

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL052925\
 Data File : VL042592.D
 Acq On : 29 May 2025 19:00
 Operator : SY/MD
 Sample : Q2124-02 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2

Quant Time: May 30 02:43:15 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri May 30 02:01:56 2025
 Response via : Initial Calibration

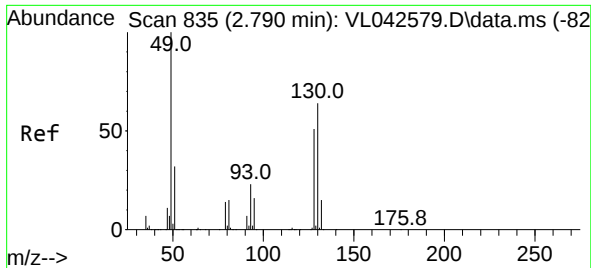
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.797	49	109253	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.971	114	313676	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.894	117	279800	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.386	95	212619	10.137	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.400%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	1698	0.126	ppbv #	86
3) Chlorodifluoromethane	1.476	51	2477m	0.134	ppbv	
10) Heptane	4.994	43	6244m	0.297	ppbv	
13) Ethanol	1.728	45	1922m	2.166	ppbv	
15) Acetone	1.842	43	17665	1.342	ppbv #	87
20) Methylene Chloride	2.068	84	1206	0.278	ppbv #	76
26) Hexane	2.835	57	31101	1.901	ppbv #	42
27) Carbon Disulfide	2.156	76	36546	2.909	ppbv #	1
29) Chloroform	2.858	83	33248	1.562	ppbv	94
30) Cyclohexane	3.871	84	2997m	0.221	ppbv	
34) 2-Butanone	2.567	43	19439	0.869	ppbv	99
38) Trichloroethene	4.567	130	2043m	0.156	ppbv	
41) Tetrahydrofuran	3.072	42	6484	0.495	ppbv	98
52) Tetrachloroethene	8.237	164	14382m	1.246	ppbv	
53) Toluene	6.949	91	21355m	0.598	ppbv	
58) Ethyl Benzene	9.370	91	6883	0.145	ppbv	92
59) m/p-Xylene	9.542	91	12974m	0.347	ppbv	
60) o-Xylene	9.979	91	7651	0.205	ppbv	85
69) p-Isopropyltoluene	11.934	119	8515	0.145	ppbv	99
73) 1,3,5-Trimethylbenzene	11.215	105	6426	0.167	ppbv	95
74) 1,2,4-Trimethylbenzene	11.545	105	14552	0.341	ppbv #	66
79) Naphthalene	13.523	128	4237m	0.105	ppbv	

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

Quant Time: May 30 02:43:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri May 30 02:01:56 2025
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 2.797 min Scan# 81

Delta R.T. 0.007 min

Lab File: VL042592.D

Acq: 29 May 2025 19:00

Instrument :

MSVOA_L

ClientSampleId :

SV2

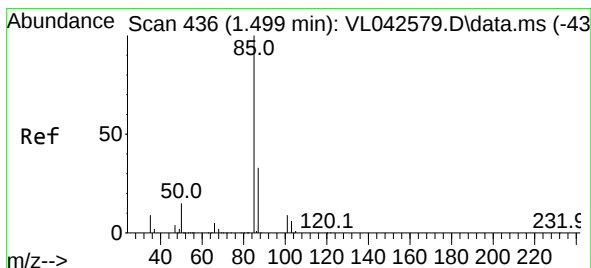
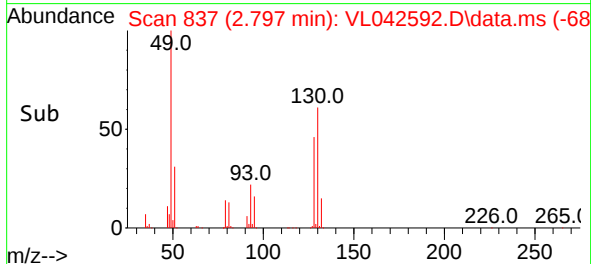
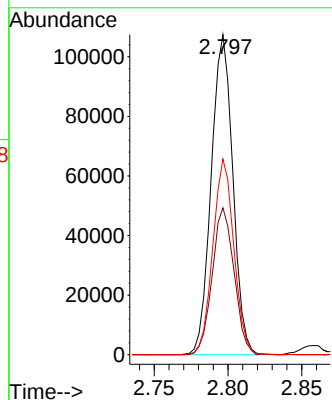
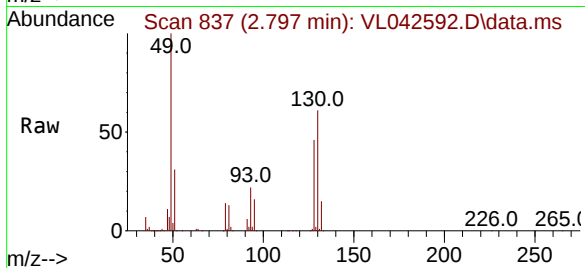
Tgt Ion: 49 Resp: 109253

Ion Ratio Lower Upper

49 100

128 46.4 24.2 72.6

130 59.6 30.4 91.2



#2

Dichlorodifluoromethane

Concen: 0.126 ppbv

RT: 1.499 min Scan# 436

Delta R.T. -0.000 min

Lab File: VL042592.D

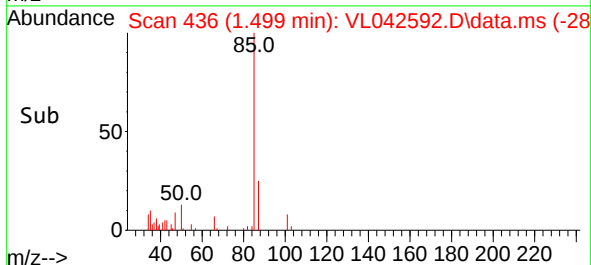
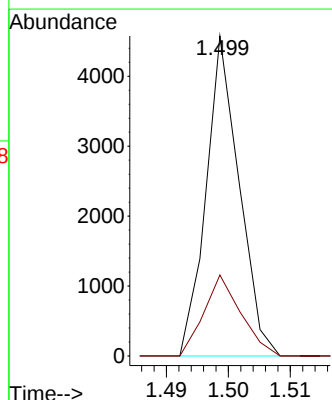
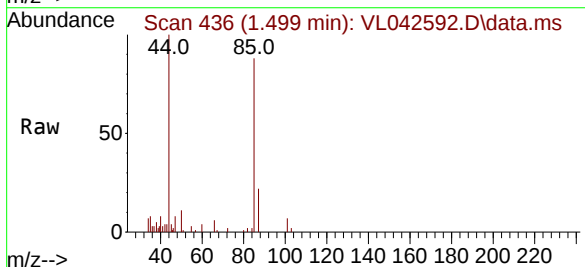
Acq: 29 May 2025 19:00

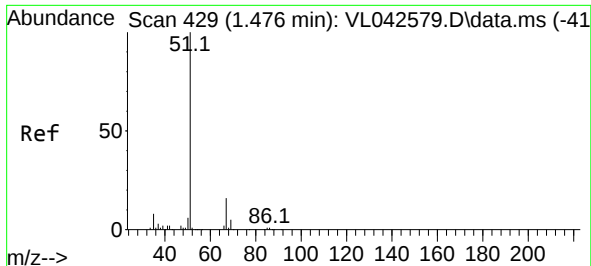
Tgt Ion: 85 Resp: 1698

Ion Ratio Lower Upper

85 100

87 25.3 26.6 39.8#

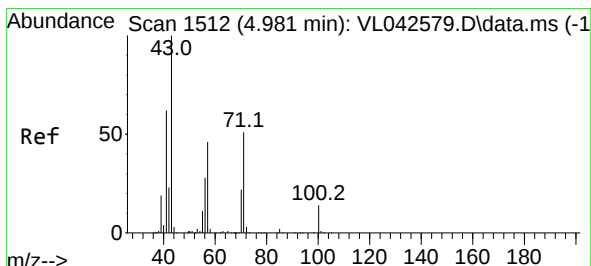
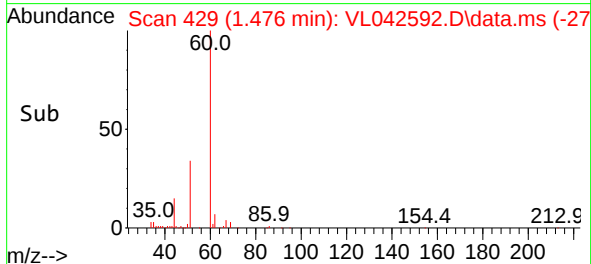
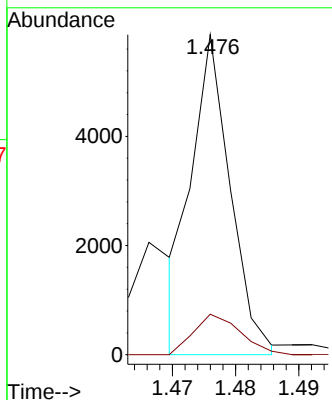
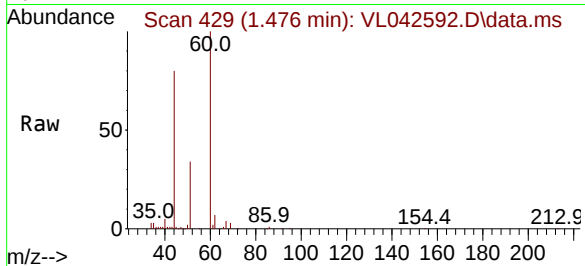




#3
Chlorodifluoromethane
Concen: 0.134 ppbv m
RT: 1.476 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

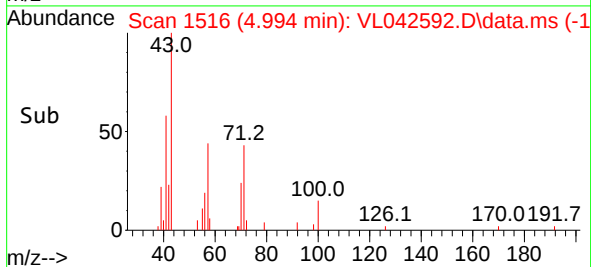
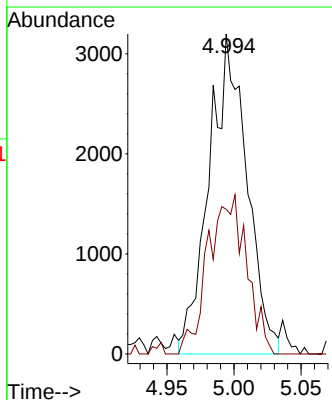
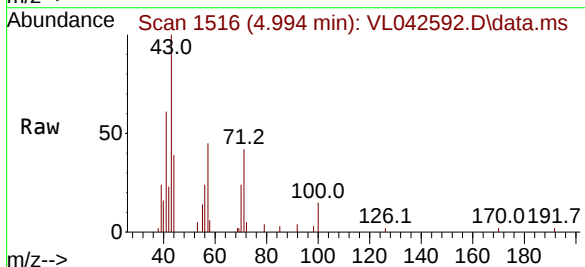
Instrument :
MSVOA_L
ClientSampleId :
SV2

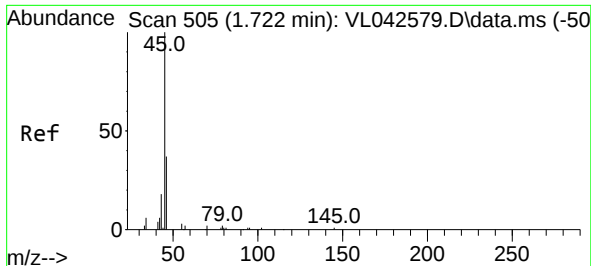
Tgt Ion: 51 Resp: 2477
Ion Ratio Lower Upper
51 100
67 18.3 13.4 20.2



#10
Heptane
Concen: 0.297 ppbv m
RT: 4.994 min Scan# 1516
Delta R.T. 0.013 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Tgt Ion: 43 Resp: 6244
Ion Ratio Lower Upper
43 100
57 0.0 38.9 58.3#

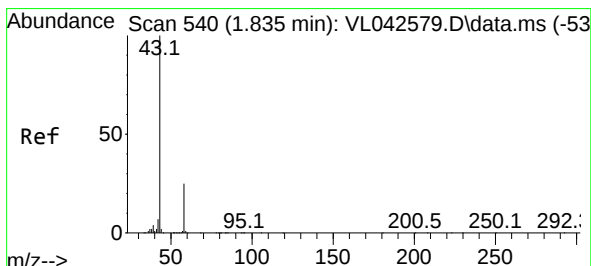
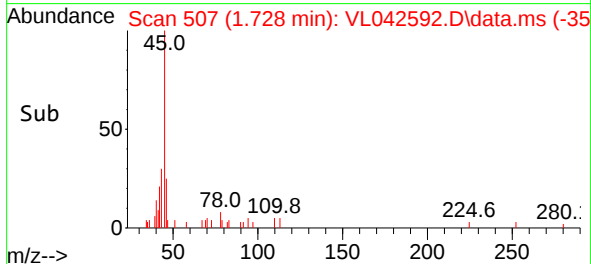
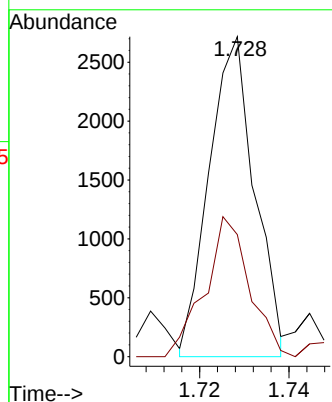
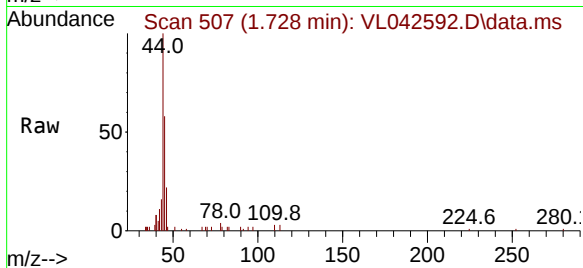




#13
Ethanol
Concen: 2.166 ppbv m
RT: 1.728 min Scan# 50
Delta R.T. 0.006 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

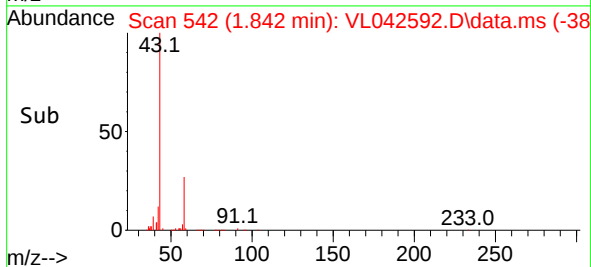
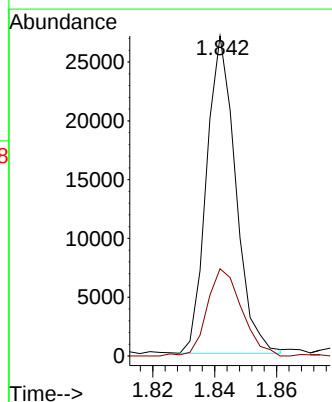
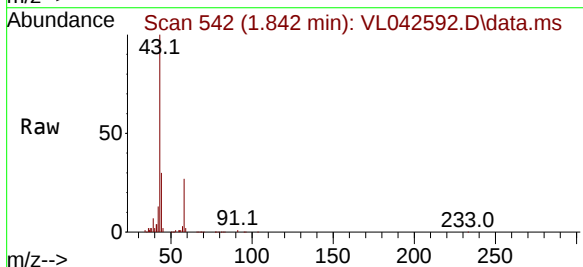
Instrument :
MSVOA_L
ClientSampleId :
SV2

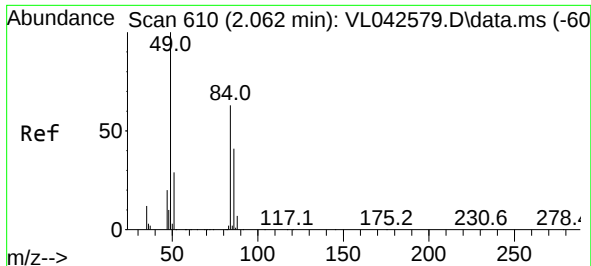
Tgt Ion: 45 Resp: 1922
Ion Ratio Lower Upper
45 100
46 0.0 14.5 58.1#



#15
Acetone
Concen: 1.342 ppbv
RT: 1.842 min Scan# 542
Delta R.T. 0.006 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Tgt Ion: 43 Resp: 17665
Ion Ratio Lower Upper
43 100
58 32.9 21.0 31.4#

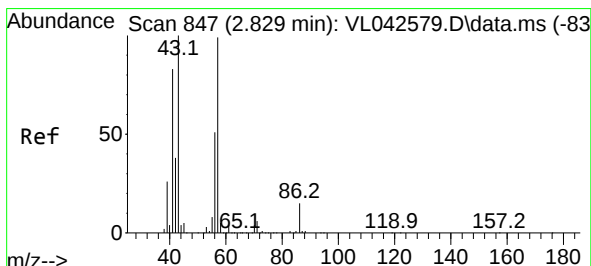
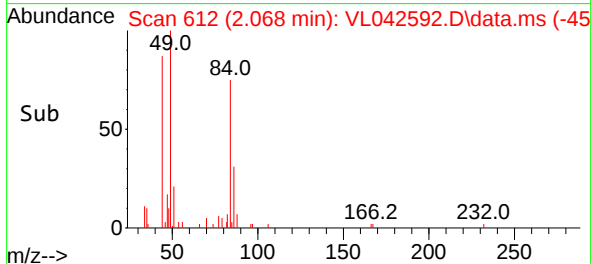
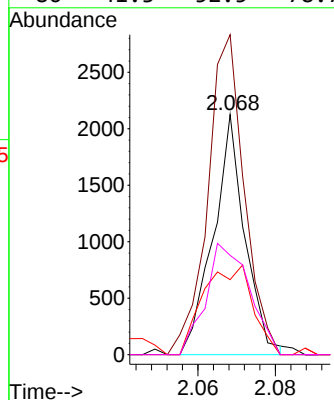
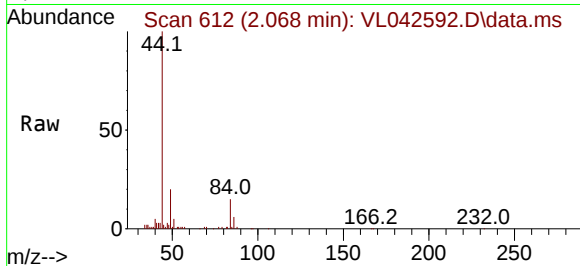




#20
Methylene Chloride
Concen: 0.278 ppbv
RT: 2.068 min Scan# 610
Delta R.T. 0.006 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

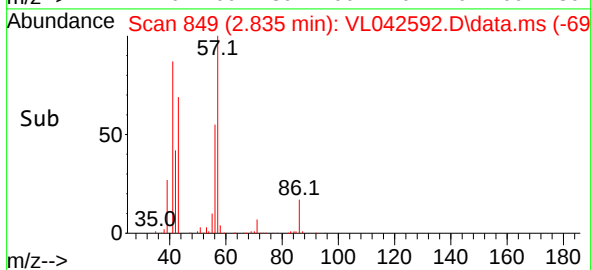
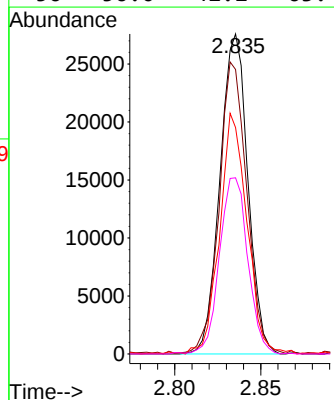
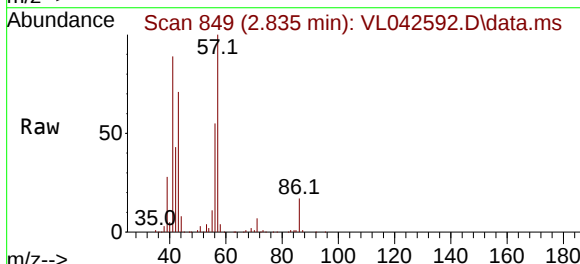
Instrument :
MSVOA_L
ClientSampleId :
SV2

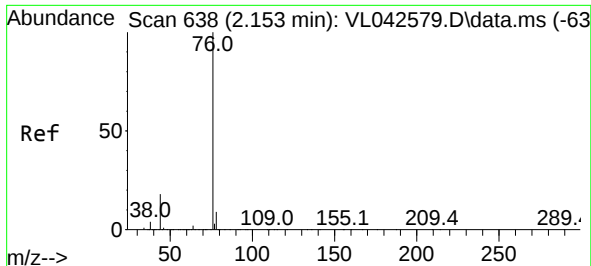
Tgt Ion:	84	Resp:	1206
Ion	Ratio	Lower	Upper
84	100		
49	133.3	128.8	193.2
51	31.2	38.6	57.8#
86	41.3	52.5	78.7#



#26
Hexane
Concen: 1.901 ppbv
RT: 2.835 min Scan# 849
Delta R.T. 0.006 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Tgt Ion:	57	Resp:	31101
Ion	Ratio	Lower	Upper
57	100		
41	90.0	70.6	106.0
43	74.6	181.1	271.7#
56	56.0	42.2	63.4

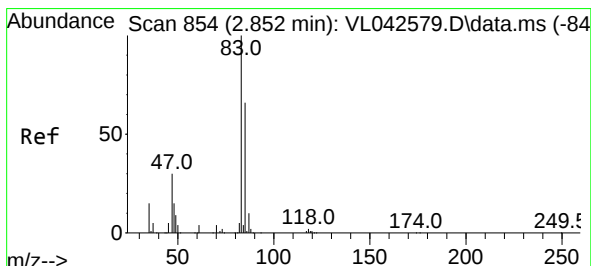
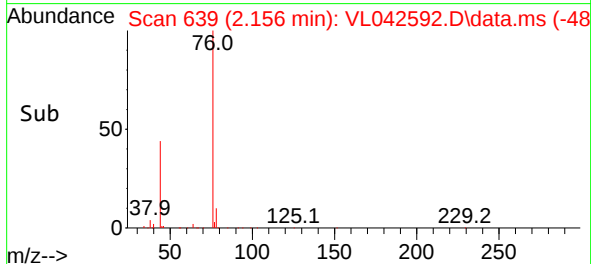
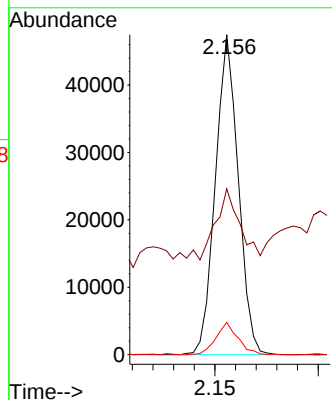
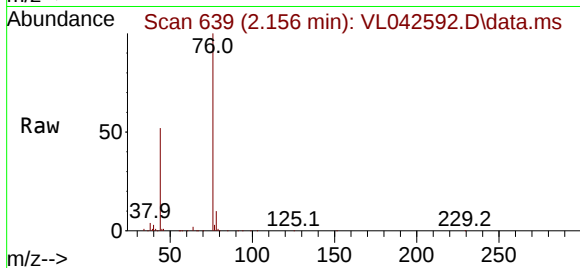




#27
Carbon Disulfide
Concen: 2.909 ppbv
RT: 2.156 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

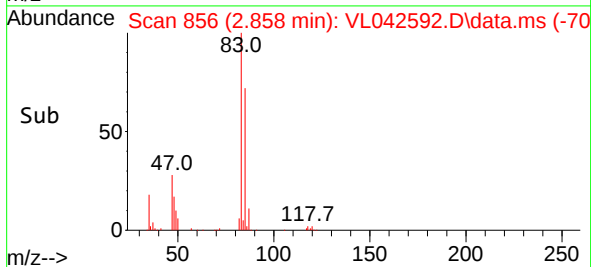
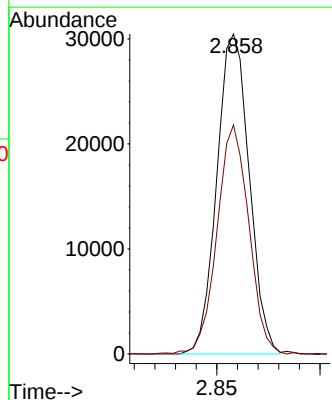
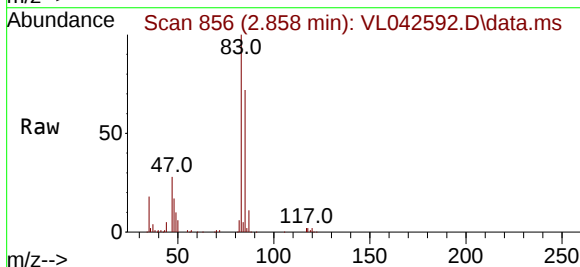
Instrument :
MSVOA_L
ClientSampleId :
SV2

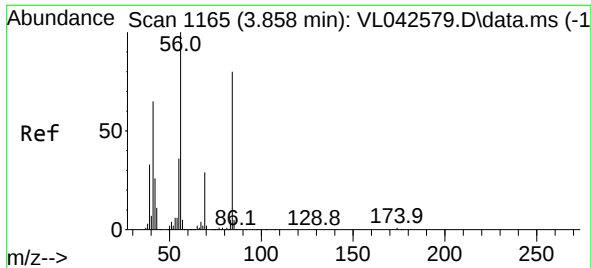
Tgt Ion: 76 Resp: 36546
Ion Ratio Lower Upper
76 100
44 177.2 21.3 31.9#
78 9.8 9.4 14.0



#29
Chloroform
Concen: 1.562 ppbv
RT: 2.858 min Scan# 856
Delta R.T. 0.006 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Tgt Ion: 83 Resp: 33248
Ion Ratio Lower Upper
83 100
85 71.0 52.8 79.2

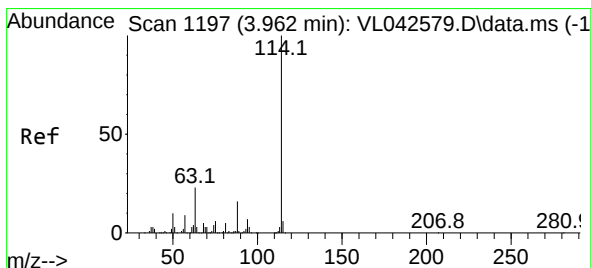
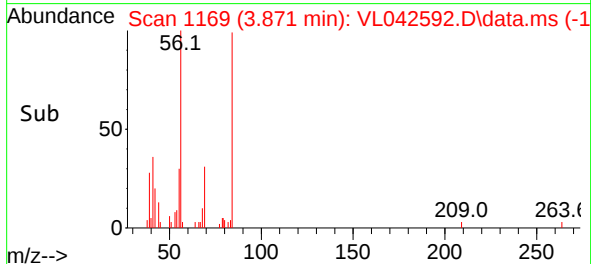
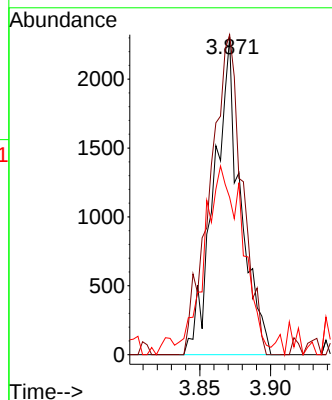
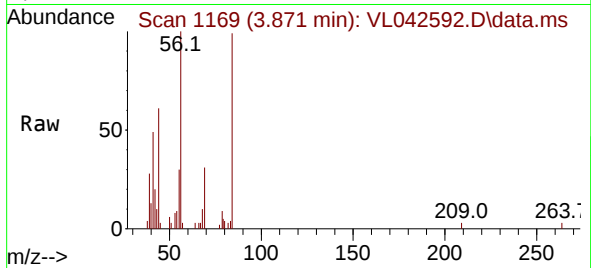




#30
Cyclohexane
Concen: 0.221 ppbv m
RT: 3.871 min Scan# 1165
Delta R.T. 0.013 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

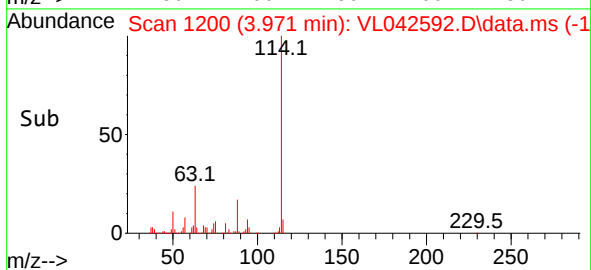
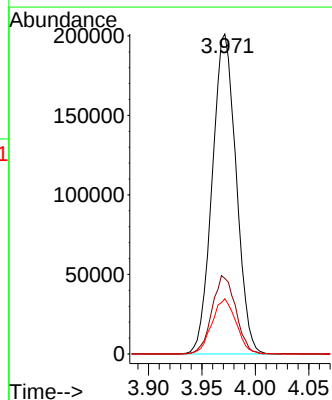
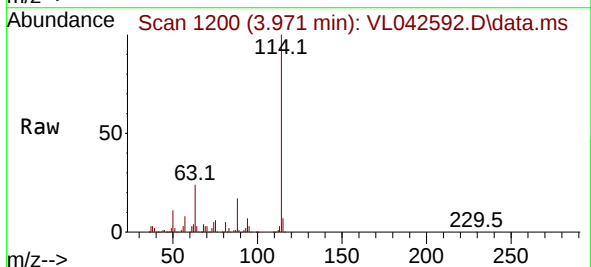
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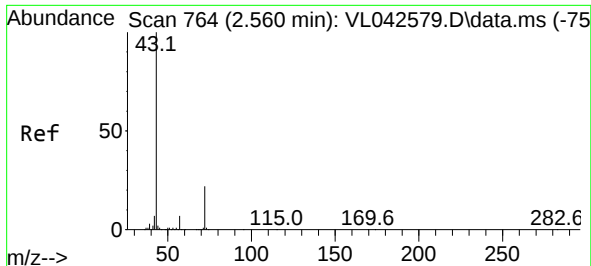
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Ion Ratio Lower Upper
84 100
56 122.8 103.7 155.5
41 90.7 65.1 97.7



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.971 min Scan# 1200
Delta R.T. 0.010 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Tgt Ion: 114 Resp: 313676
Ion Ratio Lower Upper
114 100
63 24.3 19.0 28.6
88 17.5 13.6 20.4

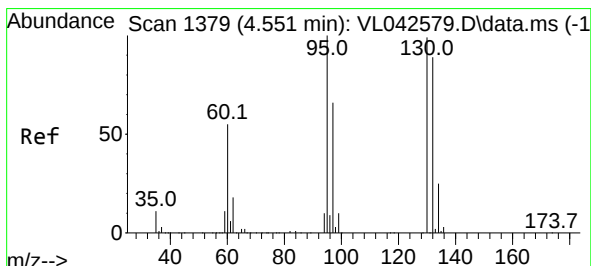
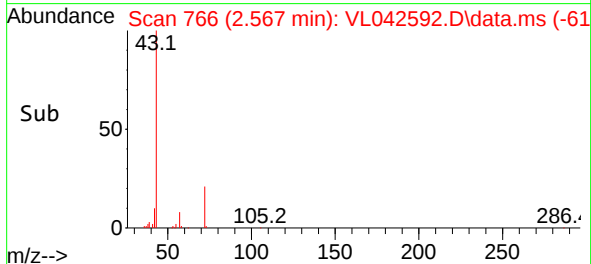
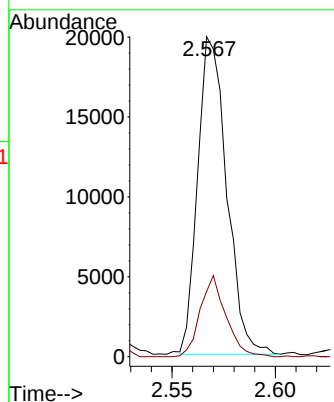
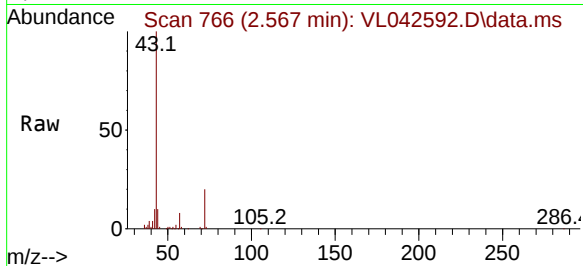




#34
2-Butanone
Concen: 0.869 ppbv
RT: 2.567 min Scan# 71
Delta R.T. 0.006 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

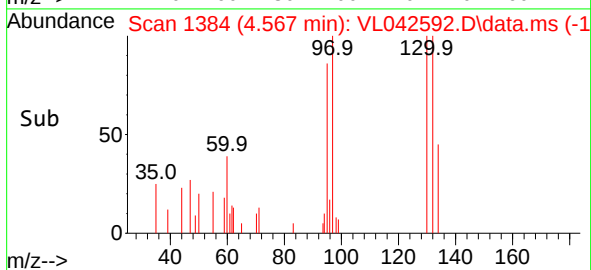
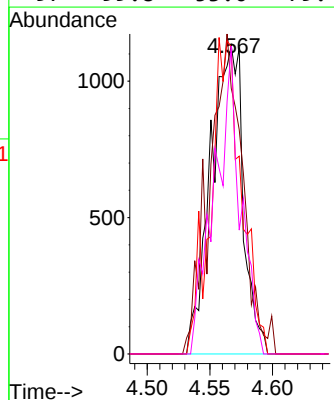
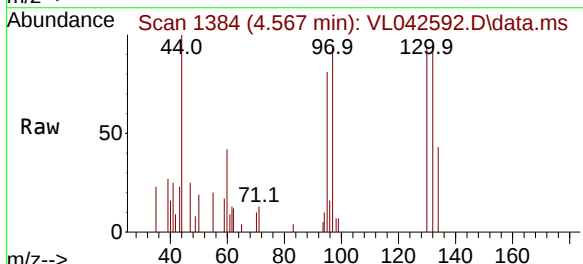
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SV2

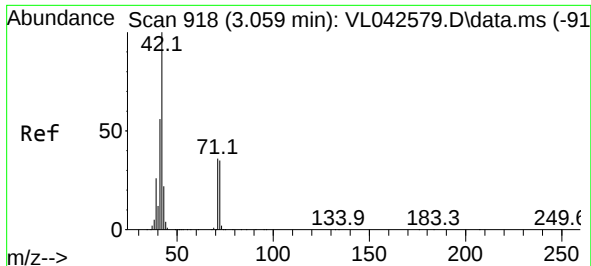
Tgt Ion: 43 Resp: 19439
Ion Ratio Lower Upper
43 100
72 22.6 17.7 26.5



#38
Trichloroethene
Concen: 0.156 ppbv m
RT: 4.567 min Scan# 1384
Delta R.T. 0.016 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Tgt Ion:130 Resp: 2043
Ion Ratio Lower Upper
130 100
95 86.2 80.6 121.0
132 99.6 71.8 107.6
97 99.8 53.0 79.4#





#41

Tetrahydrofuran

Concen: 0.495 ppbv

RT: 3.072 min Scan# 91

Delta R.T. 0.013 min

Lab File: VL042592.D

Acq: 29 May 2025 19:00

Instrument :

MSVOA_L

ClientSampleId :

SV2

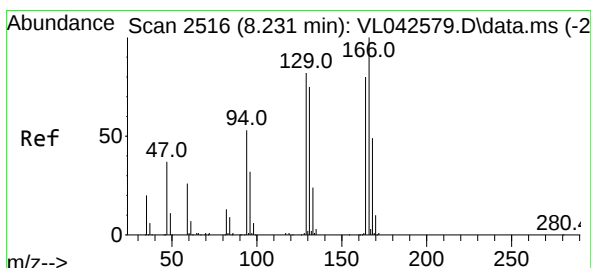
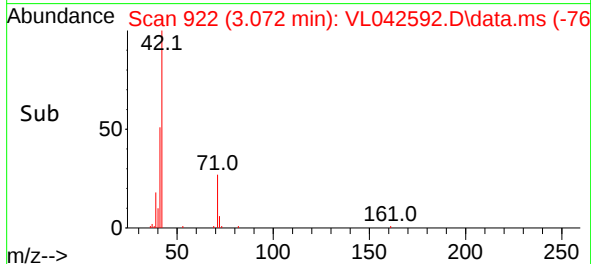
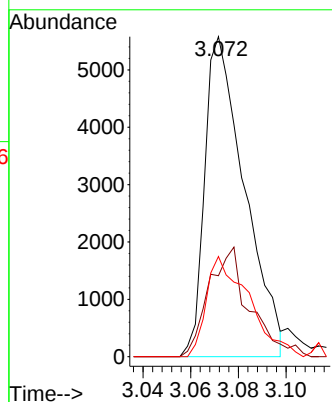
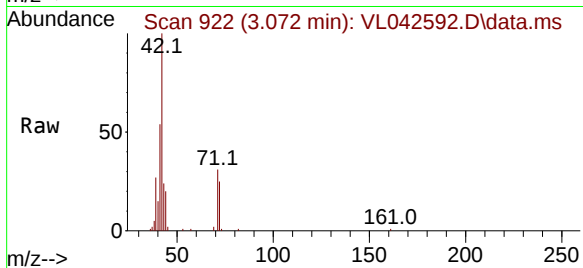
Tgt Ion: 42 Resp: 6484

Ion Ratio Lower Upper

42 100

72 35.1 28.9 43.3

71 34.4 28.5 42.7



#52

Tetrachloroethene

Concen: 1.246 ppbv m

RT: 8.237 min Scan# 2518

Delta R.T. 0.006 min

Lab File: VL042592.D

Acq: 29 May 2025 19:00

Tgt Ion: 164 Resp: 14382

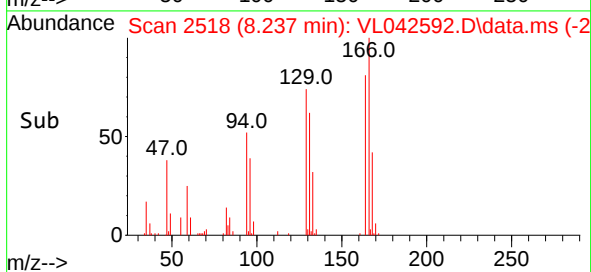
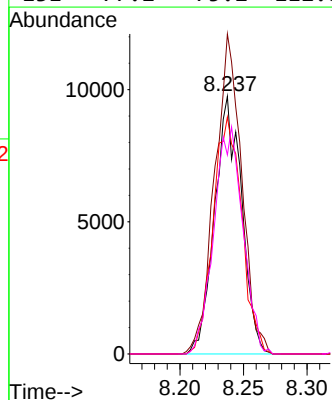
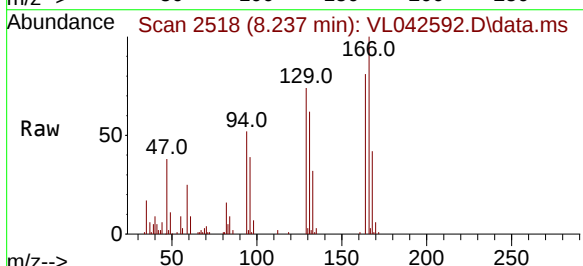
Ion Ratio Lower Upper

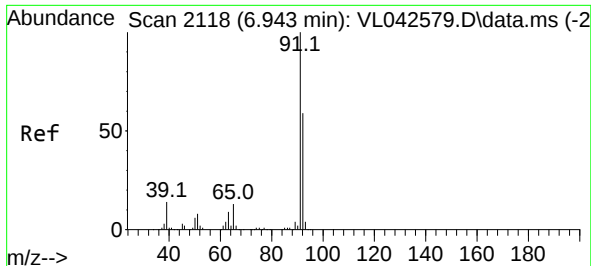
164 100

166 124.2 100.0 150.0

129 92.0 82.2 123.4

131 77.2 75.2 112.8

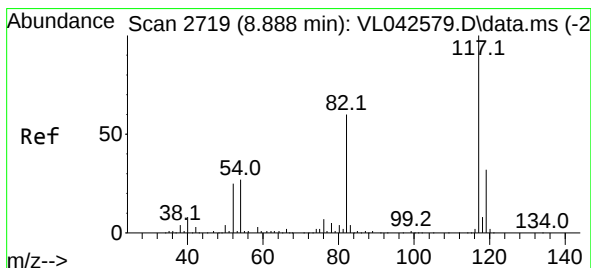
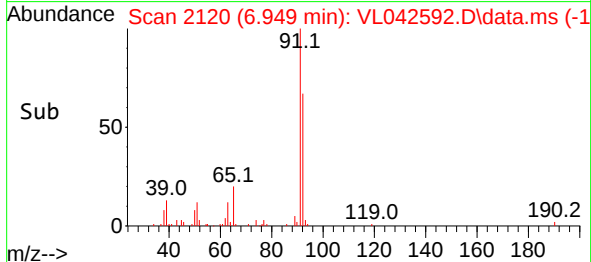
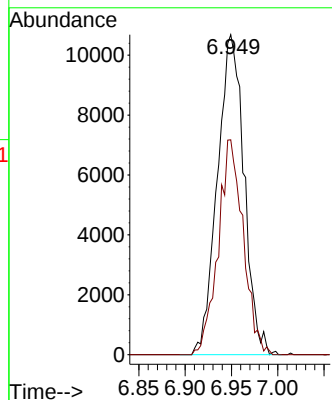
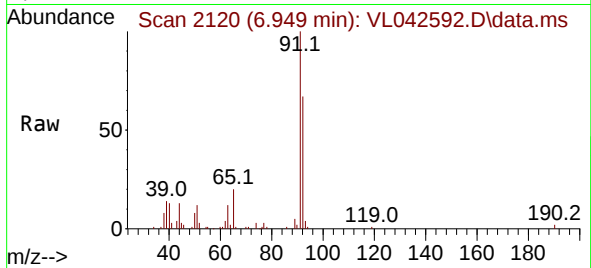




#53
Toluene
Concen: 0.598 ppbv m
RT: 6.949 min Scan# 2118
Delta R.T. 0.006 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

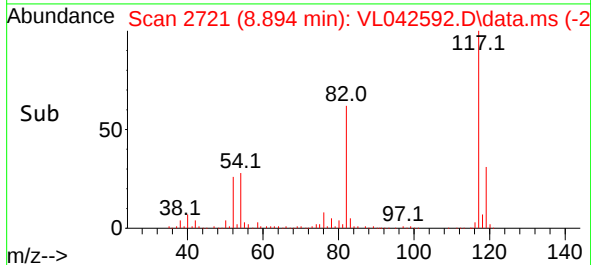
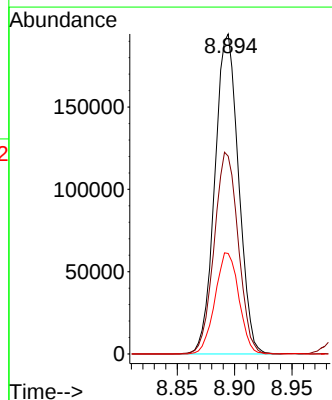
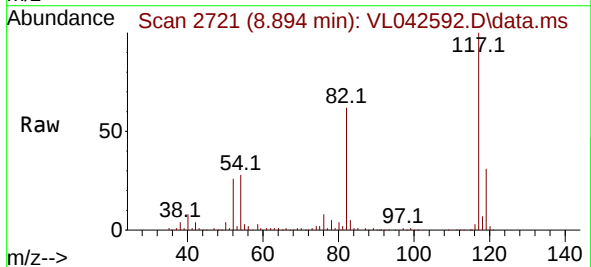
Instrument :
MSVOA_L
ClientSampleId :
SV2

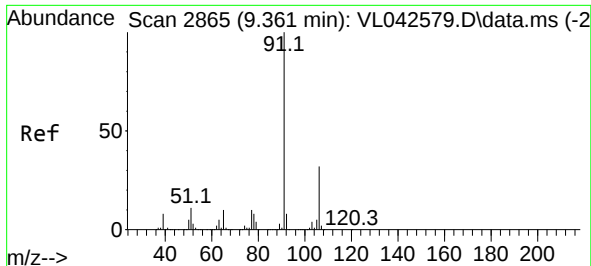
Tgt Ion: 91 Resp: 21355
Ion Ratio Lower Upper
91 100
92 63.1 48.2 72.4



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.894 min Scan# 2721
Delta R.T. 0.006 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Tgt Ion: 117 Resp: 279800
Ion Ratio Lower Upper
117 100
82 64.1 51.2 76.8
119 31.9 26.3 39.5

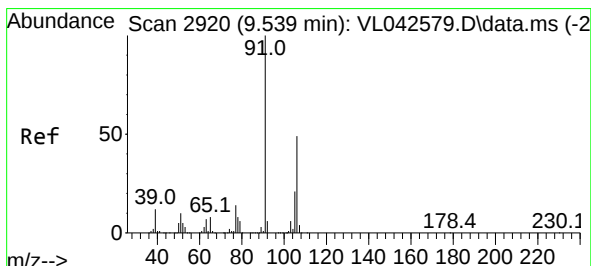
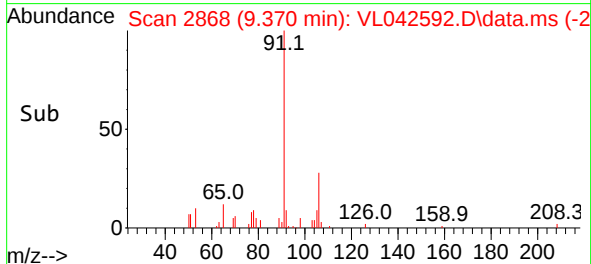
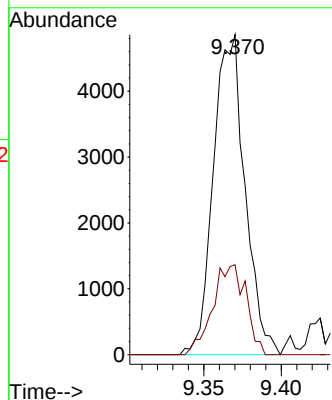
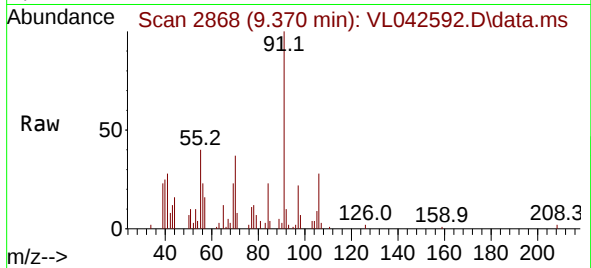




#58
Ethyl Benzene
Concen: 0.145 ppbv
RT: 9.370 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

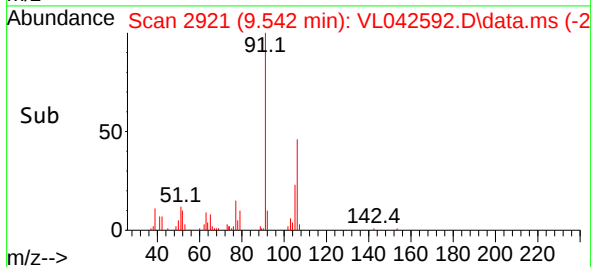
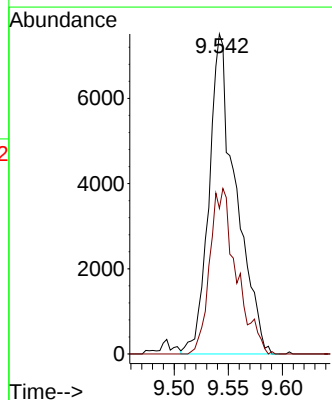
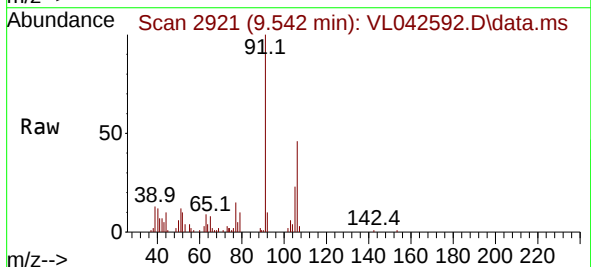
Instrument :
MSVOA_L
ClientSampleId :
SV2

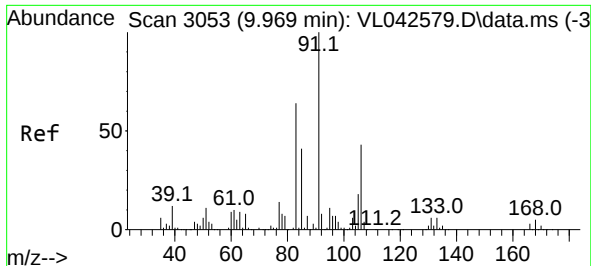
Tgt Ion: 91 Resp: 6883
Ion Ratio Lower Upper
91 100
106 28.1 25.9 38.9



#59
m/p-Xylene
Concen: 0.347 ppbv m
RT: 9.542 min Scan# 2921
Delta R.T. 0.003 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Tgt Ion: 91 Resp: 12974
Ion Ratio Lower Upper
91 100
106 51.3 38.8 58.2

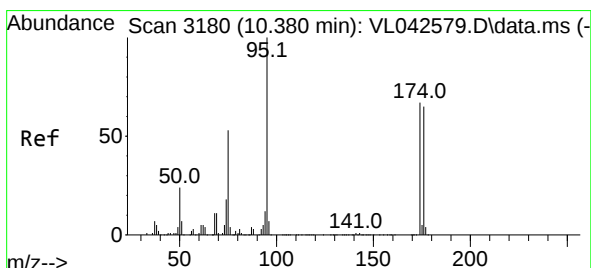
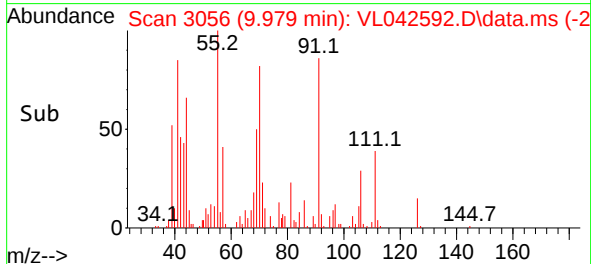
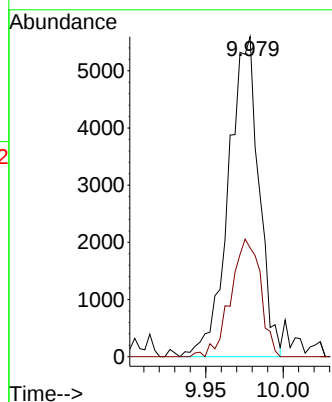
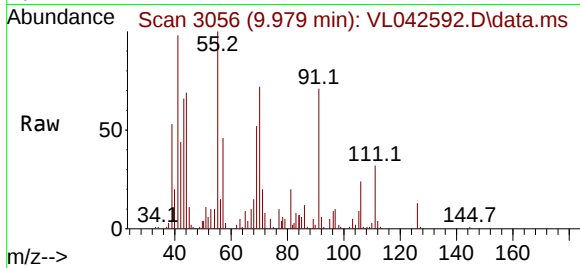




#60
o-Xylene
Concen: 0.205 ppbv
RT: 9.979 min Scan# 3053
Delta R.T. 0.010 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

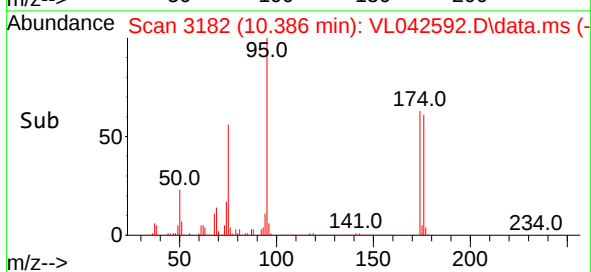
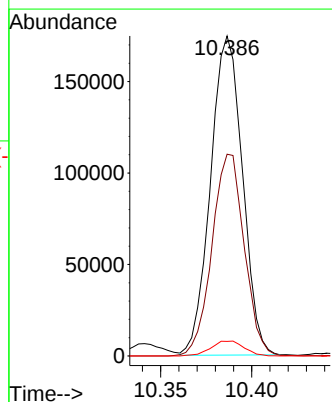
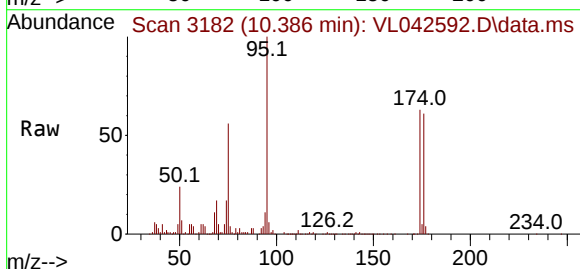
Instrument :
MSVOA_L
ClientSampleId :
SV2

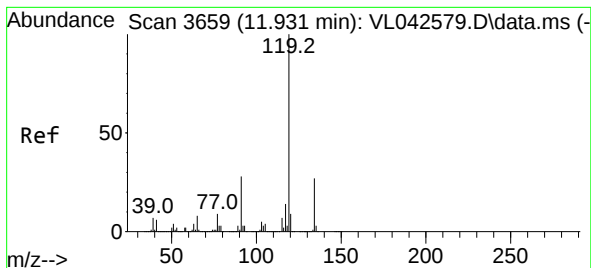
Tgt Ion: 91 Resp: 7651
Ion Ratio Lower Upper
91 100
106 35.9 22.9 68.5



#68
1-Bromo-4-Fluorobenzene
Concen: 10.137 ppbv
RT: 10.386 min Scan# 3182
Delta R.T. 0.006 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Tgt Ion: 95 Resp: 212619
Ion Ratio Lower Upper
95 100
174 63.9 53.1 79.7
175 4.9 4.2 6.2





#69

p-Isopropyltoluene

Concen: 0.145 ppbv

RT: 11.934 min Scan# 3659

Delta R.T. 0.003 min

Lab File: VL042592.D

Acq: 29 May 2025 19:00

Instrument :

MSVOA_L

ClientSampleId :

SV2

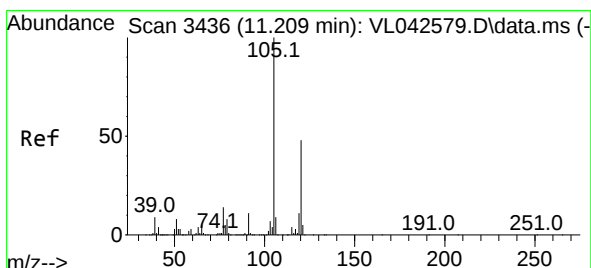
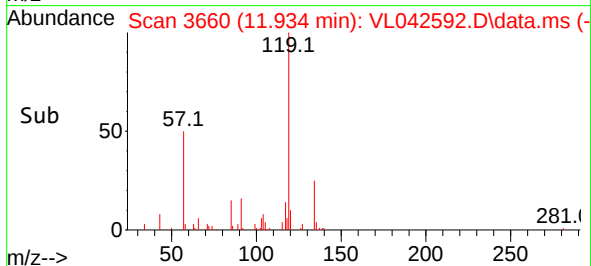
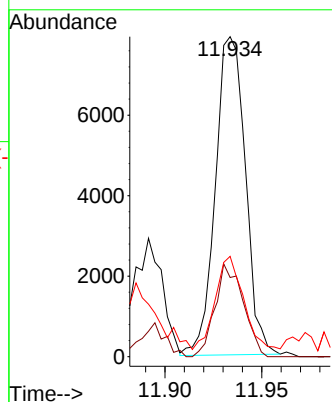
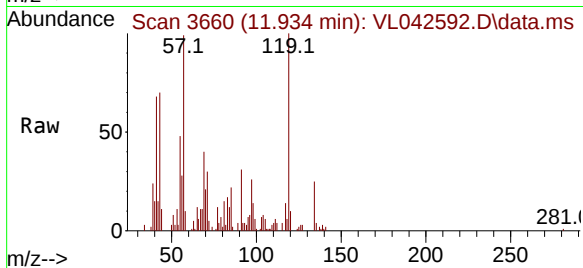
Tgt Ion:119 Resp: 8515

Ion Ratio Lower Upper

119 100

134 27.4 21.1 31.7

91 27.8 21.9 32.9



#73

1,3,5-Trimethylbenzene

Concen: 0.167 ppbv

RT: 11.215 min Scan# 3438

Delta R.T. 0.006 min

Lab File: VL042592.D

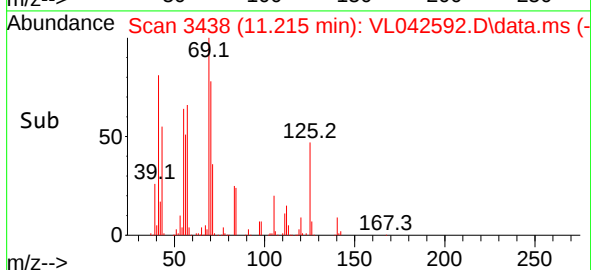
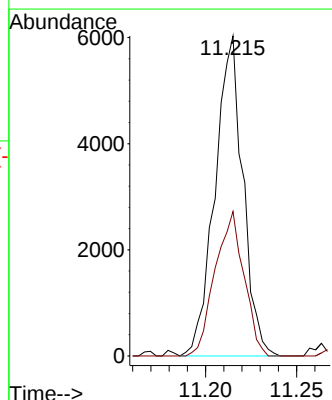
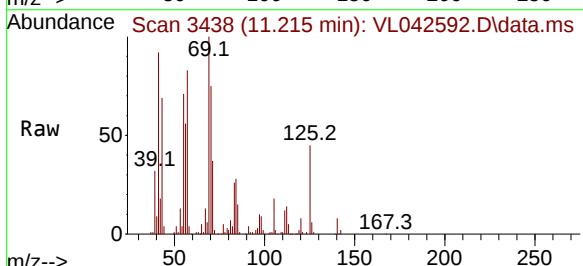
Acq: 29 May 2025 19:00

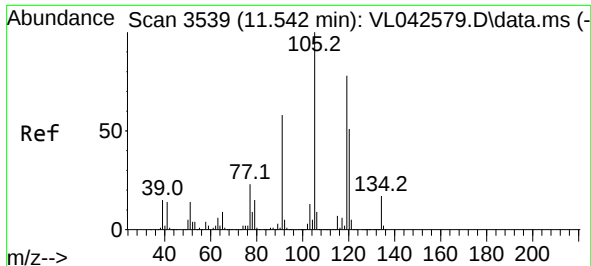
Tgt Ion:105 Resp: 6426

Ion Ratio Lower Upper

105 100

120 45.1 38.8 58.2

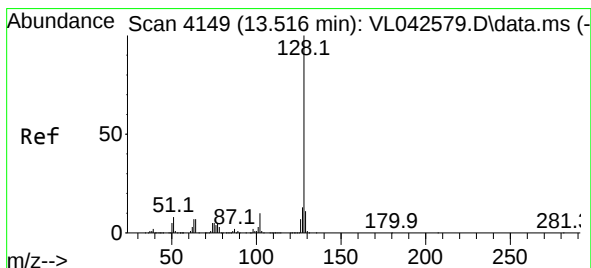
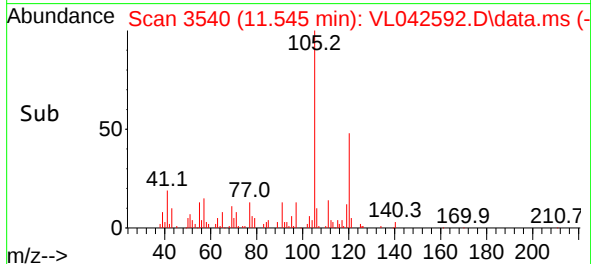
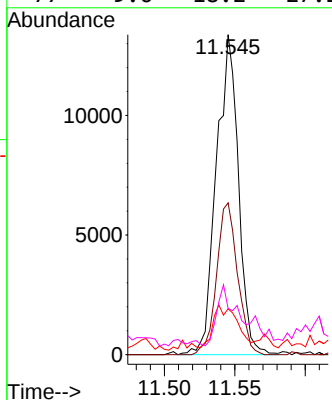
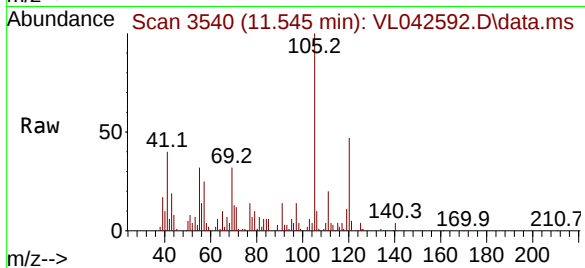




#74
1,2,4-Trimethylbenzene
Concen: 0.341 ppbv
RT: 11.545 min Scan# 31
Delta R.T. 0.003 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tgt Ion:105	Resp:	14552
Ion	Ratio	Lower Upper
105	100	
120	47.4	40.8 61.2
91	12.5	46.8 70.2#
77	9.6	18.2 27.2#



#79
Naphthalene
Concen: 0.105 ppbv m
RT: 13.523 min Scan# 4151
Delta R.T. 0.006 min
Lab File: VL042592.D
Acq: 29 May 2025 19:00

Tgt Ion:128	Resp:	4237
Ion	Ratio	Lower Upper
128	100	
127	75.6	10.2 15.4#
129	6.8	8.8 13.2#

