

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL052925\
 Data File : VL042594.D
 Acq On : 29 May 2025 20:05
 Operator : SY/MD
 Sample : Q2124-03 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV3

Quant Time: May 30 02:13:40 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)

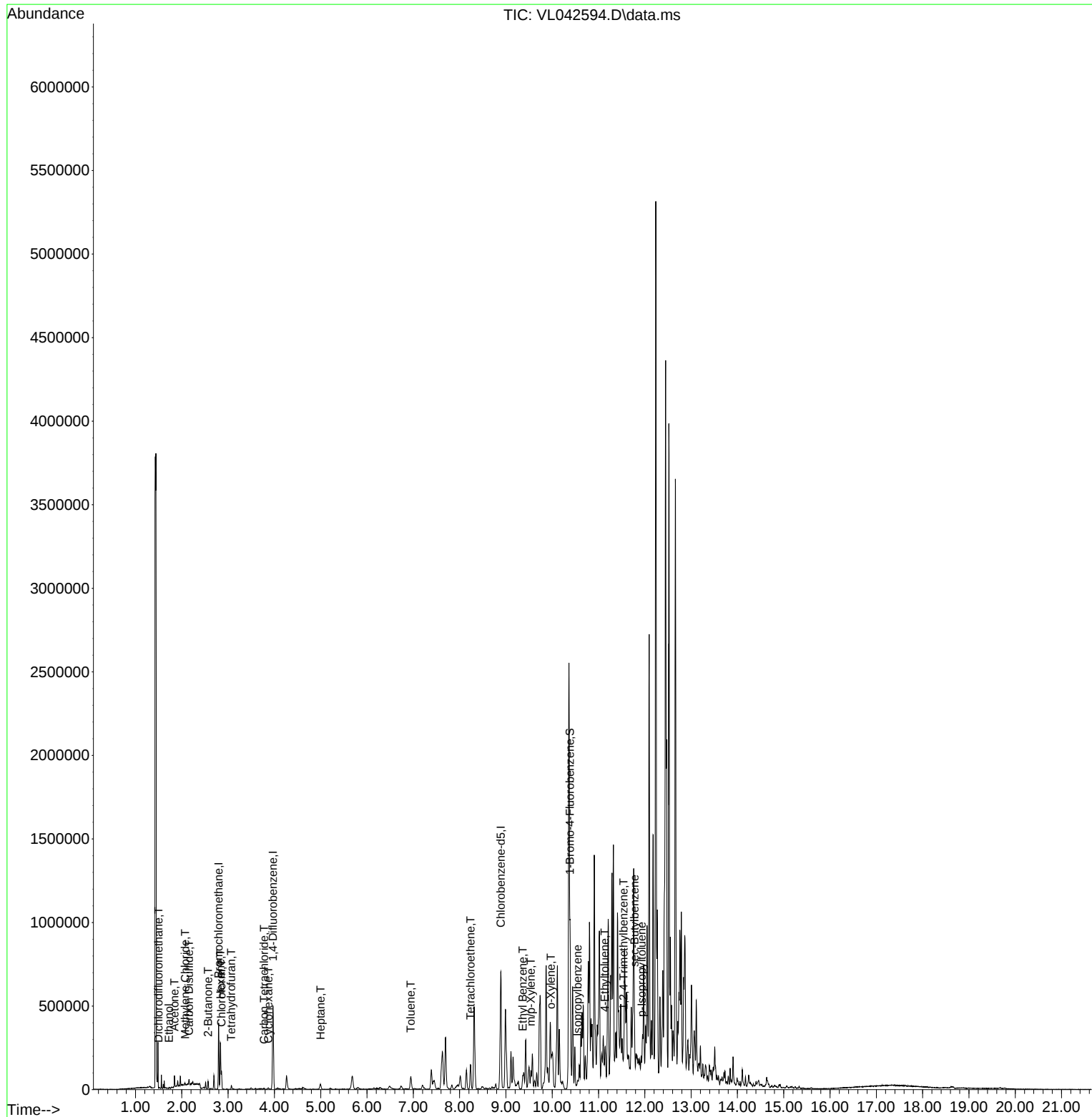
Internal Standards						
1) Bromochloromethane	2.797	49	109883	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	315583	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	284413	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	210817	9.888	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.900%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	1779	0.132	ppbv #	88
10) Heptane	4.994	43	13912	0.659	ppbv	98
13) Ethanol	1.725	45	2596m	2.908	ppbv	
15) Acetone	1.842	43	27951	2.112	ppbv #	84
20) Methylene Chloride	2.072	84	1525	0.349	ppbv	83
26) Hexane	2.835	57	70521	4.285	ppbv #	41
27) Carbon Disulfide	2.156	76	20835	1.649	ppbv #	1
29) Chloroform	2.858	83	41250	1.927	ppbv	99
30) Cyclohexane	3.868	84	2359m	0.173	ppbv	
34) 2-Butanone	2.567	43	28702	1.275	ppbv	99
35) Carbon Tetrachloride	3.777	117	1545	0.074	ppbv #	89
41) Tetrahydrofuran	3.068	42	9145m	0.694	ppbv	
52) Tetrachloroethene	8.234	164	26326	2.267	ppbv	91
53) Toluene	6.946	91	54297	1.512	ppbv	98
58) Ethyl Benzene	9.364	91	33818	0.701	ppbv	89
59) m/p-Xylene	9.539	91	60849	1.603	ppbv	99
60) o-Xylene	9.972	91	30572	0.807	ppbv	100
62) Isopropylbenzene	10.548	105	14864	0.266	ppbv	99
67) sec-Butylbenzene	11.775	105	18180m	0.255	ppbv	
69) p-Isopropyltoluene	11.934	119	11768	0.197	ppbv	97
72) 4-Ethyltoluene	11.134	105	17745	0.376	ppbv #	52
74) 1,2,4-Trimethylbenzene	11.542	105	40578	0.936	ppbv #	66

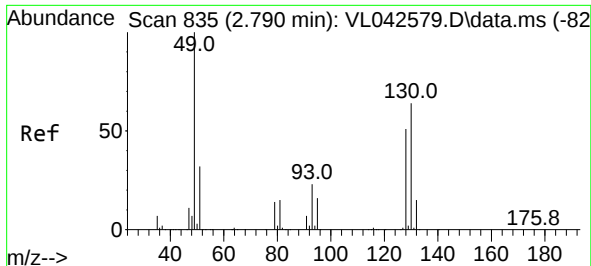
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL052925\
Data File : VL042594.D
Acq On : 29 May 2025 20:05
Operator : SY/MD
Sample : Q2124-03 4X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SV3

Quant Time: May 30 02:13:40 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

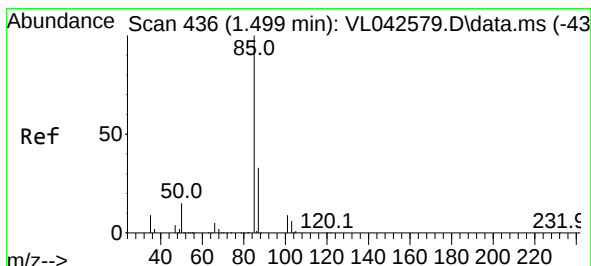
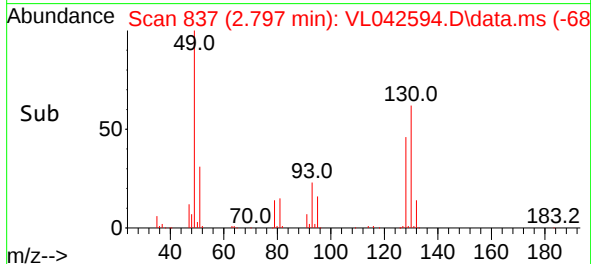
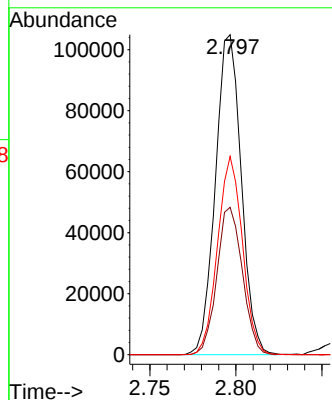
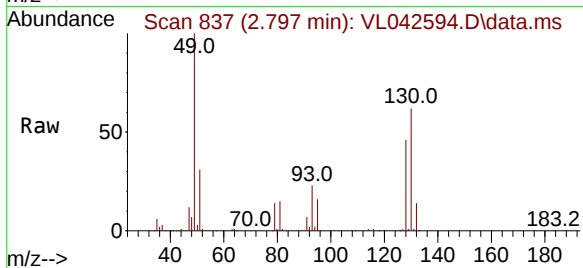




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 835
Delta R.T. 0.007 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

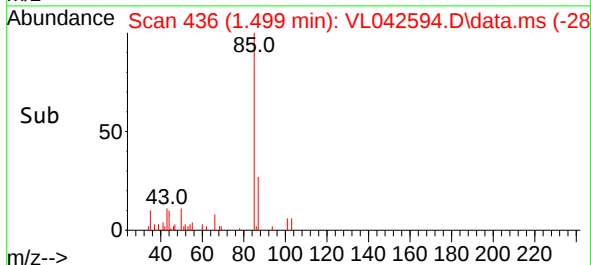
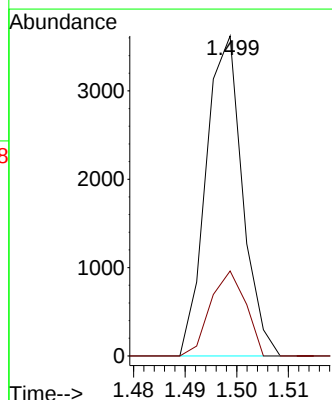
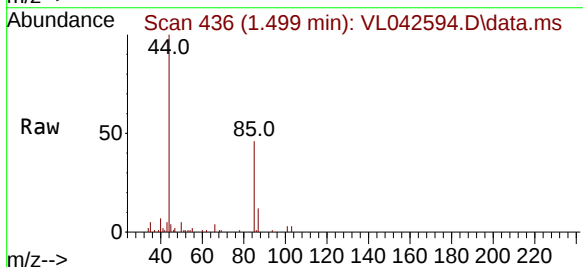
Instrument :
MSVOA_L
ClientSampleId :
SV3

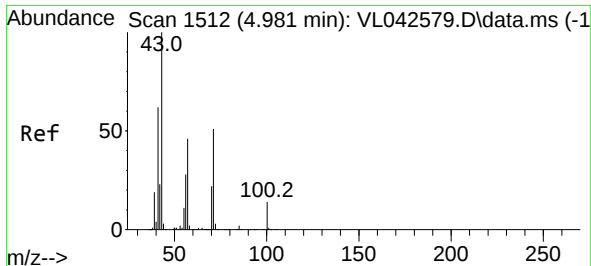
Tgt Ion: 49 Resp: 109883
Ion Ratio Lower Upper
49 100
128 45.4 24.2 72.6
130 59.5 30.4 91.2



#2
Dichlorodifluoromethane
Concen: 0.132 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

Tgt Ion: 85 Resp: 1779
Ion Ratio Lower Upper
85 100
87 26.6 26.6 39.8#





#10

Heptane

Concen: 0.659 ppbv

RT: 4.994 min Scan# 1516

Delta R.T. 0.013 min

Lab File: VL042594.D

Acq: 29 May 2025 20:05

Instrument :

MSVOA_L

ClientSampleId :

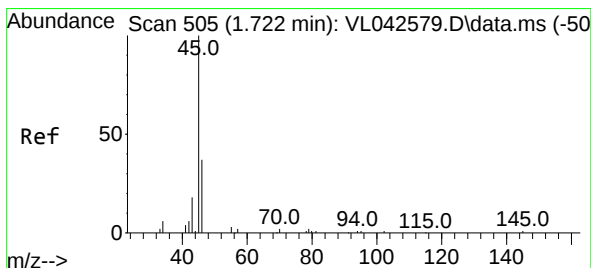
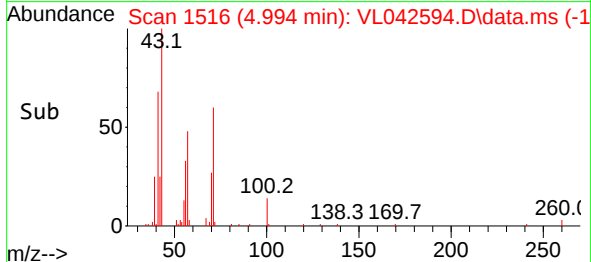
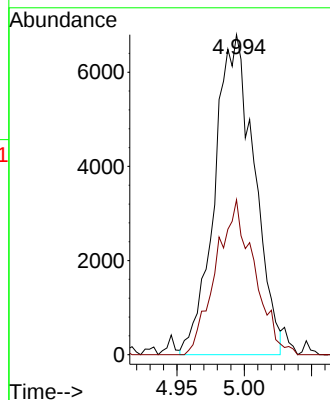
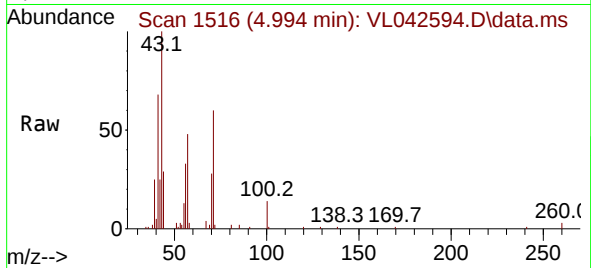
SV3

Tgt Ion: 43 Resp: 13912

Ion Ratio Lower Upper

43 100

57 47.0 38.9 58.3



#13

Ethanol

Concen: 2.908 ppbv m

RT: 1.725 min Scan# 506

Delta R.T. 0.003 min

Lab File: VL042594.D

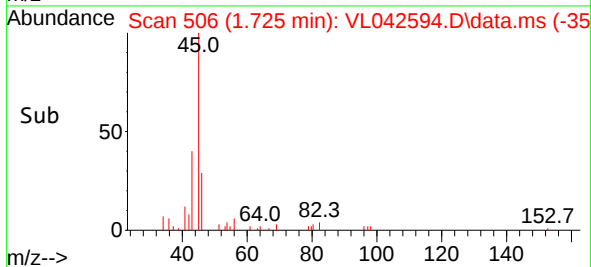
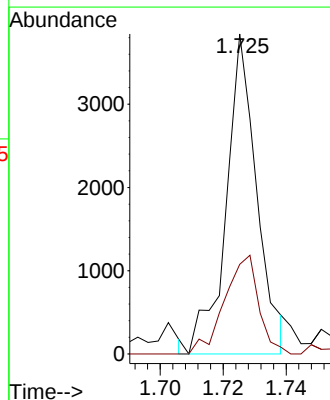
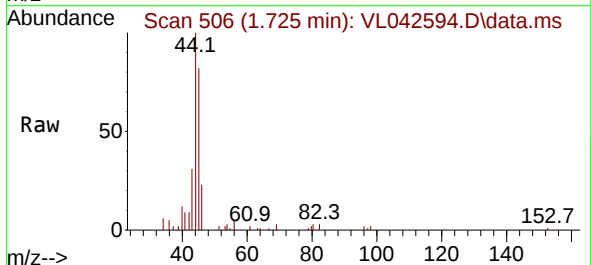
Acq: 29 May 2025 20:05

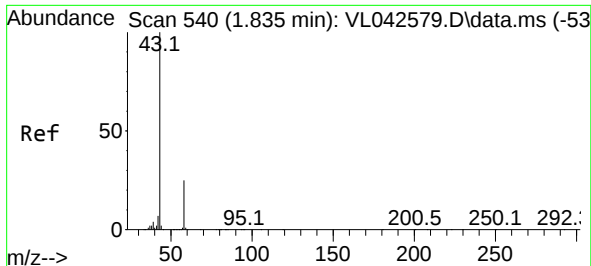
Tgt Ion: 45 Resp: 2596

Ion Ratio Lower Upper

45 100

46 0.0 14.5 58.1#





#15

Acetone

Concen: 2.112 ppbv

RT: 1.842 min Scan# 54

Delta R.T. 0.006 min

Lab File: VL042594.D

Acq: 29 May 2025 20:05

Instrument :

MSVOA_L

ClientSampleId :

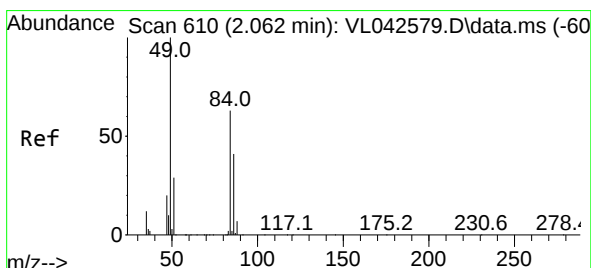
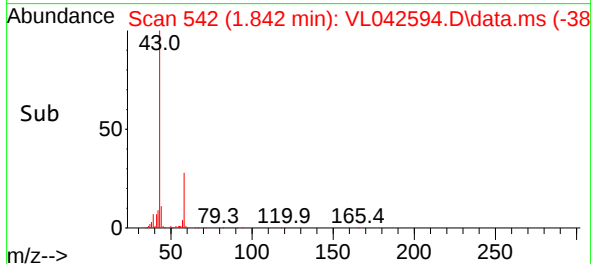
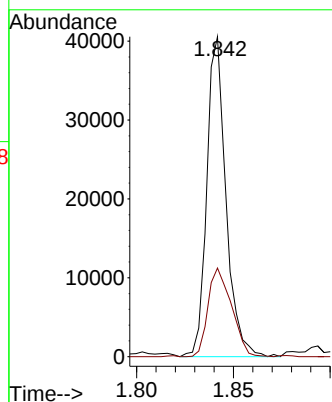
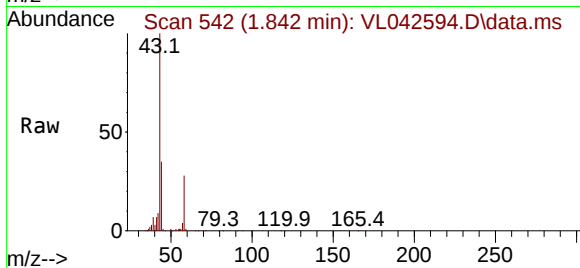
SV3

Tgt Ion: 43 Resp: 27951

Ion Ratio Lower Upper

43 100

58 34.3 21.0 31.4#



#20

Methylene Chloride

Concen: 0.349 ppbv

RT: 2.072 min Scan# 613

Delta R.T. 0.010 min

Lab File: VL042594.D

Acq: 29 May 2025 20:05

Tgt Ion: 84 Resp: 1525

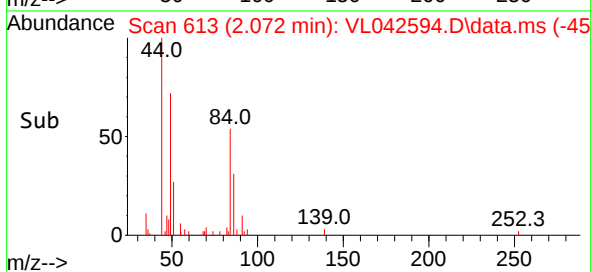
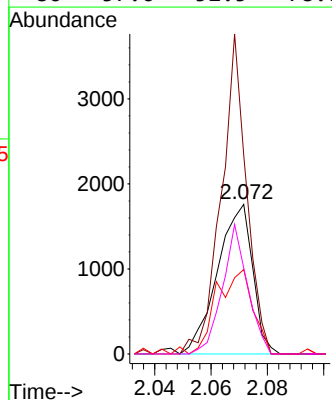
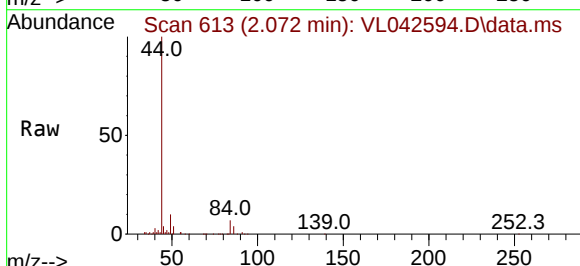
Ion Ratio Lower Upper

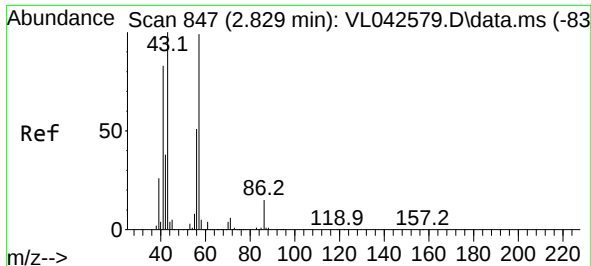
84 100

49 133.1 128.8 193.2

51 56.5 38.6 57.8

86 57.6 52.5 78.7

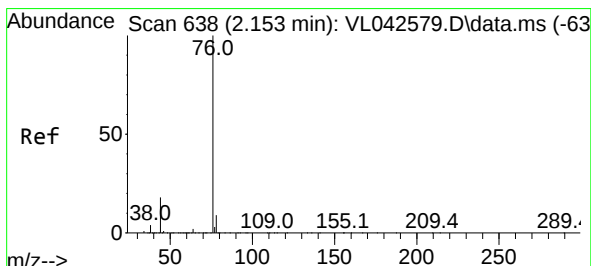
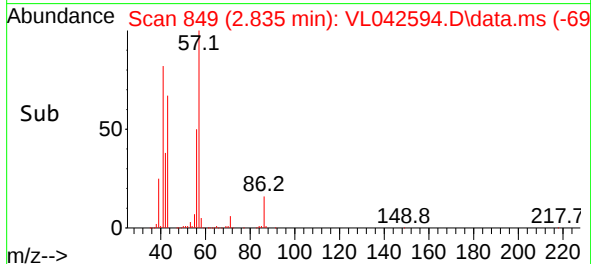
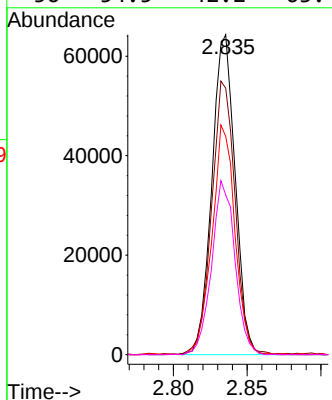
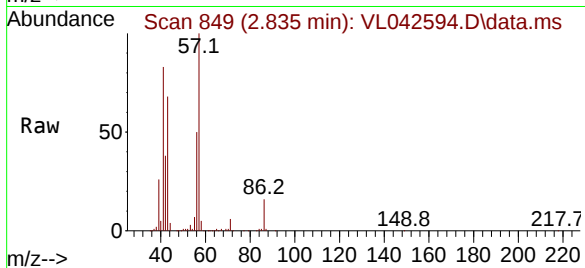




#26
Hexane
Concen: 4.285 ppbv
RT: 2.835 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

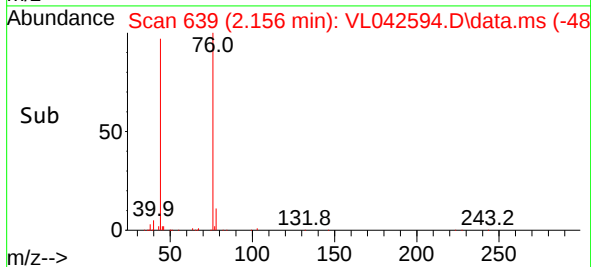
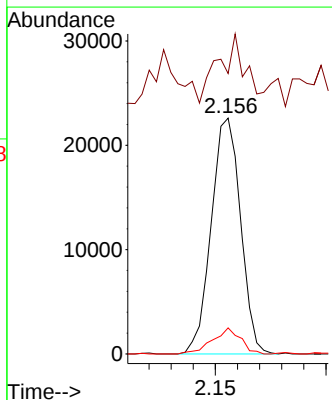
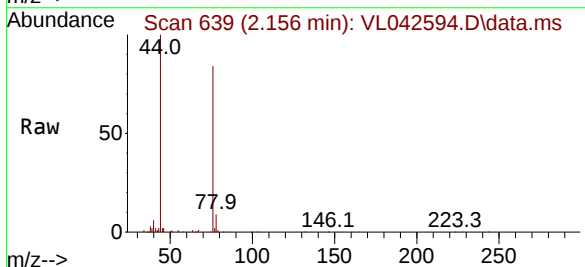
Instrument :
MSVOA_L
ClientSampleId :
SV3

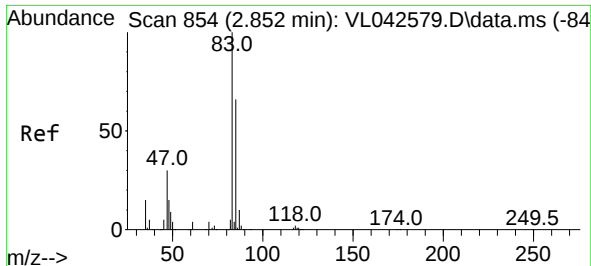
Tgt Ion: 57 Resp: 70521
Ion Ratio Lower Upper
57 100
41 87.4 70.6 106.0
43 71.5 181.1 271.7#
56 54.5 42.2 63.4



#27
Carbon Disulfide
Concen: 1.649 ppbv
RT: 2.156 min Scan# 639
Delta R.T. 0.003 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

Tgt Ion: 76 Resp: 20835
Ion Ratio Lower Upper
76 100
44 522.4 21.3 31.9#
78 10.8 9.4 14.0





#29

Chloroform

Concen: 1.927 ppbv

RT: 2.858 min Scan# 856

Delta R.T. 0.006 min

Lab File: VL042594.D

Acq: 29 May 2025 20:05

Instrument :

MSVOA_L

ClientSampleId :

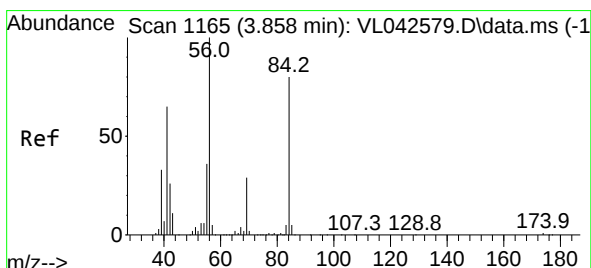
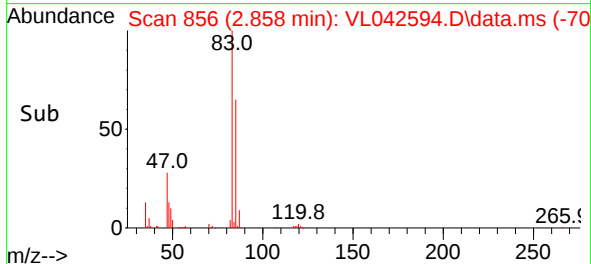
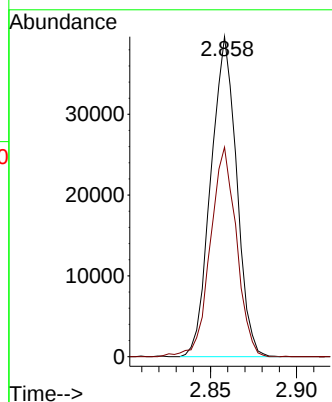
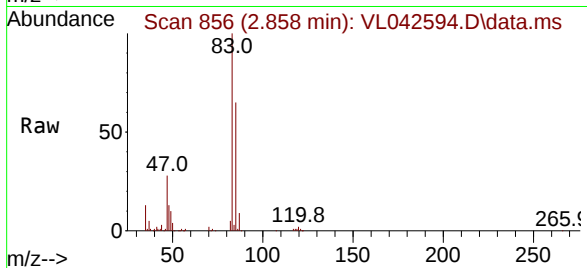
SV3

Tgt Ion: 83 Resp: 41250

Ion Ratio Lower Upper

83 100

85 65.4 52.8 79.2



#30

Cyclohexane

Concen: 0.173 ppbv m

RT: 3.868 min Scan# 1168

Delta R.T. 0.010 min

Lab File: VL042594.D

Acq: 29 May 2025 20:05

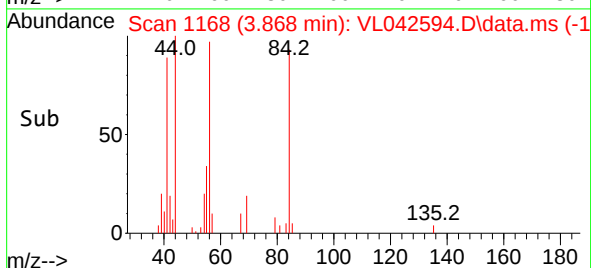
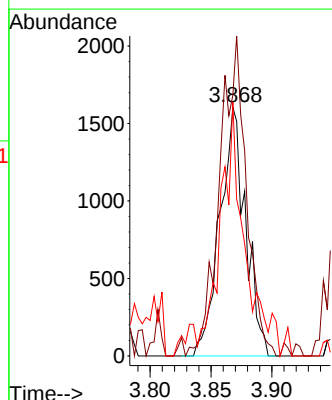
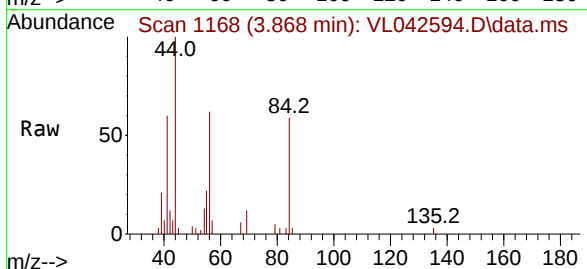
Tgt Ion: 84 Resp: 2359

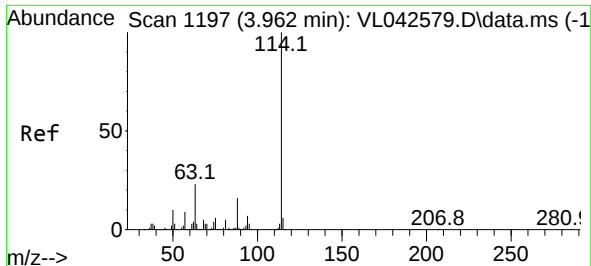
Ion Ratio Lower Upper

84 100

56 0.0 103.7 155.5#

41 0.0 65.1 97.7#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.968 min Scan# 1199

Delta R.T. 0.006 min

Lab File: VL042594.D

Acq: 29 May 2025 20:05

Instrument :

MSVOA_L

ClientSampleId :

SV3

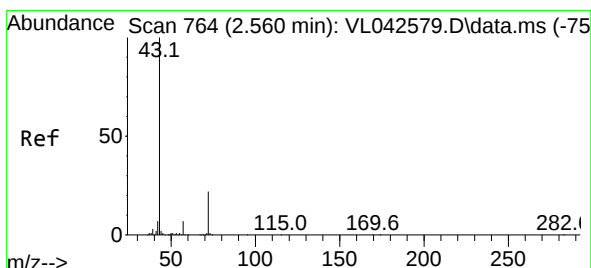
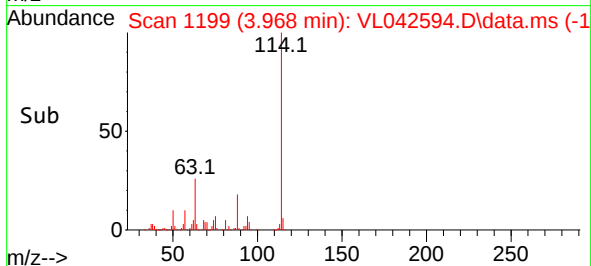
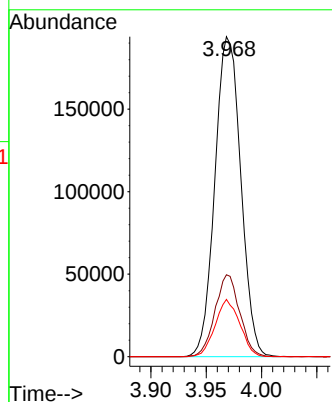
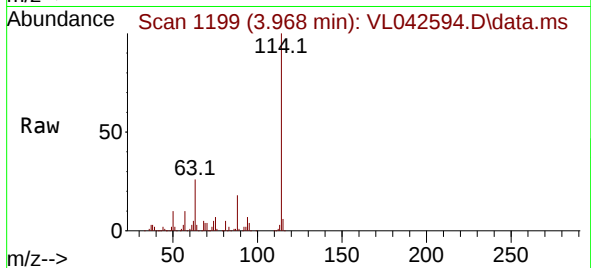
Tgt Ion:114 Resp: 315583

Ion Ratio Lower Upper

114 100

63 24.4 19.0 28.6

88 17.1 13.6 20.4



#34

2-Butanone

Concen: 1.275 ppbv

RT: 2.567 min Scan# 766

Delta R.T. 0.006 min

Lab File: VL042594.D

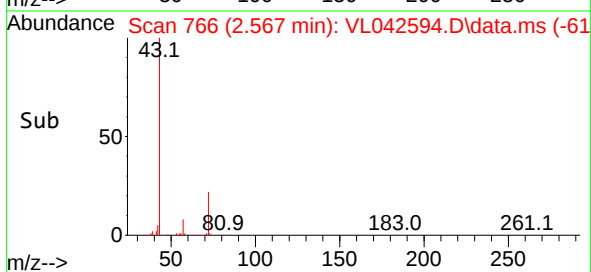
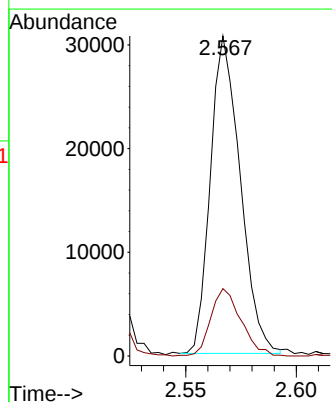
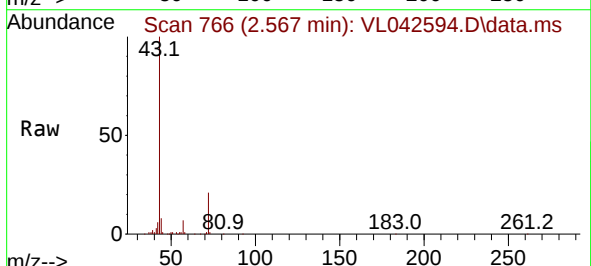
Acq: 29 May 2025 20:05

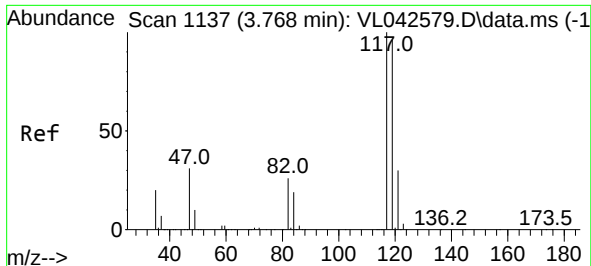
Tgt Ion: 43 Resp: 28702

Ion Ratio Lower Upper

43 100

72 21.4 17.7 26.5

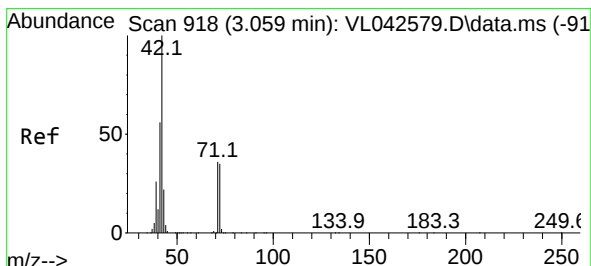
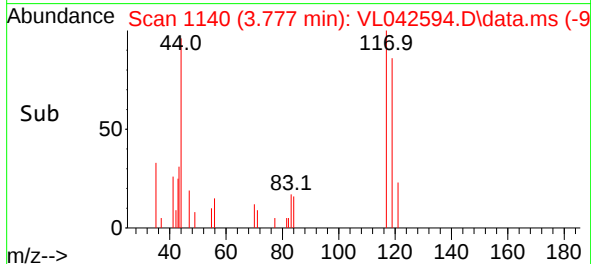
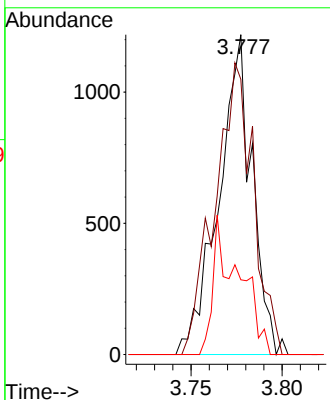
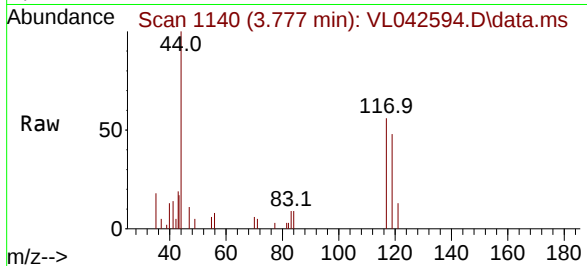




#35
Carbon Tetrachloride
Concen: 0.074 ppbv
RT: 3.777 min Scan# 1137
Delta R.T. 0.010 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

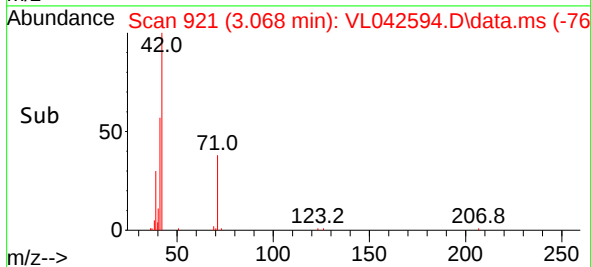
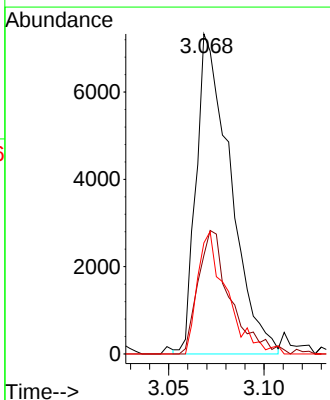
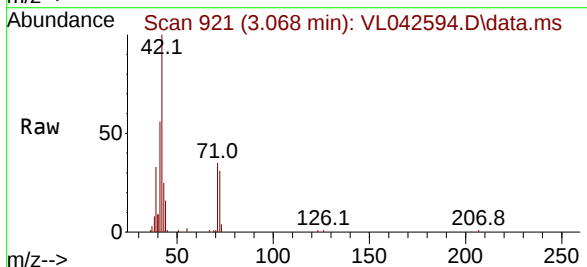
Instrument :
MSVOA_L
ClientSampleId :
SV3

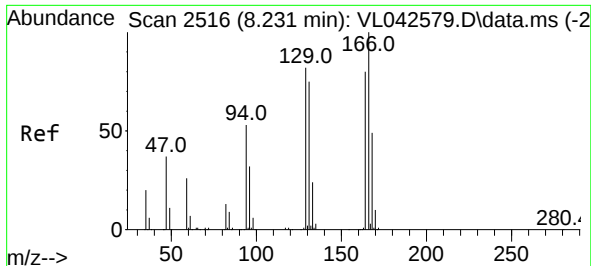
Tgt Ion:117 Resp: 1545
Ion Ratio Lower Upper
117 100
119 86.1 76.8 115.2
121 23.4 24.3 36.5#



#41
Tetrahydrofuran
Concen: 0.694 ppbv m
RT: 3.068 min Scan# 921
Delta R.T. 0.010 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

Tgt Ion: 42 Resp: 9145
Ion Ratio Lower Upper
42 100
72 36.7 28.9 43.3
71 32.9 28.5 42.7

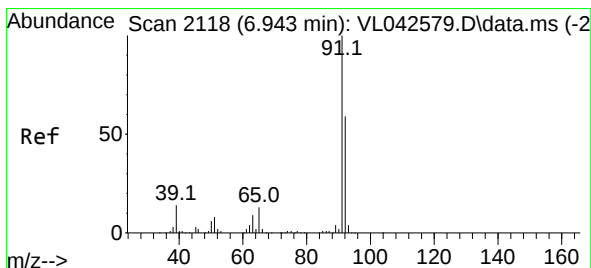
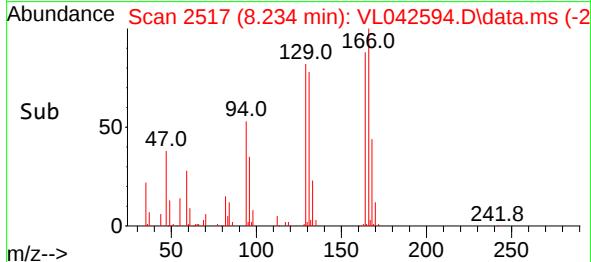
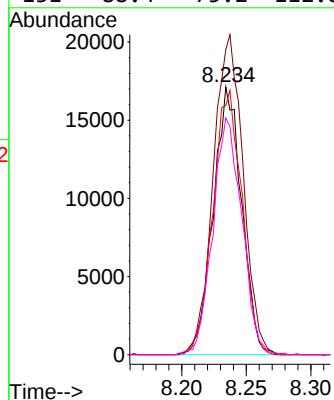
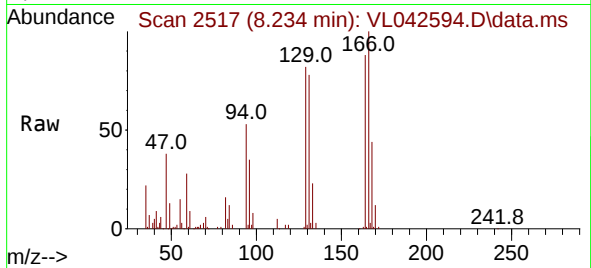




#52
Tetrachloroethene
Concen: 2.267 ppbv
RT: 8.234 min Scan# 2119
Delta R.T. 0.003 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

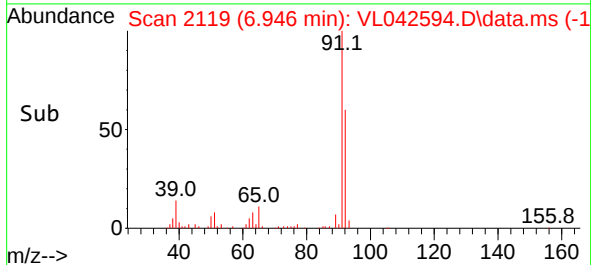
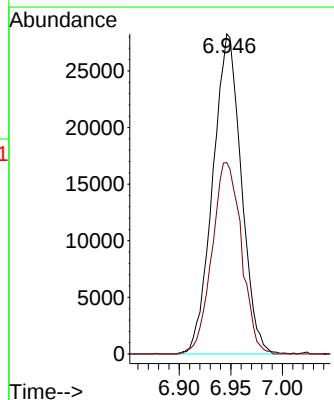
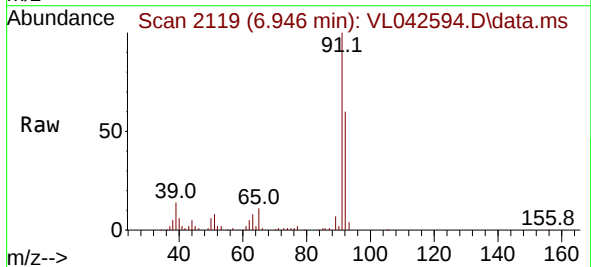
Instrument :
MSVOA_L
ClientSampleId :
SV3

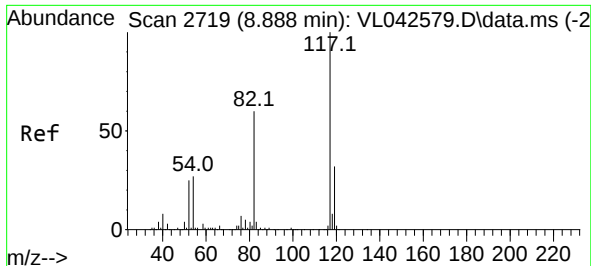
Tgt Ion:164 Resp: 26326
Ion Ratio Lower Upper
164 100
166 114.0 100.0 150.0
129 92.6 82.2 123.4
131 88.4 75.2 112.8



#53
Toluene
Concen: 1.512 ppbv
RT: 6.946 min Scan# 2119
Delta R.T. 0.003 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

Tgt Ion: 91 Resp: 54297
Ion Ratio Lower Upper
91 100
92 61.7 48.2 72.4

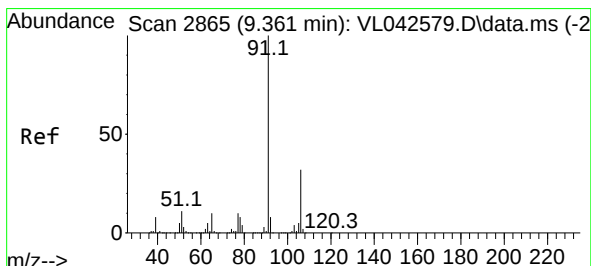
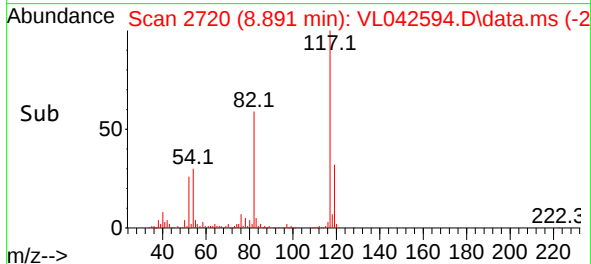
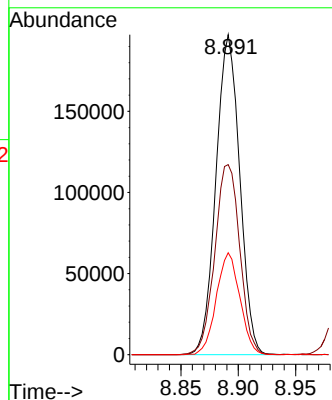
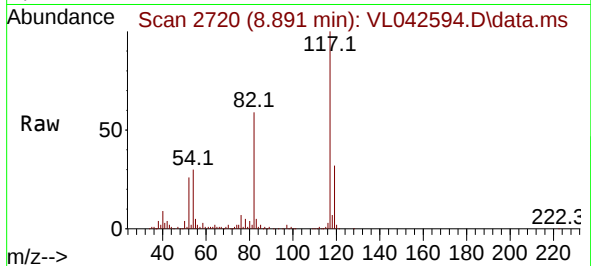




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.891 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

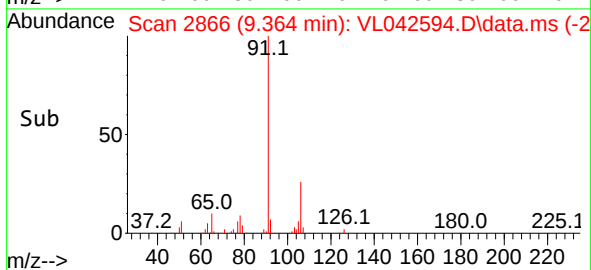
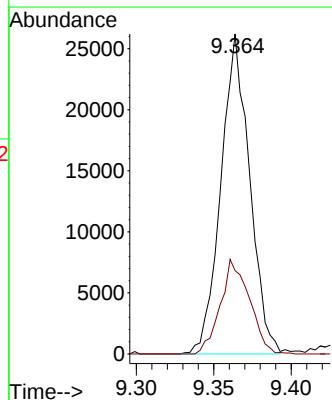
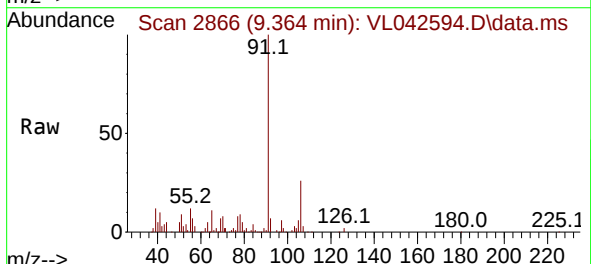
Instrument :
MSVOA_L
ClientSampleId :
SV3

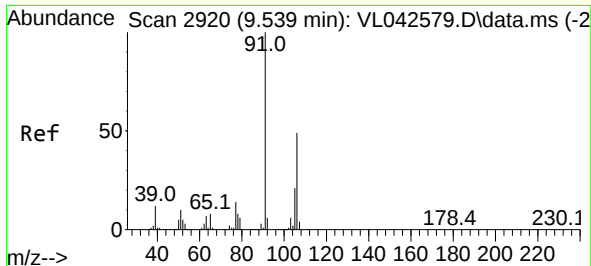
Tgt Ion:117 Resp: 284413
Ion Ratio Lower Upper
117 100
82 62.5 51.2 76.8
119 31.6 26.3 39.5



#58
Ethyl Benzene
Concen: 0.701 ppbv
RT: 9.364 min Scan# 2866
Delta R.T. 0.003 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

Tgt Ion: 91 Resp: 33818
Ion Ratio Lower Upper
91 100
106 26.1 25.9 38.9





#59

m/p-Xylene

Concen: 1.603 ppbv

RT: 9.539 min Scan# 2920

Delta R.T. -0.000 min

Lab File: VL042594.D

Acq: 29 May 2025 20:05

Instrument :

MSVOA_L

ClientSampleId :

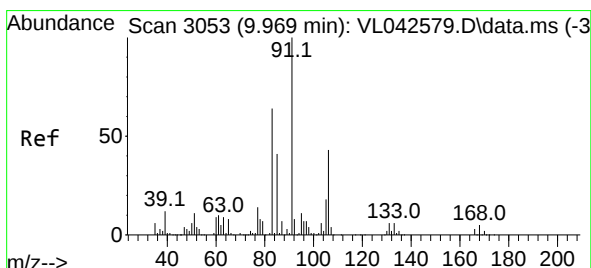
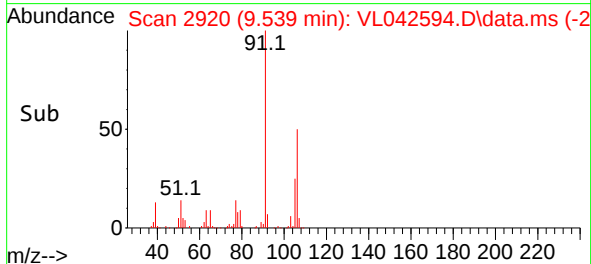
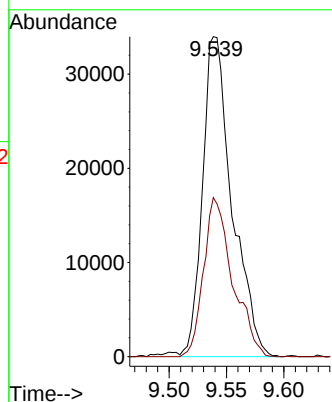
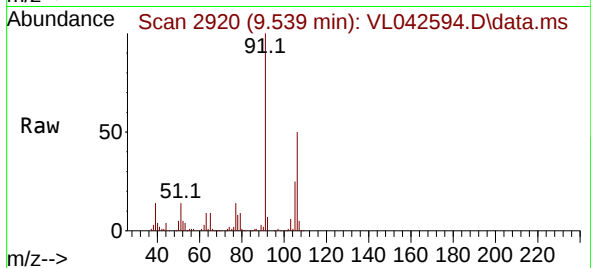
SV3

Tgt Ion: 91 Resp: 60849

Ion Ratio Lower Upper

91 100

106 49.0 38.8 58.2



#60

o-Xylene

Concen: 0.807 ppbv

RT: 9.972 min Scan# 3054

Delta R.T. 0.003 min

Lab File: VL042594.D

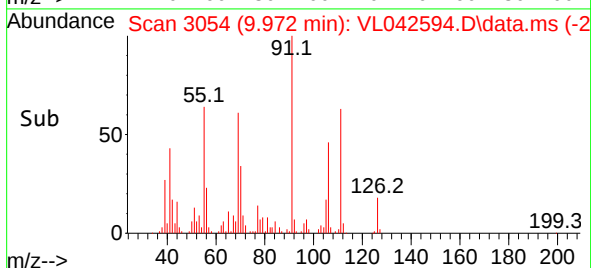
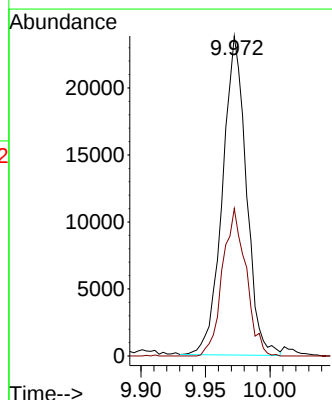
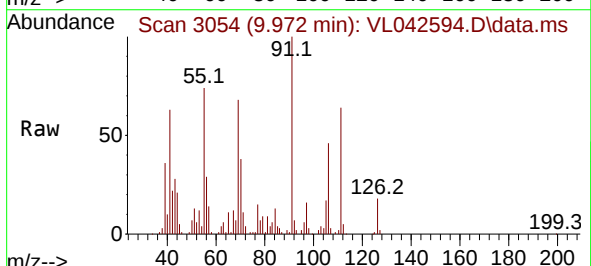
Acq: 29 May 2025 20:05

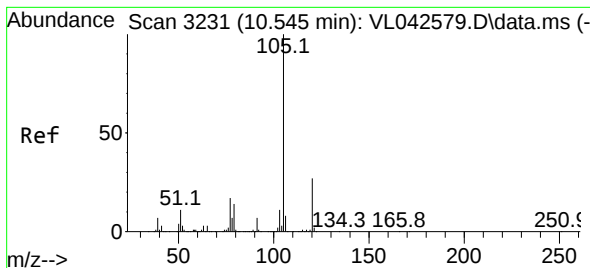
Tgt Ion: 91 Resp: 30572

Ion Ratio Lower Upper

91 100

106 45.5 22.9 68.5





#62

Isopropylbenzene

Concen: 0.266 ppbv

RT: 10.548 min Scan# 31

Delta R.T. 0.003 min

Lab File: VL042594.D

Acq: 29 May 2025 20:05

Instrument :

MSVOA_L

ClientSampleId :

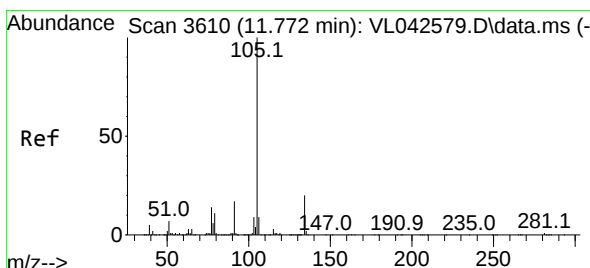
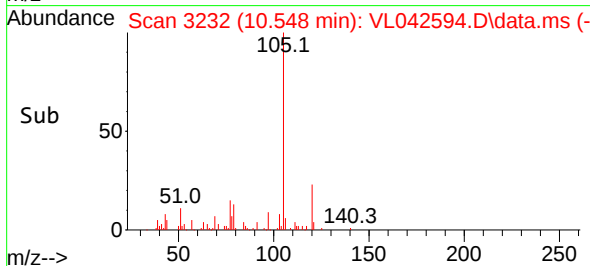
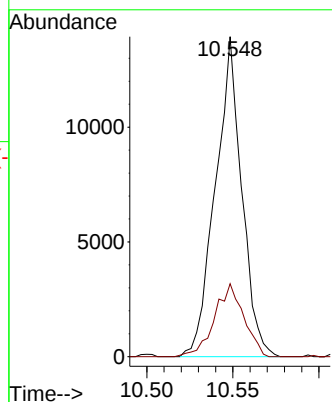
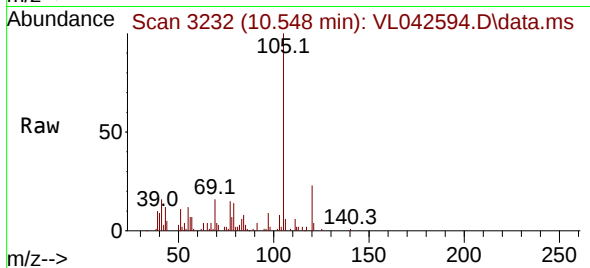
SV3

Tgt Ion:105 Resp: 14864

Ion Ratio Lower Upper

105 100

120 25.3 20.9 31.3



#67

sec-Butylbenzene

Concen: 0.255 ppbv m

RT: 11.775 min Scan# 3611

Delta R.T. 0.003 min

Lab File: VL042594.D

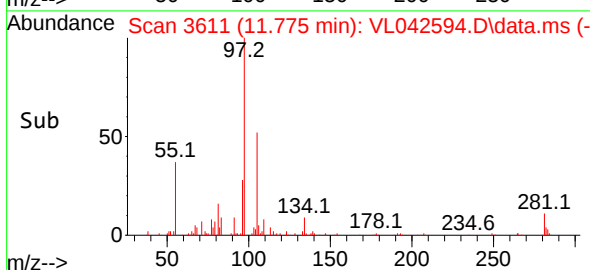
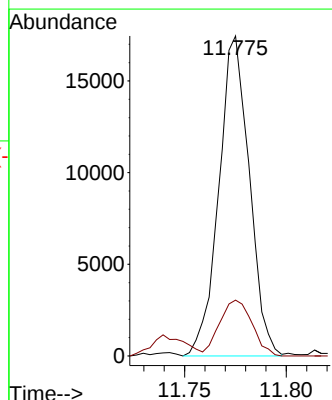
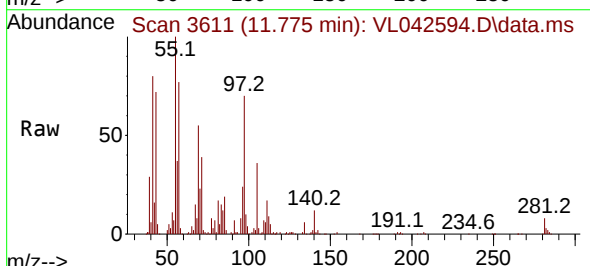
Acq: 29 May 2025 20:05

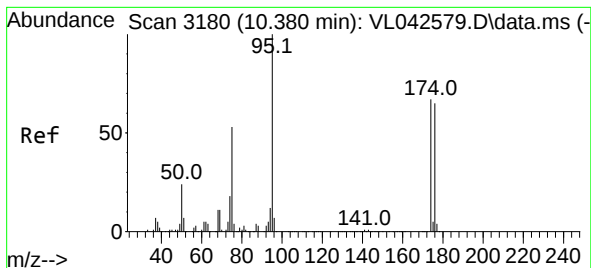
Tgt Ion:105 Resp: 18180

Ion Ratio Lower Upper

105 100

134 14.1 15.8 23.6#

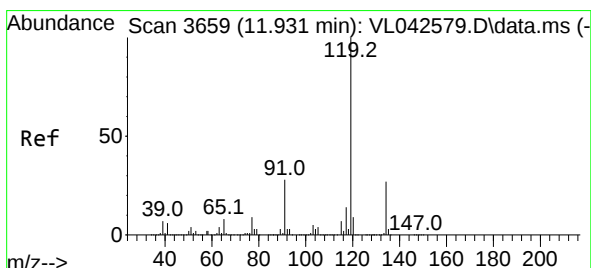
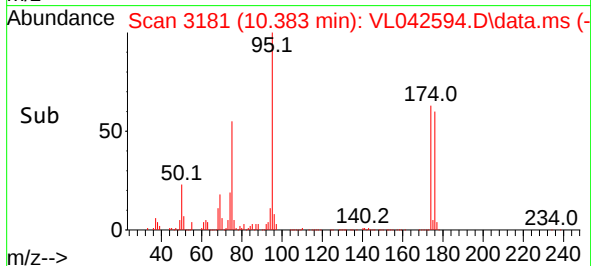
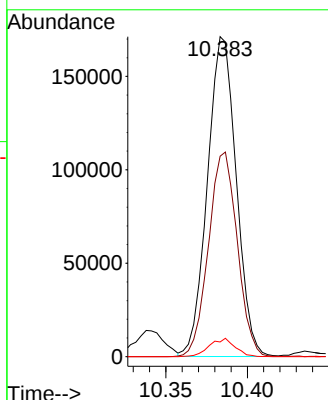
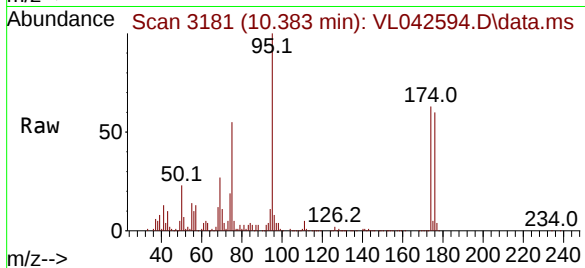




#68
1-Bromo-4-Fluorobenzene
Concen: 9.888 ppbv
RT: 10.383 min Scan# 3180
Delta R.T. 0.003 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

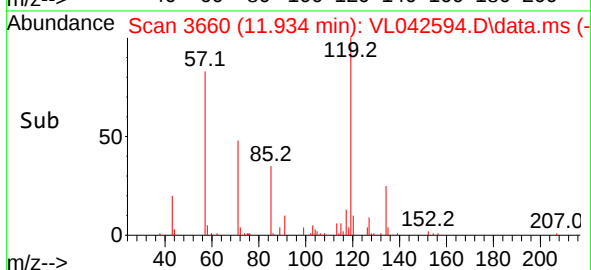
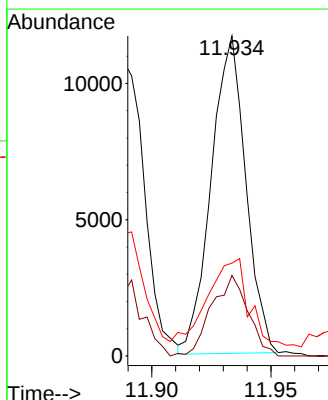
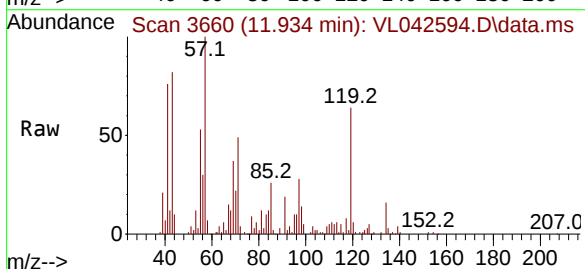
Instrument :
MSVOA_L
ClientSampleId :
SV3

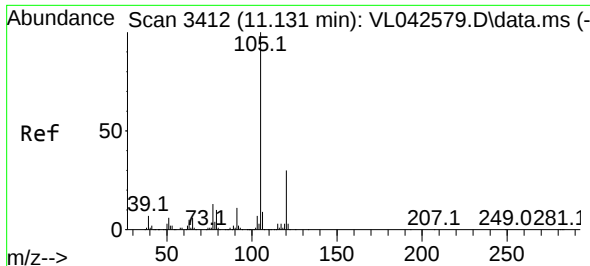
Tgt Ion: 95 Resp: 210817
Ion Ratio Lower Upper
95 100
174 63.8 53.1 79.7
175 5.1 4.2 6.2



#69
p-Isopropyltoluene
Concen: 0.197 ppbv
RT: 11.934 min Scan# 3660
Delta R.T. 0.003 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

Tgt Ion: 119 Resp: 11768
Ion Ratio Lower Upper
119 100
134 26.6 21.1 31.7
91 30.7 21.9 32.9

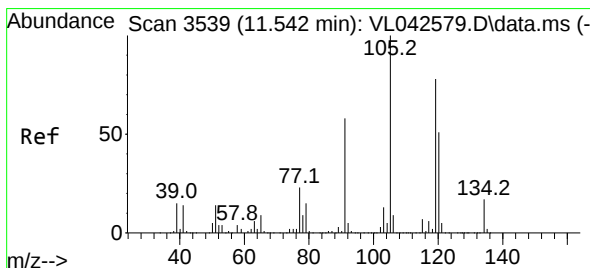
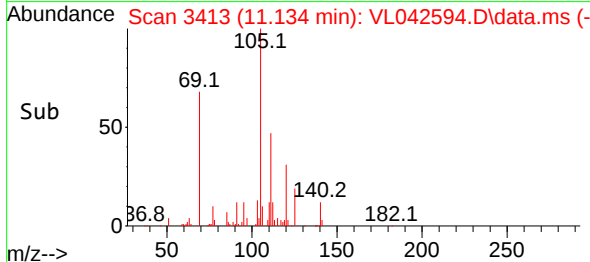
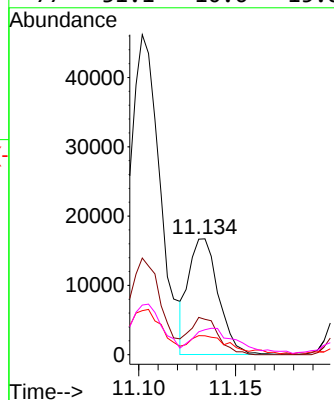
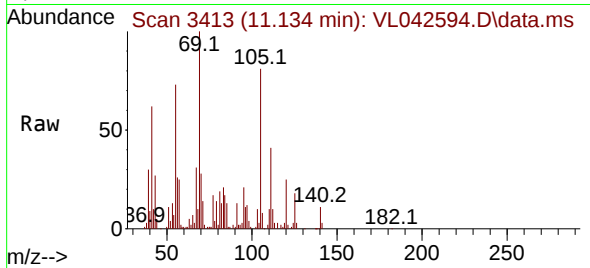




#72
4-Ethyltoluene
Concen: 0.376 ppbv
RT: 11.134 min Scan# 3412
Delta R.T. 0.003 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tgt Ion:105	Resp:	17745
Ion Ratio	Lower	Upper
105	100	
120	0.0	24.6
91	0.0	9.6
77	31.1	10.6



#74
1,2,4-Trimethylbenzene
Concen: 0.936 ppbv
RT: 11.542 min Scan# 3539
Delta R.T. -0.000 min
Lab File: VL042594.D
Acq: 29 May 2025 20:05

Tgt Ion:105	Resp:	40578
Ion Ratio	Lower	Upper
105	100	
120	44.2	40.8
91	13.5	46.8
77	12.5	18.2

