

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092425\
 Data File : VL043010.D
 Acq On : 24 Sep 2025 15:39
 Operator : SY/MD
 Sample : Q3154-01 5X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

Quant Time: Sep 25 01:57:12 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

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

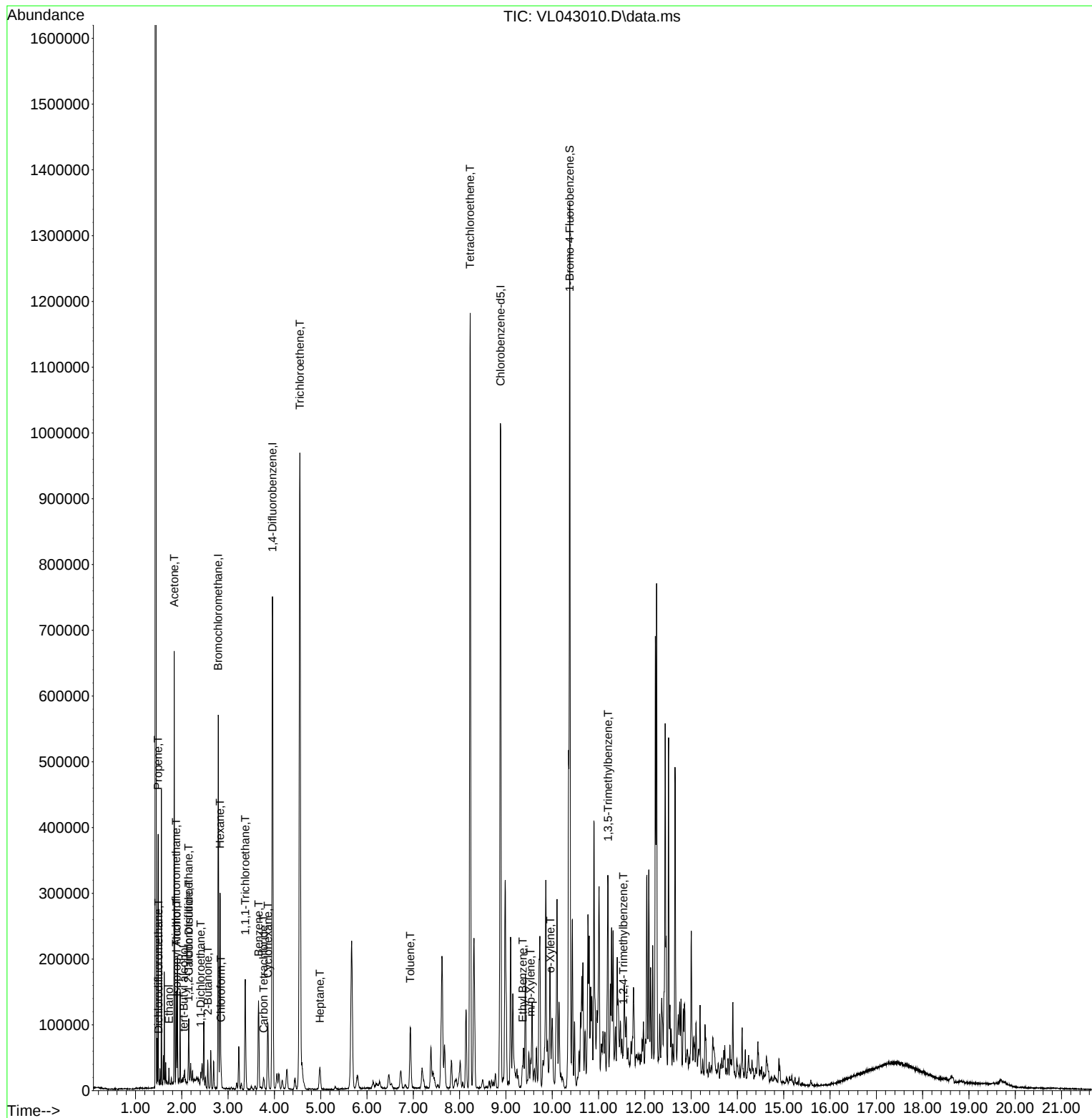
Internal Standards								
1)	Bromochloromethane		2.787	49	153782	10.000	ppbv	0.00
33)	1,4-Difluorobenzene		3.959	114	473304	10.000	ppbv	0.00
55)	Chlorobenzene-d5		8.885	117	423014	10.000	ppbv	0.00
System Monitoring Compounds								
68)	1-Bromo-4-Fluorobenzene		10.377	95	317512	10.055	ppbv	0.00
Spiked Amount		10.000	Range	65 - 135	Recovery	=	100.600%	
Target Compounds								Qvalue
2)	Dichlorodifluoromethane		1.499	85	2629	0.127	ppbv	99
9)	Propene		1.489	41	30943m	2.759	ppbv	
10)	Heptane		4.981	43	14555m	0.486	ppbv	
11)	Trichlorofluoromethane		1.877	101	37652	1.888	ppbv	98
12)	1,1,2-Trichlorotrifluo...		2.143	101	4960	0.307	ppbv	87
13)	Ethanol		1.722	45	8738	8.032	ppbv	99
15)	Acetone		1.835	43	291560	14.556	ppbv	96
17)	tert-Butyl alcohol		2.042	59	3191	0.145	ppbv #	72
19)	Isopropyl Alcohol		1.887	45	17944m	1.490	ppbv	
24)	1,1-Dichloroethane		2.411	63	2049	0.123	ppbv #	86
26)	Hexane		2.826	57	71281	3.089	ppbv #	41
27)	Carbon Disulfide		2.152	76	49869	2.410	ppbv #	85
29)	Chloroform		2.848	83	9515	0.315	ppbv	95
30)	Cyclohexane		3.858	84	26849	1.392	ppbv	96
32)	1,1,1-Trichloroethane		3.369	97	66252	2.033	ppbv	98
34)	2-Butanone		2.560	43	26819	0.809	ppbv	96
35)	Carbon Tetrachloride		3.764	117	3548m	0.115	ppbv	
36)	Benzene		3.658	78	85986	1.935	ppbv	98
38)	Trichloroethene		4.551	130	292517	13.243	ppbv	98
52)	Tetrachloroethene		8.228	164	223431	12.992	ppbv	96
53)	Toluene		6.936	91	67271	1.279	ppbv	100
58)	Ethyl Benzene		9.360	91	7912	0.114	ppbv	94
59)	m/p-Xylene		9.532	91	20709	0.378	ppbv #	100
60)	o-Xylene		9.963	91	16797	0.307	ppbv	93
73)	1,3,5-Trimethylbenzene		11.205	105	6786	0.122	ppbv #	84
74)	1,2,4-Trimethylbenzene		11.536	105	11191	0.182	ppbv #	65

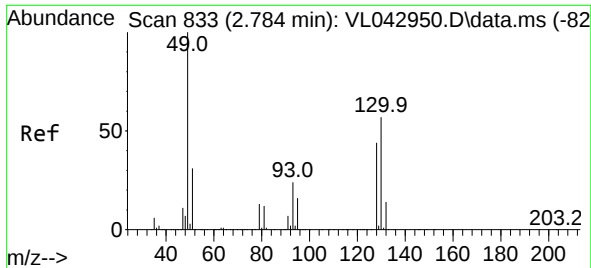
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092425\
Data File : VL043010.D
Acq On : 24 Sep 2025 15:39
Operator : SY/MD
Sample : Q3154-01 5X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SV1

Quant Time: Sep 25 01:57:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Tue Sep 23 02:39:16 2025
Response via : Initial Calibration

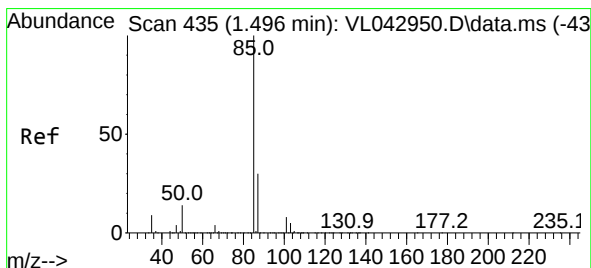
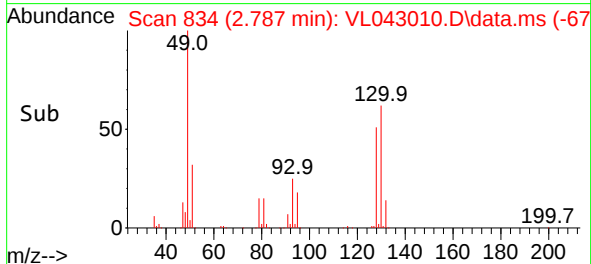
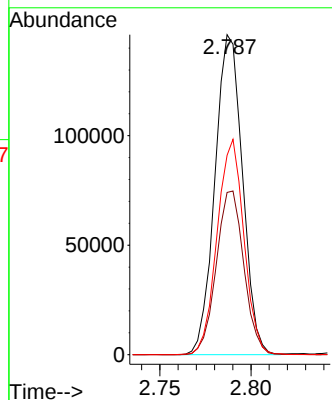
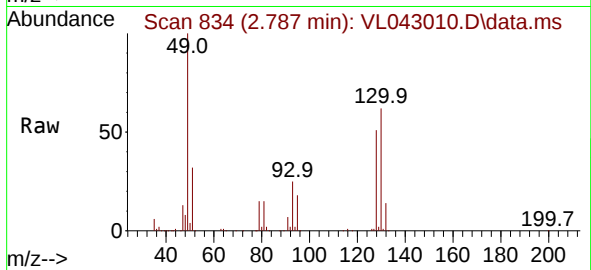




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 834
Delta R.T. 0.003 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

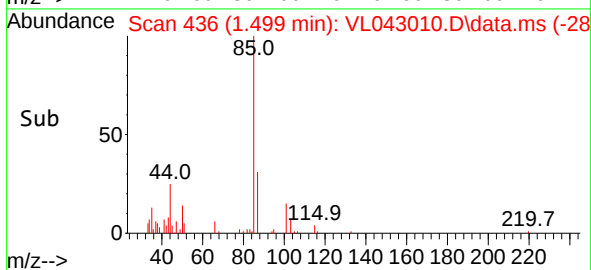
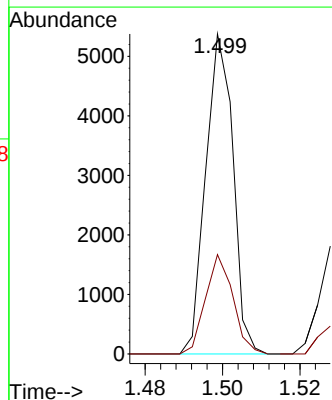
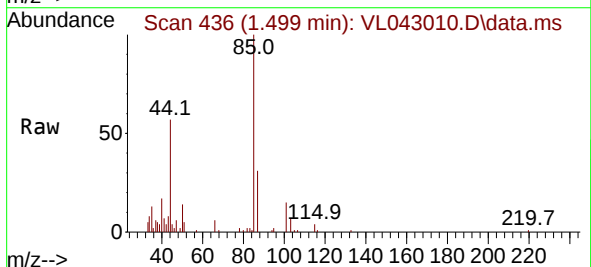
Instrument :
MSVOA_L
ClientSampleId :
SV1

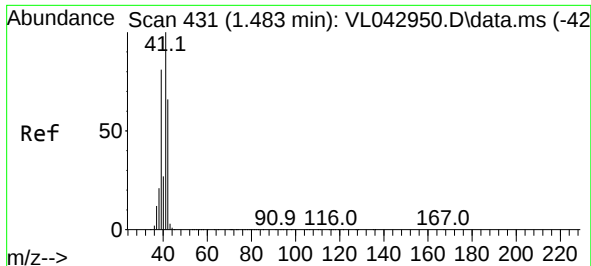
Tgt Ion: 49 Resp: 153782
Ion Ratio Lower Upper
49 100
128 51.2 22.9 68.8
130 65.3 29.1 87.3



#2
Dichlorodifluoromethane
Concen: 0.127 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

Tgt Ion: 85 Resp: 2629
Ion Ratio Lower Upper
85 100
87 31.0 24.3 36.5

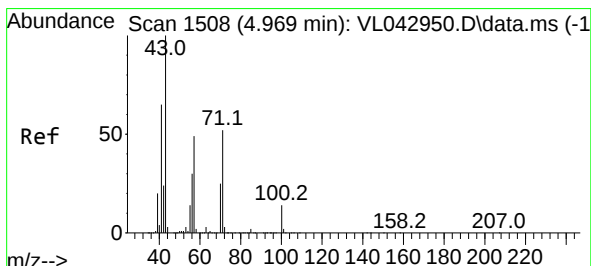
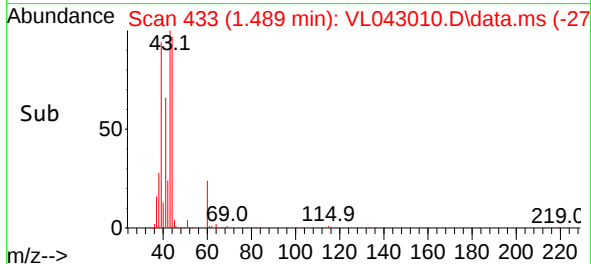
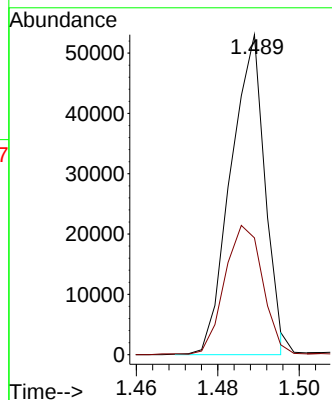
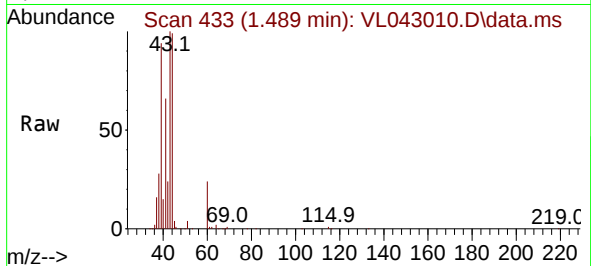




#9
Propene
Concen: 2.759 ppbv m
RT: 1.489 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

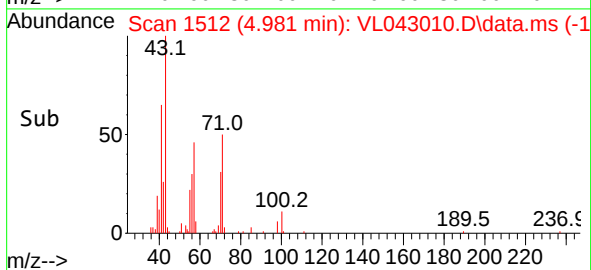
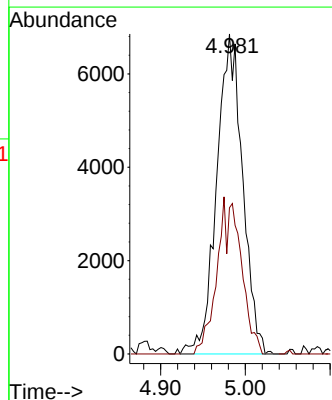
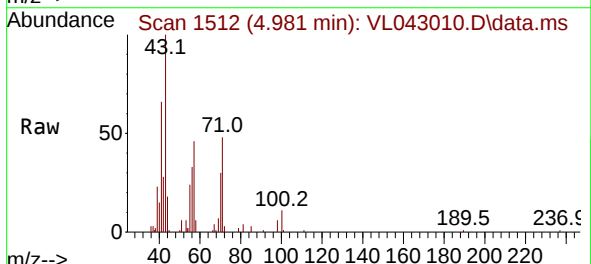
Instrument :
MSVOA_L
ClientSampleId :
SV1

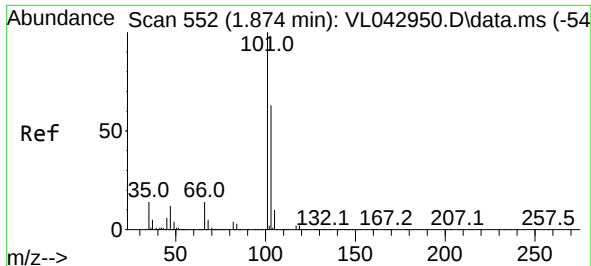
Tgt Ion: 41 Resp: 30943
Ion Ratio Lower Upper
41 100
42 96.7 57.4 86.2#



#10
Heptane
Concen: 0.486 ppbv m
RT: 4.981 min Scan# 1512
Delta R.T. 0.013 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

Tgt Ion: 43 Resp: 14555
Ion Ratio Lower Upper
43 100
57 45.9 38.6 57.8

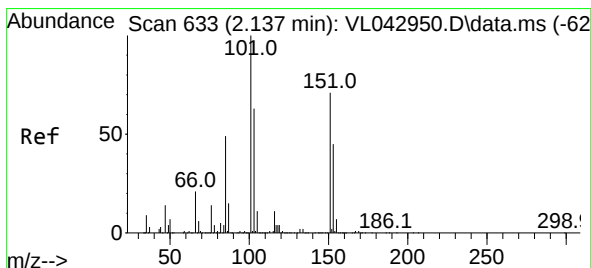
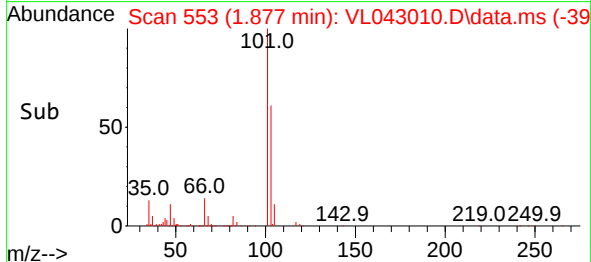
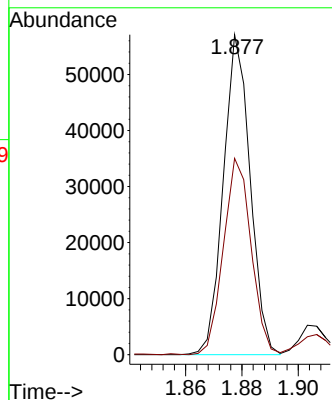
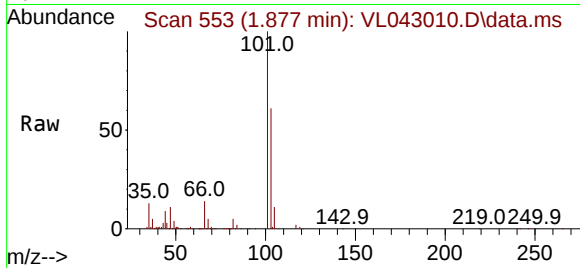




#11
 Trichlorofluoromethane
 Concen: 1.888 ppbv
 RT: 1.877 min Scan# 51
 Delta R.T. 0.003 min
 Lab File: VL043010.D
 Acq: 24 Sep 2025 15:39

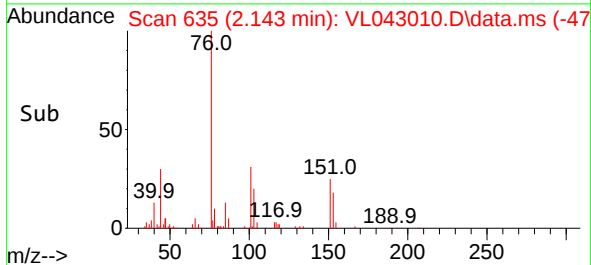
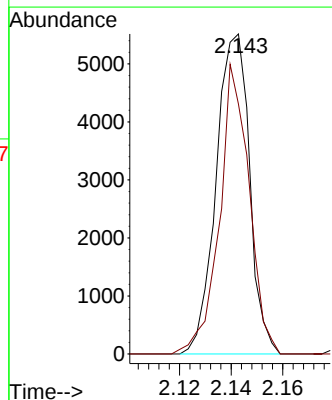
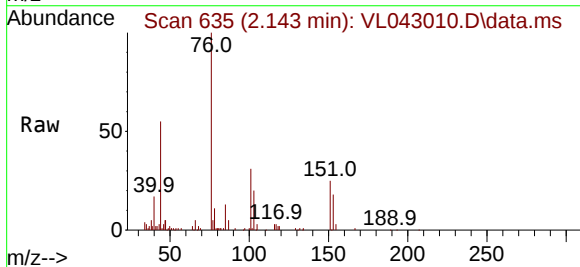
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

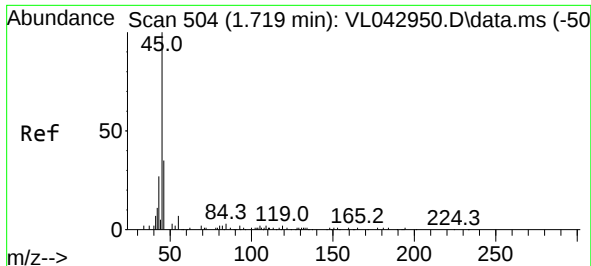
Tgt Ion:101 Resp: 37652
 Ion Ratio Lower Upper
 101 100
 103 61.2 50.1 75.1



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.307 ppbv
 RT: 2.143 min Scan# 635
 Delta R.T. 0.006 min
 Lab File: VL043010.D
 Acq: 24 Sep 2025 15:39

Tgt Ion:101 Resp: 4960
 Ion Ratio Lower Upper
 101 100
 151 80.2 55.7 83.5

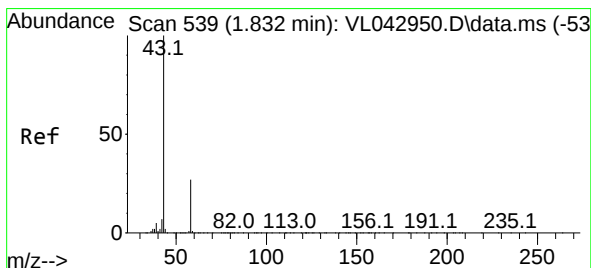
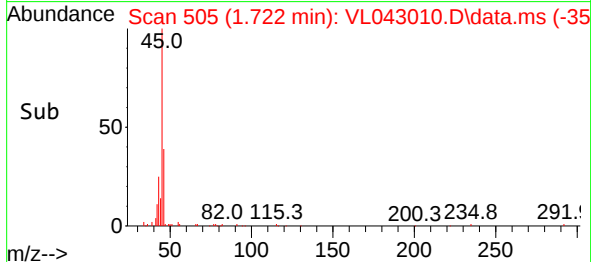
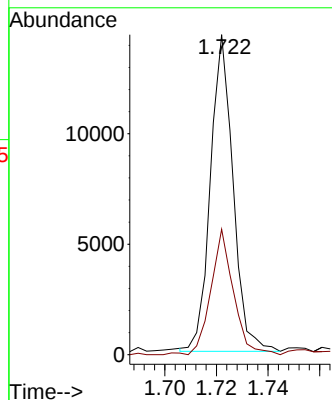
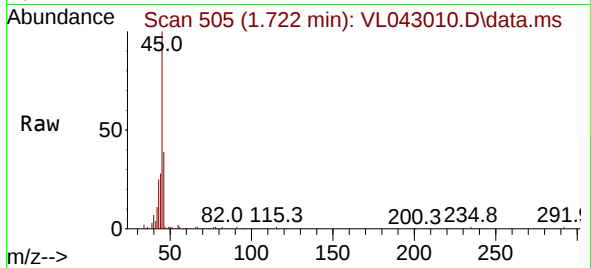




#13
Ethanol
Concen: 8.032 ppbv
RT: 1.722 min Scan# 50
Delta R.T. 0.003 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

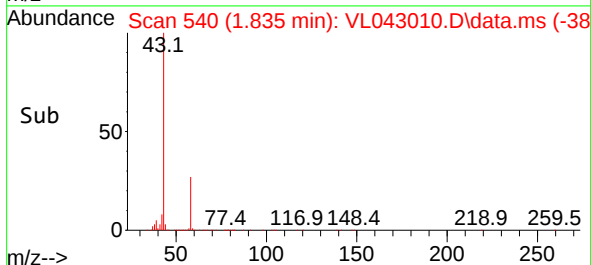
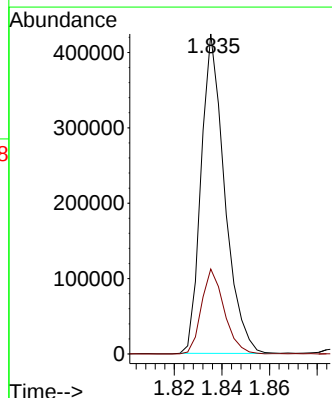
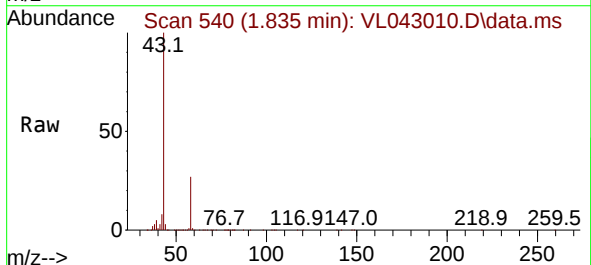
Instrument :
MSVOA_L
ClientSampleId :
SV1

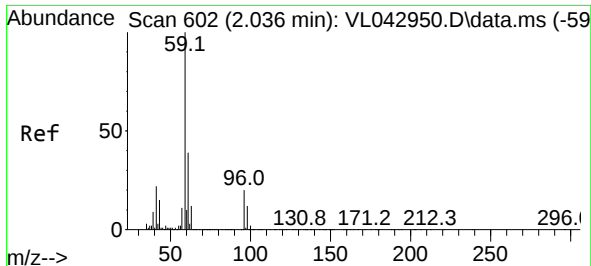
Tgt Ion: 45 Resp: 8738
Ion Ratio Lower Upper
45 100
46 39.6 16.2 64.6



#15
Acetone
Concen: 14.556 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

Tgt Ion: 43 Resp: 291560
Ion Ratio Lower Upper
43 100
58 25.6 22.3 33.5





#17

tert-Butyl alcohol

Concen: 0.145 ppbv

RT: 2.042 min Scan# 602

Delta R.T. 0.006 min

Lab File: VL043010.D

Acq: 24 Sep 2025 15:39

Instrument :

MSVOA_L

ClientSampleId :

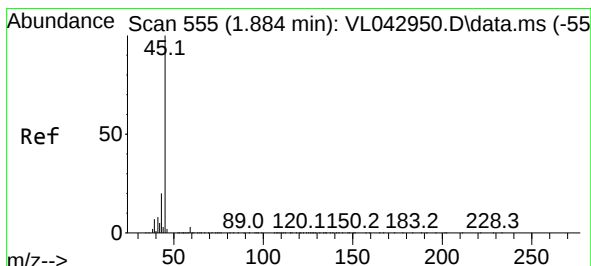
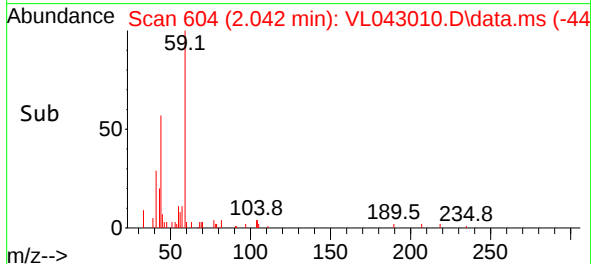
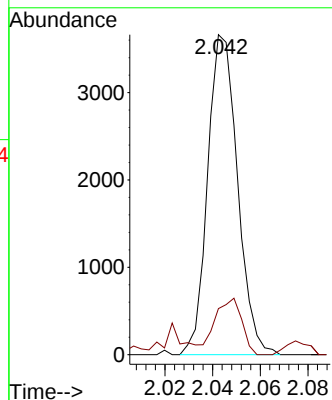
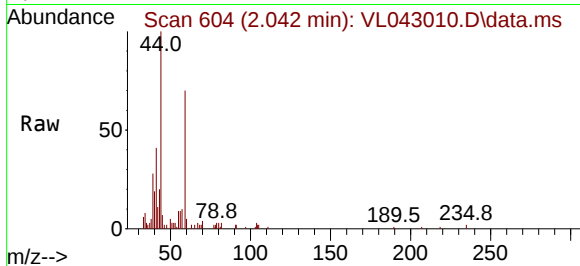
SV1

Tgt Ion: 59 Resp: 3191

Ion Ratio Lower Upper

59 100

57 0.0 8.6 12.8#



#19

Isopropyl Alcohol

Concen: 1.490 ppbv m

RT: 1.887 min Scan# 556

Delta R.T. 0.003 min

Lab File: VL043010.D

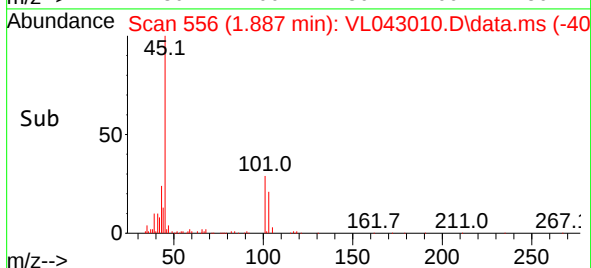
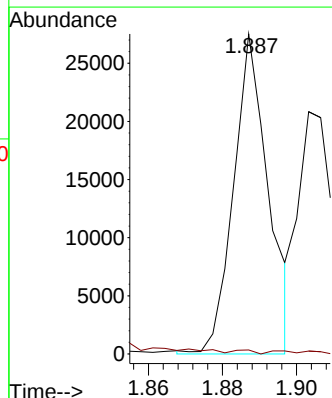
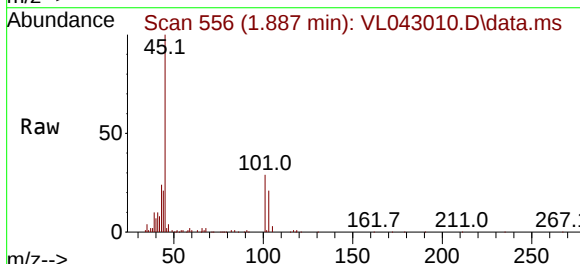
Acq: 24 Sep 2025 15:39

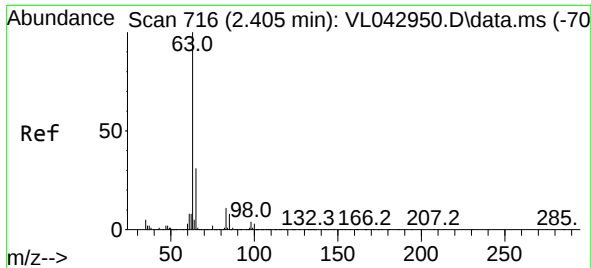
Tgt Ion: 45 Resp: 17944

Ion Ratio Lower Upper

45 100

58 0.0 31.0 46.6#

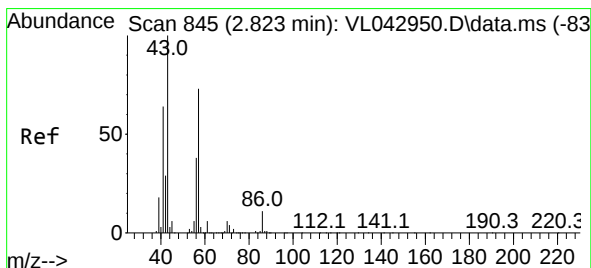
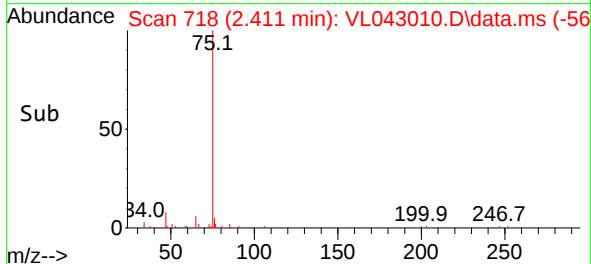
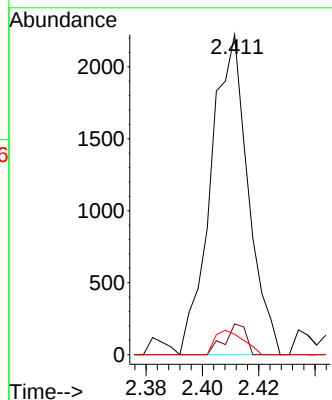
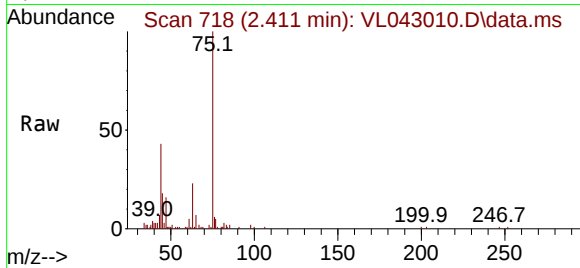




#24
1,1-Dichloroethane
Concen: 0.123 ppbv
RT: 2.411 min Scan# 716
Delta R.T. 0.006 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

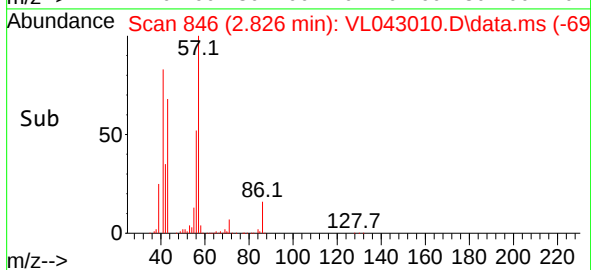
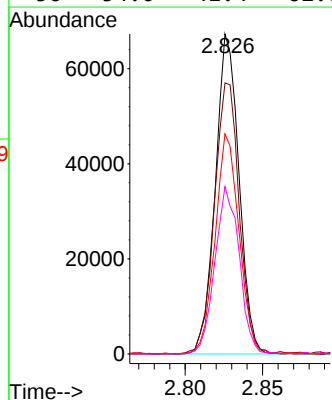
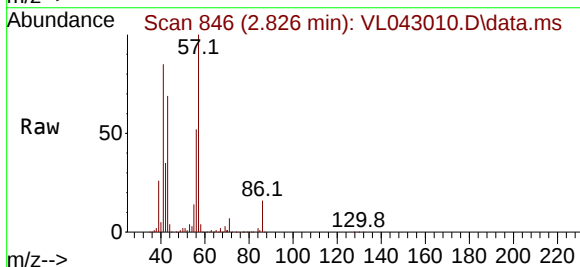
Instrument :
MSVOA_L
ClientSampleId :
SV1

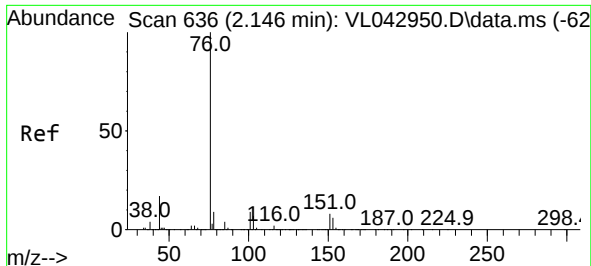
Tgt Ion: 63	Resp: 2049
Ion Ratio	Lower Upper
63 100	
98 9.6	2.2 6.6#
100 6.4	1.4 4.0#



#26
Hexane
Concen: 3.089 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

Tgt Ion: 57	Resp: 71281
Ion Ratio	Lower Upper
57 100	
41 89.5	71.7 107.5
43 70.4	180.8 271.2#
56 54.0	41.4 62.0

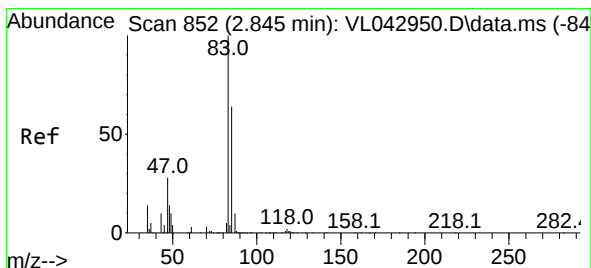
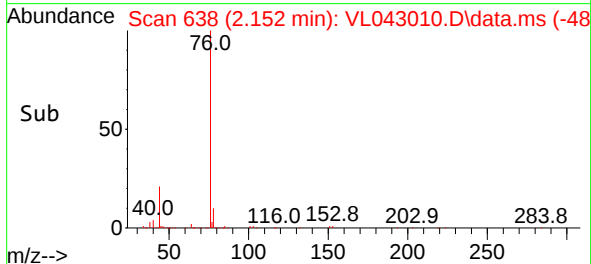
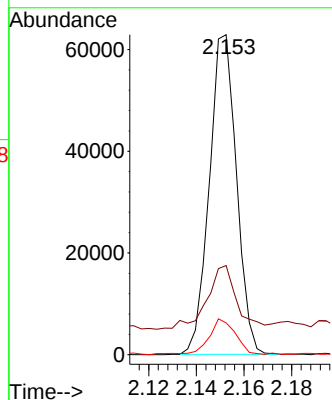
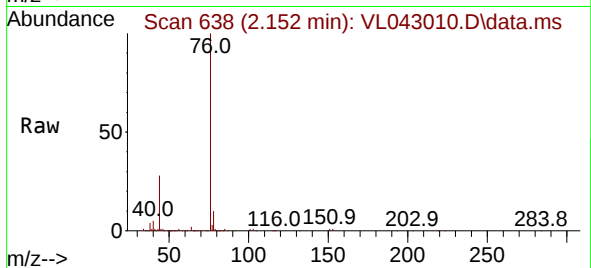




#27
Carbon Disulfide
Concen: 2.410 ppbv
RT: 2.152 min Scan# 61
Delta R.T. 0.006 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

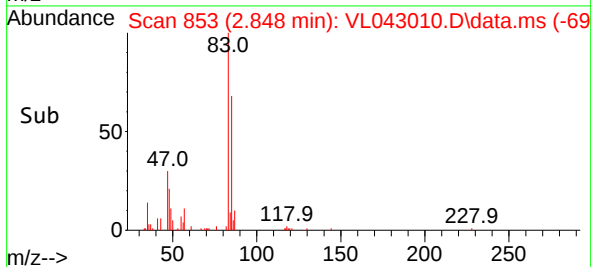
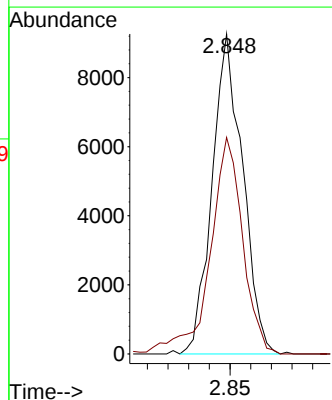
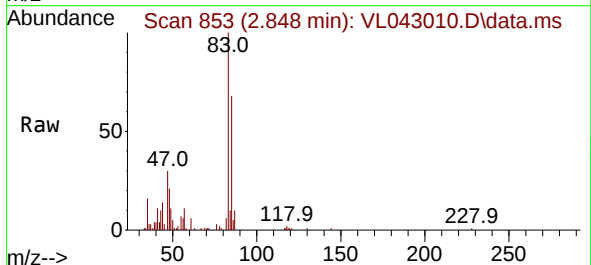
Instrument :
MSVOA_L
ClientSampleId :
SV1

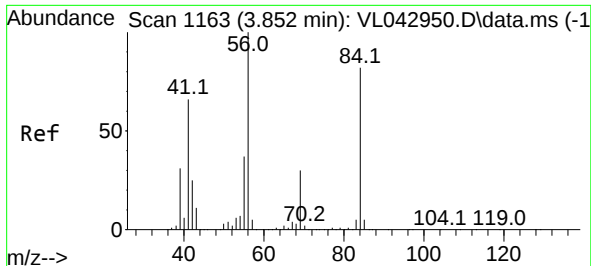
Tgt Ion: 76 Resp: 49869
Ion Ratio Lower Upper
76 100
44 29.4 15.6 23.4#
78 12.2 8.9 13.3



#29
Chloroform
Concen: 0.315 ppbv
RT: 2.848 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

Tgt Ion: 83 Resp: 9515
Ion Ratio Lower Upper
83 100
85 67.7 51.2 76.8

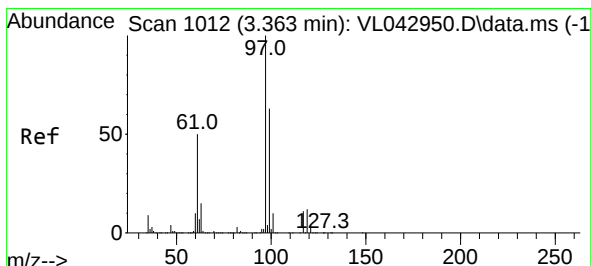
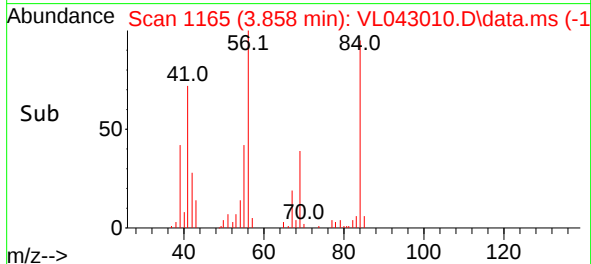
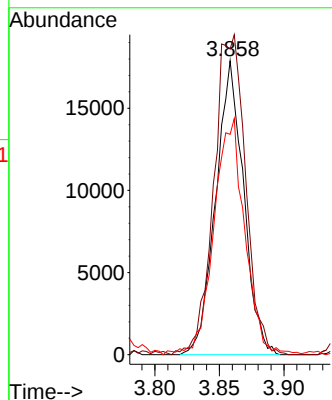
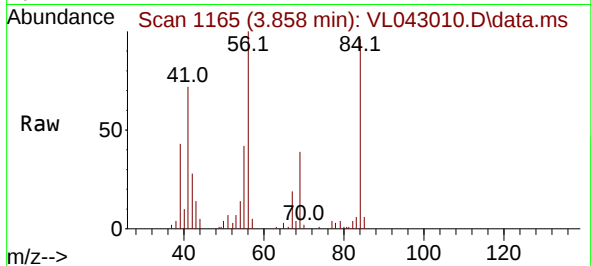




#30
Cyclohexane
Concen: 1.392 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.006 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

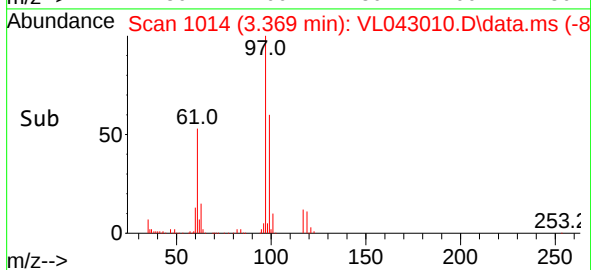
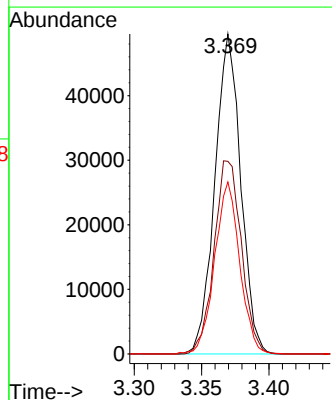
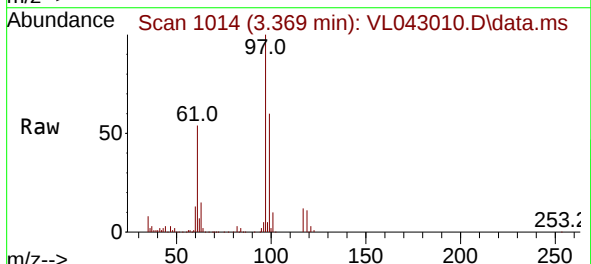
Instrument :
MSVOA_L
ClientSampleId :
SV1

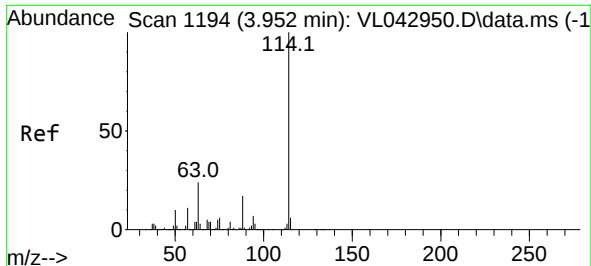
Tgt Ion: 84 Resp: 26849
Ion Ratio Lower Upper
84 100
56 123.8 102.2 153.4
41 87.2 65.6 98.4



#32
1,1,1-Trichloroethane
Concen: 2.033 ppbv
RT: 3.369 min Scan# 1014
Delta R.T. 0.006 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

Tgt Ion: 97 Resp: 66252
Ion Ratio Lower Upper
97 100
99 63.6 51.1 76.7
61 52.2 39.8 59.6





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. 0.006 min

Lab File: VL043010.D

Acq: 24 Sep 2025 15:39

Instrument :

MSVOA_L

ClientSampleId :

SV1

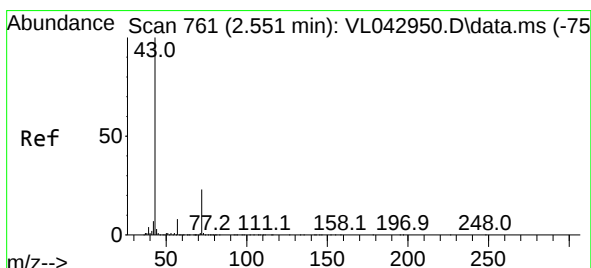
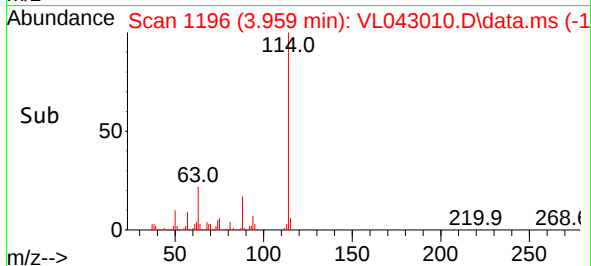
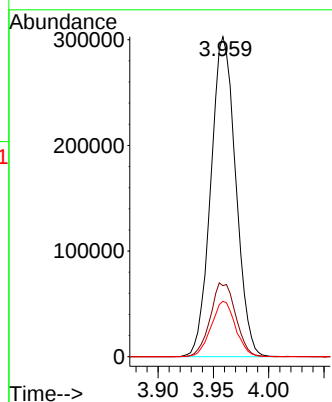
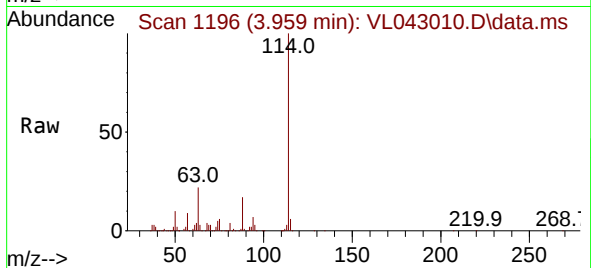
Tgt Ion:114 Resp: 473304

Ion Ratio Lower Upper

114 100

63 23.6 19.4 29.2

88 16.9 14.2 21.2



#34

2-Butanone

Concen: 0.809 ppbv

RT: 2.560 min Scan# 764

Delta R.T. 0.010 min

Lab File: VL043010.D

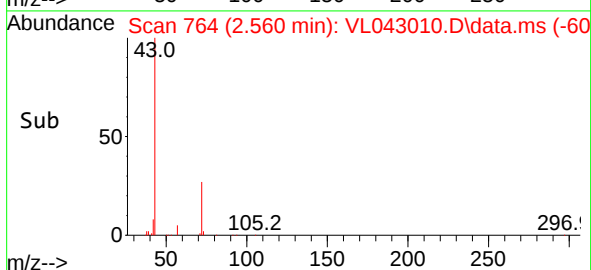
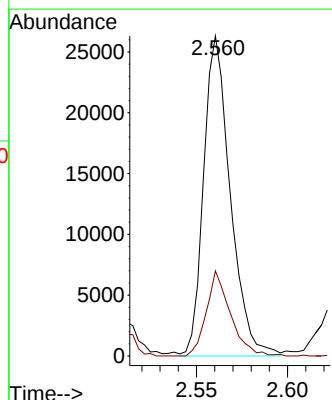
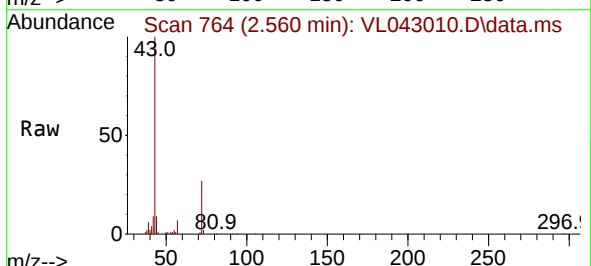
Acq: 24 Sep 2025 15:39

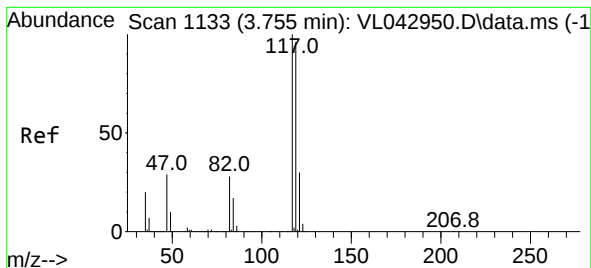
Tgt Ion: 43 Resp: 26819

Ion Ratio Lower Upper

43 100

72 24.1 17.7 26.5





#35

Carbon Tetrachloride

Concen: 0.115 ppbv m

RT: 3.764 min Scan# 1136

Delta R.T. 0.010 min

Lab File: VL043010.D

Acq: 24 Sep 2025 15:39

Instrument :

MSVOA_L

ClientSampleId :

SV1

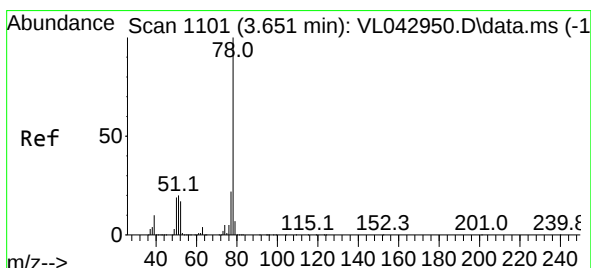
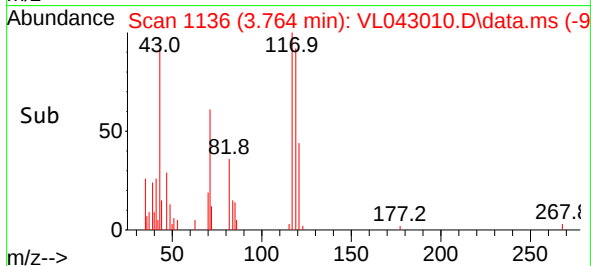
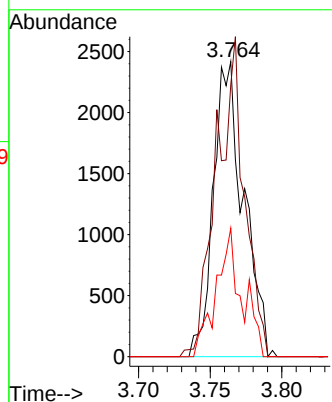
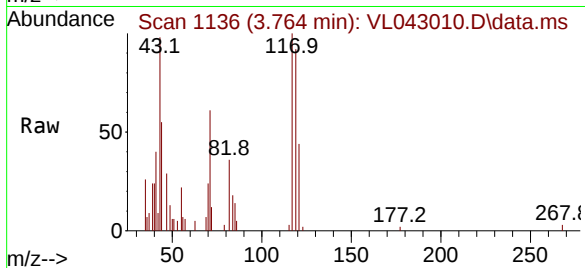
Tgt Ion:117 Resp: 3548

Ion Ratio Lower Upper

117 100

119 92.1 76.9 115.3

121 43.5 23.7 35.5#



#36

Benzene

Concen: 1.935 ppbv

RT: 3.658 min Scan# 1103

Delta R.T. 0.006 min

Lab File: VL043010.D

Acq: 24 Sep 2025 15:39

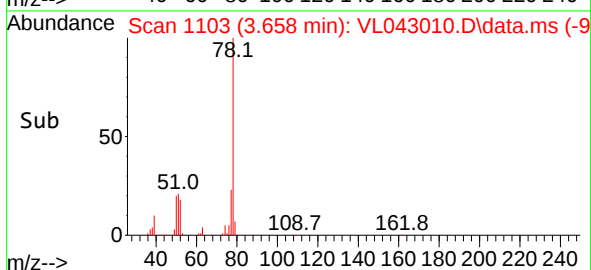
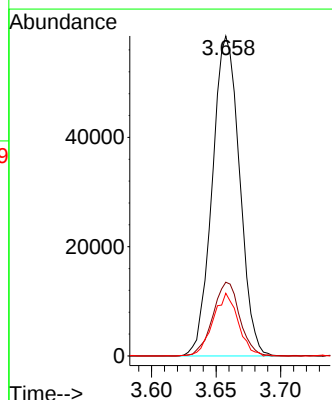
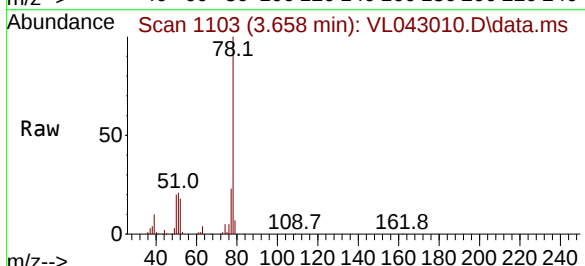
Tgt Ion: 78 Resp: 85986

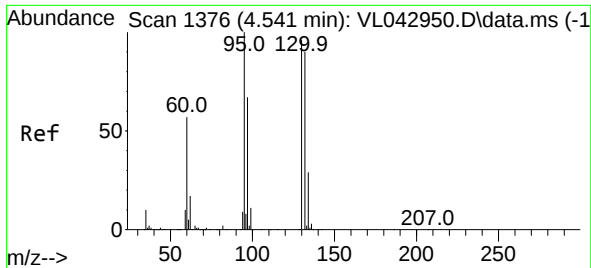
Ion Ratio Lower Upper

78 100

77 22.9 17.8 26.6

50 19.6 15.0 22.4

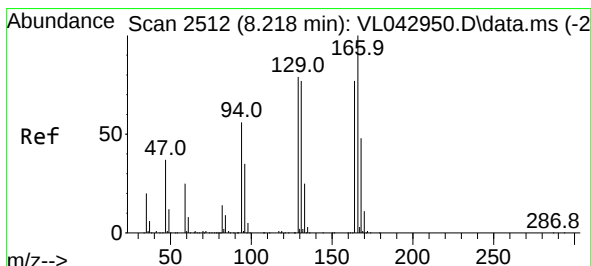
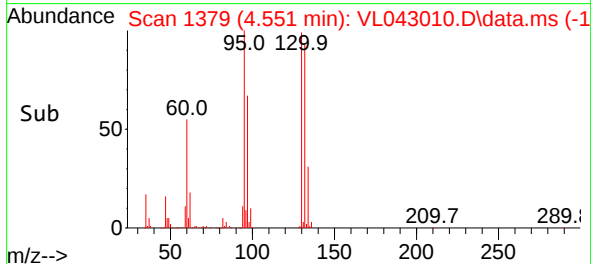
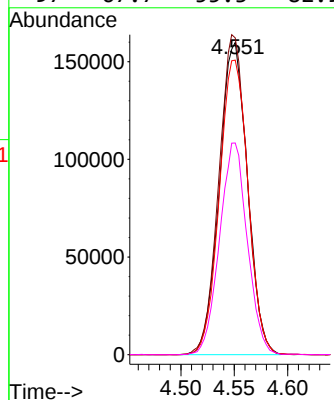
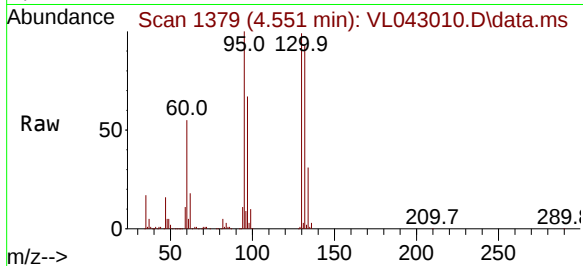




#38
 Trichloroethene
 Concen: 13.243 ppbv
 RT: 4.551 min Scan# 11
 Delta R.T. 0.010 min
 Lab File: VL043010.D
 Acq: 24 Sep 2025 15:39

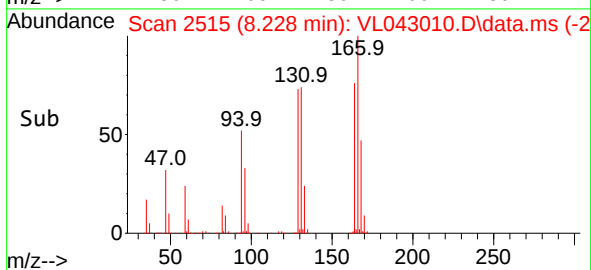
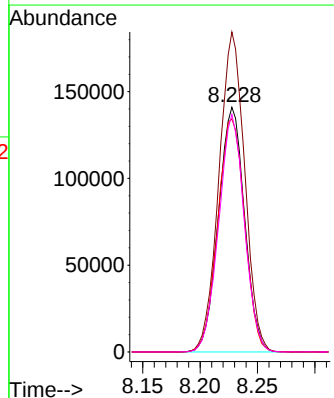
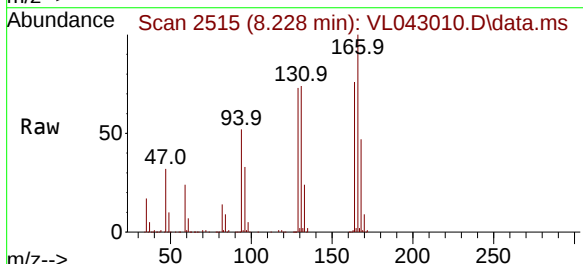
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1

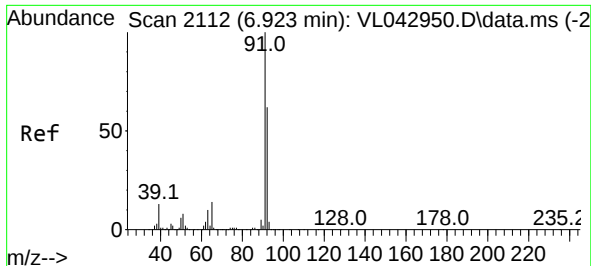
Tgt Ion:	130	Resp:	292517
Ion	Ratio	Lower	Upper
130	100		
95	101.5	83.0	124.4
132	94.4	74.6	112.0
97	67.7	55.3	82.9



#52
 Tetrachloroethene
 Concen: 12.992 ppbv
 RT: 8.228 min Scan# 2515
 Delta R.T. 0.010 min
 Lab File: VL043010.D
 Acq: 24 Sep 2025 15:39

Tgt Ion:	164	Resp:	223431
Ion	Ratio	Lower	Upper
164	100		
166	130.8	103.5	155.3
129	95.2	82.2	123.4
131	97.0	80.1	120.1

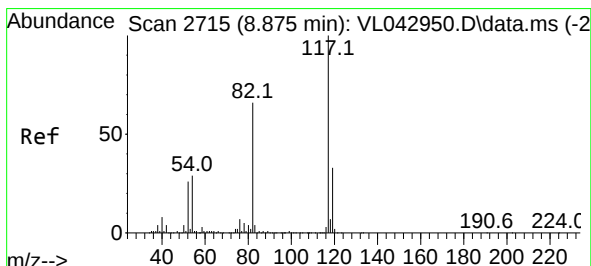
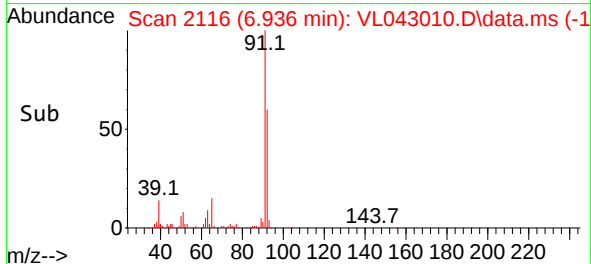
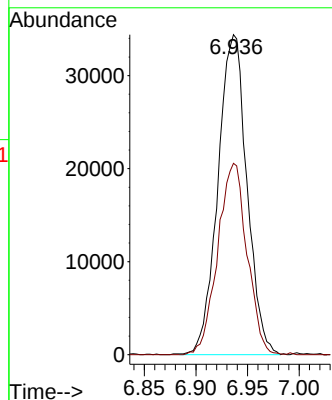
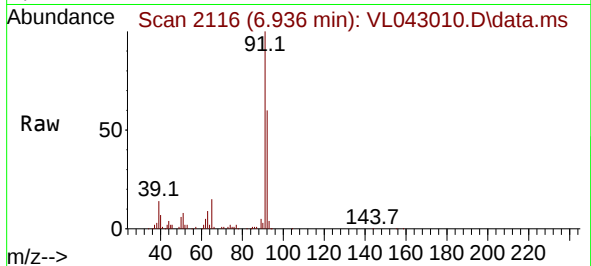




#53
Toluene
Concen: 1.279 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. 0.013 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

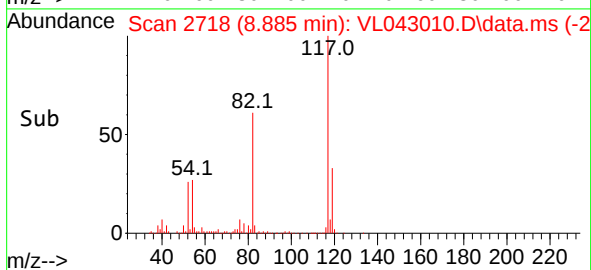
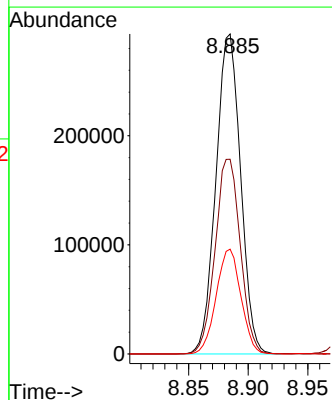
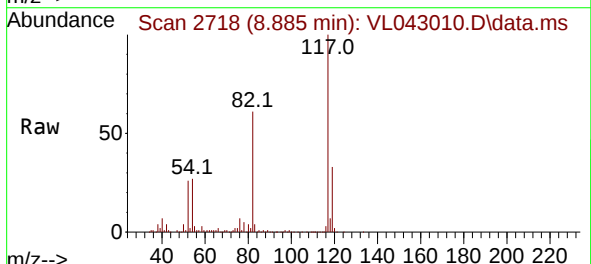
Instrument :
MSVOA_L
ClientSampleId :
SV1

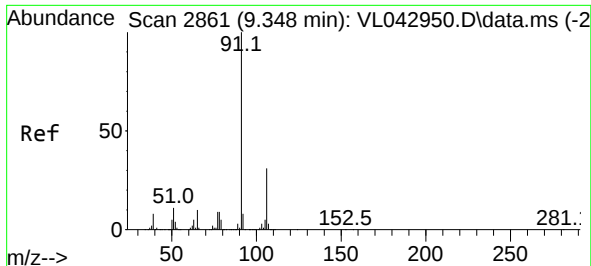
Tgt Ion: 91 Resp: 67271
Ion Ratio Lower Upper
91 100
92 60.5 48.2 72.2



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.010 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

Tgt Ion: 117 Resp: 423014
Ion Ratio Lower Upper
117 100
82 62.0 52.8 79.2
119 32.7 26.5 39.7

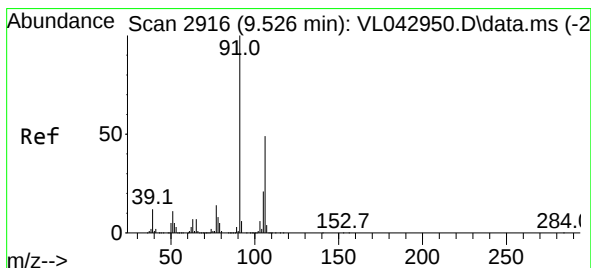
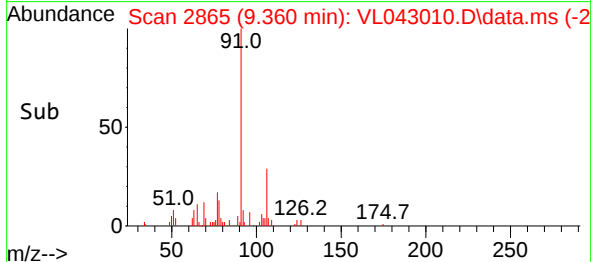
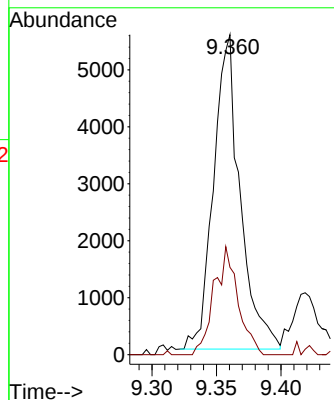
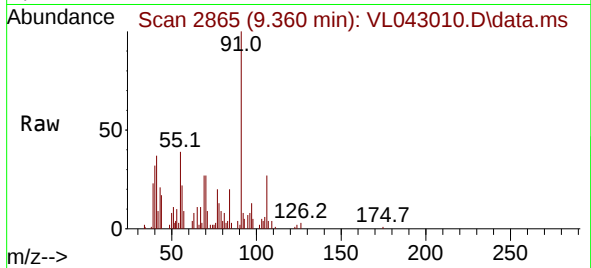




#58
Ethyl Benzene
Concen: 0.114 ppbv
RT: 9.360 min Scan# 2865
Delta R.T. 0.013 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

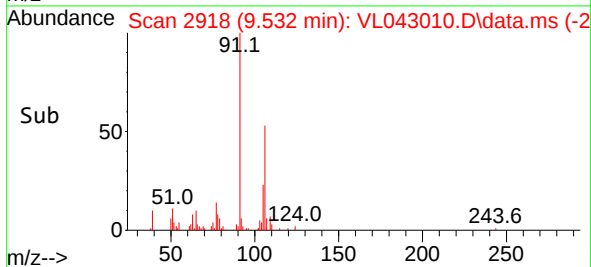
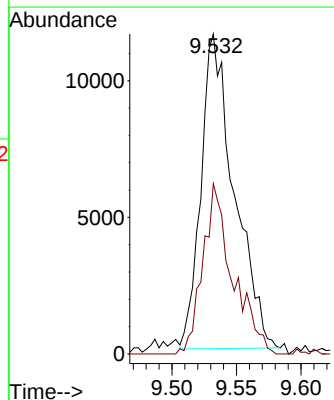
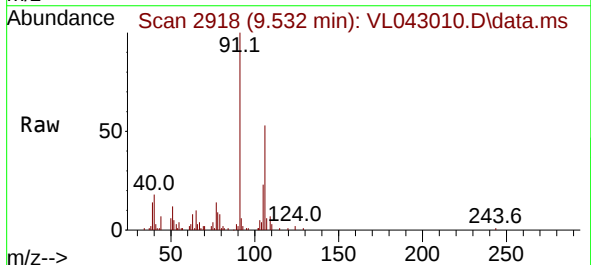
Instrument :
MSVOA_L
ClientSampleId :
SV1

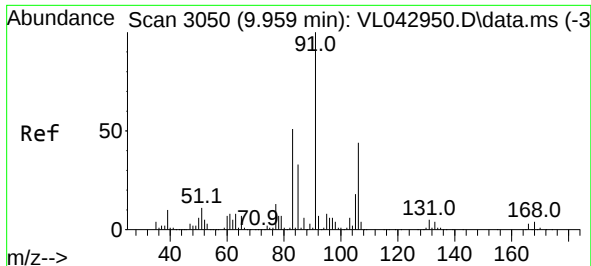
Tgt Ion: 91 Resp: 7912
Ion Ratio Lower Upper
91 100
106 27.8 24.6 37.0



#59
m/p-Xylene
Concen: 0.378 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. 0.006 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

Tgt Ion: 91 Resp: 20709
Ion Ratio Lower Upper
91 100
106 48.6 0.0 0.0#

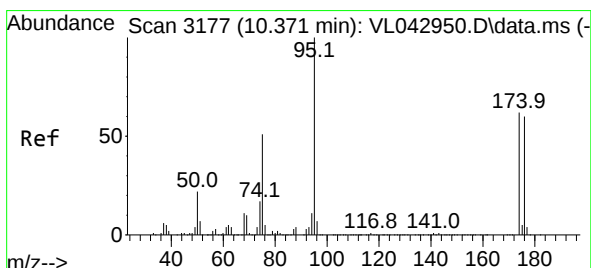
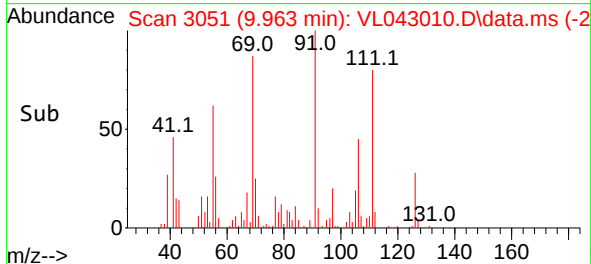
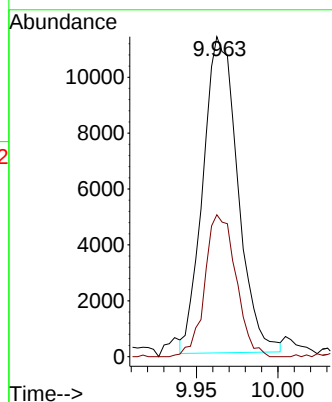
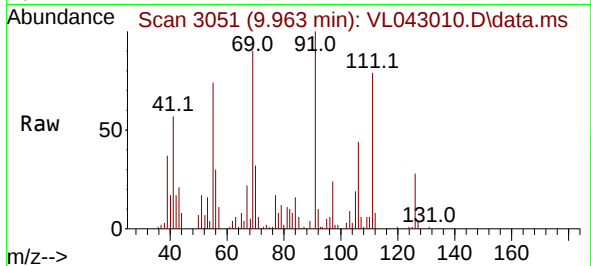




#60
o-Xylene
Concen: 0.307 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

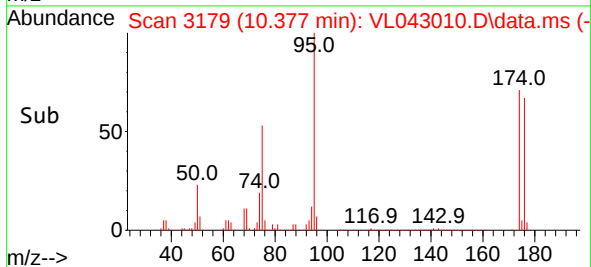
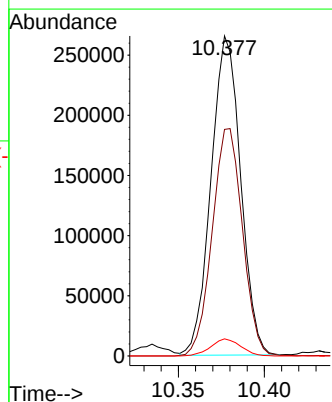
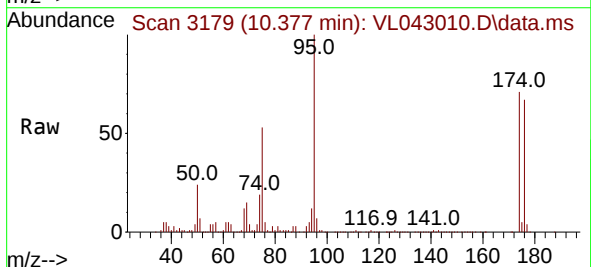
Instrument :
MSVOA_L
ClientSampleId :
SV1

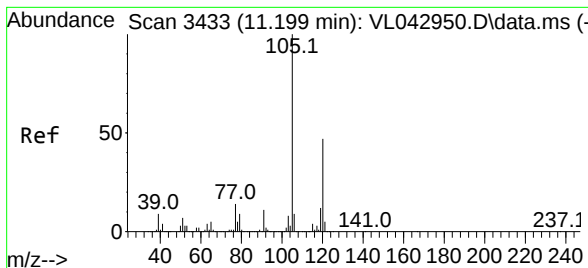
Tgt Ion: 91 Resp: 16797
Ion Ratio Lower Upper
91 100
106 40.2 22.4 67.0



#68
1-Bromo-4-Fluorobenzene
Concen: 10.055 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL043010.D
Acq: 24 Sep 2025 15:39

Tgt Ion: 95 Resp: 317512
Ion Ratio Lower Upper
95 100
174 73.1 51.4 77.2
175 5.4 4.0 6.0





#73

1,3,5-Trimethylbenzene

Concen: 0.122 ppbv

RT: 11.205 min Scan# 3433

Delta R.T. 0.006 min

Lab File: VL043010.D

Acq: 24 Sep 2025 15:39

Instrument :

MSVOA_L

ClientSampleId :

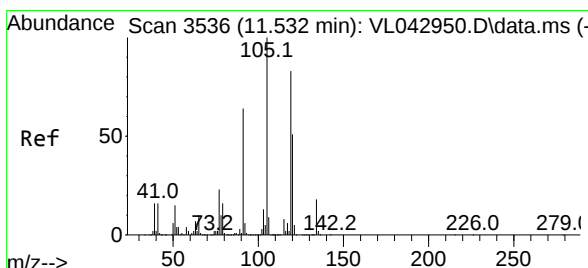
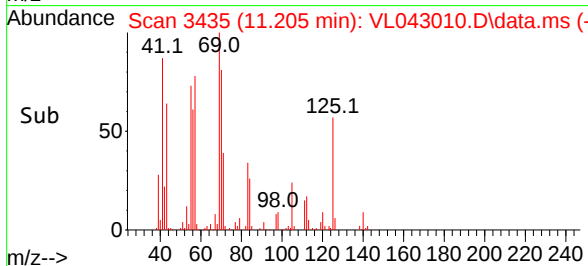
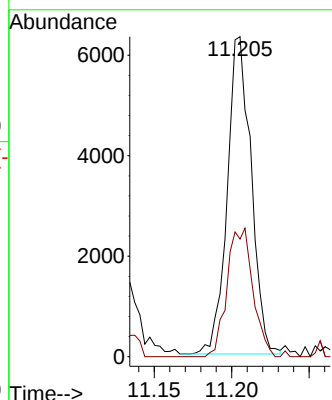
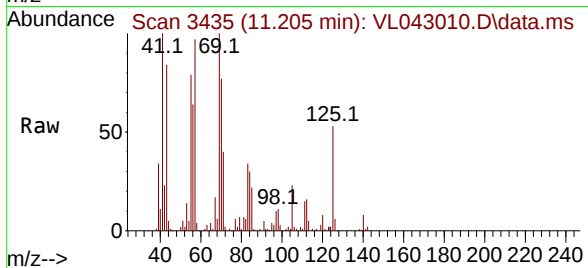
SV1

Tgt Ion:105 Resp: 6786

Ion Ratio Lower Upper

105 100

120 37.1 38.0 57.0#



#74

1,2,4-Trimethylbenzene

Concen: 0.182 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. 0.003 min

Lab File: VL043010.D

Acq: 24 Sep 2025 15:39

Tgt Ion:105 Resp: 11191

Ion Ratio Lower Upper

105 100

120 46.1 40.9 61.3

91 10.9 51.2 76.8#

77 19.1 18.4 27.6

