
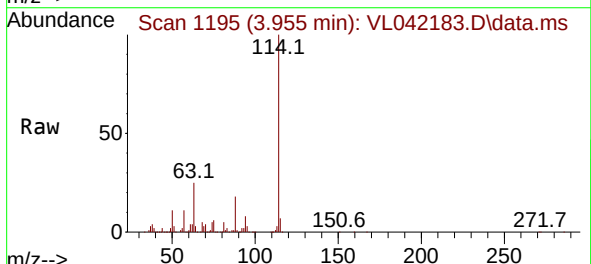
Instrument :
MSVOA_1
ClientSampleId :
SV1

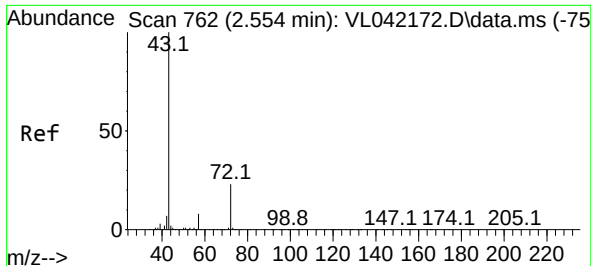
Tgt Ion: 73 Resp: 1712
Ion Ratio Lower Upper
73 100
57 0.0 20.5 30.7#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 114 Resp: 535675
Ion Ratio Lower Upper
114 100
63 26.0 20.7 31.1
88 18.2 15.0 22.4

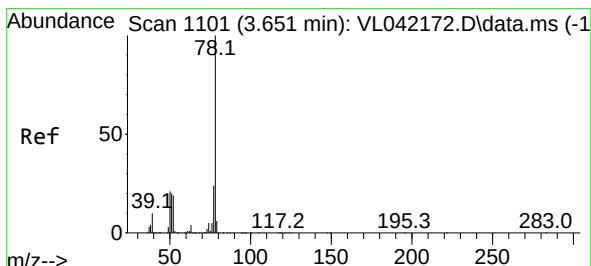
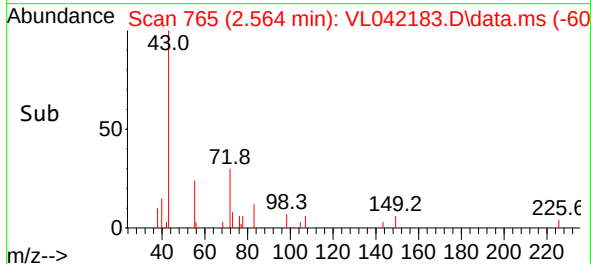
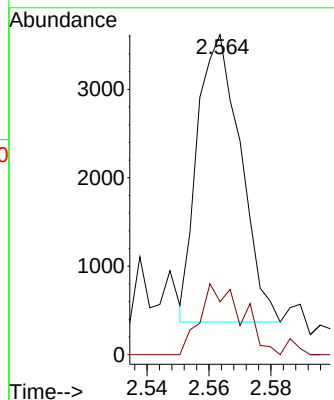
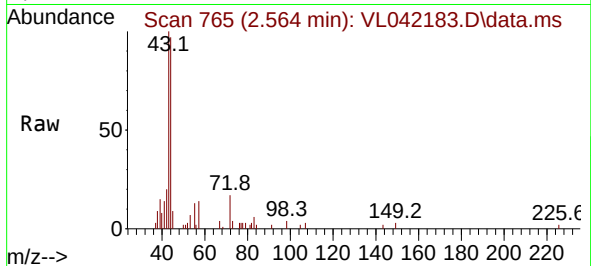




#34
2-Butanone
Concen: 0.081 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.009 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

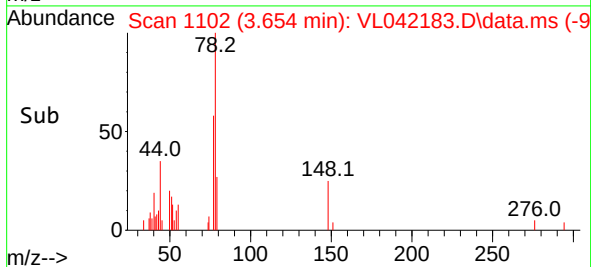
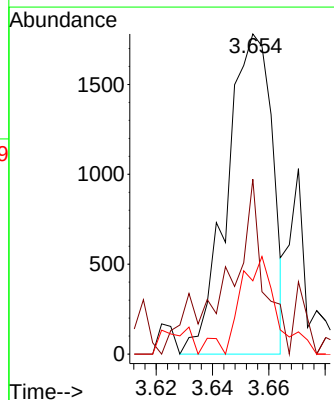
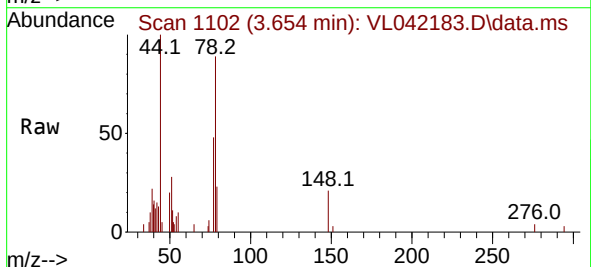
Instrument :
MSVOA_L
ClientSampleId :
SV1

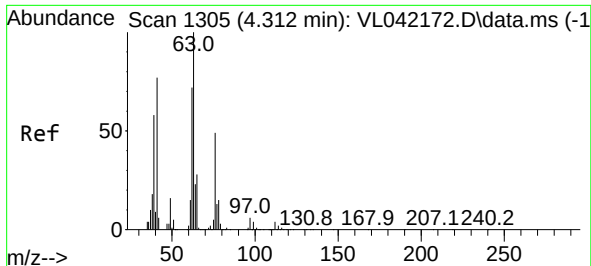
Tgt Ion: 43 Resp: 3130
Ion Ratio Lower Upper
43 100
72 25.6 18.2 27.2



#36
Benzene
Concen: 0.038 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 78 Resp: 1998
Ion Ratio Lower Upper
78 100
77 45.5 19.1 28.7#
50 17.2 16.6 24.8

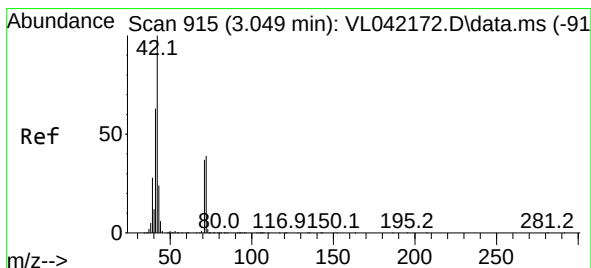
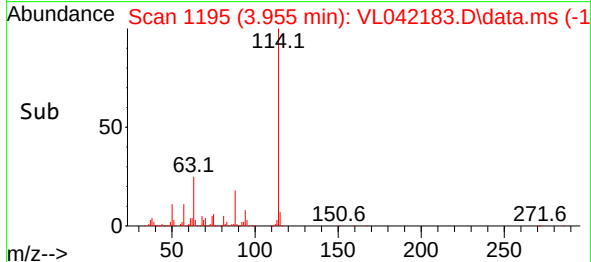
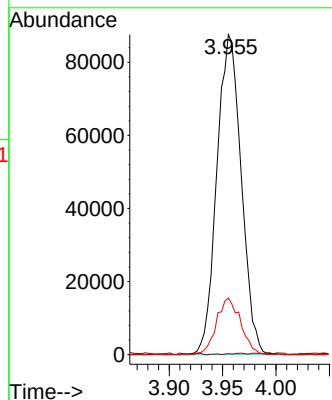
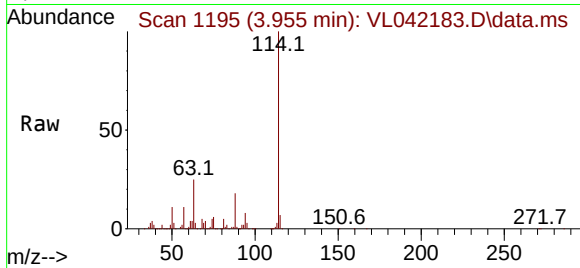




#39
1,2-Dichloropropane
Concen: 7.200 ppbv
RT: 3.955 min Scan# 11195
Delta R.T. -0.356 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

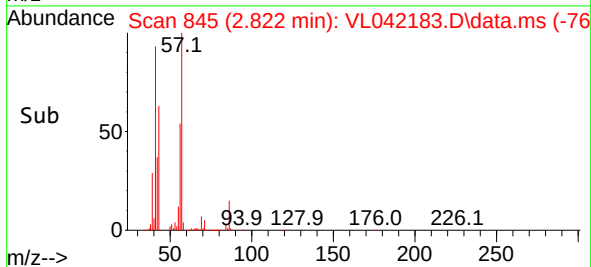
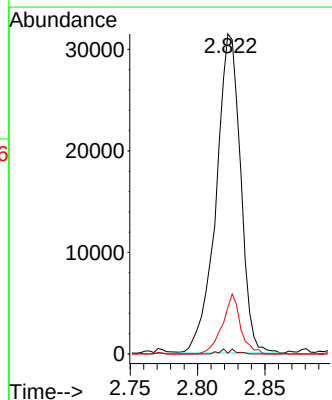
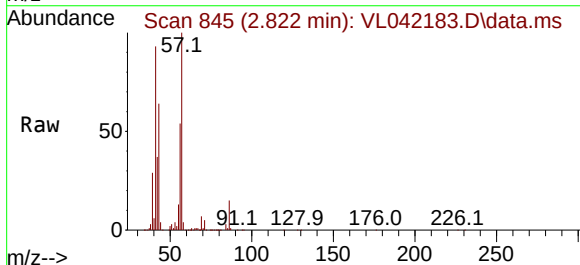
Instrument :
MSVOA_L
ClientSampleId :
SV1

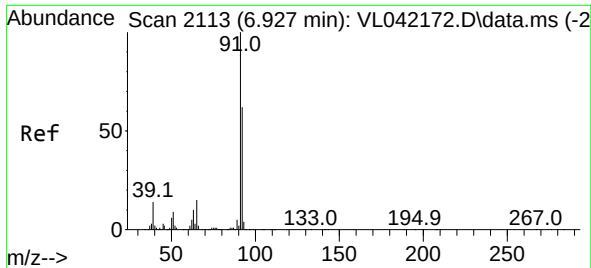
Tgt Ion: 63 Resp: 139244
Ion Ratio Lower Upper
63 100
41 0.0 61.7 92.5#
62 17.7 57.6 86.4#



#41
Tetrahydrofuran
Concen: 1.777 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.227 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 42 Resp: 39746
Ion Ratio Lower Upper
42 100
72 0.9 31.4 47.0#
71 13.9 30.2 45.4#

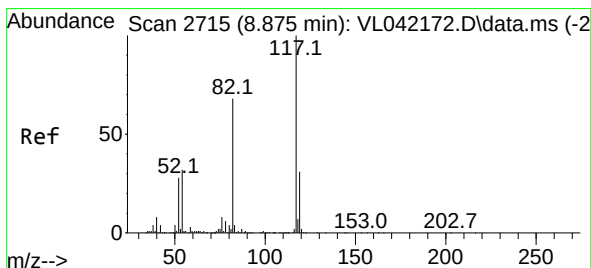
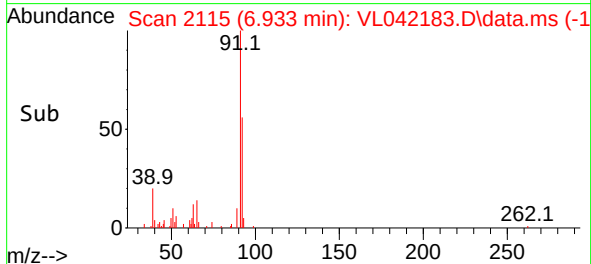
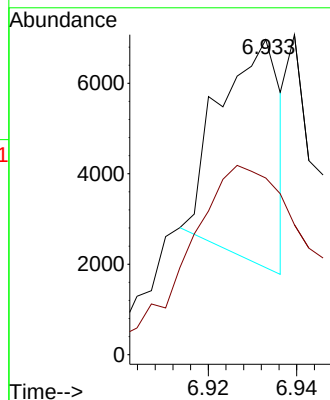
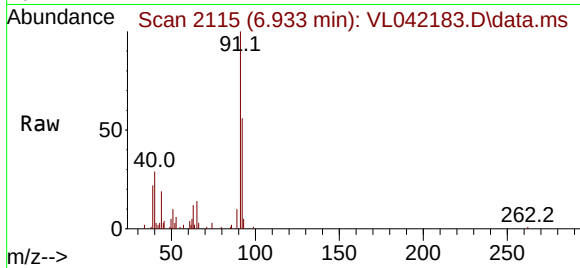




#53
Toluene
Concen: 0.073 ppbv
RT: 6.933 min Scan# 2115
Delta R.T. 0.006 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

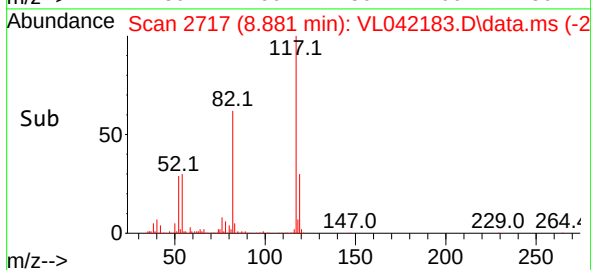
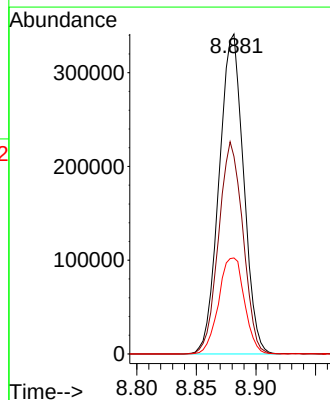
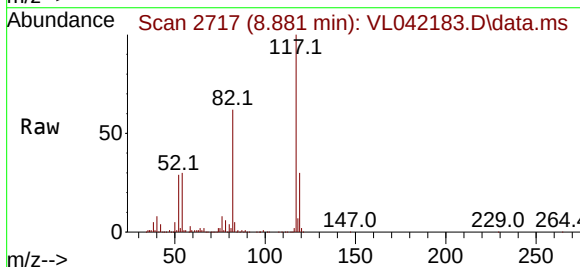
Instrument :
MSVOA_L
ClientSampleId :
SV1

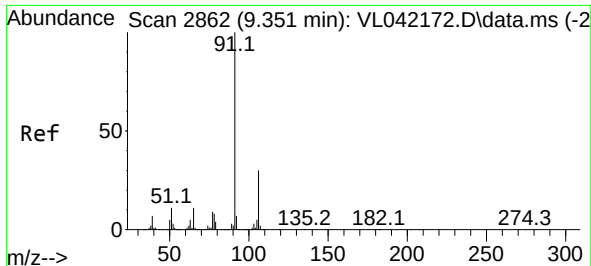
Tgt Ion: 91 Resp: 4573
Ion Ratio Lower Upper
91 100
92 179.7 48.4 72.6#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 117 Resp: 487132
Ion Ratio Lower Upper
117 100
82 66.0 55.8 83.6
119 31.7 25.5 38.3

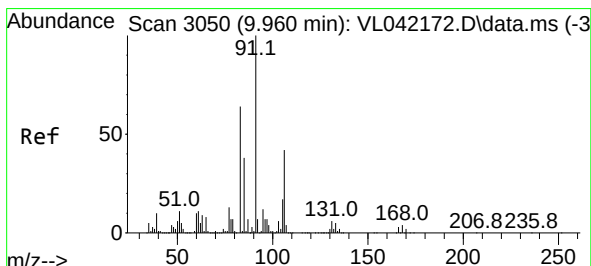
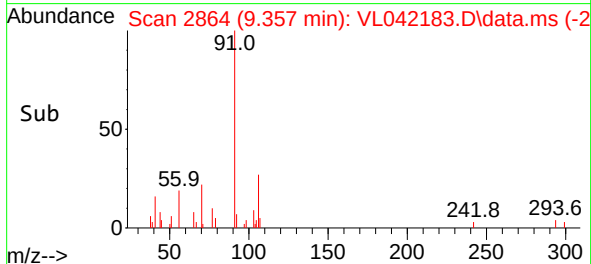
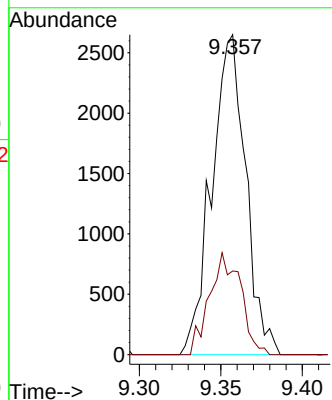
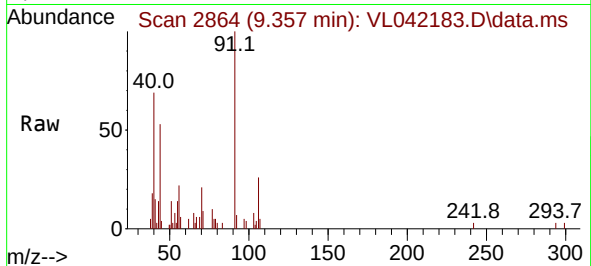




#58
Ethyl Benzene
Concen: 0.044 ppbv
RT: 9.357 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

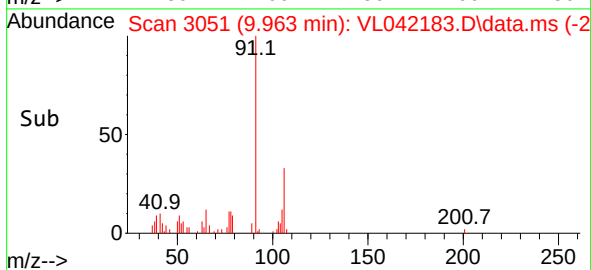
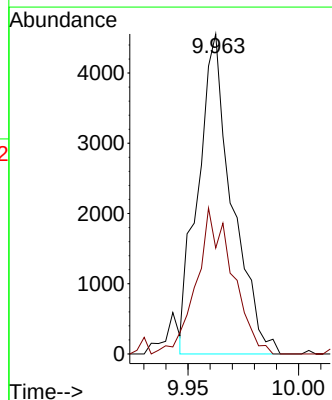
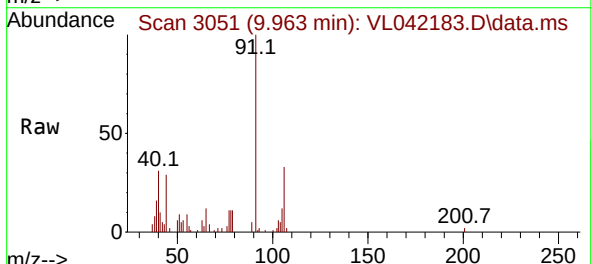
Instrument :
MSVOA_L
ClientSampleId :
SV1

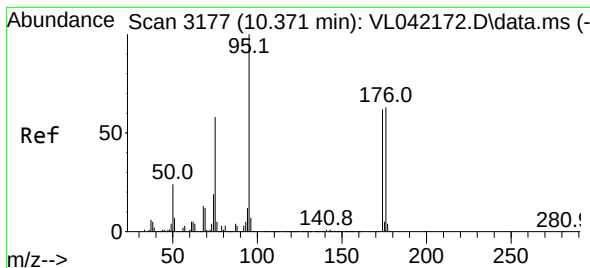
Tgt Ion: 91 Resp: 3836
Ion Ratio Lower Upper
91 100
106 26.1 24.2 36.2



#60
o-Xylene
Concen: 0.070 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 91 Resp: 4878
Ion Ratio Lower Upper
91 100
106 49.4 20.8 62.5

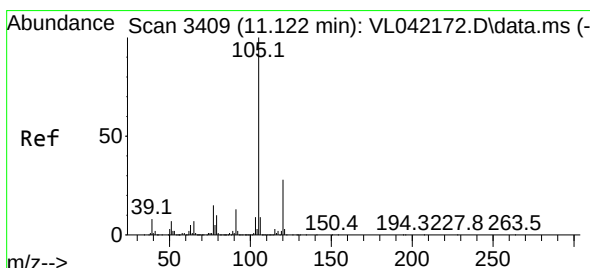
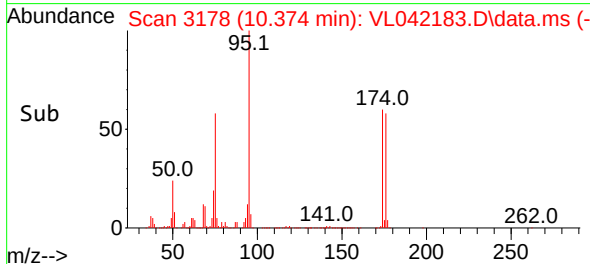
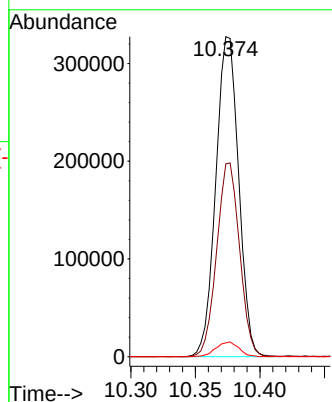
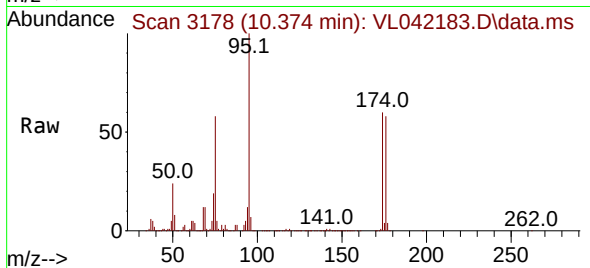




#68
1-Bromo-4-Fluorobenzene
Concen: 10.067 ppbv
RT: 10.374 min Scan# 3177
Delta R.T. 0.003 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

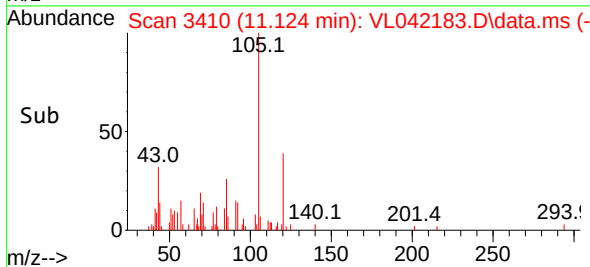
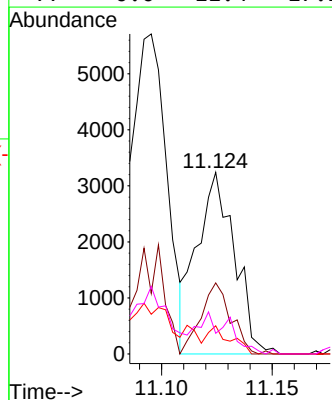
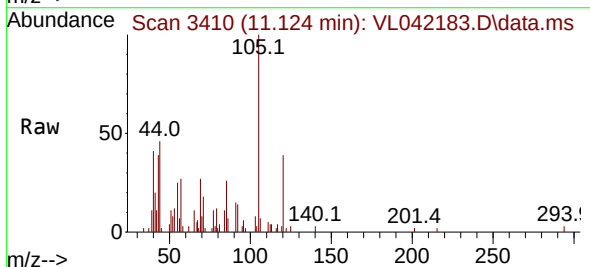
Instrument :
MSVOA_L
ClientSampleId :
SV1

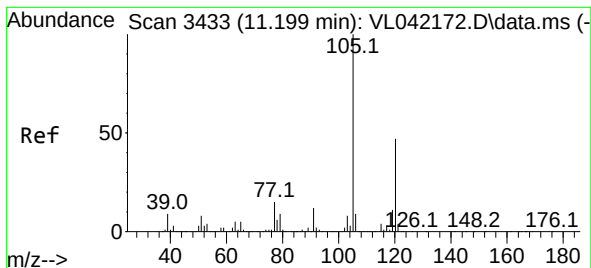
Tgt Ion: 95 Resp: 402708
Ion Ratio Lower Upper
95 100
174 60.6 50.6 76.0
175 4.7 3.8 5.6



#72
4-Ethyltoluene
Concen: 0.045 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042183.D
Acq: 27 Mar 2025 17:13

Tgt Ion: 105 Resp: 3847
Ion Ratio Lower Upper
105 100
120 27.8 23.4 35.0
91 0.0 10.3 15.5#
77 0.0 11.4 17.2#





#73

1,3,5-Trimethylbenzene

Concen: 0.038 ppbv

RT: 11.202 min Scan# 3434

Delta R.T. 0.003 min

Lab File: VL042183.D

Acq: 27 Mar 2025 17:13

Instrument :

MSVOA_L

ClientSampleId :

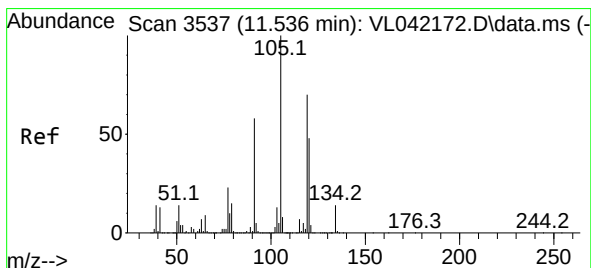
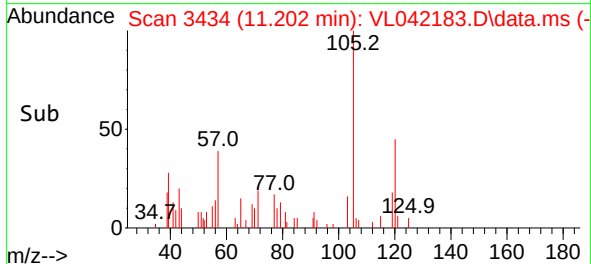
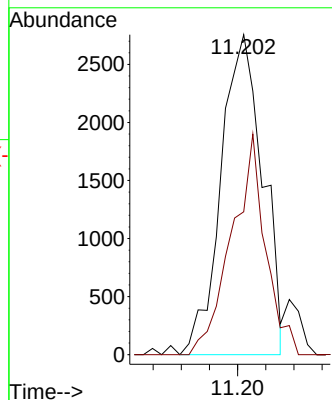
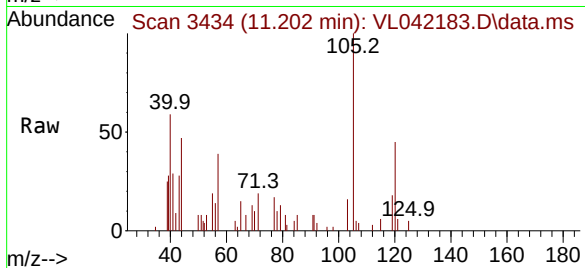
SV1

Tgt Ion:105 Resp: 2840

Ion Ratio Lower Upper

105 100

120 44.6 37.4 56.0



#74

1,2,4-Trimethylbenzene

Concen: 0.157 ppbv

RT: 11.539 min Scan# 3538

Delta R.T. 0.003 min

Lab File: VL042183.D

Acq: 27 Mar 2025 17:13

Tgt Ion:105 Resp: 13657

Ion Ratio Lower Upper

105 100

120 38.8 38.6 58.0

91 14.8 46.2 69.2#

77 12.7 18.6 27.8#

