

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL080425\
 Data File : VL042811.D
 Acq On : 04 Aug 2025 18:34
 Operator : SY/MD
 Sample : Q2750-01DL 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Aug 05 01:10:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL072325AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Jul 24 05:24:41 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	149688	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	402086	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	341959	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	269128	9.938	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.400%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.476	85	4244	0.214	ppbv	98
3) Chlorodifluoromethane	1.476	51	287592	11.155	ppbv	100
4) Chloromethane	1.531	50	6536	0.816	ppbv	95
7) Chloroethane	1.703	64	80	0.026	ppbv	97
8) Dichlorotetrafluoroethane	1.499	85	1128	0.069	ppbv #	21
9) Propene	1.560	41	59734	6.375	ppbv	92
11) Trichlorofluoromethane	1.878	101	557	0.027	ppbv	96
13) Ethanol	1.726	45	456302	667.656	ppbv	89
15) Acetone	1.836	43	336142	16.263	ppbv	100
16) 1,3-Butadiene	1.560	39	28090	3.186	ppbv #	17
17) tert-Butyl alcohol	1.907	59	1032377	55.380	ppbv #	94
19) Isopropyl Alcohol	1.907	45	6648938	605.326	ppbv #	41
20) Methylene Chloride	2.065	84	2715	0.417	ppbv #	73
21) Allyl Chloride	1.907	41	2180191	171.144	ppbv #	83
25) Ethyl Acetate	2.842	43	18358	0.401	ppbv #	71
26) Hexane	2.829	57	3285	0.164	ppbv #	1
27) Carbon Disulfide	2.153	76	5950	0.346	ppbv #	63
29) Chloroform	2.852	83	2725	0.088	ppbv	97
31) cis-1,2-Dichloroethene	2.839	61	2123	0.103	ppbv #	23
34) 2-Butanone	2.564	43	5063	0.178	ppbv	94
39) 1,2-Dichloropropane	3.962	63	102389	7.279	ppbv #	21
53) Toluene	6.940	91	1262	0.031	ppbv #	21
66) Benzyl Chloride	11.549	91	428	0.092	ppbv #	91
69) p-Isopropyltoluene	11.927	119	2766	0.042	ppbv #	82
79) Naphthalene	13.500	128	23	0.436	ppbv #	69
80) Naphthalene,2-methyl-	14.488	142	83	1.131	ppbv #	25
81) 1,2,4-Trichlorobenzene	13.371	180	35	0.436	ppbv #	25

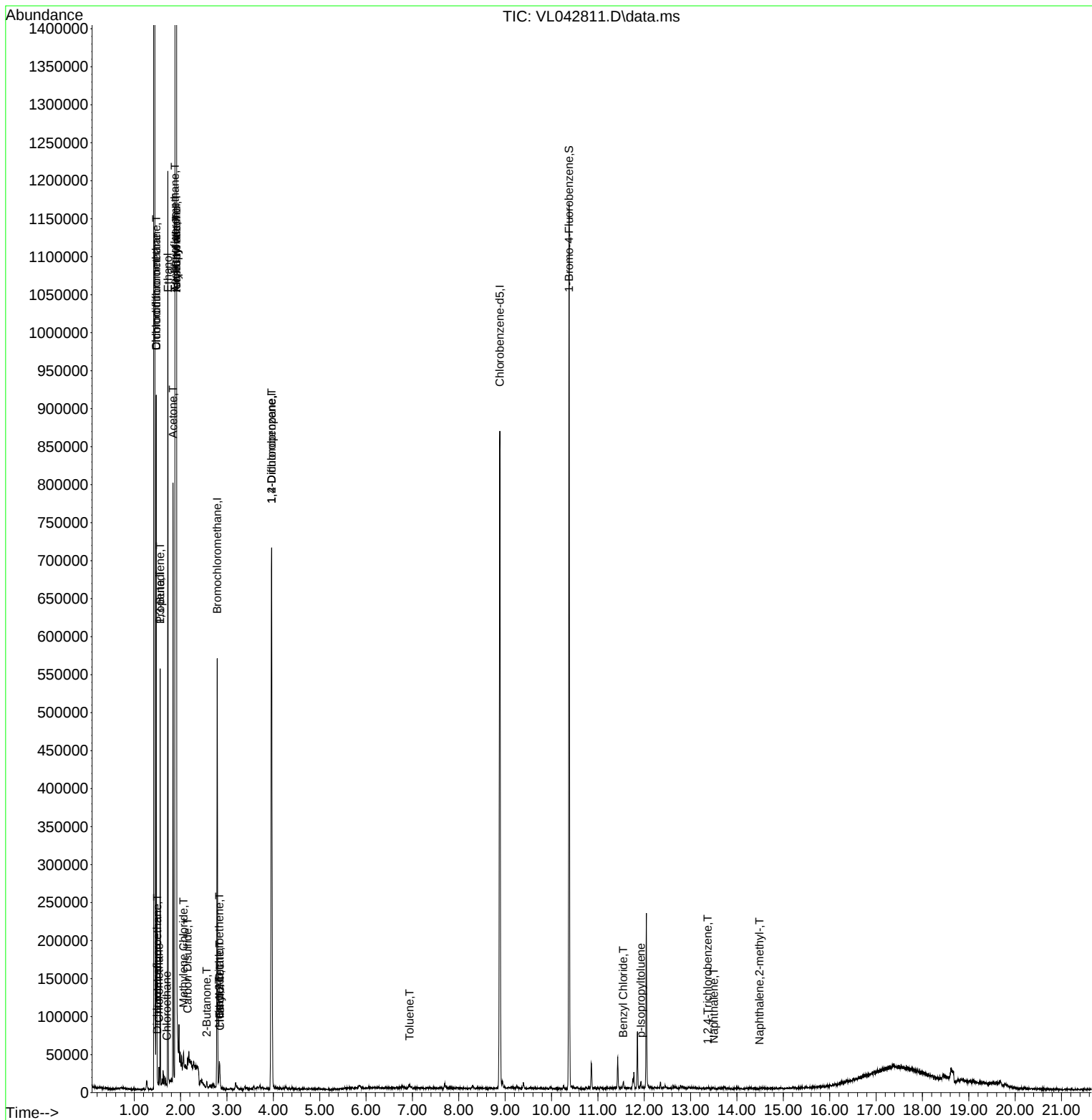
(#) = qualifier out of range (m) = manual integration (+) = signals summed

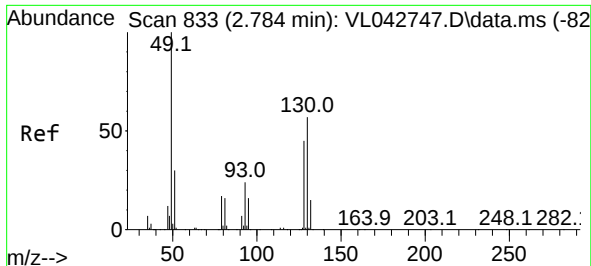
Instrument :

MSVOA_L

ClientSampleId :

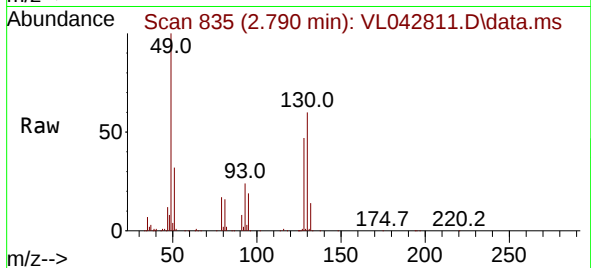
Response via : Initial Calibration



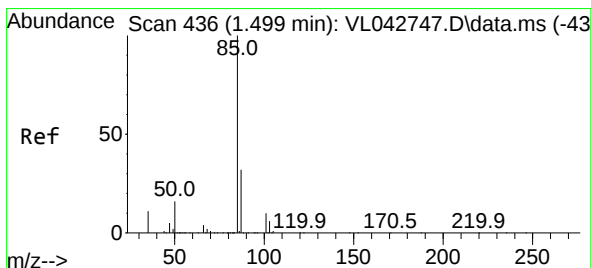
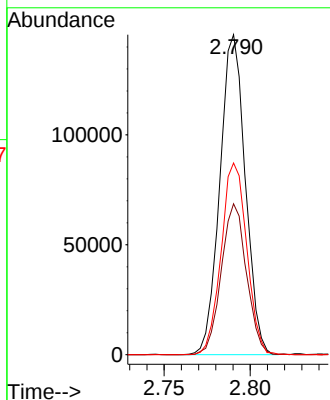
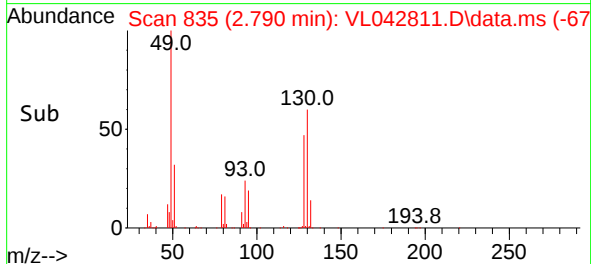


#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 81
Delta R.T. 0.006 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

Instrument :
MSVOA_L
ClientSampleId :

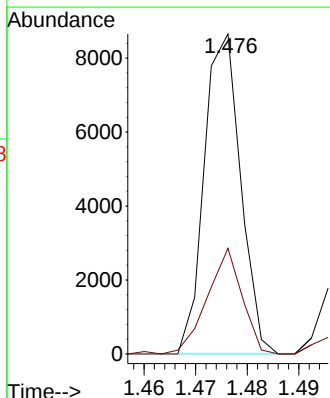
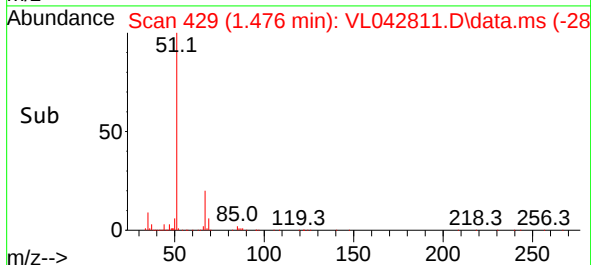
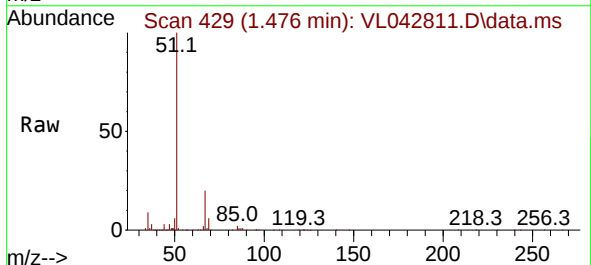


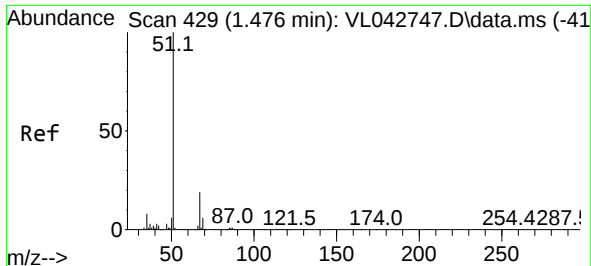
Tgt Ion: 49 Resp: 149688
Ion Ratio Lower Upper
49 100
128 46.7 23.6 71.0
130 60.4 30.3 90.8



#2
Dichlorodifluoromethane
Concen: 0.214 ppbv
RT: 1.476 min Scan# 429
Delta R.T. -0.023 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

Tgt Ion: 85 Resp: 4244
Ion Ratio Lower Upper
85 100
87 33.0 25.4 38.2

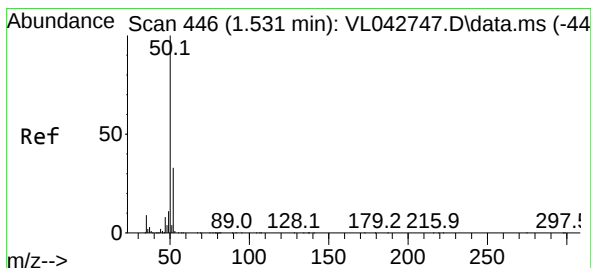
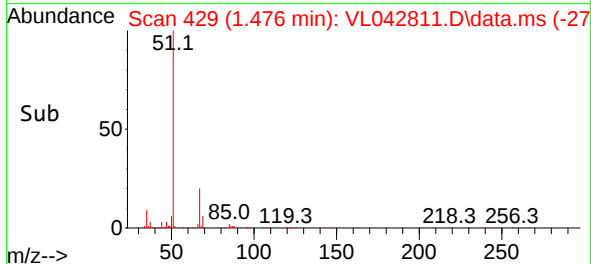
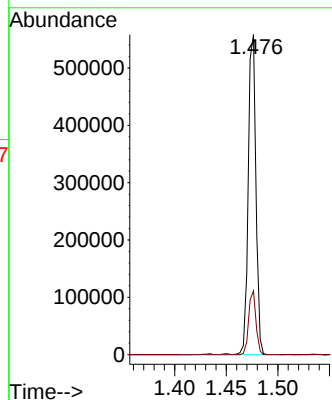
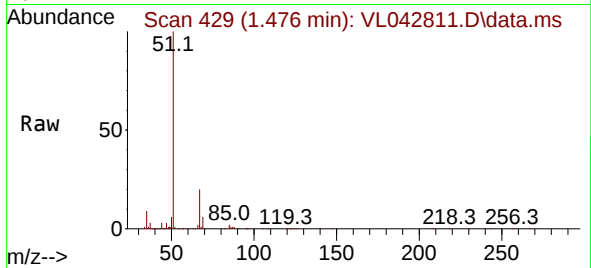




#3
Chlorodifluoromethane
Concen: 11.155 ppbv
RT: 1.476 min Scan# 429
Delta R.T. 0.000 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

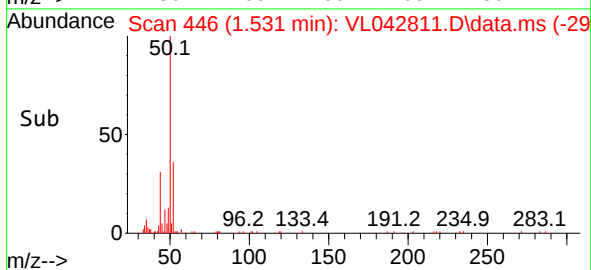
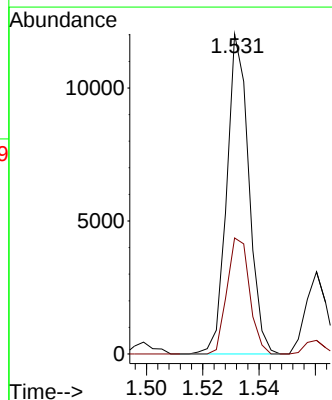
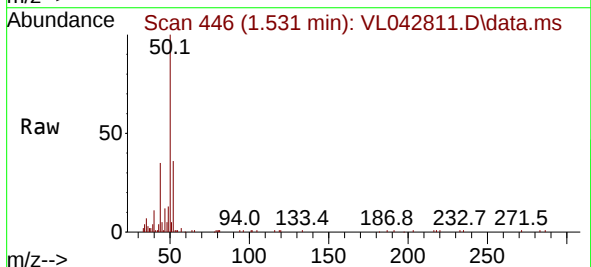
Instrument :
MSVOA_L
ClientSampleId :

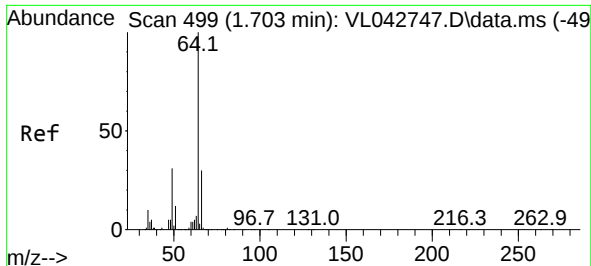
Tgt Ion: 51 Resp: 287592
Ion Ratio Lower Upper
51 100
67 18.8 15.0 22.6



#4
Chloromethane
Concen: 0.816 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

Tgt Ion: 50 Resp: 6536
Ion Ratio Lower Upper
50 100
52 36.3 26.6 40.0

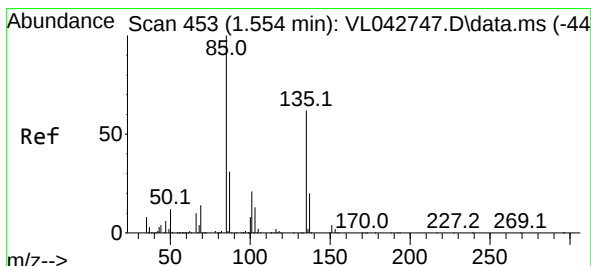
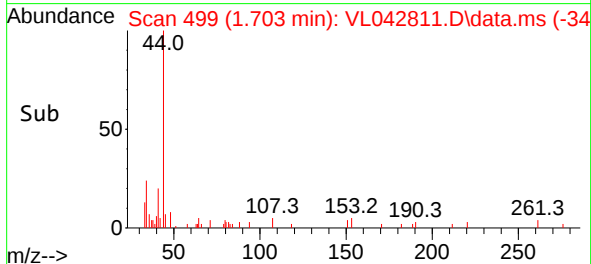
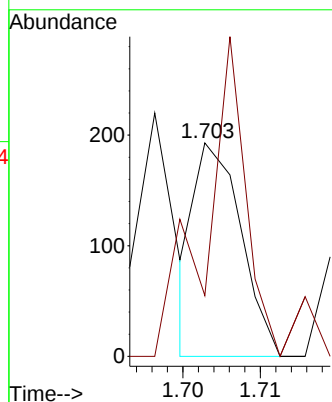
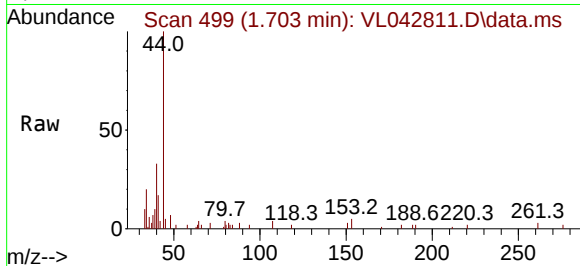




#7
Chloroethane
Concen: 0.026 ppbv
RT: 1.703 min Scan# 499
Delta R.T. 0.000 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

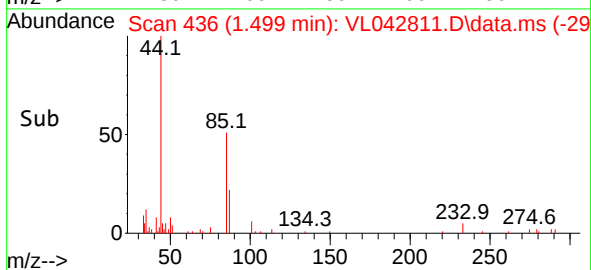
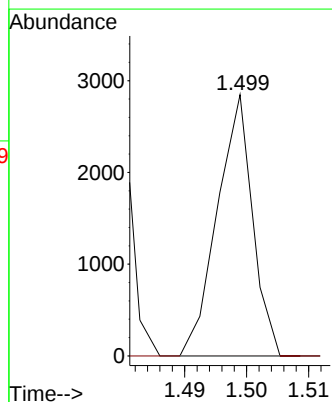
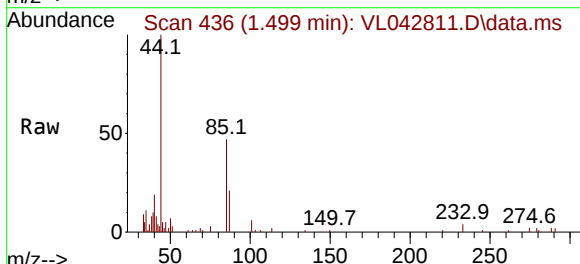
Instrument :
MSVOA_L
ClientSampleId :

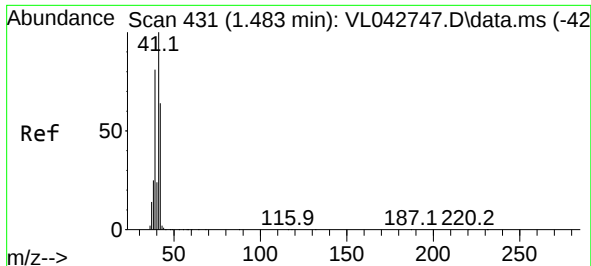
Tgt Ion: 64 Resp: 80
Ion Ratio Lower Upper
64 100
66 28.5 24.1 36.1



#8
Dichlorotetrafluoroethane
Concen: 0.069 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.055 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

Tgt Ion: 85 Resp: 1128
Ion Ratio Lower Upper
85 100
135 2.0 50.6 76.0#





#9

Propene

Concen: 6.375 ppbv

RT: 1.560 min Scan# 41

Delta R.T. 0.078 min

Lab File: VL042811.D

Acq: 04 Aug 2025 18:34

Instrument :

MSVOA_L

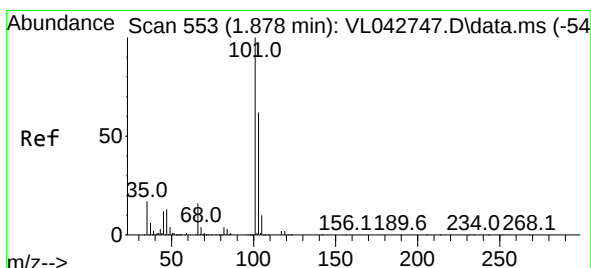
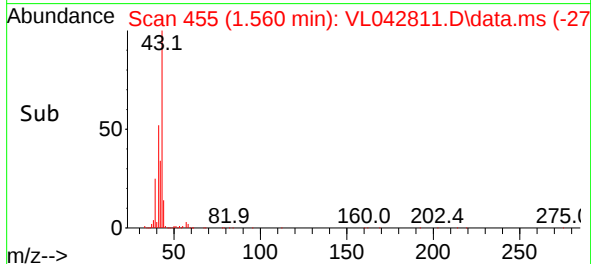
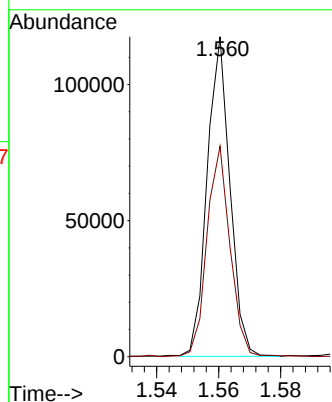
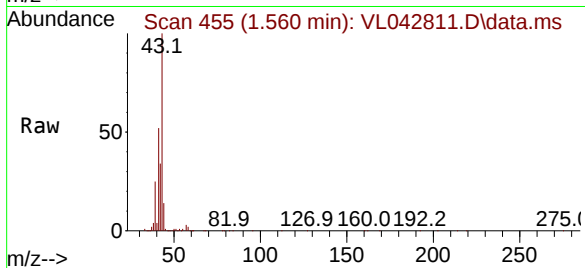
ClientSampleId :

Tgt Ion: 41 Resp: 59734

Ion Ratio Lower Upper

41 100

42 73.2 53.2 79.8



#11

Trichlorofluoromethane

Concen: 0.027 ppbv

RT: 1.878 min Scan# 553

Delta R.T. 0.000 min

Lab File: VL042811.D

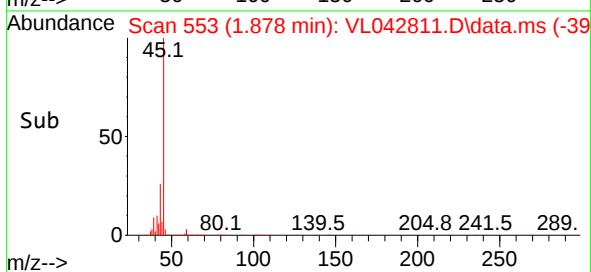
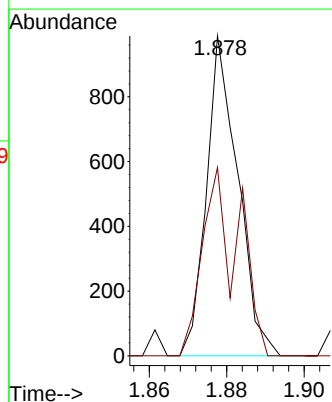
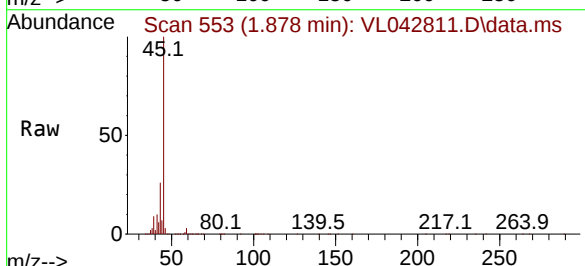
Acq: 04 Aug 2025 18:34

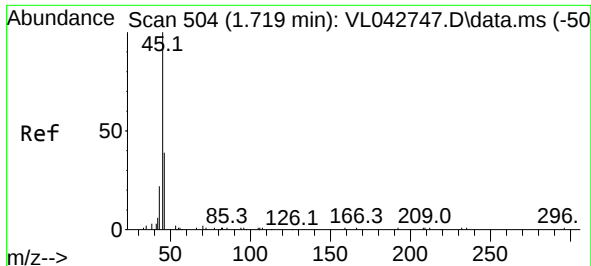
Tgt Ion: 101 Resp: 557

Ion Ratio Lower Upper

101 100

103 58.9 49.6 74.4

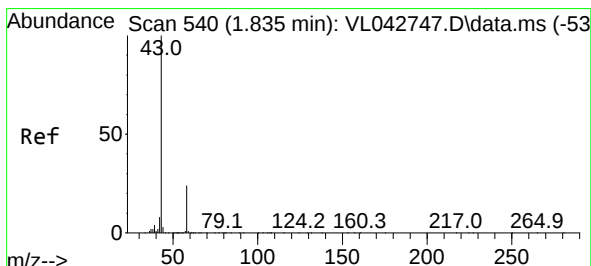
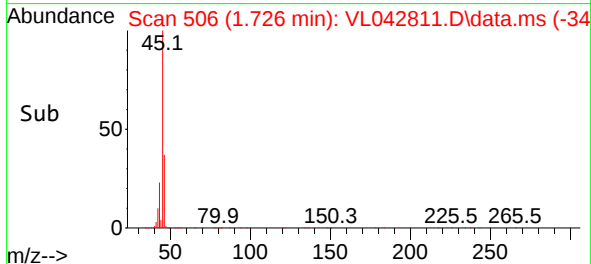
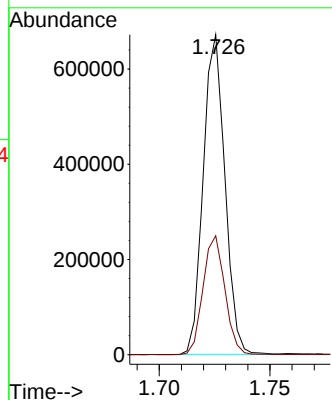
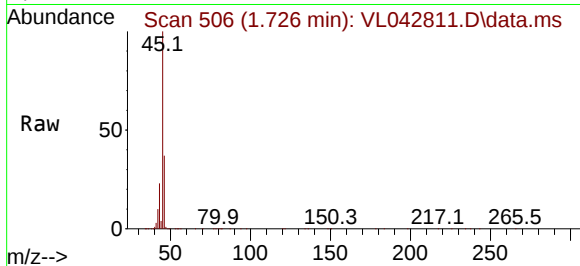




#13
Ethanol
Concen: 667.656 ppbv
RT: 1.726 min Scan# 504
Delta R.T. 0.007 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

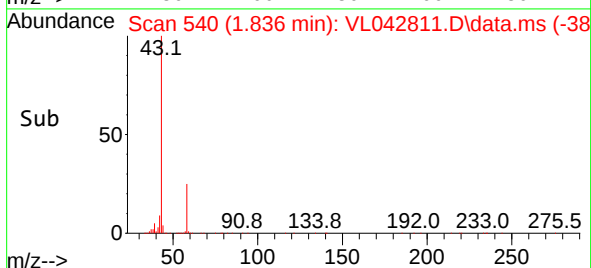
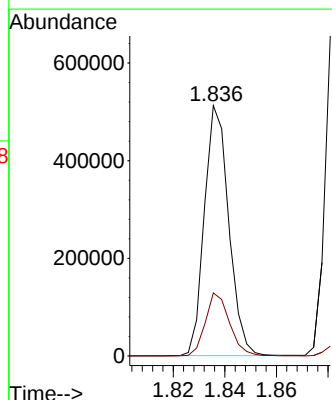
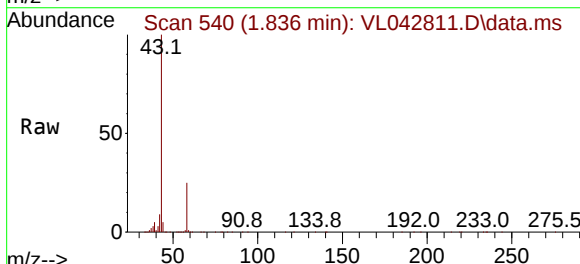
Instrument :
MSVOA_L
ClientSampleId :

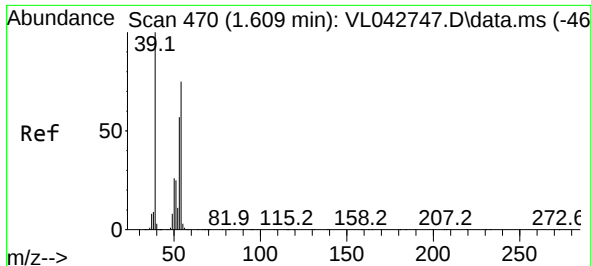
Tgt Ion: 45 Resp: 456302
Ion Ratio Lower Upper
45 100
46 37.6 17.8 71.4



#15
Acetone
Concen: 16.263 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.000 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

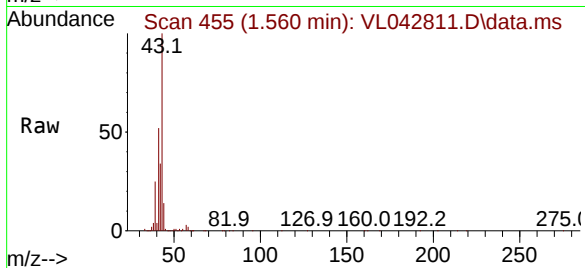
Tgt Ion: 43 Resp: 336142
Ion Ratio Lower Upper
43 100
58 25.0 19.8 29.8



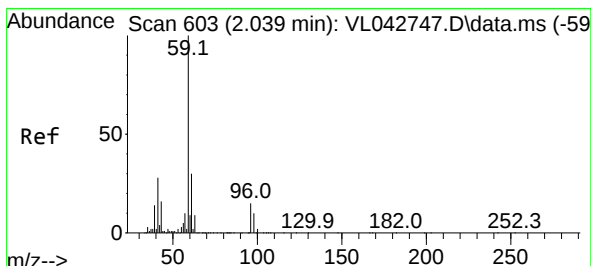
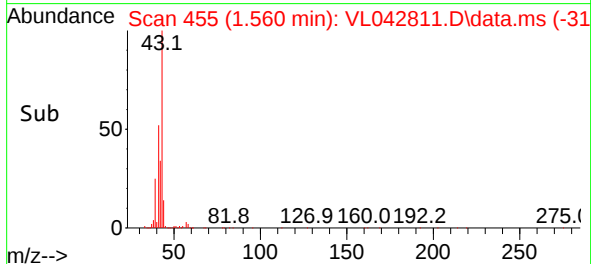
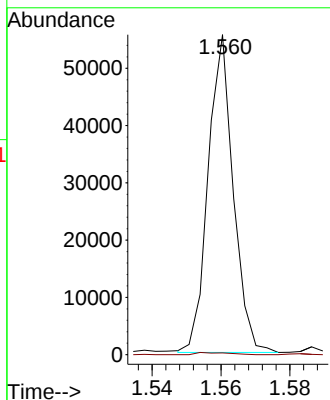


#16
1,3-Butadiene
Concen: 3.186 ppbv
RT: 1.560 min Scan# 41
Delta R.T. -0.048 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

Instrument :
MSVOA_L
ClientSampleId :

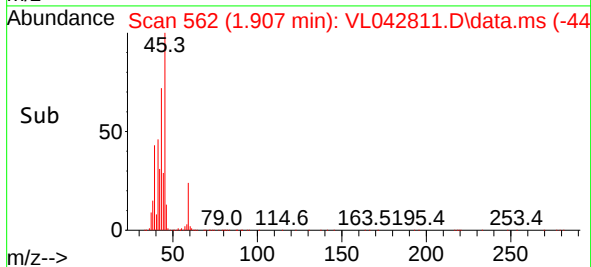
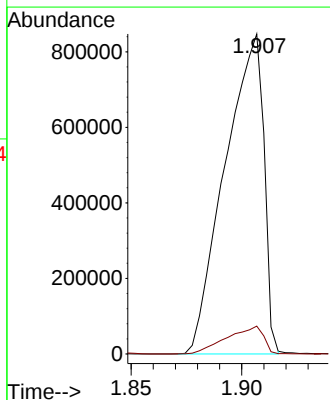
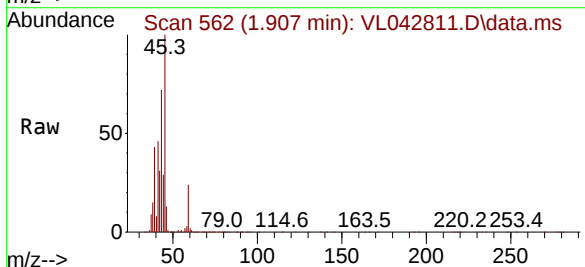


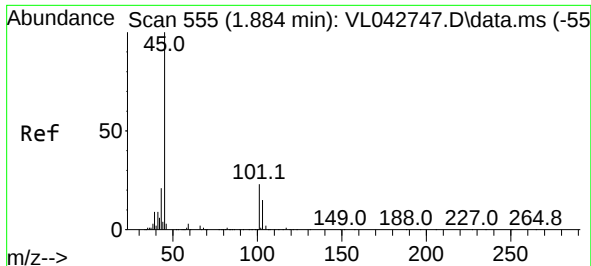
Tgt Ion: 39 Resp: 28090
Ion Ratio Lower Upper
39 100
54 1.0 54.5 81.7#



#17
tert-Butyl alcohol
Concen: 55.380 ppbv
RT: 1.907 min Scan# 562
Delta R.T. -0.133 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

Tgt Ion: 59 Resp: 1032377
Ion Ratio Lower Upper
59 100
57 8.3 8.3 12.5#

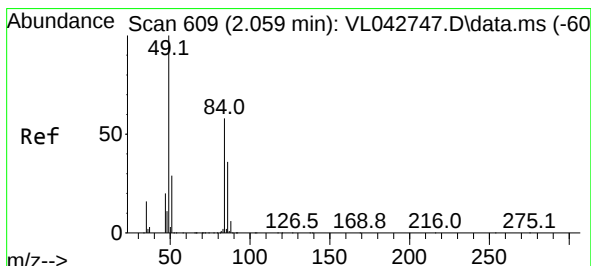
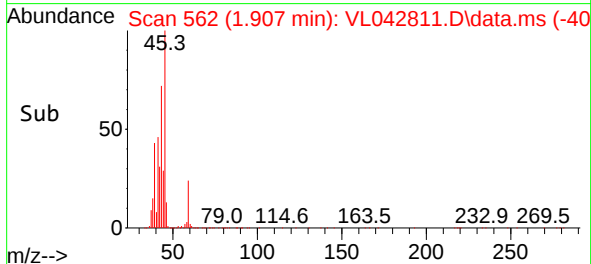
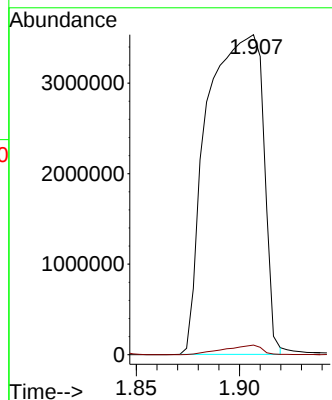
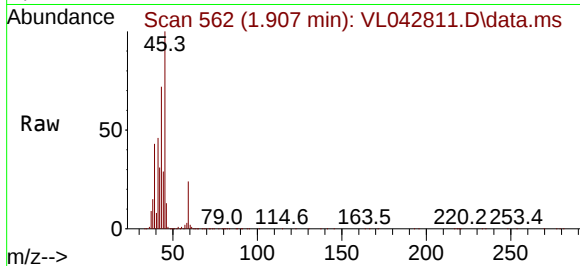




#19
Isopropyl Alcohol
Concen: 605.326 ppbv
RT: 1.907 min Scan# 511
Delta R.T. 0.023 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

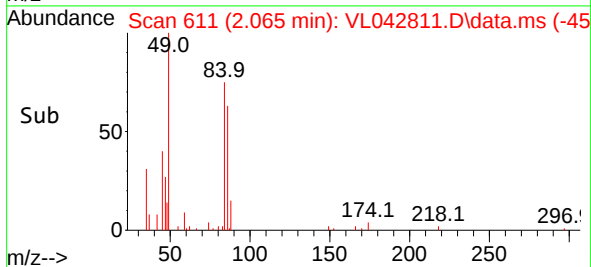
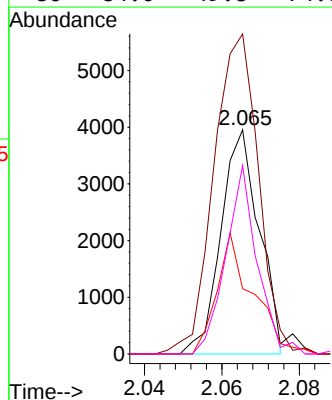
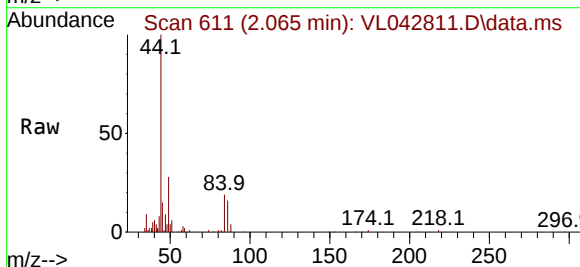
Instrument :
MSVOA_L
ClientSampleId :

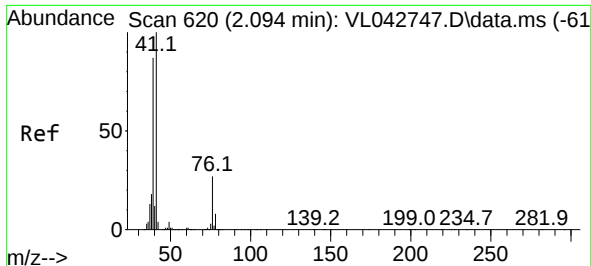
Tgt Ion: 45 Resp: 6648938
Ion Ratio Lower Upper
45 100
58 2.1 30.0 45.0#



#20
Methylene Chloride
Concen: 0.417 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.007 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

Tgt Ion: 84 Resp: 2715
Ion Ratio Lower Upper
84 100
49 137.3 138.6 208.0#
51 29.1 40.6 61.0#
86 84.0 49.8 74.8#

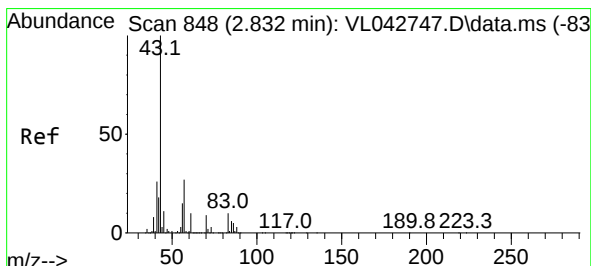
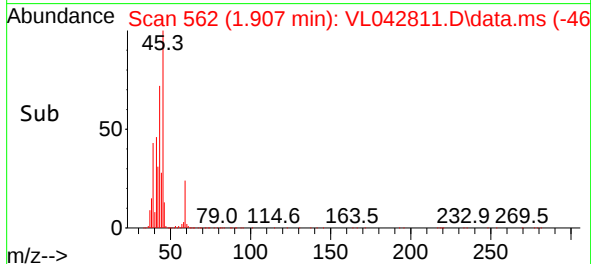
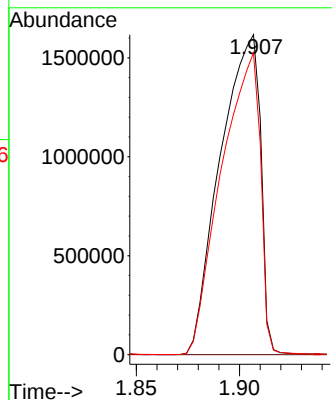
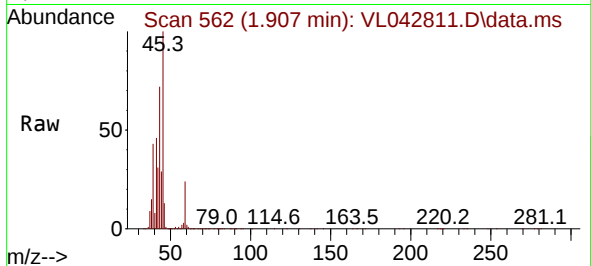




#21
 Allyl Chloride
 Concen: 171.144 ppbv
 RT: 1.907 min Scan# 50
 Delta R.T. -0.188 min
 Lab File: VL042811.D
 Acq: 04 Aug 2025 18:34

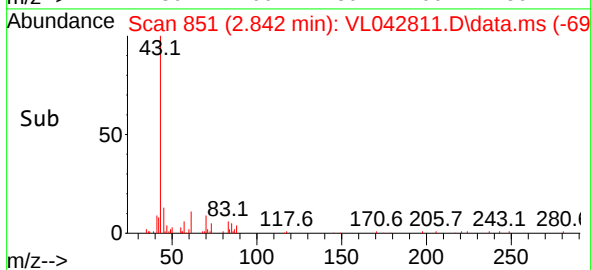
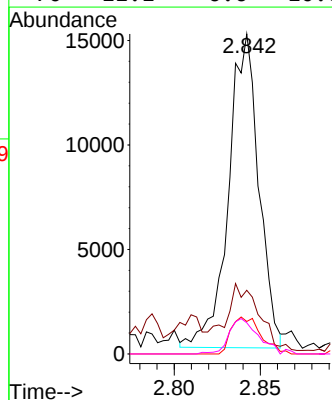
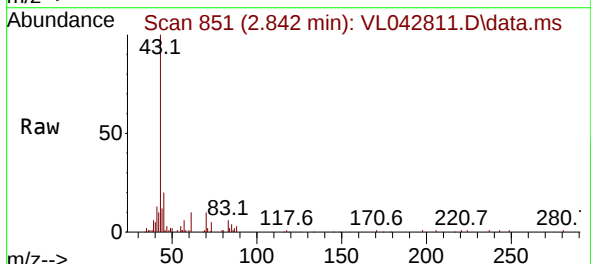
Instrument :
 MSVOA_L
 ClientSampleId :

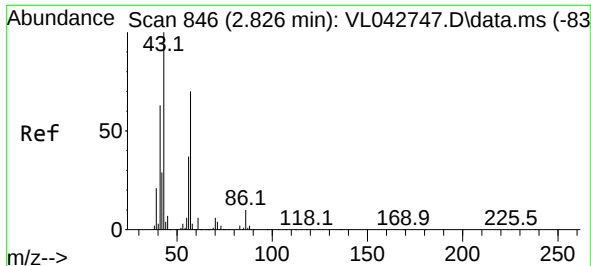
Tgt Ion: 41 Resp: 2180191
 Ion Ratio Lower Upper
 41 100
 76 0.0 21.1 31.7#
 39 91.4 68.3 102.5



#25
 Ethyl Acetate
 Concen: 0.401 ppbv
 RT: 2.842 min Scan# 851
 Delta R.T. 0.010 min
 Lab File: VL042811.D
 Acq: 04 Aug 2025 18:34

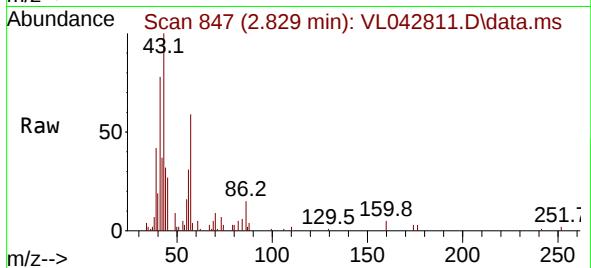
Tgt Ion: 43 Resp: 18358
 Ion Ratio Lower Upper
 43 100
 45 33.0 7.8 11.6#
 61 11.6 6.7 10.1#
 70 11.1 6.6 10.0#



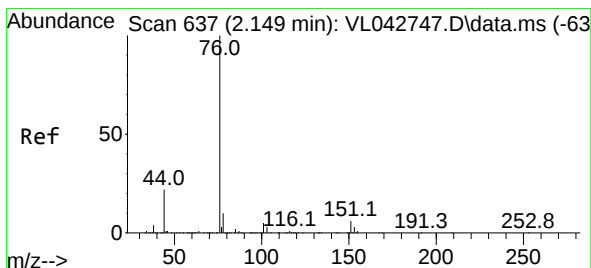
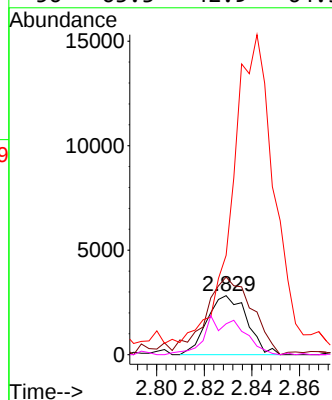
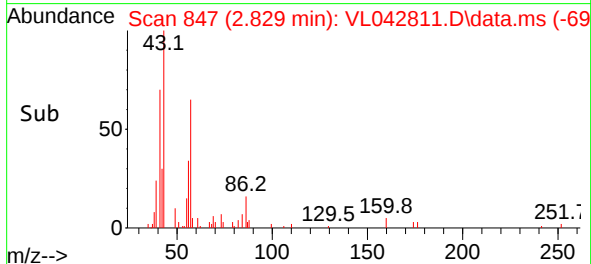


#26
Hexane
Concen: 0.164 ppbv
RT: 2.829 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

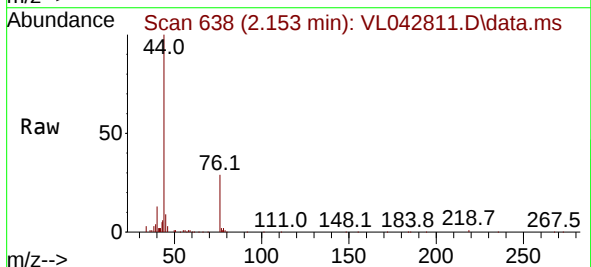
Instrument :
MSVOA_L
ClientSampleId :



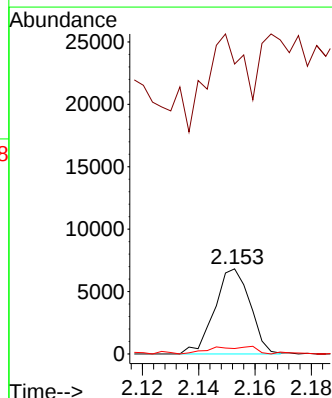
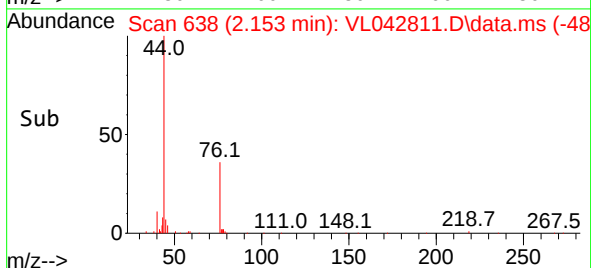
Tgt Ion: 57 Resp: 3285
Ion Ratio Lower Upper
57 100
41 157.8 75.4 113.2#
43 580.2 185.0 277.6#
56 63.3 42.9 64.3

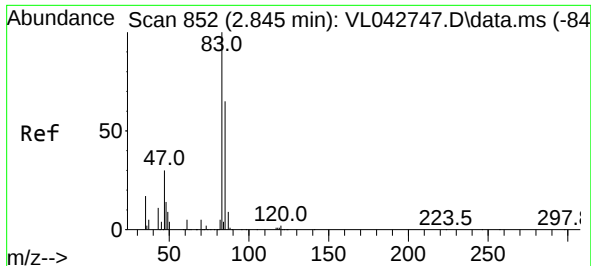


#27
Carbon Disulfide
Concen: 0.346 ppbv
RT: 2.153 min Scan# 638
Delta R.T. 0.003 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34



Tgt Ion: 76 Resp: 5950
Ion Ratio Lower Upper
76 100
44 0.0 19.3 28.9#
78 18.3 9.9 14.9#





#29

Chloroform

Concen: 0.088 ppbv

RT: 2.852 min Scan# 81

Delta R.T. 0.007 min

Lab File: VL042811.D

Acq: 04 Aug 2025 18:34

Instrument :

MSVOA_L

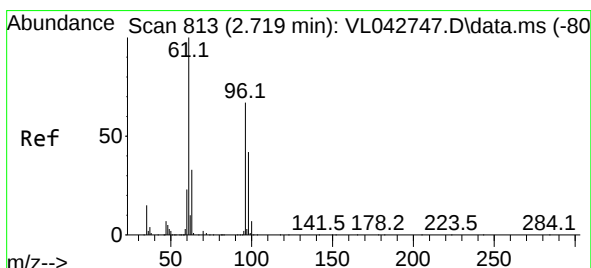
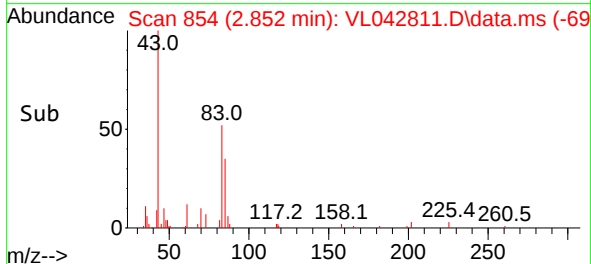
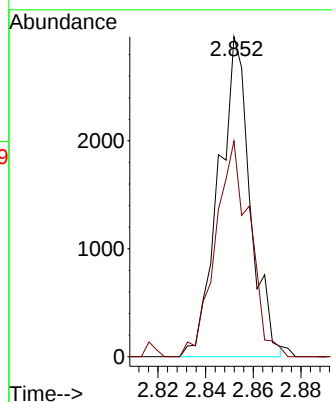
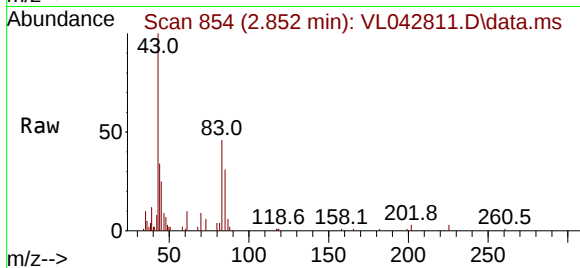
ClientSampleId :

Tgt Ion: 83 Resp: 2725

Ion Ratio Lower Upper

83 100

85 67.4 52.2 78.2



#31

cis-1,2-Dichloroethene

Concen: 0.103 ppbv

RT: 2.839 min Scan# 850

Delta R.T. 0.120 min

Lab File: VL042811.D

Acq: 04 Aug 2025 18:34

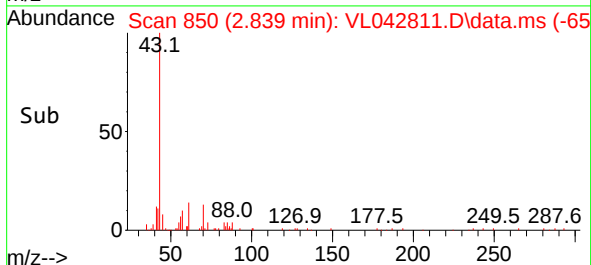
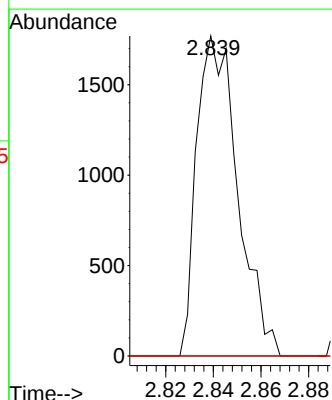
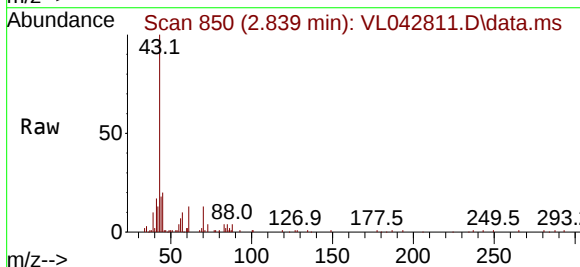
Tgt Ion: 61 Resp: 2123

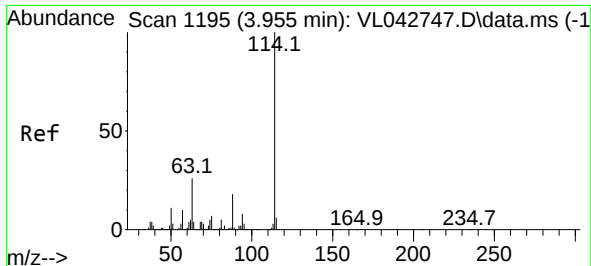
Ion Ratio Lower Upper

61 100

96 0.0 53.5 80.3#

98 0.0 33.6 50.4#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.962 min Scan# 1197

Delta R.T. 0.007 min

Lab File: VL042811.D

Acq: 04 Aug 2025 18:34

Instrument :

MSVOA_L

ClientSampleId :

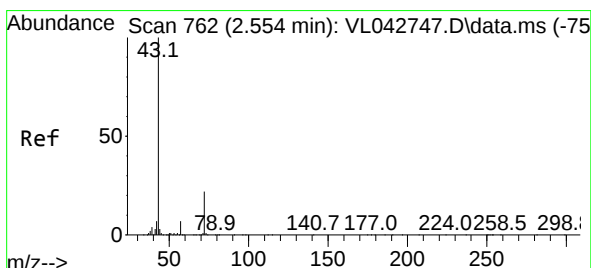
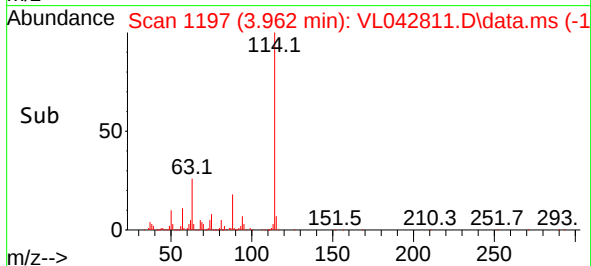
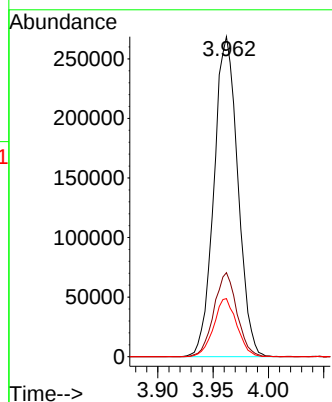
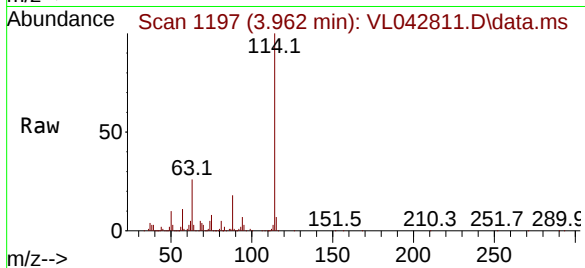
Tgt Ion:114 Resp: 402086

Ion Ratio Lower Upper

114 100

63 25.5 20.5 30.7

88 17.7 14.0 21.0



#34

2-Butanone

Concen: 0.178 ppbv

RT: 2.564 min Scan# 765

Delta R.T. 0.010 min

Lab File: VL042811.D

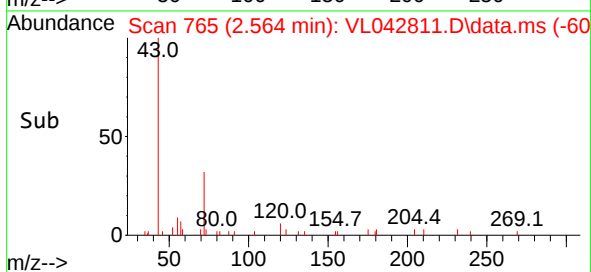
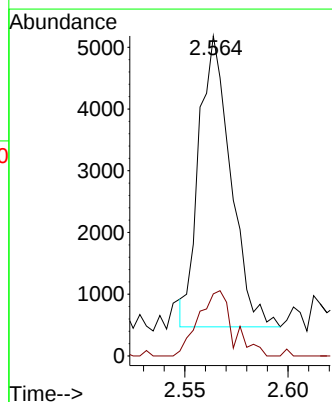
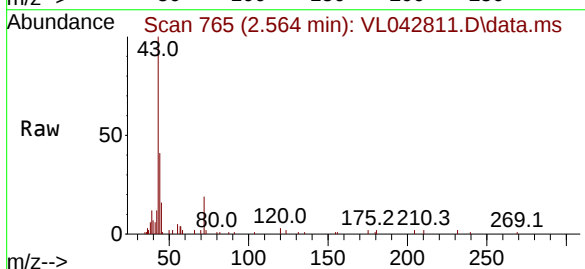
Acq: 04 Aug 2025 18:34

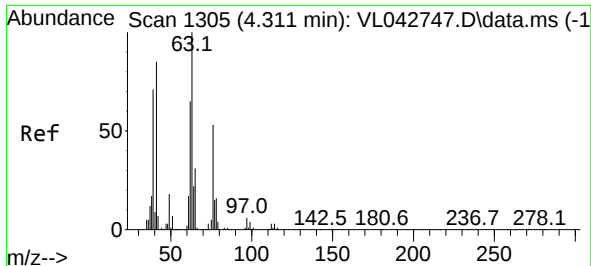
Tgt Ion: 43 Resp: 5063

Ion Ratio Lower Upper

43 100

72 24.5 17.4 26.0





#39

1,2-Dichloropropane

Concen: 7.279 ppbv

RT: 3.962 min Scan# 1117

Delta R.T. -0.349 min

Lab File: VL042811.D

Acq: 04 Aug 2025 18:34

Instrument :

MSVOA_L

ClientSampleId :

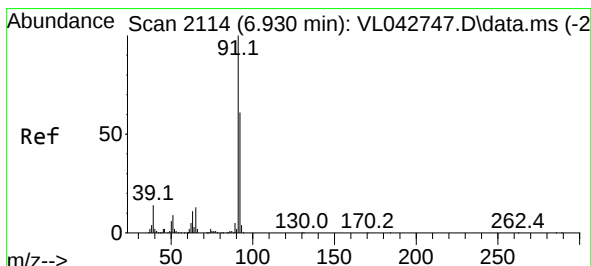
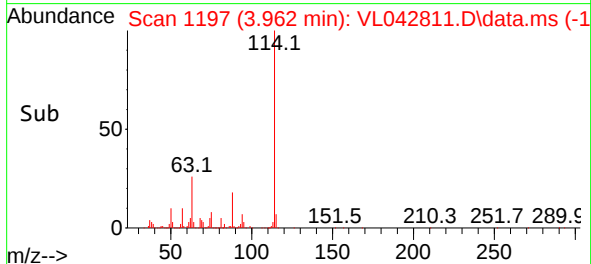
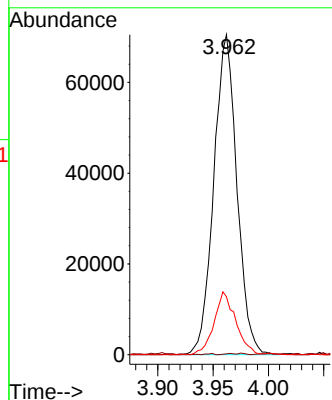
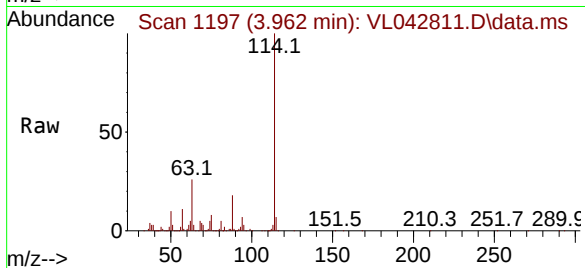
Tgt Ion: 63 Resp: 102389

Ion Ratio Lower Upper

63 100

41 0.0 68.2 102.4#

62 18.1 52.0 78.0#



#53

Toluene

Concen: 0.031 ppbv

RT: 6.940 min Scan# 2117

Delta R.T. 0.010 min

Lab File: VL042811.D

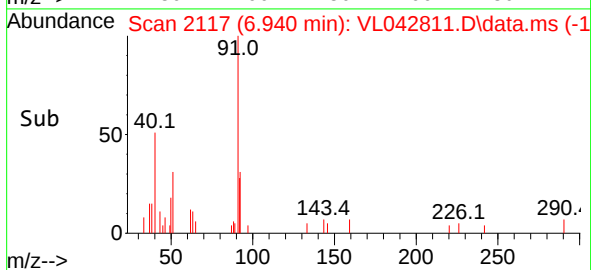
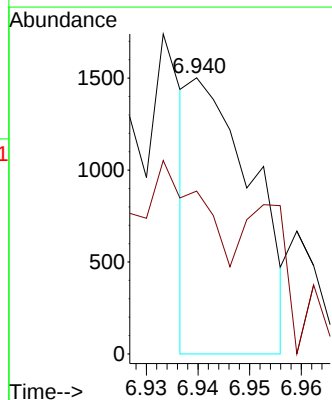
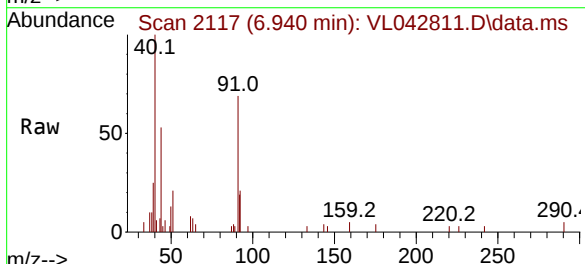
Acq: 04 Aug 2025 18:34

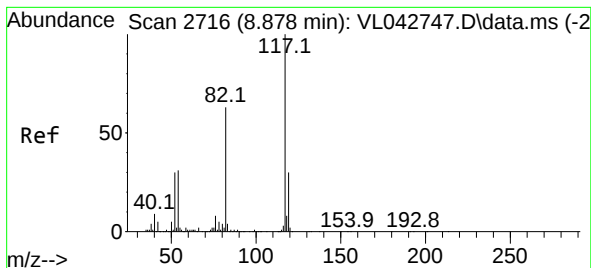
Tgt Ion: 91 Resp: 1262

Ion Ratio Lower Upper

91 100

92 0.0 48.0 72.0#





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.885 min Scan# 21

Delta R.T. 0.007 min

Lab File: VL042811.D

Acq: 04 Aug 2025 18:34

Instrument :

MSVOA_L

ClientSampleId :

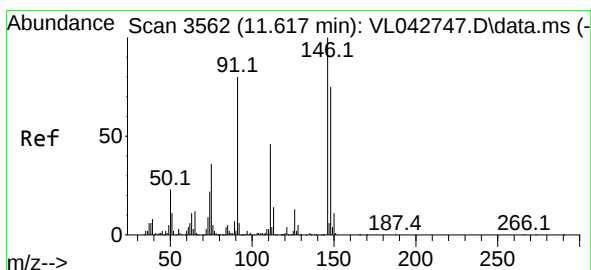
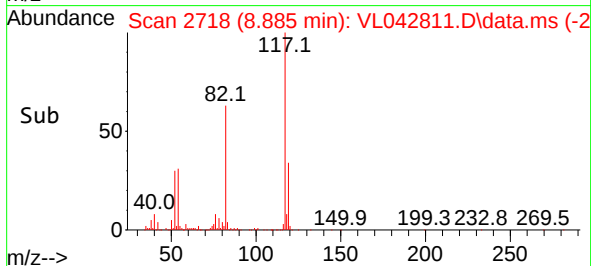
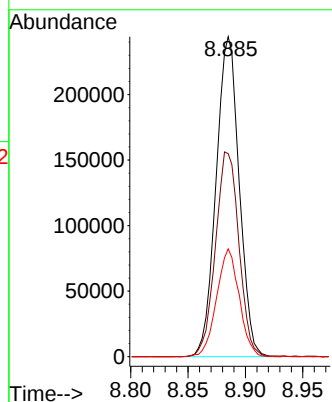
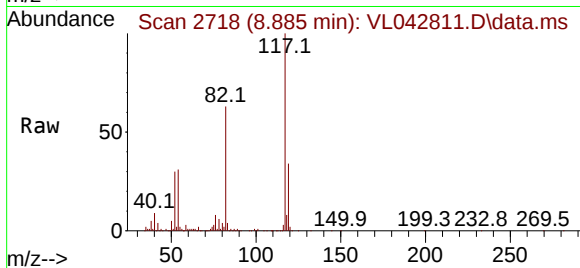
Tgt Ion:117 Resp: 341959

Ion Ratio Lower Upper

117 100

82 65.1 53.3 79.9

119 33.0 25.8 38.6



#66

Benzyl Chloride

Concen: 0.092 ppbv

RT: 11.549 min Scan# 3541

Delta R.T. -0.068 min

Lab File: VL042811.D

Acq: 04 Aug 2025 18:34

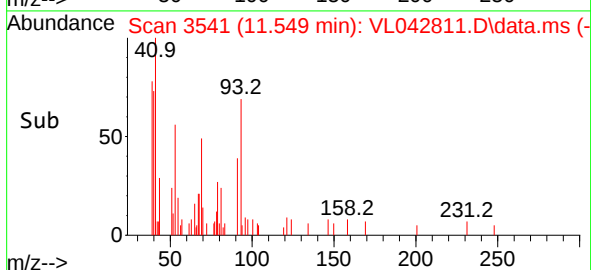
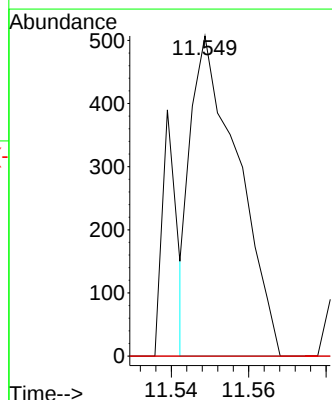
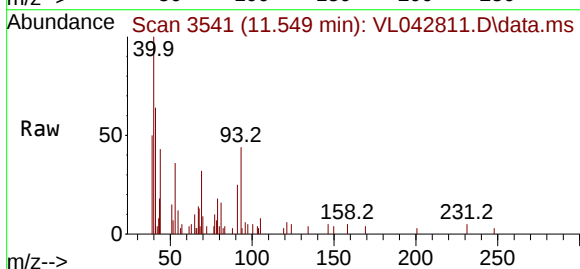
Tgt Ion: 91 Resp: 428

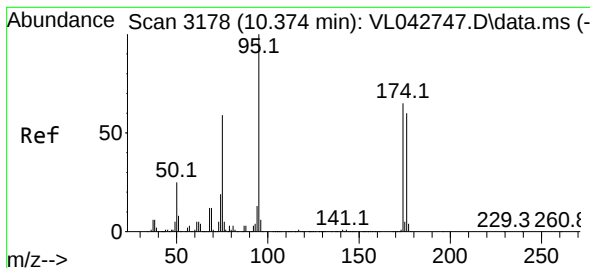
Ion Ratio Lower Upper

91 100

126 14.5 14.4 21.6

128 2.6 5.2 7.8#

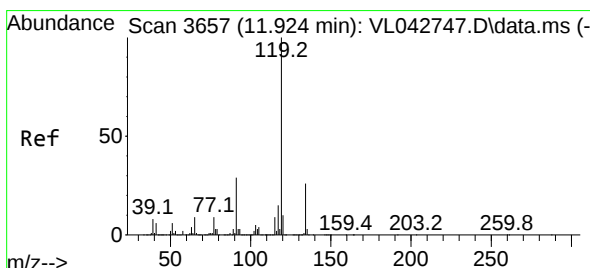
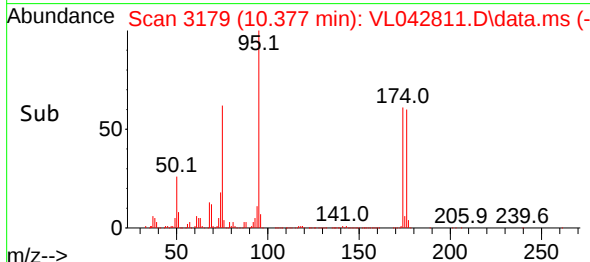
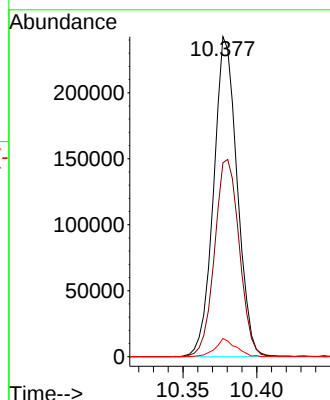
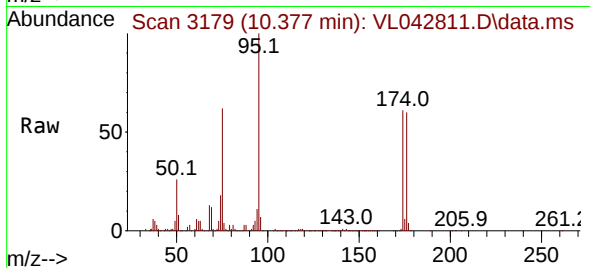




#68
1-Bromo-4-Fluorobenzene
Concen: 9.938 ppbv
RT: 10.377 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

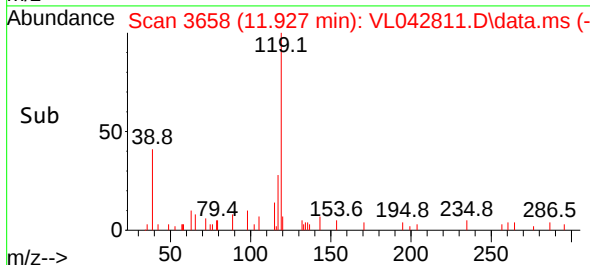
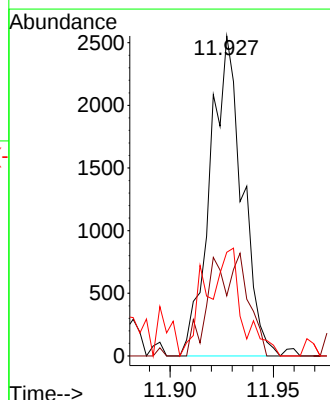
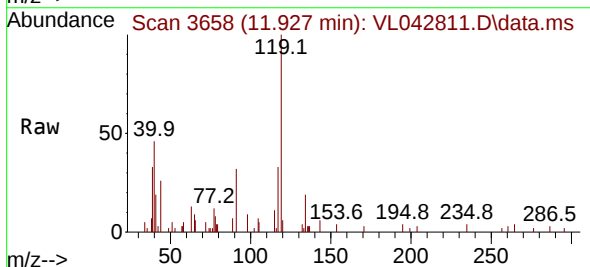
Instrument :
MSVOA_L
ClientSampleId :

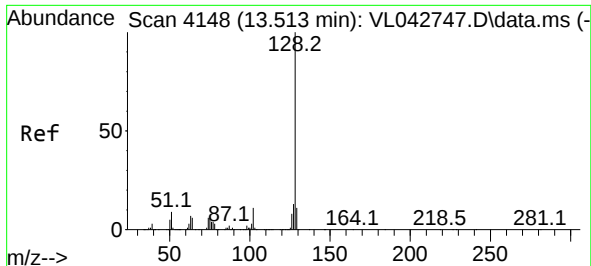
Tgt Ion: 95 Resp: 269128
Ion Ratio Lower Upper
95 100
174 65.0 53.8 80.6
175 5.0 4.0 6.0



#69
p-Isopropyltoluene
Concen: 0.042 ppbv
RT: 11.927 min Scan# 3658
Delta R.T. 0.003 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

Tgt Ion: 119 Resp: 2766
Ion Ratio Lower Upper
119 100
134 37.1 20.6 31.0#
91 36.8 23.2 34.8#

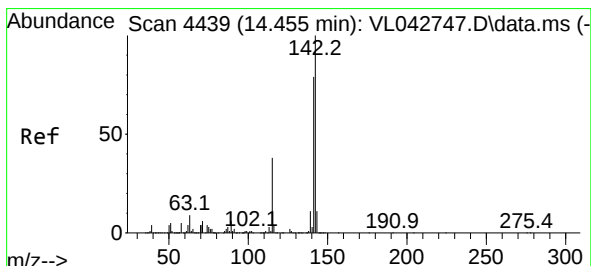
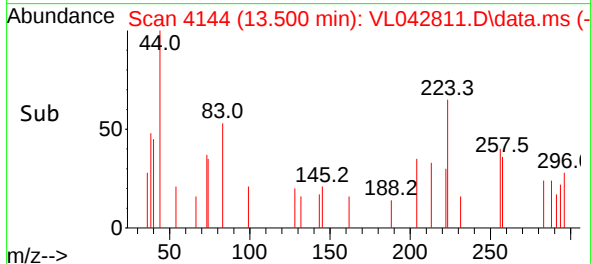
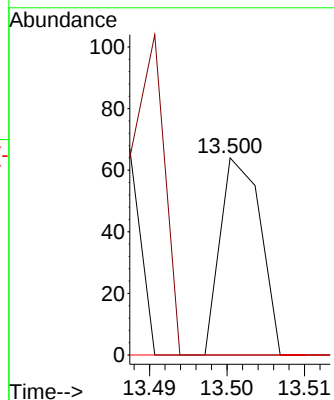
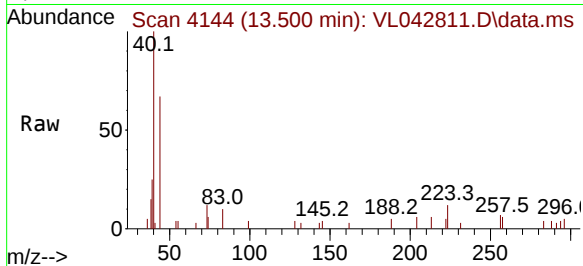




#79
Naphthalene
Concen: 0.436 ppbv
RT: 13.500 min Scan# 4148
Delta R.T. -0.013 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

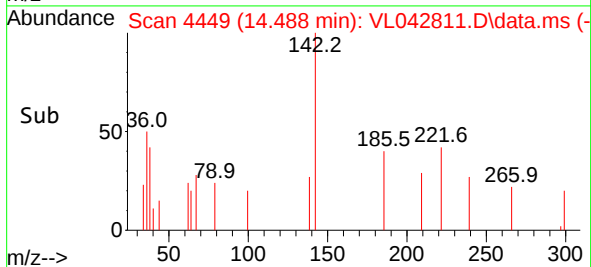
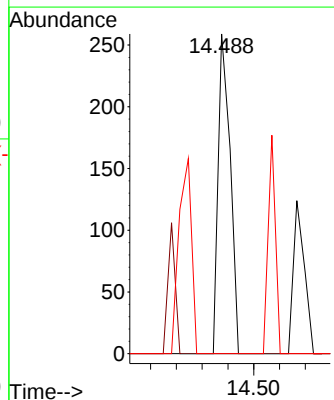
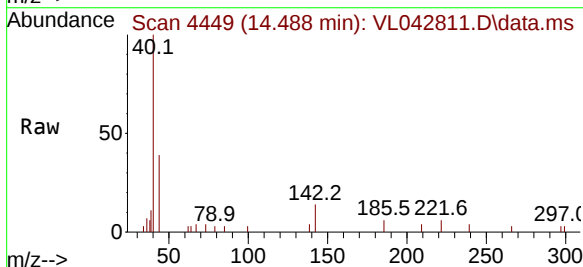
Instrument :
MSVOA_L
ClientSampleId :

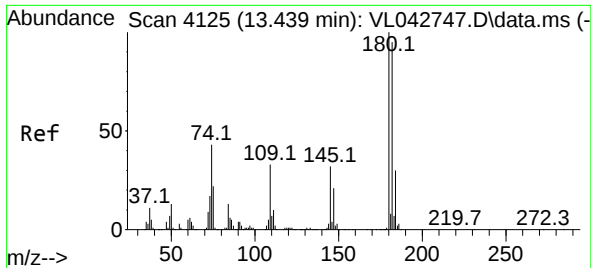
Tgt Ion:128 Resp: 23
Ion Ratio Lower Upper
128 100
127 0.0 10.5 15.7#
129 0.0 8.6 13.0#



#80
Naphthalene,2-methyl-
Concen: 1.131 ppbv
RT: 14.488 min Scan# 4449
Delta R.T. 0.032 min
Lab File: VL042811.D
Acq: 04 Aug 2025 18:34

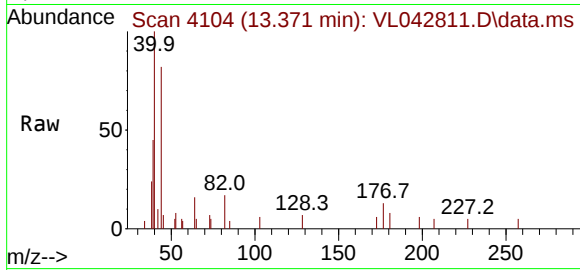
Tgt Ion:142 Resp: 83
Ion Ratio Lower Upper
142 100
141 0.0 65.8 98.8#
115 63.9 31.2 46.8#





#81
 1,2,4-Trichlorobenzene
 Concen: 0.436 ppbv
 RT: 13.371 min Scan# 41
 Delta R.T. -0.068 min
 Lab File: VL042811.D
 Acq: 04 Aug 2025 18:34

Instrument :
 MSVOA_L
 ClientSampleId :



Tgt Ion:180 Resp: 35
 Ion Ratio Lower Upper
 180 100
 182 0.0 76.2 114.2#
 184 28.6 24.8 37.2

